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## MaNUAL OF INSTRUUTITON

## VOLUNTEERS AND MILITII

OF THE<br>Confederate states:

BY

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## PREFACE.

THE fullowing work was undertaken with the hope of meeting, to some extent at lenst, a long-felt want among the rolunteers and militia: that is, a manual, whieh, hesides containing cverything which may be neeessary for mere tactical instruction, should also embrace more or less instruction on various other suljects of equal importanee with tactics: subjects that few wen who have not been regularly trained in the military service have much familiarity with. In the regular service the neeessity for such a work is not felt, at least not to the same extent as among the volunteers and militia, from the fact that the military system heing in eonstant operation, and each individual, no matter what his present rank may be, having gradually risen from a low, or perhaps the very lowest grade, has abundant opportunities for beeoming familiar with it in all its details, before he is called upon for any extensive exercise of his professional knowledge. With the volunteers and militia, however, where no such process for the acquisition of important practical knowledge is attainable, the ease is very different. Called suddenly into active service, from the various pursuits of civil life, all, even the highest in rank, and the best informed, meet with difficultics on every side; what would seem to be comparatively plain and simple to the old eampaigner, must of necessity be more or less obseure to the volunteer or militia officer, whose opportunities for the attainment of military knowledge have been limited.

It is not intended, nor indeed would it be desirable, that the present work should embrace everything whiel is proper to be known by our citizen soldiery; its aim is, simply to aid the inexperienced so far as to enable them to become familiar with such principles and practical details of the military service as are absolntely essential to those who would be competent officers, whetwer in the line or in the staff. If it accomplishes this, it will not have been compiled in rain.

The Introduction, or "Glossary," will, it is hoped, be found useful to the student of military art or science, and to the reader of military history.

Article I, on Army Organization, commences with a gencral aceount of the four arms of the service-Infantry, Cavalry, Artillery and Engineers-the duties of each in the conduct of a campaign, and the proportion they should bear to cach other in an army. The latter part of the Article enters more fully into the details of the organization of each of the three lcading arms, and closes with a short account of the duties of the various departments of the staff.

In Article II, upon Arms and Ammunition, will be found a coudensed account of the various arms and kinds of ammunition used by infantry, cavalry and artillery, together with the manner of preparing and using the latter.

From Article III to Article XI, inclusive, will be found the tactical portion of the work; it embraces very full instructions for crery kind of Infantry troops, from the School of the Soldier to that of the Battalion: Cavalry tactics, from the School of the Trooper to the Instruction of the Regiment; and Artillcry tactics, from the School of the Piece to the Evolutions of a Battery. The whole will be found to be in strict conformity with the requirements of the United States service.

Article XII embraces directions and forms for the conduct of every form of parade; the kinds and duties of guards; together with much other matter of a kindred nature.

In Article XIII the duties of captains, and other company officers, in regard to the internal management, police and morale of their companies, together with the proper equipment of officers and men, to sccure efficiency as well as comfort, when in the field, camps, marches, etc., are discussed.

Article XIV is devoted to the Staff, and embraces such directions for the conduct of those departments of the staff upon which the efficiency of an army in the field must mainly depend, as seemed most necessary. In this Article will also be found directions and forms for the preparation of the morning reports of Companies, Regiments, Brigades and Divisions, together with such forms for requisitions, returns, etc., as are in most frequent use.

In Article XV will be fonnd some acconnt of the various orders of battle, together with au outline of the manner in which the different kinds of troops should be handled in action.

Article XVI contains directions for the organization and conduct of Military Courts; and lastly, the Appendix, containing the Articles of War, presents us with the Military Law now in force.
W. G.

Virginia Military Institute, December, 1860.

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## INTRODUCTION.

GLOSSARY.

## A.

Abatis. A species of intrenchment; it consists of trees felled, and laid with their branches sharpened and interwoven, so as to present a thick row of pointed stakes toward the enemy. They are generally used in front of field works; while the enemy is removing thew he is exposed to a destructive fire from the defenders.
About. A technical word to express the movement by which a body of troops reverses its front. In infantry the about is always to the right ; in cavalry it is either to the right or left; and in artillery it is to the left.
Accessible. A place is said to be accessible, by land or sea, when it can be approached by a hostile foree on either of these sides.
Accoutrements. A term denoting the belts, cartridge box, scabbard, ctc., of a soldier.
Action, in military language, is an engagement between two armics, or any smaller bodies of troops.
Adjutant. A regimental staff officer, who discharges all the duties of detail of a regiment or military post, communicates all orders, forms the battalion for drills, parades, etc., mounts the guards, and in the manœusres assists the lieutenant-colonel.
Adjutant-General is the chief staff officer of the army, division, or brigade to which he belongs, and assists the general in the discharge of his dutics; he keeps the roster of the officers; makes details for duty; makes up the morning reports, returns, ete.; publishes the orders of the general; and is the channel through which all reports to, and correspondence with the general, pass.
Advanced-signifies some part of the army in front of the rest, as in adcanced guards, which always precede the main body; it applies also to any portion of the command which is thrown in front of the first linc.
Advantage Ground. A ground that gives superiority, or an opportunity for annoyance or resistance.
Affarr. An action or engagement; generally between small bodies of troops.
Aid-de-Camp. An officer appointed to attend a general officer; he receives and carries orders, and discharges such other duties as may be necessary. A brigadier-general is entitled to one, and a majorgeneral to two aides-de-camp.

Ans. The act of bringing the firearm to its proper line of direction with the object to be struck.
Alars is a sudden apprehension of an attack, by which men take to their arms, and stand upon their guard.
Alarm Post is the place appointed for every regiment or detachment to assemble, in case of alarm.
Alert. Vigilant.
Alignest is the placing of men on the same line. In artillery it applies to the gun carriages, caissons, cte.
Ally, in a military sense, implies a nation united to another, under treaty, either offensive or defensive.
Ambuscade. A body of men posted in some secret or concealed place, for the purpose of falling upon an enemy by surprise.
Aмbusi. A place of concealment for a body of troops intended for a surprisc.
Ammunition implies everything in the way of powder, balls, shells, cartridges, canister and grape shot, etc., etc.
Appontments. Warlike habiliments, accoutrements, etc.
Apprehend. Seizing or confining any person.
Approaches. The works that are carried on toward a work that is bosieged.
Counter-Approaches. The works carried on by the besicged against those of the besicgers.
Aprox. In gunnery, a piece of leather to cover the cent of a piece of ordnance.
Arm. A term used to signify a particular kind of troops, as the infantry arm, cavalry arm, etc.
To Arm. To take arms, or prepare to meet an enemy.
Armed. Something provided with or carrying arms.
An Armed lody of men denotes a corps or detachment ready for an engagement.
Armistice. A temporary truce.
Arsory. A place for the construction of arms; also a place of deposit for arms.
Arms. All weapons whether of offence or defence.
Fire-Arms. Any machine discharged by inflamed gunpowder.
Place of Arms. A part of the covered way of a fortification. (See Fortificution.)
Army. An organized body of armed men commanded by a general. In time of peace, the whole organized military force of the State is intended when we speak of the army; in time of war this force is broken up into several distinct bodies, each of which is an army. These armies are named, from the particular duty assigned them, as the army of incusion, army of occupation, etc.; or from the country or direction in which they operate-as, army of the North, army of Mexico, etc.; or from the general who commands it-as, army of Scott, etc. An army is made up of a staff and administrative departments, and four distinct arms-Infantry, Cavalry. Artillery, and

Engineers; eaeh having distinet duties, but all eombining to form one and the same military body.
Arrest. The depriving an offieer of his sword, preparatory to trial, for an offenee against military law. The order for arrest usually desiguates the particular limits within which the officer is required to confine himself. An officer under arrest must not call upon his commanding offieer without permission, and then it must be upon business.
Brefch of Arrest. Going beyond the limits prescribed in the order of arrest of an officer. It is a grave offence.
Arsenal. A place of deposit for arms and other implements. Arsenals are sometimes arsenals of construction, a term which signifies that it is a place of construction as well as deposit.
Articles of War. Rules for the better government of the army.
Artillery. Every sort of firearms of large calibre, as guns, mortars, howitzers, ete., torether with everything necessary for serving them in the field, at sieges, ete. Also a term applied to the science which treats of the construction and service of artillery. Also a name given to the troops which serve artillery.
Assault. A furious effort to earry a fortified post, eamp, or fortifieation.
Assembly. The signal to form by company.
Attack. An ouset upon the enemy, either to gain a post, or break his ranks; or to divert his attention and make him divide his forecs, when it becomes a false attack.

## B.

Baggage. The elothing, tents, utensils, provisions, ete., of an army or corps.
Band. A body of musicians attached to any regiment or battalion.
Banquette. A small elevation of earth three or four feet wide, and four feet nine inches helow the erest of the parapet, to enable the shortest men to fire over it with facility.
Barbette-batteries are platforms raised behind a parapet to enable the guns mounted on them to fire orer the parapet, and sweep the surrounding eountry. They are usually placed in the salient points of works.
Barracks. Permanent buildings for the quartering of troops.
Barricade. To barricade, is to bloek up the aveuues by which an enemy might have access to any position. This is done by abatis, wagons, ete.
Barrier. A passive obstacle.
Bastion, in fortification, is a work eonstructed at one of the angles of a polygon, consisting of two faces and two flanks. It is so constructed, that every part of it is defended by the flanking fire of some other part of the works.
Battalion. Any borly of infantry from two companies to ten, and serving under the same commander.
Batter. A cannonade of heary orrlnance.

To Batter in breach is a heary cannonade of many picces dirceted to a single point in the walls of a fortification.
Batteries. The name given to any place where guns, howitzers or mortars are mounted, either for the purpose of attacking the encmy, or of battering a fortification. When a number of pieces of artillery are thrown together they also constitute a battery, as a mounted battery, where from four to six or eight pieces are together, the cannoneers serving on foot; or a horse artillery battery, where the same number of pieces constitute the battery, the cannoneers being momited on horses.
Battle. An action in which the forces of two contending armies are engaged.
Bayonet. A kind of triangular dagger, with a hollow shank, which fits over the muzzle of the musket, rifle or carbine. It is principally used by infantry troops. A new form of bayonet has of late years been introduced for use on the rifle; this bayonet is in the form of a short sabre. It is called the sabre-bayonet, and is intended for use in the hand as well as on the riffe.
Berm. A narrow space between the diteh and parapet of a work, to keep the parapet from falling into the diteh.
To Besiege. To lay siege to or invest any place with an armed force.
Besieged. The"garrison that defends a place.
Besiegers. The troops that lay siege to a fortified place.
Bivouac. An army is said to bicouac, when, instead of camping in tents, the men sleep around the fires, or make temporary shelters of branches of trees, etc.
Budy. Any number of men serving under one commander, as the main body, etc.
Bombard. To throw shells from mortars.
Breach. An opening in the works of a fortified place, made by the artillery or mines of the besiegers, preparatory to making an assault.
Breech of a gun. The portion from the vent to the cascable.
Brigade. Two or more regiments of infantry or eavalry, or both, under the command of a brigadier-general.
Brigadier-General. The commander of a brigade ; an officer whose rank is next above that of a colonel.

## C.

C'adence. Uniform time and pace in marching, an indispensable requisite in the mancurres of troops.
Calibre, in gunnery, is the diameter of the bore of any piece of ordnance, or the weight of the solid shot which it carries.
Caisson. A carriage for artillery ammunition; each pieee of field artillery is followed by its caisson.
Camp is the extent of ground oecupied by an army when under canras.
Campaign. The period of cach year that an army is in the field.
Cannon. A general term for every form of artillery.

Cannoneers. Soldiers who serve or manage picees of artillery.
Canteen. A small vessel used by soldicrs to carry water, etc.
Cantonments. Troops are in cantonments when quartered in towns and villages, lying as near as possible to each other.
To Capitulate is to surrender any place or body of troops to the enemy, on certain stipulated conditions.
Capitulation. The conditions on which the garrison of a besieged plaec agree to give it up.
Caponsiere, in fortification, is a ditch defence; they are of two sorts, single or donble.
Cartain. The commander of a company.
Carbine. A species of fire-arms smatler than the musket, and used mainly by cavalry.
Cartel. An agrcement between two States at war for an exchange of brisoners of war.
Cartimpe. A case of paper, or flanuel. fitter to the bore of a piece. and holding the exact charge of gunpowder. Cartridges for small arms are made of strong paper, those for artillery are made of flannel, or some other woollen goods.
Cartridge-box. A bos made of stont leather, attached to a belt which is worn over the shoulder, or around the waist, and used to hold cartridges for swall arms.
Cascable, in artillery, is the part of the gun in rear of the breech, and consists of the neck and the knob.
Casemate. A chamber covered with a bomb-proof arch. in a fortification, having an embrasure cut through the wall, through which the gun is fired. Used in fortifications on the sea-coast.
Cavaliet. A work constructed in the interior of a bastion.
Cavalar. That portion of an army whieh serves and fights on horseback.
Chamber, of a mortar or howitzer. A cavity at the botom of the mortar or howitzer, intended to receive the cartridge.
Charge, in gunnery, denotes the quantity of powder with which the piece is loaded.

In the erolutions, the charge expresses the advance of a body of infantry to attack the enemy with bayonets fixed; or the rapid attack of cavalry.
Chase of "gun. The length from the trannions to the muzzle.
Chem. The pieces of timber which form the sides of gun-carriages. and upon which the trunnions rest ; also, in fortitication, the oblique sides of the embrasure.
Cheval-de-frieze. A piece of timber some six inches square. pierced with many holes, through which pass pieces of wood some six feet long, crossing each other at right angles, and pointer at the ends. They are used to stop up breaches, to block up the avenues of approach, etc.
Line of Circumvallation. An earthen work consisting of a low parapet and trench, made around a place which it is intended to besiege.
Colonel. The commander of a regiment.

Color. Large silk flags fixed on wooden poles.
Camp Colors. Small flags, cighteen inches square, and used to mark the color line, points of wheeling, etc.; they are also carried by the markers in the evolutions.
Combat. A battle.
Commissary. An officer charged with the purchase and issue of provisions for the troops.
Company. A small body of from 50 to 100 men, and commanded by a captain.
Convor. A detachment of troops employed to guard any supply of men, money, ammunition, provisions, etc., conveyed in time of war to a town or army.
Corporal. A non-commissioned officer of the lowest grade.
Corps. A body of troops acting together under one commander.
Countersign. A particular word which is exchanged between guards, and entrusted to those employed on duty in camp or garrison.
Court-Martial. A military court for the investigation and punishment of all offences committed by officers and soldiers, in resistance of military law.
Cuirassiers. Heavy eavalry armed with breast-plates of metal, or cuirasses.
A Curtain, in fortification, connects two contiguous bastions.

## D.

Defence, in fortification, consists of all sorts of works that cover and defend an army or place.
Defile. A narrow passage or road through which troops can only march by flank, or with a very small front.
Deploy. To display, or spread out troops.
Depôt. A place of deposit formilitary stores.
Detachment. A hody of troops taken from an army for a particular service.
Discipline. The instruction and government of soldiers.
Dislodge. To drive an enemy from his position.
Dismantle. To strip a town or fortress of its outworks.
Ditch. An excavation or trench made around the works of a fortification, from whence the earth necessary for the construction of the parapet is raised. Ditches are of two kinds-wet and dry.
Dragoons, are a kind of cavalry, who serve both on horseback and on foot.

## E.

Echelon. A position in tactics, when different bodies, whether the divisions of a battalion, battalions, or brigades, follow each other on different lines. By this arrangement, both the front and one or both flanks may be protected at once.
Elevation. In gunnery, the angle included between the horizon and the axis of any piece of artillery.

Embrasure. In fortification, an opening, or aperture in the parapet of a work, through which pieces of artillery are fired at the enemy.
Enciente, in fortification, is the interior wall or rampart which surrounds a place.
Encounter. Combat. Fight.
Enemy. One who is on the opposite side in war.
To Exfilade is to throw shot along the whole length of the enemy's line.
Engineers. Officers charged with planning, constructing, and repairing all fortifications and all defensive works; with planning the attack and defence of military works, etc., ete.
Epallement. A kind of treastwork to eover troops in front, or on the flank.
Epaulettes. Shoulder-knots worm by officers.
Eprouvette. A small mortar for trying the strength of gumpowder. Equipage. All kinds of furniture made use of by an army.
Establishaent implies the quota of officers and men in an army, regiment, troop, or company.
Evolution. The movement made by a body of troops when they ebange their disposition.
Exempts. Men who, from their age or occapation, are not liable to be ealled upon for military service.
Expeditios. A royage or march against an enemy.

## F.

False-alurm. An alarm either desiguedly or nointentionally created by noise, reports, ete., without being dangerous.
False-atteck. An approach which is mate for the purpose of diverting an enemy from the real point of attaek.
Fascines. Long eylindrical bundles of twigs intended to support the earth in the parapets of field fortifications, etc.
Feint. A moek attack made to conceal the true one.
Fiecd. The place of battle. A eampaign, or the action of an army while it is in the field.
Fieldenfficers. The colonel, lieutenant-colonel, and major of a regiment.
Fight. Battle.
File. A line of soldiers drawn up behind each other. As a general thing, a file means two soldiers, the front and rear rank men.
Firearms. Every deseription of arms charged with powder and ball.
Flanks. The right and left of an army, encampment, battalion, company, etc.
Flank. In fortification, any part of a work defending another, by a fire along the outside of the parapet.
Foil. A blunt sword used in feneing.
Forage. The hay, straw, and oats required for the subsistence of the horses of an army.

Force. Any body of troops assembled for military purposes.
Forlorn-hope. Men appointed to make the first attack in the day of battle, or to be the first to storm in a siege.
Fort. A fortified place surrounded by a diteh, etc.
Fortification. The art of surrounding a place by works so disposed as to render it capable of a lasting defence against a besieging army.
Field-Fortification is the art of constructing all kinds of temporary works in the field.
Front. A word of command signifying that the men are to turn to their proper front.
Fugle-man. A well-drilled, intelligent soldier, advanced in front of the line, to give the time in the manual, etc.
Furlougit. A leave of absence.
Fuse. A tube fixed into a shell filled with combustible materials, which, when the shell is fired, burns and causes the shell to explode.

## G.

Gabion. A cylindrical basket without bottom, and employed in throwing up intrenchments, etc.
Gallery. A passage in a mine.
Garmison. A place where troops are quartered.
General-officers. All officers above the rank of colonel. The only grades in our service are brigadier-general. major-general, and lieu-tenant-general.
Glacis. In permanent fortifications, the parapet of the covered way. Grenade. A small shell thrown from the hand upon the enemy. Used in defending a work.
Grape. A kind of shot.
Guard. A body of men whose duty it is to protect an army or place from surprise. It also applies to troops kept to guard generals and otber persons, or publie property, etc.
Gudons. Small silk standards for cavalry.
Gunpowder. A composition of sulphur, nitre (or saltpetre) and charcoal, mixed together and granalated, to which, if fire be applied, it burns with an explosion.

## H.

Marass. To annoy, perplex, bang upon the rear or flanks of a body of men, or an army, or to interrupt the operations of a siege by repeated attacks.
Haversack. A linen bag to carry a soldier's rations on the mareb.
Head-quarters. The place where the officer commanding an army or independent body of troops, takes up his residence.
IIlet. The handle of a sword.
Holsters. Cases for a horseman's pistols, attached to the pommel of the saddle.
Hospital. A place appointed for the sick and wonnded.

Hosr. An army.
Hostility-denotes a state of war between two nations.
Howitzer. A piece of artillery, chambered at the bottom of the bore, and intended for firing hollow shot, canister, and, if necessary, can be used for firing solill shot.

## I.

Infantry. Foot soldiers armed with the musket or riffe.
Inroad. Sudden and destiltory invasion.
Inspector-General. An officer whose duty it is to inspect the troops at stated times, and report the state of their diseipline, efficiency, ete.
Intreschment. Any work intended to fortify a post against the attack of an encmy.
Invasion. The entrance or attack of the troops of a nation on the dominions of another.
To Investr. To scize upon all the avenues of approach to a place or town, so as to cut it off from succor.

## h.

Kinapsack. A leather or canvas bag, worn on the backs of infantry soldiers, and which contains his clothing and other neeessaries.

## L.

Laboritory. A place where all sorts of fire-works are prepared, whether for actual service or for display.
Iifettenant. The lowest grade of commissioned officers.
Line of Battle is the disposition of the troops for battle.
Links. Thongs of leather used by cavalry to fasten their horses together.
Litter. A sort of bed on which wounded officers and men are carried off the ficld.
Lobgmext. Possession of the whole or a part of the enemy's works.
Luvette. A small field work.
M.

Magazine. A place in which stores, arms, ammunition, or provisions are kept.
Mason. An officer next in rank to a lientenant-colonel.
Martial Law. The law of war.
Matcif. A preparation to communicate fire to guns, mortars, mines, ete.
Mines. Sulterranean passages dug under the walls of a fortification, or under the works of a besicging army, for the purpose of blowing then up by means of guupowder.
Montans. Short camon with large bores fitted with chambers, and used for throwing shells, stones, etc.

Muster. A parade of troops for the purpose of inspection, and taking an account of their numbers, presence, etc.
Mutiny. Any seditious or refractory conduct among soldiers.

## N.

Nitre. A compound of nitric acid and potash, used in the manufacture of gunpowder.

## 0.

Onders. All such lawful directions as may be issued by a superior officer.
Ordnance. A general term for all guns, howitzers, and mortars.
Outposts. Bodies of troops posted beyond the bounds or limits of the encampment.
Outworks, in fortification, are the works constructed beyond the principal works.

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Palisadese In fortifications, stakes made of strong pieces of wood, and set in the ground.
Paralléls. The trenches or lines made by the besiegers around the works of the besieged.
Parapet. In fortification, an elevation of earth designed for covering the soldiers from the fire of the enemy.
Park of Artillery. The place appointed for the artillery.
Parley. A conference with the enemy.
Parole. The promise or word of honor given by a prisoner of war when permitted to be at large, that be will return at the time appointed.
Parole is also a word given out in orders for the purpose of distinguishing friends from foes.
Party. A small detachment of troops employed upon any duty, as fatigue party, etc.
Patrol. A small party minder a non-commissioned officer detached from one of the gnards, to move from post to post, through strects, along roads, etc., to ensure vigilance, order, etc.
Paymaster. An officer charged with the payment of the troops.
Pickets. Outguards occupying the first liue beyond the police guards; when attacked the outposts and grand guards fall back upon the pickets for support.
Pillage. Plinder.
Proneers. A small hody of soldiers, provided with saws, axes, etc., and intended to clear the way for troops on the march, to work on the intrenchments, etc.
Platoon. Half a company.
Pontoons. Small boats used to sustain the bridges across streams for the passage of troops.
Portrire. A sort of match fur firing guns, etc.
Provost-Marshal. An officer whose duty it is to see punishments put in force, secure prisoners, ete.
Protecinv. Every kind of artificial fireworks.
Q.

Quarter. To give quarter is to spare the life of a vanquished enemy. Quartermaster. An officer whose duty it is to supply the quarters, fuel, clothing, transportation, etc., to the troops.

## R.

Rally. To re-form disordered or dispersed troops into regular order. Rampart. A bank of earth raised about a place to resist the enemy's shot, cover the buildings, etc.
Range. The distance from the gun to the place where the projectile touches the grouncl.
Rank. A line of soldiers drawn up side by side.
Rank and File. Non-commissioned officers and privates.
Ration. The daily allowance of bread, meat, etc., to the soldiers.
Rear Guard. A detachment of troops which brings up and protects the rear of an army.
Reconvortre. To view and examine the country in which an enemy is operating ; to examine the approaches to an enemy's works; ascertain his position, strength, etc., etc.
Redoubt. A small work in fortification.
Regimest. A body of troops composed of ten or twelve companies, and commanded by a colonel.
Reserve. A body of troops so posted as not to come into action until near its close, or until a critical moment in the battle.
Retreat. To retreat is to make a retrogade movement.
Retrenchment. Any work raised to cover a point, and fortify it against an enemy.
Ricochet. The rebounding of shot or shells after striking the ground.
Rosters are lists or tables by which the details of officers, non-commissioned officers and privates, for various duties, are regulated.
Round. A general discharge of cannon or small arms.
Rocnds. A visiting or personal inspection of the guards and sentinels on duty.
Rout. The confusion created in an army or body of troops when defeated or dispersed.

## 8.

Sabre. A species of sword with a broad and heary blade, curved toward the point.
Sack. An expression nsed when a town has been taken by storm and given up to pillage.
Safeguard. A protection granted by the general of an army, for some of the enemy's lands or persons, to prescrve them from being insulted or plandered.
Sally. A sally, or sortic, is a secret movement of attack made by strong detachments of troops from a besieged place, for the purpose of destroying the enemy's works.
Salute. A discharge of artillery in compliment of some individnal. It also means the ceremony of presenting arms.

SAND Bags. Bags filled with earth for the purpose of repairing breaches, etc.
Scouts. Horsemen sent in advance or on the wings of an army to discover the enemy.
Sentinel. A private soldier placed upon a post, whose duty it is to watch the motions of the cnemy, prevent surprise, and in general to enforce any specific order with which he may be entrusted.
Sergeant. A non-commissioned officer.
Sergeant-Major. The first non-commissioned officer of his regiment, and assists the adjutant in the discharge of his duties.
Service. Every kind of duty which a military man may be called upon to perform.
Shells. Hollow iron balls thrown among the enemy from mortars and howitzers. Being filled with powder, and provided with a fuse which sets fire to the contents, the shell explodes.
Siege. The art of surrounding a fortified place with an army, and attacking it by means of batteries, mines and trenches.
Skirmish. A loose desultory kind of combat in presence of two armies.
Sorties. Parties that sally out of a place secretly to annoy the besiegers.
Spherical Cone Shot. Thin shells filled with musket balls, and fired from a howitzer.
Storm. A vigorous assault on a fortified place.
Stratagest. A scheme or plan devised by a general to cover his designs during a campaign.
Strategr. The hostile movements of armies beyond the range of each other's cannon.
Surprise. To fall upon an enemy uncxpectedly. ,

## T.

Traverses. Parapets of earth raised to cover troops from the enfilading fire of an enemy.
Trenches. Ditches made during a siege, to enable the assailants to approach more securely.
Troop. A company of cavalry.
Trophy. Anything captured from an enemy.

## V.

Vedettes. Sentries on horseback upon outposts.
Vext. The opening in firearms through which the fire is communicated to the charge.
Volley. The simultaneous discharge of a number of firearms.
W.

Windage. The difference between the diameter of the bore, and the diameter of the shot or shell.
Wings. The right or left divisions of an army or battalion.
Wonks. Fortifications.

## MANUAL

FOIR

## Volunterers and militia.

Article I.<br>ARMYORGANIZATION.

1. Every thoroughly-organized army eonsists of one or more army corps, made up of infantry and cavalry, with an artillery equipage of one or more batteries, depending upon the strength of the eorps, engineer troops, bridge trains, etc.
2. The infantry, from its powers of endurance, its capability of operating suecessfully in almost every position, its entire independence of the various casualties which sometimes eompletely paralyze cavalry and artillery, ranks first in importance in the organization of any army. The strength of the other arms is always hased upon that of the infantry, whieh long experience has shown should be about fourfifths of the entire force.

The troops which compose the infantry are usually divided into heavy and light; these distinctions arise partly from the nature of the weapons, and partly from their different destination on the field of battle. The former is known as the infantry of the line, the latter as light infantry and rifles.

The only arm of the infantry of the line of the present day is the musket, usually the rifled musket, provided with the bayonet, which, in all the manœuvres, is fixed to the picce. This arm possesses all the essential qualities of the rifle, together with the advantages peculiar to the musket, making it a most effieient weapou in the hands of well diseiplined troops.

The infantry of the line should be so diseiplined as to act as oue mass, which knows no breaking; it should be prepared to deliver its fire in line, in the face of an opposing foe; to form in columns to
attaek with the bayonct ; form into square to resist the charge of cavalry; or stand unmoved uuder the fire of artillery. To it must be confided everything in the conduct of a battle which requires uyyielding firmness-as the attack and defence of strong points, the formation of attacking or supporting columns, the reserves, etc.

The habitual formation of the infantry of the line of our service is in two ranks; the men of cach rank being side by side, with an interval of thirteen inches between the backs of the men of the front rank and the breasts of those of the rear rank.
3. Light infantry may be armed with the musket, the same as the infantry of the line, the bayonet being worn by the side exeept upon rare oceasions, when it is fixed: or, it may be armed with rifles, when light infantry men beeome riftemen. The rifle now used is short, light, easily earried on long or rapid marehes, and possesses the additional advantage of the sword buyouet, which, in a charge, may be used like the ordinary bayonet, or as a sword, in a hand-to-hand engagement.

The duties of light troops are to open an engagement, and to do their part durirg its eontinuance. They should cover the front and flanks of the infantry of the line, in the advance of the latter, driving the enemy out of all covers, ete., only retiring npon the main body when too strongly pressed to maintain their position. Upon them usually devolve advance post, detachment, and advance and rear guard service.

Light troops form as other infantry when oceasion requires, but the habitual order of battle is the dispersed order, in which each man is separated some distance from his neighbor, and must depend in a great degree upon himself.

They should be expert marksmen, cool, circumspeet, skilful in taking advantage of their position to secure cover, etc., and should be prepared to keep an enemy occupied for many hours at once, and maintain their ground inch by ineh.

All infantry now receives rery nearly the same instruetion, so as to enable it to perform all the duties that may be required of the infantry soldier, making the distinction between heavy and light troops much less.

The volunteers and militia of our country possess, in an eminent degree, all the qualities requisite for both heavy and light troops, and were they discipliued and well instrueted, as all must be to be truly formidable, might serve in either capacity with as much effieiency as any other troops, let them come from whatever quarter they may.
4. "In all countries where military art is justly appreciated, the eavalry arm is placed in the sccond rank to infantry. To it an army is often indebted for turning the seales of victory, and giving a decisive
character to the issuc. 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 re-form. Without it, much of adraneed post daty, patrols and detachment service, requiring great aetivity, would be but badly performed.
"But the arm of cavalry ly itself can effeet but little; and, in many ciremmstances, does not suffice 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 alamed, and justly so, at every phantom. The proportion borne ly the eavalry to the infantry should vary with the features of the seat of war; being greater in a champaign than in a hroken, or mountainous country. The proportion of owe-forrth of the infantry for the first, and one-sixth for the last, is generally admitted by received military anthority as the best." -(Mahan.)

The essential qualities of cavalry, whieh distinguish it from all other troops, are that of eelerity, and the irresistible force with which, under favorable circumstances, it bears down all opposition ; making it, when properly handled, a truly formidable arm.

Cavalry, to be effeient, should unite several essential eonditions: horses and weapons in goorl condition; suffieient ground to gather speed for the charge, and space for rallying; to have its flanks eovered to prevent a surprise; to be led boldly into action; and to be followed by a support or reserve sufficient to eover a retreat, or secure it from eonfusion if brought up unexpectedly by the enemy.

In European armies there is a marked distinction between heary and light eavalry, but in ours the distinction is more nominal than real; all caralry being called upon alike for the discharge of the duties of both heary and light troops.

When acting as heavy cavalry, its duties are'usually eonfined to the field of battle; there, placed in reserve, it is held in hand until the decisive moment arrives, when it is sent forth to achieve vietory or prevent defeat.

To the light eavalry are entrusted the duties of seenring the heavy cavalry from surprise; to wateh over the safety of the field artillery; to perform the services required of them by infantry divisions, and those portaining to out-post and detachment service in general.

In our service all cavalry is armed with the sabre, with Colt's revolving pistols, and with lreech-loading rifles, or earbines, of which there are several different patterns now in use: as Sharpe's rifle and carbine, Burnside's and Mayuard's rifles, ete.
5. "The artillery is placed third in ronk among the arms. Its duties' are to support and eover the other arms; keep the enemy from ap-
proaching too near; hold him in check as he advances; and prevent his débouching at particular points. To perform these duties it is considered that an allowance of one piece for eneh thousand men ${ }^{1}$ of the other arms, and one in reserve from 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 dis ipline. 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 cover their retreat."-(Mahax.)

Artillery is incapable of defending itself, and must always be protected by a sufficient force of caralry or infantry.

Field artillery, like the other arms, is divided into light and heary; a division which results from differences in the calibre of the pieces, and the manner in which they are used. The heary field artillery comprises the 12 -pounder gun, and the 24 and 32 -pounder howitzer; they are generally reserved for batteries in position, and are seldom shifted during an action.

The light field artillery is composed of the 6-pounder field gun, and the 12 -pounder howitzer. When the cannoneers are mounted upon horses during the evolution, it is called horse artillery; when they follow the pieces on foot, it becomes mounted artillery.

To the heavy artillery 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 pos: session might be of importance to the enemy, as villages, defiles, etc.; and for breaking down all obstacles that protect the enemy, or check the progress of the other's arms.

The light pieces, serving as mounted artillery, follow the movements of the infantry; corering the flanks of its position, preparing the way for its advance, and arresting that of the encmy. When well disciplined and skilfully handled, mounted artillery, by having the cannoneers mounted upon the ammunition boxes, may be moved with great celerity, and made almost, if not quite, as efficient as horse artillery.

The horse artillery, besides performing the same duties as the mounted batteries, may be used with great effect at the decisive moments of an action. "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 in another point of the field, to force back an

[^0]enemy's colnmn. In preparing the attacks of cavalry, this arm is often indispensable, and always invalnable ; bronght 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 caralier finds but a feeble obstacle, where, without this aid, he would in vain have exhausted all his powers."
6. Engineer troops constitute a fourth arm of service; as compared with artillery, their relative numbers are about as two to three. They are divided into the staff, guards, or fort-keepers, artificers, sappers and pionecrs, miners and pontoniers.

The officers constituting the staff are charged in time of peace with planning, constructing and repairing all fortifications and other defensive works, etc.; in time of war, engineer troops are charged with the attack and defence of military works, the laying out and construction of field defences, redoubts, intrenchments, roads, etc.; in the attack they form a part of the advanced guard, to remove obstructions; and in retreat they form a part of the rear-guard, to erect obstacles, destroy roads, bridges, etc., so as to retard an enemy's pursuit.

## ORGANIZATION OF INFANTRY.

7. In the organization of infantry, the smallest number complete in itself, is the company, which varies in number from 50 to 100 rank and file.

A captain, two or more licutenants, from four to six sergeants, and as many corporals, are attached to every company. The captain and lieutenants are the officers, and the sergeants and corporals the noncommissioned officers of the company.

The captain is responsible for the instruction, discipline, general efficiency and moral tone of the company.

The lieutenants assist the captain in the maintenance of discipline, and in the instruction.

The company is divided into two equal parts, which are designated as the first and second platoon, counting from the right; and each platoon is, in like manner, divided into two sections.

The compauy is formed into two ranks in the following manner: the corporals on the right and left of platoons, according to height; the tallest corporal and the tallest man from the first file on the right, the next two tallest men from the second file, and so on to the last file, which is composed of the shortest corporal and the shortest man.

The odd and even files, numbered as oue, two, in the company, from right to left, form groups of four men, who, when they act as light troops, are desiguated comrodes in battle.
8. The officers and non-commissioned officers of the company are posted in the following manner:

The captain on the right of the company, touching with the left elbow.

The first sergeant, in the rear rank, touching with the left clbow, and covering the captain. In the manœurres he is denominated covering sergeant, or right guide of the company.

The remaining officers and sergeants are posted as file-closers, in the rank of file-closers, two paces behind the rear rank.

The first lieutenant, opposite the centre of the fourth section.
The seeond lieutenant, opposite the centre of the first platoon.
The third lieutenant, opposite the eentre of the second platoon.
The second sergeant, opposite the sccond file from the left of the company. In the manœuvres he is called the left guide of the company.

The third sergeant, opposite the seeond file from the right of the second platoon.

The fourth sergeant, opposite the second file from the left of the first platoon.

The fifth sergeant, opposite the second file from the right of the first platoon.

The corporals are posted in the front rank, as directed in No. 7.

## The Regiment.

9. A regiment is composed of ten companies, which are habitually posted from right to left, in the following order: first, sixth, fourth, winth, third, eighth, fifth, tenth, seventh, second, according to the rank of the captain. With a less number of companies the same principle will be observed, viz: the first captain commands the right company, the second captain the left company, the third captain the right centre company, and so on.

The companies thus posted are designated from right to left, first company, second company, etc. This designation is observed in all the manœuvres.

The first two companies on the right, whatever their denomination, form the first dicision; the next two companies the second division; and so on to the left.

In all excreises and manœuvres, cvery regiment, or part of a regiment, composed of two or more companies, is called a buttalion.

Every regiment is provided with a eolor, which is posted with its guard, to be designated hereafter, on the left of the right centre company; that company, and all on its right belong to the right wing of
the regiment or battalion; the remaining companies eonstitute the left wing.

To each regiment are attached a colonel, who commands it, and is responsible for its general discipline and instruction, a lieutenantcolonel, two majors, a quartermaster, commissary, paymaster, surycon, and frequently an assistent suryeon, an culjutent, sergeent-major, quar-termaster-sergeant, and commissary sergeant. The four first named of these officers are the field officers of the regiment; the others constitute its commissioned and non-commissioned staff.

## Posts of Field Officers and Regimental Staff.

10. The field officers are supposed to be monnted, and on active service must be on horseback. The adjutant, when the battalion is mancurring, is on foot; when on the march, or in action, he is mounted.

The colonel's post is thirty paces in rear of the file-elosers, and opposite the centre of the battalion. The lieutenant-colonel and senior major are behind the eentres of the right and left wings respectively, the junior major behind the centre of the battalion, all twelve paces in rear of the file-closers.

The adjutant and scrgeant major are opposite the right and left of the battalion respectively, and eight paces in rear of the file-closers. They assist the lientenant-colonel and major, respectively, in the manœurres.

The quartermaster, surgeon, and other staff-officers, are in one rank on the left of the colonel, and three paces in his rear. The quarter-master-sergeant is on a line with the front rank of the field music, and two paces on its right.

## Pioneers, Field Music and Band.

11. The pioneers (one for each company) are drawn up in two ranks, and posted on the right, having their left four paces from the right of the first company. A corporal of pioneers, selected from the corporals by the coloncl, is posted on the right of the pioneers.

The field music (two musicians to each company) is drawn up in four ranks, and posted twelve paces in rear of the file closers, the left opposite the centre company. The principal mnsician is two paces in front of the field music. The regimental band (not to excced sixteen musicians), if there be one, is drawn up in two or four ranks, according to its numbers, and posted five paces in rear of the field mnsic, having a prineipal musician at its head.

## Color-Guard.

12. The color-guard of a regiment or battalion is composed of eight sorporals, posted on the left of the right centre company, of which company, for the time being, the guard forms a part. ${ }^{*}$

The front rank is composed of a sergeant selected by the colonel, who is called the color-bearer, with the two ranking corporals on his right and left; the rear rank is composed of the three corporals next in rank; the three remaining corporals are posted in rear in the rank of file-closers. The left guide of the color company, when the three last named corporals are in the rank of file-closers, is immediately on their left.

In battalions of less than five companics, there should be no colorguard, and no display of colors, except at reviews.

## General Guides and Markers.

13. There should be two general guides in each battalion, selected by the colonel from among the sergeants (other than first sergeants) for their accuracy in marching. These sergeants are denominated right and left general guide, respectively, and are posted in the line of fileclosers; the first in rear of the right, and the sccond in rear of the left flank of the battalion.

Three markers are required to every battalion; they are posted behind the first company in the rank of file-closers, when the battalion is in line, and behind the leading company or division whenever it is in column.

## The Battalion in Column.

14. For the march, in many of the manœurres, etc., the battalion is in column. The column may be one of companies, or of divisions, in rare instances it is one of platoons. It may be a column right in front, in which case the first company, or division, is in front, all the others being behind it in regular succession; or it may be a column left in front, in which the last company or division leads, the others following in the inverse order of their numbers.

When the right is in front, the guides of the colnmn are habitually to the left, and to the right when the column is left in front.

The column may be onc at full distance, at lealf distance, or closed in mass; in the first case the distance between the guides of any two consecutive companies of the column is equal to the width of one of the companies or divisions; in the second case it is one-half the width of the company or division : and in the last case, that of the column closed in mass, the distance between the guides is six paces.

## Posts of the Officers when the Battalion is in Column.

15. The colonel is on the directing flank, fifteen or twenty paces from the guides, and abreast the centre of his battalion; the lienten-ant-colonel is on the direeting flank, abreast with the leading eompany or division, and six paces from the guide; the majors are on the same flank, the senior abreast with the rearmost company or division, and six paees from the guide, the junior in a eorresponding position abreast the eentre company ; the adjutant is ncar the lieutenant-colonel, and the sergeant-major near the senior major.

In a column of companies, the captains are two paces in front of the centres of their companies; the right guide of each eompany is on the right of the front rank, the left guide in a corresponding position on the left; the lieutenants, and remaining sergeants, are in the rank of file-closers.

In a column of divisions, the senior captain of each division is two paces in front of the centre of his division, the junior eaptain in the interval between the two companies; the right guide of the right eompany is on the right of the front rank of the division, the left guide of the left eompany is in a corresponding position on the left; the right guide of the left company is in the rear rank, bebind the junior eaptain, and the left guide of the right company is in the rank of the file-closers.

## Brigades and Divisions.

16. Two or more regiments serving together constitute a brigade, under the command of a brigadier-general.

Two or more brigades serving together constitute a division, eommanded by a major-general.

Two divisions serving together eonstitute an army corps.
The army corps, when supplied with a due proportion of eavalry, artillery, etc., comprises within itself all the elements of a eomplete army, ready for any emergency.

The interval between two contiguous regiments in the same brigade, division, or army corps, is twenty-two paces.

As often as one or more brigades or divisions, united in the same line, manœurre together, cach battalion will be designated by its numher, according to its position in the line. The battalion on the right of the whole is denominated first, that next on its left second, the following one third, and so on to the battalion that closes the left of the line.

In line of battle, the general (the senior major-general present) has no fixed pasition; he goes whithersoever he may judge his presence necessary.

In column, he will hold himself habitually at its head, in order to direct it aecording to his views. In the evolutions, he will place himself at the point whence he can best direct the general execution of the movement.

In line of battle, generals of division place themselves at about seventy paces in rear of the centres of their divisions.

In column they hold themselves on the directing flank, abreast with the centres of their divisions, and at thirty or forty paces from the guides.

In line of battle, generals of brigade place themselves at about forty paces in rear of the centre of their brigades.

In column, they hold themselves at fifteen or twenty paces outside the guides, and abreast with the centre of their brigades.

## ORGANIZATION OF CAVALRY.

## The Company.

17. The company in cavalry is denominated the troop; it is organized upon the same principles as that of infantry; its habitual formation is in two ranks.

When the company is in line, and acting singly, the officers and noncommissioned offiecrs are posted as follows:

The captain in front of the centre, one pace from the front rank.
The first lieutenant in rear of the centre, in the rank of file-closers.
The seeond lieutenant commands the first platoon; in the absence of a third lieutenant, the secoud platoon is commanded by the senior sergeant. The chiefs of platoons are posted one pace in front of the centres of their respective platoons.

The first sergeant in rear of the right, in the rank of file-elosers.
The second and third sergeants on the right and left of the company, and denominated the guide of the right, and guide of the left, respectively.

The fourth sergectit is on the left of the first platoon, in the front rank, and comnted in the rank; the fifth seryeant is in a corresponding position on the right of the second platoon.

Corporals on the flauks of platoons.
Buglers twenty paces in rear of the centre.

## The Squadron.

18. Two companies united constitute the squadron. Each squadron is composed of four platoons, distinguished by the denomination of first, second, third and fuoth, eummencing on the right.

The first and second platoons form the first dicisiom, the third and fourth form the second division.

The senior captain of the squadron is denominated the eaptain commanding, the junior captain the second captuin.

When the squadron is in line, the othecrs and non-commissioned officers are posted as follows:

The captain commanding at the centre of the squadron, the croup of his borse onc pace in front of the heads of the horses of the front rank.

The second captain three paces in rear of the centre of the squadron. He is charged with the alignment of the rear rank and line of fileclosers.

The senior first lieutenant commands the first platoon ; the junior first - lieutenant commands the fourth platoon.

The senior second lientenut eommands the second platoon; the junior second lientenant commands the third platoon.

Each of these officers is posted at the eentre of his platoon, with the croup of his horse one pace in front of the heads of the horses of the front rank.

The senior sergerant is posted behind the first file from the right of the first platoon; he is the principal guide when the column of squadrons is left in front.

The second sergeant is behind the third file from the left of the fonrth platoon; he is principal guide when the column of squadrons is right in front.

The third sergeant is posted on the right of the front rank of the squadron; he is the gride of the right, and is not counted in the rank.

The fourth sergernt on the left of the front rank; he is guide of the left, and not connted in the rank.

The fifth sergeant on the left of the first platoon, and counted in the rank.

The sixth sergeant on the right of the scond platoon, also counted in the rank.

The seventh sergeant on the right of the third platoon; the eighth sergeant on the right of the fourth platoon-both are counted in the rank.

The heads of the horses of the file-elosers are at one pace from the cronp of those of the rear rank.

The corporals are in the front rank, on the right and left of their respective platoons, and supply the places of sergeants when neeessary.

When guidons are used they are carried by the non-commissioned officers on the left of the first and third platoons.

## The Regiment in Line.

19. The reyiment is mude up of five squadrons, distinguished by the denomination, first, secoml, third, fourth and fifth; they are formed on the same line, in the order of these numbers, commeneing on the right, and with an interval of twelve paces.

This is the primitive and habitual order of the squadrons in regiments.

When a regiment is to mount, boots and saddlles is sounded; at this signal the horses are saddled, bridled, and prepared to be led out.

At the signal, to horse! the first sergeants direct the men to lead out.

The sergeants, corporals and privates being in two ranks, in the order of their platoons, at the head of their horses, the orderly-sergeant calls the roll.

The captain directs them to eall off by fours and to mount (see No. 383 ), and on reaching the regimental prarade, reports all absentees to the adjutant, through the orderly-sergeant.

In case of alarm or surprise, to horse is sounded; the men then saddle, bridle and mount with the utmost celerity, and repair to the place of assembly, which is always previously designated.

The offieers and non-commissioned officers of the field and staff of the regiment are posted as follows:

The colonel twenty-five paees in front of the ceutre of the regiment, having a chief bugler behind him.

The lientencont-colonel twelve paces in advance of the centre of the right wing.

The major twelve paces in advance of the centre of the left wing.
The junior major, when there is one, twelve paees in front of the centre of the regiment.

The colonel moves where his presence may be neeessary.
The adjutant on a line with the front rank, two paces from the right of the regiment. Wheu the regiment marehes iu line with the guide right, it is his duty to give the points of direction, and superintend the guides and the direction of the march.

The sergeant mijor on a line with the front rank, two paces from the left of the regiment. He is charged with the same functions as the adjutant, when the mareh is in line with the guide left.

The adjutant, assisted by the sergeant-major, is also charged with tracing the lines.

The standurd-bearer is placed at the last file but one from the left of the front rank of the platoon on the right of the centre of the regiment.

General staff-officers (surgeon, paymaster, ete.), serving with the regiment, twenty-five paces in rear of the right of the first squadron, aeeording to rank.

The quartermaster-scrgcant hehind the adjutant, on the line of the rear rank.

The general guides of the right and left are plaeed in the rank of file-closers, in rear of the sergeant-major and quartermaster-sergeant.

The trumpeters, formed in two ranks, are twenty-five paces in rear of the centre of the regiment.

The trumpeters of a squadron acting separately, are posted in the same manner, but in one rank.

## Order of the Regiment in Column.

## By Two or by Four.

20. In this order the squadrons preserve an interval of twelve paces between each other; the same as in line. This distanee is measured from the eroups of the borses of the last files of one squadron, to the heads of the horses of the first files of the next squadrou.

The colonel marches at the ceutre of the regiment, on the side of the guides, twenty-five paces from the flank of the column, having behind him a ehief bugler.

The lieutcnant-colonel on the side of the guides, twelve paces from the flank of the column; he marehes on a line with the lieutenants commanding the first platoon of the first squadron.

The major marehes in the same direction of the lieutenant-colonel, and on a line with the guide of the left of the fifth squadron.

The adjutant marcbes on the side of the guides, two paces from the flank, and on a line with the leading files of the column, to obscrve the guides and the direction of the mareh.

The sergeant-major marches on the side of the gnides, two paees from the flank of the column, and on a line with the guide of the left of the fifth squadron; if the left is in front, he executes on the side of the guides what is preseribed for the adjutant when the right is in front.

The quartcrmaster-sergeant having the right general guide behind him, marehes on the side opposite the guides, two paces from the flank, and on a line with the first files of the column.

The captains commandiny mareh on the side of the guides, and four paces from the flank, and abreast of the eentre of their squadrons.

The second captains march on the side opposite the guides, four paces from the flark, and abreast of the centre of their squadrons.

The first lientenant of each squadron marches at the head of the first
platoon, one pace in advance of the first files, haring the guide of the right on his right.

The chiefs of the other platoons march on the side of the guides, one pace from the flank of the column, and abreast of their first files; the file-closers march on the side opposite the guides, one pace from the flank, and on a line with the centre of their platoons.

They all march in a similar manner on the flanks of the column when the left is in front: and, in this case, it is the junior first lientenant who marches in the column at the head of the fourth platoon of each squadron.

The guide, who in line is posted on the left of the squadron, marches behind the last file of the squadron; when the column is left in front, he takes post on the left of the officer commanding the fourth platoon, one pace in front of the left file.

## Order in Column of Platoons.

21. In this order, the distance from one platoon to another, measured from the men of one front rank to those of another front rank, is equal to the front of a platoon; that is to say, it is twelve paces if the platoons are of twelve files, subtracting the depths of two ranks, which is six paces, there remains six paces from the croup of the horses of the rear rank of one platoon to the heads of the horses of the front rank of the next platoon, a distance which is equal to half of the front of a platoon.

The colonel marches at the centre of the regiment, on the side of the guides, twenty-five paces from the flank of the column.

The lieutenant-coloncl marches on the side of the guides, twelve paces from the flank of the column, and on a line with the lieutenant commanding the first platoon of the first squadron.

The major marches in the direction of the lieutenant-colonel, and abreast of the file closers of the last platoon of the column.

The adjutont marches behind the left filo of the first platoon to direct the guide of the column; he should occasionally place himself in front of this file to satisfy himself that the guides of each platoon preserve the same direction.

The sergeant-major marches on the side of the guides, two paces from the flank of the column, and ahreast of the file-closers of the fourth platoon of the fifth squadron; and, if the left is in front, he executes on the side of the guides that which is preseribed for the adjutant when the right is iu front.

The quartermaster-sergeant having the right gencral guide behind him, marches on the side opposite to the guides, two paces from the
flank of the column, and on a line with the front rank of the first platoon.

The ectptains commanding march on the side of the guides, four paces from the flank of the column, and habitually abreast of the centre of their squadrons.

The second cuptains march on the side opposite to the guides, four paces from the flank of the column, and abreast of the centre of their squadrons.

The first and second licutenants march at the centre of their platoons, one pace from the front rank; those who eommand the platoons at the head of squadrons, preserve, besiles their distance, the gronnd necessary to enable each squadron, in wheeling into line, to maintain its interval.

The sergeants, who are filc-closcrs, march on the side opposite to the guides, behind the third file of their platoons.

When the column marches right in front, the guide at the right of each squadron marches on the right of the first platoon; and the guide of the left places himself as file-closer behind the seconll file from the left of the fonrth platoon.

The post of these sergeants is the reverse when the left is in front.

## Order in Column of Divisions.

22. The colonel, lientenant-colonel, major, and adjutant, are posted as in the column of platoons.

It is the same for the captains commardiny, and the seeond captains.
The senior first lientenent commands the first division, the other first lieutenant the second; they remain, however, at the centre of their platoons.

All the other officers and sergeants of each division are posted as prescribed in the order in column of platoons, the file-closers remaining in their places, on whatever side the guide may be.

## Order in close Column of Squadrons.

23. In this order, the distance from one squadron to another is twelve paces, measured from the croup of the horses of the rear rank of one squadron, to the heads of the horses of the front rank of the next squadron.

The colonel, lientenant-culonel, and major, are posted as in column of platoons.

The adjutant marches behind the left guide of the first squadron, on the alignment of the file-closers, to superintend the direction of the march.

The sergeant-major is posted as in column of platoons, and when the left is in front, he performs the same duties as the adjutant when the right is in front.
The quartermaster-sergeant marches on the side opposite the guides, as in column of platoons.
The guide of the left of the left wing of the first squadron moves to the front on the alignment of the officers; be is replaced by the sergeant file-closers of the fourth platoon. If the left is in front, the guide of the right of the fifth squadron places himself on the alignment of the officers to serve as guide; be is replaced by the sergeant file-closer of the first platoon.
All the offieers of the squadron, and the file-closers, remain posted as in the order of battle, except the captains commanding, who march on the sides of the guides, four paces from the flank, and on a line with the officers of their squadrons.

## Cavalry Brigades and Divisions.

24. Two or more regiments of cavalry constitute a brigade; and two or more brigades constitute a division. They are officered in the same manner as infantry brigades and divisions.

Mixed brigades and divisions, composed of regiments of infantry and cavalry, are sometimes formed.

## ORGANIZATION OF FIELD ARTILLERY.

25. Field artillery is always formed into batteries. A battery may be composed of four, six, or eight pieces; the pieces may be all 6 -pounder or 12 -pounder guns, or it may be composed of 6 -pounder guns and 12 -pounder howitzers, or 12 -pounder guns and 24 or 32 -pounder howitzers.

The number of guns should be double that of the howitzers; for a defensive war, from $\frac{1}{4}$ to $1-5$ th of the pieces should be 12 pounder guns, and 24 or 32 -pounder howitzers. For an offensive war, from 1-7th to $\frac{1}{8}$ only should be of these calibres, otherwise the batterics could not be moved with sufficient celerity.

Each piece is followed by a caisson for ammunition; each piece and caisson is drawn by four or six horses.
26. A battery of six pieces will be supposed; it is divided into three sections, the right, centre and left; each containing two pieces and two caissons. In each section, the pieces are denominated right pieces and left pieces.
The battery is also divided into half batteries, denominated right and left half batteries.

The word piece applies to the gun or howitzer, either with or without its limber; and sometimes to the picee and caisson together.

The officers and men required for the service of the battery, are as follows:

One coptain, who commands the battery.
Four lieutenants; the first in rank commanding the right section (of two pieces), the sccond the left, the third the centre, and the fourth the line of caissons. When half batteries are formed, the first eommands the right, and the second the left.

Six monnted sergeants, cach charged with guirling and superintending a piece.

Twenty-four or thirty-six drivers, being one to each pair of horses.
Six detachments of camoneers, each containing nine men in mounted batteries, and eleven in horse artillery, inchaing the chicf of the caisson, and the guner who commands the detachment. In each detachment of horse artillery, the two last extra men are horseholders, who hold the horses of the detachment while it is serving the piece.

Two trumpeters or buglers. One guidon.

## Orler in Line.

27. The order in line is that in which the carriages are formed in two lines; the horses all facing the same direction (to the front), the pieces limbered, and each followed or preceded by its eaisson.

The interval between the carriages in a monnted battery is fourtecn yards; in a horse artillery battery it is seventeen yards.

The distance between the two lines, in a mounted battery, measured frem the rear of the carriages of one line to the heads of the horses of the second, is two yards; in horse artillery the detachments being two yards in rear of their pieces, the secoud line is two yards in rear of them.

In a mounted battery the cannoneers are at their posts.
The captain is four yards in front of the centre; but, during the manœuvres, be goes wherever his presence may be most necessary, and where his commands may be best heard.

Each chicf of section is in line with his leading drivers, and midway between the leading earriages of his section.

The chief of the line of cuissons is opposite the centre, four yards bchind the rear line of carriages.

Each chief of piece is on the left, and near the leading driver of his leading carriage. In horse artillery, when the chiefs of caissons are mounted, each chief of earriage is near its leading driver on the left.

The trumpeter is near the captain.

## Order in Column.

28. The order in column is that in which the battery is formed by sections; the earriages being in two files, and each piece being followed or preceded by its caisson.

In a mounted battery, the interval between the two pieces of each section of the column is fourteen yards; the distance between the carriages is two yards. The cannoneers are in file on each side of their pieces.

In horse artillery, the interval between earriages is seventeen yardsThe distance between the carriages and detachments is two yards. The detachments formed in two ranks are two yards in rear of their pieces.

The captein is generally feurteen yards from the column and opposite the eentre.

Each chief of section is in line with his leading drivers and midway between his leading earriages.

The chief of the line of caissons is in line with the captain, on the same side of the column, and four yards from it; but ho does not change his position to conform to that of the captain.

The chiefs of pieces and caissons are posted as in line.

## Order in Battery.

29. The order in battery is that in whieh the pieces are prepared for firing; the pieces, limbers, and eaissons being turned toward the enemy, and formed in three parallel lines.

In a mounted battery the interval between the carriages is fourteen yards. The distanees between the lines of pieces and limbers is six yards, measured from the end of the handspike to the heads of the leading horses. The distance between the lines of limbers and caissons is eleven yards, measuring from the rear of the limbers to the heads of the leading horses of the caissons. The cannoneers are at their posts.

In horse artillery the interval between the pieees is seventeen yards. The distances between the lines are the same as for the mounted battery. The eannoncers are at their posts, and the detachments of horses are four yards in rear of the limbers.

The captain is gencrally on the left of the chief of the centre section; but he may go wherever his presence is required.

Each ehief of scction is habitually in the centre of his section, half way between the lines of picces and limbers.

The chicf of the line of caissoms is opposite the eentre, four yards in rear of the line of caissons.

Each chief of piece is ontside the file on the left of his piece; but
near it, and opposite the middle of the trail handspike. During the executions of the firings be habitually dismounts and gives the reins of his horse to the driver of the wheel borses of the limber.

Each chief of caisson is on the keft, and four yards in rear of the limber of the piece. In horse artillery be gives the reins of his horse to the driver of the wheel horses of the eaissuns.

## Two or more Batteries united.

30. When necessary, two or more hatteries may be united; they may be formed by sections in one or more parallel columns, or in two columns joined, and presenting a front of four pieees with the same intervals as in line. Sumetimes they are formed in elose column with a front of four or six pieces, and the batteries being placed a distanco apart equal to the interval between two pieces. When the batteries are in line, the intervals between them are twice the intervals between the pieces.

## The position of Artillery.

31. Artillery seldom or never acts in an independent capaeity, but in conjunetion with either infantry or earalry, or both.

The positions usually assigned batteries are on the flanks, or in the intervals between regiments and brigades, these intervals being increased sufficiently to admit them. When a battery is brought into action, it is usnally thrown forward some sisty paces in front of the main line.

Two mounted batteries are usually assigned to each division of infantry, and one of horse artillery to every division of eavalry. Besides, for each army corps of infantry, there is a reserve of several batteries.
THE STAFF.
32. The well-being and efficiency of an army must depend in a large degree upon the thorough organization of the various departments of the Stceff.

These are:

> An Adjutant-General's Department.
> An Inspector-General's Department.
> A Quartermaster's Department.
> A Commissary Department.
> An Engineer Department.
> An Ordnance Department.
> A Pay Department.
> A Medical Department.
33. The officers of the adjutant-general's department are, an redju-tant-general, with such rank as may be assigned him by legislative enactment, usually that of colonel or brigadier-general, with as many assistent adjutant-generals as the exigencies of the service may require.

The adjutant-general should be the chief of the staff of the com-mander-in-chief. He is the regular channel through which commanders of corps and cliefs of departments communicate with the com-mander-in-chief; and all orders, special instructions and general regulations, issued by the commander-in-chief relative to the organization, discipline and instruction of the forces, are prepared and published by the adjutant-general, conformably to the direction of the commander-in-chief.

When the commander-in-chief takes the field the adjutant-general should accompany him; when an army in the field is in command of any general not the general-in-chief, an assistant adjutant-general is assigned to him as chief of his staff.

An assistant adjutant-general, with the rank of captain, is assigned to the commander of each brigade, and one with the rank of major is assigned to the general of every division. In each case the assistant adjutant-general is the chief of staff of his general, and his duties are of the same general nature as those of the adjutant-general.

An adjutant is the chief of staff of his regiment.
34. The officers of the inspector-general's department are one or more inspector-generals, with a division inspector for each division, and a brigade inspector for each brigade.

To the inspector-general, and the division and brigade inspectors, are assigned the duties of inspecting the troops, fortifications, camps, etc., at stated times; and division and brigade inspectors are specially entrusted with the instruction of regimental officers. The militia laws of Virginia, and some of the other States, impose all the dutics of this department upon that of the adjutant-general, in which case the division and brigade inspectors become the chiefs of staff of their divisions and brigades, and discharge all the duties which usually devolve upon the assistant adjutant-general.
35. The officers of the quartermaster's department are, a quarter-master-general, who has the control of the department; one or more assistant quartermaster-generals, quartermasters and assistant quartermasters.

The duties of this department are, to provide quarters and transportation for the troops; storage and transportation for all army supplies; clothing for the troops; camp and garrison equipage; cavalry and artillery horses; fuel; forage; straw, and stationery.
36. The officers of the commissary department are, a commissury
generct, one or more assistant commisscry-fenerals, and as many commissaries and assistont commissaries as the exigencies of the service may require.

To this department are assigned the duties of providing all the supplies necessary for the subsistence of the troops.
37. The ofticers of the engineer department are, a chief cngineer, and as many officers of engineers as may be necessary to give efficiency to the department.

The duties of this department nsually relate to the construction of permanent and field fortifications; works for the attack and defence of places; for the passage of rivers; for the movements and operations of troops in the field, and such reconnoissances and surveys as may be required for these objects.
38. The ordnance department is officered in the same manuer as that of the engineers.

This department has charge of all arsenals and armories; all cannon and artillery carriages and equipments; all apparatus and machines for the service and manœuvres of artillery ; all small arms and accoutrements and horse equipments; all ammunition, and all materials for the construction of munitions of war.
39. The officers of the pay department are, a paymatster-general, one or more dcputy paymuster-generals, and one paymaster, ordinarily, to every regiment. When large borlies of troops are serving together, the mumber of paymasters may be very much reduced without detriment to the service.

To this department belong all the duties pertaining to thepayment of the troops when they are in the service of the State.
40. The officers of the medical department are a surgeon-gfueral, with one surgeon to each regiment, and such other surgeons and assistant surgeous as a proper attention to the health of the troops may require.

The senior medical offieer, on duty with any corps in the field, mess utherwise specially ordered by the commanding officer, will be, exofficin, the medical direetor, and will have the general control of the modical officers and the supervision of the hospitals under their eharge.

## Article II.

## ARMS.

41. The prineipal small arms used in warfare at the present day are the eommon or smooth bore musket with pereussion lock, the riffed musket, the rifle with elongated ball, rifled carbines, pistols and sabres.
42. The smooth bore musket ( $U$. S. service pattern) is four feet ten inches in length from the butt to the muzzle; is provided with a bayonet cighteen inches in length, whieh fits upon the outside of the muzzle, and locks, so as to prevent its removal by an adversary; it has a bore of 0.69 of an inch in diameter, and carries a leaden ball running 32 to the ponnd. The musket with its bayonet weighs ten pounds nearly. The fire of the mnsket is inaccurate, but in a general action, where aecuracy of fire is not attainable, it may be made effeetive up to 300 yards; beyond 400 yards it is useless.

This arm is being rapidly superseded hy the rifled musket, or Minié musket, as it is sometimes called.
43. The rifled musket is nothing but the common musket "riffed;" the grooves are three in number, they are of equal width, and equal in width to the "lands ;" the twist of the grooves is a uniform spiral of onc turn to six feet in length; the grooves are very shallow at the muzzle ( 0.005 of an inch), and deepen slightly as they go down to the breech. The projectile, instead of being round, as in the common musket, is made cylindro-conical, the eylindrical portion having three grooves around it, and the base or bottom being hollowed out in a conical form. The objeet of giving the ball a pointed form is that it may meet with the least possible resistance in its flight through the air ; the effect of the grooves is, by the aetion of the air upon them, to keep the point of the ball in front, and cause it to strike first; the objeet of making it hollow at the base is to make it expand when the piece is fired, thereby cansing it to fill the grooves, and follow them in its passage out of the piece.

The dimensions of the rifled musket (U.S. pattern) are as follows: length, without bayonet, four feet eight inches; with bayonet fixed, six feet two inches ; weight, ten pounds; diameter of hore, 0.58 of an ineh; weight of ball, 500 grains.
44. The "altered musket" of the U. S. serviee is the old pattern musket rifled; the principal difference between this and the new rifled
musket being that the altered musket has a larger bore, its diameter being 0.69 of an inch. The ball carried by it is heavier, weighing 730 grains, and a beavier charge of powder is necessary.
45. The rifte, or Minié rifle, as it is generally called, is rifled in the same manner as the muskets; the diameter of the bore is 0.58 of an inch, the same as the new musket, and the same ball is used; it is shorter than the musket, being but four feet one inch in length, withont the bayonet, and not quite six feet with the bayonct fixed; its weight is greater than that of the musket, it being, without the bayonet, ten pounds, within a small fraction, and thirteen with it. The bayonet is not quite twenty-two inches in length; it is made in the form of a heary sabre, but slightly curved near the point. It is usually worn at the side, and is ouly fixed when pressed by caralry, or in a charge.
46. There are several forms of rifles and carbines which are more or less in use by mounted troops, as Colt's repeating carbines and repeating rifles, Maynard's, Burnsides, and Sharp's rifles, and Sbarp's carbine, all of which are breech-loading arms. Colt's arms are intended for both round and elongated balls; in the others, the elongated ball is alone nsed.
47. The pistols in gencral use at this time are the largest size of Colt's repeaters; they are rifled, and may be used as carbines by the attachment of an "adjustable breech."

There is also a "a pistol carbine" manufactured by the U. S. ordnance department; it is rifled, bas the same bore as the rifle and rifle musket, and the same ball may be used, although a ball with a larger carity than that of the riffe ball is preferable. This arm may be used as a pistol or carbine-in the latter case an adjustable breech becomes necessary.
48. All cavalry and artillery troops are armed with sabres-the U. S. cavalry and artillery sabres have steel scabbards; are forty-three and thirty-eight inches long respectively, and are attached to "sling" belts, which are worn around the waist.
49. The fire-arms used in artillery are divided into three classes, guns, howitzers and morters. Guns are used to throw solid shot, which cut by their force of percussion, hence they are always fired with large charges of powder, say from one-fifth to one-half the weight of the ball. They are used to strike an object direct, and at a distance; or, by their ricochet fire, for reaching objects not attainable by direct fire. They are also used to batter down the walls of fortifications. They are always designated by the weight of solid shot which they carry.

There are six different calibres, which are divided into three classes, they are $6,12,18,24,32$ and 42 -pounders.
50. The 6 and 12 -pounders, usually made of bronze, but sometimes
of cast iron, constitute one class called field guns ; the 12, 18, and 24pounders, made of cast iron, constitute a second known as siege and garrison guns; and the 32 and 42 -pounders, also cast iron, make the third, denomiuated sea-cocist grms.

Field guns are used in the field as light artillery; siege and garrison guns are used in permanent and field fortifications, and in sieges, to batter down the walls, etc.; sea-coast guns are principally used in permanent fortifications on the sea-board.
51. A howitzer is a gun with a cheomber in it. It is used principally for firing hollow projectiles, or shells; in order to prevent breaking the shell, and at the same time to give the projectile sufficient velocity, a small charge of powder is fired from a cylindrical chamber at the bottom of the bore.

The calibre of howitzers is designated by the weight of the solid shot which they would carry, or by the number of inches that the bore is in diameter. They are divided into ficld howitzers, momentain howitzers, siege and garrison, and sea-coctst howitzers; field howitzers are 12, 24, and 32 -pounders; mountain howitzers are 12 -pounders, siege and garrison howitzers are 24-pounders and S-inch, and sea-coast howitzers are 8 and 10 inch.
52. Field howitzers are used with light batteries in the field; the mountain howitzer is for service in countries too rough to admit the passage of wheeled carriages; siege and garrison howitzers are used in the trenches at sieges, and in the defence of permanent fortifications; and sea-coast howitzers are used in permanent fortifications on the seaboard.
53. There are several kinds of mortars ranging from six to sixteen inches in calibre; the heavy mortars are principally used on the seacoast ; the others are for use in the trenches at sieges, and in the defence of fortifications of all kinds.
54. Pieces of artillery are mounted on their carriages by means of trumnions; they are cyliuders east with the gun, haviug a common axis at right angles to that of the gun. The trunnions of the 6 -pounder guu, and 12 -pounder howitzer have the same diameter, so that guns and howitzers may be mounted on the same sized carriages, and serve together in the same battery; the trunnions of the 12 -pounder gun, and 24 and 32 -pounder howitzer, are also of the same size, so that they may be thrown torether in the same battery.
55. The field gun earriage is composed of two parts-the portion on which the piece rests when it is fired, and the limber. The first part, or carriage proper, is two-wheeled ; from the axle proceeds the stock, to which are fastened two upright pieces ealled cheeks, upon which the trunnions rest. The end of the stock, designated the trail, rests on the
ground during the firings ; at other times it is attached to the limber ; the piece gets its proper elevation by means of the elevating serew, which works through a plate on the stock. The limber is the part of the carriage to which the horses are attached; on the end of the trail is an iron plate called the lunette, through which there is an opening, which goes over a book on the axle of the limber called the pintle-hook, and is secured in its place by a bolt callerl the pintle-bolt. The limber also carries an ammunition box, which may be removed at pleasure.
56. Each piece is followed by its caisson or earriage, for ammunition. The wheels of the carriage, limber and eaisson, are all of the same size ; and may, when necessary, replace each other, and a spare wheel is carried on the rear of every caisson. The caisson carries three ammunition hoxes, of the same size as the one on the limber, and movable, so that when the box on the limber is empty, it may be exchanged for a full one from the eaisson. The boxes are partitioned off into small compartments, eaeh compartment being the receptacle for a eharge of ammunition.

Every artillery carriage is drawn by from four to six horses, a driver being required for each pair of horses.

## AMMUNITION.

57. When troops are in the field it is not only necessary that they should go with a sufficient supply of ammonition, but that it should be put up in such form as to he convenient for use, and at the sance time as well protected as possible from the effects of the weather, ete. Cartridges made of paper or flanuel, or some other woollen goods, are in general use; the former for small arms, and the latter for artillery.
58. To make the eylinders for blank eartridges, the paper is cut in a trapezoidal form, with a pattera. The former is a eylinder of hard wood, of the same diameter as the ball, coneare at one end, and eonvex at the other. The paper is laid on a table with the side perpendieular to the bases next the workman, the broad end to the left, the former laid on it with the eoncare end half an inch from the broad edge of the paper, and enveloped in it once. The right hand is then laid flat on the former, and all the paper rolled on it. The projecting end of the paper is now neatly folded down into the concavity of the former, pasted, and pressed on a ball imbedded in the table for the purpose.

Instead of being pasted, these cylinders may be elosed by choking
with a string tied to the table, and having at the other end a stick by which to hold it. The convex end of the former is placed to the left, and after the paper is rolled on, the former is taken in the left hand, and a turn made around it, with the choking string, half an inch from the end of the paper. Whilst the string is drawn tight with the right hand, the former is held in the left, with the forefinger resting on the end of the cylinder, folding it neatly down upon the end of the former. The choke is then firmly tied with twine.
59. For ball cartridges, the cylinders are made and choked as above, and the choke tied without cutting the twine. The former is then withdrawn, the ball inserted, and followed by the concave end of the former. Two half-hitches are made just above the ball, and the twine cut off.

For ball and buck-shot cartridges make the cylinder as before, insert three buck-shot, fasten them with a half-hitch, and insert and secure the ball as before.

For buck-shot cartridges make the cylinder as before, insert four tiers of three buck-shot cach, as at first, making a lalf-hitch between the tiers, and ending with a double hitch.
60. To fill the cartridges, the cylinders are placed upright in a box, and the charge poured into each from a conical charger of the appropriate size; the mouths of the cylinders are now folded down on the powder by two rectangular folds, and the cartridges bundled in packages of ten. For this, a folding box is necessary; it is made with but two vertical sides, at a distance from each other equal to five diameters of the ball, and two diameters high.

Put a wrapper in the folding box, and place in it, two tiers of fire cartridges each, parallel to each other and to the short sides of the wrapper, the balls alternating; wrap the cartridges whilst in the fold-ing-box, by folding the paper over them, and tie them. A package of twelve percussion caps is placed in each bundle of ten cartridges.

The bundles are marked with the number and kind of cartridge.
61. The cartridges for elongated projectiles differ so much from those used with the spherical bullet, that a separate description is necessary.

Each cartridge is made of three pieces of paper, the larger piece or cartridge proper, is made of what is known as cartridge paper, but it should not be too strong; the second piece is made of the same or stronger paper, and the third is made of the stoutest rocket paper.

Before enveloping the balls in the cartridges, their cylindrical parts should be covered with a melted composition of one part beeswax and three parts tallow ; it should be applied bot, in which ease the superfloous part would run off. Care should be taken to remove all the
grease from the bottom of the ball, lest by coming in contaet with the bottom of the case it penetrate the paper and injure the powder.
62. The sticks on which the cartridges are rolled are made of the same diameter as the bore of the piece; the dimensions given are for the U. S. musket or rifle of 0.58 bore. The piece of stiff or rocket paper is laid on the smaller trapezoidal piece, with one of its longer sides coinciding with the shorter parallel side of the trapezoid. The former is laid on the side of the trapezoid, perpendicular to the parallel sides, leaving about a quarter of an inch of the side nucovered by the former, and the paper is rolled around the former; the projecting end of the paper is then folded down and pasted. After the cylinder thus made is dry, it is again put on the stick; the stick is then taken in the left hand and laid upon the outer wrapper, the end not far from the middle of the wrapper (the oblique edge of the wrapper turned from the workman, the longer vertical edge toward his left hand), and snugly rolled up. The ball is then inserted in the open end of the cartridge, the base resting on the cylinder ease, the paper neatly choked around the point of the ball, and fastened by tying with cartridge thread. The stick is then withdrawn, sixty grains of powder poured into the case, and the mouth of the cartridge is "pinched" or folded in the usual way.
63. To use this cartridge, tear the fold and pour out the powder; then seize the ball end firmly between the thumb and forefinger of the right hand, and strike the cylinder a smart blow across the muzzle of the piece; this breaks the cartridge and exposes the bottom of the ball; a slight pressure of the thumb and forefinger forces the ball into the bore clear of all cartridge paper. In striking the cartridge the cylinder should be held square across, or at right angles to the muzzle; otherwise, a blow given in an oblique direction would only bend the cartridge without breaking it.
64. The ammunition for artillery consists of a charge of powder contained in a cartridge bag, and the projectile, which may be either fixed to, or separate from the cartridge. When the two are fastened together, the whole constitutes a charge of fixed ammunition.
65. The eartridge bag should be made of merino, bombazette, or flannel, which shonld be all wool, otherwise fire might be left in the piece after its discharge. The texture and sewing should be close enough to prevent the powder sifting through. Untwilled stuff is preferable. The bag is formed of two pieces, a rectangle, which forms the cylinder, and a circular piece which forms the bottom. As the stuff does not stretch in the direction of its length, the long side of the rectangle should be taken in that direction, otherwise the cartridge might become too large for convenient use with its piece. The material is laid sometimes several folds thick, on a table, and the rectangles and circles marked out on
it with chalk, using, for the purpose, patterns made of hard, well seasoned wood, sheet iron, or tin. The pieces are then ent with the seissors. For a 6 -pounder gun and 12 -pounder howitzer, the reetangle is 11.4 inches long by 7.25 inches in height, the diameter of the bottom being 4.37 inches-the seam is half an inch wide. For the 12 -pounder gun, and 24 and 32 -pounder howitzer, the reetangle is 14.2 inehes by 10 , and the diameter of the bottom is 5.25 inches. The short sides of the rectaugle are sewed togther, and the bottom sewed in. The sewing is done with woollen yarn, twelve stitehes to the inch. The two edges of the seam are turned down on the same side, and basted, to prevent the powder from sifting through.
Blank cartridge bags, or those intended for immediate use, may be made of two rectangular pieces with semi-circular ends sewed together.
66. When special aceuraey is required, charges are carefully weighed in delieate seales; but usually the bags are filled by measurement. The powder measures are made of sheet eopper; they are eylindrical, and their diameters and height are equal. A measure 3.628 inches in diameter and height, holds one and a quarter pounds of powder, the charge for a 6 -pounder gun when it fires solid shot; one of 3.368 iuches holds one pound of powder, the eharge for the same gun when it fires spherical ease or eanister; it is also the charge for the 12 -pounder howitzer. A measure of 4.24 inches in diameter and height, holds two pounds of powder, the light charge for a 24 -pounder howitzer; one of 4.57 inches holds two and a half pounds of powder, the heaviest charge for the 24 -pounder howitzer, and the light eharge for the 32 -pounder. The one pound and a quarter measure, and the two pound measure, making three and a quarter pounds, will be the heavy charge for the 32 -pounder howitzer.
67. Blank cartridges, and those for the 12 -pounder gun, are, after being filled, simply tied firmly about the neek with twine. Those for fixed ammunition are attached to pieees of wood called sabots, by tying them with strong twiue; before attaching them to the sabots, however, the sabot must be fastened to the projectile.
The sabot, for guns, is cylindrical, or nearly so, in shape, and for howitzers, conical. For shot and spherical case for guns, they have one groove for attaching the cartridge; those for gun eauisters, and for 12 -pounder howitzer shells, spherical ease, and canister, have two grooves. Sabots for 32 -pouuder and 24 -pounder howitzers have no grooves, but are furnished with handles made of a pieee of cord, passing through two holes, and fastened by knots countersunk on the inside.
68. The sabots are fasteued to shot and shell with strips of sheet tin. For shot there are two straps crossing at right angles, one passing throngh a slit in the middle of the other. For shells there are four
straps soldered to a ring of tin; the straps are nailed to the sabot. If tin cannot be procured, straps may be made of strong canvas, one inch wide, sewed at the point of crossing. The part of the ball which is to be inserted into the soeket is dipped in glue; the straps are glued to the ball, and nailed to the sabot.
69. A canister shot is a cylinder of tin, of the same diameter as the bore of the piece, filled with small balls. The cylinder is left open at both ends; after being soldered, it is nailed to the sabot, and a plate of rolled iron placed at the bottom of the sabot. To prevent rusting, the cylinder before filling should be covered with beeswax dissolved in spirits of turpentine, and the balls should be painted or lacquered.

To fill the canister place it upright on its sabot; put in a tier of balls, filling the interstices with dry sawdust, packing it with a pointed stick, so that the balls will hold by themselves when the case is turned over, and throw out the loose sawdust. Place another tier of balls, and proceed in the same manner until the canister is filled; cover the top tier with a layer of sawdust, and put on the cover, which is a circular plate of sheet iron, settling it well with a mallet in order to compress the sawdust. The top of the cylinder is cut into slits about half an inch -ong, which are turned down over the cover to secure it.
70. The shot, shell, or cauister being secured to the sabot, the cartridge is tied to it, making the eharge complete. The mouths of the bag are first twisted and pressed down, so as to settle the powder; they are then opened and the powder smoothed. The sabot is introduced, and the cartridge drawn up around it, until it reaches the powder; the cartridge is then sccured by passing scveral turns of strong twine around it in the grooves, and tying it, after which the excess of the bag is cut off.
71. The cartridge and projectile for the 24 and 32 -pounder howitzers are kept separate; the projectile is attached to the sabot as has been explained, No. 68, and the cartridge to a cylindrical picce of light wood called a cartridge block.

These blocks give a better finish to the cartridge, help to fill the chamber and keep the eartridge from turning in the bore while the piece is being loaded. They have but one groove; the grooved end is inserted in the mouth of the eartridge, and pressed down upon the powder; the bag is pulled orer it and tied with twine in the groove. The mouth of the bag is then turned down, and another tie made over it, which keeps the powder from working up between the block and the bag. The superfluous part of the bag is then cut off.
72. For the greater security of field ammonition, the cartridges are covered with paper cylinders and caps. They are both made together, on the same former, which is a piece of board with slightly inclined
sides and rounded edges. The paper is pasted around this. The requisite length for the cylinder is cut from the smaller end, the rest forming the cap, which is choked at the end from which the eylinder is cut. For choking, a cylindrical former of wood, with a hemispherical end, is used, which should be bored through the end to facilitate the drawing off of the cap. The cylinder fits over the body of the cartridge and a part of the sabot to which it is tied, while the cap fits over the end. When the cap is drawn off, which is always done when the cartridge is placed in the piece, the lower end is left exposed so that the priming wire, or fire from the friction tube, can reach it without going through any paper.
73. Shells are hollow shot, the interior space being formed of a sphere coucentric with the outer surface, making the sides of equal thickness. They have a conical opening or eye, used to load the shell, and in which is iuserted the fuze to communicate fire to the charge.
74. To load shells, they are set upon their sabots, the charges measured out in the proper powder measure, and poured in through a copper funnel. The 32 -pounder requires a charge of one pound of powder (rifle or musket powder) to burst it, the 24 -pounder twelve ounces and the 12 -pounder scven ounces. If now the shell is to be fired by an ordinary fuze (see article on fuzes), a conical piece of dry beech is firmly driven into the eye, and then a hole is reamed out through it to receive the fuze, and stopped with a wad of tow, the fuze not to be driven in until the shell is to be fired.
75. Spherical case, or Schrapnel-shot, as they are called, after the English officer who brought them to perfection, are thin-sided shells in which, besides the bursting charge, are placed a uumber of musket balls. Their sides are much thinner than those of the ordinary shell, in order that they may contain a greater number of bullets; and these acting as a support to the sides of the shell prevent it from being broken by the force of the discharge. The weight of the empty case is about one-half that of the solid shot of the same diameter. Lead being much more dense than iron, the schrapnel is, when loaded, nearly as heavy as the solid shot of the same calibre; but on account of the less charge which it is necessary to use to prevent breaking the case, their fire is neither so accurate nor the range so great as with the solid shot. But when the schrapnel bursts just in front of an object the effect is terrible, being as great as the discharge of grape from a piece at a very short range.
76. To load a schrapnel shot, the requisite number of balls are placed in; the shell for a 6 -pound gun requires thirty-eight balls, that for the 12 -pound gun and howitzer seventy-eight, the 24 -pound howitzer one hundred and seventy-five, and the 32 -pound howitzer two hundred
and twenty-five. The balls being inserted, a stick a little less in diameter than the f'uze-hole, and baving a groove on each side of it, is inserted and pushed to the bottom of the chamber by working the balls aside. The shell is then heated to about the melting point of sulphur, and melted sulphur is poured in to fill up the interstices between the balls. When the shell is cool the stick is withdrawn, and any adhering sulphnr is remored.

If a fuze-plug and common fuze are to be used, the charge is placed in and the plug inserted as for shells; but if the Boarman fuze is to be used (see the artiele on fuzcs), the charge is to be inserted, and the stopper and fuze are screwed into their places. The bursting charges are as follows: for the 6 -pounder, 2.5 ounces; for the 12 -pounder, 4.5 ounces; for the $2 t$-pounder, 6 ounees; and for the 32 -pounder, 8 ounces.
77. A fuse is a eontrivance for communicating fire to the charge in a shell. It consists of a highly inflammable composition, inclosed in a wood, metal or paper case. The paper fuze consists of a eonical paper casc, containing the composition, whose rate of buruing is shown by the color of the ease, as follows:


Each fuze is made two inches long, and the yellow burns, consequently, ten seconds. For any shorter time, the fuse is eut with a sharp knife. This fuze is not placed in the shell until it is to be fired, when the wad of tow is removed from the fuze-plug, and the fuze pressed down with the thumb.
78. The Belgian or Boarman fuze is the best now in use. The fuze case is made of metal (an alloy of lead and tin), and consists, first, of a short eylinder, having at onc end a horse-shoe shaped indentation, one end only of which communicates with the magazine of the fuze plaeed in the centre. The indentation cxtends nearly to the other end of the eylinder, a thin layer of metal ouly intervening. This is graduated on the outside into cqual parts, representing seeonds and quarter seeonds. In the bottom of this ehannel a smooth layer of the composition is placed, with a piece of wiek or yarn underneath it; on this is plaecd a pieee of metal, the cross section of which is wedge-shaped; and this is by maehinery pressed down upon the eomposition. The cylindrical opening is filled with fine powder and covered with a sheet of tin, whieh is soldered in its place, elosing the magazinc from the external air. Before using the fuse, several holes are punched through this sheet of tin to allow the flame to escape into the shell. On the side of the fuse the thread of a serew is ent which fits into one on the
inside of the fuze hole, and the fuze is serewed into the shell with a wrench.
79. The thin layer of metal over the composition is cut away with a gouge or chisel of any kind, at the point marked with the number of seconds which we wish the fuze to buru. The metal of this fuze being soft, there is danger of its being driven into the shell by the explosive foree of the charge. To prevent this, a circular piece of iron, of a less diameter than the fuze, with a hole through its centre, and the thread of a screw on the outside, is serewed into the fuze-bole before the fuze is placed in.

The regularity and eertainty of this fuze is very great; one of its most important advantages is, the fact that the shells can be loaded, all rearly for use, and remain so for any length of time, perfeetly safe from explosion; as the fuze can be serewed to its place, and the composition never exposed to external fire until the metal is eut through. The only operation to be performed when the shell is to be fired is to gouge through the metal at the proper point, which may be done with any kind of a chisel, knife or other instrument.
80. Fire is eommunicated to the ebarge in a cannon by means of priming tubes and friction tubes.

Quill priming tubes are mate from quills by eutting off the barrel at both ends, and splitting down the large end for about half an inch, into seven or any other odd number of parts; these are bent outward, perpendicular to the body of the quill, and from the cup of the tube. Fine woollen yarn is then woven into these slits like basket work, the end being brought down and tied on the stem; or a perforated dish of paper is pasted on them.

These tubes are filled by injecting into them, with a tube-injector, a liquid paste made of mealed powder and spirits of wine; a better method is, not to make the paste too thin, and then press it in with the thumb. A strand of quick mateh, two inehes long, is now laid across the eup, and pasted in them with the powder paste. A small wire is then run through the tube, and remains there until the paste is dry; this leaves an aperture, furnishing a quick communication for the fire along the tube. A paper eap is placed over the eup, and twisted tightly around the tube under the enp.

Tubes are also made of metal; they are either moulded, or formed into tubes by machinery. They are filled, primed and eapped in the same way as quill tubes.

Priming tubes are now almost superseded by friction tubes, whieh are made by machinery at one of the U.S. arsenals.
81. To fire priming tubes portfires are used; they eonsist of paper rases, filled with a highly inflammable, but slowly burning composi-
tion, the flame of whiel is very intense and penetrating, and cannot be extinguished with water.

Friction tubes are fired by means of a lotmyid ; this is a stout cord which bas a wooden handle at one end, and an iron hook upon the other; the cannoneer puts the hook through the loop in the wire of the friction tube, and, holding the lanyard by the handle, pulls steadily until the wire is withdrawn, when an explosion takes place, induced by the friction of the wire against the composition in the tube.

## Article III. <br> SCHOOL OF THE SOLDIER.

## gENERAL RULES.

82. The object of this school is the individual instruction of the soldier; it should be taught with the greatest possible eare and precision, as on it depends the effieiency of the instruction of the company, which is again so nccessary to that of the battalion, and from that of the battalion to the evolutions of the line, where an entire army is manœuvred with as much precision as a single company. .

The instructor shonld never require a movement to be executed until he has fully explained it, and joined example to precept by performing the movement in person. He should accustom the soldier to take for himself the position required, correcting him when necessary, and should labor to prevent the formation of a habit of carelessness in the exccution of the movements.

Each movement should be thoroughly nnderstood before passing to another. After they have been properly executed in the order laid down, the instructor should no longer confine himself to that order. The men should be allowed to rest for a few moments, frequently, in the earlier stages of their instruction, and as often at other times as the instructor may think neccssary to prevent weariness, which is the prelnde to carelessness. When they are at attention, however, he should not allow any looking to the right or left; no changing of position, or langhing, or whispering, etc., so common among volunteers and militia. Here is the place to make the individual soldier, to give him habits of attention, teach him subordination, etc. If he does not acquire them in this school, it will be too late when he is adranced in the company.

At the command rest, the soldier is no longer required to preserve immobility or to remain in his place. If the instructor wishes merely to relieve the attention of the soldier, he commands, in place-rest; the soldicr is then only required to keep one of his fect in place; if he wishes to move that foot, the other is first bronght up to its proper position.

The school of the soldier is diviled into three parts, the first comprehending what ought to be tanght to recruits without arms ; the second, the manual of arms, the loadings and firings; the third, the principles
of alignment, the march by the front, the different steps, the march by the flank, the principles of wheeling and those of change of direction. In this school, the company is broken up into small squads, the number of men in each squad being proportioned to the number of instructors ; the squads for the first and second part should be as small as possible, and the men placed in single rank; for instruction in the third part, two or more squads of about equal proficiency should be united.

## PART FIRST.

In this part, the men shonld be without arms, and about one pace apart.

## Position of the Soldier.

83. Heels on the same line, as near each other as the conformation of the men will permit; because, if one were in rear of the other, the shoulder on that side would be thrown back.

The feet turned out equally, and forming with cach other something less than a right angle; because, if one foot were turned out more than the other, a shoulder would be deranged, and if both feet be too much turned out, it would not be practicable to give the body its proper position.

The knees straight, without stiffness ; because, if stiffened, constraint and fatigue would be unavoidable.

The body erect on the hips, inclining a little forward, because it gires stability to the position. Soldiers are at first disposed to project the belly and throw back the shoulders when they wish to hold themselves erect, from which result many inconveniences in marching; it is, therefore, important that the instructor should be particular to enforce this rule at the beginning.

- The shoulders square, and falling equally; if the shoulders are advanced beyoud the line of the breast, and the back arched (the defect called round-shouldered), the man cannot align himself, nor use his piece with skill. In correcting this defect, the instructor will take care that the shoulders are not thrown too much to the rear, causing the body to project, and the small of the back to curve.

The arms hanging naturally; elbows near the body; palms of the hands turned a little to the front, the little finger behind the seam of the pantaloons. These positions are important to the shoulder arms, to prevent the man from occupying more space in ranks than is necessary, and to keep the shoulders in proper position.

The head erect, and square to the front, without constraint; the chin slightly drawn in ; the eyes fixed straight to the front, in order to prerent derangement of the shoulders, and striking the ground at the distance of about fifteen paces.
84. The instructor having given the squad the position of the soldier without arms, will now teach the turning of the bead and eyes. He will command:

## 1. Eyes-Right. 2. Front.

At the word right, the soldier will turn his head gently, so as to bring the inner corner of the left eye in a line with the buttons of the coat, the eyes fixed on the line of the eyes of the men in the same rank. At the command Front the head will resume the direct or habitual position. The instructor will take eare that the morement of the head does not derange the equareness of the shoulders, and that the men do not acquire a habit of throwing down the lead in dressing.

The movement of Eyes-Left will be executed by inverse means.

## Facings.

85. Facing to the right and left will be executed in one time or pause. The instructor commands:

## 1. Squad. 2. Right (or left)-Face.

At the word Face, raise the right foot slightly, turn on the left heel, to the right (or left), raising the left toe a little, and then replace the right heel beside the left, and on the same line. The face should always be through a right angle, and should be executed by the feet and legs, the hody moring around to the right (or left) without twisting or constraint. The instruetor should labor to keep the body steady, and to prevent the formation of the habit of bending the knees, or spring ${ }^{2}$ ing.
86. The full face to the rear is always to the right, and is executed in two times, or pauses. The instructor commands:

## 1. Squad. 2. About-Face.

First motion. At the word alout, the soldier will turn far enough on the left heel to bring the left toe directly to the front, at the same time carrying his right foot to the rear, the hollow opposite to, and full three inches from the left heel, the feet square to each other. The back of the right hand is placed a little above the right hip, and the body is turned to the right sufficiently to give ease to the position.

Second motion. At the word face, the soldier raises his toes a little, turns upon both heels, faces to the rear, keeping his legs straight, and draws baek the right heel by the side of the left, at the same time dropping his right hand by his side.

## Balance Step.

87. Before commencing the march the soldier should always be instructed in the balance step, the object of which is to teach him the free movement of his limbs, while he, at the same time, preserves perfect squareness of the shoulders, with the greatest steadiness of the body; no labor should be spared to attain this object, which lies at the very foundation of good marching.

The squad being at attention, the instructor commands:

## Left foot-Forward.

At this command the soldier will throw his left foot gently forward, about twenty-four inches, balanciag his body well on the right foot without changing the position of the shoulders, and without the body losing its erect position. The toe should be turned out as in the purition of the soldier, the foot about three inches from the ground and very nearly parallel to it, the toe being very slightly depressed.

At the command:
Left foot-Rear.

The left foot is brought gently baek, the ball of the left foot close to the right heel, the leg straight, toe raised.and heel depressed.

As soon as the soldier becomes steady in the new position, the instructor repeats the command, left foot forward, then left foot rear, for several times, and then eommands :

## Halt :

at which the left foot, either advanced or to the rear, is brought to the right, as in the position of the soldier.

The instructor then canses the soldier to balance on the right foot, by advaneing and retiring the right, as has been directed for the left.

## The Direct Step.

88. After the soldier is suffieiently instructed in the balance step to execute it on either foot without losing his balance, the instructor will
proceed to instruct him in the mechanism of the direct step. For this purpose he will eommand:

## 1. By the numbers-Forward. 2. One.

At the eommand one, the soldier will throw forward the left foot, as in the position of left foot forward, the instructor then eommands:

## Two.

At this command, the weight of the body is thrown forward, the left foot striking the ground without shock, at the distance of twenty-eight inches from the right; the body assumes the perpendicular position, and the right foot is brought up to the position of right foot rear.

The right foot is then brought forward at the command one, and the step completed at the command tico; thus the squad is made to advance step by step. The halt is executed as in the balance step.
89. When the squad is sufficiently instructed in the mechanism of the direct stop, the instructor will cause it to take up the march in common time; for this purpose be will commaud :

## 1. Squad forward-Common time. 2. March.

At the command forward, the soldier will throw the weight of his body on the right leg, without bending the left knee.

At the command march, he will smartly, but without a jerk, carry straight forward the left foot twenty-eight inches from the right, the sole near the gronud, the leg extended, the toe a little depressed, and both it and the knee slightly tarned out; he will at the same time throw the weight of the body forward, and plant flat the left foot, withont shock, preeisely at the distance where it finds itself from the right when the weight of the body is brought forward, the whole of whieh will now rest on the left foot. The soldier will next, in like manner, advance the right foot and plant it as directed for the left, the heel twenty-eight inches from the heel of the left foot, and thus continue the march without erossing the legs, or striking one agaiust the other, without turning the shoulders, and always preserving the face direct to the front. Common time is executed at the rate of ninety steps to the minute.

When the instructor wishes to arrest the march he commands:

## 1. Squad. 2. Halt.

The command halt should be given just as one foot has come to the ground and the other is raised for making the next step; the soldier
instinctively completes the pace with the raised foot, and brings the other firmly to its place beside it. By eareful attention to this rule a large command may be as readily halted at the same instant as a single individual.
90. The prineiples of the step in quick time are the same as for eommon time; it is exceuted, however, at the rate of 110 steps per minute. After the soldier is well established in the length and swiftness of the step at eommon time, he should be practised in quiek time, as it is the pace best adapted to marehes, the manourres, ete.

The instructor wishing the squad to march in quiek time, eommands:

## 1. Squad forward. 2. March.

## Principles of the Double Quick Step.

91. The length of the double quick is thirty-three inches, and its swiftness is at the rate of 165 steps per minute. This step is designed especially for light troops, such as light infantry and riflemen, and to them it is indispensable; its utility has, howerer, been so frequently demonstrated of late years, as to make it proper that it should form a part of the instruction of all infantry troops.

The instructor wishing to teaeh his squad the principles and meehanism of the double quick step, commands:

## 1. Double quick step. 2. March.

At the command double quick step, the soldier will raise his hands to a level with his hips, the hands closed, the nails toward the body, the elbows to the rear and well drawn in toward the body.

At the command march, he will raise his left knee as high as possible without derangement of the body, keeping his leg from the knee down in a vertical position, the toe depressed; he will then replace his foot in its former position. At the eommand tro, he will exeeute with the right leg what has just been preseribed for the left, and the alternate movement of the legs at the commands one, two, will be continued until the eommand :

## 1. Squad. 2. Halt.

At the command hatt, the soldier will briug the foot whieh is raised by the side of the other, and at the same time dropping his hands by his side will resume the position of the soldier without arms.

When the squad bas learned to exeeute the step properly, the instruc-
tor will repeat the words one, two, in more rapid succession, and will finally drop them, learing the files to execute the step in their own time. The instructor will see that the step is taken in rapid sucession, and that none of the files lose the step.
92. The soldier being sufficiently established in the principles of this step, the instruetor will command:

## 1. Squad', forwarl. 2. Double quick. 3. March.

At the command forward, the soldier will throw the weight of his body on the right leg, without bending the left knec.

At the command double quick, he will place his arms as indicated above.

At the command march, he will carry forward the left foot, and plant it, the toe first, at the distance of thirty-three inches from the right, the legs slightly bent, and the knee somewhat raised; he will then exccute with the right foot what has just been prescribed for the left. This alternate movement of the legs will take place by throwing the weight of the body on the foot that is planted, and by allowing a uatural, oseillatory motion to the arms. The feet should not be raised too mueh, a common fault with beginners, and the body should incline slightly formard.

The double quick step may be exceuted with different degrees of swiftness. Under urgent circumstances, the cadence of this step may be increased to 180 per minute. At this rate, a distance of 4000 yards would be passed over in about twenty-five minutes.

The men should also be exereised in running; the prineiples are the same as for the double quick step, the only difference consisting in a greater degree of swiftness.

It is recommended, in marebing in double quick time or the run, that the men should breathe as much as possible through the nose, keeping the mouth closed.

## PART SECOND.

## General Rules.

93. The instructor will not pass the soldiers to this seeond part until they are well established in the position of the body, and in the manner of marching at the different steps.

In the manual of arms, each command will be executed in one time (or pause), but this time will be divided into motions, the better to
make known the mechanism and to secure inniformity and precision in the motements.

The rate (or swiftness) of each motion, in the manual of arms, is fixcd at the ninetieth part of a minute; but the instructor will, at first, look more particularly to the execution of the motions, withont requiring a nice observance of the cadence, to which be will bring the men progressively, and after they have become a little familiarized with the use of the weapon.

The motions relative to the cartridge, to the rammer, and to the fixing and unfixing of the bayonet, cannot be executed at the rate prescribed, or even with uniform swiftness; the instructor will, however, labor to have these motions executed with promptness and regularity.

The last syllable of the command will decide the brisk execution of the first motion of each time (or pause). The commands two, three and four, will decide the brisk exccution of the other motions. As soon as the men comprehend well the positions of the several motions of a time, they will be taught to exceute the time without resting on its motions; the mechanism of the time must, however, be observed, as well to give perfect use of the weapon as to prevent carelessness or slighting of the motions. When the men hare acquired sufficient proficiency to execute the times withment resting, the instructor must be carcful to have the proper cadence observed; great promptness in the execution of the motions is not incompatible with the observance of a pause between them, so that they may be executed at the prescribed rate - that is, of ninety to the minnte. Those instructors who insist most upon the strict observance of this rule are those whose squads execute the manual in the best manner.

## Principles of Shouldered Arms.

94. Each soldier being in the position of the soldier, the instructor will cause him to turn up the left hand without bending the wrist, the left forearm only acting. The instructor will raise the piece perpendicularly, and place it as follows:

The piece in the left hand, the arm very slightly bent, the clbow back near the body, the palm of the hand pressing on the outer flat of the butt; the outer elge of the latter on the upper joints of the fingers, the heel of the butt between the middle and forefingers, the thumb on the front serew of the butt plate, the remaining fingers under the butt, the butt more or less kept back according to the conformation of the man, so that the piece, seen from the front, shall appear perpendicular, and, also, that the movement of the thigh, in marching, may not raise
it or cause it to waver; the stock, below the tail-band, resting against the hollow of the shoulder, just within the joint, the right arm hanging naturally, as prescribed in the position of the soldier.

Soldiers on first bearing arms are liable to derange their position, and particularly to distort the shoulders, which, causing the musket to lose its poiut of support, they drop the left hand to prevent the musket from falling from the shoulder, which again causes that shoulder to droop, a curvature of the side, spreading of the elbows, etc. The instructor will be careful to correct all these faults by continually rectifying the position; he will avoid fatiguing the men too much in the beginning, but labor to render this position so natural and easy by degrees, that they may remain in it a long time without fatigue.
The instructor will also take great care that the musket be not carried too high or too low; if too high, the left elbow would spread out, the soldier would occupy too much space in ranks and the musket would be unsteady; if too low, the files would be too close, the man would not have the necessary space to handle his musiet with facility, the left arm would become too much fatigued, the shoulder would droop, etc.
The manual of the musket will be taught in the following order: The instructor commands:

## Support-Arms.

## One time and threc motions.

95. First motion. With the right hand seize the small of the stock briskly, four inches below the lock, raising the piece a little, but not turning it.

Sccond motion. Take the left hand from the butt; extend the left forearm upward across the body, aud under the hammer, the left haud flat on the right breast.

Third motion. Drop the right arm smartly to its position.
The squad being at support arms, the instructor commands:

> Carry-Arms.

One time rand three motions.
96. First motion. Carry quickly the right hand to the small of the stock.

Second motion Place the left hand under the butt, as in the position of shoulder arms.

Third motion. Let fall smartly the right hand to its position, aud
drop with the left, at the same time, the piece into the position of shoulder arms.

## Present-Arms.

One time and two motions.
97. First motion. Turn the piece with the left hand, the lock out, and seize the small of the stock at the same time with the right hand, the piece perpendicular and detached from the shoulder, the left hand remaining under the butt.

Second motion. Complete the turning inward of the piece, so as to bring it erect before the centre of the body, the rammer to the front, the right hand under and against the guard; seize it smartly at the same time with the left hand just above the lock, the thumb extended along the barrel and on the stock, the left forearm resting on the body without constraint, and the hand at the height of the elbow.

## Shoulder-Arms.

## One time and tro motions.

98. First motion. Turn the piece with the right hand, the barrel to the front, raise and support it against the left shoulder with the right hand, drop the left under the butt, the right hand resting on, without grasping, the small of the stock.

Second motion. Drop quickly the right hand into its position.

## Order-Arms. <br> One time and tuo motions.

99. First motion. Drop the piece smartly by extending the left arm, seize it at the same time with the right hand, above and near the tailband; quit the hold of the left band, and carry the piece opposite to the right shoulder, the rammer to the front, the little finger behind the barrel, the right hand supported against the hip, the butt three inches from the ground, the piece erect, the left hand hanging by the side.

Second motion. Let the picce slip through the right hand to the ground without shock, and take the position about to be described.

## Position of Order Arms.

100. The hand low, the barrel between the thumb and forefinger extended along the stock; the other fingers extended and joined; the
muzzle about two inches from the right shoulder; the rammer in front; the toe of the butt against, and in a line with, the toe of the right foot, the barrel perpendicular.
101. When the instructor wishes to give repose in this position, he commands :

## Rest.

At this command the soldiers will not be required to prescrve silence or steadiness. They, however, will not quit their rank without speciai ${ }^{*}$ permission.
102. When the instructor wishes the men to pass from this position to that of silence and steadiness, he commands:

## 1. Attention. 2. Squad.

At the sccond word, the men will rescrve the position of order arms, and remain firm and silent.

## Shoulder-Anms.

> One time and tro motions.
103. First motion. Raise smartly the piece with the right hand, carry it against the left shoulder, turning it, so as to bring the barrel to the front; at the same time place the left hand under the butt, and slip the right hand down to the lock.

Second motion. Let the right hand fall briskly to its position.

## Charge-Bayonet.

## One time and thoo motions.

104. First motion. Make a half face to the right on the left heel, bring the left toc directly to the front, at the same time place the right foot behind, and at right angles with the left, the hollow of the right foot opposite to, and about threc inches from the left heel; turn the piece with the left hand, the lock outward, and seize the small of the stock at the same time with the right hand, the musket perpendicular and detached from the shoulder, the left hand under the butt.

Second mofion. Bring down the piece with the right hand, letting it fall firmly into the left, the latter seizing it a little in advance of the tail-band, the barrel up, the left elbow near the body, the right hand against the hip, the point of the bayonet as high as the eye.

## Shoulder-Arms.

 One time and two motions.105. First motion. Face to the front by turning on the left heel, bring up the right by the side of the left heel; at the same time bring up the piece with the right hand to the left shoulder, and place the left hand under the butt.

Second motion. Let the right hand fall promptly into its position.

Load in ten times.

## 1. Load.

One time and two motions.
106. First motion. Drop the piece by a smart extension of the left arm, seize it with the right hand above and near the lower band; at the same time carry the right foot forward, the heel against the hollow of the left foot.

Second motion. Drop the piece with the right band along the left thigh, seize it with the left hand above the right, and with the left hand let it descend to the gromnd, without shoek, the piece tonching the left thigh, and the muzzle opposite the centre of the body; carry the right hand quickly to the cartrilge-box and open it.

## 2. Handle-Cartridge.

One time and one motion.
107. Seize a cartridge with the thumb and the next two fingers, and place it between the teeth.

## 3. Tear-Cartridge.

One time and one motion.
108. Tear the paper down to the powler, hold the cartridge upright between the thumb and the next two fingers, near the top; in this position place it in front of and near the muzzle, the baek of the hand to the front.

## 4. Charge-CARTRIDGE.

109. Fix the cye on the muzzle, turn quickly the back of right hand toward the body, in order to diseharge the powder into the barrel,
raise the elbow to the height of the wrist, shake the eartridge, foree it into the muzzle, and leave the hand reversed, the fingers elosed but not elenched.

## 5. Draw-Rammer.

## One time and three motions.

110. First motion. Drop the right elbow smartly, and seize the rammer between the thumb and forefinger bent, the other fingers shut; draw it smartly, extending the arm, seize the rammer again at the middle between the thumb and forefinger, the hand reversed, the palm to the front, the nails up, the eyes following the movement of the hand, clear the rammer from the pipes by again extending the arm.

Second motion. Turn rapidly the rammer between the bayonet and the face, closing the fingers, the rammers of the rear rank grazing the right shoulders of the men of the same file in front, the rammer parallel to the bayonet, the arm extended, the butt of the rammer opposite to the muzzle, but not yet inserted, the eyes fixed on the muzzle.

Third motion. Insert the butt of the rammer, and foree it down as low as the hand.

## 6. Ram-Cartridge.

One time and one motion.
111. Extend the arm to its full length to seize the rammer between the right thumb extended and the forefinger bent, the other fingers elosed; with foree ram home twice and seize the rammer at the small end, between the thumb and forefinger bent, the other fingers elosed, the right elbow touching the body.

## 7. Return-Rammer.

## One time and three motions.

112. First motion. Draw the rammer briskly, re-seize it at the middle between the thumb and forefinger, the hand reversed, the palm to the front, the nails up, the eyes following the hand, elear the rammer from the barrel by extending the arm.

Sceond motion. Turn the rammer rapidly between the bayonct and the face, elosing the fingers, the rammers of the rear rank grazing the right shoulders of the men in the same file in front, the rammer parallel to the bayonet, the arm extended, the little end of the rammer opposite to the first pipe, but not yet inserted, the eyes fixed on that pipe.

Third motion. Insert the small end, and with the thumb, which will follow the movement, force it as low as the middle band; raise the hand quickly, a little bent, place the little finger on the butt of the rammer, and foree it down; lower the Jeft hand on the barrel to the extent of the arm without depressing the shoulder.

## 8. Cast-About.

One time and two motions.
113. First motion. With the left hand bring up the piece rertically against the left shoulder, seize it smartly with the right hand at the small of the stock, and slide the left hand duwn as low as the chin.

Second motion. Make a half face to the right on the left heel, bring the left toe to the front, place the right foot at the same time close behind, and at right angles with the left, the bollow of the right foot against the left heel; earry the piece opposite to the right shoulder ; bring down the piece with the right hand into the left, which will seize it at the tail-band, the thumb extended on the stock, the butt under the right forearm, the small of the stock against the body, and about two inches under the right breast, the muzzle at the height of the eye, the left elbow supported against the side, the right hand grasping the small of the stock.

## 9. Prime.

## One time and one motion.

114. Place the thumb of the right hand on the hammer (the fingers remaining under and against the gnard), and half cock the piece; brush off the old cap, and with the thumb and first two fingers of the right hand take a eap from the pouch, place it firmly on the cone by pushing it down with the thumb, and seize the piece by the small of the stock.

> 10. Shoulder-Arms.

## One time and tico motions.

115. First motion. Face to the front by turning on the left heel: at the same time bring the piece briskly with the right hand to the left shoulder, and place the left hand under the butt.

Sccond motion. Let the right hand fall smartly into its position at shoulder arms.

## Ready. (From the position of prime.)

One time and one motion.
116. Plaee the thumb of the right hand on the hammer (the fingers remaining under and against the guard), cock the piece, and seize the small of the stoek.

## Ready. (From the position of shoulder arms.)

## One time and four motions.

112. First motion. Turn the pieee with the left hand, the lock to the front, seize it at the small of the stoek with the right hand, at the same time make a half face to the right on the left heel, bringing the left toe to the front, and placing the right foot behind, and at right angles to the left, the hollow of the foot against the left heel.

Second motion. Bring the piece with the right band to the middle of the body, place the left hand just above the loek, the thumb extended along the stock at the beight of the chin, the eounter (or S) plate turned toward the body, the rammer obliquely to the left and front.

Third motion. Place the thumb on the hammer, the forefinger under and on the guard, the other three fingers joined to the first, the elbow at the height of the hand.

Fourth motion. Close the right elbow smartly to the body in cocking, without bending the wrist, seize the piece by the small of the stock, let it deseend along the body in the left hand to the tail-band, which will remain at the height of the shoulder.

## Aim.

## One time and one motion.

118. Raise the butt to the shoulder, the left elbow a little down, shut the left eye, direct the right along the barrel, drop the head upon the butt to catch the object, and place the forefinger on the trigger. The rear rank will at the same time, carry the right foot about eight inches toward the left heel of the man next on his right.

## Fire.

## One time and one motion.

119. Apply the forefinger with foree to the trigger without further lowering or turning the head, and remain in that position.

## Load. (From the Fire.)

One time and two motions.
120. First motion. Bring baek the piece quickly with both hands, depress the butt strongly by extending the right arm, and earry it with the arm thus extended to the left side, the barrel to the front and opposite to the left shoulder, the left hand at the beight of the chin, the back of the hand to the front, the left forearm touching the stock; at the same time face to the tront and carry the right foot forward, the heel against the hollow of the left foot.

Second motiou. Let go the handle with the right hand, let the piece descend through the left to the ground, without shock, and take the position of the second motion of load.

## Shoulder-Arms. (From the Fire.)

One time and tho motions.
121. First motion. Bring batk the piece with both hands, face to the front, carry the piece against the luft shoulder, and place the left hand under the butt.

Second motion. Let the right hand fall smartly to its position.
The squad being in the position of aim, the instruetor, to habituate the soldiers to wait for the word jirc, sometimes eommands:

> Recover-Arms.
> One time and one motion.
122. Withdraw the finger from the trigger, throw up the muzzle smartly, and retake the position of the fourth motion of ready.

The men being in this position, if the instructor wishes them to eome to a shoulder, he commands:

## Shoulder-Arms.

123. At the word shoulder, the squad will face to the front, and bring their pieces to the middle of the body again; the left thumb at the height of the ehin, the little finger just above the lock; next place the right thnmb on the head of the hammer, support the forefinger on the trigger, sustain the hammer carefully in its descent at the same time, to the position of half-cock, then scize the small of the stock with the right hand. At the word arms, carry the pieco to the shoulder smartly, and take the position of shoulder arms.

## To load in four times (or pauses).

124. The instructor commands:

## 1. Load in four times. 2. Load.

Execute the first time of loading, handle cartridge, tear cartridge, charge cartridge.

Two.
125. Draw rammer, euter it as far as the hand, and ram twice.

## Three.

126. Return rammer, cast about, and prime.

## Four.

127. Execute the tenth time of loading.
128. The soldiers being at a shoulder, when the instructor may wish to return bayonets, be commands :

> Unfix-Bayonets.

One time and three motions.
First motion. Drop the piece by a smart exteusion of the left arm, seize it with the right hand above and near the tail-band.

Second motion. Drop the piece with the right hand along the left thigh, seize it with the left band above the right, lengthen out the left arm, rest the butt on the ground, without shock, and carry the right hand at the same time to the bayonet, with the thumb lower the clasp against the stop, and then seize the bayonet at the socket and shank.

Third motion. Wrest off the bayonet, return it to the scabbard, place the little finger on the butt of the rammer, lower the left hand along the barrel in extending the arm, without depressing the shoulder.

## Shoulder-Arms.

One time and three motions.
129. First motion. Raise the piece with the left hand along the left side, the hand at the height of the chin, the forearm touching the piece, the barrel to the front; drop at the same time the right hand to seize the piece a little above the handle, the forefinger touching the cock, and the thumb on the counter plate.

Scond motion. Raise the pieee with the right hand, drop the left, and place it under the butt, support the piece with the right hand against the shoulder, in the position prescribed for shoulder arms, the right hand resting on, without grasping, the piece.

Third motion. Let fall smartly the right hand into its position by the side of the thigh.

## Fix-Bayonet.

130. First and second motions. As the first and second motions of unfi. bayonet, except that at the end of the second motion, the right hand will go te seize the bayonet by the socket and shank, so that the lower (now upper) end of the socket shall extend about an inch above the beel of the palm.

Third motion. Draw the bayonet from the scabbard, earry and fix it on the muzzle, turning the clasp toward the boty with the right thumb; place the little finger on the head of the rammer, lower the left hand along the barrel, in extending the arm.

## Shoulder-Arms.

The same as from the unfix bayonet.

> Secure-Arms.

One time and tro motions.
131. First motion. Seize quickly the picce with the right hand, the thumb on the counter plate, and the forefinger against the cock; detach the picce from the shoulder at the same instant, the barrel to the front, seize it at the tail-band with the left hand, the thumb extentled on the rammer, the piece ercet, opposite to the shoulder, the left elbow on the piece.

Second motion. Reverse the piece, pass it under the left arm, the left hand remaining at the tail-band, the thumb on the rammer to prevent it from sliding out, the little finger resting against the hip, and the right hand falling at the same time into its position.

## Shoulder-Arms.

## Gne time and tro motions.

132. First motion. Raise the piece with the left hand, but not too suddenly, lest the rammer should fly out; seize the handle with the right hand to support it against the shoulder, quit the hold of the left hand, and place quickly this hand under the butt.

Seeond motion. Let fall smartly the right hand into its position; drop at the same time the piece into the position of shouldered arms.
Trail—Arms.

One time and tico motions.
133. First motion. As the first motion of order arms.

Second motion. Iucline a little the muzzle to the front, the butt to ${ }^{\text {s }}$ the rear, and about three inches from the ground, the right hand, supported at the hip, will sustain the piece so that the men of the rear rank may not touch with their bayonets the men in front of them.
Shoulder-Arms.
134. At the command shoulder, raise the piece perpendicularly in the right hand; at the commaud arms, execute what has been prescribed for the shoulder from the position of order arms.

## To right shoulder, shifi-Arms.

One time and one motion.
135. Turn the piece with the left hand, the lock to the front, seize it at the same time with the right hand at the handle, place it on the right shoulder, the left hand not quitting the butt, the lock-plate upward, the muzzle up; sustain the piece in this position by placing the right haud on the flat of the butt; let fall the left hand by the side.
Shoulder-Arns.
136. Raise the piece by extending the right arm, seize it with the left hand above the lock, carry it agaiust the left shonlder, turning the barrel to the front, the right hand being at the haudle, place the left hand under the butt, and let the right fall into its position.
Arms-AT will.

One time and one motion.
137. Carry the piece at pleasure on either shoulder, or with one or both hands, the muzzle always up.

> Shoulder-Arms.

## 138. Retake smartly the position of shoulder arme.

## Inspection of Arms.

139. The squad being at ordered arms, and having the bayonet in the scabbard, if the instructor wishes to cause an inspection of arms, he will command :

## Inspection of-Arms.

> One time and three motions.

First motion. Face to the right once and a half on the left heel, carrying the right foot perpendicularly to the rear of the alignment, about six inches from, and at rigbt angles with, the left foot; seize promptly the piece with the left hand a little above the middle band, incline the muzzle to the rear without displacing the heel of the butt, the rammer tnrned toward the body: carry at the same time the rigbt hand to the bayonet, and seize it as has been prescribed.

Second motion. Draw the bayonet from the scabbard, carry and fix it on the muzzle: seize next the rammer, draw it as has been explained in loading it twelve times, and let it glive to the bottom of the bore.

Third motion. Face promptly to the front, seize the piece with the right hand, and retake the position of ordered arms.

The instructor will then inspect in succession the piece of each man in passing along the front of the rank. Each, as the instructor reaches bim, will raise smartly his piece with his right hand, seize it with the left between the tail-band and the feather-spring, the lock to the front, the left hand at the height of the ehin, the piece opposite to the left eye; the instructor will take it with the right hand at the handle, and, after inspecting it, will return it to the soldier, who will receive it back with the right hand, and replace it in the position of ordered arms.

When the instructor shall have passed him, each soldier will retake the position prescribed at the command inspection of arms, and return the rammer ; after which be will face to the front.
140. If, instead of inspection of arms, it be the wish of the instructor only to cause bayonets to be fixed, he will command:

## Fix-Bayonet.

Take the position indicated inspection of arms (first motion), fix bayonets as has been explained, and immediately face to the front.

Bayonets fixed, if it be the wish of the instructor, after firing, to ascertain whether the pieces have been discharged, he will command:

## Spring-Rammers.

Put the rammer in the barrel, as has been explained above, and immediately face to the front.

The instructor, for the purpose stated, can take the rammer by the small end and spring it in the barrel, or cause each man to make the rammer ring in the barrel.

Each man, after the instructor passes him, will return rammer, and face to the front.

> Arms-Port.

One time and one motion.
-
141. Throw the piece diagonally across the body, the lock to the front, seize it smartly at the same instant with both hands, the right at the handle, the left at the tail-band, the two thumbs pointing toward the muzzle, the barrel sloping upward and crossing opposite to the point of the left shoulder, the bntt proportionately lowered. The palm of the right hand will be above, and that of the left under the piece, the nails of both hands next to the body, to which the elbows will be closed.
Shoulder-Arms.

One time and two motions.
First motion. Bring the piece smartly to the left shoulder, placing the left hand under the butt.

Second motion. Drop the right hand smartly by the side.

## MANUAL OF ARMS FOR THE RIFLE.

## Principles of Shouldered Arms.

142. The soldier standing in the position of the soldier, the instructor causes him to bend the right arm slightly, and places the piece in it in the following manner: The piece in the right hand-the barrel nearly vertical and resting in the bollow of the shoulder - the guard to the front, the arm hanging nearly at its full length near the body; the thumb and forefinger embracing the guard, the remaining fingers closed together, and grasping the swell of the stock just under the cock, which rests on the little finger.

> Support-Arms.

One time and three motions.
143. First motion. Bring the piece, with the right hand, perpendicularly to the front and between the eyes. the barrel to the rear; seize the
piece with the left hand at the lower band, raise this hand as high as the chin, and seize the piece at the same time with the right hand four inches below the cock.

Sceond motion. Turn the piece with the right hand, the barrel to the front; carry the piece to the left shonlder, and pass the forearm extended on the breast between the right hand and the cock; support the cock against the left forearm, the left hand resting on the right breast.

Third motion. Drop the right hand by the side.

## Shoulder-Arms.

One time and three motions.
144. First motion. Grasp the piece with the right hand under and against the left forearm ; seize it with the left hand at the lower band, the thumb extended; detach the piece slightly from the shoulder, the left forearm along the stock.

Second motion. Carry the piece vertically to the right shoulder with both hands, the rammer to the front, ehange the position of the right hand so as to embrace the guard with the thumb and forefinger, slip the left hand to the height of the shoulder, the fingers extended and joined, the right arm nearly straight.

Third motion. Drop the left hand quickly by the side.
Present - Arms.

One time and taco motions.
145. First motion. With the right hand bring the piece erect before the centre of the body, the rammer to the front; at the same time seize the piece with the left hand half-way between the guide sight and lower band, the thumb extended along the barrel and against the stock, the forearm horizontal and resting against the body, the hand as high as the elbow.

Second motion. Grasp the small of the stock with the right hand below and against the guard.

> Shoulder-Arms.

One time and two motions.
146. First motion. Bring the piece to the right shoulder, at the same time ehange the position of the right hand so as to embrace the guard with the thumb and forefinger, slip up the left hand to the height of
the shonlder, the fingers extended and joined, the right arm nearly straight.

Second motion. Drop the left hand quickly by the side.

> Order-Arms.

Onc time and two motions.
147. First motion. Seize the piece briskly with the left band near the upper band, and detach it slightly from the shoulder with the right hand; loosen the grasp of the right hand, lower the piece with the left, re-seize the piece with the right hand abore the lower baud, the little finger in rear of the barrel, the butt about four inches from the ground, the right hand supported against the hip, drop the left hand by the side.

Second motion. Let the piece slip through the right hand to the ground by opening slightly the fingers, and take the position about to be described.

## Position of order arms.

148. The hand low, the barrel between the thumb and forefinger extended along the stock; the other fingers exteuded and joined; the muzale about two inches from the right shoulder; the rammer in front; the toe (or beak) of the butt against and in a line with the toe of the right foot, the barrel perpendicular.

## Shoulder-Arms.

## One time and tro motions.

149. First motion. Raise the piece vertically with the right hand to the height of the right breast, and opposite the shoulder, the elbow close to the hody; seize the pieee with the left hand below the right, and drop quiekly the right hand to grasp the piece at the swell of the stoek, the thumb and forefinger embracing the guard; press the piece against the shoulder with the left hand, the right arm nearly straight.

Second motion. Drop the left hand quickly by the side.
Load in nine times.

$$
\text { 1. LoAD. }{ }^{1}
$$

One time and one motion.
150. Grasp the pieee with the left band as high as the right elbow,

1 Whenever the loadings and firings are to be executed, the instructor will catse the cartridge boxes to be brought to the front.
and bring it rertically opposite the middle of the body; shift the right hand to the upper band, plaee the butt between the feet, the barrel to the front; scize it with the left hand near the mazzle, which should be three inches from the body : earry the right hand to the eartridge box.

## 2. Handle-Cartridge.

One time and one motion.
151. Seize the cartridge with the thmmb and next two fingers and plaee it hetween the teeth.

## 3. Tear-Cartridge.

One time and one motion.
152. Tear the paper to the powder, hold the eartridge upright between the thumb and first two fingers, near the top; in this position place it in front of and near the muzzle-the back of the hand to the front.

## 4. Charge-Cartridge.

One time and one motion.
153. Empty the powder into the harrel; disengage the ball from the paper with the right haud and the thumb and first two fiugers of the left ; insert it into the bore, the pointed end uplermost. and press it down with the right thumb; seize the head of the rammer with the thumb and forefinger of the right land, the other fingers closed, the ellows s:ear the body.

> 5. Drau-Pammer.

One time and three motions.
154. First motion. Half draw the rammer by extending the right arm : steady it in this position with the left thumb: grasp the rammer near the mnzzle with the right hand, the little finger nppermost, the nails to the front, the thumb extended along the rammer.

Second motion. Clear the rammer from the pipes by again extending the arm: the rammer is the prolongation of the pipes.

Third motion. Turn the rammer, the little end of the rammer passing near the left shoulder; place the head of the rammer on the ball, the back of the hand to the front.

## 6. Ram-Cartridge. <br> One time and one motion.

155. Insert the rammer as far as the right, and steady it in this position with the thumb of the left hand; seize the rammer at the small end with the thumb and forefinger of the right hand, the back of the hand to the front; press the ball home, the elbows near the body.

## 7. Return-Rammer.

One time and three motions.
156. First motion. Draw the rammer half-way out, and steady it in this position with the left thumb; grasp it near the muzzle with the right hand, the little finger uppermest, the nails to the front, the thumb along the rammer; elear the rammer from the bere by extending the arm, the nails to the front, the rammer in the prolongation of the bore.

Second motion. Turn the rammer, the head of the rammer passing near the left shoulder, and insert it in the pipes until the right hand reaches the muzzle, the nails to the front.

Third motion. Foree the rammer home by placing the little finger of the right hand on the head of the rammer; pass the left hand down the barrel to the extent of the arm, without depressing the shoulder.

## 8. Prime.

One time and two motions.
157. First motion. With the left hand raise the piece till the hand is as high as the eye, grasp the small of the stock with the right hand; half face to the right; place, at the same time, the right foot behind and at right angles with the left; the hollow of the right foot against the left heel. Slip the left hand down to the lower band, the thumb along the stoek, the left elbow against the body ; bring the piece to the right side, the butt below the right forearm-the small of the stock against the body and two inehes below the right breast, the barrel upward, the muzzle on a level with the eye.

Second motion. Half-cock with the thumb of the right hand, the fingers supported against the guard and the small of the stoek-remore the old eap with one of the fingers of the right hand, and with the thumb and forefinger of the same haud take a cap from the pouch, place it on the nipple, and press it down with the thumb; seize the small of the stock with the right hand.

## 9. Shoulder-Arms.

One time and two motions.
158. First motion. Bring the piece to the right shoulder, and support it there with the left hand, face to the front; bring the right heel to the side of and on a line with the left; grasp the piece with the right hand as indicated in the position of shoulder arms.

Second motion. Drop the left band quickly by the side.

## Ready.

## One time and three motions.

159. First motion. Raise the piece slightly with the right hand, making a half face to the right on the left hecl: carry the right foot to the rear, and place it at right angles to the left, the hollow of it opposite to, and against the left hecl: grasp the picee with the left hand at the lower band and detach it slightly from the shonlder.

Second motion. Bring down the piece with both hands, the barrel npward, the left thumb extended along the stock, the butt below the right forearm, the small of the stock against the body and two inches below the right breast, the muzzle as high as the eye, the left elhow against the side; place at the same time the right thomb on the hear of the cock, the other fingers under and against the guard.

Third motion. Cock, and scize the piece at the small of the stock without deranging the position of the butt.

## Aim.

160. As in the manual for the musket.

## Fire.

161. As in the manual for the musket.

## Load.

## One time and one molion.

162. Bring down the piece with both hands, at the same time face to the front and take the position of load. Each rear rank man will bring his right foot by the side of the left.

The men being in this position, the instructor will canse the loading to be continued by the commands and means prescribed.

If, after firing, the instructor should not wish the recrnits to reload, he will command :

## Shoulder-Arms.

One time and one motion.
168. Throw up the piece briskly with the left hand and resume the position of shoulder arms, at the same time face to the front, turning on the left heel, and bring the right heel on a line with the left.

## Recover-Arms.

164. The same as in the manual for the musket.
165. The soldiers being in the position of the third motion of ready, if the instructor should wish to bring them to a slooulder, he will command:

## Shoulder-Arms.

One time and one motion.

At the command shoulder, place the thumb upon the cock, the forefinger on the trigger, balf cock, and seize the small of the stock with the right hand. At the command arms, bring up the piece briskly to the right shoulder, and retake the position of shoulder arms.

The recruits being at shoulder arms, when the instructor-shall wish to fix bayonets, he will command :
Fix-Baronet.

One time and three motions.
166. First motion. Grasp the piece with the left hand at the beight of the shoulder, and detach it slightly from the shoulder with the right hand.

Second motion. Quit tlie piece with the right hand, lower it with the left band, opposite tle middle of the horly, and place the butt between the feet, without shock: the rammer to the rear, the barrel vertical, the muzzle three inches from the budy : seize it with the right hand at the upper baud, and carry the left hand reversed to the handle of the sabre-bayonet.

Third motion. Draw the sabre-bayonet from the seabbard and fix it on the extremity of the barrel ; seize the picce with the left hand, the arm extended, the right hand at the upper band.

## Shoulder-Arms.

One time and two motions.
167. First motion. Raise the piece with the left hand and place it against the right shoulder, the rammer to the front ; seize the piece at the same time with the right hand at the swell of the stock, the thumb and forefinger embracing the guard, the right arm nearly extended.

Second motion. Drop briskly the left hand by the side.

## Charge-Bayonet.

## One time and two motions.

168. First motion. Raise the piece slightly with the right hand and make a half face to the right on the left heel ; place the hollow of the right foot opposite to, and three inches from the left hecl, the feet square; seize the piece at the same time with the left hand a little above the lower banl.

Second motion. Bring down the piece with both hands, the barrel uppermost, the left elbow against the body; seize the small of the stock at the same time with the right hand, whieh will be supperted against the hip; the peint of the sabre-bayonet as high as the eye.

## Shoulder-Arms.

One time and tiro motions.
169. First motion. Throw up the piece briskly with the left hand in facing to the front, place it against the right shoulder, the rammer to the front; turn the right hand so as to embrace the guard, slide the left hand to the height of the shoulder, the right hand nearly extended.

Second motion. Drop the left hand smartly by the side.

> Trail-Arms.

One time and theo motions.
170. First motion. The same as the first motion of order arms.

Second motion. Incline the muzzle slightly to the front, the butt to the rear, and about four inches from the ground. The right hand supported at the bip will so hold the piece that the rear rank men may not touch with their bayonets the men in the front rank.

## Shoulder-Arms.

171. At the command shoulder, raise the piece perpendicularly in the right hand, the little finger in rear of the barrel: at the command arms, exccute what has been prescribed for the shoulder from the position of order arms.

Unfix-Bayonet.
One time and three motions.
172. First and second motions. The same as the first and second motions of fix bryonct, except that, at the end of the second command, the thumb of the right hand will be placed on the spring of the sabrebayonet, and the left hand will embrace the handle of the sabre-bayonet and the barrel, the thumb extended along the blade.

Third motion. Press the thumb of the right hand on the spring, wrest off the sabre-bayouet, turn it to the right, the edge to the front, lower the guard until it tonches the right hand, which will seize the back and the edge of the blade between the thumb and first two fingers, the other fingers bolding the piece; change the position of the hand without quitting the handle, return the sabre-bayonet to the scabbard, and seize the piece with the left hand, the arm extended.

> Shoulder-Arms.

One time and tivo motions.
173. First motion. The same as the first motion from fix bayonet. Second motion. The same as the second motion from fix bayonct.

> Secure-Arms.

## One time and three motions.

174. First motion. The same as the first motion of support arms, except with the right hand seize the piece at the small of the stock.

Second motion. Turn the piece with both hands, the barrel to the front; bring it opposite the left sboulder, the butt against the hip, the left hand at the lower band, the thumb as high as the chin and exteuded on the rammer; the piece erect and detached from the shoulder, the left forcarm against the piece.

Third motion. Reverse the piece, pass it under the left arm, the left hand remaining at the lower band, the thumb on the rammer to prevent it from sliding out, the little finger resting against the hip, the right hand falling at the same time by the side.

## Shoulder-Arms.

## One time and three motions.

175. First motion. Raise the piece with the left hand, and seize it with the right hand at the small of the stock. The piece erect and detached from the shoulder, the butt against the hip, the left forearm along the piece.

Second motion. The same as the second motion of shoulder arms from a support.

Third motion. The same as the third motion of shoulder arms from a sipport.

Right shoulder shift-Arms.
One time and two motions.
First motion. Detach the piece perpendicularly from the shoulder with the right hand, and seize it with the left between the lower band and guide-sight, raise the piece. the left hand at the height of the shoulder and four inches from it; place, at the same time, the right hand on the butt, the beak between the first two fingers, the other two fingers under the butt plate.

Second motion. Quit the piece with the left hand, raise and place the piece on the right shoulder with the right hand, the lock plate upward; let fall, at the same time, the left hand by the side.

## Shoulder--Arms.

One time and tho motions.
177. First motion. Raise the piece perpendicularly by extending the right arm to its full length, the rammer to the front, at the same time seize the piece with the left hand between the lower band and guidesight.

Second motion. Quit the butt with the right hand, which will immediately embrace the guard, lower the piece to the position of shoulder arms, slide up the left hand to the height of the shoulder, the fingers extended and closed. Drop the left hand by the side.

The men being at support arms, the instructor will sometimes canse pieces to be brought to the right shoulder. To this effect, he will command :

> Right shoulder shift-Arms.

One time and two motions.
178. First motion. Seize the piece with the right hand, below and near the left forearm, place the left hand under the butt, the heel of the butt between the first two fingers.

Second motion. Turn the piece with the left hand, the luck plate upward, carry it to the right shoulder, the left hand still holding the butt, the muzzle elerated; hold the piece in this position and place the right hand upon the butt, and let fall the left hand by the side.

## Support-Arms.

## One time and tow motions.

179. First motion. The same as the first motion of shoulder arms.

Second motion. Turn the piece with both hands, the barrel to the front, carry it opposite the left shoulder, slip the right hand to the small of the stock, place the left forearm extended on the breast, and let fall the right hand by the side.

## Arms-At will.

One time and one mution.
180. At this command, carry the piece at pleasure on either shoulder, with one or both hands, the muzzle elerated.

## Shoulder-Arms.

One time and one motion.
181. At this command, retake quickly the position of shoulder arms.

## Inspection of arms.

182. The soldiers being at ordered arms, and having the sabre-bayonet in the scabbard, if the instructor wishes to cause an inspection of arms, he will command :

Inspection-Arms.
One time and two motions.
183. First motion. Seize the piece with the left hand below and near the upper band, carry it with both hands opposite the middle of the body, the butt between the feet, the rammer to the rear, the barrel vertical, the muzzle about three inches from the body; carry the left hand reversed to the sabre-bayonet, draw it from the scabbard and fix it on
the barrel; grasp the piece with the left hand below and near the upper band, seize the ranmer with the thumb and forefinger of the right hand bent, the other fingers closed.

Second motion. Draw the rammer as has been explained in loading, and let it glide to the bottom of the bore, replace the piece with the left hand opposite the right shoulder, and retake the position of ordered arms.

The instructor wiil then inspect in succession the pieee of each man, in passing along the front of the rank. Eaeh, as the instructor reaches him, will raise smartly his piece with his right hand, seize it with the left between the lower band and guide sight, the lock to the front, the left hand at the height of the chin, the piece opposite to the left eye; the instructor will take it with the right hand at the haudle, and, after inspeeting it, will return it to the man, who will receive it back with the right hand, and replace it in the position of ordered erms.

When the instructor shall have passed him, each soldier will retake the position preseribed at the eommand inspection arms, return the rammer, and resume the position of ordered arms.

If, instead of inspection of arms, the instruetor should merely wish to canse the bayonets to be fixed, he will command :

## Fix-Bayonet.

184. Take the position indieated fix bayonets as has been explained, and immediately resume the position of ordercd arms.

If it be the wish of the instructor. after firing, to aseertain whether the pieces have been diseharged, he will eommand:

> Spring-Rammers.

This is done as in the manual for the musket.

## To load in four times.

185. The first time will be executed at the end of the command ; the tiree others at the commands, tico, three and four.

The instruetor will command:

1. Load in four times. 2. LoAD.
2. Execute the times to include charge cartridge.

Two.
187. Execute the times to include ram cartridge.

## Tineee.

188. Execute the times to include prime.

## Four.

189. Execute the time of shoulder arms.

## To load at will.

190. The instructor will next teach loading at will, which will be executed as loading in four times, but continued, and without resting on either of the times. He will command:

## 1. Load at will. 2. Load.

The instructor will habituate the soldiers, by degrees, to load with the greatest possible promptitude, each without regulating bimself by his neighbor, and above all without waiting for him.

## Firings.

191. The firings are direct or oblique, and will be executed as follows:

## The direct fire.

The instructor will give the following commands:

\author{

1. Fire by Squad. ' 2. Squad. 3. Ready. 4. Arm. 5. Fire. 6. Load.
}

These sereral cummands will be executed as has been prescribed in the manual of arms. At the third command, the men will come to the position of ready as berctofore explained. At the fourth they will aim according to the rank in which each may find himself placed, the rear rank men inclining forward a little the upper part of the body, in order that their pieces may reach as much beyond the front rank as possible.

At the sixth command, they will load their pieces, and return immediately to the position of ready.

The instructor will recommence the firing by the commands:

1. Šquad. 2. Aim. 3. Fire. 4. Load.

When the instructor wishes the firing to cease, he will command:

Cease firing.
At this eommand, the men will cease firing, but will load their pieces if unloaded, and afterward bring them to a shoulder.

## Oblique firings.

192. The oblique firings will be executed to the right and left, and by the same commands as the direct fire, with this single difference-the command aim will always be preceded by the caution, right or left oblique.

## Position of the two ranks in the oblique fire to the right.

At the command ready, the two ranks will execute what has been prescribed for the direct fire.

At the cautionary eommand, right obtique, the two ranks will throw back the right shoulder and look steallily at the object to be hit.

At the command aim, each front rank man will aim to the right withont deranging the feet: each rear rank man will advance the left foot abont eight inches toward the right heel of the man next on the right of his filc leader and aim to the right. inclining the upper part of the body forward and lending a little the left knee.

## Position of the two ranks in the oblique fire to the left.

At the cautionary eommand, left ollique, the two ranks will throw back the left shoulder and look steadily at the object to be hit.

At the command $\quad$ im, the tront rank will take aim to the left without deranging the fect; each man in the rear rank will adrance the right foot about cight inches toward the right heel of the man next on the right of his file-leader, and aim to the left, inclining the upper part of the body forward and bending a little the right knee.

In both cases, at the command load, the men of each rank will come to the position of load as prescribed in the direct fire; the rear rank men bringing back the foot which is to the right and front by the side of the other. Each man will continne to loal as if isolated.

## To fire by File.

193. The fire by file will be executed by the two ranks, the filcs of whieh will fire snccessively, and without regulating on each other, except for the first fire.

The instrnetor will command:

## 1. Fire by File. 2. Squad. 3. Ready. 4. Commence Firing.

At the third command, the two rauks will take the pasition prescribed in the direct fire.

At the fourth command, the file on the right will aim and fire; the rear rank man in aiming will take the position indicated in No. 118.

The men of this file will load their pieces briskly and fire a second time; reload and fire again, and so on in continuation.
The second file will aim at the instant the first brings down pieces to reload, and will conform in all respects. to that which has just been prescribed for the first file.

After the first fire, the front and rear rank men will not be required to fire at the same time.

Each man, after loading, will return to the position of ready and continue the fire.

When the instructor wishes the fire to cease, he will command:

## Cease-Firing.

At this command the mea will cease firing. If they have fired, they will load their picces and bring them to a shoulder ; if at the position of ready, they will half cock and shoulder arms. If in the position of aim, they will bring down their pieces, half cock, aud shoulder arms.

## To fire by Rank.

194. The fire by rank will be executed by each eutire rank, alternately.

The instructor will command:

1. Fire by Rank. 2. Squad. 3. Ready. 4. Rear rank. 5. Aim. 6. Fire. 7. Load.

At the third command, the two ranks will take the position of ready: as prescribed in the direct fire.

At the seventh command, the rear rank will execute that which has been prescribed in the direct fire, and afterward take the position of ready.

As soon as the instructor sees several men of the rear rank in the position of ready, he will command:

## 1. Front rank. 2. Aim. 3. Fire. 4. Load.

At these commands, the men in the front rank will execute what has been prescribed for the rear rank, but they will not step off with the right foot.

The instrnetor will recommence the firing by the rear rank, and will thus eontinue to alternate from rank to rank, until he shall wish the firing to cease, when he will command, couse firiny, which will be exccuted as heretofore prezcribed.

## To five and load Kineeling.

195. In this exereise the synad will be supposed loaded and drawn up in one rank. The instruction will be given to each man individually, without times or motions, and in the following manner.

The instruetor will eommand:

## Fire and load Knerling.

At this command, the man on the right of the squad will move forward three paces and halt; then carry the right foot to the rear and to the right of the left heel, and ia a position conrenient for pacing the right knee upon the ground, and bending the left leg; place the right knee upon the gromad ; lower the piece, the left forearm supported upon the thigh on the same side, the right hand on the small of the stoek, the batt resting on the right thigh, the left hand supporting the piece near the lower band.

He will next more the right leg to the left aromnd the knee supported on the ground, until this leg is nearly perpendicular to the direetion of the left font, and thus seat himself eomfortably on the right heel.

Raise the piere with the right hand and smport it with the left, holding it near the lower band, the left ellow resting on the left thigh wear the knee; seize the hammer with the thumb, the forefinger under the guard; cock and seize the piece with the small of the stock; bring the picee to the shoulder; wim and fire.

Bring the piece down as soon as it is fired, and support it with the left hath, the butt resting against the right thigh; carry the piece to the rear, rising on the knee, the barrel downward, the butt resting on the ground ; in this pusition support the piece with the left hand at the upper band, draw cartridge with the right and load the piece, ramming the ball, if neeessary, with botil hands.

When loaded, bring the piece to the front with the left hand, which holds it at the upper baud; seize it at the same time with the right hand at the small of the stock; turn the pieee, the barrel uppermost and nearly horizontal, the left elbow restiag on the left thigh; half coek, remore the old cap and prime, rise, and return to the ranks.

The second man will theo be taught what has just been prescribed for the first, and so on through the romainder of the squad.

## To fire and load Lying.

196. In this exereise, the squad will be in one rank and loaded; the instruction will be given individually and without times or motions.

The instructor will command:

## Fire and load Lying.

At this command, the man on the right of the squad will move forward three paces and halt; he will then bring his piece to an order, drop on both knees, and place himself on the ground flat on his belly. In this position he will support the picce nearly borizontal with the left hand, holding it near the lower band, the butt end of the piece and the left elbow resting on the ground, the barrel uppermost; cock the piece with the right hand, and carry this hand to the small of the stock; raise the piece with both hands, press the butt against the shoulder, and, resting on both elbows, aim and fire.

As soon as he has fired, bring the piece duwn and turn upon his left side, still resting on his left clbow; bring back the piece until the cock is opposite his breast, the butt end resting on the ground; take out a eartridge with the right hand: seize the small of the stock with this hand, holding the eartridge with the thumb and two first fingers; he will then throw bimself on his back, still holding the piece with both hands; carry the piece to the rear, place the butt between the heels, the barrel up, the muzzle elevated. In this position, charge eartridge, draw rammer, ram cartridge, and return rammer.

When finished loading, the man will turn again upon his left side, remove the old cap and prime, then raise the piece vertically, rise, turn about, and resume his position in the ranks.

The second man will be tanght what has just been prescribed for the first, and so on throughout the squad.

## Bayonet Exercise.

197. The bayonet exereise in this book will be confined to two movements, the guard against infantry, and the guard against cavalry. The men will be placed in one rank. with two paces interval, and, being at shoulder arms, the instructor will command :

> 1. Guard against Infuntry. 2. Guard.

One time and two motions.
First motion. Make a half face to the right, turning on both heels,
the feet square to each other; at the same time raise the piece slightly, and seize it with the left hand above and near the lower band.

Second motion. Carry the right foot twenty inches perpendicularly to the rear, the right heel on the prolongation of the left, the knecs slightly bent, the weight of the body resting equally on both legs; lower the piece with both hands, the barrel uppermost, the left elbow against the body; seize the piece at the same time with the right, hand at the small of the stock, the arms falling naturally, the point of the bayonet slightly elevated.

## Shoulder-Arms.

One time and one motion.
Throw up the piece with the left hand, and place it against the right shoulder, at the same time bring the right heel by the side of the left, and face to the front.

## 1. Guard against Cavalry. 2. Guard.

One time and tico motions.
Both motions the same as for guard afainst infautry, except that the right hand will be supported against the hip, and the bayonet held at the beight of the eye, as in charge bayonet.

## Shoulder-Arms.

Ore time rand one motion.
Spring up the piece with the left hand and place it against the right shoulder, at the same time bring the right bcel by the side of the left, and face to the front.

## MANUAL OF THE SWORD OR SABRE, FOR OFFICERS.

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POSITION OF THE SWORD OR SABRE, UNDER ARMS.
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198. The carry. The gripe in the right hand, which will be supported against the right hip, the back of the blade against the shoulder.

TO SALUTE WITH THE SWORD OR SABRE.
Three times (or pauses).
One. At the distance of six paces from the person to be saluted, raise the sword or sabre perpendicularly, the point up, the flat of the
blade opposite to the right eye, the guard at the height of the shoulder, the elbow supported on the body.

Two. Drop the point of the sword or sabre by extending the arm, so that the right hand may be brought to the side of the right thigh, and remain in that position until the person to whom the salute is rendered, shall be passed, or shall have passed, six paces.

Three. Raise the sword or sabre smartly, and restime the position first prescribed.

## COLOR SALUTE.

199. In the ranks, the eolor-bearer, whether at a halt or in march, will always earry the heel of the eolor-lance supported at the right hip, the right hand generally placed on the lance at tho height of the shoulder, to hold it steady. When the color has to render honors, the eolor-bearer will salute as follows:

At the distance of six paces slip the right hand along the lance to the height of the eye; lower the lance by straightening the arm to its fullest extent, the heel of the lance remaining at the hip, and bring back the lance to the habitalal position when the person saluted shall be passed, or shall have passed, six paces.

## PART THIRD.

200. When the men are well established in the principles und mechanism of the step, the position of the lody, and the mannal of arms, the instructor will unite from eight to twelve in a squad, in order to teach them the principles of alignment, the touch of the elbow in marching to the front, the principles of the march by the flank, wheeling from a halt, wheeling in marching, and the change of direction to the side of the guide. He will place the squad in one rank, elbow to elbow, and number the men from right to left.

## Alignments.

201. The instructor will at first teach the soldiers to align themselves, man by mas, in order to make them understand the prineiples of alignment better; for this purpose, he will command the two men on the right flank to march two paces to the front, and having aligned (or dressed) them, he will cause the remainder of the squad to move up, as may be successively called, each by his number, as threc, four, ete., and align (or dress) themselves successively on the line of the first two men.

Eaeh man, as designated by his number, will turn his head and eyes to the right, as directed for eyes right in the first part, and mareh two paees forward in quick time, shortening the last step, so as to find himself about six inehes behind the new line, which he onght never to eross; he will then move up steadily by steps of two or three inches, the legs straight, to the side of the next man to him on the line, so that, without throwing the head or the shonlders ont of place, he may find himself in the exact line with the files on his right, and touching elbows with the nearest one without opening out his arms.

The instrnetor, seeing the line properly dressed, eommands:

## Front.

At which the men will turn their eyes to the front, and remain firm. Alignments to the left will be conducted on the same principles.
202. When the men shall hare learned to dress correetly, man by man, without deranging the head or shoulders, and without jostling, the instructor will cause the entire stuad to dress at once by the command:

## - Squad right (or left)—Dress.

At this the squad, except the two men placed in adrance as a basis of alignment, will more up in quiek time, and place themselves on the new line aceording to the prineiples just laid down.

The instructor will superintend the dressing, and when he sees the greater number of the squad in their proper places, will command:

## Front.

The instructor may afterward order this or that file forward or back, designating eaeh man by his number (or name). The tile or files designated, will slightly turn the head toward the right (or left), to judge how much they ought to move up or back, place themselves on the line by moring an inch or two at a time, and then turn eyes to the front, without waiting for any command from the instructor.
203. Alignments to the rear will be executed on the same principles, the men stepping back a little beyond the line, and then dressing up according to the prineiples laid down in No. 201; the commands of the instructor are:

## Right (or left) backward-Dress.

## To march to the front.

204. The squad being eorreetly aligned, and the instruetor wishing to march it to the front, he will place a well-instructed man on the
right or left, according to the side on which be wishes the guide to be, and command :

## 1. Squad, forward. 2. Guide right (or left). 3. March.

At the command march, the squad will step off smartly with the left foot, and will take up quick time, unless otherwise specially ordered. This rule is general. The guide will take care to march straight to the front, keeping his shoulders always square with that line. The men will touch elbows lightly on the side toward the guide, maintaining the shoulders square to the front, no matter on which side the guide may be; they should be careful not to open out the left elbow, or the right arm; that they yield to pressure coming from the side of the guide, and resist that coming from the side opposite; that they recover, by insensible degrees, the touch of the elbow, if lost; and if any files are before or behind the line, that they correct themselves by shortening or lengthening the step by almost insensible degrees. It is all important that the closest attention should be paid to each one of the above directions, otherwise the men cannot attain proficiency, and when they are advanced to the company drill, it will be impossible to secure promptness or accuracy in the manœurres.
205. The men being well established in the principles of the direct march, the instructor will exercise them in marching obliquely. The squad being in march, the instructor commands:

## 1. Right (or left) oblique. 2. March.

At the command march, each man will make a half face to the right (or left), and will then march straight forward in the new direction. As the men no longer tonch clbows, they will glance along the nearest files, toward the side to which they are obliquing, and will regulate their steps so that the right (or left) shoulder shall always be behind the left (or right) shoulder of their next neighbor on the right (or left), and that his head shall conceal the heads of the other men on the right (or left). The men should be careful to preserve the same leugth of pace, and the same degree of obliquity. The guides must always be on the flank toward which the oblique takes place.

The instructor wishing to resume the direct march, will command:

## 1. Forward. 2. Marcil.

At the command march, each man will make a half face to the left (or right), and all will march straight to the front, conforming to the priuciples laid down for marching to the front.

## To march to the front in double quick time.

206. Instruction in the principles of this stop is recommended for all infantry troops; it may be omitted for infartry of the line, but in no other case; nothing but the imperative necessity for giving all of the time at the disposal of the instructor to instruction in the principles of the quick step and to the manœurres, should prevent eren infantry of the line from being thoroughly instructed in the principles of this step.

The squad being at a march in quick time, the instructor commands:

## 1. Double quick. 2. March.

At the command march, which will be given when cither foot is coming to the ground, the squad will step off in double quick time. The men should be careful to follow the rules already laid down for the march in the domble quick step, and to preserve the alignment.

When the instructor wishes the squad to resume the quick step, he will command:

## 1. Quick lime. 2. March.

At the command march, which should be given when either foot is coming to the ground, the squad will retake the step in quick time.

If the squad is at a halt, and the instructor wishes to march at the double quick step, he commands:

## 1. Squad, forward. 2. Guide right (or left). 3. Double quick. 4. March.

The squad being on the march in double quick time, the instructor will occasionally cause it to mark time ; the men will then mark double quick time without altcring the cadence. He will also cause them to pass from the direct to the oblique march, and the reversc, conforming to what has been prescribed for the oblique march.

In marching at double quick time, the men will always carry their pieces on the right shoulder, or at a trail. This rule is general.

If the instructor wishes the pieces carried at a trail, he will give the command trail arms, before the command double quick. If, on the contrary, this command is not given, the men will shift their pieces to the right shoulder at the command double quick. In either case. at the command halt, the men will bring their pieces to the position of shouldered arms. This rule is general.

## To face about in marching.

207. If the squad be marching in quick, or double quick time, and the instructor should wish to march in retreat, he will command :

## 1. Squad, right about. 2. March.

At the command march, which should be given at the instant the * right foot touches the ground, the soldier will complete the next pace with the left foot, then turning to the right about on both heels, will step off with the left foot.

## To march by the flank.

208. The squad being at a halt, and correctly aligned, the instructor will command :

## 1. Squad, right-Face. 2. Forward. 3. March.

At the command face, the squad will face to the right; the even numbered men, after falling to the right, will step quickly to the right side of the odd numbered men, the latter standing fast, so that when the movement is executed, the men will be formed into files of two men abreast, or doubled.

At the command march, the squad will step off smartly with the left foot; the files keeping their dress, and preserving their intervals.

The march by the left flank will be executed by the same commands, substituting the words left for right, and by inverse means; in this case, the even numbered men, after facing to the left, will stand fast, and the odd numbered will place themselves on their left.

When the instructor shall wish to halt the squad, marching by the flank, and to cause it to face to the front, he will command:

## 1. Squad. 2. Halt. 3. Front.

At the second command the rank will halt, and afterward no man will stir, although he may have lost his distance. This prohibition is necessary, to habituate the men to a constant attention to their distances.

At the command front, each man will front by facing to the left, if marching by the right flank, aud by a facc to the right, if marching by the left flank. The rear rank men will move quickly into their places, so as to form the squad into one rank again.
209. The squad being on the march by the flank, the instructor will cause it to change direction by commanding:

## 1. By file left (or right). 2. Marcir.

At the command march, the first file will change direction to the left (or right) in describing a small are of a circle, and will then march straight forward: the two men of this file. in wheeling, will keep up the touch of the elbows, and the man on the side to which the wheel is made, will shorten the first three or four steps. Each file will come successively to the wheel on the same spot where that which preceded it wheeled.
210. The instructor will also cause the squad to face by the right or left flank in marching, and for this purpose will command:

## 1. Squad, by the right (or left) flank. 2. March.

At the command march, which will be given a little before either foot comes to the ground, the men will turn the body, plant the foot that is raised in the new direction, and step off with the other foot without altering the cadence of the step. When the squad faces to the front or rear in marching, the meu who find themselves in rear step to the right or left so as to form a single rank, each man in his place as in the begiuning; this is called the undoubling of files.

If, when the squad is marching to the front or rear, the instructor causes it to march by a flank, the files will double; when the squad is on the march to the front, and is faced by the right flank, the even numbers will step up to the right of the odd ones, as in the first instance in facing from a halt; when it is marched by the left tlank, the odd numbers should double on the left of the even: if the squad is marching to the rear when it is faced by the right flank, the odd will double on the even as in the last case, but if faced by the left flank the even will double to the right of the odd as in the first case.

The instructor will sometimes march by a flank without doubling files; for this purpose he commands :

> In one rank, right-Face.

In marching at the double quick, bowerer, the files will always be doubled.

## General principles of wheelings.

211. Wheelings are of two kinds; from a halt, or on fixed pivots, and on the march, or on a mocteble pirot.

In wheelings from a balt, the pivot-man only turns in bis place,
without advancing or receding. In the wheels in marching, the pirotman takes steps of nine or eleven inches, according as the squad is marching in quick or donble quick time, so as to elear the wheeling point, which is necessary in order that, in a column composed of sections, platoons, or companies, the distances between the different parts of it shall not be lost, as will be more fully explained in the school of the company.

The man on the whecling flank will take a full pace of twenty-eight, or thirty-tbree inches, according to whether the time is quick or double quick.

## Wheeling from a halt or on a fixed pivot.

212. The squad being at a halt, the instructor will place a well-instructed man on the wheeling flank to eonduct it, and command:

## 1. By squad, right wheel. 2. Marcir.

At the command march, the squad will step off with the left foot, turning the head at the same time a little to the left, the eyes on the line of the eyes of the men to their left; the pirot-man will merely mark time, gradually turning his body, in order to conform himself to the movements of the marching flank; the man who conducts this flank will take steps of twenty-eight inches, and from the first step adrance the left shonlder a little, cast his eyes from time to time along the rank, and feel constantly, but lightly, the elbow of the next man on his right, but never push him. The other man will feel lightly the elbow of the next man to his right, resist pressure coming from the left, and yield to any coming from the right; each man will conform himself to the march of the men on the left, shortening his step more and more as be is nearer the right, or pivot.

The instructor will make the squad wheel round the circle once or twice before halting, in order to cause the principles to be better understood, and be will be watchful that the centre does not break or get too far in advance.

He will cause the whecl to the left to be executed on the same principles.

When the instructor wishes to arrest the wheel, be commands:

## 1. Squad. 2. Halt.

At the second command the squad will halt, and no man stir. The instructor going to the left (or right, if the wheel has been to the left) flank, will place the two outer men of that flank in the direction he may wish to give to the squad, without however displacing the pirot,
who will conform the line of his shoulders to this direction. The instructor will take care to have between these two men and the pirot only the space necessary to contain the other men. He will then command:
Left (or right)-Dress.

At this the squad will place itself on the aligmment of the men fixed as the bases, in confurmity with the principles laid down for the alignments. As soon as the men are aligned, the instructor commands :

## Front.

## Wheeling in marching, or on a movable pivot.

213. When the men have been brought to execute the wheel from a halt properly, they will be taught the wheel in marching.

For this end, the squad being on the march, when the instructor sball wish to cause it to change direction to the flank opposite the guide, he will command :

## 1. Right (or left) wheel. 2. March.

The first command will be given when the squad is four paces from the wheeling point.

At the command march the wheel will be executed in the same manner as from a halt, except that the touch of the elbow will remain toward the left or marching flank, instead of the side of the actual pivot; that the pivot man, instead of merely turning in his place, will conform himself to the movement of the marching flank, feel lightly the elbow of the next man, take steps of full nine inches, and thns gain ground forward so as to clear the point of the wheel. The middle of the rank will bend slightly to the rear. As soon as the movement shall commence, the man who conducts the marching flank will cast bis eyes on the gronnd over which he will have to pass.

The wheel being eaded, the instructor will command:

## 1. Forward. 2. March.

The command forward will be given fow paces before the wheel is complete.

At the command march, which will begin at the instant the wheel is complete, the man who conducts the wheel will march straight forward; the pirot man and all the rest of the squad will retake the step of twenty-eight inches, and bring the head direct to the front.

## Turning, or change of direction to the side of the guide.

214. The change of direction to the side of the guide, in marching, will be executed as follows: the instructor will command :

## 1. Left (or right) turn. 2. March.

The first command should be giveu when the squad is four paces from the turning point.

At the command march, to be pronounced at the instant the rank ought to turn, the guide will face to the left (or right) in marching, and move forward in the new direction without changing the pace. The whole squad will promptly conform to the new direction; to effect which, each man will advance the shoulder opposite the guide, take the double quick step, turn the head and eyes to the side of the gaide, place himself on the line with the guide, from whom he will take the step, tonch clbows to the side of the guide, and resume the direct position of the head. The men will arrive in their places in regular succession.
215. When the men comprehend, and can excecute the various wheels, etc., in quick time, the instructor will cause them to be repeated in double quick time, by the same commands, and according to same principles as in quick time, except that the command double quick will precede that of march. In wheeling while marching, the pivot man will take steps of eleren inches, and in the changes of direction to the side of the guide, the men on the side opposite the guide must increase the gait in order to bring themselves into line.

The instructor, in order not to fatigue the men, and not to divide their attention, will cause them to cxecute the several movements of wheelings, ctc., first without arms, and next, after the mechanism be well comprehended, with arms.

## Article IV. <br> SCHOOL OF THE COMPANY.

MANNER OF FORMING THE COMPANY.

216. The whole company being assembled on its parade ground, or in the rendezvous, the first. or orderly sergeant, will command:
Fall in-Company.

At this command the corporals and privates will form in one rank faced to the right, and in the order of height from right to left, the tallest man on the right (now head of the company), the next tallest man immediately covering the first, and so on to the left or rear of the rank, in which position will be placed the shortest man. The other sergeants will take post in the rank of file-closers, two paces to the right of the company, and assist the first sergeant in forming the company.

When the men have their places, the first sergeant will command:

## Front.

The second sergeant, who is the left guide of the company, will now place himself on the left of the company, and the orderly sergeant will promptly command:

1. In two rank's, form company. 2. Lefl-Face. 3. March.

At the command left face. the whole company will face to the left, except the guide and man on the left, who stand fast.

At the command march, the whole of the men who have faced to the left, will step off together ; the second man, counting from the left, will place himself in the rear rank, behind the man next to the guide, and face to the front; the two following men will, in like manner, on closing up, form the next file, the third man in the front, and the fourth in the rear rank hehind him, and all the other men will come successively to form files, two deep, to the right of those already formed.*

[^1]The officers will now take their posts as prescribed in No. 8 ; if the captain bas to discharge the duties of instructor, the first licutenant will take bis place on the right of the front rank, the second licutenant replacing the first behind the fourth section.

The instructor will then cause the files to be numbered, and for this purpose will command:

## In each rank-count Twos.

At this command the men count in each rank from right to left, pronouncing in a loud and distinct voice, in the same tone, without hurry and without turning the head, one, two, according to the place each one occupies. He will also cause the company to be divided into platoons and sections, taking care that the first platoon is always composed of an even number of files.

## To open ranks.

217. The company being at ordered armz, the ranks and file-closers well aligned, when the instructor shall wish to cause the ranks to be opened, he will direct the left guide to place himself on the left of the front rank, which being exccuted, he will command:

## 1. Company. 2. Shoulder-Arms.

## 3. To the rear, open order.

At the last command, the covering sergeant (or orderly sergeant), and the left guide, will step off smartly to the rear, four paces of twentyeight inches from the frout rank, in order to mark the position for the rear rank. They will judge this distance by the eye without counting the steps.

The instructor will place himself at the same time on the right flank, in order to obserre if these two non-commissioned officers are on a line parallel to the front rank; and, if necessary, to correct their positions, which, being executed, he will command:

## 4. March.

At this command the front rank will stand fast. The rear rank will step to the rear without counting the steps, and will place themselves on the alignment marked for this rank, each man stepping slightly behind the line, and then dressing forward as in the backward dress. The covering sergeant will dress the rear rank on the left guide placed
to mark the left of this rank. The instructor seeing the rear rank aligned, will command :

## 5. Front.

At this command, the sergeant on the left of the rear rank will return to his place as a file-closer.

## Alignments in open ranks.

218. The ranks being open, the instructor will, in the first exercises, align the ranks, man by man, the better to inculcate the principles. To effect this, he will cause two or four men on the right or left of each rank to march two or three paces forward, and, after having aligned them, command:

> By file, right (or left)—Dress.

At this, the men of each rank will move up successively on the alignment, each man being preceded by his neighbor in the same rank, toward the basis, by two paces, and haring correctly aligned bimself, will cast his eyes to the front.
219. Successive alignments having habituated the soldier to dress correctly, the instructor will cause the ranks to align themselves at once, forward and backward, sometimes in a direction parallel, and sometimes in one oblique to the original direction, giving, in cach case, two or four men to serve as a basis of alignment to each rank. To effect which be will command :

## 1. Right (or left)—Dress. 2. Front;

or,

## 1. Right (or left) bacliward-Dress. 2. Front.

In oblique alignments, in opencd ranks, the men of the rear rank will not seek to cover their file-leaders, as the sole object of the exercise is to teach them to align themselves correctly in their respective ranks, in the different directions.

In the several alignments, the captain will superintend the front rank, and the covering sergeant the rear rank. For this purpose they will place themselves on the side by which the ranks are dressed.

In oblique alignments, the men will conform the line of their shoulders to the new direction of their ranks, and will place themselves on the alignment as has been preseribed in the school of the sollier, according as the new direction shall be in front or rear of the original。 one.

## To close ranks.

220. The instructor will command:

## 1. Close order. 2. March.

At the command march, the rear rank will close up in quick time, each man directing himself on his filc-leader.

## Alignments in closed ranks.

221. The ranks being elosed, the instructor will cause to be exeeuted parallel and oblique alignments by the right and left, furward and backward, observing to place always two or four files as a basis of alignment. He will give the same commands preseribed for opened ranks.
In alignments in closed ranks, the eaptain will superintend the front rank, and the covering sergeant the rear rank. They will habitnate themselves to judge the alignment by the lines of the eyes and shoulders, in casting a glance of the cye along the front and rear of the ranks.

The moment the captain perceives the greater number of the front rank aligned, he will command Front, and rectify afterward, if necessary, the alignment of the other men by ordering this or that file forward or back, designating each by its number. The rear rank will conform to the alignment of the front rank, superintended by the covering sergeant.

The ranks being steady, the instructor will place himself on the flank to verify their alignment. He will also see that each rear rank man corers accurately his file-leader.

In all aligmments, the file-closers will preserve the distance of two paces from the rear rank.
The alignments being ended the instructor will exercise the company at the manual, and finish with stacking arms as follows:

## To Stack Arms.

222. The men being at order arms, the instructor will command :

## Stack-Arms.

At this command, the front rank man of every even numbered file will pass his piece before him, seizing it with the left hand above the middle band, and place the butt behind and near the right foot of
the man next on the left, the barrel turned to the front. At the same time the front rauk man of every odd numbered file will pass his piece before him, seizing it with the left hand below the middle band, and hand it to the man next on the left; the latter will receive it with the right hand two inches above the middle band, throw the butt about thirty-two iuches to the front, opposite to his right shoulder, ineline the muzzle toward him, and lock the shanks of the two bayonets; the loek of this second piece toward the right, and its shank above that of the first piece. The rear rank man of every even file will projeet his bayonet forward, and introduce it (using both hands) between and under the shanks of the two other bayonets. He will then abandon the piece to his file-leader, who will receive it with the right hand under the middle band, bring the butt to the front, bolding op his own pieee and the stack with the left hand, and place the butt of this third piece between the feet of the man next on the right, the $S$ plate to the rear. The stack thus formed, the rear rank mau of every odd file will pass bis pieee into his left hand, the barrel turned to the front, and, sloping the bayonet forward, rest it on the staek.
223. If the company be armed with rifles, or any piece withont the bayonet, arms will be stacked by the same commands, and in the following manner: At the command stack arms, the front rank mair vi every even uumbered file will pass his piece before him, seizing it with the left hand near the upper band; will place the butt a little in advance of his left toe, the barrel turned toward the body, and draw the rammer slightly from its place; the front rank man of every odd numbered file will also draw the rammer slightly, and pass his piece to the man next on his left, who will seize it with the right hand near the upper band, and place the butt a little in advance of the right toe of the man next on his right, the barrel turned to the front; he will then eross the rammers of the two pieces, the rammer of the piece of the odd numbered man being inside; the rear rank man of every even file will also draw his rammer, lean his piece forward, the lock-plate downward, advance the right foot about six inches, and insert the rammer between the rammer and barrel of the piece of his front rank man; with his left hand he will place the butt of his piece on the ground, thirty-two inehes in rear of, and perpendicular to, the front rank, bringing back his right foot by the side of the left; the front rank man of every even file will at the same time lean the stack to the rear, quit it with his right hand, and force all the rammers down. The stack being thus formed, the rear rank man of every odd file will pass his piece into his left hand, the barrel to the front, and inelining it forward, will rest it ou the stack.
224. The men of both ranks having taken the position of the soldier without arms, the instructor will command:

## 1. Break ranks. 2. March.

## To Resume Arms.

Both ranks being re-formed in rear of their stacks, the instructor will command:
Take-Arms.

At this command, the rear rank man of every odd numbered file will withdraw his piece from the stack; the front rank man of every even file will seize his own piece with the left hand, and that of the man on his right with his right hand, both above the lower band; the rear rank man of the even file will seize his piece with the right hand below the lower band; these two men will raise up the stock to loosen the rammers or bayonets; the front rank man of every odd file will facilitate the disengagement of the rammers, if necessary, by drawing them ont slightly with the left band, and will receive bis picce from the hand of the man ncxt on his left; the four men will retake the position of the soldier at order arms.

## The firings.

## To fire by company.

225. The instructor, wishing to cause the fire by company to be executed, will command:

## 1. Fire by company. 2. Commence firing.

At the first command, the captain will promptly place himself opposite the centre of his company, and four paces in rear of the line of file-closers: the covering sergeant will retire to that line, and place himself opposite to his interval. This rule is general, for both the captain and covering sergeant, in all the different firings.

At the second command, the captain will add:

## 1. Company. 2. Ready. 3. Aim. 4. Fire. 5. Load.

At the command load, the men will load their pieces, and then take the position of ready, as prescribed in the school of the soldier.

The captain will immediately recommence the firing, by the commands:

> 1. Company. 2. Aim. 3. Fire. 4. Load.

The firing will be thns continued until the signal to cease firing is sounded.

The captain will sometimes cause aim to be taken to the right or left, simply observing to pronounce right (or left) ollique, before the command aim.

## The fire by file.

226. The instructor wishing to cause the fire by file to be executed, will command :

## 1. Fire by file. 2. Company. 3. Ready. 4. Commence firing.

The third and fourth commands will be executed as prescribed in the school of the soldicr.

The fire will be commenced by the right file of the company; the next file will take aim at the instant the first brings down pieces to reload, and so on to the left; but this progression will only be observed in the first discharge, after which each man will reload and fire without regulating himself by others, conforming himself to what is prescribed in the school of the soldier.

## The fire by rank.

227. The instructor wishing the fire by rank to be exceuted, will command :
228. Fire by rank. 2. Company. 3. Ready. 4. Rear rank-Aim. 5. Fire. 6. Load.

The fifth and sixth commands will be executed as is prescribed in the school of the soldier.

When the instructor sees one or two pieces in the rear rank at a ready, he will command:

## 1. Front rank. 2. Aim. 3. Fire. 4. Load.

The firing will be continued thus, by alternate ranks, until the signal is given to cease firing.
228. The instructor will sometimes cause aim to be taken to the right and left, conforming to what is prescribed for the oblique fire.

The instructor will cause the firing to cease, whether by company, by file, or by rank, by sounding the sigual to cease firing; at which signal the men will cease to fire. If they have fired, they will load their pieces and bring them to a shoulder; if at the position of ready, they
will half-cock and shoulder arms. If in the position of aim, they will bring down their pieces, half-cock, and shoulder arms.
229. The signal to cease firing will be always followed by a bugle note, or tap of the drum ; at which sound the captain and covering sergeant will promptly resume their places in line, and will rectify, if necessary, the alignment of the ranks.

The fire by file being that which is most frequently used against an enemy, it is highly important that it be rendered perfectly familiar to the troops. The instructor will, therefore, give it almost exclusive prefcrence, and labor to cause the men to aim with care, and always, if possible, at some particular object. As it is of the utmost importance that the men should aim with precision in battle, this principle will be rigidly enforced in the excrcises for purposes of instruction.

## To fire by the rear rank.

230. The instructor will cause the several fires to be executed to the rear, that is, by the rear rank. To effect this, he will command :
231. Face by the rear rank. 2. Company. 3. About-Face.

At the first command, the captain will step out and place himself near to, and facing the right file of his company; the covering sergeant and file-closers will pass quickly through the captain's interval, and place themselves faced to the rear, the covering sergeant a pace behind the captain, and the file-closers two paces from the front rank opposite to their places in line, each passing behind the covering sergeant.

At the third command, which will be given at the instant the last file-closer shall have passed through the interval, the company will face about; the captain will place himself in his interval in the rear rank, now become the front, and the covering sergeant will cover him in the front rank, now become the rear.

The company having faced by the rear rank, the instructor will cause it to execnte the fire by company, both direct and oblique; the fire by file, and the fire by rank, by the commands and means prescribed. The captain, covering sergeant, and the men will conform themselves, in like manner, to what is prescribed.

The fire by file will commence on the left of the company, now become the right. In the fire by rank the firing will commence with the front rank, now become the rear.

To resume the proper front, the instructor will command:

1. Face by the front rank. 2. Company. 3. About-FACE.

At the first command, the captain, covering sergeant and file-closers will conform to what is preseribed above.

At the third command, the company having faced about, the captain and covering sergeant will resume their places in line.

In this lesson, the instructor will impress on the men the importance of aiming always at some particular object, and of holding the piece as prescribed in the school of the soldier.

The instructor will recommend to the captain to make a short pause between the commands aim and fire, to give the men time to aim with accuracy.

## To advance in line of battle.

231. The company being in line of battle, and correctly aligued, when the instructor shall wish to exercise it in marching by the front, he will assure himself that the shoulders of the captain and covering sergeant are perfectly in the direction of their respective ranks, and that the sergeant accurately covers the cap ian ; the instructor will then place himself twenty-five or thirty paces in front of them, face to the rear, and place himself exactly on the prolongation of the line passing between their heels.

The instructor, being aligned on the directing file, will command:

## 1. Company, forward.

At this, a sergeant, previously designated, will move six paces in advance of the captain: the instructor, from the position prescribed, will correctly align this sergeant on the prolongation of the directing file.

This adranced sergeant, who is to be charged with the direction, will, the moment his position is assurel, take two points on the ground in the straight line which would pass between his own and the heels of the instructor.

These dispositions being made, the instructor will step aside, and command :

## 2. March.

At this, the company will step off with life. The directing sergeant will observe, with the greatest precision, the length and cadence of the step, marching on the two points he has chosen; he will take in succession, and always a little before arriving at the point nearest to bim, new points in alvance, exactly in the same line with the first two, and at the distance of some fifteen or twenty paces from each other. The captain will march steadily in the trace of
the directing sergeant, keeping always six paces from him; the men will each maintain the head direct to the front, feel lightly the elbow of his neighbor on the side of direction, and conform himself to the principles prescribed, school of the soldier, for the march by the front.

The man next to the captain will take special care not to pass him; to this end, he will keep the line of his shoulders a little in the rear, but in the same direction with those of the captain.

The file-closers will march at the habitual distance of two paces behind the rear rank.

If the men lose the step, the instructor will command:
To the-STEP.
$\Rightarrow$ At this command, the men will glance toward the directing sergeant, retake the step from him, and again direct their eyes to the front.

The instructor will cause the captain and covering scrgeant to be posted sometimes on the right, and sometimes on the left of the company.

The directing sergeant, in advance, having the greatest influence onthe march of the company, be will be selected for the precision of his step, his habit of maintaining his shoulders in a square with a given line of direction, and of prolonging that line without variation.

To halt the company, marching in line of battle, and to align it.
The instructor, wishing to halt the company, will command:

## 1. Company. 2. Halt.

At the second command, the company will halt; the directing sergeant will remain in advance, unless ordered to retnrn to the line of file-closers. The company being at a halt, the instructor may advance the first three or four files on the side of direction, and align the company on that basis, or he may confine himself to causing the alignment to be rectified. In this last case, he will command: Captain, rectify the alignment. The captain will direct the corering sergeant to attend to the rear rank, when each, glancing his eyes along his rank, will promptly rectify it, conforming to what is prescribed in the school of the soldier.

## Oblique march in line of battle.

232. The company being in the direct march, when the instructor shall wish to cause it to march obliquely, he will command:

## 1. Right (or left) oblique. 2. March.

At the command march, the company will take the oblique step. The men will accurately observe the principles prescribed in the school of the soldier. The rear rank men will preserve their distances, and march in rear of the man next on the right (or left) of their habitual file-leaders.

When the instructor wishes the direct march to be resumed, he will command:

## 1. Forward. 2. March.

At the command march, the company will resume the direct march. The instructor will move briskly twenty paces in front of the captain, and facing the company, will place himself exactly in the prolongation of the captain and covering sergeant; and then, by a sign, will move the directing sergeant on the same line, if he be not already on it; the latter will immediately take two points on the ground between himself and the instructor, and as he adrances, will take new points of direction.

In the oblique march, the men not having the touch of elbows, the guide will always be on the side toward which the oblique is made, without any indication to that cffect being given; and when the direct march is resumed, the guide will be, equally without indication, on the side where it was previous to the oblique.

To mark time, to march in double quick time, and the back step.
233. The company being in the direct march and in quick time, the instructor, to cause it to mark time, will command:

## 1. Mark time. 2. March.

To resume the march, he will command :

## 1. Forward. 2. March.

To cause the march in double quick time, the instructor will command :

> 1. Double quick. 2. March.

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The command march will be pronounced at the instant either foot is coming to the ground.

To resume quick time, the instructor will command:

## 1. Quick time. 2. March.

The command march will be pronounced at the instant either foot is coming to the ground.

The company being at a halt, the instructor will cause it to march in the back step; to this effect, he will command:

## 1. Company, backward. 2. Мarch.

The back step will be executed according to the principles prescribed in the school of the soldier, but the use of it being rare, the instructor will not cause more than fifteen or twenty steps to be taken in succession, and to that extent but seldom.
The instructor ought not to excreise the company in marching in double quick time till the men are well established in the length and swiftness of the pace in quick time; he will then endeavor to render the march of 165 steps in the minute equally easy and familiar, and also cause them to observe the same erectness of body and composure of mind, as if marching in quick time.

## To march in retreat.

234. The company being halted and correctly aligned, when the instructor shall wish to canse it to march in retreat, he will command:

> 1. Company. 2. About-FACE.

The company having faced to the rear, the instructor will place himself in front of the directing file.

The instructor, being correctly established on the prolongation of the directing file, will command:

## 3. Company, forward.

At this, the directing sergeant will conform himself to what is prescribed, No. 231, with this difference--he will place himself six paces in front of the line of filc-closers, now leading.

The covering sergeant will step into the line of file-closers, opposite to his interval, and the captain will place himself in the rear rank, now become the front.

This disposition being promptly made, the instructor will command:

## 4. March.

At this, the directing scrgeant, the captain, and the men, will conform themselves to what is prescrilied, No. 231.

The instructor will canse to be exccuted, marching in retreat, all that is prescribed for marching in advance; the commands and the means of execution will be the samc.

The instructor haring halted his company, will, when he may wish, cause it to face to the frunt. The captain, the covering sergeant, and the directing sergeant, will resmme their habitual places in line, the moment they have faced about.
235. The instructor being in mareh by the front rank, if the instructor should wish it to march in retreat, he will cause the right about to he executed while marching, and to this effect he will command :

## 1. Company. 2. Right about. 3. March.

At the third command, the company will promptly face about, and recommence the march by the rear rank.

The directing sergeant will face about with his company, and will move rapidly six paces in front of the file-closers, and upon the prolongation of the guide. The iustructor will place him in the proper direction by the means prescribed. The captain, the covering sergeant, and the men, will conform to the principles prescribed for the march in retreat.

When the instructor wishes the company to march by the front rank, he will give the same commands, and regulate the direction of the march by the same means.
236. Tbe instructor will cause all the above marches, except the backward march, to be executed in the double quick time: the latter will be exceuted only in quick time. He will give the same commands, observing to add double quick before the command march.

When the picces are carried on the right shoulder, in quick time, the distance hetween the ranks will be sixteen inches. Wheuever, therefore, the instructor brings the company from a shoulder to this position, the rear rank must shorten a little the first steps in order to gain the prescribed distance, and will lengthen the steps, on the contrary, in order to close up when the pieces are again brought to a shoulder. In marching in double quiek time, the distance between the ranks will be twenty-six inches, and the picces will be carricd habitnally on the right shoulder.

Whenever a company is halted, the men will bring their picces at once to the shoulder at the command hult. The rear rank will close to its proper distance. These rules wie yeneral.

## To march by the flank.

237. The company being in line of battle, and at a balt, when the instructor shall wish to cause it to march by the right flank, he will command:
238. Company, right-Face. 2. Forward. 3. March.

At the first command, the company will face to the right, the covering sergeant will place bimself at the bead of the front rank, the captain having stepped out for the purpose, so far as to find himself by the side of the sergeant, and on his left; the twe ranks will form to the right at the word, the rear rank will step off one pace to the right, then the even numbers of both rauks will step up to the right of the odd, as directed in the school of the soldier; so that when the movement is completed, the files will be formed of four men aligned, and clbow to elbow. The intervals will be preserved.

The file-closers will also move by side step to the right, so that when the ranks are formed, they will be two paces from the rearmost rank.

At the command march, the company will move off briskly in quick time; the covering sergeant at the head of the front rank, and the captain on his left, will march straight forward. The men of each file will march abreast of their respective front rank men, heads direct to the front ; the file-closers will march opposite their places in line of battle.

The instructor will cause the march by the left flank to be executed by the same commands, substituting left for right; the rear rank steps one pace to the left, then the odd files of both ranks take their places to the left of the even numbered.

At the instant the company faces to the left, the left guide will place himself at the head of the front rank; the eaptain will pass rapidly to the left, and place bimself by the right side of this guide; the covering sergeant will replace the captain in the front rank, the moment the latter quits it to go to the left.

The instructor will sometimes exercise the company in facing without doubling, for this purpose he will command:

## 1. Company, in two ranks, right-2. Face.

The double quick, however, will never be executed without the ranks being doubled.

## To change direction by file.

238. The company being faced by the flank, and either in march or
at a halt, when the instructor shall wish to cause it to wheel by file, be will command:
239. By file, left (or right). 2. March.

At the command march, the first file will wheel; if to the side of the front rank man, the latter will take care not to turn at once, but to describe a short are of a circle, shorteming a little the first five or six steps, in order to give time to the fourth man of this file to conform himself to the movement. If the wheel be to the side of the rear rank, the front rank man will wheel in the step of twenty-eight inches, and the fourth man will conform himself to the movement by describing a short are of a circle as has been explained. Each file will come to wheel on the same ground where that which preceded it wheeled.

The instructor will see that the wheel be executed according to these principles, in order that the distance between the files may always be preserved, and that there be no check or hindrance at the wheeling point.

To halt the company marching by the flank, and to face it to the front.
239. To effect these objects, the instructor will command:

## 1. Company. 2. Halt. 3. Front.

The second and third commands will be executed as prescribed in the school of the soldier. As soon as the files have undoubled, the rear rank will close to its proper distance. The captain and covering sergeant, as well as the left guide, if the march be by the left flank, will return to their babitual places in line at the instant the company faces to the front.

The instructor may then align the company by one of the means prescribed.

The company being in march by the flank, to form it on the right (or left) by file into line of battle.
240. If the company be marching by the right flank, the instructor will command:

1. On the right, by file into line. 2. Marcir.

At the command march, the rear rank men doubled will mark time; the captain and the covering sergeant will turn to the right, march
straight forward, and be halted by the instructor when they shall have passed at least six paces beyond the rank of file-closers; the captain will place bimself correctly on the line of battle, and will direet the alignment as the men of the front rank suecessively arrive; the covering sergeant will place himself behind the captain at the distance of the rear rank: the two men on the right of the front rank doubled, will continue to march, and passing beyond the covering sergeant and the captain, will turn to the right; after turning, they will continue to mareh elbow to elbow, and direct themselves toward the line of battle, but when they shall arrive at two paces from this line, the even number will shorten the step so that the odd number may preecde him on the line, the odd number placing himself by the side and on the left of the eaptain; the even number will afterward oblique to the left, and place himself on the left of the odd number; the next two men of the front rank doubled, will pass in the same manner behind the two first, turn then to the right, and place themselves, according to the means just explained, to the left, and by the side of the two men already established on the line; the remaining files of this rank will follow in suecession, and be formed to the left in the same manner. The rear rank doubled will execute the movement in the manner already explained for the front rank, taking care not to commence the movement until four men of the front rank are established on the line of battle; the rear rank men, as they arrive on the line, will cover accurately their file-leaders.

If the company be marching by the left flank, the instructor will eause it to form by file on the left into line of battle, according to the same principles and by the same commands, substituting the indieation left for right. In this case, the odll numbers will shorten the step, so that the even numbers may precele them on the line. The eaptain, placed on the left of the front rank, and the left guide, will return to their places in line of battle, by order of the instructor, after the eompany shall be formed aud aligned.

To enable the men the better to comprehend the meehanism of this movement, the instructor will at first cause it to be executed separately by each rank doubled, and afterward by the two ranks united and doubled.

The company being in march by the flank, to form it by company, or by platoon, into line, and cause it to face to the right and left in marching.
241. The company being in march by the right flank, the instructor
will order the captain to form it into line ; the eaptain will immediately command :

## 1. By company, into line. 2. March.

At the command march, the covering sergeant will continue to mareh straight forward; the men will alvance the right shoulder, take the double quick step, and move into line by the shortest route, taking care to undouble the files, and to come on the line one after the other.

As the front rank men successively arrive in line with the eovering sergeant, they will take from him the step, and then turn their eyes to the front.

The men of the rear rank will conform to the movements of their respective filc-leaders, but without endeavoring to arrive in line at the same time with the latter.

At the instant the morement begins, the captain will face to his company in order to follow up the execution ; and, as soon as the company is formed, he will command guide left, place himself two paces before the centre, face to the front, and take the step of the company.

At the command guide left, the second sergeant will promptly place himself in the front rank, on the left, to serve as guide, and the covering sergeant who is on the opposite flank will remain there.
When the company marches by the left flank, this movement will be executed by the same commands and according to the same principles; the company being formed, the captain will command guide right, and place himself in front of his company as above; the covering sergeant who is on the right of the front rank will serve as guide, and the second sergeant placed on the left flank will remain there.

Thus, supposing the company to constitute a part of a column by company, right or left in front, the covering sergeant and the second sergeant of each company will always be placed on the right and left, respectively, of the front rank; they will be denominated right guide and left guide, and the one or the other charged with the direction.

The company being in march by the flank, if it be the wish of the instructor to cause form platoons, he will give an order to that effect to the captain, who will command :

## 1. By platoon, into line. 2. March.

The movement will be executed by each platoon according to the above principles. The eaptain will place himself before the centre of the first platoon, and the first lienteuant before the centre of the
second, passing through the opening made in the centre of the company, if the march be by the right flauk, and around the left of his platoon, if the march be by the left: in this last case, the captaiu will also pass around the left of the second platoon in order to place himsclf in frent of the first. Both the captain and lieutenant, without waiting for each other, will command guide left (or right) at the instant their respective platoons are formed.

At the command guide lfft (or right), the guide of each platgon will pass rapidly to the indicated flank of the platoon, if not already there.

The right guide of the company will always serve as the guide of the right or left of the first platoon, and the left guide of the company will serve, in like manner, as the guide of the second platoon.

Thus in a column, by platoon, there will be but one guide to each platoon; he will always be placed on its left flank, if the right be in front, and on the right flank, if the left be in front.

In these movements, the file-closers will follow the platoons to which they are attached.

The instructor may cause the company, marching by the flank, to form by company, or by platoon, into line, by his own direct commands, using these prescribed for the captain

The instructor will exercise the company in passing, without halt, from the march by the front, to the march by the flank, and reciprocally. In either case he will employ the commands prescribed in the school of the soldier, substituting company for squad. The company will face to the right or left, in marching, and the captain, the guides, and filc-closers will conform themselves to what is prescribed for each in the march by the flank, or in the march by the front of a cumpany supposed to be a subdivision of a column.

If, after facing to the right or left, in marching, the company find itself faced by the rear rank, the captain will place himself two paces behind the centre of the front rank, now in the rear, the guides will pass to the rear rank, now leading, and the file-closers will march in front of this rank.

The instructor, in order to avoid fatiguing the men, and to prevent them from being negligent in the position of shoulder arms, will sometimes order support arms in marching by the flank, and arms on the right shoulder, when marching in line.

## To break into column by platoon, either at a halt or in march.

242. The company being at a halt, in line of battle, the instructor.
wishing to break it into column, by platoon to the right, will command:

## 1. By platoon, right wheel. 2. March.

At the first command, the cbiefs of platoons will rapidly place themselves tro paces before the centres of their respective platoons, the lieutenant passing around the left of the company. They need not occupy themselves with dressing, oue upon the other. The covering sergeant will replace the captain in the front rank.

At the command march, the right front rank man of each platoon will face to the right, the covering sergeant standing fast, the chicf of cach platoon will move quickly by the shortest line, a little beyond the point at which the marching flank will rest when the wheel shall be completed, face to the late rear, and place himself so that the line which be forms with the man on the right (who had faced) shall be perpendicular to that occupied by the company in line of battle : each platoon will wheel according to the principles prescribed for the wheel on a fixed pivot; and when the man who conducts the marching flank shall approach near to the perpendicular, its chicf will command:

## 1. Platoon. 2. Malt.

At the command halt, which will be given at the instant the man who conducts the marching flank shall have arrived at three paces from the perpendicular, the platoon will halt; the covering sergeant will move to the point where the left of the first platonn is to rest, passing by the front rank; the second sergeant will place himself, in like manner, in respect to the second platoon. Each will take care to leave between himself and the man on the right of his platoon, a space equal to its front: the eaptain and first licutenant will look to this. and each take care to align the sergeant between himself and the man of the platoon who had faced to the right.

The guide of each platoon, being thus established on the perpendicular, each chicf will place himself two paces outside of his guide, and facing toward him, will command :

> 3. Lefl--Dress.

The alignment being ended, each chief of platoon will command, Front, and place bimself two paces before its centre.

The file-closers will conform themselves to the movement of their respective platoons, preserving always the distance of two paces from the rear rank.

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The company will break by platoon to the left, according to the same principles. The instructor will command:

## 1. By platoon, left wheel. 2. March.

The first command will be executed in the same manner as if breaking by platoon to the right.

At the command march, the left front rank man of each platoon will face to the left, and the platoons will wheel to the left, according to the principles prescribed for the wheel on a fixed pivot; the chiefs of platoon will conform to the principles indicated.

At the command halt, given by the chicf of each platoon, the covering sergeant on the right of the front rank of the first platoon, and the second sergeant near the left of the second platoon, will each move to the points where the right of his platoon is to rest. The chief of each platoon should be careful to align the sergeant between himself and the man of the platoon who had faced to the left, and will then command:

## Right-Dress.

The platoons being aligned, each chief of platoon, will command, Front, and place himself opposite its centre.
243. The instructor wishing to break the company by platoon to the right, and to move the column forward after the wheel is completed, will caution the company to that effect, and command:

## 1. By platoon, right wheel. 2. March.

At the first command, the chiefs of platoon will move rapidly in front of their respective platoons, conforming to what has been prescribed, and will remain in this position during the continuance of the wheel. The covering sergeant will replace the chief of the first platoon in the front rank.

At the command march, the platoons will wheel to the right, conforming to the principles herein prescribed; the man on the pivot will not face to the right, but will mark time, conforming himself to the movement of the marching flank; and when the man who is on the left of tnis flank shall arrive near the perpendicnlar, the instructor will command:

## 3. Forward. 4. March. 5. Guide left.

At the fourth command, which will be given at the instant the wheel is completed, the platoons will move straight to the front, all the men taking the step of twenty-eight inches. The covering sergeant and
the second sergeant will move rapidly to the left of their respective platoons, the former passing before the front rank. The leading guide will immediately take points on the ground in the direction which may be indicated to him lyy the instructor.

At the fifth command, the men will take the touch of elbows lightly to the left.

If the guide of the second platoon should lose his distance or the line of direction, he will conform to the principles herein prescribed.

If the company be marching in line to the front, the instructor will cause it to break by platoon to the right by the same commands. At the command march, the platoons will wheel in the manner already explained; the man on the pivot will take care to mark time in his place, without advancing or receding; the instructor, the chiefs of platoon and the guides, will conform to what has been prescribed.

The company may be broken by platoons to the left, according to the same principles and by inverse means, the instructor giving the commands preseribed, substituting left for right, and reciprocally.

## To march in column.

244. The company having broken by platoon, right (or left) in front, the instructor, wishing to cause the column to march, will throw himself twenty-five or thirty paces in front, face to the guides, place himself correctly on their direction, aud caution the leading guide to take points on the ground.

The instructor being thus placed, the guide of the leading platoon will take two points on the ground in the straight line passing between his own and the heels of the instructor.

These dispositions being made, the instructor will step aside, and command :

## 1. Column, forward. 2. Guide left (or right). 3. March.

At the command march, promptly repeated by the ehiefs of platoon, they, as well as the guides, will lead off, by a decided step, their respective platoons, in order that the whole may move smartly and at the same moment.

The men will each feel lightly the elhow of his neighbor toward the guide, and conform himself, in marching, to the principles prescribed in the school of the soldier. The man next to the guide, in each platoon, will take care never to pass him, and also to march always about six inches to the right (or left) from him, in order not to push him out of the direction.

The leading guide will observe, with the greatest precision, the
length and cadence of the step, and maintain the dircetion of his march by the means prescribed.

The following guide will march exactly in the trace of the leading one, preserving between the latter and himself a distance precisely equal to the front of his platoon, and marching in the same step with the leading guide.

## To change direction.

The changes of direction of a column while marching will be executed according to the priaciples prescribed for wheeling on the march. Whenever, therefore, a column is to change direction, the instructor will change the guide, if not already there, to the flank opposite the side to which the change is to be made.
245. The column being in march, right in front, if it he the wish of the instructor to change direction to the right, he will give the order to the chief of the first platoon, and immediately go himself, or send a marker, to the point at which the change of direction is to be made ; the instructur, or marker, will place himself on the direction of the guides, so as to present the breast to that flank of the columb.

The leading guide will direct his march on that person, so that, in passing, his left arm may just graze his breast. When the leading guide shall have approached near to the marker, the chief of his platoon will command :

## 1. Right wheel. 2. Marcir.

The first command will be given when the platoon is at the distance of four paces from the marker.

At the command march, which will be pronounced at the instant the guide shall have arrived opposite the marker, the platoon will wheel to the right, conforming to what is prescribed in the school of the soldier.

The wheel being finished, the chief of each platoon will command:

## 3. Forward. 4. March.

These commands will be pronounced and executed as is prescribed in the school of the soldier. The guide of the first platoon will take points on the gromnd in the new direction, in order the better to regulate the march.

The second platoon will continue to march straight forward till up with the marker, when it will wheel to the right, and retake the direct march by the same commands and the same means which governed the first platoon.

The column being in march, right in front, if the instructor should
wish to change direction to the left, be will command, guide right. At this eommand, the two guides will move rapidly to the right of their respective platoons, each passing in front of his subdivision; the men will take the touch of elbows to the right; the instructor will afterward conform to what is prescribed.

The change of direction to the left will then be cxecuted according to the same principles as the change of direction to the right, but by inverse means.

When the change of direction is completed, the instructor will command, guide left.

The changes of direction in a column, left in front, will be executed according to the same principles.

In changes of direction in double quick time, the platoons will wheel according to the principles prescribed in the school of the soldier.

In order to prepare the men for those furmations in line which can be executed only by turning to the right or the left, the instructor will sometimes cause the column to change direction to the side of the guide. In this case, the chief of the leading platoon will command: Left (or right) twn. instead of left (or right) wheel. The subdivisions will each turn, in suceession, conforming to what is prescribed in the school of the soldier. The leading guide, as soon as he has turned, will take points on the ground, the better to regulate the direction of the mareh.

## To halt the column.

The column being in mareh, when the instructor shall wish to balt it, he will command:

## 1. Column. 2. Halt.

At the second command, promptly repeated by the ehiefs of platoon, the column will halt; the guides also will stand fast, although they may have lost both distance and direction.

If the command hatt be not repeatel with the greatest vivacity, and exeeuted at the same instant. distances will be lost.

If a guide, having lost his distance, seck to recover it after that command, he will only throw his fault on the following guide, who, if he have marebed well, will no longer be at his proper distance; and if the latter regain what he has thus lost, the movement will be propagated to the rear of the column.

Being in column by platoon, to form to the right or left into line of
battle, either at a halt or on the march.
246. The instructor baving halted the column, right in front, and
wishing to form it into line of battle, will place bimself at platoon distance in front of the leading guide, face to him, and rectify, if necessary, the position of the guide beyond; which being executed, he will command :

> Left-Dress.

At this command, which will not be repeated by the chiefs of platoon, each of them will place bimself briskly two paces outside of his guide, and direct the alignment of the platoon perpendicularly to the direction of the column.

Each chief having aligned his platoon, will comuand Front, and return quickly to his place in column.

This disposition being made, the instructor will command:

## 1. Lefl into line, wheel. 2. March.

At the command march, briskly repeated by the chiefs of platoon, the front rank man on the left of each platoon will face to the left, and place his breast lightly agaiust the arm of the guide by his side, who stands fast; the platoons will whecl to the left on the principle of wheels from a balt, and in conformity to what is prescribed. Each chief will turn to his platoon to observe its movement, and when the marching flank has approached near the line of battle, he will command:

## 1. Platoon. 2. Halt.

The command halt will be given when the marching flank of the platoon is three paces from the line of battle.

The chief of the second platoon having balted it, will return to his place as a file-closer, passing around the left of his subdivision.

The captain having halted the first platoon, will move rapidly to the point at which the right of the company will rest in line of battle, and command :

## Right-Dress.

At this command, the two platoons will dress up on the aligument; the front rank man on the right of the leading platoon, who finds himself opposite the instructor established on the direction of the guides, will place his breast lightly against the lett arm of this officer. The captain will direct the alignmeut from the right on the man on the opposite flank of the company.

The company being aligned, the captain will command :

## Front.

The instructor seeing the company in line of battle, will command:
Guides—Posts.

At this eommand, the covering sergeant will cover the eaptain, and the left guide will return to his plaee as a file-closer.

If the column he left in front, and the instructor should wish to form it to the right into line of hattle, he will place himself at platoon distanee in front of the leading guide, face to him, and rectify, if nevessary, the position of the guide beyond; which being executed, he will command:

## 1. Right into line, wheel. 2. March.

At the command march, the front rank man on the right of each platoon will face to the right and place his breast lightly against the left arm of the guide by his side, who stands fast; each platoon will wheel to the right, and will be balted by its chief, when the marehing flank has approached near the line of battle; for this purpose, the ehief of eaeh platoon will command :

## 1. Platoon. 2. Halt.

The command halt will be given when the marching flank of the platoon is three paces from the line of hattle. The chief of the second platoon having halted his platoon, will resume his place in the rank of file-elusers.

The captain having halted the first platoon, will more briskly to the point at which the left of the eompany will rest, and command:

## Left-Dress.

At this command, the two platoons will dress up on the alignment: the man on the left of the secomd platoon, opposite the instructor, will place his breast lightly against the right arm of this officer, and the eaptain will direet the alignment from the left on the man on the opposite flank of the company.

The company heing aligned, the captain will eummand :

## Front.

The instructor will afterward command :

## Guides-Posts.

At this command, the eaptain will move to the right of his company. the covering sergeant will cover him, and the leít guide will return to his platee as a file-closer.
247. If the column be marching right in front, and the instructor should wish to form it into line without halting the column; he will give the command :

## 1. Left into line, wheel. 2. March.

and will himself move rapidly to platoon distance in front of the leading guide.

At the command march, briskiy repeated ly the chiefs of platoons, the front rank man on the left of eacb platoon will face to the left, and place his breast lightly against the arm of the guide by his side, who stands fast; the platoons will wheel to the left on the principle of wheels from a halt. Each chief will turn to his platoon to observe its movement, and conform to what is prescribed for wheeling into line from a halt.

If the column be in march left in front, this furmation will be made according to the same principles, and by inverse means.
248. If the column be marching right in front, and the instructor should wish to form it into line without halting the column, and to march the compaay in line to the front, he will command:

## 1. By platoons, left wheel. 2. March.

At the command merch, briskly repeated by the chiefs of platoon, the left guides will halt; the man next to the left guide in each platoon will mark time: the platoons will wheel to the left, contorming to the principles of the wheel on a fixed pivot. When the right of the platoons shall arrive near the line of battle, the instructor will command:

## 3. Forward. 4. March. 5. Guide right (or left).

At the fourth command, given at the instant the wheel is completed, all the men of the company will move off together with the step of twenty-eight inches; the captain, the chief of the second platoon, the covering sergeant, and the left guide, will take their positions as in line of battle.

At the fifth command, which will bo given inmediately after the fourth, the captain and covering sergeant, if not already there, will move briskly to the side on which the guide is designated. The noncommissioned officer charged with the direction will move rapidly in front of the guide, and will be assured in his line of march by the instructor. That non-commissioued officer will immediately take points on the ground. The men will take the touch of clbors to the side of the gaide, conforming themselves to the principles of the march in line.

The same principles are applicable to a column left in front.

A company murching to the front, to break it into platoons, and to re-form the company.
249. The company marching in the cadenced step, and supposed to make part of a column, right in front, in which case the guide is left, when the instructor shall wish to canse it to break by platoon, he will give the order to the captain, who will command:

## 1. Break into platoons,

and immediately place himself before the centre of the iirst platoon.
At the command break into platoons, the first lieutenant will pass quickly around the left to the centre of his platoon, and give the cantion: Mark time.

The captain will then command :

## 2. March.

The first platoon will continue to march straight forward ; the covering sergeant will move rapidly to the left flank of this platoon (passing by the front rank) as soon as the flank shall be disengaged.

At the command march, given by the eaptain, the second platoon will begin to mark time; its chief will immediately add:

## 1. Right oblique. 2. March.

The last command will be given so that this platoon may commence obliquing the instant the rear rank of the first platoon shall have passed. The men will shorten the step in obliquing, so that when the command forvard, march is given, the platoon may have its exact distance.

The guide of the second platoon being near the direction of the guide of the first, the chief of the second will command forward, and add March, the instant that the guide of his platoon shall cover the guide of the first.

In a column, left in front, the company will break into platoons by inverse means. applying to the first platoon all that has been preseribed for the seeond, and reciprocally.

In this casc, the left guide of the company will shift to the right flank of the second plation, and the covering sergeant will rematin on the right of the first.
250. The column, by platoon, being in march, right in front, when
the instruetor shall wish to eause it to form company, he will give the order to the captain, who will command :

## Form company.

Ilaving given this eommand, the eaptain will immediately add :

## 1. First platoon. 2. Right oblique.

The ehief of the seeond platoon will eaution it to eontinue to mareh straight forward.

The eaptain will then eommand:

## 3. March.

At this command, repeated by the chief of the seeond, the first platoon will oblique to the right, in order to unmask the second; the covering sergeant, on the left of the first platoon, will return to the right of the company, passing by the front rank.

When the first platoon shall have nearly unmasked the second, the eaptain will command:

## 1. Mark time.

and at the instant the unmasking shall be complete. he will add:

## 2. March.

The first platoon will then eease to oblique, and mark time.
In the mean time the seeond platoon will have continued to march straight forward. and when it shall be nearly up with the first, the eaptain will command forward, and at the instant the two platoons shall unite, add March; the first platoon will then cease to mark time.

In a column, left in front, the same movement will be executed by inverse means, the ehief of the second platoon giving the command forward, and the eaptain adding the command March, when the platoons are usited.

The guide of the second platoon, on its right, will pass to its left flank the moment the platoon begins to oblique; the guide of first, on its right, remaining on that flank of the platoon.

The instruetor will also sometimes cause the company to break and re-form, by platoon, by his own direet commands. In this ease, be will give the general commands prescribed for the eaptain above:

## 1. Break into platoons. 2. Mareh.

and

1. Form company. 2. March.

If, in breaking the company into platoons, the subdivision that breaks off should mark time too long, it might, in a column of many subdivisions, arrest the march of the following one. which would cause a lengthening of the column and a loss of distances.

Being in column, to break jiles to the rear, and to cause them to re-enter into line.
251. The company being in march, and supposed to constitute a subdivision of a column, right (or left) in front, when the instructor shall wish to cause files to break off he will give the order to the captain, who will immediately turn to his company, and command:

## 1. Two files from left (or right) to rear. 2. March.

At the command march, the two files on the left (or right) of the company will mark time, the others will continue to march straight furward; the two rear rank men of these files will, as soon as the rear rank of the company shall clear them, move to the right by advancing the outer shoulder: the odd number will place himself behind the third file from that flank, the even number behind the fourth, passing for this purpose behind the odd number; the two front rank men will, in like manner, move to the right when the rear rank of the company shall clear them, the odd number will place himself behind the first file, the even number behind the second file, passing for this purpose behind the odd number. If the files are broken from the right. the men will move to the left, advancing the onter shoulder, the eveu number of the rear rank will place himself behind the third file, the odd number of the same rank behind the fourth; the even number of the front rank behind the first file, the odd number of the same rank behind the second, the odd numbers for this purpose passing behind the even numbers. The men will be careful not to lose their distances, and to kecp aligned.

If the instructor should still wish to break two files from the same side, he will give the order to the captain, who will proceed as above directed.

At the command march, given by the captain, the files already broken, advancing a little the outer shoulder, will gain the space of two files to the right, if the files are broken from the left, and to the left, if the files are broken from the right, shortening, at the same time, the step, in order to make room between themselves and the rear rank of the company for the files last ordered to the rear; the latter will break by the same commands and in the same manner as the first. The
men who double should increase the length of the step in order to prevent distances from being lost.

The instructor may thus diminish the front of a company hy breaking off successive groups of two files, bnt the new files must always be broken from the same side.

The instructor, wishing to cause files broken off to return into line, will give the order to the captain, who will immediatcly command:

1. Two fles into line. 2. March.

At the command march, the first two files of those marching by the flank will return briskly into line, aud the others will gain the space of two files by adrancing the inner shoulder toward the flank to which they belong.

The captain will turn to his company, to watch the observance of the principles which have just been prescribed.

The instructor having caused groups of two files to break one after another, and to return again into line, will afterward canse two or thrce groups to break together, and for this purpose will command: Four or six: files from left (or right) to rear, March. The files designated will mark time; each rank will advanee a little the outer shoulder as soon as the rear rank of the company shall clear it; will oblique at once, and each group will place itself behind the four neighboring files, and in the same manner as if the movement had been executed group by group, taking care that the distances are preserved.

The instructor will next order the eaptain to cause two or three groups to be brought into line at once, who, turning to the company, will command:

## Four or six files into line-March.

At the command morrh, the files designated will advance the inner shoulder, move up and form on the flank of the company by the shortest lines.

As often as files shall break off to the rear, the guide on that flank will gradually close on the nearest front rank man remaining in line, and he will also open out to make room for files ordered into line.

The files which march in the rear are disposed in the following order: the left files as if the company was marching by the right flank, and the right files as if the company was marching by the left flank. Consequently, whenever there is on the right or left of a subdivision, a file which does not belong to a group, it will be broken singly.

It is necessary to the preservation of distances in column, that the
mon should be babituated in the schools of detail to execute the movements of this article with precision.

If new files braken eff do not step well to the left or right in obliquing; if, when files are ordered into line, they do not meve up with promptitude and precision, in either case the following files will be arrested in their march, and thereby cause the column to be lengthened out.

The instructor will place himself on the flank from which the files are broken, to assure himself of the exact observanee of the principles.

Files will only be broken off from the side of direction, in order that the whole company may easily pass from the front to the flank march.

To march the column in route, and to execute the movements incident thereto.
252. The swiftuess of the route step will be 110 steps iu a minute; this swiftncss will be babitually maintained in column in reute, when the reads and ground may permit.

The company being at a balt, and supposed to constitute a subdivision of a column, when the instructor shall wish to cause it to march in the route step, be will command:

1. Column, forward. 2. Guide left (or right). 3. Route step. 4. March.

At the command march, repeated by the captain, the two ranks will step off together; the rear rauk will take, iu marching, by shortening a few steps, a distance of one pace (twenty-eight iuches) frow the rank preceding, which distauce will be computed from the breasts of the mon in the rear rank, to the knapsacks of the men in the front rank. The men, without further command, will immediatcly carry their arms at with, as indicated in the school of the soldier. They will no louger be required to march in the eadenced pace, or with the same foot, or to remain silent. The files will march at ease; but care will be taken to prevent the ranks from intermising, the front rank from gettiug in advance of the guide, and the rear rank from opening to too great a distance.

The company marching in the reuto step, the instructor will cause it to chauge direction, which will be executed without formal commands, on a simple caution from the captain; the rear rank will come up to change direction in the same manner as the front rank. Each rank will conform iteelf, although in the ronte sten, to the principles which
have been prescribed for the change in closed ranks, with this difference only: that the pivot man, instead of taking steps of nine, will take steps of fourteen inches, in order to clear the wheeling point.

The company marching in the route step, to cause it to pass to the cadenced step, the instructor will first order pieces to be brought to the shoulder, and then command:

## 1. Quick time. 2. Makch.

At the command march, the men will resume the cadenced step, and will close so as to leave a distance of sixteen inches between each rank.
253. The company marching in the cadenced pace, the instructor, to cause it to take the route step, will command:

## 1. Route step. 2. March.

At the command march, the front rank will continue the step of twenty-eight inches, the rear rank will take, by gradually shortening the step, the distance of twenty-eight inches from the front rank: the men will carry their arms at will.

The instructor will exercise the company in increasing and diminishing front by platoon, which will be executed by the same commands and the same means as if the company were marching in the cadenced step. When the company breaks into platoons, the chief of each will move to the flank of his platoon, and will take the place of the guide, who will step back into the rear rank.
254. The company being in column, by platoou, and marching in the route step, the instructor can cause the front to be diminished and increased, by scction, if the platoons have a front of twelve files or more.

The movements of diminishing and increasing front by section, will be executed according to the principles indicated for the same movement by platoon. The right sections of platoons will be commanded by the captaiu and first lieuteuaut, respectively; the left sections, by the two next subalterns in rank, or, in their absence, by sergeants.

The instructor wishing to diminish by section, will give the order to the captain, who will command:

## 1. Break into sections. 2. March.

As soon as the platoons shall be broken, each chief of section will place himself on its directing flank in the front rank, the guides who will be thus displaced, will fall back into the rear rank; the file-closers will close up to within one pace of this rank.

Platoons will be broken into sections only in the column in route, the movement will never be executed in the manœuvres, whatever may be the front of the company.

When the instructor shall wish to re-form platoons, he will give the order to the captain, who will command :

## 1. Form platoons. 2. March.

At the first eommand, each chief of scetion will place himself before its centre, and the guides will pass into the front rank. At the command march, the movement will be executed as has been prescribed for forming company. The moment the platoous are formed, the chiefs of the left sections will return to their places as file-elosers.

The instructor will also eause to be exeented the diminishing and inereasing front by files, as prescribed in the preceding artiele, and in the same manncr, as if marching in the eadenced step. When the company is broken into sections, the subdivisions must not be reduced to a front of less than six files, not counting the chief of the section.

The eompany being broken by platoon, or by section, the instructor will cause it, marching in the route step, to mareh by the flank in the same direction, by the eommands and the means indieated. The moment the subdivisions shall face to the right (or left), the first file of each will wheel to the left (or right) in marching, to prolong the direction, and to unite with the rear fite of the subdivision immediately preeeding. The file-closers will take their habitual places in the march by the flank, before the union of the suldivisions.
255. If the company be marching by the right flank, and the instructor should wish to undouble the files, which might sometimes be found necessary, be will inform the captain, who, after cansing the cadenced step to be resumed, and arms to be shouldered or supported, will eommand :

## 1. In two ranks, undouble files. 2. March.

At the second command, the odd numbers will continue to mareh straight forward, the even numbers will shorten the step, and obliquing to the left will place themselves promptly behind the odd numbers; the rear rank will gain a sten to the left so as to retake the toueh of elbows on the side of the front rank.

If the eompany be marching by the left flank. it will be the even numbers who will continue to mareh forward, and the odd numbers who will undouble.

If the instruetor should wish to double the files, he will give the order to the eaptain, who will command :

## 1. In four ranks, double files. 2. Marcis.

At the command march, the files will double in the manner as explained, when the company faces by the right or the left flank. The instructor will afterward cause the route step to be resumed.

The various movements prescribed in this lesson may be executed in double quick time. The men will be brought, by degrees, to pass over at this gait about 1100 yards in seven minutes.

When the company marching in the route step shall halt, the rear rank will close up at the command halt, and the whole will shoulder arms.

Marching in the route step, the men will be permitted to carry their pieces in the manner they shall find most convenient, paying attention only to holding the muzzles up, so as to avoid accidents.

## Countermarch.

256. The company being at a halt, and supposed to constitute a part of a column, right in front, when the instructor shall wish to cause it to countermarch, he will command :
257. Countermarch. 2. Company, right-Face. 3. By file left. 4. March.

At the second command, the company will face to the right, the two guides to the right about: the captain will go to the right of his company, and cause two files to break to the rear, and then place himself by the side of the front rank man to conduct him.

At the command morch, both guides will stand fast; the company will step off smartly ; the first file, conducted by the captain, will wheel around the right guide, and direct its march along the front rank so as to arrive behind, and two paces from the left guide ; each file will come in sucecssion to wheel on the same ground around the right guide; the leading file having arrived at a point opposite to the left guide, the captain will command :

## 1. Company. 2. Halt. 3. Front. 4. Right-Dress.

The first command will be given at four paces from the point where the leading file is to rest.

At the secoud command, the company will halt.
At the third, it will face to the front.
At the fourth, the company will dress by the right; the captain will step two paces outside of the left guide, now on the right, and dircet
the alignment, so that the front rank may be enclosed between the two guides; the company being aligued, he will command Frost, and place himself before the centre of the company as if in column: the guides, passing along the front rank, will shift to their proper places, on the right and left of that rank.

In a column, by platoon, the comntermareh will be exceuted by the same commands, and according to the same principles; the guide of each platoon will face about, and its chief will place hinself by the side of the file on the right, to conduct it.

In a column, left in front, the countermarch will be executed by inverse commands and means, but accorling to the same principles. Thus, the movement will be made by the right flank of subdivisions, if the right be in front, and by the left flank, if the left be in front; in both cases the subdivisions will wheel by file to the side of the front rank.

Being in column by platoon, to form on the right (or left) into line of battle.

257 . The column by platoon, right in front, being in march, the instructor wishing to form it on the right into line of battle, will command :

## 1. On the right into line 2. Guide right.

At the second command, the guide of each platoon will shift quickly to its right flank, and the men will tonch elbows to the right ; the column will continue to mareh straight forward.

The instructor having given the second command, will move briskly to the point at which the right of the company ought to rest in line, and place himself facing the point of dircction to the left which he will choose.

The line of battle ought to be so chosen that the guide of each platoon, after having turned to the right, may have at least ten paces to take before arriving upon that line.

The head of the column being nearly opposite to the instructor, the chief of the first platoon will command: 1. Kight turn; and when exactly opposite to that point, he will add:

## 2. March.

At the command mareh, the first platoon will turn to the right, in conformity with the principles prescribed in the school of the soldier. Its guide will so direct his march as to bring the front rank man next
on his left, opposite to the instrnctor; the ehief of the platoon will march before its centro; and when its guide shall be near the line of battle, he will command:

## 1. Platoon. 2. Halt.

At the command halt, which will be given at the instant the right of the platoon shall arrive at the distance of three paces from the line of battle, the platoon will halt; the files not yet in line will come up promptly. The guide will throw himself on the line of battle, opposite to one of the three left files of his platoon; be will face to the instructor, who will align him on the point of direction to the left. The chief of platoon having, at the same time, gone to the point where the right of the company is to rest, will, as soon as he sees all the files of the platoon in line, command :

## Right-Dress.

At this the first platoon will align itself; the front rank man, who finds himself opposite to the guide, will rest his breast lightly against the right arm of this guide, and the chief of the platoon, from the right, will direct the alignment on this man.

The second platoon will continne to march straight forward until its guide shall arrive opposite to the left file of the first; it will then turn to the right at the eommand of its chief, and mareh toward the line of battle, its guide directing himself on the left file of the first platoon.

The guide having arrived at the distance of three paces from the line of battle, this platoon will be halted, as prescribed for the first; at the instant it halts, its guide will spring on the line of battle, opposite to one of the three left files of bis platoon, and will be assured in his position by the instructor.

The ehief of the seeond platoon, seeing all its files in line, and its guide established on the direction, will command :

## Right-Dress.

Having given this command, he will return to his place as a filecloser, passing around the left; the second platoon will dress up on the alignment of the first, and, when established, the eaptain will command:

## Front.

The movement ended, the instructor will command:
Guides-Posts.

At this command, the two guides will return to their places in line of battle.

A column by platoon, left in front, will form on the left into line of battle, according to the same principles, and by inverse means, applying to the second platoon what is preseribed for the first, and reciproeally. The chief of the second platoon having aligned it from the point d'appui (the left), will retire to his place as a file-closer. The captain having halted the first platoon three paces behind the line of battle, will go to the same point to align this platoon, and then command : Front. At the command, guides-posts, given by the instruetor, the eaptain will shift to his proper flank, and the guides take their places in the line of battle.

Formation of a company from two ranlis into four, and reciprocally, at a halt, and in march.

25s. The company being formed in two ranks, at a halt, aud supposed to form part of a column right in front, when the instractor shall wish to form it into four ranks, he will command:

## 1. In four ranks, form compuny. 2. Company, left-FAcE. 3 March (or double quick-March).

At the second command, the left guide will remain faced to the front, the company will face to the left; the rear rank will gain the distance of one pace from the front rank by a side step to the left and rear, and the men will form into four ranks, as prescribed in the school of the soldier.

At the command march, the first file of four men will reface to the front without undoubling. All the other files of four will step off, and closing successively to about five inches of the preceding file, will halt, and immediately face to the front, the men remaining doubled.

The file-elosers will take their new places in liue of battle, at two paces iu rear of the fourth rank.

The eaptain will superintend the movement.
259. The company being in four ranks, when the instructor shall wish to form it into two ranks, he will command:

1. In two ranks, form company. 2. Company, right-FAce. 3. March (or double quick-March).

At the second command the left guide will stand fast, the company will face to the right.

At the eommand march, the right guide will step off and mareh in
the prolongation of the front rank. The leading file of four men will step off at the same time, the other files standing fast; the second file will step off when there shall be between it and the first space suffieient to form it into two ranks. The following files will exceute successively what bas been prescribed for the second. As soon as the last file shall have its distance, the instructor will eommand:

## 1. Company. 2. Halt. 3. Front.

At the command front, the company will face to the front, and the files will undouble.
260. The company being formed in two ranks, and marching to the front, when the instructor shall wish to form it into four ranks, he will conimand:

1. In four ranks, form company. 2. By the left, double files. 3. March (or double quick-March).

At the command morch, the left guide and the left file of the company will continue to march straight to the front; the eompany will make a half face to the left, the odd numbers placing themselves behind the even numbers. The even numbers of the rear rank will shorten their steps a little, to permit the odd numbers of the front rank to get between them and the even numbers of that rank. The files thus formed of fours, except the left file, will continue to mareh obliquely, lengthening their stcps slightly, so as to keep constantly abreast of the guide; each file will close successively on the file next on its left, and when at the proper distance from that file will face to the front by a half face to the right, and take the touch of elbows to the left.
261. The company bcing in march to the front in four ranks, when the instructor shall wish to form it into two ranks, he will command:

1. In two ranks, form company. 2. By the right, undouble files. 3. March (or double quich-March).

At the conmand march, the left guide and the left file of the company will eontinue to mareh straight to the front; the company will make a half face to the right and march obliquely. lengthening the step a little, in order to keep as near as possible abreast of the guide. As soon as the second file from the left shall have gained to the right the interval necessary for the left file to form into two ranks, the second file will face to the front, by a half face to the left, and march straight forward; the left file will immediately form into two ranks,
and take the toneh of elbows to the left. Eaeh file will execute successively what has just been prescribed for the file next to the left, and each will form into two ranks when the file next on its right has obliqued the required distance and faced to the front.
If the company be supposed to make part of a column, left in front, these different movements will be executed according to the same principles and by inverse means, substituting the indication left for right.

## INSTRUCTION FOR SKIRMISHERS.

## General principles and division of the instruction.

262. The movements of skirmishers should be subjected to such rules as will give to the commander the means of moving them in any direetion with the greatest promptitude.

It is not expected that these movements should be executed with the same precision as in closed ranks, nor is it desirable, as such exaetness would materially interfere with their prompt cxecution.

When skirmishers are thrown out to clear the way for, and to protect the advance of the main corps, their movements should be so regulated by this eorps as to keep it constantly covered.

Every body of skirmishers should have a reserve, the strength and composition of which will vary aecording to circumstances.

If the body thrown out be within sustaining distance of the main corps, a very small reserve will be sufficient for each company, whose duty it shall be to fill vaeant places, furnish the line with cartridges, relieve the fatigued, and serve as a rallying point for the skirmishers.

If the main corps be at a considerable distance, beside the company reserves, another reserve will he required, composed of entire companies, whieh will be employed to sustain and reinforce such parts of the line as may be warmly attacked; this reserre should be strong enough to relieve at least half the companies deployed as skirmishers.

The movements of slimishers will be executed in quick, or double quick time. The run will be resorted to only in cases of argent necessity.

Skirmishers will be permitted to carry their picees in the manner most convenient to them.

The movements will be habitually indicated by the sonnds of the bugle.

The officers, and, if necessary, the non-commissioned offieers, will repeat, and cause the commands to be exceuted, as soon as they are given; but to avoid mistakes, when the siguals are employed, they will wait until the last bugle note is sounded before commeneing the movement.

## Deployments.

263. A company may be deployed as skirmishers in two ways: forward, and by the flank.

The deployment forward will be adopted when the company is behind the line on which it is to be established as skirmishers: it will be deployed by the flank. when it finds itself already on that line.

Whenever a company is to be deployed as skirmishers, it will be divided into two platoons, and each platoon will be subrlivided into two sections; the comrades in battle, forming groups of four men, will be careful to know and to sustain cach other. The captain will assure bimself that the files in the centre of each platoon and section are designated.

The interval between skirmishers depends on the extent of ground to be covered; but in general, it is not proper that the groups of four men should be removed more than forty paces from each uther. The habitual distanee between men of the same group in open grounds will be five paces; in no case will they lose sight of each other.

## To deploy forward.

264. A company being at a balt or in mareh, when the captain shall wish to deploy it forward on the left file of the first platoon, holding the second platoon in reserve, he will command:
265. First platoon-as skirmishers. 2. On the left file-take intervals. 3. March (or louble quick-March).

At the first command, the second and third lieutenants will place themselves rapidly two paces behind the centres of the right and left sections of the first platoon; the fifth sergeant will move one pace in front of the centre of the first platoon, and will place himself between the two sections in the front rank as soon as the movement begins; the fourth sergeant will place himself on the left of the front of the same platoon, as soon as he can pass. The captain will indicate to the sergeant the point on whish he wishes him to direct bis march. The first
licutenant, placing himself before the centre of the second platoon, will commant :

## Second platoon, buckward-March.

At this command, the second platnon will step three paces to the rear, so as to unmask the flank of the first platoon. It will then be halted by its ehief, and the second sergeant will place himself on the left, and the third sergeant on the right flank of the platoon.

At the command march, the left group of four men, conducted by the fourth sergeant, will direct itself on the point indicated; all the other groups of fours, throwing forward briskly the left shoulder, will move diagonally to the front in double quick time, so as to gain to the right the space of twenty paces, which shall he the distance between each group and that immediately on its left. When the second group from the left shall arrive on a line with, and twenty paces from the first, it will march straight to the front, conforming to the gait and direction of the first, keeping constantly on the same alignment and at twenty paces from it. The third group, and all the others, will conform to what bas just been preseribed for the second; they will arrive successively on the line. The right guide will arrive with the last group.

The left guide having reached the point where the left of the line should rest, the eaptain will command the skirmishers to halt; the meu composing each group of fours will then immediately deploy at five paces from each other, and to the right aud left of the front rank men of the even file in each group, the rear rank men placing themselves on the left of their file-leaders. If any groups be not in line at the command halt, they will move up rapidly, conforming to what has just been preseribed.

If, during the deployment, the line should be fired upon by the enemy, the captain may eause the groups of fours to deploy as they gaiu their proper distances.

The line being formed, the non-commissioned officers on the right, left and centre of the platoon, will place themselves ten paces in rear of the line, and opposite the positions they respectively oceupied. The chiefs of sections will promptly reetify any irregularities, and then place themselves twenty-five or thirty paces in rear of the centre of their sections, each baving with him four men taken from the reserve, and also a bugler, who will repeat, if necessary, the signals sounded by the captain.

Skirmishers should be particularly instructed to take advantage of any eover which the ground may offer, and should lie flat on the ground
whenerer such a morement is necessary to protect them from the fire of the euemy. Regularity in the alignment should yield to this important advantage.

When the movement begins, the first lieutenant will face the second platoon about, and march it promptly, and by the shortest line, to about 150 paces in rear of the centre of the line. He will hold it always at this distance, unless ordered to the contrary.

The rescrve will conform itself to all the movements of the line. This rule is general.

Light troops will carry their bayonets babitually in the scabbard, and this rule applies equally to the skirmishers and the reserve; whenever bayonets are required to be fixed, a particular signal will be given. The captain will give a general superintendence to the whole deployment, and then promptly place himself about eighty paces in rear of the centre of the line. He will have with him a bugler and four men taken from the reserve.

The deployment may be made on the right or the centre of the platoon, by the same commands, substituting the indication right or centre, for that of left file.

The deployment on the right or the centre will be made according to the principles prescribed above; in this latter case, the centre of the platoon will be marked by the right gronp of fours in the second section; the fifth sergeant will place himself on the right of this group, and serve as the guide of the platoon during the deployment.

In whatever manner the deployment be made, on the right, left, or centre, the men in each gronp of fours will always deploy at five paces from each other, and upon the front rank man of the even numbered file. The deployments will habitually be made at twenty paces interval; but if a greater interval be required it will be indicated in the command.

If a company be thrown out as skirmishers, so near the main body as to render a reserve unnecessary, the entire company will be extended in the same manner, and according to the same principles, as for the deployment of a platoon. In this case, the third lieutenant will command the fourth section, and a non-commissioned officer designated for tbat purpose, the second section; the fifth sergeant will act as centre guide; the file-closers will place themselves ten paces in rear of the line, and opposite their places in line of battle. The first and second lieutenants will each have a bugler near them.

## To deploy by the flank.

265. The company being at a halt, when the captain shall wish to
deploy it by the flank, holding the first platoon in reserve, be will command:
266. Second platoon-as skirmishers. 2. By the right flank-take intervals. 3. March (or double quick-March).

At the first command, the first and third lieutenants will place themselves, respectively, two paces behind the centres of the first and second sections of the second platoon; the fifth sergeant will place bimself one pace in front of the centre of the second platoon; the third sergeant, as soon as he can pass, will place himself on the right of the front rank of the same platoon. The captain will indicate to him the point on which he wishes bim to direct his march. The chief of the first platoon will execute what has been prescribed for the chief of the second platoon, No. 264. The fourth sergeant will place himself on the left flank of the reserve, the first sergeant will remain on the right flank.

At the second command, the first and third lieuteuants will place themselves two paces behind the left group of their respective sections.

At the command march, the second platoon will face to the right and commence the movement; the left group of fours will stand fast, but will deploy as soon as there is room on its right, conforming to what has been prescribed, No. 264: the third sergeant will place himself on the left of the right gromp, to conduct it the second group will halt at twenty paces from the one on its left, the third groap at twenty paces from the second, and so on to the right. As the groups halt, they will face to the enemy, and deploy as bas been explained for the left group.

The chicfs of sections will pay particular attention to the successive deployments of the groups, keeping near the group about to balt, so as to rectify any errors which may be committed. When the deployment is completed, they will place themselves thirty paces in rear of the centre of their sections, as has been beretofore prescribed. The noucommissioned officers will also place themselves as previously indicated.

As soon as the movement commences, the chief of the first platoon, causing it to face about, will move it as indicated, No. 264 .

The deployment may be marle by the left flank according to the same principles, substituting left flank for right flomk.
266. If the captain should wish to deploy the company upon the centre of one of the platoons, he will command:

1. Second platoon - as skirmishers. 2. By the right and left flank:-take intervals. 3. MARCH (or double quich-MARCH).

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At the first command, the offieers and non-commissioned officers will conform to what has been prescribed, No. 265.

At the second command, the first lieutenant will place himself behind the left group of the right section of the seeond platoon, the third lieutenaut behind the right group of the left seetion of the same platoon.

At the command march, the right section will face to the right, the left section will face to the left, the group on the right of this latter section will stand fast. The two sections will move off in opposite directions; the third sergeant will place himself on the left of the right file to couduct it, the second sergeant on the right of the left file. The two groups nearest that which stands fast will each halt at twenty paces from this group, and each of the other groups will halt at twenty paces from the group which is in rear of it. Each group will deploy as heretofore preseribed, No. 264.

The first and third lieutenants will direct the movement, holding themselves always abreast of the group which is about to halt.

The captain can canse the deployment to be made on any named group whatsoever; in this case the fifth sergeant will place bimself before the group indicated, and the deployment will be made according to the prineiples heretofore preseribed.

The entire company may be also deployed, according to the same principles.

## To extend intervals.

267. This movement, which is employed to extend a line of skirmishers, will be executed aecording to the prineiples preseribed for deployments.

If it be supposed that the line of skirmishers is at a halt, and that the captain wishes to extend it to the left, he will command:

## 1. By the left flank (so many paces), extend intervals. 2. March (or louble quick-MARCH).

At the command march, the group on the right will stand fast, all the other gromps will face to the left, and each group will extend its interval to the prescribed distance by the means indicated. No. 265.

The men of the same group will continue to preserve between each other the distance of five paces, unless the nature of the ground shonld reuder it necessary that they should close nearer, in order to keep in sight of each other. The intervals refer to the spaces between the groups, and not to the distances between the men in each gromp. The intervals will be taken from the right or left man of the neighboring group.

If the line of skirmishers be marching to the front, and the eaptain should wish to extend it to the right. he will command :

## 1. On the left group (so many paces), extend intervals. 2. March (or double quick-Marcir).

The left group, conducted by the guide, will continue to march on the point of direction; the other groups throwing forward the left shoulder, and taking the double quick step, will open their intervals to the prescribed distance.

Intervals may be extended on the centre of this line, aecording to the same principles.

If, in extending intervals. it be intended that one company or platoon should occupy a line which had been previously oceupied by two, the men of the company or platoon which is to retire, will fall successirely to the rear as they are reliced by the extension of the intervals.

## To close interials.

268. This morement, like that of opening intervals, will be executed according to the principles prescribed for the deployments.

If the line of skirmishers be halted, and the captain should wish to close interrals to the left, be will command:

## 1. By the left flank (so mamy puces), close intervals. 2. March (or double quich-MARCH).

At the command morch, the left groul will stand fast, the other groups will face to the left and close to the prescribed distance, each group facing to the enemy as it attains its proper distance.

If the line be morching to the front, the captain will command :

## 1. On the left group (so many paces), close intervals. 2. March (or double quick-Marcii).

The left gromp, conducted by the guide, will continue to more on in the direction previonsly indicated; the other groups. advancing the right shoulder, will close to the left, until the interrals are reduced to the prescriberl distance.

Interrals may be closed on the right, or on the centre, according to the same principles.

When intervals are to be elosed up, in order to reinforec a line of skirmishers, so as to eanse two companies to cover the ground which bad been previonsly oceupied by one, the new eompany will deploy so
as to finish its movement at twenty paces in rear of the line it is to occupy, and the men will successively move upon that line, as they shall be unmasked by the men of the old company. The reserves of the two companies will unite behind the centre of the line.

## To relieve a company deployed as skirmishers.

269. When a company of skirmishers is to be relieved, the captgin will be advised of the intention, which he will immediately communicate to the first and second lientenants.

The new company will execute its deployment forward, so as to finish the movement at about twenty paces in rear of the line.

Arrived at this distanee, the men of the new company, by command of their captain, will adrance rapidly a few paces beyond the old line and halt; the new line being established, the old company will assemble on its reserve, taking care not to get into groups of fours until they are beyond the firc of the enemy.

If the skirmishers to be relieved are marching in retreat, the company thrown ont to relieve them will deploy by the flank, as prescribed, No. 265 and following. The old skirmishers will continue to retire with order, and having passed the new line, they will form upon the reserve.

## To advance.

To advance in line, and to retreat in line.

- 270. When a platoon or a company deployed as skirmishers is marching by the front, the guide will be habitually in the centre. No particular indication to this effect need be given in the commands, but if, on the contrary, it be intended that the directing guide shonld be on the right, or left, the command guide right, or guide left, will be given immediately after that of forward.

The captain, wishing the line of skirmishers to advance, will command:

## 1. Forwarl. 2. March (or double quick-March).

This command will be repeated with the greatest rapidity by the chiefs of sections, and in case of need, by the sergeants. This rule is general, whether the skirmishers march by the front or by the flank.

At the first command, three sergeants will move briskly on the line, the first on the right, the second on the left, and the third in the centre.

At the command march, the line will move to the front, the guide
charged with the direction will move on the point indicated to him, the skirmishers will hold themselves aligned on this guide, and preserve their intervals toward him.

The chiefs of sections will mareh inmediately behind their sections so as to direct their movements.

The captain will give a general superintendence to the movement.
When he shall wish to halt the skirmishers, be will command:

## Halt.

At this command, briskly repeated, the line will halt. The chiefs of sections will promptly rectify auy irregularity in the alignment and intervals, and after taking every possible advantage which the ground may ofter for protecting the men, they, with the three sergeants in the line, will retire to their proper places in rear.
271. The captain, wishing to mareh the skirmishers in retreat, will command:

## 1. In retreat. 2. March (or double quick-March).

At the first command, the three sergeants will move on the line, as prescribed, No. 270.

At the command morch, the skirmishers will face about individually and march to the rear, conforming to the principles prescribed, No. 270.

The officers and sergeants will use cvery exertion to preserve order.
To halt the skirmishers, marching in retreat, the captain will command:

## Halt.

At this command, the skirmishers will halt and immediately face to the frout.

The chiefs of sections and the three guides will each couform himself to what is prescribed, No. 270.

## To change direction.

272. If the commander of the line of skirmishers shall wish to cause it to change direction to the right, he will command:

## 1. Right wheel. 2. March (or double quick-March).

At the command march, the right guide will mark time in his place; the left guide will move in a circle to the right, and that he may properly regulate his movements, will occasionally cast his eycs to the
right, so as to obscrve the direction of the linc and the nature of the gronud to be passed over. The centre guide will also mareh in a circle to the right, and, in order to conform his movements to the general direction, will take care that his steps are only half the length of the steps of the guide on the left.

The skirmishers will regulate the length of their steps by the distance from the marching flank, being less as they approach the pivot and greater as they are removed from it; they will often look to the marching flank so as to preserve the direction and their intervals.

When the commander of the line shall wish to resume the direct mareh, he will command:

## 1. Forward. 2. March.

At the command march, the line will cease to wheel, and the skirmishers will move direct to the front ; the centre guide will march on the point which will be indicated to him.

If the captain should wish to halt the line, in place of moving it to the front, he will eommand:

## Halt.

At this eommand, the line will halt.
A change of direction to the left will be made according to the same principles, and by inverse means.

The line of skirmishers marehing in retreat will change direction by the same means and by the same eommands as a line marching in advance: for example, if the captain should wish to reface bis left, now become the right, he will command :

## 1. Left wheel. 2. March.

At the command halt, the skirmishers will face to the enemy.
But if, instead of halting the line, the captain should wish to continue to mareh it in retreat, he will, when be judges the line has wheeled sufficiently, command :

## 1. In retreat. 2. March.

## To march by the fank.

273. The captain, wishing the skirmishers to march by the right flank, will command:
274. By the right flank. 2. March (or double quick-March).

At the first command the three sergeants will place themselves on the line.

At the command moreh, the skimishers will face to the right, and move off ; the right guide will place himself by the side of the leading man on the right to conduct him. and will march on the point indicated; eaeh skirmisher will take care to follow exactly in the direction of the one immediately preceding him, and to preserve his distance.

The skirmishers may be marehed by the left fiank, according to the same principles. and ly the same commands, substituting left for right: the left guide will place himself by the side of the learling man to conduct him.

If the skirmishers be marehing by the flank, and the captain should wish to halt them, he will enmmand:

## Halit.

At this command, the skirmishers will halt and face to the enemy. The officers and sergeants will conform to what has been preseribed, No. 270.

The reserve should exceute all the movements of the line, and be held always about 150 paces from it, su as to be in position to second its operations.

When the chief of the reserve shall wish to march it in advance, he will command:

## 1. Platoon, forward. 2. Guide left. 3. March.

If be should wish to mareh it in retreat, he will command:

## 1. In retreat. 2. MARCH. 3. Guirle right.

At the command lech. it will reface to the cnemy.
The men should be made to uaderstand that the signals or commands, such as formord, mean that the skirmishers shall march on the enemy: in retrent, that they shall retire, and to the right or left fank that the men must face to the right or left, whatever may be their position.

If the skirmishers be marching by the flank, and the captain should wish to change direction to the right (or left), he will command:

> 1. By, file right (or left). 2. March.

These movements will also be executed by the signals, No. 262.

## THE FIRINGS.

274. Skirmishers will fire either at a halt or marching.

## To fire at a hall.

To canse this fire to be executed, the eaptain will command :
Commence-Firing.
At this command, briskly repeated, the men of the front rank will commenee firing; they will reload rapidly, and bold themselves in readiness to fire again. During this time the men of the rear rank will come to a ready, and as soon as their respective filc-leaders have loaded, they will also fire and reloal. The men of cach file will thus continue the firing, couforming to this principle, that the one or the other shall always have his piece loaded.

Light troops should be always calm, so as to aim with accuracy; they shonld, moreover, eudeavor to estimate correctly the distanees between themselves and the enemy to be hit, and thus be enabled to deliver their fire with the greater certainty of success.

Skirmishers will not remain in the same place whilst reloading, unless protected by accidents in the ground.

## To fire marching.

275. This fire will be exccuted by the same commands as the fire at a halt.

At the command, commence firing, if the line be advancing, the front rank man of every file will halt, fire, and reload before throwing himself forward. The rear rank man of the same file will continue to march, and after passing ten or twelve paces heyond bis front rank man will halt, eome to a ready, select his object, and fire when his frout rank man has loaded; the fire will thus contiuue to be executed by each frle; the skirmishers will kecp united, and endeavor, as much as possible, to preserve the general direction of the aligument.

If the line be marching in retreat, at the command, comnence fring, the front rank man of erery file will halt, face to the enemy, fire, and then reload whilst moving to the rear; the rear rank man of the same file will continue to march, and halt teu or trelre paces beyond his frout rank man, face about, come to a ready aud fire, when his front rank man has passed lim in reireat and loaded; after
which, he will move to the rear and reload; the front rank man in his turn, after marching briskly to the rear, will halt at ten or twelve paces from the rear rank, face to the enemy, load his piece and fire, conforming to what has just been prescribel; the firing will thus be continued.

If the company be marching by the right flank, at the command, commence firing, the front rank man of crery file will face to the enemy, step one pace forward, balt and fire; the rear rank man will continue to move forward. As soun as the front rank man has fired, he will place himself briskly behind his rear rank man and reload whilst marebing. When he has loaded, the rear rank man will, in his turn, step one pace forward, halt and fire, and retnrning to the ranks will place himself behind his front rank man; the latter, in his turn, will act in the same manner, obscrving the same principles. At the command, cease firing, the men of the rear rank will retake their original positions, if not already there.

If the company be marehing by the left flank, the fire will be cxecuted according to the same principles, but in this case it will be the rear rank men whe will be first.

The following rules will be observed in the cases to which they apply:

If the line be firing at a halt, or whilst marching by the flank, at the command, forucurd-March, it will be the men whose pieces are loaded, without regard to the partinular rank to which they belong, who will move to the front. Those men whose pieces have been discharged will remain in their places to load them before moving forward, and the firing will be continued agreeably to the principles preseribed above.

If the line be firing either at a halt, advancing, or whilst marehing by the flank, at the command, in retreat-Mance, the men whese picces are loaded will remain faced to the enemy, and will fire in this position; the men whose pieces are discharged will retreat loading them, and the fire will be continued agreeably to the principles prescrihed for the fire in marching in retreat.

If the line of skirmishers be firing either at a halt, advancing, or in retreat, at the command, by the right (or left) flemk-Manch, the men whose picces are loaded will step one pace ont of the general aligument, fate to the enemy, and fire in this position; the men whose picces are unloaded will face to the right (or left) and march in the direction indicated. The men who stepped out of the ranks will place themselres, immediately atter firing, upon the general direction, and in rear of their front or rear rank men, as the case
may be. The fire will be continued according to the principles prescribed for firing when marehing by a fiank.

Skirmishers will be habituated to load their pieces whilst marching; but they will be enjoined to balt always an instant, when in the act of charging cartridge and priming.

They should be practised to fire and load knecling, lying down, and sitting, and much liberty should be allowed in these exercises, in order that they may be executed in the manner found to be most * eouvenient. Skirmishers should be cautionell not to forget that, in whatever position they may load. it is important that the piece should be placed urright before ramming, in order that the entire charge of powder may reach the bottom of the bore.

In commencing the fire, the men of the same rank should not all fire at once, and the men of the same file should be partienlar that une or the other of them be always loaded.

In retreating, the officer commanding the skirmishers should seize on every advantage which the ground may present for arresting the enemy as long as possible.

At the signal to cease firing, the captain will see that the order is promptly obeyed: but the men who may not be loaded, will load. If the line be marching it will continue the movement; but the man of each file who happens to be in front will wait until the man in rear shall be abreast with him.

If a line of skirmishers be firing alvancing, at the command halt, the line will re-form upon the skirmishers who are in front; when the line is retreating, upon the skirmishers who are in rear.
276. Offieers should watch with the greatest possible vigilanee over a line of skirmishers: in battle, they should neither carry a rifle or fowling piece. In all the tirings, ther, as well as the sergeants, should see that order and silence are preserved, and that the skirmishers do not wander imprudently ; they should especially eantion them to be calm and collected: not to fire until they distinetly pereeive the objects at which they aim, and are sure that those objects are within proper range. Skirmishers should take advantage promptly, and with intelligence, of all shelter and of all aceidents of the ground, to conceal themsclyes from the vicw of the enemy, and to protect themselves from his fire. It may often happen that intervals are momentarily lost when several men near each other find a common shelter; but when they quit this position they should immediately resume their intervals and their places in line, so that they may not, by crowding, needlessly expose themselves to the fire of the enemy.

## THE RALLY.

## To form column.

277. A company deployed as skirmishers, is rallied in order to oppose the enemy with better success; the rallies are made at a run, and with bayonets fixed; when ordered to rally, the skirmishers fix bayonets without command.

There are several ways of rallying, which the ehief of the line will adopt according to circumstances.

If the line, marching or at a halt, be merely disturbed by scattered borsemen, it will not be necessary to fall baek on the reserve, but the captain will cause bayonets to be fixer. If the horsemen should, however, advance to charge the skirmishers, the eaptain will command, rally by fours. The line will balt if marehing, and the four men of each group will execute this rally in the following manner: the front rank man of the even numbered file will take the position of guard aguinst caunlry; the rear rank man of the odd numbered file will also take the position of guard against caralry, turning his back to him, his right foot thirteen inches from the right foot of the former, and parallel to it; the front rank man of the odd file, and the rear rank man of the even file, will also place themselves back to back, taking a like position, and between the two men already established, facing to the right and left; the right feet of the four men will be brought together, forming a square, and serving for mutual support. The four men in each group will come to a ready, fire as occasion may offer, and load without moring their feet.

The eaptain and ehiefs of sections will cach cause the four men who constitute his guard to form square, the men separating so as to enable him and the bugler to place themselves in the centre. The three sergeants will each promptly place himself in the group nearest him in the line of skirmishers.

Whenever the eaptain shall judge these squares too weak, bnt should wish to hold his position by strengthening his line, he will command :

## Rally by sections.

278. At this command, the ebiefs of sections will move rapidly on the centre gronp of their respective sections, or on any other inferior group whose position might offer a shelter, or other particular advantage; the skirmishers will collect rapidly at a ran on this group, and without distinction of numbers. The men composing the group on which the formation is made will immediately form square, as hereto-
fore explained, and elevate their pieces, the bayonets uppermost, in order to indicate the point on which the rally is to be made. The other skirmishers, as they arrive, will occupy and fill the open angular spaces between these four men, and successively rally aronnt this first nucleus, and in such manner as to form rapidly a compact cirele. The skirmishers will take, as they arrive, the position of charge bayonet, the point of the bayonet more elevated, and will cock their pieces in this position. The movement concluded, the two exterior ranks will fire as oceasion may offer, and load without moving their feet.

The captain will move rapidly with bis gnard, wherever he may julge his presence most necessary.

The officers and sergeants will be particnlar to observe that the rally is made in silence, and with promptitude and order; that some pieces in each of their subdivisions be at all times loaded, and that the fire is directed on those points only where it will be most effective.

If the reserve should be threatened, it will form into a circle around its chief.

If the captain, or commander of a line of skirmishers formed of many platoons, should judge that the rally by scetion does not offer sufficient resistance, he will cause the rally by platoons to be executed, and for this purpose, will command:

## Rally by platoons.

279. This movement will be executed according to the same principles, and by the same means, as the rally by sections. The chiefs of platoon will conform to what has been preseribed for the chiefs of section.

The eaptain, wishing to rally the skirmishers on the reserve, will command :

## Rally on the reserve.

280. At this command, the eaptain will move briskly on the reserve; the officer who commands it will take immediate steps to form square; for this purpose, he will cause the half sections on the flanks to be thrown perpendienlarly to the rear; he will order the men to come to a ready.

The skirmishers of each section, taking the run, will form rapidly into groups, and upon that man of each group who is nearest the centre of the section. These groups will direet themselves diagonally toward each other and iu such manner as to form into sections, with the greatest possible rapidity, while moving to the rear ; the officers and sergeants will see that this formation is made in proper order, and the chiefs will direct their sections upon the reserve, taking eare to unmask
it to the right and left. As the skirmishers arrive, they will continue and eomplete the formation of the square begun by the reserve, elosing in rapidly upon the latter, without regard to their places in line; they will come to a ready withont command, and fire upon the enemy; which will also be done by the rescrve as soon as it is nmmasked by the skirmishers.

If a section should be closely pressed by cavalry while retreating, its chief will eommand, halt; at this command, the men will form rapidly into a compact eircle around the officer, who will re-form his section and resume the march, the moment he ean do so with safety.

The formation of the square in a prompt and efficient manner, requires eoolness and activity on the part of both officers and sergeants.

The captain will also profit by every moment of respite which the enemy's cavalry may leare him: as soon as he can, he will endearor to place himself beyond the reach of their eharges, either by gaining a position where he may defend himself with advantage, or by returning to the corps to which be belongs. For this purpose, being in square, he will eause the company to break into eolumu by platoons at half distanee; to this effect, he will command:

## 1. Ferm column. 2. March.

At the command march, each platoon will dress on its centre, and the platoon whieh was facing to the rear will face about without eommand. The guides will plaee themselves on tbe right and left of their respective platonns, those of the second platoon will place themselves at half distance from those of the first, counting from the rear rank. These dispositions being made, the captain ean move the column in whatever direction he may judge proper.

If he wishes to mareh it in retreat, he will command:

## 1. In retreat. 2. MARCH (or double quick-MARCH).

At the command march, the eolumn will immediately face by the rear rank, and move off in the opposite direction. As soon as the column is in motion, the captain will eommand :

## 3. Guide right (or left).

He will indicate the direction to the leading guide; the guides will march at their proper distances, and the men will keep aligned.

If again threatened by cavalry, the captain will command :

## 1. Form square. 2. March.

At the command march, the column will halt; the first platoon will face about briskly, and the outer balf sectious of each platoon will be thrown perpendicularly to the rear, so as to form the second and third fronts of the square. The officers and sergeants will promptly rectify any irregularities which may be committed.

If he should wish to march the column in advance, the captain will command :

## 1. Form column. 2. March.

Which will be executed as prescribed above.
The column being formed, the captain will command:

1. Forward. 2. March (or double quick-March). 3. Guide
left (or right).

At the second command, the column will move forward, and at the third command, the men will take the touch of elbows to the side of the guide.

If the captain should wish the column to gain ground to the right or left, he will do so by rapid wheels to the side opposite the guide, and for this purpose will change the guide whenever it may be necessary.
281. If a company be in column by platoon, at half distance, right in front, the captain can deploy the first platoon as skirmishers by the means already explained; but if it should be his wish to deploy the second platoon forward on the centre filc, leaving the first platoon in reserve, he will command:

1. Second platoon-as skirmishers. 2. On the centre fle-take intervals. 3. March (or double quick-March).

At the first command, the chief of the first platoon will caution his platoon to stand fast; the chiefs of sections of the second platoon will place themselves before the centre of their sections; the fifth sergeant will place himself one pace in front of the centre of the second platoon.

At the second command, the chief of the right section, second platoon, will command: Section, right fuce; the chief of the left section : Section, left face.

At the command march, these sections will move off briskly in opposite directions, and haviug unmasked the first platoon, the chiefs of scctions will respectively command: Dy the left flank-Marcri, and By the right flank-March; and as soon as these sections arrive on the alignment of the first platoon, they will command : As skirmishers-

March. The groups will then deploy according to prescribed principles, on the right group of the left section, which will be directed by the fifth sergeant, on the point indicated.

If the captain should wish the deployment made by the flank, the sccond platoon will be moved to the front by the means above stated, and halted after passing some steps beyond the aligument of the first platoon; the deployment will then be made by the flank according to the principles prescribed.

When one or more platoons are deployed as skirmishers, and the captain should wish to rally them on the battalion, he will command :

## Rally on the battalion.

282. At this eommand, the skirmishers and the reserve, no matter what position the company to which they belong may ocempy in order of battle, will rapidly unmask the front of the battalion, directing themselves in a run towarl its nearest flank, and then form in its rear.

As soon as the skirmishers have passed beyond the line of filecloscrs, the men will take the cquick step, and the chief of each platoon or section will re-form his subdivision, and place it in eolumn hohind the wing on which it is rallicd, and at ten paces from the rank of tileclosers. These subdivisions will not be moved except by order of the commander of the hattalion, who may. it he thinks proper, throw them into line of battle at the extremities of the line, or in the intervals between the battalions.

If many platoons should be united behind the same wing of a battalion, or behind any shelter whatsoever, they should be formed always into close column, or into column at half distance.

When the battalion, covered by a company of skirmishers, shall be formed into square, the platoons and sections of the covering company will be directed by their chiefs to the rear of the square, which will be opened at the angles to reeeive the skirmishers, who will be then formed into close column by platoons in rear of the tirst front of the square.

If circumstances should prevent the angles of the square from being oponed, the skirmishers will throw themselves at the feet of the front rauk men, the right knee on the ground, the butt of the piece resting on the thigh, the bayonet in a threatening position. A part may also place themselves about the angles, where they can render good service by defending the sectors without fire.

If the battalion on which the skirmishers are rallied be in column ready to form square, the skirmishers will be formed into close column
by platoon, in rear of the centre of the third division, and at the command, Form square-March, they will move forward and close on the buglers.

When skirmishers bave been rallied by platoon or section behind the wings of a battalion, and it be wished to deploy them again to the front, they will be marched by the flank toward the intervals on the wings, and be then deployed so as to cover the front of the battalion.

When platoons or sections, placed in the interior of squares or columns, are to be deployed, they will be marehed out by the flanks, and then thrown forward, as is proseribed, No. 281; as soon as they shall have unmasked the column or square, they will be deployed, the one on the right, the other on the left file.

## The assembly.

283. A company deployed as skirmishers will be assembled when there is no longer danger of its being disturbed; the assembly will be made habitually in quick time.

The eaptain wishing to assemble the skirmishers on the reserve, will command:

## Assemble on the reserve.

At this command the skirmishers will assemble by groups of fours; the front rank men will place themselves behind their rear rank men; and each group of fours will direet itself on the reserve, where each will take its proper place in the ranks. When the company is reformed, it will rejoin the battalion to which it belongs.

It may be also proper to assemble the skirmishers on the centre, or on the rigbt or left of the line, *ither marehing or at a balt.

If the captain should wish to assemble them on the centre while marehing, he will command:

## Assemble on the centre.

At this command, the centre guide will continue to mareh directly to the front on the point indicated; the front rank man of the directing file will follow the guide, and be covered by his rear rank man; the other two comrades of this group, and likewise those on their left, will march diagonally, alvancing the left shoulder and aecelerating the gait, so as to re-form the groups while drawing nearer and nearer the directing file: the wen of the right seetion will unite in the same manner into groups, and then upon the direeting file, throwing forward the
right shoulder. As they successively unite on the centre the men will bring their pieces to the right shoulder.

To assemble on the right or left file will be executed according to the same principles.

The assembly of a line marching in retreat will also be executed according to the same principles, the front rank men marching behind their rear rank men.

To assemble the line of skirmishers at a halt, and on the line they oceupy, the captain will give the same commands; the skirmishers will face to the right or left, according as they should march by the right or left flank, re-form the groups while marching, and thns arrive on the file which served as the point of formation. As they successively arrive, the skirmishers will support arms.

## Article V.

## TARGET PRACTICE.

284. In order that fre-arms in the hands of soldiers may produce their full effect, it is necessary,

1st. That the soldier should have sufficient knowledge of the parts of his piece to enable him to take it apart and put it together again for the purpose of keeping it in order.

2d. That the soldier should know how to load his pieee properly. The school of the soldier contains all that is necessary on this subject.

3d. That the rules for firing his piece should be known; that is to say, that he knows the manner of regulating his aim according to the distance of the object to be hit.

4th. That he should be practiced in estimating distances within the range of his piece.

5th. That he should be able to take a position which enables him, To aim with ease;
To keep the body steady, withont constraint;
Not to incline the sights to the right or left ;
To support the recoil.
6th. When pressing on the trigger to discharge the piece, not to derange his aim.

The above comprises all that is necessary for the soldier to know, and put in practice, in order that he may obtain the maximum effect of his arm.

## EXERCISE PREPARATORY TO FIRING.

285. In the exercises which constitute this lesson, the company will be divided into as many squads as there are instructors arailable. When the exercise is conducted on the drill-ground, the squads will be formed in one rank, with an intersal of one pace between the files, and equipped as for drill. The bayonet, as a general rule, will be in the scabbard, unless otherwise directed.

## Aining.

286. Instruction in aiming will be given at first in the quarters, if practicable. A bag. partially filled with sand or eurth, is placed on a bench, the bench on a table: by striking the bag with the back of the hand, an indentation will lee formed in which the picce can be rested. The piece is now placed on the bag, and aimed by the instrnctor on some object, such as a wafer on the wall, being careful that the sights incline neither to the right or leift. He now points out to his squad the two points which determine the line of sight; that is, the top of the front or muzzle sight, and the middle of the noteh of the hausse or breech sight. The instructor explains that aiming consists in bringing these two points and the object aimed at in the same right line.

Each man, in turn, placing himself behind the butt of the piece, without touching it, closing the left cye, looks through the middle of the noteb of the breech sight, over the top of the front sight. and on the centre of the wafer upon which the line of sight was previously directed, and satisfies himself that these three points are in the same right line. The instructor will now derange the gun, and then call up each soldier in turn, who will aim the piece at the point indicated: he will criticise the aiming, pointing out to each of them their error or errors, if any are found, by making them see that the object aimed at is not in the line of sight, but that this line passes to the right, left, above, or helow, as the case may be. After Laving rectified the aiming of each soldier, the instructor will be careful to derange the piece. This exercise will be repeated; but, instead of the instructor rectifying errors himself, he will first call up the men of his syuarl in turn, and ask each if the line of sight passes to right, left, above, or below the point indicated, or whether the piece inclines to the right or left. When the men bare expressed their opinions, the instructor will give hix own, correeting thus all the errors which have been committed. The instructor will repeat this exercise as often as may he necessary.

Two drills, of two hours each, devoted to the first part of the instruction in aining, will be saficient to teach the generality of men the principles of aiming agon with the raised sight down.

In a third drill, the instructor will explain to his squad the use of the different parts of his piece. the rules for tiring, the object aud use of the raised sight, by tracing the figures on a board, table or floor. Explain that the line of fire is the axis of the gin indefinitely produced, that the ball describes a curved line dming its flight, that the line of sight is a right line passing tbrough the middle of the noteb of the rear sight and the top of frout sight, that the print-hlank is the
secon 1 intersection of the trajectory, or curre, with the line of sight. Assuming the point-blank of a gun, with the hausse down, to be 200 yards, be will explain to his squad, that to hit a man in the head at 200 yards, aim at his head; at 150, at his throat; at 100 , at his chest, and so on. Thus, with the assistance of a curved line, and a few simple remarks adapted to the comprehension of any man of ordinary intelligence, the squad will receive a lesson which many will find useful in practice, and but few will forget. The instructor will, from time to time during the drill, question the men, and satisfy bimself that he is clearly understood. The instructor will also add, that by the use of the hausse or raised sight, the number of point-blanks are increased, and explain the reason.

The fourth, fifth and sixth drills that follow will take place on the drill-ground, and squads will be exercised in aiming at any distance betwecn 100 and 1,000 yards, or up to that point for which the aim is sighted. Each squad is provided with a target, a bag partially filled with sand, and a tripod, formed of poles about six feet loug, tied or fastened near the top. The tripod is placed in an upright position, the sand-bag on the tripod, and the piece on the sand-bag. Each man aims his own gun. When he pronounces his piece correctly aimed, the instructor calls up the remainder of the squad in turn, who examine the piece, and inform the instructor, in a low tone, how, in their opinion, the gun is sighted. He then examines the piece himself, pronounces how the giu is aimed, calls up those who answer incorrectly, and, haring satisfied them of their errors, requires the man who aimed the piece, to correct his mistake. Should it be desirable to economize targets, one target will answer for the different squads of the same company during this part of the drill: in that case the tripods will be placed as near togetber as practicable. Soldiers who have previously been thoroughly instructed in this part of the exercise, and show a knowledge of the first four drills, may be excused from the last two.

## Position of a Skirmisher aiming standing.

287. When the men can aim correctly from a rest, they will be instructed in the above position.

Squads under arms will be formed in a single rauk, with an interval of one pace between the files.

The instructor, facing the squad, will give the details of the position, executing the same himself as he describes them.

## Aiming with sight down (when rifled musket is used).

One time and three motions.
First motion. As first motion of " charge bayonet," except that the right foot is carried fifteen inches to rear of left beel.

Second motion. Bring down the piece with the right hand to the right side, the barrel uppermost ; seizing it with the left hand in rear of the hausse or breech sight, the stock resting in the palm of this hand, the thumb extended along the stock, the left elbow close to the body. the muzzle as high as the eye. Cock the piece with the thumb of the right hand, the fingers supported against the guard and the small of the stock ; seize the piece at the small of the stock with the right hand.

Third motion. Turn in slightly the left toe, raise the piece with both hands; place the butt firmly against the shoulder, the body erect, the left elbow close to the hody; shat the left cye, raise the right shoulder in order to bring the sight to the height of the right eye, the clhow raised nearly to the beight of the shoulder; aim, keeping the line of sight horizontal and in the vertical plane of fire, inclining as little as possible the bead to the right, the thumb of the right hand over the small of the stock, the last joint of the first finger of the right hand in front of but not touching the trigger, the remaining fingers under, and grasping the small of the stock.

## Aiming with sight down (when rifle is used).

One time and three motions.
First motion. Raise the piece with the right hand; make a half-face to the right on the left heel; place the hollow of the right foot opposite to, and fifteen inches from, left beel ; the feet square; seize the piece at the same time with the left hand in rear of the hausse or breech sight, the thumb extending along the stock.

Second motion. Bring down the piece with both hands; the barrel uppermost, the left elbow elose to the body, the muzzle as high as the eye. Cock the piece with the thumb of the right hand, the fingers supported against the guard and the small of the stock. Seize the piece at the small of the stock with the right hand.

Third motion. Same as that giren for riffed musket.
The instructor directs each man to take the position, commencing on the right of the squad: during the instruction he will assist the soldier in supporting his arm by placing his right hand under or near the mid-
dle band. After which, the man is made to take the position without any assistance. The commands giren in order to make a soldier take or abandon the positions as given above, will be:

## As a skirmisher-Aim. Cease-Aiming.

At the first part of the last command, withdraw the finger frem in front of the trigger; at the command aiming, retake the position of the second motion of "Aiming with sight down;" half-coek the piece, and come to a shoulder. As the instructor proceeds with the squad, he. will direet those who have been instructed to exereise themselves in taking the position, keeping it for an instaut, and then abandoning it, repeating this as often as they can while the rest are being instructed. Men will be cautioned not to cock the piece when repeating the instruction. The squad will now be exercised in aiming tagether, keeping them in the position long enough to confirm, but not long enough to fatigue them. This drill may be conducted in the quarters. In this ease the instructor will drill but one man at a time ; the remainder will exercise themselves in taking and abandoning the position as he proceeds. Two drills will be given to the above exercise. One will suffice for soldiers who have been previously instructed.

During the drill, the soldier will not be required to aim at any fixed point, the object being that he may acquire with ease the position of a soldier, "aiming as a skirmisher, standing," and the habit of readily catching with his eye the two points which determine the line of sight.

When the men are confirmed in the position described above, they will be exercised at aiming at a mark. First with the sight down : one drill will be given to this exereise. Previous to the man's aiming, the instructor will order him to direct the liue of sight below the point to be aimed at; to raise the piece slowly nntil the line of sight is on the point designated, preserving his aim for an instant, kecping the body and gun immovable. During the first part of this drill the men will be instructed individually.

The men will now be cxereised in aiming, using the hausse for ranges for which it is graduated, and the intermediate ones.

## Aiming with sight raised (when rifled musket and rifle are used).

> One time and four motions.

First and Second. Same as "Aiming with sight down."
Third motion. Raise the piece slightly with both hands, at the same time depressing the mazzle nutil the piece is horizontal, the left arm and stock against the body : with the thumb and first finger of the right
hand regulate the hansse for the distance indieated, and seize the piece with the right hand at the small of the stock.

Fourth motion. Same as third motion, "Aiming with sight down."
Two drills will be given to this exereise: during the first drill, the men will be instrueted individually, emmencing with the lower sights, and then eausing the hausse to be raised gradually.

The position of a soldier aiming as a skimisher eannot always be taken exactly in the same manner, as it will be fonud necessary to lower the shoulder and arms in proportion as the hausse is elevated: without moving the body, or inclining the head, the soldier, by lowering the shoulder and arms, ean take any line of sight trom 250 to 1.000 yards. This will be found a good exereise for the men. In order to aim at objects 800,900 and 1,000 yards distant, it is necessary to press the beel of the butt of the piece against the shoulter. If men have short necks the position is constrained, and cannot be taken properly. Instructors pereeiving this difficulty will exercise their judgment in requiring men to take the position above designated when firing at these long ranges.

During the second drill, squads formed on the drill ground will be exereised in aiming together, using the different lines of sight for which the hausse is regulated. In this drill, the bayonet will be fixed when aiming at distances not less than 400 yards.

## Position of a soldier lneeling and aiming as a skirmisher.

288. The instruction will be given without times or motions. The instructor will command:

Take the position of a skirmisher kneeling and aiming;

> or,
> Cease-Aming.

The instructor will detail the position of a skirmisher kueeling and aiming, as follows: The squad is supposed to he at shouldered arms, the files one pace apart. Take the position of present arms; then earry the right foot to the rear and to the right of the left heel, and in a position convenient for plaeing the right knee upon the ground in beuding the left leg; place the right knee upou the ground, lower the pieee, the left forearm supported upon the thigh on the same side, the right hand on the small of the stock, the butt resting on the right thigh, the left hand supporting the piece near the lower band. Move the right leg to the left, around the knee supported on the ground,
until this leg is nearly perpendicular to the direction of the left foot, and thus scat himself on the right heel. Raise the piece with the right hand and support it with the left, holding it near the lower band, the left elbow resting on the left thigh near the knee. With the thumb and forefinger of the right hand regulate the hansse, if necessary ; cock the piece, seize it with the right hand at the small of the stock, the right shoulder raised or lowered according to the position of the target, the right elbow nearly to the height of the shoulder; aim at the point indicated, keeping the top of the muzzle sight and the bottom of the notch of the hausse in the vertical plane of fire, the thumb of the right hand over the small of the stock, the last joint of the first finger of the right hand in front of but not touching the trigger, the other fingers of this hand grasping the small of the stock. The instructor, having taken, and detailed at the same time, the position of a skirmisher kneeling and aiming, will instruct the men in aiming from this position, in conformity with what has been prescribed in the school of the soldier. Two drills will be given to this exercise. One will suffice for soldiers previonsly instructed in the drill.

## Keeping the piece steady when the trigger is pulled.

289. It is easy to preserve the aim until the trigger is pressed upon in order to discharge the piece; but, when this is done, the aim is maintained with diffieulty. When pressing on the trigger the line of sight is apt to be deranged: although properly directed before touching the trigger, it may not be so at the moment the discharge takes place. The report of the discharge of his picce should find the soldicr still preserving his aim. The soldier will attain this if he holds his breath from the moment he commences to touch the trigger uutil the gun is discharged; if he docs not pull the trigger with a jerk, or suddenly, but increases the pressure on the trigger by degrees; if he places his finger in such a manner upon the trigger as to exercise its full force, pressing not on the extremity of the finger, but on the last joint, or as near this joint as the conformation of the man will permit. The instructor, holding a gan in a convenient position similar to that of charge bayonet, will point out to each soldier in succession the mauner of pulling the trigger, which will be done with the first finger of the right hand as described above, the remaining fingers of this hand under and grasping the small of the stock, the thumb over the stock.

The men repeat after the instructor, in succession, what he has just executed. After this has been repeated as often as necessary, the in-
structor explains to his squad how they should manage in order to fire without deranging the position of the picce after bringing the line of sight to bear on an object. He will explain and execute this as follows:

Press upon the trigger by degrees with the last joint of the first finger of the right hand, clusing the muscles of this finger without moving the arm, holding the breath, the sound of the discharge finding. the soldier preserving the line of sight upon the point aimed at. Remain aiming an instant after the gun is discharged, to be assured that the object is still in the line of sight. In actual firing, it will be impossible to preserve the aim the instant the gun is discharged; but, should the gun hang fire, the soldier accustomed to remain an instant aiming will be more apt to make a good shot.

The instructor should make the soldier understand that a good marksman is known by the stcadiness with which he preserves his gun when it misses fire.

The men will be made to take one or the other of the positions of a soldier aiming, as laid down in No. 287. They will be permitted to snap the gun without any commands heing given to that effect. The instructor will indicate the distance, either assumed or real, of the target, and will see that the men use the sights corresponding to those distances. The instructor will command, for instance, "Take the position of a 'skirmisher aiming standing' at 600 yards aim."

The exercisc given in this article is considered of great importance. It will be repeated for four drills. Two will suffice for those men who have been previously instructed.

## Simulated firing with caps.

290. This is the same as the preceding, except that a cap will be used, and it will not be necessary to explain to the soldier the manner of pulling the trigger. Squads assembled in the quarters will be made to aim at a lighted candle, which will be placed three feet or more from the muzzle of the gun. The line of sight will be brought to bear below the flame; then, gradually raising the piece until the line of sight is directly on the flame, the cap will be exploded: if the cone and barrel of the piece are perfectly clear, and the piece correctly sighted, the body kept steady when aiming and at the moment the cap explodes, the candle will be extinguished. Simulated firing with caps will be executed in two drills. Ten caps per man will be exploded at each drill ; eight caps standing and two kneeiing.

## Simulated fring with blank cartridges.

291. Firing with blank cartridges will be conducted in conformity with the principles laid down. The squad will be formed on the drill ground, as preseribed in No. 287. The men will fire in succession at a target, placed or supposed to be placed at different distances. The rules laid down in the foregoing examples relating to a soldier aiming will be strietly followed. This lessou will be executed in two drills; ten cartridges will be fired per man at each drill; eight standing and two kneeling.

The object of these drills is to accustom the men to preserve their aim when firing.

## Estimating distances.

292. The company assembled fully equipped as for drill will be divided into at least three squads, or as many as there are company officers present. Each officer is provided with a small cord, 25 yards long. The instruetor will measure on the ground a right line, which will be marked off into distances,

$$
0,50,100,150,200, \text { yards } ; \frac{0,50,100,150,200,}{|||| |}
$$

marking these distances, as measured, with a stake, stone or line, on the ground. He will now direet each man of his scuad to pace off the measured distance of 100 yards, eautioning them to be careful and preserve their natural gait, without attempting to increase or diminish the length of their step. He will direet the men to count the number of steps they take in passing over the distance of 100 yards. This having been repeated at least three times by each soldier, who reports each time the number of steps taken by him in passing over 100 yards, the ratio which a yard bears to the step of each soldier becomes known. The instructor will inform each soldicr the number of steps it will be necessary for him to take to pass over 10 yards. The soldier now knowing the number of steps he must take to pass over 10 and 100 yards, it will be easy for him to measure any distance with sufficient accuraey for all practical purposes when firing.

To estimate a distance greater than 100 yards-in steps-the soldier, having started from the point of departure, will count the number of steps he should take to pass over 100 yards; extending as a tally, at the moment of arrival, the thumb of his right hand, the other fingers closed: he will recommence then his count, extending the first finger of the right hand when he bas counted the
number of stejs neecssary to make a second 100 yards, and so on, until he arrives at a point less than 100 fards from the point up to which he is to measure. When the soldier finds himself less than 100 yards from the object, he will eount by tens, saying, "Ten yards," when he has counted the number of steps necessary for him to pass orer the distance of 10 yards, 20,30 yards, and so on, until he arrives very near the object, when he will increase the length of his step, counting each step a yard; and, by adding these to the tens, he will then only have to count as hundreds the number of fingers he has raised to know the whole distance expressed in yards.

The instructor will form his sunad at one of the extremities of the 200 yard line, which has been measured in sueh a way that the right line measured shall be perpendieular to the front of the squad. He will order four men to place themselres, the first at the point marked 50 yards, the second at the point marked 100 yards, the third at the point marked 150 yards, and the fourth at the point marked 200 yards. The men seleeted should be as near the same height as practicable. The instructor will now direct the attention of the squad to the different parts of the dress, arms, equipment, and figure of the men on the line, sueh as can be easily distinguished and recognized at 50 yards, and such as cannot be readily reeognized at this distance. He questions each man of his squad on these points, not expecing all to answer alike, since the eyesight of men will generally differ.

The instruetor will now eall the attention of the men to the soldier placed at the point 100 yards distant, and eause them to make similar observations upon this man as those already preseribed for the soldier at 50 yards. The instructor again questions the men, and will be careful to point out to them the difference that exists between those two distances, as illustrated by the difference in the appearanee of the same objects at these distances. The instructor will make, in succession, npon the two men plaeed at 150 and 200 yards, similar observations as preseribed for the men at 50 and 100 yards; being very careful to eall the attention of eaeh man to the difference whieh exists between the four distances, illustrated by the distinetness with whieh certain objeets are seen. The instructor will direet the squad to notiee that men appear smaller the farther they are off, although in reality they are nearly the same height. The men stationed at the different points will be frequently replaced by others. When the men of the squad have made a suffieient number of observations upon the four distances above indicated, and when these observations are well im-
pressed on their memories, the instructor will cansc the squad to cstimate intermediate distances between 50 and 200 yarls.

In order to do this, the instructor will mareh his squad to a different part of the ground from that on which he measured the distances in the first instance, and form it in one rank. He now sends out one man, directing him to balt at a given signal. The instant this man steps off, the squad is faced about, in order that the men may not connt the steps taken. When the man proceeds a sufficieut distanee, he will be balted, facing toward the squad. The squad will now be faced to the front. The men will estimate the distance which separates them from the soldier. The instructor eautions the squad to recollect the observations made by them upon the men placed at the measured distances. The instructor, placing himself a short distance from the squad, calls each man to him iu turn, directing them to give in their estimates in a low voice. This is necessary, in order that no man may be influeneed in his judgment by the opinion of another. The instructor will now cause the distance to be measured, and, at the same time, stepped off by the men. The instructor now points out to the men the errors, if any werc committed, in estimating the distance. In order to do this more distinetly, he may send a man to the point from which the squad started, pointing out all errors by observations on this man. The instructor will repeat this exereise as often as in his judgment is necessary, taking care each time to choose a differeut distanee, but always between the limits above indicated.

Estimating distances should take place under different conditions of the atmosphere, cloudy, foggy, etc.; and, if the locality permits, squads should be drilled ou ground the outline of which is diversified by hills, ravines, etc.

When the instructor judges that the men of his squad-who should, if possible, be the same during these exereises-hare acquired a sufficient accuracy in estimating distances comprised between 50 and 200 yards, he will proceed to estimate distances comprised between 200 and 400 yards. To accomplish this, be will eause to be measured a distance of 400 yards, and mark, upon the right line so measured, distances of

$$
0,200,250,300,350 \text {, and } 400 \text { yards } ; \frac{0,200,250,300,350,400}{|||||| |}
$$

The squads will be formed as explained. The instructor now orders five meu to place themselves, the first at 200 , the second at 250 , the third at 300 , the fourth at 350 , and the fifth at 400 yards, facing the squad and resting ou their arms. He will make upon these different distances observations similar to those already made upon the lesser
distances, and for that of 200 yards. This last distance shonld be the object of particular attention and study. The instructor will cause distances comprised between 200 and 400 yards to be estimated as explained for the lesser distances.

When the men have acquired sufficient accuracy in estimating distances comprised between 200 and 400 yards, they will be made to estimate distances comprised hetween 50 and 400 yards.

This haring becn accomplished, distances will be no longer estimated on single individuals, but on groups of men.

Each company, under the command of its captain, will be divided into two platoons, commanded by the first and second lieutenants, when not superintending the firing of a class. The eaptain will keep bimself with one of the two platoons, having an eye to the exercise. The chief of each platoon, having halted his platoon in a favorable position indicated by the captain, will bring his platoon to an order, and rest. A group, composed of a corporal, a drummer or bugler, and two men, will proceed immediately in front of the platoon, following a line indicated by the chief of platoon, who will point out to the corporal two points on this line upon which to direct himself. The corporal, having passed over a distance of 200 yards, but not exceeding 700 , will be at liberty to halt his group. He will then place the men one pace apart, in one rank, and, facing the platoon, bring them to an order, and rest, and take his place on the right of the rank, the centre of which should be established on the line. The chief of the platoon will now estimate the distance himself, and note the same in his notebook. He will now call out the non-commissioned officers, receive their estimates (which should be given in a low tone), and so on with the men. As soon as the officer in charge of the platoon commences to take down the estimates of the men, a sergeant, assisted by two men carrying a cord twenty-five yards long, will measure the distance which separates the platoon from the group, and note down the same. Should the number of units which remain after having noted the hundreds and tens be less or equal to five, they will be rejected; if greater than five, they will be counted as ten. The officer having taken down the estimates, and the distance separating the platoon from the group having been measured, the officer will display a signal, and the sergeant who measured the distance will indicate the number of yards by causing the drummer to sound a roll for each hundred, and a single tap for tens. The bugler will indicate the same by long and short notes.

The group, at the discretion of the officer commanding the platoon, may be made to increase or lessen the distance which separates it from the platoon, the corporal keeping the group within the limits

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prescribed, and on the line as indicated to him. When be balts the group, he will be careful to establish it on the line facing the platoon.

The scrgeant eharged with measuring the distance will retirc a few paces from the line, after having marked the point up to which he last measured.

He will observe the platoon, and as soon as its chief commences recording the estimates, he will measure the distance which separates the group from its first station, taking note of this distance, and adding it to the first or substracting it, as the ease may be.

In estimating distances comprised between 700 and 1,000 yards, the number composing a group will be increased to eight men, a corporal, and drummer or bugler. The groups will be formed sohetimes in one and sometimes in two ranks.

In all other respects, the rules laid down for estimating distances between 200 and 600 yards will be followed.

Instruction in estimating distances will be given when it does not interfere with other parts of the soldiers' drill. It will, however, always precede ball practice, and be carricd on during this practice. When one squad is oecupied in firing at the target, the remaining squads will be excreised in estimating distances.

Officers, particularly, should be prompt in estimating distances correctly, as they are called mpon to conduet and regulate the fire in presence of an enemy.

## Firing with Ball Cartridges at Different Distances, Formation of Classes, etc.

293. The distances at which the targets are placed will be 150,225 , $250,300,325,350,400,450,500,550,600,700,800,900$, and 1,000 yards.

These distances will be carefully measured and staked off on the " firing ground."

The surfaces fired at will be,
at 150 and 225 yards, one target 6 ft . high and 22 inches broad.

| 250 and 300 | " one | " | " | 44 |
| :---: | :---: | :---: | :---: | :---: |
| 325,350 , and 400 | " one | " | " | 66 |
| 450 and 500 | " one | ، | " | 88 |
| 550 and 600 | " one | " | " | 110 |
| 700 | " one | " | " | 132 |
| 800 | " one | * | " | 176 |
| 900 | " one | * | " | 220 |
| -1,000 | " one | " | * | 264 |

Four rounds will be fired at each of the above distances. The company will be divided into three equal chasses, non-commissioned officers equally distributed.

After the company has fired at the several distanees, 150, 225, 250, $300,325,350$, and 400 yards, the classes will be rearranged aecording to merit of firing, -the first class composet of thoso men who have hit the target the greatest number of times, the second class of those who come next in order, and so on with the thirl, keeping the elasses as nearly equal as practicable. Non-commissioned officers will not be assigned to elasses aecording to merit, but aceording to rank, a sergeant in each class, the presence of non-commissioned officers being necessary with elasses when estimating distances, ete. When the firing has been executed at the fifteen distances, the elasses will be again re-formed, as prescribed above; previous to whieh no ehange will be made.

Men who, from unavoidable causes, have missed drills, will be placed in that class to which the number of their shots that hit the target entitles them; whieh will be determined by a simple calculation.

A list of the company, arranged by classes, will be kept exposed in the quarters until new lists are formed. The ubject in forming elasses is that the officers may know the good marksmen in their companies, and to stimulate the pride of the men.

When the company arrives on the gronnd, the elasses will be paraded. The first elass, formed in one rank, will take position ten steps in rear of the point from which the firing takes place, the eentre of the rank on and perpendienlar to the plane of fire.

The remaining elasses will be divided into as many squads per elass as there are intelligent non-commissioned officers available; and these squads, superintended by an offecr, will be exercised, on suitable gronnd near the firing groand, in estimating distances. When estimating distances greater than 400 yards, the two chasses may be united, in whieh ease the detachment will be enmmanded by an officer. The offieer superintending the firing will order his class to load at will, and then bring them to a " support arms," or "order arms," and rest.

Before a man fires, a roll on the drum, or note on the bugle, will be sounded. At this signal the markers will take their places. At the eommand "Commence firing," the man on the right will take the position in front of the squad that has been pointed out to him, and fire, retiring, as soon as be bas fired, three paces in rear of his first position; and so on with the rest. When a class las fired, it will reload at the commands "Load at will." "Load," and thus continue until the four shots have been expended. Three shots will be fired standing, the fourth kneeling. The firing of the other classes will be conducted in the same manner.

Officers should retire a short distance from the soldier who is about to fire, and be careful not to speak to him when in the act of firing. Officers will pay particular attention that all the principles are followed which have been laid down in the foregoing articles.

Balls which strike within the black lines will have no greater value on the "record-book" than those which strike any other part of the target.

An intelligent non-commissioned officer, assisted by a man, will place themselves in a hole dug at the foot and in front of the target, protected by a breastwork of earth thrown up on that side from which the firing takes place. This non-commissioned officer will mark the shots which strike the target. He will be provided with a small flag, and a rod about six fect long, on one end of which will be nailed a circular disk of wood, or other material, six or eight inches in diameter, painted on one side white, on the other black. When a ball strikes outside the black, he will cover the shot-hole with the disk, presenting the black side to the detachment; when inside the black, the white side will be presented to view. Firing will only be permitted when the flag is down. The marker should be provided with a pot of paste, a brush and patches of paper, when the target covered with muslin is used. After fire shots. the marker will paste patches over the ball holes, or otherwise deface them. When cast-iron targets are used, the marker should be provided with black and white paint.

Should it not be possible to obtain the greatest range laid down, the entire number of shots will nevertheless be fired. The shots, in that case, will he divided equally between the 150 yard range and the greatest available range.

When the first elass has nearly completed firing its four rounds, the drummer will be directed to sound a roll, or the bugler the signal "Commence firing."

The second class will then be marched to the position occupied by the first, and execute what has heen laid down above.

During the remainder of the drill, the first class will be exercised in estimating distances. It will be found to economise time, and the record of shots can be better kept by keeping the same non-commissioned officer superintending the marking of shots during the entire drill.

## Firing as Skirmishers.

294. The company will now be exercised in firing as skirmishers. Three drills will he given to this exercise. Ten cartridges will be fired per man at each drill. When firing as skirmishers, the men will be
permitted to take that position whieh suits them best. The line of skirmishers will fire first advancing, then retreating, conforming to the principles laid down in the instruction for skirmishers. The targets will be six feet high and twenty-two inches wide, placed upon a line parallel to the line of skirmishers and six yards apart.

As many targets will be used as the nature of the ground and a due regard to economy will permit. A line will be staked off parallel to the line of targets and 350 yards distant. The line of skirmishers, formed a suitable distance from this line, will advance upon it, and when ou the line the command will be given, "Commence firing ;" the line of skirmishers will advance and fire five rounds; the remaining five will be fired retreating.

The firing during the second drill will be executed as laid down for the first. The surface fired at will be double; the targets placed six yards apart. The firing will commence when the skirmishers arrive on a line 600 yards from the targets. The number of targets will not be limited. Five cartridges will be fired advancing and five retreating.

Firing during the third drill will commence when the skirmishers reach a line 800 yards from the line of targets. Four targets will be used, placed 12 yards apart. The dimension of each target will be 6 fcet by 88 inches.

## Firing by Company or Rank, and by Platoon.

295. The exercises in firing will terminate with firing by file, by company or rank, and by platoon. At each drill, six cartridges per man will be fired by file, two by rank or company, and two by platoon. The distances at which the several firings take place will be 300,400 , and 500 yards. The target used will les six feet high and 176 inches broad. The vertical and horizontal stripes on this target will be 12 inches in width.

The firings by file, by company or rank, and by platoon, will be executed in three drills; at the first, the firing will commence at 300 yards; the second at 400 , and the third at 500 yards. At each drill, the firing will commence by file, then by company or rank, and will end by firing by platoon. When firing at 300 yards, whether by file, by company or rank, or platoon, bayonets will be fixed.

As the position of soldiers firing by file, company or rank, and by platoon, is different from that taken when firing as a skirmisher, it will be necessary, before executing the above firings, to habituate the men to the positions which they should take by simulated firings.

The simulated firing will first be by allowing the hammer to fall upon
the cone. The men will be made to take the positions as laid down in the sehool of a soldier as applieable to those different firings. They will be accustomed to regulate the hausse in ranks, putting in practice as much as possible, when firing in ranks, what bas been prescribed fur individnal firing.
During the first part of the first drill, ten eaps per man will be ex-ploded-six in file firing, two in company or rank, and two in platoon. During the second part of the same drill, teu blank cartridges will be fired-six by file, two by company or rank, and two by platoon. The front rank will be made frequently to change positions with the rear rank. Firing with ball eartridges will then take place, preeeding each real fire by simulated firings, when the hammer will be allowed to fall upon the cone. The proper execution of platoon and company firing depends in a great degree upon the commands of the offieer. If he does not allow a sufficient interval between the commands "Aim" and "Fire," the men will not have time to aim. To obey the command in time, the trigger will be pulled suddenly. The result will be that much of the efficiency of the fire will be lost, and a simultaneous fire, upon which a great deal depends, will not be obtained; for experience and reason demonstrate the faet, everything else being equal, that pla-toon-firing is more effective in proprortion as it is executed together. When the offieer leaves a suitable interval between the commands "Aim" and "Fire," the men hare time to adjust the piece to the shoulder, to place the finger in front of the trigger, and to exereise a slight pressure on the trigger when awaiting the command "Fire." They are then really to fire the moment the command is given, thus obtaining a simultaneous and effective fire. But, if the officer superintending the firing should be careful to leave a sufficient interval between the commands "Ain" and "Fire," he should no less avoid the opposite extreme. If he keeps the men aining too long, they will beeome fatigued, will lose their aim, and will not be prepared to ohey the command when given. It is ouly ly eommanding, and seeing platoon and company firing exeented with ball and cartridye, and judging of its effeet by the number of balls put in the target, that offieers ean appreciate the infinence of a command promptly given, and acquire the habit of thus giving their commands.
When firing by file, by company or rank, or by platoon, the officers will indieate the distance which separates the company from the oljeet to be fired at. Men in ranks are necessarily more or less constrained in their morements. Occupied, moreover, in loading their pieees, soldiers will not be able to julge the distance which separates them from from the enemy.
The most suitable moment to indieate the distance will be imme-
diately hefore the command "Aim" is given. The men will then be in a position to regulate the hansse. To direet the fire of a platoon upon an enemy, for example, at 400 yards , the officer will command :

Fire by platoon. Platoon-Ready-at 400 yards-Aim-Fire -Load.

The above obserrations are applieabie to firing by company or rank. When firing by file, the distance will be announeed immediately before the command "Commenee firing," and after the command "Ready."

Inacenracy of fire may arise from very different eauses.
1st. From ignorance of, or failing to apply the principles which govern good marksmen when firing.

2d. A ball, when fired, may be, and gencrally is defleeted from its course when deseribing the trajectory.

The first canses may be obviated in a great degree by practical and theoretical instruction.

The seeond is attributable to the pieee, and exterior influences acting npon the hall. Some of the causes cannot be modified by the most skilful marksman : while others, to a great extent, may be countcract.l. It would be unreasonable to expeet comparative perfection in cevery fun issued from our large manufactories. Our rifled musket is believed to be as perfect an arm of its kind as has ever been made. A perfect arm cau only exist in theory. A soldier always firing the same pieee will become aequainted with its defects, and will be able to make such allowances when firing as experience teaches him to be necessary.

Among the exterior influences which afiect the aecuraey of a gun, the principal one is the wind. If the wind blows from the right, the ball will be deflected to the left ; to the right, if it blows from the left; raised, if from the rear ; and lowered. if from the front; raised and to the left, if it blows from the rear and right. The deviation produced by the wind will be increased in proportion as the distance inereases; it increases even more rapidly than the ristance. Experience alone cau teach the soldier the allowance be must make for the wind. Not only does the wind affect accuraey of fire by deflecting the ball from its course, but it prevents a person from holding his piece steady.

The temperature and dampness of the atmosphere influence the ball in its flight. It has been remarked that in dry weather longer ranges bave been obtained than in damp weather.

When firing at an object in motion, allowance must be made for the motion. For instance, when firing at a horseman galloping in a direetion perpendicular to the plane of fire, it is necessary that the line of
sight should move in proportion as the horseman mores, and should be directed in advance of him in proportion as he is farther off.

In opening a fire upon an encmy, particular attention should be paid to discorer where the first balls fired strike. It would be better that the balls fall short of, rather than pass over, the enemy. In the first case, we stand a chance of a ricochet ball taking effect; from which we naturally deduce that a soldier should be impressed with the necessity of firing too low rather than too high.

## TARGETS.

296. The difficulty of procuring any specified material for targets at many posts precludes the adoption of any particular target.

The surface fired at, at the different distances, will alone be fixed by regulation.

The following suggestions are offered:
The best targets, and those recommended for permanent posts, are of cast-iron-by far the cheapest and most durable. The different surfaces required could be obtained by having four cast-iron targets of the following dimensions : one target 6 feet by 22 inches; one 6 feet by 44 inches; one 6 feet by 66 inches; and one 6 feet by 132 inches.

When cast-iron targets cannot be had, the next best.are targets formed of wrought-iron frames with muslin stretched upon them. Four frames of the following dimensions, by combination, would enable us to obtain the surfaces required : one 6 feet by 22 inches; one 6 feet by 44 inches; one 6 feet by 88 inches; one 6 feet by 110 inches; and all the parts could be carried in a wagon-body.

By carefully covering the ball-holes with patches of paper pasted on, we strengthen and thicken the target; and one of these targets will last longer than one would suppose.

The next best targets are wooden frames composed of four pieces, 6 inches wide and 1 inch thick, bolted together; the ends of the vertical sides projecting about a foot below, and sharpened, the frame covered with muslin, and held in position by four guys fastened to the top and attached to pins in the ground in front and rear.

Every target will be marked by a vertical and a horizontal stripe, dividing it into four equal parts, and varying in width according to the distance, as follows:

| At 150 |  | and 225 | yards | 4 inches | wide. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| * 250 |  | * 300 | " | 5 | " |
| " 325 |  | " 350 | " | 8 | * |
| * 400 | 450 | 500 | " 1 | 12 | " |
| ' 550 | 600 | " 700 | 1 | 16 | " |
| ' 800 | 900 | " 1000 | " 2 | 20 | \% |

## Article VI.

## SCHOOLOF THE BATTALION.

## To form the Regiment or Battalion.

297. At the sigual, called the adjutant's call, the companies are marched from the company parades by their captains, the music playing. The color company serres as the basis of the formation, and is the first to form ; the color-guard being at the point where the centre of the line is to rest, one marker is placed in front of it, his elbow touching the right corporal of the color guard, and another on the line at a little less than company distance from him, on his right, and facing toward him; the color company is halted three paces behind this line, faced to the front, and dressed up upon the line by the captain, who aligns it to the left.

The company on the left of the color is the next to take its post; it is halted three paces behind the line, its right nearly behind the left file of the color-gnard, and faced to the front; as soon as it halts the left guide of the company throws himself out, so as to be opposite one of the three left files of the company, faces to the right, and aligns himself upon the two markers; the captain then places bimself on the left of the color-guard, on a line with its front rank, and aligns the company to the right. The company on the right of the color forms next upon the same principles; the right guide posts himself upon the line opposite one of the three right files of the company, and faces to the left; the captain places himself on the right of the color company, and aligns his company to the left.

The remaining companies take their posts on the left and right in succession, and when the formation is complete, the adjutant commands, guides, posts; at this command the guides on the line retire to their places by passing throngh the intervals between the companics, and those captains who are on the left of their companies, shift to the right.

## Opening and closing ranks, and the execution of the different fires.

## To open and to close ranks.

298. The colonel, wishing the rauks to be opened, will eommand:

## 1. Prepare to open ranks.

At this command, the lieutenant-colonel and major will place themselves on the right of the hattalion, the first on the flank of the fileclozers, and the second four paees from the front rank of the battalion.

These dispositions being made, the colonel will command:

## 2. To the rear, open order. 3. March.

At the second command, the eovering sergeants, and the sergeant on the left of the battalion, will place themselves four paces in rear of the front rank, and opposite their places in line of battle, in order to mark the new aligument of the rear rank; they will le aligned by the major on the left sergeant of the lattalion, who will be careful to place himself exactly four paees in rear of the front rank, and to hold his picee between the eyes, crect and inverted, the better to indieate to the major the direction to be giren to the covering sergeants.
At the command march, the rear rank and the file-elosers will step to the rear without eounting steps; the men will pass a little in rear of the line traced for this rank, halt, and dress forward on the corering sergeants, who will aligu correetly the men of their respective companies.
The file-closers will fall back and preserve the distance of two paces from the rear rank, glaneing eyes to the right; the lientenaintcolonel will, from the right, align them on the file-eloser of the left, who, having placed himself aceurately two paees from the rear rank, will invert his pieee, and hold it up erect between his eyes, the better to be seen hy the lieutenant-colonel.

The eolonel, seeing the ranks aligned, will eommand:

## 4. Front.

At this command, the lieutenant-colonel, major, and the left sergeint, will retake their plaees in line of battle.
The colonel will eause the ranks to be closed by the commands preseribed for the instructor in the school of the company.

## THEFIRINGS.

299. The colonel will cause to be exeeuted the fire by company, the fire by wing, the fire by battalion, the fire by file, and the fire by rank, by the commands to be hercin indicated.

The fire by company and the fire by file will always be direct; the fire by battalion, the fire by wing, and the fire by rank, may be either direct or oblique.

When the fire ought to be oblique, the colonel will give, at every round, the caution right (or left) oblique, between the commands ready and aim.

The fire by company will be executed alternatel. by the right and left companies of each division, as if the division were alone. The right companies will fire first; the captain of the left will not give his first command till he shall sec one or two pieces at a ready in the right company; the captain of the latter, after the first discharge, will observe the same rule in respect to the left company; and the fire will thus be continued alternately.

The colonel:will observe the same rule in the firing by wing.
The fire by file will commence in all the companies at once, and will be executed as has been prescribed in the school of the company. The fire by rank will be executed by each rank alternately.

The color-guard will not fire, but reserve itself for the defence of the color.

## The fire by company.

The colonel, wishing the fire by company to be executed, will command:

## 1. Fire by company. 2. Commence firing.

At the first command, the captains and covering sergeants will take the positions indicated in the school of the company.

The color and its guard will step back at the same time, so as to bring the front rank of the guard in a line with the rear rank of the battalion. This rule is yeneral for all the different firings.

At the second command, the odd numbered companies will commence to fire ; their captains will each give the commands prescribed in the school of the company, observing to precede the command compony by that of first, third, fifth, or seventh, according to the number of each.

The captains of the even numbered companies will give, in their turn, the same commands, observing to precede them by the number of their respective companies.

In order that the odd numbered companies may not all fire at once, their captains will observe, but only for the first discharge, to give the command fire one after another; thus, the captain of the third company will not give the command fire until he has heard the fire of the first company; the captain of the fifth will observe the same rule with respect to the third, and the captain of the seventh the same rule with respect to the fifth.

The colonel will cause the fire to cease by the sound to ceare firing; at this sound, the men will execute what is prescribed in the school of the company; at the sound, for officers to take their places after firing, the captains, covering sergeauts, and color-guard, will promptly resume their places $n$ line of battle. This rule is general for all the firings.

## The fire by wing.

When the colonel shall wish this fire to be executed, he will command:

## 1. Firebywing. 2. Right wing. 3. Ready. 4. Aim. 5. Fire. 6. Load.

The colonel will cause the wings to fire alternately, and he will recommence the fire by the commands: 1. Right uing; 2. Aim.; 3. Fire; 4. Load. 1. Left wing; 2. Aim; 3. Fire; 4. Load; in conforming to what is prescribed in the school of the company.

## The fire by battalion.

The colonel will cause this fire to be executed by the commands last prescribed, substituting for the first two: 1. Fire by battalion; 2. Battalion.

> The fire by file.

To cause this to be executed, the colonel will command :

## 1. Fire by file. 2. Battalion. 3. Ready. 4. Commence firing.

At the fourth command, the fire will commence on the right of each company. The colonel may, if he thinks proper, cause the fire to commence on the right of each platoon.

## The fire by rank.

Tu canse this fire to be executed, the colonel will command :

## 1. Fire by rank. 2. Battalion. 3. Ready. 4. Rear rank. 5. Aim. 6. Fire. 7. Load.

This fire will be executed as has been explained in the school of the company, in following the progression prescribed for the two ranks which should fire alternately.

## To fire by the rear rank.

When the colonel shall wish the battalion to fire to the rear, he will command :

## 1. Face by the rear rank. 2. Battalion. 3. About-FAce.

At the first command, the captains, covering sergeants and fileclosers will execute what has been prescribed in the school of the company; the color-bearer will pass into the rear rank, and for this purpose, the corporal of his file will step before the corporal next on his right to let the color-bearer pass, and will then take his place in the front rank; the lientenant-colonel, adjutant, major, sergeant-major, and the music will place themselves before the front rank, and face to the rear, each opposite his place in the line of battle-the first two passing around the right, and the others around the left of the battalion.

At the third command, the battalion will face about; the captains and covering sergeants observing what is prescribed in the school of tbe company, No. 230.

The kattalion facing thus by the rear rank, the colonel will cause it to execnte the different fires by the same commands as if it were faced by the front rank.

The colonel, after firing to the rear, wishing to face the battalion to its proper front, will command:

1. Face by the front rank. 2. Battalion. 3. About-FAce.

At these commands, the battalion will return to its proper front by the means prescribed, No. 230.

Different modes of passing from the order in battle to the order in column.

To break the right or left into column.
300. Lines of battle will habitually break into column by company; they may also break by division or by platoon.

It is here supposed that the colonel wishes to break by company to the right; he will command:

1. By company, right wheel. 2. March (or double quickMarch).

At the first command, each captain wi'l place bimself rapidly before the centre of his company, and caution it that it has to wheel to the right; each covering sergeant will replace bis captain in the front rank.

At the command merch, each company will break to the right, according to the principles prescribed in the school of the company; each captain will conform himself to what is prescribed for the chiefs of platoon; the left guide, as soon as he can pass, will place himself on the left of the front rank to conduct the marching flank, and when he shall have approached near to the perpendicular, the captain will command:

## 1. Such company. 2. Halt.

At the sccond command, which will be given at the instant the left guide shall be at the distance of three paces from the perpendicular, the company will halt; the guide will advance and place his left arm lightly against the breast of the captain, who will establish him on the alignment of the man who has faced to the right; the covering scrgeant will place bimself correctly on the alignment on the right of that man, which being executed, the captain will align his company by the left, command Front, and place himself two paces before its centre.

The captains haring commanded Front, the guides, although some of them may not he in the direction of the preceding guides, will staud fast, in order that the error of a company that has wheeled too much or too little may not be propagated; the guides not in the direction will readily come into it when the column is put in march.

A battalion in line of battle will break into column by company to the left, according to the same principles, aud by inverse means.

When the colonel shall wish to move the column forward without halting, he will intimate his intention, and when the companies have nearly completed the whecl, command:

## 3. Forward. 4. March. 5. Guide left:

To break to the rear, by the right or left, into columa.
301. When the colonel shall wish to cause the battalion to break to the rear, by the right, into columu by company, he will command:

1. By the right of companies, to the rear into column. 2. Battalion, right-Face. 3. March (or double quick-March).

At the first command each captain will place himself before the centre of his company, and caution it to face to the right ; the covering sergeants will step into the front rank.

At the second command, the battalion will face to the right; each captain will hasten to the right of his company, and break two files to the rear; the first file will break the whole depth of the two ranks; the second file less: which being executed, the eaptain will place himself so that his breast may tonch lightly the left arm of the front rank man of the last file in the company next on the right of his own. The captain of the right company will place himself as if there were a company on his right, and will align himself on the other captains. The covering sergeant of each company will break to the rear with the right files, and place himself before the front rank of the first file to conduct him.

At the command march, the first file of each company will wheel to the right; the covering sergeant, placed before this file, will conduct it perpendicularly to the rear. The other files will come successively to wheel on the same spot. The captains will stand fast, sce their companies file past, and at the instant the last file shall have wheeled, each captain will command :

1. Such company. 2. Halt. 3. Front. 4. Lefl-Dress.

At the instant the company faces to the front, its left guide will place himself so that his left arm may tonch lightly the breast of his captain.

At the fourth command, the company will align itself on its left guide, the captain so directing it that the new alignment may be perpendicular to that which the company had occupied in line of battle; and, the better to judge this, he will step back two paces from the flank.

The company being aligned, the captain will command: Front, and take his place before its centre.
302. The battalion marching in line of battle, when the colonel shall wish to break into column by company, to the rear, by the right, he will command :

1. By the right of companies, to the rear into column. 2. Battalion, by the right flank. 3. March (or double quick-March).

At the first command, each captain will step briskly in front of the centre of his company, and caution it to face by the right ficulk.

At the command march, the battalion will face to the right; each captain will move rapidly to the right of his company and cause it to
break to the right; the first file of each company will wheel to the right, and the covering sergeant placed in front of this file will conduct it perpendicularly to the rear; the other files will wheel successively at the same place as the first. The captains will see their companies file past them; when the last files have wheeled, the colonel will command:

## 3. Battalion, by the left flank-March. 4. Guide left.

At the command march. the companies will face to the left, and march in column in the new direction. The captains will place themselves in front of the centres of their respective companies.

To break to the rear by the left, the colonel will give the same commands as in the case of breaking to the rear by the right, substituting the indication left, for that of right.

The battalion may be broken by division to the rear, by the right or left, in like manner.

## To ploy the battalion into close column.

303. This movement may be executed by company or by division, on the right or left subdivision, or on any other subdivision, right or left in front.

To ploy the battalion into close column by division in rear of the first, the colonel will command:

1. Close column, by division. 2. On the first division, right in front. 3. Battalion, right-Face. 4. March-(or double quich-MARCH).

At the second command, all the chiefs of division will place themselves before the centres of their divisions; the chief of the first will caution it to stand fast; the chiefs of the three others will remind them that they will have to face to the right, and the covering sergeant of the right company of each division will replace his captain in the front rank, as soon as the latter steps out.

At the third command, the last three divisions will face to the right; the chief of each division will hasten to its right, and cause files to be broken to the rear, as indicated, No. 301 ; the right guide will break at the same tine, and place himself before the front rank man of the first file, to conduct bim, and each chief of division will place himself by the side of this guide.

The moment these divisions face to the right, the junior captain in each will place himself on the left of the covering sergeant of the left
company, who will place himself in the front rank. This rule is general for all the ployments by division.

At the command march, the chief of the first division will add, guide left; at this, its left guide will place himself on its left, as soon as the movement of the second dirision may permit, and the file-closers will advance one pace upon the rear rank.

All the other divisions, each conducted by its chief, will step off together, to take their places in the column; the second will gain, in wheeling by file to the rear, the space of six paces, which ougbt to separate its guide from the guide of the first division, and so direct its march as to enter the column on a line parallel to this division; the third and fourth divisions will direct themselves diagonally toward, but a little iu rear of, the points at which they ought, respectively, to enter the column; at six paces from the left flank of the column, the head of each of these divisions will incline a little to the left, in order to enter the column as has just been prescribed for the second, taking care also to leave the distance of six paces between its guide and the guide of the preceding division. At the moment the divisions put themselres in march to enter the column, the file-closers of each will incline to the left, so as to bring themselves to a distance of a pace from the rear rank.

Each chief of these three divisions will conduct his division till be shall be up with the guide of the directing one; the chief will then himself halt, see bis division filc past, and halt it the instant the last file shall hare passed, commanding:

## 1. Such division. 2. Halt. 3. Front. 4. Lefl-Dress.

At the seconl command, the division will halt; the left guide will place himself promptly on the dircetion, six paces from the guide which precedes him, in order that, the column being formed, the divisions may be separated the distance of four paces.

At the third command, the division will face to the front; at the fourth, it will be aligned by its chief, who will place himself two paces outside of his guide, and direct the alignment so that bis division may he parallel to that which precedes-which being donc, be will command, Front, and place bimself before the centre of his division.

The lieutenant-coloncl, placing bimself in succession in rear of the left guides, will assure them on the direction as they arrive, and then move to his place outside of the left flank of the column six paces from, and abreast with the first division. In assuring the guides on the direction be will be a mere observer, unless one or more should fail to cover exactly the guide or guides already established. This rule is general.

To ploy the battalion in front of the first division, the colonel will give the same commands, substituting the indication left for that of right in front.

At the second and third commands, the chiefs of divisions and the junior eaptains will conform themselves to what has been prescribed above; but the chiefs of the last three divisions, instead of causing the first two files to break to the rear, will cause them to break to the front.

At the fourth command, the chicf of the first division will add: guide right.

The three other divisions will step off together to take their places in the columu in front of the directing division; each will enter in such manner that, when halted, its guide may find himself six paces from the guide of the division next previously established in the column.

Each chief of these divisions will couduct his division, till his right guide shall be nearly up with the guide of the directing one; he will then halt his division, and cause it to face to the front: at the instant it halts, its right guide will face to the rear, place himself six paces from the preceding guide, and cover him exactly-which being done, the chief will align his division by the right.

The lieutenant-colonel, placed in front of the right guide of the first division, will assure the guides on the direction as they suceessively arrive.

The movement being ended, the colonel will command:

> Guides, about-FACE.

At this, the guides, who are faced to the rear, will face to the front.
304. To ploy the battalion in rear, or in front of the fourth division, the colonel will command :

1. Close column, by division. 2. On the fourth division (left or right), in front. 3. Battalion, left-FACE. 4. MARCH (or double quick-MARCH).

These movements will be executed according to the principles of those which precedc, but by inverse means: the fourth division on which the battalion ploys will stand fast; the instant the movement commences, its chief will command, guide right (or left).
305. The foregoing examples embrace all the principles : thus, when the colonel shall wish to ploy the battalion on an interior division, he will command:

1. Close column, by division. 2. On such division, right (or left) in fromt. 3. Battalion, inward-Face. 4. March (or double quick-MaRCH).

The instant the movement commences, the chief of the directing division will command, guide left (or right).

The divisions which, in the order in battle, aro to the right of the directing division, will face to the left ; those which are to the left will face to the right.

## To march in column at full distance.

306. When the colonel shall wish to put the eolumn in mareh, he will indieate to the leading guide two distant objects in front, on the line which the guide ought to follow. This guide will immediately put his shoulders in a square with that line, take the more distant object as the point of direction, and the nearer one as the intermediate point. The colonel will then command :

## 1. Column, forward. 2. Guide left (or right). 3. March (or double quick-March).

At the command march, briskly repeated by the chiefs of subdivision, the column will put itself in march, eonforming to what is preseriked in the school of the emprany, No. $24 t$.

The leading guide may always maintain himself correctly on the direction by keeping steadily in view the two points indicated to him, or chosen by himself; if these points have a certain elevation, he may be assured he is on the true direction, when the nearer masks the more distant point.

The following guides will preserve with exactness both step and distance; each will march in the trace of the guide who immediately precedes him, without occupying himself with the general direction.

The lieutenant-colonel will bold bimself, habitually, abreast with the leading guide, to see that be does not deviate from the direction, and will observe, also, that the next guide marehes cxactly in the trace of the first.

## To change direction in column at full distance.

307. The column being in march in the cadenced step, when the colonel shall wish to cause it to change direetion, he will go to the point at which the change ought to be commenced, and establish a marker
there, presenting the breast to the flank of the column ; this marker, no matter to which side the change of direction is to be made, will be posted on the opposite side, and he will remain in position till the last subdivision of the battalion shall have passed. The leading subdivision being within a few paces of the marker, the colonel will command:

Head of column to the left (or right).
At this the chief of the leading subdivision will immediately take the guide on the side opposite the change of direction, if not already there. This guide will direct himself so as to graze the breast of the marker; arrived at this point, the chief will cause his subdivision to change direction by the commands and according to the principles prescribed in the school of the company. When the wheel is completed, the chicf of this suldivision will retake the guide, if changed, on the side of the primitive direction.

The chief of each succeeding subdivision, as well as the guides, will conform to what has just been explained for the leading subdivision.

When the column is at half distance, the pivot man will take a pace of fourteen inches instead of nine.

The column being in march, the colonel will frequently cause the about to be exccuted while marching ; to this effect, he will command:

## 1. Battalion, right about. 2. March. 3. Guide right.

At the second command the companies will face to the right about, and the column will then march forward in the opposite direction; the chiefs of companies will remain behind the front rank, the file-closers in front of the rear rank, and the guides will place themselves in the same rank.

## To halt the column.

308. The column being in march, when the colonel shall wish to halt it, he will command:

## 1. Column. 2. Halt.

At the second command, briskly repeated by the captains, the column will halt ; no guide will stir, though he may have lost his distance or be out of the direction of the preceding guides.

The column being in march, in double quick time, will be halted by the same commands. At the command halt, the men will halt in their places, and will themselves rectify their positions in the ranks.

The column being halted, when the colonel shall wish to form it into line of battle, he will move a little in front of the leading guide, and face to him; this guide and the following one will fix their eyes on the colonel, in order promptly to conform themselves to bis directions.

If the colonel judge it not necessary to give a general direction to the guides, be will limit himself to rectifying the position of such as may be without, or within the dircetion, by the command guides of (such) company, or guides of (such) companics, to the right (or to the left); at this command, the guides designated will place themselves on the direction ; the others will stand fast.

If, on the contrary, the colonel judge it necessary to give a general direction to the guides of the column, he will place the first two on the direction he shall have chosen, and command:

## Guides, cover.

At this, the following guides will promptly place themselves on the direction covering the first two in file, and each precisely at a distance equal to the front of his company, from the guide immediately preceding; the lieutenant-colonel will assure them in the direction, and the colonel will command :

> Left (or right)-Dress.

At this command, each company will incline to the right or left, and dress forward or backward, so as to bring the designated flank to rest on its guide ; each captain will place himstlf two paces outside of his guide, promptly align his company parallelly with that which precedes, then command Froxt, and return to his place in column.

## To close the column to half distance, or in mass.

309. A column by company being at full distance right in front, and at a halt, when the colonel shall wish to cause it to close to half distance, on the leading company, be will command :

## 1. To half distance, close column. 2. MARCH (or double quickMarch).

At the first command, the captain of the leading company will caution it to stand fast.

At the command march, which will be repeated by all the captains, except the captain of the leading company, this company will stand fast, and its chief will align it by the left; the file-closers will close one pace upon the rear rank.

All the other companies will continue to march, and as each in succession arrives at platoon distance from the one which precedes, its captain will halt it.

At the instant that each company halts, its guide will place himself on the direction of the guides who precede, and the captain will align the company by the left; the file-closers will close one pace upon the rear rank.

No particular attention need be given to the general direction of the guides before they respectively halt; it will suffice if each follow in the trace of the one who precedes him.

The colonel, on the side of the guides, will supcrintend the execution of the movement, observing that the captains halt their compauies exactly at platoon distance the one from the other.

The lieutenant-colonel, a few paces in front, will face to the leading guide and assure the positions of the following guides as they successively place themselves on the direction.

The major will follow the movement abreast with the last guide.
If the column be in march, the colonel will cause it to close by the same commands.

If the columu be marching in double quick time, at the first command, the captain of the leading company will command quick time; the chiefs of the other companies will caution their companies to contimue the march.

At the command merch, the leading company will take quick, while the other companies continue to march in double quick time; and as each arrives at platoon distance from the preceding one, its chief will canse it to march in quick time.

When the rearmost company shall have gained its distance, the colonel will command :

## Double quick-March.

When the colonel shall wish to halt the column marching at double quick, and to cause it to close to half distance at the same time, he will notify the captain of the leading company of his intention, who, at the command march, will halt his company and align it to the left.

If the column be marching in quick time, and the colonel should not give the command double quick, the captain of the leading company will halt his company at the command march, and align it to the left. In the case where the colonel adds the command double quick, the leading company will contiuue at quick, while all the others, at the command march, take double quick time.

To close the column on the eighth, or rearmost company.
310. The column being at a halt, if, instead of causing it to close to half distance on the first empany, the colonel should wish to cause it to close on the eighth, he will command:

1. On the eighth company, to half distance close column. 2. Battalion, about-Face. 3. Column, forward. 4. Guide right. 5. March (or double quick-March).

At the second command, all the eompanies, exeept the eighth, will face abont, and their guide will remain in the front rauk, now the rear. At the fourth eommand, all the eaptains will place themselves two - paces outside of their companies on the side of the gruide.

At the command march, the eightl company will stand fast, and its captain will align it to the left; the other eompanies will put themselves in mareh, and as caeh arrives at platoon distance from the one established before it, its captain will halt it and face it to the front. At the moment that each eompany halts, the left guide, remaining faced to the rear, will place himself promptly on the direction of the guides already established. Immediately after, the eaptain will align his company to the left, and the file-closers will close one pace on the rear rank.

If this movement be exeented in donble quiek time, each eaptain, in turn, will halt, and command:

## Such company, right about-HALT.

At this command, the eompany desiguated will face to the right about, and halt.

All the companies being aligned, the colonel will eause the guides, who stand faced to the rear, to face about.

The lieutenant-eolonel, plaeing himself behind the rearmost guile, will assure the position of the other guides in suecession; the major will remain abreast with the rearmost eompany.
311. The column being in march, when the colonel shall wish to elose it on the eighth eompany, he will eommand:

1. On the eighth company, to half distance, close column. 2. Battalion, right about. 3. March (or double quich-MARCH). 4. Guide right.

At the first eommand, the captain of the eighth company will caution his eompany that it will remain faced to the front; the captains of the
other companies will caution their companies that they will have to face about. At the command march, the captain of the eighth company will halt his company and align it to the left; the file-closers will close one pace upon the rear rank.

The captains of the other companies, at the same command, will place themselves on the flank of the column ; the subdivisions will face about, and as each arrives at platoon distance from the company immediately preceding it, its chief will face it to the front, and halt it. The instant each company halts, the guide on the directing flank, remaining faced to the rear, will quickly place himself on the direction of the guides already established. After which, the captain will align the company to the left, and the file-closers will close one pace upon the rear rank.

The lieutenant-colonel will follow the movements abreast of the first company. The major will place himself a tew paces in rear of the guide of the eighth company, and will assure the position of the other guides in succession.
312. A column by division at full distance will close to half distance by the same means and the same commands.

A column by company, or by division, being at full or half distance, the colonel will cause it to close in mass by the same means and commands, substituting the indication column, close in mass, for that of to half distance, close column.

In a column, left in front, these various movements will be executed on the same principles.

Being in column at half distance, or closed in mass, to take distances.

## To take distances by the head of the column.

313. The column being by company at half distance and at a halt, when the colonel shall wish to cause it to take full distances by the head, he will command :

## By the head of column, take wheeling distance.

At this command, the captain of the leading company will put it in march; to this end, he will command:

> 1. First company, forward. 2. Guide left. 3. March (or double quick-MARCH).

When the second shall have nearly its wheeling distance, its captain will command :

## 1. Second company, forward. 2. Guide left. 3. March (or double quick-March).

At the command march. which will be pronounced at the instant that this company shall have its wheeling distance, it will step off smartly, taking the step from the preceding company. Each of the other companies will successively execute what has just been prescribed for the sccond.
The colonel will see that each company put itself in march at the instant it has its distance. The lieutenant-colonel will hold himself at the head of the column, and direct the march of the leading guide. The major will hold himself abreast with the rearmost guide.

If the column, instead of being at a halt, be in march, the colonel will give the same commands, and add:

## March (or double quick-March).

If the column be marehing in quick time, at the command mareh, the captain of the leading company will eause double quick time to be taken; which will also be taken by the other companies as they successively attain their proper distance.
If the column be marching in double quick time, the leading company will contiune to march at the same gait. The captains of the other companies will cause quick time to be taken, and as each company gains its proper distance, its captain will cause it to retake the double quick step.

## To take distancess on the rear of the column.

314. If the colonel wish to take distances on the rearmost company, he will establish two markers on the direction he shall wish to give to the line of battle, the first opposite to the rearmost company, the second marker toward the head of the column, at company distance from the first, and both facing to the rear ; at the same time, the right general guide, on an intimation from the licutenant-colonel, will move rapidly a little beyond the point to which the head of the column will extend, and place himself correctly on the prolongation of the two markers. These dispositions being made, the colonel will command:
315. On the eighth company, take wheeling distance. 2. Column, forward. 3. Guide left. 4. March (or double quick-March).

At the third command, the captains will place themselves two paces outside of the directing flank ; the captain of the eighth company will caution it to stand fast.

At the command march, repeated by all the captains, except the captain of the eighth company, this latter company will stand fast; its chief will align it to the left on the first marker, who is opposite to this company, and place himself before its centre, after commanding, Front. At this command, the marker will retire, and the left guide will take his place.

All the other companies will put themselves in march, the guide of the leading one directing himself a little within the right general guide; when the seveuth company has arrived opposite the second marker, its eaptain will halt, and align it on this marker, in the manner prescribed for the eighth company.

When the captain of the sixth company shall see that there is, between his company and the seventh, the necessary space for wheeling into line, he will halt his company; the guide, facing to the rear, will place himself promptly on the dircetion, and the moment he shall be assured in his position, the captain will align the company by the left, and then place himself two paces before its centre; the other companies will in succession conform to what has been prescribed for the sixth company.

The colonel will follow the movement, and see that each company halts at the prescribed distance; he will promptly remedy any fault that may be committed, and as soon as all the companies shall be aligned, he will cause the guides, who are faced to the rear, to fucc about.

The lieutenant-colonel will assure the left gnides on the direction in snccession, placing himself in their rear, as they arrive. The major will hold himself at the head of the column, and will direct the mareh of the leading guides.

## To take distances on the head of the column.

315. The colonel, wishing to take distances on the leading company, will establish two marehes in the manner just deseribed, one abreast with this company, and the other at company distance in rear of the first, both facing to the front; the left general guide, on an intimation from the licutenant-colonel, will move rapidly to the rear, and place bimself correctly on the prolongation of the two marches, a little heyond the point to which the rear of the column will extend; these dispositions being made, the colonel will command :
316. On the first company, take wheeiing distance. 2. Battalion, about-Face. 3. Column, forward. 4. Guide right. 5. March (or double quick-MARCH).

At the secoud command, all the companies, except the one designated, will face about, the guides remaining in the front rank now become the rear. At the fourth command, the captains will place themselves outside of their guides.

At the command moref, the captain of the designated company will align it on the marker placed by its side.

The remaining companies will put themsctves in march, the guide of the rearmost one will direct himself a little within the left general guide: when the second company shall have arrived opposite the second marker, its captain will face it about, halt it, and align it as has just been prescribed for the first company.

The captains of the remaining companies will each, in succession, conform himself to what has just been prescribed for the captain of the second.

The colonel, lientenant-colonel, and major, will conform to what is prescribed in No. 314.

## To change direction in column closed in mass.

## To change direction in marching.

316. A column by division, closed in mass, being in march, will change direction by the frout of subdivisions.

Whether the change be made to the reverse or to the jivot flank, it will always be executed on the principle of wheeling in marching; to this end. the colonel will first cause the battalion to take the guide on the flazk opposite to the intended change of direction, if it be not already on that flank.

A column by division, closed in mars, right in front, having to ehange direction to the right, the colonel, after having caused a marker to be placel at the point where the change ought to commence, will command:

## 1. Battalion, right wheel. 2. Manci.

At the command march, the leading division will wheel as if it were part of a column at half distance.

The instant that this division commences the wheel, all the otbers will, at once. conform themselves to its movement; to this end the left guide of each, adrancing slightly the left shoulder, and lengthening a little the step, will incline to the left, and will observe, at the same time, to gain so much gromed to the front that there may constantly be an interval of fur paces between his division ant that
which precedes it; and as soon as he shall cover the preceding guide, he will cease to incline, and then march exactly in his trace.

Each division will conform itself to the movement of its guide; the men will feel lightly the elbow toward him and advance a little the left shoulder the instant the morement commences; each file, in inelining, will gain sa mneh the less gromed to the front, as the file shall be nearer to the pirot, and the right guide will gain only so mueh as may be necessary to maintain between his own and the preceding division the same distance which separates their marching flanks.

The colonel, seeing the wheel nearly ended, will command:

## 1. Forward. 2. March.

At the second command, which will be given at the instant the leadiug division completes its wheel. it will resume the direct march; the other divisions will conform themselves to this movement; and if any guide find himself not covering his immediate leader, he will, by slight degrecs, bring himself on the trace of that guide, by advaneing the right shoulder.

## To change direction from a halt.

317. A column by company, or by division, closed in mass, being at a halt, when the colonel shall wish to give it a new direction; and in which it is to remain, he will cause it to exeente this movement by the flanks of subdivisions, in the following manner:

The battalion having the right in front, when the colonel shall wish to cause it to change direction by the right flank, he will indicate to the lieutenant-colonel the point of direction to the right; this officer will immediately establish, on the new direction, two markers, distant from each other a little less than the front of the first subdivision, the first marker in front of the right file of this subdivision ; which being executed, he will command :

## 1. Change direction by the right flank. 2. Battalion, right-Face. 3. March (or double quick-March).

At the second command, the column will face to the right, and each chief of subdivision will place binself by the side of his right guide.

At the command march, all the subdivisions will step off together; the right guide of the leading one will direct himself from the first step, parallelly to the markers placed in alvance on the new direction; the chief of the subdivision will not follow the movement, but see it
file past, and as soon as the left guide shall have passed, he will command :

1. First company (or first rlivision). 2. Halt. 3. Front.
2. Left-Dress.

At the fourth command the subdivision will place itself against the two markers, and be promptly aligned by its chief.

The right guide of each of the following subdivisions will conform himself to the direction of the right guide of the subdivision preceding his own in the column, so as to enter on the new direction parallelly to that subdivision, and at the distance of four paces from its rear rank.

Each chief of subdivision will halt in his own person on arriving opposite to the left guides already placed on the new direction, see his subdivision file past, and conform himself, in halting and aligning it, to what is prescribed above.

If the change of direction be by the left flauk, the colonel will cause markers to be established as before, the first in front of the left file of the leadiug subdivision, and then give the same commands, substituting the indication left for right.

Being in column by cumpany, closed in mass, to form divisions.
318. The column being closed in mass, right in front, and at a halt, when the colonel shall wish to form divisions, he will command:

## 1. Form divisions. 2. Left companies, left-Face. 3. March (or double quich-MaRCH).

At the first command the captains of the left companies will caution them to face to the left. At the second command the left companies will face to the left, and their captains will place themselves by the side of their respeetive left guides.

The right companies, and their captains, will stand fast; but the right and left guides of each of these companies will place themselves respectively before the right and left files of the company, both guides facing to the right, and each resting his right arm gently against the breast of the front rank man of the file, in order to mark the direction.

At the command march, the left companies only will put themselves in march, their captains standing fast; as each shall sce that his company, filing past, has nearly cleared the column, he will command :

1. Such company. 2. Halt. 3. Front.

The first command will be given when the eompany shall yet have four paces to mareh; the second the instant it shall have cleared its right company ; and the third immediately after the second.

The company having faced to the front, the files, if there be intervals between them, will promptly ineline to the right ; the eaptain will place himsclf on the left of the right eompany of the division, and align limself eorrectly on the front rank of that eompany. The left guide will, at the same time, place himself before one of the three left files of his company, race to the right, and cover the guides of the right eompany correctly; the moment his captain sees him established on the direetion, he will command:

## Right-Dress.

At this, the left eompany will dress forward on the alignment of the right eompany; the front rank man, who may find bimself opposite to the left guide, will, without preeeding bis rank, rest his breast lightly against the right arm of this guide; the captain of the left company will direct its alignment on this man, aud the alignment being assured, be will eommand Front; but not quit his position.

The coloncl seeing the divisions formed, will command:

## Guides-Posts.

At this the guides, who have marked the fronts of division, will return to their places in column, the left guide of eaeh right company passing through the intersal in the eentre of the division, the senior captain of each division will take his post two paces in front of the division, and the junior captain will plaee himself between the two eompanies.
319. If the column be in march, instead of at a halt, when the colonel shail wish to form divisions, he will command :

1. Form divisions. 2. Left companies, by the left flank. 3. March (or double quick-March).

At the first command, the captains of the right eompanies will command, mark time, the eaptains of the left companies will caution their eompanies to fuce by the left flumk. At the third eommand, the right eompanies will mark time, the left companies will faee to the left, the captains of the left companies will each see his company file past him, and when it has cleared the column, will command:

As soon as the divisions are formed, the colonel will command:

## 4. Forward. 5. March.

At the fifth command, the column will resume the gait at which it was marching previous to the commencement of the movement. The guides of each division will remain on the right and left of their respective companics; the left guide of the right company will pass into the line of file-closers, before the two companies are united; the right guide of the left company will step into the rear rank.

Being in column at full or half distance to form divisions.
320. If the column be at a halt, and, instead of being closed in mass, is at full or half distance, divisions will be formed in the same manner; but the captains of the left companies, if the movement be made in quick time, after commanding Front, will cach place himself before the centre of bis company, and command :

## 1. Such company, forward. 2. Guide right. 3. March.

If the movement be made in double quick time, each will command, as soon as his company has closed the columu:

## 1. Such company, by the right flank. 2. March.

If the left be in front, the movement will be executed by inverse means.

## Countermarch of a column at full or half distance.

321. In a column at full or half distance, the countermarch will be executed by the means indicated, school of the company; to this end, the colonel will command :
322. Countermarch. 2. Battalion, right (or left)——FAce. 3. By file left (or right). 4. March (or double quick-March).

## 7 o countermarch a column closed in mass.

If the column be closed in mass, the countermarch will be executed by the commands and means subjoined.

The column being supposed formed by division, right in front, the colonel will command :

1. Countermarch. 2. Battalion, right and left-FAce. 3. By file, left and right. 4. March (or double quick-March).

At the first command, the chiefs of the odd numbered divisions will caution them to face to the right, and the chiefs of the others to face to the left.

At the second command, the odd divisions will face to the right, and the even to the left; the right and left guides of all the divisions will face about; the chicfs of odd divisions will hasten to their right and cause two files to break to the rear, and each chief place himself on the left of the leadiug front rauk man of his division; the chiefs of even divisions will hasten to their left, and cause two files to break to the rear, and cach chief place himself on the right of his leading front rauk man.

At the command march, all the divisions, each conducted by its chief, will step off smartly, the guides standing fast; each odd division will wheel by file to the left around its right guide; each eren division will wheel by file to the right around its left guide, each division so directing its march as to arrive behind its opposite guide, and when its head shall he up with this guide, the chief will halt the division, and cause it to face to the front.

Each division, on facing to the front, will be aligned by its chief by the right; to this end, the chiefs of the even divisions will move rapidly to the right of their respective divisions.

The divisions being aligned, each chief will command, Front; at this, the guides will shift to their proper flanks.

In a column with the left in front, the countermarch will be executed by the same commands and means; but all the divisions will be aligned by the left: to this end, the chiefs of the odd divisions will hasten to the left of their respective divisions as soon as the latter shall have ween faced to the front.

## Different modes of passing from the order in column to the order in battle.

## Manner of deternining the line of battle.

322. The line of battle may be marked or determined in three different manners: 1st, by placing two markers eighty or one hundred paces apart, on the direction it is wished to give to the line; 2d, by placing a marker at the point at which it may be intended to rest a flank, and then choosing a second point toward or beyoud the opposite flank, and there posting a second marker, distant from each other a little less than the leading subdivision ; $3 d$, by chonsing at first the points of direction for the flanks, and then determining, by intermediate points, the straight line between those selected points, both of which may sometimes be heyond reach.

## Column, at full distance, right in front, to the left into line of battle.

323. A column, right in front, being at a halt, when the colonel shall wish to form it to the left into line, he will assure the positions of the guides by means previously indicated, and then command :

## 1. Left into line, wheel. 2. March (or double quick-March).

At the first command, the right guide of the leading company will hasten to place himself on the direction of the left guides of the column, face to them, and place himself so as to be opposite to one of the three right files of his company, when they shall be in line: he will be assured in this position by the lieutenant-colonel.

At the command march, briskly repeated by the captains, the left front rank man of each company will face to the left, and rest his breast lightly against the right arm of his guide; the companies will wheel to the left on the principle of wheeling from a balt, conforming themselves to what is prescribed, school of the company : each eaptain will turn to his company, to observe the execution of the movement, and, when the right of the company shall arrive at three paces from the line of battle, he will command:

## 1. Such company. 2. Halt.

The company being halted, the eaptain will place himself on the line by the side of the left frout rank man of the eompany next on the right, align bimself eorrectly, and command:

## 3. Right-Dress.

At this command, the company will dress up between the captain and the front rank man on its left, the captain directing the alignment on that man ; the front rank man on the right of the right eompany, who finds himself opposite to its right guide, will lightly rest his breast against the left arm of this guide.

Each eaptain, having aligned his company, wili command, Front, and the colonel will add :

## Guides-Posts.

At this command, the guides will return to their places in line of battle, each passing through the nearest captain's interval ; to permit him to pass, the captain will momentarily step before the first file of
his company, and the covering sergeant behind the same file. This rule is general for all the formations into line of battle.

When companies form line of battle, file-closers will always place themselves exactly two paces from the rear rank, which will sufficiently assure their aligument.

The battalion being correctly aligned, the colonel, lieutenant-colonel, and major, as well as the adjutant and sergeant-major, will return to their respective places in line of battle. This rule is general for all the furmations into line of battle.

A column, with the left in front, will form itself to the right into line of battle, according to the same principles.

At the command guides, posts, the captains will take their places in line of battle as well as the guides. This rule is general for all formations into line of battle in which the companies are aligned by the left.
324. A column by division may form itself into line of battle by the same commands and means, observing what follows: if the right be in front, at the command halt, given by the chiefo of division, the left guide of each right company will place himself ou the alignment opposite to one of the three files on the left of his company; the left guide of the first company will be assured on the direction by the lieu-tenant-colonel; the left guides of the other right companies will align themselves correctly on the division guides; to this end, the division guides (already on the line) will invert, and hold their pieces up perpendicularly before the centre of their bodies, at the command, left into line, wheel. If the column by division be with the left in front, the right guides of the left companies will couform to what has just been prescribed for the left guides of the.right companies.
325. A column in march will be formed into line, without halting, by the same commands and means. At the command mareh, the guides will halt in their places, and the lieutenant-colonel will promptly rectify their positions.

If, in forming the column into line, the colonel should wish to move forward, without halting, he will command:

## 1. By companies, left wheel. 2. March (or double quickMarch).

At the command march, repeated by the captains, each company will wheel to the left on a fixed pivot, as prescribed in the school of the company, the left guides will step back into the rank of file-closers before the wheel is completed, and when the right of the companies shall arrive near the line, the colonel will command :

## 3. Forward. 4. March. 5. Guide centre.

At the fourth command, given at the instant the wheel is completed, the companies will march dircetly to the front. At the fifth command, the color and the general guides will move rapidly six paces to the front. The colonel will assume the direction of the color; the captains of companies and the men will, at onec, conform to the principles of the march in line of battle, to be indicated, No. 343.

## By inversion to the right (or left) into line of battle.

326. When a column, right in front, shall be under the necessity of forming itself into line faced to the reverse Hank, and the colonel shall wish to execute this formation by the shortest movement, he will command:
327. By inversion, right into line, wheel. 2. Battalion, guide right.

At the first command, the licutenant-colonel will place himself in front, and facing to the right guide of the leading subdivision; at the second command, he will rectify, as promptly as possible, the direction of the right guides of the column ; the captain of the odd company, if there be one, and the colums be ly division, will promptly bring the right of his company on the direction. aud at company distance from the division next in front: the left gaide of the leading subdivision will place himself on the direction of the right guides, and will be assured in his position by the lieutenant-colonel; which being executed, the colonel will command:

## 3. March (or double quick-March).

At this, the right front rank man of each subdivision will face to the right, rest his breast lightly against the left arm of his guide, and the battalion will form itself to the right into line of battle, according to the principles prescribed.

## Successive formations.

327. Under the denomination of successive formations are included all those formations where the severai subdivisions of a column arrive one after another on the line of battle; such are formations on the right, or left, forward and faced to the rear into line of battle, as well as deploymeuts of columns in mass.

The successive formations which may be ordered when the column is marching, and is to continue marching, will be executed by a combination of the two gaits, quick and double quick time.

In all the successive formatious, every captain will always observe
before dressing his company, to place himself correctly on the line either on the left or right of the company which precedes his in line, and see that his guide has been assured on the direction by the lieuten-ant-colonel.

Column at full distance, on the right (or on the left) into line of battle.
328. A column by company, at full distance, and right in front, having to form itself on the right into line of battle, the colonel will indicate to the lientenant-colonel a little in advance, the point of appui, or rest, for the right, as well as the point of direction to the left; the lieutenant-colonel will hasten with two markers, and establish them in the following manner on the direction indicated:
The first marker will be placed at the point of appui for the right front rank man of the leading company; the second will indicate the point where one of the threc left files of the same company will rest when in line; they will be placed so as to present the right shoulder to the battalion when formed.
These dispositions being made, the colonel will command:

## 1. On the right, into line. 2. Battalion, guide right.

At the second command, the right will become the directing flank, and the touch of the clbow will be to that side; the right guide of the leading company will march straight forward until np with the turning point, and each following guide will march in the trace of the one immodiately preceding.
The leading company being nearly up with the first marker, its captain will command:

## 1. Right turn,

and when the company is precisely up with this marker, be will add:

## 2. March.

At the command march, the company will turn to the right; the right guide will so direct himself as to bring the man next to him opposite to the right marker, and when at three paces from him, the captain will command:

## 1. First company. 2. Halt.

At the second command, the company will halt; the files, not yet in line, will form promptly; the left guide will retire as a file closer; and the captain will then command:

## 3. Right-Dress.

At this enmmand, the company will align itself: the two men who find themselves opposite to the two markers will each lightly rest his breast against the right arm of his marker; the eaptain, passing to the right of the front rank, will direct the alignment on these two men. These rules are general for all sucressive formations.

The second eompany will continue to mareh straight forward; when arrived opposite to the left flank of the preceding company, it will turn to the right, and be formed on the line of hattle, as has just been preseribed: the right guide will direet himself so as to eome upon that line by the side of the man on the left of the first company.

At the distance of three paces from the line of battle, the eompany will be halted by its captain, who will place himself briskly by the side of the man on the left of the preceding company, and align himself eorrectly on its front rank.

The left guide will, at the same time, place himself before one of the three left files of his company, and, facing to the right, he will place himself accurately on the direction of the two markers of the preceding company.

The captain will then command:

## Right-Dress.

At this command, the second eompany will dress forward on the line: the captain will direet its alignment on the front rank man who has rested his breast against the left guide of the company.

The following eompanies will thas come suceessively to form themselves on the line of battle, each eonforming itself to what has just been preseribed for the one next to the right; and when they shall all be established, the colonel will command:

## Guides-Posts.

At this command, the guides will take their places in line of battle; and the markers placed before the right company will retire.

If the column be marching in quick time, and the colonel should wish to cause the movement to be executed in double quiek time, he will add the command:

## Double quick-Marcir.

At the eommand mureh, all the eompanies will take the double quiek step, and the movement will be executed as preseribed above.

The colonel will follow up the formation, passing along the front, and
being always opposite the company abont to turn; it is thus that be will be the hetter able to see and correct the error that would result from a command given too soon or too late to the preceding company.

The lieutenant-colonel will, with the greatest care, assure the direction of the guides; to this end, the instant that the markers are established for the leading company, he will more a little beyond the point at which the left of the next company will rest, establish himself correctly on the prolongation of the two markers, and assure the guide of the second company on this direction; this guide beingassured, the lieutenant-colonel will place himself farther to the rear, in order to assure, in like manner, the guide of the third company, and so on, successively, to the left of the battalion. In assuring the guides in their positions on the line of battle, he will take care to let them first place themselves, and confine himself to rectifying their positions if they do not cover accurately, and at the proper distance, the preceding guides or markers. This rule is general for all suecessive formations.

When the direction of the line of battle forms a sensible angle with that of the march of the column, the colonel, before beginning tho movement, will give the head of the column a new direction parallel to that line.

A column, left in front, will form itself on the left into line of battle according to the same priuciples.

Each captain will cause his company to support arms, the instant that the captain, who follows him, shall have commanded front. This rule is general for all successice formations.

When, in the execution of this movement, the colonel shall wish to commence firing, he will give the order to that effect to the captain whose company is the first on the line; this captain will immediately place limself hehind the ecntre of his company, and as soon as the next captain shall have commanded front, he will commence the fire by file. At the command fire by file, the marker at the outer flank of this company will retire, and the other will place himself against the nearest man of the next company. The captain of the latter will commence firing as soon as the captain of the third company in line shall have commanded front; the marker before the right or left file retiring, and the guide before the opposite flauk taking post before the nearest file of the third company, iu line; and so on to the last company.

Column at full distance, forward into line of battle.
329. A column being by company, at full distance, right in front, and at a halt, when the colonel shall wish to form it forward into line,
he will conform to what is prescribed in the first part of the last number, and then command:

1. Forward, into line. 2. By company, left half wheel. 3. March
(or double quick-MarCH).

At the first command, the captaiu of the leading company will add, guide right, put the company in march, halt it three paces from the markers, and align it against the latter by the right.

At the command march, all the otber eompanies will wheel to the left on fixed pivots ; and, at the instant the colonel shall judge, according to the direction of the line of battle, that the companies bave suffieiently wheeled, he will command:

## 4. Forward. 5. March. 6. Guide right.

At the fifth command the companies eeasing to wheel will mareh straight forwarl; and at the sixth, the men will touch elbows toward the right. The right guide of the second company, who is nearest to the line of battle, will mareh straight forward ; each succeeding right guide will follow the file immediately before him at the cessation of the wheel.

The second company having arrivel opposite to the left file of the first, its captain will canse it to turn to the right, in order to approach the line of battle: and when its right guide shall be at three paces from that line, the eaptain will command:

## 1. Second company. 2. Halt.

At the sceond command, the company will halt: the files not yet in line with the guide will eome into it promptly, the left guide will place himself on the line of battle, so as to be opposite to one of the three files on the left of the company; and, as soon as he is assured on the direction by the lieatenaut-colonel, the captain, having placed himself accurately on the line of battle, will command:

## 3. Right-Dress.

At the instant that the gride of the second company begins to turn to the right, the guide of the third ceasing to follow the file immediately befure bim, will march straight furward: and, when he shall arrive opposite to the left of the second, his captain will cause the company to turn to the right, in order to approach the line of battle, halt it at three paces from that line, and align it by the right, as prescribed for the second company.

Each following company will cxecute what has just been prescribed

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for the third, as the preceding company shall turn to the right in order to approach the line of battle.

The formation ended, the colonel will command :

## Guides-Posts.

The colonel and lieutenant-colonel will obserre, in this formation, what is prescribed for them on the right into line.

A column left in front, will form itself forward into line of battle according to the same principles and by inverse means.
330. When a column by company at full distance, rigft in front, and in march, has arrived at company distance from the two markers established on the line, the colonel will command:

## 1. Forward, into line. 2. By company, left half wheel. 3. March (or double quich-MARCH).

At the first command, the captain of the first company will command, guide right, and cantion it to march directly to the front, the captains of the other companies will caution them to wheel to the left.

At the command march, briskly repeated by the captains, the movement will be executed as in the last case.

If the colonel shonld wish to form the column forward intoline, and to continue to march in this order, be will not cause markers to be established; thic movements will be executed in double quick time, by the same commands and means, obscrving what follows:

At the first command, the eaptain of the first company will add quick time after the command guide right. At the second command, the first company will continue to march in ruick time, and will take the touch of elbow to the right; its chief will immcdiate'y place himself on its right, and to assure the march will take points of direction to the front. The eaptain of the second company will canse his company to take the same gait as soon as it shall arrive on a line with the first, and will also move to the right of his company ; the captains of the third and fourth companies will execute in succession what has just been prescribed for the second. The companies will preserve the touch of ellows to the right, until the command, guide centre.

When the color company shall have entered the line, the colonel will command. guide centre. At this command the color-bearer and right gencral guide will move rapidly six paces in adrance of the line. The colonel will assure the dircetion of the color-bearer, the lientenantcolonel and right companies will immediately conform to the principles of the march in line of battle. The left companies and the
left general guide, as they arrive in line, will also conform to the same principles.

1. Column, at full distance, faced to the rear, into line of battle.
2. A column being by company, at full distance, right in front, and at a halt, when the colonel shall wish to form it into line faced to the rear, he and the lieutenant-colonel will conform themsclres to what is prescribed in the first part of No. 328 , and the colonel will then command:
3. Into line, faced to the rear. 2. Battalion, right-Face. 3. March (or double quick-Marcir).

At the first command, the captain of the leading company will cause it to face to the right, and put it in mareh, causing it to wheel by file to the left, and direct its march toward the line of battle, which it will pass in rear of the left marker; the first file having passed three paces beyond the line, the company will wheel again by file to the left, in order to place itself in rear of the two markers; being in this position, its captain will halt it, face it to the front, and aligu it by the right against the markers.

At the second command, all the other companies will face to the right, each captain placing himsclf by the side of his right guide.

At the command march, the companies will put themselves in movement ; the left guide of the second, who is nearest to the line of battle, will hasten in advance to mark that line; he will place himself on it as prescribed above for successive formations, and thus indicate to his captain the point at which he ought to pass the line of battle, by three paces, in order to wheel by file to the left, and then to direct his company parallelly to that line.

As soon as the first file of this company shall have arrived near the left file of the preceding one already on the line of battle, its captain will command:

## 1. Second company. 2. Halt. 3. Front. 4. Right-Dress.

The first command will be given when the company shall yet have four paces to take to reach the balting point.

At the second command, the company will halt.
At the third, the company will face to the front, and if there be openings between the files the latter will promptly close to the right; the captain will immediately place himself by the side of the man on the left of the preceding company, and align himself on its front rank.

The fourth command will be executed as prescribed, No. 328.
The following companies will be conducted and established on the line of battle as just pressribed for the second, each regulating itself by the one that precedes it; the left guides will detach themselves in time to precede their respective companics on the line oy tweive or fifteen paces, and each place himself so as to be opposite to one of the three left files of his company, when in line. If the movement be executed in double quick time, the moment it is commenced, all the left guides will detach themsclves at the same time from the column, and will move at a run, to establish themselves on the line of batdle.

The formation ended, the colonel will command:

## Guides-Posts.

The colonel and lieutenant-coloncl, in this formation, will each observe what is prescribed for bim in that of on the right, into tine of battle.

A colnmn, left in front, will form itself faced to the rear into line of battle, according to the same principles and by inverse means.
332. If the column be in march, and nearly at company distance from the two markers established on the line, the eolonel will command:

1. Into line, faced to the rear. 2. Battalion, by the right flank. 3. March (or double quick-Marcii).

At the first command, the captains will caution their companies to face by the right flank.

At the command march, briskly repeated by the captains of companies, all the companies will face to the right, and the movement will be completed as in the last case.

## Formation in line of battle by two movements.

338. If a column by company, right in front, and at a halt, find itself in part on the line of battle, and the colonel should think proper to form line of battle before all the companies enter the new direction, the formation will be execnted as follows:

It will be supposed that the column has arrived behind the line of battle, and that five companies have entered the new direction, the colonel having assured the guides of the first five companies on the direction, will command:

1. Left into line, wheel. 2. Three rear companies, forward into line.

At the second command, the chief of each of the rear companies will command: By compeny, left hulf-uheet; and the colonel will add:

## 3. March (or double quick-March).

At this command, repeated by the captains, the first fire companies will wheel to the left into line, and the last three will execute forward into line, by the means prescrihed for this formation; each captain of the three rear companies will, when his company shall have sufficiently wheeled, command:

## 1. Forward. 2. March. 3. Guide right.

If the column be in mareh, the colonel will command :

1. To the left, and forward into line. 2. March (or double quick-MaRCh).

If the colonel should wish, in forming the battalion into line, to march immediately forward, he will command:

1. By company, to the left, and forward into line. 2. March.

And when the right of the companies which wheel shall arrive on the line, he will command:

## 3. Forward. 4. March. 5. Guide centre.

If the battalion be marching in double quick time, the colonel will cause quick time to be taken before commencing the movement.
334. If, instead of arriving behind, the column should arrive before the line of battle, so that a portion is on the line, and the remaining portion still in front of it, the colonel will command:

1. Left into line, wheel. 2. Three rear companies into line, faced to the rear.

At the second command, the captain of each of the three rear companies will command:

> 1. Such company. 2. Righ-FACE.

The colonel will then add:

## 3. March (or double quick-March).

At this command, repeated by the captains, the first five companies will form to the left into line, and the three last into line, freed to the rear.

If the column be in march, the colonel will command:

1. To the left, and into line, faced to the rear. 2. March (or
double quick-March).

Different modes of passing from column at half distance into line of battle.

Column at half distance, to the left (or right) into line of battle.
335. A column at half distance having to form to the left (or right) into line, the colonel will cause it to take distance by the means prescribed, No. 313; which being executed, he will form the column into line to the left or right, No. 323.
If a column by company, at half distance, be in march, and it is necessary to form rapidly into line, the colonel will command:

## 1. By the rear of column, left (or right) into line, wheel. 2. March (or double quick-March).

At the first command, the right general guide will move rapidly to the front, and place himself a little beyond the point where the head of the column will rest, and on the prolongation of the guides. The captain of the eighth company will command: Left into tine, wheel; the other captains will caution their companies to continue to march to the front. At the command march, repeated by the captain of the eighth company, the guide of this company will halt, and the company will wheel to the left, conforming to the prineiples laid down for wheeling from a halt; when its right shall arrive near the line, the captain will halt the company, and align it to the left. The otber captains will place themselves briskly on the flank of the column; when the captain of the seventh sees that there is sufficient distance between Lis company and the eighth to form the latter into line, he will command: Left into tine, wheet-March; the left guide will halt, and facing to the rear, will place himself on the line; the company will wheel to the left, the man ou the left of the front rank will face to the left, and place his breast against the arm of the guide; the captain will balt the company when its right shall arrive near the line, and will align it to the left. The other companies will conform in succession to what has becn prescribed for the seventh. Each captain will direct the alignment of his company on the left man in the front rank of the company next ou his right.
The lieutenant-colonel will see that the leading' guide marehes accurately on the prolongation of the line of battle, and directs himself
on the right general guide. The major, placed in rear of the left guide of the eighth company, will, as soon as the seventh company is established on the direction, hasten in rear of the guides of the other companies, so as to assure each of them on the line in succession.

## Column, at half distance, on the right (or left) into line of battle.

336. A column at half distance will form itself on the right (or left) into line, as prescribed for a column at full distance.

## Column at half distance, forward, into line of battle.

337. If it be wished to form a column at half distance forward into line of battle, the colonel will first cause it to close in mass and then deploy it on the lading company.

## Column at half distance, into line, face to the rear.

338. A column at half distance will be formed into line of battle, faced to the rear, as prescribed for a column at full distance.

## Deployment of column closed in mass.

339. When a column in mass, by division, arrives hehind the line on which it is intended to deploy it, the colonel will indicate, in advance, to the lieutenant colonel, the direction of the line of batile, as well as the point on which he may wish to direct the column. The lieutenantcolonel will immediately detach himself with two markers, and establish them on that line, the first at the puint indicated, the second a little less than the front of a division from the first.

Deployments will always be made upon lines parallel and lines perpendicular to the line of battle; consecuently, if the head of the column be near the line of battle, the colonel will commence by establishing the direction of the column perpendienlarly to that line, if it be not already so. If the column be in march, he will so direct it that it may arrive exactly behind the markers, perpendicularly to the line of battle, and halt it at three paces from that line.

The column, right in front, being halted, it is supposel that the colonel wishes to deploy it on the first division; he will order the left general guide to go to a point on the line of battle a little beyond that at which the left ol the battalion will rest when deployed, and place himself correctly on the prolongation of the markers established before the first division.

These dispositions being made, the colonel will command:

1. On the first division, deploy column. 2. Battalion, left--FACE.

At the first command the chicf of the first division will caution it to stand fast; the chiefs of the three other divisions will remind them that they will have to face to the left.

At the second command the three last divisions will face to the left; the chief of each division will place himself by the side of its left guide, and the junior captain by the side of the covering sergeant of the left company, who will have stepped into the front rank.

At the same command the lieutenant-colonel will place a third marker on the alignment of the two first, opposite to one of the three left files of the right company, first division, and then place himself on the line of battle, a few paces beyond the point at which the left of the second division will rest.

The colonel will then command:

## 3. March (or double quick-March).

At this command the chief of the first division will go to its right and command :
Right-Dress.

At this the division will dress up against the markers; the chief of the division and its junior captain will each align the company on his left, and then command:

## Front.

The three divisions, faced to the left, will put themselves in march; the left guide of the second will dircet himself parallelly to the line of battle; the left gaides of the third and fourth divisions will march abreast with the guide of the second; the guides of the third and fourth, each preserving the prescribed distance between bimself and the gaide of the division which preceded his own in the column.

The chief of the second division will not follow its movement; he will see it file by him, and when its right guide shall be abreast with him, he will command:

## 1. Second division. 2. Halt. 3. Front.

The first command will be given when the division shall yet have seren or eight paces to march; the second, when the right gnide shall be abreast with the chief of the division, and the third immediately after the second.

At the second command, the division will balt; at the third, it will
face to the front, and if there be openings between the files, the ehief of the division will eause them to be promptly closed to the right; the left guides of both companies will step rpon the line of battle, face to the right, and place themselves on the direetion of the markers established before the first dirision, each guide olposite to one of the three left files of his company.

The division having faced to the front. its chief will place himself accurately on the line of battle, on the left of the first division ; and when he shall see the grides assured on the direction, he will command:

## Right-Dress.

At this, the division will be aligned by the right in the manner indicatel for the first.

The third and fourth divisions will continue to march; at the command halt, given to the second, the ehief of the third will balt in his own person, place himsclf exactly opposite to the guide of the second, after this division shall have faced to the front and closed its files; he will see his division file past, and when his right guide shall be abreast with him he will command:

## 1. Third division. 2. Halt. 3. Front.

As soon as the division faces to the front, its chief will place himself two paces before its centre, and command:

## 1. Third division, forward. 2. Guide right. 3. March.

At the third command, the division will march toward the line of battle; the rirgt guide will so direct himself as to arrive by the side of the man on the left of the second division, and when the division is at three paces from the line of battle, its chief will halt it and align it by the right.

The chief of the fourth division will conform himself (and the chief of the fifth, if there be a fifth) to what has just been prescribed for the third.

The deployment ended, the colonel will command:
Guides-Posts.

At this command, the guides will resmme their plaees in line of battle, and the markers will retire.
340. If the eolumn be in march, and the colonel shall wish to deploy it on the first division without halting the colnmn, he will make the
necessary dispositions, and when the first division shall have arrived at three paces from the line, he will command :

1. On the first division, deploy column. 2. Battalion, by the left flank. 3. March (or double quick-March).

At the first command, the chief of the first division will caution it to halt, and will command, first dicision; the other chiefs will caution their divisions to face by the left flank.

At the command march, briskly repeated by the chiefs of the rear divisions, the chief of the first division will command, Hati, and will align his divisiou by the right against the markers; the other divisions will face to the left, their chicfs hastening to the left of their divisions. The sccond, third and fourth divisions will execute what is prescribed, No. 338 ; but the chief of each division will halt in his own person at the command march, given by the chief of the division which precedes him, and when the right of his division arrives abreast of him, he will command:

## Such division, by the right flank-March.

If the colonel should wish to deploy the column without halting it, and to continue the march, the markers will not be posted; the movement will be executed by the same commands and means as the foregoing, but with the following modifications:

At the first command, the chief of the first division will command: 1. Guide right. 2. Quick time. At the command, Double quickMarch, giren by the colonel, the first division will take quick time, and touch elbows to the right; the captains will place themselves on the right of their respective companies; the captain on the right of the battalion will take points on the ground to assure the direction of the march. The chicf of the second division will allow his division to file past him, and when he sees its right abreast of him, he will command: 1. Second division, by the right flank. 2. March. 3. Guide right; and when this division shall arrive on the alignment of the first, he will cause it to march in quick time. The third and fourth divisions will deploy according to the same principles as the second.

The colonel, lieutenant-colonel, major, and color-bearer, will conform to what is prescribed, No. 330 .
341. The column being at a halt, if, instead of deploying it on the first, the colonel shall wish to deploy it on the rearmost division, he will cause the dispositions to be made indicated, No. 338 ; but it will be the right general guide whon he will send to place himself beyond the point at which the right of the battalion will rest when deployed.

The colonel will then commaud:

1. On the fourtle (or such) division, deploy column. 2. Battalion, right--Face.

At the first command, the chief of the fourth division will caution it to stand fast; the chiefs of the other divisions will caution them that they will have to face to the right.

At the sccond command, the first threc divisions will face to the right; and the chief of each will place himself by the side of its right guide.

At the same command, the lieutenant-colonel will place a third marker between the first two, so that this marker may be opposite to one of the three right files of the left company of the division: the lientenant-colonel will then place himself on the line of hattle a few paces beyond the point at which the right of the third division will rest when deployed.

The colonel will then command :

## 3. March (or double quich-March).

At this command, the three right divisions will put themselves in march, the guide of the first so directing himself as to pass three paces within the line marked by the right gencral guile. The chicf of the third division will not follow its movement; he will see it file past, halt it when its left guide shall be abreast with him, and cause it to face to the front; and if there be openings between the files, he will cause them to be promptly closed to the left.

The chief of the fourth division, when he sees it ncarly unmasked by the three others, will command:

## 1. Fourth division, forward. 2. Guide left. 3. March.

At the command march, which will be given the instant the fourth is unmasked, this division will approach the line of battle, and when at three paces from the warkers on that line, its chicf will halt it, and command :
Left-Dress.

At this command, the division will dress forward against the markers; the chief of the division and the junior captain will each align the company on his right, and then command :

## Front.

The instant that the third division is nnmasked, its chief will cause
it to approach the linc of battle, and halt it in the manner just pro scribed for the fourth.

The moment the division halts, its right guide and the eovering sergeant of its left company will step on the line of battle, placing themselves on the prolongation of the markers established in front of the fourlh division; as soon as they shall be assured in their positions, the divisions will be aligned as has just been prescribed for the fourth.

The sceond and first divisions which will have continued to march, will, in suecession, be halted and aligned by the left, in the same manner as the third; the chiefs of these divisions will conform themselves to what is preseribed, No. 339. The second being near the lite of battle, the eommand will not be given for it to move on this line, but it will be dressed up to it.

The deployment ended, the eelonel will command:

## Guides-Posts.

342. To dejloy the column on an interior division, the colonel will canse the line to be traced by the means above indieated, and the general guides will move briskly on the line. This being exeeuted, the colonel will eommand:
343. On such division, deploy column. 2. Battalion, outwardFace. 3. March (or double quick-Marci).

Whether the column be with the right or left in front, the divisions which, in the order in battle, belong to the right of the directing one, will face to the right; the others, exeept the direeting division, will face to the left.

The direeting division, the instant it finds itself unmasked, will approach the line of batlle, taking the guide left or right, according as the right or left of the column may be in front. The ehicf of this division will align it by the direeting flank, and then step back into the rear, in order momentarily to give place to the chief of the next division

## To advance in line of battle.

34.3. The battalion being eorreetly aligncd, and supposed to be the directing one when the coloncl shall wish to march in line of battle, he will give the lieutenant-colonel an intimation of his purpose, place bimself about furty paces in rear of the color-file, and face to the front.

The lieutenant-e日lonel will place himself a like distance in front of the same file, and face to the colonel, who will establish him as cor-
rectly as possible, by sigual of the sword, perpendicularly to the line of battle opposite to the color-bearer. The colonel will next, above the heads of the licutenant-colonel and color-bearer, take a point of direction in the field beyond, if a distinct one present itsclf, exactly in the prolongation of those first two points.

The colonel will then move twenty paces farther to the rear, and establish two markers on the prolongation of the straight line passing through the color-bearer and the lieutenant-colonel; these markers will face to the rear, the first placel about twenty-five paces behind the rear rank of the battalion, and the secontl at the same distance from the first.

The color-bearer will be instructed to take, the moment the lieuten-ant-colonel shall be established on the perpendicular, two points on the ground in the straight line which, drawn from himself, would pass between the hecls of that officer; the first of these points will be taken at fifteen or twenty paccs from the colur-bearer.

These dispositions being made, the coloncl will command:

## 1. Battalion, forward.

At this, the front rank of the color-guard will adrance six paces to the front; the corporals in the rear rank will place themselres in the front rank, and these will be replaced by those in the rank of fileclosers; at the same time the two general guides will move in advance, abreast with the color-bcarer, the one on the right, opposite to the captain of the right company, the other opposite to the sergeant who closes the left of the battalion.

The captains of the left wing will shift, passing before the front rank, to the left of their respective companics: the sergeant on the left of the battalion will step back into the rear rank. The covering sergeant of the company next on the left of the color-company will step into the front rank.

The lientenant-colonel, having assured the eolor-bearer on the line between himself and the corporal of the color-file, now in the front rank, will go to the position which will be hereinafter indicated.

The major will place himself six or eight paces on either flank of the color-rank.

The colonel will then command:

## 2. March (or double quick-March).

At this commant, the battalion will step off with life; the colorbearer, charged with the step and direction, will scrupulously observe the length and cadence of the pace, marching on the prolongation of
the two points previously taken, and successively taking others in advance by the means indicated in the school of the company; the corporal on his right, and the one on his left will march in the same step, taking care not to turu the head or shoulders, the color-bearer supporting the color-lance against the hip.

The two general guides will march in the same step with the colorrank, each maintaining himself abreast, or nearly so, with that rank, and neither occupying himself with the movement of the other.

The three corporals of the color-guard, now in the front rank of the battalion, will march well aligued, elbow to elbow, heads direct to the front, and without deranging the line of their shoulders;"the centre one will follow exactly in the trace of the color-bearer, and maintain the same step, without lengthening or shortening it, except on an intimation from the colonel or lieutenant-colonel, although he should find himself more or less than six paces from the color-rank.

The covering sergeant in the front rank, between the color-company and the next on the left, will march elbow to elbow, and on the same line, with the threc corporals in the centre, his head well to the front.

The captains of the color-company, and the company next to the left, will constitute, with the three corporals in the centre of the front rank, the basis of aligmment fur buth wings of the battalion; they will march in the same step with the color-bearer, and exert themselves to maintain their shoulders exactly in the square with the direction. To this end, they will keep their heads direct to the front, only occasionally casting an eye on the three centre corporals, with the slightest possible turn of the neck, and if they perceive themselves in advance or in rear of these corporals, the captain. or two captains will, almost insensibly, shorten or lengthen the step, so as, at the end of several paces, to regain the true alignment, without giving sudden checks or impulsions to the wings beyond them respectively.

The lieutenant-colonel, placed twelve or fifteen paces on the right of the captain of the eolor-company, will maintain this captain and the next one beyond, abreast with the three centre corporals; to this end, he will caution either to lengthen or to shorten the step, as may be necessary, which the captain, or two captains will cxecute as has just been explained.

All the other captains will maintain themselves on the prolongation of this basis; and, to this end, they will east their eyes toward the centre, taking eare to turn the neek but slightly, and not to derange the direction of their shoulders.

The captains will observe the march of their companies, and prevent the men from getting in advance of the line of captains; they will not lengthen or shorten step except when evidently necessary; because, to
correct, with too scrupulous attention, small faults, is apt to canse the production of greater-loss of calmness, silence, and equality of step, each of which it is so important to maintain.

The men will constantly keep their heads well directed to the front, feel lightly the elbow toward the centre, resist pressure coming from the flank, give the greatest attention to the squareness of shoulders, and hold themselves always very slightly behind the line of the captains, in order never to shut out from the view of the latter the basis of alignment; they will, from time to time, cast an eye on the color-rank, or on the general gruide of the wing, in order to march constantly in the same step with those advanced persons.

Pending the march, the line determined by the two markers will be prolonged by placing, in proportion as the battalion advances, a third marker in the rear of the first, then the first marker will quit his place and go a like distance in rear of the third; the second marker will, in his turn, do the like in respect to the first, and so on, in succession, as long as the battalion continues to advance; each marker, on shifting position, taking care to face to the rear, and to cover accurately the two markers already established on the direction. A staff officer, or the quartermaster-sergeant, designated for the purpose, and who will hold himself constantly fifteen or twenty paces from and facing the marker farthest from the battalion, will caution each marker when to shift place, and assure him on the direction behind the other two.

## To halt the battalion, marching in line of battle, and to align it.

344. The battalion, marching in the line of battle, when the colonel shall wish to halt it, he will command:

## 1. Battalion. 2. Halt.

At the second command, the battalion will halt: the color-rank and the general guides will remain in front; but if the colonel should not wish immediately to resume the advance in line, nor to give a general alignment, be will command :

## Color and general guides-Posts.

At this command, the color-rank and general guides will retake their places in line of battle, the captains in the left wing will shift to the right of their companies.

If the colonel should thon judge it necessary to rectify the alignment, he will command :

## Captains, rectify the alignment.

The captains will immediately cast an eye toward the centre, align themselves accurately, on the basis of the alignment, which the lieutenant-colonel will see well directed, and then promptly dress their respective companies. The lientenant-colonel will admonish such captains as may not be accurately on the alignment by the command: Cuptain of (such) company, or eaptains of (such) companies, move up or fall back.

But when the colonel shall wish to give the battalion a general alignment, either parallel or oblique, insiead of rectifying it as above, he will more some paces outside of one of the general guides (the right will here be supposed) and eaution the right general gaide and the color-bearer to face him, and then establish them by signal of the sword, on the direction which he may wish to give to the battalion. As soon as they shall be correctly established, the left general guide will place himself on their direction, and be assured in his prosition by the major. The color-bearer will carry the color-lance perpendicularly between his eyes, and the two corporals of his rauk will return to their places in the front rank the moment he shall face to the coloncl.

This disposition being made, the colonel will command :

## 1. Guides-On the line.

At this command, the right guide of each company in the right wing, and the left guide of each company in the left, will each place himself on the direction of the color-bearer and the two general guides, face to the color-bearer, place himself in rear of the guide who is next before him, at a distance equal to the tront of his company, and align himself upon the color-bearer and the general guide beyond.

The captains in the right wing will shift to the left of their companies, except the captain of the color-company, who will remain on its right, but step into the rear rank; the captains in the left wing will shift to the right of their companies.

The lientenant-colonel will promptly rectify, if necessary, the positions of the guides of the right wing, and the major those of the other; which being executcd, the colonel will command:

## 2. On the centre-Dress.

At this command, the companies will move up in quick time against the guidcs, where, having arrived, each captain will align his company according to prescribed principles, the lieutenant-colonel aligning the color-company.

If the alignment be oblique, the captains will take care to conform their companies to it in conducting them toward the line.

The battalion being aligned, the colonel will command:

## 3. Color and guides-Posts.

At this command, the color-bearer, the general and company guides, and the captains, in the right wing, will take their places in the line of battle, and the color-bearer will replace the heel of the color-lance against the right hip.

## To march in retreat, in line of battle.

345. The battalion being halted, if it be the wish of the colonel to cause it to march in retreat, he will command:

## 1. Face to the rear. 2. Battalion, about-FACE.

At the second command, the battalion will face about; the colorrank and the general guides, if in advance, will take their places ill line; the color-bearer will pass into the rear rank, now leading; the corporal of bis file will step behind the corporal next on his own right, to let the color-bearer pass, and then step into the front rank, now rear, to re-form the color-file; the colonel will place himself behind the front rank, become the rear ; the lieutenant-colonel and major will place themselves before the rear rank, now learling.

The colonel will take post furty paces behind the color-file, in order to assure the lieutenant-colonel on the perpendicular, who will place bimself at a like distance in front, as prescribed for the adrance in line of battle.

If the battalion be the one charged with the direction, the colonel will establish markers in the manner indicated, No. 343 , except that they will face to the battalion, and that the first will be placed twentyfive paces from the lieutenant coloncl. If the markers be already established, the officer charged with replacing them in succession will cause them to face about the moment that the battalion executes this movement, and then the marker nearest to the battalion will hasten to the rear of the two others.

These dispositions being madc, the colonel will command:

## 3. Battalion, forward.

At this command, the color-bearer will advance six paces beyond the rank of file-closers, accompanied by the two corporals of his guard of that rank, the centre corporal stepping back to let the color-bearer
pass; the two file-closers nearest this centre corporal will unite on him behind the color-guard to serve as a basis of alignment for the line of file-closers ; the two general guides will place themselres abreast with the color rank, the covering sergeants will place themselves in the line of file-closers, and the captains in the rear rank, now leading; the captains in the left wing, now right, will, if not already there, shift to the left of their companies, now become the right.

The colonel will then command:

## 4. March (or double quick-March).

The battalion will march in retreat on the same principles which govern the advance in line.

To halt the battalion marching in retreat, and to face it to the front.
346. The colonel having halted the battalion, and wishing to face it to the front, will command :

## 1. Face to the front. 2. Battalion, about-FAcE.

At the second command, the color-rank, general guides, captains and covering sergeants, will all retake their habitual places in line of battle, and the color-bearer will repass into the front rank.
347. The battalion marching in line of battle by the front rank, when the colonel shall wish to march it in retreat, he will command:

## 1. Battalion, right about. 2. March.

At the command march, the battalion will face to the rear and move off at the same gait by the rear rank. If the colonel should wish the battalion to march again by the front, he will give the same commands.

## Passage of obstacles, advancing and retreating.

348. The battalion adrancing in line will be supposed to encounter an obstacle which covers one or more companies; the colonel will cause them to ploy into column at full distance, in rear of the next company toward the color, which will be executed as follows: It will be supposed that the olostacle only covers the third company, the colonel will command :

## Third company, obstacle.

At this command, the captain of the third company will place him-
self in its front, turn to it, and command: 1. Third company, by the left flank, to the rear into column. 2. Double quick. 3. March. He will then hasten to the left of his compauy.

At the command march, the company will face to the left in marching; the two left files will promptly disengage to the rear in double quick time; the left guide, placing himself at the head of the front rank, will conduct it behind the fourth company, directing himself parallelly with this company; the captair of the third will himself halt opposite to the captain of the fourth, and sce his company file past; when its right file shall be uearly up with him, he will command: 1 . Third conpany. 2. By the right tank. 3. March. 4. Guide right, and place himself before the centre of the company.

At the command march, the company will face to the right, preserving the gait, but the moment it shall be at the prescribed distance. the captain will command :

## 1. Quick time. 2. Makci.

This company will follow in coluwn that behind which it finds itself, and at wheeling distance, its right guide marching exactly in the trace of the captain of that company.

As soon as the third company shall have faced to the left, the left guide of the second will place himself on the left of the front rank of his company, and maintain between himself and the right of the fourth, the space necessary for the return into line of the third.

The ohstacle being passed, the colonel will command:

## Third company, forward into line.

At this command, the captain, turning to his company, will add :

## 1. By company, right half wheel. 2. Double quick. 3. Мarch.

At the command march, the company will take the double quick step and execute a half wheel ; its captain will then command:

## 1. Forward. 2. March. 3. Guide left.

At the command march, the company will direet itself straight forward toward the line, and retake its position in it according to the principles prescribed for the formation forward into line.
349. It will be supposed that the obstacle covers several contiguous companies (the three companies on the right, for example), the colonel will command:

## 1. Three right companies, obstacle. 2. By the left flank, to the rear, into column. 3. Double quick. 4. March:

At the first command, the captains of the designated companies will each place himself before the centre of his company, and caution it that it has to face to the left.

At the command march, the designated companies will face to the left in marching, and immediately take the double quick step; each aaptain will cause the head of his company to disengage itself to the rear, and the left guide will place bimself at the head of the front rank; the captain of the third company will conform to what has been prescribed for him in the last number; the captains of the other companies will conduct their companies by the flank in rear of the third, inclining toward the head of the column; and as the head of each company arrives opposite to the right of the one next before it in column, its captain will halt, see his company file past bim, face it by the right flank, take guide right, and place himself before its centre.

When the last company in column shall have passed the obstacle, the colonel will command :

## 1. Three right companies, forward into line.

At this command, the captain of each of these three companies will command: By company, right half wheel. The colouel will then add:

## 1. Double quick. 2. March.

At this, briskly repeated by the captains of the three companies, each company will exceute the movement on the principles laid down in the movement of forward into line without halting.
350. If the companies belong to the left wing, they will execute the passage of an obstacle according to the same principles, but by inverse means.

If the battalion is marching at double quick, and it becomes necessary to break off several companies in the passage of an obstacle, the colonel will first bring it to march in quick time.

When the color-company shall be obliged to cxecute the movement of passing an obstacle, the color-rank will return into line the moment the company shall face to the right or left; the major will place himself six paces before the extremity of the company behind which the coior company marches in column, in order to give the step and the direc-' tion; he, himself, first taking the step from the battalion.

## To pass a defile, in retreat, by the right or left flank.

351. When a battalion, retiring in line, shall encounter a defile which it must pass, the colonel will halt the battalion and face it to the front.

It will be supposed that the defile is in rear of the left flank, and that its width is sufficient to give passage to a column by platoon; the colonel will place a marker fifteen or twenty paces in rear of the file-closers at the point around which the companies will have to change direction in order to enter the defile; he will then command:

## To the rear, by the right flank, pass the defile.

The captain of the first company will immediately command:

## 1. First company, right-Face. 2. March (or double quichMarch).

At the command march, the first company will commence the movement; the first file will wheel to the right, march to the rear till it sball have passed four paces beyond the file-closers, when it will wheel again to the right, and then direct itself straight forward toward the left flank. All the other files of this company will wheel in succession at the same place where the first had wheeled.

The second company will, in its turn, execute the movement, by the commands of its captain, who will give the command march, so that the first file of his company may immediately follow the last of the first, without constraint ; the first file of the second company will wheel to the right on its ground; all the other files of this company will, in succession, wheel at the same placc. The following companies will execnte, each in its turn, what has just been prescribed for the second.

When the whole of the second company shall be on the same direction with the first, "the captain of the first will cause it to form, by platoon, into line, and the moment that it is in column, the guide of the first platoon will direct himself on the marker around whom he has to change direction in order to enter the defile.

The second company will continue to march by the flauk, directing itself parallelly with the line ; and it, in its turn, will form by platoon into line, when the third company shall be wholly on the same direction with itself. The following companies will execute in succession what has just been prescribed for the second.

The first platoon of the leading company having arrived opposite to the marker placed at the entrance of the defile, will turn to the left,

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 MANUAL FOR VOLUNTEERS AND MILITIA.and the following platoons will all execute the same movement at the same point. As the last company will not be able to form platoons before reaehing the defile, they will so direet themselves, in entering it, as to leave room to the left for this movement.

The battalion will thus pass the defile by platoon; and, as the two platoons of eaeh company shall elear it, companies will be formed. The head of the column having eleared the defile, and having reached the distance at which the colonel wishes to re-form the line faced to the defile, he may eause the leading eompany to turn to the left, to prolong the eolumn in that direetion, and then form it to the left into line of battle; or he may balt the eolumn, and form it into line faced to the rear.

If the defile be in rear of the right flank, it will be passed by the left; the movement will be executed according to the same prineiples, and by inverse means.

If the defile is $t o 0$ narrow to receive the front of a platoon, it will be passed by the flank.

## To march by the fank.

352. The eolonel, wishing the battalion to mareh by the flank, will command :

1 Battalion. 2. Right ${ }^{1}$ (or left)-FAce. 3. Forward. 4. March (or double quick-March).

At the sceond command, the eaptains and covering sergeants will place thumselves as preseribed in the school of the eompany.

The sergeant on the left of the battalion will place himself to the left and by the side of the last file of his company, covering the eaptains in file.

The battalion having to face by the left flank, the eartains, at the second eommand, will shift rapidly to the left of their companies, and each place himself by the side of the eovering sergeant of the company preceding his own, except the eaptain of the left company, who will place himself by the side of the sergeant on the left of the battalion. The covering sergeant of the right company will place himselt by the right side of the front rank man of the rearmost file of his company, covering the captains in file.

At the enmmand march, the battalion will step off with life; the sergeant, placed before the leading file (right or left in front), will be careful to preserve exactly the length and cadence of the step,
and to direct himself straight forward; to this end, he will take points on the ground.

Whether the battalion march by the right or left flank, the lien-tenant-colonel will place himself abreast with the leading file, and the major abreast with the color-file, both on the side of the front rank, and about six paces from it.

The adjutant, placed between the lieutenant-coloncl and the front rank, will march in the same step with the head of the battalion, and the sergeant-major, placed between the major and the color-bearer, will march in the same step with the adjutant.

The captains and file-closers will carefully see that the files neither open out nor close too much, and that they regain insensibly their distances, if lost.
353. The colonel wishing the battalion to wheel by file, will command:

## 1. By file right (or left). 2. March.

The files will wheel in succession, and all at the place where the first had wheeled, in conforming to the principles prescribed in the school of the company.

The battalion marching by the flank. when the colonel shall wish it to halt, he will command:

## 1. Battalion. 2. Halt. 3. Front.

These commands will be executed as prescribed in the school of the company.

If the battalion be marching by the flank, and the colonel should wish to cause it to march in line, either to the front or to the rear, the movements will be executed by the commands and means prescribed in the school ot the company.

To form the battalion on the right or left, by fle, into line of battle.
354. The battalion marching by the right flank, when the colonel shall wish to form it on the right by file, he will determine the line of battle, and the lieutenant-colonel will place two markers on that line, in conformity with what is prescribel in No. 327 .

The head of the battalion being nearly up with the first marker, the colunel will command:

1. On the right, by file into line. 2. MaRCH (or double quickMarch).

At the command march, the leading company will form itself on the right, by file, into line of battle, as indicated in the school of the company, No. 240 ; the front rank man of the first file will rest his breast lightly against the right arm of the first marker; the other companies will follow the movement of the leading company; each captaiu will place bimself on the line at the same time with the front rank man of his first file, and on the right of this man.

The left guide of each company, except the leading one, will place himself on the direction of the markers, and opposite to the left file of bis company, at the instant that the front rank man of this file afrives on the line.

The formation being ended, the colonel will command :

## Guides-Posts.

The colonel will superintend the successive formation of the battalion, moving along the front of the line of battle.

The lieutenant-colonel will, in succession, assure the direction of the guides, and see that the men of the front rank, in placing themselves on the line, do not pass it.

## Changes of front.

## Change of front perpendieularly forward.

355. The battalion being in line of battle, it is supposed to be the wish of the colonel to cause a change of front forward on the right company, and that the angle formed by the old and new positions be a right angle, or a few degrees more or less than one; he will cause two markers to be placed on the new direction, before the position to be occupied by that company, and order its captain to establish it against the markers.

The captain of the right company will immediately direct it upou the markers by a wheel to the right on the fixed pivot; and after baring halted it, he will align it by the right.

These dispositions being made, the colonel will command:

1. Change front forward, on first company. 2. By company, right half wheel. 3. March (or double quick-March).

At the second command, each captain will place himself before the centre of his company.

At the third, each company will wheel to the right on the fixed pivot; the left guide of each will place himself on its left as soon as
he shall be able to pass; and when the colonel shall judge that the companies have sufficiently wheelerl, he will command:

## 4. Forward. 5. Marcir. 6. Guide right.

At the fifth command, the companics ceasing to whcel will march straight forward; at the sixtl, the men will touch elbows toward the right.

The right guide of the second company will march straight forward until this company shall arrire at the point where it should turn to the right; each succecding right guide will follow the file immediately before him at the cessation of the whecl, and will march in the trace of this file until this company shall turn to the right to move upon the line; this guide will then march straight forward.

The second company having arrived opposite to the left file of the first, its captain will cause it to turn to the right; the right guide will direct himsclf so as to arrive squarely upon the line of battle, and when he shall be at three paces from that line, the captain will command :

## 1. Second company. 2. Halt.

At the second command, the company will halt; the files not yet in line with the guide will come into it promptly, the left guide will place himself on the line of battle, and as soon as he is assured in the direction by the lieutenant-colonel, the captain will align the company by the risht.

Each following company will conform to what has just been prescribed for the sccond.

The formation ended, the colonel will command :

> Guides-Posts.
356. If the battalion be in march, and the colonel shall wish to cbange front forward on the first company, and that the angle formed by the old and new positions be a right angle, he will cause two markers to be placed on the new direction, before the position to be occupied by that company, and will command:

1. Change front forward, on first company. 2. By company, right half wheel. 3. Marcir (or double quick-MaRCH).

At the first command, the captains will move rapidly before the centre of their respective companies; the captain of the first company will command: 1. Riyht turn. 2. Quich time; the captains of the other companies will caution them to wheel to the right.

At the command march, the first company will turn to the right, according to the principles prescribed in the school of the soldier, its captain will halt it at three paces from the markers, and the files in rear will promptly come into line. The captain will align the company by the right.

Each of the other companies will wheel to the right on a fixed pivot; the left guides will place themselves on the left of their respective companies, and when the colonel shall judge they have wheeled sufficiently, he will command:

## 4. Forward. 5. March. 6. Guide right.

The colonel will cause the battalion to change front forward on the eighth company according to the same principles and by inverse means.

Change of front perpendicular to the rear.
357. The colonel, wishing to change front to the rear on the right company, will impart his purpose to the captain of this company. The latter will immediately face his company about, wheel it to the left on the fixed pivot, and halt it when it shall be in the direction indicated to him by the colonel; the captain will then face his company to the front, aud align it by the right against the two markers, whom the colonel will cause to be established before the right and left files.

These dispositions being made, the colonel will command :

1. Change front to the rear, on first company: 2. Battalion, about-FAce. 3. By company, left half wheel. 4. March (or double quick-MARCH).

At the second command, all the companies, except the right, will face about.

At the third, the eaptains whose companies have faced about, will each place bimself behind the centre of his company, two paces from the front rank, now the rear.

At the fourth, these companies will wheel to the left on the fixed pivot by the rear rank; the left guide of each will, as soon as he is able to pass, place himself on the left of the rear rank of his company, now become the right; and when the coloucl shall judge that the companies have sufficiently wheeled, he will command:

## 5. Forward. 6. March. 7. Guide left.

At the sixth conmand the companies will eease to wheel, mareh straight forward toward the new line of battle, and, at the seventh, take the touch of the elbow toward the left.

The second company, from the right, having arrived opposite to the left of the first, will turn to the left; the guide will so direct himself as to arrive parallelly with the line of battle, cross that line, and when the front rank, now in the rear, shall be three paces beyond it, the captain will command:

## 1. Second Company. 2. Halt.

At the second eommand, the company will halt; the files which may not yet be in line with the guide, will promptly eome into it; the eaptain will eause the company to face about, and then align it by the right.

All the other companies will execute what bas just been prescribed for the second, each as it successively arrives opposite to the left of the company that precedes it on the new line of battle.

The formation being ended, the colonel will command ;

## Guides-Posts.

The colonel will cause a change of front on the left company of the battalion to the rear, according to the same principles and by inverse means.

## To ploy the battalion into column doubled on the centre.

358. This movement consists in ploying the corresponding companies of the right and left wings into column at company distance, or closed in mass in rear of the two eentre eompanies.

The colonel, wishing to form the double column at company distance (the battalion being in line of battle), will command:

## 1. Double column, at half distance. 2. Battalion, inward-FACE. 3. March (or double quick-March).

At the first command, the captains will place themselves two paces in front of their respective companies; the captains of the two centre companies will caution them to stand fast, and the other captains will eaution their companies to face to the left and right respectively. The eovering sergeants will step into the front rank,
At the second command, the fourth and fifth companies will stand fast; the others of the right wing will face to the left, and the others of the left wing will face to the right; each captain whose company bas
faced, will hasten to break to the rear the two files at the head of his company; the left guide of each right company, and the right guide of each left company, will each place himself at the bead of its front rank, and the captain by the side of his guide.

At the command march, the fourth and fifth companies, which are to form the first division, will stand fast; the senior captain of the two will place hinself before the centre of the division, and command: Guide right; the junior captain will place himself in the interval hetween the two companies, and the left guide of the left company will place himself in the front rank on the left of the division, as soon as he shall be able to pass.

All the other companies, conducted by their captains, will step off with life to arrange themselves in column at company distance, each company behind the preceding one in the column of the same wing, so that, in the right wing, the third may be next behind the fourth, the second next to the third, and so on to the right company; and, in the left wing, the sixth may be next bchind the fifth, the seventh next to the sixth, and so on to the left company of the battalion.

The corresponding companies of the two wings will unite into divisions in arranging themselves in column; an instant before the union, at the centre of the column, the left guides of right companies will pass into the line of file-closers, and cach captain will command: 1. Such company. 2. Halt. 3. Front.

At the second command, which will be given at the instant of nnion, each company will halt; at the third, it will face to the front. The senior captain in each division will place himself on its right, and command, Right-Dress, and the junior captain will place himself in the interval between the two companies. The division being aligned, its chief will command, Front, and take his position two paces before its centre.

The column being thus formed, the divisions will take the respective denominations of first, second, third, etc., according to position in the column, beginning at the front.

The lieutenant-colonel, who, at the second command given by the colonel, will have placed himself at a little more than company distance in rear of the right guide of the first division, will assure the right guides on the direction as they successively arrive, by placing himself in the rear.

The music will pass to the rear of the column.
359. The battaliou being in march, to form the double column at company distance without halting the battalion, the colonel will command:

1. Double column, at half distance. 2. Battalion, by the right and left flanks. 3. Marcii (or double quick-March).

At the first command, each captain will move briskly in front of the centre of his company ; the captains of the fourth and fifth will caution their companies to march straight forward; the other captains will cantion their companies to face to the right and left.

At the command march, the fourth and fifth companies will continue to march straight forward; the senior captain will place himself before the centre of his division and command, Guide, right; the juvior captain will place himsclf in the interval between the two companies. The left guide of the fifth company will place himself on the left of the front rank of the division. The men will take the touch of elbows to the right. The color and general guides will retake their places. The three right companies will face to the left, and the threo left companies will face to the right. Each captain will break to the rear two files at the head of his company; the left gnides of the right companies, and the right guides of the left companies will each place himself at the head of the front rank of his company, and the captain by the side of his guide.

The third and sixth companies will enter the column and direct themselves parallelly to the first division. Each of the other companies will, in like manner, place itself behind the company of the wing to which it belongs, and will be careful to gain as much ground as possible toward the head of the column.

The corresponding companies of cach wing will unite iuto divisions on taking their positions in column, and each captain, the instant the head of his company arrives at the centre of the column, will command: 1. Sueh company, by the right (or left) flenk. 2. March. The senior captain of the two companies will place himself in front of the centre of his division, and command, Guide right; the junior captain will place himself' in the interval between the two companies. The two companies thus furmed into a division will take the tonch of elbows to the right, and when each division has gained its proper distance, its chief will canse it to march in quick time.

The double column, elosed in mass, will be formed according to the same principles and by the same commands, substituting the indication, closed in mass, for that of at half distance.

Deployment of the double column, faced to the front.
360. The colonel wishing to deploy the double column, will place 21
a marker respectively before the right and left files of the first division, and a third before the left file of the right company, same division; which being done, he will cause the two general guides to spring out on the alignmeut of the markers a little beyond the points at which the respective flanks of the battalion ought to rest ; be will then command:

## 1. Deploy column. 2. Battalion, outward-Face. 3. March (or double quick-March).

The column will deploy itself on the two companies at its head, according to the principles prescribed for the deployment of columns in mass. The captain of these companies will each, at the command march, place himself on the right of his owu company, and align it by the right; the captain of the fourth will then place himself in the rear rank, and the covering sergeant in the rank of file-closers, at the moment the captain of the third shall come to its left to align it.

The deployment being ended, the colonel will command:

## Guides-Posts.

361. The battalion being in double column and in march, if the coloncl shall wish to deploy it without halting the column, he will cause thrce markers to be posted on the line of battle, and when the head of the column shall arrive near the markers, he will command: 1. Deploy column. 2. Battalion, by the right and left flanks. 3. Marci (or double quick-March). The column will deploy on the two leading companies, according to the principles prescribed for the deployment of a close column; at the command march, the chief of the first division will halt it, and the captains of the fourth and fifth companies will align their companies by the right.
362. If the column be in march, and it is the wish of the colonel to deploy the column, and to continue ou the march in line of battle, he will not cause markers to be established at the head of the column. At the first command, the chicf of the first division will command, quick time; at the command march, the first division will continue to march in quick time ; the colonel will command, guide centre. The captains of the fourth and fifth companies, the color, and the men, will immediately conform to the principles of the march in line. The companies will take the quick step by the command of their captains, as they successively arrive in line. The movement completed, the colonel may cause the battalion to march in double quick time.

To form the double column into line of battle, faced to the right or left.
363. The double column being at company distance, and at a halt, may be formed into line faced to the right or left; when the colonel shall wish to form it faced to the right, he will command:

1. Right into line, wheel, left companies on the right into line. 2. Battalion, guide right. 3. March (or double quick-March).

At the first command, each captain will place himself before the centre of his company; the right companies will be cautioned that they have to wheel to the right, the left companies that they will have to move straight forward.

At the sccond command, the left gnide of the fourth company will place himself briskly on the direction of the right guides of the column, face to them, and opposite to one of the three last files of his company when in line; the lieutenant-colonel will assure him in that position.

At the command march, briskly repeated by the captains, the right companies will form to the right into line, the left companies will put themselves in march in order to form on the right into line; the licu-tenant-colonel will assure the guides of the left wing on the line as they in succession come upon it.

## Dispositions against cavalry.

364. A battalion being in column by company, at full distance, right iu front, and at a halt, when the colonel shall wish to form it into square, be will first cause divisions to be formed; which being done, he will command:
365. To form square. 2. To half distance, close column. 3. March (or double quick-March).

At the command march, the column will close to company distance, the second division taking its distance from the rear rank of the first division.

At the moment of balting the fourth division, the file-closers of each company of which it is composed, passing by the outer flank of their companies, will place themselves two paces before the front rank opposite to their respective places in line of battlc, and face toward the head of the column.

At the commencement of the movement, the major will place himself
on the right of the column abreast with the first division ; the buglers formed in two ranks will place themselves at platoon distance, behind the inner platoons of the second division.

These dispositions being made, the colonel may, according to circumstances, put the column in march, or cause it to form squares; if he wish to do the latter, he will command :

## 1. Form square. 2. Right and left into line, wheel.

At the first command, the lieutenant-colonel, facing to the left guides, and the major, facing to those of the right, will align them, "from the front, on the respective guides of the fourth division, who will stand fast, holding up their pieces, inverted, perpendicularly; the right guides, in placing themselves on the direction, will take their exact distances.

At the second command, the chief of the first division will caution it to stand fast: all the captains of the second and third divisions will place themselves before the centres of their respective companies, and caution them that they will have to wheel, the right companies to the right, and the left companies to the left into line of battle.

The color-bearer will step back into the line of file-closers, opposite to his place in line of battle, and will be replaced by the corporal of his file, who is in the rear rank; the corporal of the same file who is in the rank of file-closers will step into the rear rank.

The chief of the fourth division will command: 1. Fourth division, forward; 2. Guide left, and place himself at the same time two paces outside of its left flank.

These dispositions ended, the colonel will command:

## March (or double quick-March).

At this command, briskly repeated, the first division will stand fast; but its right file will face to the right, and its left file to the left.

The companies of the second and third divisions will wheel to the right and left into line, and the buglers will advauce a space equal to the front of a company.

The fourth division will close up to form the square, and when it shall have closed, its chief will halt it, face it about, and align it by the rear rank upon the guides of the division, who will, for this purpose, remain faced to the front. The junior captain will pass into the rear rank, now become the front, and the covering sergeant of the left company will place himself behind him in the front rank, become rear. The file-closers will, at the same time, close up a pace on the front rank, and the outer file on each flank of the division will face outward.

The square being formed, the colonel will command:

## Guides-Posts.

At this command, the chiefs of the first and fourth divisions, as well as the guides, will enter the square.

- The captains whose companics have formed to the right into line, will remain on the left of their companies; the left guide of each of those companies will, in the rear rank, cover his captain, and the covering sergeant of each will place himself as a file-closer behind the right file of his company.

The field and staff will enter the square, the lieutenant-colonel placing himself behind the left, and the major behind the right of the first division.

If the battalion present ten, instead of eight companies, the fourth division will make the movements prescribed above for the second and third divisions, and the fifth, the movements prescribed for the fourth division.

The fronts of the square will be designated as follows: the first division will always be the first front; the last division, the fourth front; the right companies of the other divisions will form the secoud front; and the left companies of the same divisions the third front.
365. If the battalion, hefore the square is formed, he in double column, the two leading companies will form the first front, the two rear companies the fourth; the other companies of the right half battalion will form the second, and those of the left half battalion the third front.

The first and fourth fronts will be commanded by the chiefs of the first and fourth divisions; each of the other two by its senior captain. The commander of each front will place himself four paces behind its present rear rank, and will be replaced momentarily in the command of his company by the next in rank therein.
366. If the column by division, whether donhle or single, be in mass, and the colonel shall wish to form it into square, he will first cause it to take company distance; to this effect, he will command :

1. To form square. 2. By the head of column, take half distance.

The colonel will halt the column the moment the third division shall have its distance, and as soon as the necessary dispositions are made, form it into square.
367. The battalion being formed into square, when the colonel shall wish to cause it to advance a distance less than thirty paces, he will command :

## 1. By (such) front, forward. 2. March.

If it be supposed that the adrance be made by the first front, the chief of this front will command:

## 1. First front, forward. 2. Guide centre.

The cbicf of the second front will face his front to the left. The captains of the companies composing the front will place themselves outside, and on the right of their left guides, who will replace them in the front rank; the ehief of the third front will face bis fromet to the right, and the captains in this front will place themselves outside, and on the left of their covering sergeants; the chief of the fourth front will face his front about, and command: 1. Fourth frout, forward. 2. Guide centre. The captain who is in the centre of the first front, will be charged with the direction of the march.

At the command march, the square will put itself in motion; the companies marchiug by the flank will be careful not to lose their distances. The chief of the fourth division will cause his division to keep constantly closed on the flanks of the second and third fronts.

This movement will only be executed in quick time.
The lieutenant-colonel will place bimself in rear of the file of direction, in order to regulate bis march.

If the colonel should wish to balt the square, he will command:

## 1. Battalion. 2. Halt.

At the sccond command, the square will halt; the fourth front will face about immediately, and without further command ; the second and third fronts will face outward; the captains of the companies will resume their places in square.

In moving the square forward by the sccond, third or fourth fronts, the same rule will be observed.

36s. The battalion being formed into square, when the colonel shall wish to cause it to advance, be will command :

## 1. Form column.

The chief of the first front will command:

## 1. First division, forward. 2. Guide left.

The commander of the fourth front will caution it to stand fast; the commander of the second front will canse it to face to the left, and then commaud: By company, by file left. The commander of the third
front will eause it to face to the right, and then command: By company, by file right. At the moment the sccond and third fronts face to the left and right, eaeh captain will canse to hreak to the rear the two leading files of his company.

These dispositions being made, the colonel will command:

## 3. March (or double quick-March).

At this command, the first front will march forward ; its ehief will halt it when it shall have advanced a space equal to half its front, and align it by the left.

The corresponding eompanies of the second and third fronts will wheel by file to the left and right, and mareh to meet each other hehind the centre of the first division. and the moment they unite the captain of each company will halt his company and face it to the front. The division being re-formed, its ehief will align it by the left.

The commander of the fourth front will cause it to face ahout; its file-elosers will remain before the frout rauk.

The column being thas re-formed, the colonel may put it in march; the right gaides will preserve eompany distance exactly as the directing guides.

When the colonel shall wish to re-form square, he will give the necessary commands.
369. To eause the square to march in retreat, the colonel will first eause column to be formed, and, when formed, he will canse it to face by the rear rank; to this end, he will command:

## 1. To march in retreat. 2. Face by the rear rank. 3. Battalion, about-FACE.

At the seeond command, the file-elosers of the interior divisions will plaee themsclves, passing by the outer flanks of their respeetive eompanies, behind the front rank opposite to their places in line of battle; the file-elosers of the other divisions will stand fast.

At the third command, the battalion will face about; cach chief of dirision will place himself before its rear rauk, become front, passing through the interval between its two companies; the guides will step into the rear rauk, now front.

The eolumn being thus disposed. the eolonel may put it in march, or eause it to form square as if it were faced by the front rank. The square being formed, its fronts will preserve the same designations they had when faced by the front rank.

The battalion being in square by the rear rank, when the colonel shall wish to mareh it in retreat or in adrance, he will eonform to what

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 MANUAL FOR VOLUNTEERS AND MILITIA.is prescribed above; otherwise, he will re-form the column, by marching forward the fourth front.

If the square is to be marched to the front, the colonel will face the column by the front rank; to this end he will command :
> 1. T.o march in advance. 2. Face by the front rank. 3. Battalion, about-FACE.
370. If the column be marching in advance, and the colonel sball wish to march it in retreat, he will command:

## 1. To march in retreat. 2. Battalion, right about. 3. March (or double quick-MARCi).

At the second command, the file-closers of the second and third divisions will place themselves rapidly before the front rank of their respective divisions. At the command march, the column will face about and move off to the rear.

If the column be marching in retreat, and the colonel shall wish to march it in advance, he will command:

## 1. To march in advance. 2. Battalion, right about. 3. March (or double quick-MARCH).

At the second command, the file-closers of the second and third divisions will place themselves before the rear rank of their respective divisions; at the third, the column will face by the front rank.

## To reduce the square.

371. The colonel, wishing to break the square, will command:

## 1. Reduce square. 2. March (or double quich-MARCH).

This movement will be executed in the manner indicated, No. 368 ; but the file-closers of the fourth front will place themselves behind the rear rank the moment it faces about; the field and staff, the colorbearer and buglers, will, at the same time, return to their places in column.

## To form square from line of battle.

372. To ploy the battalion into column upon one of the flank divisions, the colonel will command:
373. To form square. 2. Column at half distance, by division. 3. On the first (or fourth) division. Battalion, right (or left)— Face. 5. March (or double quich-March).

This movement will be executed according to the principles already prescribed.
373. To ploy the battalion into double column, the colonel will command :

1. To form square. 2. Double column at half distance. 3. Battalion, inward-Face. 4. March (or double quickMarch.
2. The battalion being in march, to ploy it into double column to form square, the coloncl will command:
3. To form square. 2. Form double column. 3. Battalion, by the right and left flanks. 4. March (or double quickMarch).

The chief of the leading division will halt his division at the command march.

Squares in four ranks.
375. If the squares formed in two ranks, according to the preceding rules, should not be deemed sufficiently strong, the colonel may cause the square to be formed in four ranks.

The battalion being in columu by company at full distance, right in front, and at a balt, when the colonel shall wish to form square in four ranks, he will first cause divisions to be formed, which being executed, be will command:

1. To form square in four ranks. 2. To half distance, close column. 3. March (or double quick-March).

At the first command, the chief of the first division will caution the right company to face to the left, and the left company to face to the right. The chiefs of the other divisions will caution their divisions to move forward.

At the command march, the right company of the first division will form into four ranks on its left file, and the left company into four ranks on its right file. The formation ended, the chief of this division will align it by the left.

The other divisions will move forward and double their files marching: the right company of each division will double on its left file, and the left company on its right file. The formation completed, each chief of division will command: Guide left. Each chief will halt his division when it shall have the distance of a company front in four ranks from the preceding one, counting from its rear rank, and will align his division by the left. At the instant the fourth division is balted, the fileclosers will move rapidly before its front rank.

The colonel will form square, re-form column, and reduce square in four ranks, by the same commands and means as prescribed for a battalion in two ranks.
376. If the square formed in four ranks be reduced and at a halt, and the colonel shall wish to form the battalion into two ranks, he will command:

## 1. In two ranks, undouble files. 2. Battalion, outward-FACE. 3. March.

At the first command, the captains will step before the centres of their respective companies, and those on the right will caution them to face to the right, and those on the left to face to the left.

At the second command, the battalion will face to the right and left.

At the command march, each company will undouble its files and re-form into two ranks as indicated in the school of the company. Each captain will halt his company and face it to the front. The formation completed, each chief of division will align lis division by the left.
377. To form square in four ranks on one of the flank divisions, the colonel will command:

1. To form square, in four ranks. 2. Column at half distance, by livision. 3. On the first (or fourth) division. 4. Battalion, right (or left)-Face. 5. March (or double quick-March).

At the sccond command, each chicf of division will place bimsclf before the centre of his division, and caution it to face to the right.

At the fourth command, the right guide of the first division will remain faced to the front, the battalion will face to the right.

At the command march, the first file of four men of the first division will face to the front, remaining doubled. All the other files of fonr men will step off together, and each in succession will close up to its proper distance on the file preceding it, and face to the front, remaining
doubled. When the last file shall bave elosed, the chief of division will eommand: Left, Dress.

The other divisions will ploy into eolumn in the same manner as with a battalion in two ranks, oloserving what follows: the chiefs of divisions instead of allowing their divisions to file past them, on entering the eolumn will continue to lead them, and as each division shall arrive on a line with the right gnide of the first division, its ehief will halt the right guide, who will immediately faec to the front; the first file of four men will also halt at the same time and face to the front, remaining doubled. The sceond file will elose on the first, and when closed, halt, and face to the front, remaining doubled. All the other filcs will exeente suceessively what has just heen prescribed for the seeond. When the last file shall have closed, the ehief of division will eommand: Left, Dress.
378. If the colonel should wish to form a perpendieular square in four ranks by donble eolumn, he will command:

1. To form square, in four ranks. 2. Double column, at half distance. 3. Battalion, inward-Face. 4. March (or double quick-MaRCH).

At the second command the eaptains of eompanies will place themselves before the eentres of their respective companies, and eaution those on the right to face to the left, and those on the left to face to the right. The eaptain of the fifth eompany will eaution bis eovering sergeant to stand fast.

At the third eommand the battalion will face to the left and right; at the eommand march, the left file of the fourth, and the right file of the fifth eompany, will face to the front, remaining doubled. The fourth company will elose suecessively by file of fours on the left file, and the fifth eompany, in like manner, on the right file; the files will face to the front, remaining donbled. The formation eompleted, the ehief of dirision will command: Right, Dress. The junior eaptain will place himself in the interval between the two eumpanies.

The other companies will close as prescribed for the double eolumn in two ranks, observing what follows: Each eaptain will halt the leading gnide of his eompany the moment the head of his company arrives on a line with the eentre of the column. In the right companies, the left guides will step into the line of filc-closers, and the left file of four men will faee immediately to the front, remaining donbled, and by the side of the right guide of the left eompany. The eompanies will each form into four ranks, the right companies on the left file, and the left eompanies on the right file. The formation completed, the junior cap-
tain will place himself between the two companies, and the senior will command: Right, Dress.

## Column against cavalry.

379. When a column closed in mass has to form square, it will begin by taking company distance; but if so suddenly threatened by cavalry as not to allow time for this disposition, it will be formed in the following manner:

The colonel will command:

## 1. Column against cavalry. 2. March.

At the first command, the chief of the leading division will caution it to stand fast and pass behind the rear rank; in the interior divisions each captain will promptly designate the number of files nccessary to close the interval between his company and the one in front of it. The captains of the divisions next to the one in rear, in addition to closing the interval in front, will also close up the interval which scparates this division from the last; the chief of the fourth division will caution it to face about, and its file closers will pass briskly before the front rank.

At the command march, the guides of each division will place themselves rapidly in the line of file-closers. The first division will stand fast, the fourth will face about, the outer file of cach of these divisions will then face ontward; in the other divisions the files designated for closing the intervals will form to the right and left into line, but in the division next to the rearmost one, the first files that come into line will close to the right or left until they join the rear division. The files of each company which remain in column will close on their outer filcs, formed into line, in order to create a vacant space in the middle of the column.

If the column be in march, the column against cavalry will be formed by the same commands and meaus. At the command march, the first and fourth divisions will balt, and the latter division will face about; the interior divisions will conform to what has been prescribed above.

The battalion being no longer threatened by cavalry, the colonel will command:

## 1. Form column. 2. March.

At the command march, the files in column will close to the left and right and make room for those in line, who will retake their places in column by stepping backward, except those closing the interval be-
tween the two rear divisions, who will take their places in column by a flank movement. The fourth division will face about, the guides will resume their places.

To deploy the battalion as skirmishers, and to rally this battalion.
To deploy the battalion as skirmishers.
350. A battalion being in line of battle, if the colonel should wish to deploy it on the right of the sixth company, for example, holding the three right companies in reserve, he will signify his intention to the lieutenant-colonel and adjutant, and also to the major, who will be directed to take charge of the reserve. He will point out to the lieu-tenant-colonel the direction he wishes to give the line, as well as the point where he wishes the right of the sisth company to rest, and to the commander of the reserve the place he may wish it established.

The lieutenant-colonel will more rapidly in front of the right of the sixth company, and the adjutant in front of the left of the same company. The commander of the reserve will dispose of it in the manner to be bercinafter designated.

The colonel will then command :

1. First (or second) platoons-as skirmishers. 2. On the right of the sixth company-take intervals. 3. March (or double quick -March).

At the second command, the captains of the fifth and sixth companies will prepare to deploy the first (or second) platoons of their companies, the sixth on its right, the fifth on its left file. The captain of the fourth company will face it to the right, and the captains of the seventh and eighth companies will face their respective companics to the left.

At the command march, the movement will commence, the platoons of the fifth and sixth companies will deploy forward (see No. 294); the right guide of the sixth will mareh on the point which will be indicated to him by the lieutenant-colonel.

The company which has faced to the right, and also the companies which have faced to the left, will march straight forward. The fourth company will take an interval of 100 paces, counting from the left of the fifth, and its chief will deploy its first platoon on its left file. The seventh and eighth companies will each take an interval of 100 paces, counting from the first file of the company which is immediatcly on its
right; and the chicfs of these companies will afterward deploy their first platoons on the right file.

The guides who conduct the files on which the deployment is made, should be careful to direct themselves toward the outer man of the neighboring company, already deployed as skirmishers; or if the company has not finished its deployment, they will judge earefully the distance which may still be required to place all these files in line, and will then march on the point thus marked out. The companics, as they arrive on the line, will align themselves on those already deployed.

The lieutenant-colonel and adjutant will follow the deployment, the one on the right, the other on the left; the movement concluded, they will place themsclves near the colonel.

The reserves of the companies will be established in echelon in tho following manner. The reserve of the sixth company will be placed 150 paces in rear of the right of this company ; the reserves of the fourth and fifth companies, united, oppositc the centre of their linc of skirmishers, and thirty paces in advance of the rescrve of the sixth company; the reserves of the seventh and eighth companies, also united, opposite the centre of their line of skirmishers, and thirty paces farther to the rear than the reserve of the sixth company.

The major commanding the companics composing the reserve, on receiving an order from the colonel to that effect, will march these companies thirty paccs to the rear, and will then ploy them into column by company, at half distance; after which he will conduct the column to the point which shall have been indicated to him.

The colonel will have a general superintendence of the movement; and when it is finished, will move to a point in rear of the line, whence his vierv may best embrace all the parts, in order to direct their movements.

If instead of deploying forward, it be desired to deploy by the flank, the sixth and fifth companics will be moved to the front ten or twelve paces, halted, and deployed by the flank, the one on the right, the other on the left file, by the means already indicated. (See No. 265.) Each of the other companies will be marched by the flank; and as soon as the last file of the company, next toward the direction, shall bave taken its interval, it will be moved upon the line established by the fifth and sixth companies, balted and deployed.

In the preceding example, it has been supposed that the battalion was in order of battle; but if in column, it would be deployed as skirmishers by the same commands and according to the same principles.

If the deployment is to be made forward, the directing company, as soon as it is unmasked, will be moved ten or twelve paces in front of
the head of the column, and will be then deployed on the file indicated. Each of the other companies will take its iuterval to the right or left, and deploy as soon as it is taken.

If the deployment is to be made by the flank, the directing company will be moved in the same manner to the front, as soon as it is unmasked, and will then be halted and deployed by the flank on the file indicated. Each of the other companies will be marched by the flank, and when its interval is taken, will be moved on the line, halted, and deployed as soon as the company next toward the direction shall have finished its deployment.

When the color-company is to be deployed as skirmishers, the eolor, without its guard, will be detached, and remain with the battalion reserve.

## The rally.

381. The colonel may cause all the movements prescribed for a enmpany to be executed by the battalion, and by the same commands and the same signals. When be wishes to rally the battalion, he will cause the rally on the battalion to be sounded, and so dispose his reserve as to protect this movement.

The companies deployed as skirmishers will be rallied in squares on their respective reserves (sce No. 280) ; each reserve of two contiguous companies will form the first front of the square, throwing to the rear the sections on the flanks; the skirmishers who arrive first will complete the lateral fronts, and the last the fourth front. The officers and sergeants will superintend the rally, and as fast as the men arrive, they will form them into two ranks, without regard to height, and cause them to face outward.

The rally being effected, the commanders of squares will profit by any interval of time the eavalry may allow for putting them in safety, either by marching upon the battalion rescrve, or by seizing an advanced position; to this end, each of the squares will be formed into column, and march in this order ; and if threatened anew, it will halt, and again form square.

As the companies successively arrive near the battalion reserve, each will re-form as promptly as possible, and, without regard to designation or number, take place in the column next in the rear of the companies already in it.

The battalion reserve will also form square, if itself threatened by cavalry. In this case, the companies in marching toward it will place themselves in the seetion without fire (i. e., march on the angles), and thus mareb on the squares.

## Article VII.

## SCHOOL OF THE TROOPER.

382. The object of this scbool is to make troopers skilful in the management of their horses and arms, iu all directions, and at all gaits. To accomplish this, the instructor must attend particularly, from the commencement, to placing the men well on horseback, and to habituating them in the application of correct principles.

The instruction should always commence at a walk, in order to give the troopers the facility of seating themselves well, and of calming their horses, as they are generally more restive on first being brought together. The instruction should also terminate at a volk.

At the commencement, it is generally necessary to make the troopers march repeatedly on the same track, at a walk, and at a trot; when, however, they already bave some skill in the management of their horses, which is almost invariably the case with volunteer cavalry, this exercise is less necessary, and the instructor may proceed almost at once to the changes of direction, and other morements.

When the instructor wishes to rest the men, he commands:

## Rest.

At this command, the trooper is no longer required to remain immovable.

When the instructor wishes to resume the drill, he commands:

## Attention.

When the trooper resumes his immovable position, and fixes his attention.

In the first part of the instruction but a very few men should be under the same instructor, or small squares should be formed as in infantry.

To conduct the horses to the drill ground.
383. The horses having the bridle reins near the neck, each trooper takes hold of the reins with theright hand, six inches from the mouth of the horse, the back of the hand up, the hand elevated and firm, to
prevent the horse from jumping, and leads his horse to the ground, where under the directioii of the instructor, he places it in such position that all the horses shall be on the same line, or in one rank.

The squad being formed, the instructor commands:

## Count by fours.

At this command, the men count from right to left, one, two, three, four, according to the place which each one occupies.

The troopers should be without arms or spurs.

## Position of the trooper before mounting.

384. On the left side of the horse, abreast of the lower jaw ; the reins in the right hand six inches from the mouth of the horse, the back of the hand up. Heels upon the same line as nearly as the conformation of the man will permit, the feet at a little less than a right angle, and equally turned out; the knee straight without being stiff; the body perpendicular upon the haunches and slightly inclined forward; the left hand hanging by the side, the palm a little turned out, the little finger along the seam of the pantaloons; the head erect without being constrained, the chin drawn in, and eyes to the front.

## To mount.

385. The instructor commands:

## Prepare to Mount.

One time and two motions.
First motion. Nos. 1 and 3 move forward six paces, stepping off with the left foot, keeping opposite their intervals. Place the right foot three inches in rear of the left; make a face and a half to the right on both heels, the right toe to the front; let go the right rein; slip the right hand along the left rein: take two steps, stepping off with the right foot, and face to the left on the toe of the left foot, the right side toward the flank of the horse; carry back the right heel three inches in rear of the left; the right hand seizing the end of the reins is placed upon the cantle of the saddle.

Second motion. Place a third of the left foot in the stirrup, supporting it against the forearm of the horse; rest upon the point of the right foot, and seize a lock of the mane with the left hand over the reins as far forward as possible, the extremity of the lock passing out of the hand on the side of the little finger.

## Mount.

## One time and two motions.

First motion. At the command mount, spring from the right foot, holding firmly to the mane, at the same time prcssiug the cantle with he right hand to prevent the saddle from turning; the body erect.

Second motion. Pass the right leg stretehed over the eroup of the horse, without touching him; sit down lightly in the saddle, placing the right hand at the same time, without quitting the reins, ypon the right holster, the palm of the band resting upon it, the fingers on the outside of it, and take one rein of the bridle (if a snaffle) in each hand.

If the trooper is using the curb bridle, he will pass the reins into the left (or bridle hand), the little finger between the reins, the other fingers well elosed, and the thumb upon the second joint of the first finger; the elbow slightly detached from the body, the hand four inches above the pommel of the saddle, the fingers six inches from, and turned toward the body; the right hand at the side.

The instructor should allow but a short interval between the first and second motion, because were the trooper to remain a long time on the stirrup, the borse would become restive, and move out of place, then command:

## Form-Rank.

Nos. 1 and 3 raise the wrists (or the brille hand), and hold the legs elose to the body of the horse to keep hin quiet; Nos. 2 and 4 enter the intervals without jostling and without precipitation.

After mounting, the instructor causes the stirrups to be crossed upon the neek, the left stirrup over the right.

## Position of the trooper, mounted.

386. The buttocks bearing equally upon the saddle, and as far forward as possible; the thighs turned upon their flat side, or knees turned in, without effort, embracing the horse equally, and stretched only by their own weight and that of the legs; a supple bend of the knces; the legs below the knee free, and falling naturally; the toes falling in like mauner; the loins supported without stiffess; the upper part of the body at ease, free and erect; the shoulders square; the arms free, the elbows falling naturally; the bead erect, at ease, and not drawn in between the shoulders; when the snaffle is worn, one rein in each hand, the fingers closed, the thumb along each rein, the wrists as high
as the elbow, at six inches from each other, the fingers turned toward each other, the upper extremity of the reins leaving the hand on the side of the thumb.

The instructor then commands:

## 1. E!es Right (or Left). 2. Front.

At the word right, the head is turned gently to the right, so that the corner of the left eye, next the nose, may be in a line witu the buttons of the jacket.

At the command front, the head is gently turned to the front.

## The use of the reins.

387. The reins serve to prepare the horse for the movements he is required to execute, to direct him, and to stop him. Their action should be progressive, and in accordance with that of the legs.

When the trooper makes use of the reins, the arms should act with suppleness, and their movements ought to extend from the waist to the shoulder.

## The use of the legs.

38s. The legs serve to urge the horse forward, to support him, and to aid him in turning to the right or left. Whenever the trooper wishes his horse to move forward, he should close the legs by degrees behind the girths, causing their effects to correspond with the sensibility of the horse, taking care neither to open or elevate the knees, of which the bend should be always pliant. The trooper relaxes the legs by degrees, as he closed them.

## The effect of the reins and legs combined.

389. In elevating the wrists, or the bridle hand, a little, and closing the legs, the trooper "gathers his horse:" in elevating the wrists, or bridle hand, he slackens the pace; in repeating this movement of the wrists, or bridle hand, he stops the horse, or he "reins back." The trooper ought to elevate the wrists without eurving them, at the same time drawing them slightly toward the body.

In opeuing the right rein, and elosing the right leg, the trooper turns his horse to the right. To open the right rein, the right wrist is carried, without turning it, more or less to the right, according to the sensibility of the horse. When the curb is worn, move the bridle hand forward and to the right.

In opening the left rein, and closing the left leg, the trooper turns his horse to the left. The left rein is opened upon the same principle as that on which the right is opened. When the curb is worn, move the bridle hand forward and to the left.

By lowering the wrists, or bridle hand slightly, the horse is at liberty to move forward; the closing of the legs puts him in motion.

## To march.

390. The instructor commands:

## 1. Squad, forward. 2. March.

At the command squad, formord, elevate the wrists, or bridle hand, slightly, and elose the legs, in order to gather the horse.

At the command march, lower the wrists, or bridle hand, slightly, and elose the legs more or less, according to the sensibility of the horse. The horse having obeyed, replace the wrists, or bridle hand, and the legs by degrees.

After some steps the instructor commands:

## 1. Squad. 2. Halt.

At the first command, the trooper gathers his horse withont slackening bis pace.

At the command halt, the trooper braces himself in the saddle; elevate the wrists, or bridle hand, at the same time, by degrees, and close the left to prevent the horse from backing. The horse having obeyed, replace the wrists and the legs by degrees.

## To turn to the right or left.

391. The instructor commands:
392. Squad, to the right (or left). 2. March. 3. Halt.

At the command squad, to the right, gather the horse.
At the command march, open the right rein, or move the bridle hand to the right, and gradually close the right leg. In order not to turn the borse too short, perform the movement on the fourth of a circle three paces in length. The movement being almost completed, diminish the effect of the rein and the right leg, supporting the horse at the same time with the left rein and leg to terminate the movement.

At the command halt, elevate the wrists or bridle hand slightly, and
hold the legs near, in order to keep the horse straight in the new direction; replace the wrists and the legs by degrees.

## To turn about to the right, or left.

392. The instructor commands:

## 1. Squad, to the right (or left), about. 2. March. 3. Halt.

This command is executed on the principles prescribed for the turn to the right or left, with this difference, that the horse should pass over a semicircle of six paces and face to the rear.

To make a quarter turn to the right or left.
393. The instructor commands:

1. Squad, right (or left) oblique. 2. March. 3. Halt.

At the command right oblique, gather the horse.
At the command march, open the right rein a little, or move the bridle hand slightly to the right, and close the right leg slightly, in order to make the horse execute a quarter twon to the right; cause the horse to feel, almost at the same time, the effect of the right rein and the left leg. to terminate the movement without increasing the degree of obliquity.

At the command halt, elevate the wrist, or bridle hand, and close the legs slightly, to keep the direction of the quarter turn to the right; replace the wrists and legs loy degrees.
The instructor commands hatt, almost inmediately after the command march; he does not require great exactness in this movement, the object of which is to give the trooper the first idea of the oblique march.

To rein back, and to cease reining back.
394. The instructor commands:

## 1. Squad, backward. 2. March. 3. Squad. 4. Halt.

At the command backoord, gather the horse. At the command march, keep a firm seat, elevate the wrists, or bridle hand, and close the legs. As soon as the horse obeys, lower and elerate the wrists or bridle hand, in regular succession, which is called yieldiny and cheeking. If the horse throws the haunches to the right, elose the right leg; if to the left, close the left leg. If these means are not sufficient to
replace the horse in his proper position, open the rein on the side toward which the horse throws the haunches, causing him to feel slightly, at the same time, the effect of the opposite rcin.

At the command squad, the trooper prepares to stop. At the command halt, lower the wrists, or bridle band, and close the legs. The horse having obeyed, replace the wrists, or bridle hand, and the legs by degrees.

## To dismount.

395. The instructor causes the stirrups to be let down, and tre feet put in them. He then commands:

## 1. Prepare to Dismount.

One time, and tioo motions.
First motion. Nos. 1 and 3 move forward six paees, and keep themsclves opposite their intervals. Pass the right rein of the snaflle (when it is worn) into the left hand, the extremity of the reins leaving the hands on the side of the thumb.

Second motion. Seize the reins of the snaftle (or of the curb bridle) above and near the left thumb with the right hand, the back of the hand up, and place this hand upon the right bolster. Disengage the right foot from the stirrup, and seize with the left hand a loek of the mane over the reins.

## 2. Dismount.

## One time, and two motions.

First motion. At the command dismonnt, rise upon the left stirrup; pass the right leg extended over the croup of the horse, without touching him, and bring the right thigh near the left, the body well sustained; at the same time place the right hand on the cantle of the saddle, slipping it along the reins without letting them go; deseend lightly to the ground, the body erect, the heels on the same line. Let go the mane with the left hand.

Second motion. Make a face and two steps to the left, stepping off with the left foot; slip the right hand along the left rein, seize both reins with the same hand six inches from the mouth of the horse, back of the hand up, and take the position of the trooper dismonted.
To file off.
396. The instructor commands :

1. By the right (or left)-File off. 2. March.

At the command march, the trooper of the right (or left) steps off with the left foot, leading his horse to the front; he takes four steps, turns to the right (or left), and marches, in the new direction, at the same time holding the hand high and firm to keep the horse from jumping. Each trooper executes, in succession, the same movement, when the one who precedes him has moved four paces to the front.

## Exercises in the riding house.

397. In the instruction which follows, the squad is supposed to be exercising in a riding house whose sides are about ninety, and ends thirty yards in length, or on a riding ground which is bounded by lines corresponding to the walls of the ridiug house.

Two of the best instructed troopers are designated to be conductors; they are placed on the right and left of the squad, and use their stirrups.

## To march to the right (or left) hand.

398. The squad being drawn up in the riding house, or on the ground, parallel to its length, the instructor commands:

## 1. Squad, to the right (or left). 2. March. 3. Forward.

At the command march, the troopers conform to what is prescribed in order to execute a turn to the right from a halt, as directed in No. 391.

At the command forward, the troopers, in lowering their wrists and closing the legs, march straight forward, and follow the conductor.

At the extremity of the riding house, the conductor turns to the right, when the troopers march to the right hand, having between them the distauce of four feet from head to croup.

The trooper marches to the right hand, when he has the right side toward the interior of the riding horse. He marches to the left hand, when it is the left side.

## To turn to the right (or left) in marching.

399. The troopers follow the conductor, and make a turn to the right (or left), in marching, or arriving at the angles of the riding house. The instructor dircets the trooper to advance the outer hip and shoulder, without inclining inward, in order to couform to the movement of the horse.

## To halt, and to step off.

400. The troopers marching in column on one of the long sides, the instructor commands:

## 1. Squad. 2. Halt.

The troopers stop as prescribed in No. 390.
To recommence the march, the instructor commands:

> 1. Squad, forward. 2. March.

To pass from the walk to a trot, and from the trot to a walk.
401. The troopers bccoming habituated to the movement of the horse, the instructor causes them to pass to the trot. When they are in column on one of the long rides, be commands:

## 1. Trot. 2. March.

At the command trot, gather the horse, without increasing his gait.
At the command march, lower the wrists a little, and close the legs more or less, according to the sensibility of the horse. As soon as the horse obeys, replace the wrists and the legs by degrees. -

The instructor should employ this gait cautiously at first, and at a moderate trot, that the men may not lose their position.

To pass from the trot to the walk, the instructor commands:

## 1. Walk. 2. Marcin.

At the command walk, gather the horse without affecting the gait.
At the command march, elevate the wrists, or bridle hand, by degrees, and hold the legs near, in order to prevent the horse from stopping. As soon as the horse obeys, replace the wrists and legs by degrees.

## Changes of hand.

402. When the troopers have marched some time to the right (or left) hond, to make them change hands in the breadth of the riding house, or ground, without stopping, the iustructor commands :

## 1. Right (or left)—Turn. 2. Forward.

At the word turn, the leading file turns to the right. At the command forvord, he moves straight forward and crosses the riding house or ground, in its breadth, followed by the other troopers.

The leading file being at two paces from the opposite track, the instructor commands :

## 1. Left (or right)-Turn. 2. Forward.

At the command twra, the leading file turus to the left: and at the command forward, be follows the track. All the troopers turn in succession on the same ground.

The instructor canses these changes of band to be made at a uralk, and at et trot.

To turn to the right (or left) by trooper, in marching.
403. O he troopers marching in column, and haring arrived about the middle of one of the long sides, the instructor commands :

1. Squad, to the right (or left). 2. March. 3. Forward.

At the command squrd, to the right, gather the horse. At the command march, each trooper executes a turn to the right in marching. At the command foreard, each trooper moves straight to the front.

The troopers being two paces from the opposite track, the instructor commands:

## 1. Squad, to the right (or left). 2. March. 3. Forward.

At the command march, each trooper executes a turn to the right, following the same principles; and at the command formard, all return to the track.

The same movements are repeated to resume the order in which the troopers were originally.

## To turn about to the right (or left) by troopers, in marching on the same line.

404. The troopers having made a turn to the right as has just been explained, and having arrived near the opposite track, the instructor commands :
405. Squad, to the right (or lefi) alout. 2. March. 3. Fortrard.

At the command, squad, to the right about, gather the horse. At the command march, each trooper executes a turn to the right about in marching, following the principles laid down in No. 392. At the command forward, each trooper moves directly to the front.

The instructor gives the command march at the moment the troopers
are within two paces of the track; the troopers are then re-formed in column upon the opposite track, by the movement of squad. to the right (or left).

To turn about to the right (or left) by trooper, in marching in column.
405. The troopers marching in column, and the leading file having arrived near the end of one of the long siles of the riding house or ground, the instruetor commands:

1. Squad, to the right (or left) about. 2. March. 3. Fonwarn.

At the command squed, to the right about, gather the borse. At the command morch, each trooper executes a turn to the right about in marehing. At the command merch, each trooper moves forward.

On arriving at the short side opposite, the leading filc turns to the left without command; the squad returns to the original order. by executing the inverse movement.
406. To rest the squad, the instructor canses the troopers to forn to the right (or left), when they are about the midille of one of the long sides of the riding house or ground, and gives the command hait, when they are out of the track. The instruction is recommenced by a turn to the right (or lefi).

To terminate the drill, the stimmps are let down. and the feet placed in them, when the instructor commands the troopers on lismoumt, and file aft.

During the rests, the instructor exercises the troopers in ranlting $m$, and from their horses, without commands.

## To leap to the ground.

The trooper, holding the reins as in dismounting, seizes a lock of the mane firmly with the left hand: places the right hand upon the pommel, raises himself mein his wrists. brings the right thigh by the side of the left. 1 emains an instant in this puition, and descerals lightly to the grumid.

> To leap on the horse.

The trooper seizes the mane with the left hand, places the right hand which holds the reins upon the pommel of the saddle, springs lively, raising himself upon the two wrists, remains an instant in this position, and places himself lightly in the saddle.
 arder to calm the borses after guink pace, and to reliere the tronpere.
 changing the face, and wi bout hosing the dimenne.

## Barroces in forn mink.




 The inveri-tor (wnamands:
In corflemin-roumt Forra...





At tiac caman and:


 precipitation.

The rear rank being formed, closes to the distance of two feet from the front.

## Of the spurs.

408. The instructor explains to the troopers the use and the effect of the spur.

If the horse does not obey the legs, it is necessary to employ the spur. The spur is not an aid, it is a means of chastising. It is only neoessary to use it occasionally, but always vigorously, and at the moment the horse commits the fault.

In order to use the spurs, it is necessary to keep steady the body, the waist and the wrists; to cling to the horse with the thighs and the calves of the legs; turn the toes a little out; lower the wrists: a little press the spurs close behind the girths, without moving the body, and let them remain there until the horse obeys: then replace the wrists and legs by degrees. In using the spur, the troopers should not bear too much upon the rein, as this would counteract the efiect of the spur.
409. To conduct the squad to the riding house or ground, the iustructor commands:

## 1. By file to the right (or left). 2. March.

At the command by fite to the right, gather the borse. At the command march, the trooper on the right of each rank executes a turn to the right, and moves forward, the trooper of the rear rank approaching, in marching, to within one foot of the front rank. This movement is executed by all the other troopers in succession.

## To march to the right (or left) hand.

410. In entering the riding house or ground, the instructor marches his squad parallel to the long sides, and when the head of the column arrives toward the middle, he commands:

## 1. Right and left-Turn. 2. Forward.

The leading file of the front rank turns to the left, the one of the rear rank turns to the right; when these files have arrived within two paces of the track, the instructor commands:

## 1. Right-Turn. 2. Forward.

The two columus then march to the right hand, and at the same pace.

The troopers preserve the distance of four feet from head to croup.

The leading files regulate the pace of their horses so as to arrive at the same time at the oppositc angles of the riding house or ground, the leading file of the rear rank regulating himself on him of the front.

To pass a corner to the right, a twrn to the right is executed; to pass a corner to the left, a turn to the left is made in marching: the movement of each one should be independent of the trooper who has gone before, their hands and legs alone should determine the horse to go to the right or to the left.

To pass from the walk to the trot, and from the trot to the walk.
411. The troopers marching in column upon the long sides, the instructor causes them to commence the trot.

Whenever the change is made from a slow gait to one more rapid, as from a walk to the trot, it is necessary to commence slowly, and increase it gradually to the degree prescribed.

The troopers marching in column at a trot upon the long sides, the instructor causes them to pass to the wall.

Whenerei the change is made from a lively gait to one more slow, as from the trot to the ralk, it is necessary to commence the last gait as gradually as possible, and to reduce it by little and little to the degree indicated.

Change of direction in the breadth of the riding house or ground.
412. The instructor canses the change of direction in the breadth of the riding house or ground, as directed for the changes of haud, laking care to give the command in sufficient time to prevent the columns from meeting at the end of the change of direction.

The change of direction ought to be executed so as neither to stop nor ebeck the rear of the column; the troopers, and particularly the leading files, ought to turn without slackening the pace, aiding themselves not only with their hands but also witl their legs.

Change of direction in the length of the riding house or ground.
413. This change of direction is executed on the same principle as that in the breadth of the riding house, or ground, the instructor observing, in order to commence it, to command riyht or left, at the instant the leading files arrive at the first angle, and to command turn, when, having past the corner, they are at three paces from the middle of the short side.

The troopers then cross the riding house or ground, in its length in a right line, without touching each other, passing to the left, and re-enter upon the track at the commands:

> 1. Right (or left)—Turn. 2. Forward.

Change of direction diagonally.
414. When the leading files have passed the second corner, and have
arrived upon the long sides, the instractor causes a diagonal ehange of direction to be executed at the commands:

1. Righl (or left)-Turn. 2. Foliward.

At the command turn, the leading filos make a half-turn to the right. At the command formard, they move straight furward, cross the riding house or ground, liagonally, pass each other to the left, and re-cnter upon the traek at the commands:

1. Left (or riglte). 2. Turn. 3. Fonward.

All the other troopers execute the same movement in suceession, in turning upon the same ground that the leading files have turned.

## Change of direction obliquely by the trooper.

415. The squad commences a change of dircetion in the length of the riding bouse, or ground; as soon as all the froopers have turned. and are in the same direction, the instructor commands:

## 1. Column. 2. Halt.

The troopers stop at the same time, keeping their horses-straight, and at their distances.

The instruetor causes the troopers to make a quarter-turn to the right (or left) from a halt. This movement being executed, he assures himself of the exactness of the directions and intervals, and then commands:

## 1. Squad, forward. 2. March.

The troopers mareh at the same gait, each in the direction he has taken. When they arrive one foot from the track, the instructor commands:

## Forward.

At this command, make a quarter-turn to the left in advancing, with the hand light and leg near, to follow the track.

The instructor causes these movements to be repeated without halting; for this purpose, after having commenced the change of direction in the length of the riding house or ground, as soon as the two ranks are in column, he commands:

## 1. Squad, right (or left) oblique. 2. March. 3. Forward.

At the command, right oblique, gather the horse. At the command march, execute a quarter turn to the right: having taken this direction,
keep the legs equally near, and march straight forward at the same gait. At the command forvord, return upon the traek, or return to the original direction.

## To march in a circle .

416. When the leading files have passed over about one-third of the long sides, the instructor commands :

## 1. In circle to the right (or left). 2. Marcir.

At the command in circle to the right, the leading files, and in succession the troopers, gather their horses. At the command march, the lealing files describe a circle between the two tracks; they are followed by the other troopers, who march exactly in the same direction.

## To change hand on the circle.

417. The instructor commands:

## 1. Right (or left)-Turn. 2. Forward.

At the command turn, the leading files turn to the right. At the command forward they move straight forward, directing themselves, in passing the centre, toward the opposite point of the circumference.

When the leading files are two feet from this point, the instructor commands:

## 1. Left (or right) -Turn. 2. Forward.

At the command turn, the lealing files turn to the left. At the command forward, they re-enter upou the circle at the new hand. All the other troopers follow the leading files.

When the instructor wishes to resume the exercise upon the right line, he takes care that the leading files are at opposite points of the eireumference; and when they are on the track of the long sides, he commands :

## Forward.

At this command the learling files straighten their horses and re-enter on the track, followed by the other troopers.
418. To reunite the troopers in order to condnet them to the quarters, the instructor causes them to close to the distance of two feet; he then orders a change of dircetion in the breadth of the riding house or ground, at the moment the leading files are opposite each other.

When the leading files, in the act of meeting each other, arrive toward the middle of the space, the instructor commands:

## 1. Lefl and right-Turn. 2. Forward.

The leader of the front rank turns to the left, that of the rear rank to the right, the two columns thus reunite, the troopers of the rear rank approaching to within one pace of those of the front.

The column having arrived on the ground where the squad was formed, the instructor commands :

## 1. Front. 2. Halt.

At the command front, the first trooper of each rank turns to the left and moves straight forward. At the command hult, the trooper of the front rank stops: anll when the rear rank trooper finds himself at two feet from the front rank he stops also.

All the other troopers exceute a tw'n to the left, in succession, when they are nearly opposite the place they are to occupy in the rank, and halt abreast of this rank.
419. To terminate the exercise, the instrnctor gives the command to dismount in two ranks, as follows: at the command

## Prepare to Dismount,

Nos. 1 and 3, of the front rank, move forward six paces; Nos. 2 and 4, of the rear rank, rein back four paces, and keep themselves opposite their intervals, dressing by the right.

After the troopers have taken these positions they go through the first motions of prepare to dismount, as direeted for a single rank, followed by the dismownt.

After the dismonnt, the instructor commands:
Form-RANKs.

At the word ranks, Nos. 1 and 3, of each rank, elevate the right hand slightly, to keep the horse quiet; Nos. 2 and 4 return quietly to their intervals.

## Exercises with stirrups.

420. The stirrup should support only the weight of the leg; the foot ought to be inscrted one-third of its length, the heel lower than the toe. The stirrups are of proper length, if, when the trooper raises himself on the stirrups, there is a space of six inches between the fork and the saddle.

## To turn to the right (or left), by the trooper, in marching.

421. The instructor causes this movement to be executed as already prescribed (No. 398), at the commands:

## 1. Squad, to the right. 2. Marci. 3. Forward.

He will observe that, the troopers marching in two columns, the command march ought to be given at the moment the leading files arrive opposite the last trooper but one of the other column.

Immediately after the command forword, the troopers move straight forward, preserving their gait and direction, so that each one may find before him the interval and the place he is to occupy in the column on the opposite track. In passing into the intervals, the legs shonld be kept near, to prevent the horse slackening his gait.

To pass in succession from the head to the rear of the column.
422. This movement is executed in succession in the two columns, at a simple warning from the instructor, by two right (or left) about turns.

The trooper designated to pass to the rear of the column gathers his horse and executes the movement in advancing, so as not to retard those who are behind him. He holds the outer leg near. in order to describe a semicircle of more than six paces; he marches then parallel to the column, and when he has re-entered upon the track by a second turn, he closes to the distance of four feet from the last trooper. The trooper who follows, and who becomes the leader, should gather his horse, and direct him with the onter rein and the inver leg, to prevent his following the horse which has left the column.

Being at a halt, to commence the move at a trot.
423. The troopers being in column upon the long sides, the instructor commands:

## 1. Column, forward. 2. Trot. 3. March.

At the command trot, gather the horse. At the command march, lower the wrists and close the legs by degrees; as soon as the horse obeys, replace the wrists and legs slowly.

## Marching at a trot, to halt.

424. The troopers marching at a trot, and in column on the loug sides, the instructor commands :

## 1. Column. 2. Halt.

At the command cotumn, gather the horse. At the command hatt, elevate the wrists by degrees until the borse stops, and hold the legs always near, to keep him straight, aud to prevent bis stepping back. The horse baving oheyed, gradually replace the wrists and legs.

The instructor shoulel require all the troopers to set off freely at the trot at the command march, and to stop altogether, withont jostling, at the eonmand halt.

To pass from the trot to the trot-out, and from the trot-out to the trot.
425. The troopers marching at the trot, and in column upon the long sides, the instruetor eommands :

## Trot-out.

At this command, lower the wrists a little, and close the legs gradually; as soon as the horse obeys, replace the wrists and the legs by degrees.

This gait should be executed only during one or two turns toward eaeh hand; in continuing it longer, the horses lose their steadiness, and the equality of their gaits is destroyed.
426. To pass from the trot-out to the trot, the instructor eommands:

## Slow trot.

At this command, elevate the wrists by degrees, and close the legs, to prevent the borse from taiking the walk; as soon as the horse obeys, replace the wrists and legs by degrees.

## To pass from the trot to the gallop.

427. Before eommencing this exercise, and when the rear rank arrives opposite one of the short sides of the riding house or ground, it is formed by eausing the troopers to front and hutl, as directed, No. 391, paying attention to make them move forward six paces from the track.

The troopers of the front rank continue to march, take between them the distance of four paces, pass to the trot and commence the yutlop, in suceession, at the indication of the instructor, as follows:

On approaching the corner, lengthen the trot, and gather the horse, feeling the left rein slightly, in order to keep baek the left shonlder, and leave the right perfectly free.

At the moment of passing the corner，close the legs equally，but nut suddenly．The horse having taken the gfollop，hold a light hand and the legs near，to keep him at his gait．

After one or two turns，the trompers pass from the gallop to the trot． and from the troi to the walk．The instructor makes them change hand in the breadth of the riding ground，and recommence the same excreise to the lajt hand．The troopers of the front rank are then formed as those of the rear rank，upon the other short side，and the troopers of the rear rank go through with the same exercise．

## To passage to the right or lefi．

428．The two columns marehing at a aralk upon the long sides，the instruntor canses the morement squad，to the right（or left）to be exe－ cuted，No．39s，and，having halted the troopers，he commands：

1．Right（or left）pass．2．Marcir．3．S＇quad．4．Halt．
At the command right puss，bear the shonklers of the horse to the right in opening the right rein a little，and closing the right leg．This movement is one of preparation；it indicates to the trooper that the shoulders of the horse should always commence the march，and pre－ cede the movement of the haunches．At the commanil morch，open the right rein to incline the horse to the right，elusing the left leg at the same time that the baunches may follow，without leaning the body to the left．make use of the left rein and the right ley to support the horse and moderate his movement．

After some steps $\mathfrak{n}$ pon the side，the instructor halts the squad．
At the command halt，cause the efiect of the right rein and left leg to cease instantly，employing the opposite rein and leg：straighten the horse，and replace the wrists and legs by degrees．

To passage to the left，employ the same principles and inverse means．

The instruetor causes this morement to be executed in the com－ mencement by each man separatety，and then by all at the same time．

## To passage to the right，or left，bring in column．

The troopers being on the track，and marching to the right（or left hand，the instructor orders a ehange of direction in the length of the riding house or ground；and when the two columus are by the side of each other，he halts them，and canses them to execute pussage to the right（or left）．When the troopers have nearly arrived at the track， the instruetor halts them．

## Principles of the gallop.

430. A horse gallops on the right foot, when the right fore and hind leg move in alvance of the left fore and hind leg. This gait is generally divided into three distinct times or treads. The first time is marked by the left hind foot which reaches the ground first; the second by the left fore and right hind foot which toueh at the same instant, and the third by the right forefoot.

A horse gallops on the left foot when the left fore and hind leg move in advance of the right fore and hind leg. In this ease, the right Find foot first reaches the ground, then the right fore and left hind foot, and lastly the left forefoot.

A horse gallops true when he gallops on the right foot, in exercising or turning to the right hand, and on the left foot, in exereising or turning to the left hand.

A horse gallops false when he gallops on the left foot, in exereising or turning to the right band, and on the right foot, in exercising or turning to the left hand.

A horse is "disunited" when he gallops with the near fore-leg followed by the off lind-leg, or with the off fore-leg followed by the near hind-leg.

When the borse gallops on the right foot, the rider experiences a sensible movement in his position from right to left, and when be gallops on the left foot, the rider experienees a sensible movement in his position from left to right.

When the horse is disunited, the trooper experiences irregular movements in his position ; the centre of grarity of the horse is deranged, and his strength impaired.

## To gallop on right lines.

431. After the troopers of the rear rank are formed as directed, No. 427, the instructor causes the men of the front rank to take the distance of four paces from each other: these troopers marching at the trot, and to the right hand upon one of the long sides, the instructor commands:

## 1. Gallop. 2. March.

At the command gallop, gather the horse and keep him perfectly straight. At the command march, earry the bridle hand slightly forward and to the left, to enable the right shoulder to move in adrance of the left, and close the legs behind the girths in order to urge the borse forward, cansing him to feel the effect of the left leg
lightly. The horse having obeyed, hold a light hand and the legs near, to keep bim at his gait.

To preserve the movement of the horse true, it is necessary for the trooper to accommodate himself to all his motions, particularly in passing eorners, when the slightest derangement in the seat would render the action of the horse irregular.

When a horse gallops false, or is disunited, the trooper is ordered to take the trot and pass to the rear of the column, taking eare not to interfere with those who follow. When he arrives at the rear, he resumes the gallop.

The troopers should make but a turn or two at the gullop to each hand, and should always be required to pass to the trot iu order to change hand.

When the troopers manage their horses well, the distance between is generally redueed to four feet.

The rear rank is earried through the sane exereise, and then both ranks at once.

## To gallop on the circle.

432. When the troopers have been suffieiently exercised at the gullop on straight lines, the instruetor eauses them to make a few turns on the eircle, following the prineiples laid down in No. 416.

This exereise is commeneed on very large eircles: the diameter is diminished as the troopers beeome more skilful.

## WHEELINGS.

433. There are two kinds of whecls: the wheel on "ficed pirot, and the wheel on a movable picot. The wheel is always on a fixed pivot, exeept when the eommand is right (or left)—turn. The troopers should execute this movement without disuniting, and without ceasing to observe the alignment.

In every kind of wheel, the eonductor of the marching flank should measure with his eye the are of the circle he is to pass over, so that it may not be neeessary for the files to open or close. He turns his head oceasionally toward the pivot; if he perceises that the troopers are too much erowded, or too open. he inereases or diminishes the extent of his cirele gradually. Each trooper of the front rank should deseribe his eircle in the ratio of the distance at which he may be from the pivot. During the wheel, the troopers should turn the head slightly toward the marching flank, to regulate the rapidity of their mareh and to keep themselves aligned; they should also feel the boot lightly on the side
of the pirot, in wrder in remain closed to that side. They should yield to pressure coming from the pirot. and resist that from the opposite direction. The horses are slirbtly turned towarl the jivot, in order to beep them on the circular lise they have to pass aser.

## The wheel on a fixed pirot.

 arter of hattle to the order of ealama, and frim the orler of column to the ortor aif hatle. The trenper whon farmsthe pixct of the whed turns uron his own erombl, withont arhancing or reining baek, and witaont paseing in the right on left.

The whealings ase escentwat first in wingle rabk: for this purpose tioc front rank is marebed forward, and hated when arrived at a lis-
 aidizned, the instrartur commands:

## 1. S'pued, in cirrie right (or lofi) whed. 2. Mancus.


 Hank eft arell, masaring with the ere the extent of the e ible le is for




When the semal has cacented sew mal whele, thalt ir. the instat cher (ammanili:



 $t$, the front.
 the same distance, and made to recommence the wheel. When the instructor wishes the squad to take the direct march, he commands :

## 1. Formard. 2. Guide left (or right).

At the command forward, the pirot resumes the gait at which it was previously marehing. All the other troopers straighten their horses, and the two flanks move forward at the same gait, conforming to the principles of the direct march. At the command guide left (or right), the troopers regulate their movements toward the side indicated.

If the squad is wheeling to the right. and the instructor wishes it to change the wheel to the left without lalting, he commands:

## 1. Squart, in circle. Tefl wheel. 2. Marcir.

At the command march, the left flank halts, and beenmes the pivot. The right fank. assuming the gait at which the left flank was marehing, moves forwarl, and deseribes a circle proportionate to the extent of the front. All the other tronners straighten their hores, and guile them so as to pass new circles in the interse sense.
 rank at the wall: and the trot. the ranks are closel and the wheels exeanted in double ramks. The instrictor commands:

1. Stquad, in circle righl (or lifi) mbeet. 2. Manch.

At the command mache the troiper: of thee frost rats acerte laf movement as prescribed above. The tropers of the rear ranls than the head and carry the hand toward the marching flank, so that eath one may be out of the direction of lis file-feader bey twe troupers. Fur this purpose, the moment the whed commones, each rear rank noan
 with the rigl.t leg, when the whed is to the ripit. or "furtow tima to the right. whan the wheel is to the lett, keeping darit? the wheel in the direction of bis now the-leator, and remainane at the distante of two fect from the front rank.

Tu stop the wheel, the instruet remmands:

 return to the direction of their file-leaders. All the trooere $\begin{gathered}\text { thatt at }\end{gathered}$ the command. At the command lefr (or fight) letese, they align themselves towarl the sime indionten. At the comman form. wom the head to the frowt.

When the inserpet $r$ wishes the sumet m manme the dimet march, he eommand-:

## 1. Forward. 2. Guide left (or right).

At the command forward, the rear rank men replace themselves behind their file-leaders, and march straight forward.

The squad wheeling to the right, to wheel to the opposite side without halting, the instructor commands :

## 1. Squad, in circle, left wheel. 2. Maroh.

At the command in circle, left wheel, the rear rank men return to the direction of their file-leaders. At the command march, the troopers conform to what has already been laid down.

The squad being halted, to place it in a direction perpendicular to the original front, the instructor commands :

## 1. Squad, right (or left) wheel. 2. March. 3. Halt. 4. Left (or right)-Dress. 5. Front.

Which is executed on the same principles as the wheel on a fixed pivot.
436. The squad being at the halt, to face it to the rear, the instructor commands:

1. Squad, right (or lefl) aboul, wheel. 2. March. 3. Halt.
2. Left-Dress. 5. Front.

Which is executed as in circle to the right or left, the squad passing over a half circle.
437. The squad being at a balt, to place it toward its right in a dircetion oblique to the original, the instructor commands:

## 1. Squad, right (or left) half wheel. 2. March. 3. .Halt. 4. Left (or right)-Dress. 5. Front.

Which is executed on the principles of the wheel on a fixed pivot.
The squad being on the march, the same movements are executed at the commands: 1. Squad, right (or left) uheel, right (or left) about, wheel, right half (or left half) wheel. 2. March. 3. Forward. 4. Guide right (or left).

At the command march, the wheeling flank wheels at the gait at which the platoon was marching; the pivot flank halts. At the command forward, the pivot resumes its original pass, and the two flanks move forward at the same gait.

## To wheel on a movable pivot.

438. The wheel on a movable pivot is employed in the successive changes of direction in column. The conductor of the marching flank should measure his gait, and describe his arc of circle so as to cause the files neither to open or close. The pivot describes an arc of five paces, in slackening the gait. The centre men preserve the gait at which the squad was marching. At the end of the wheel, the marching flank and the pivot resume the gait at which they originally marched.

The squad being on the march, to cause it change direction, the instructor commands:

## 1. I.eft (or right)-Turn. 2. Formard.

At the command left (or right) the pivot prepares to slacken, and the marching flank to augment the gait. At the command turn, thie squad turns to the left, or to the right, the pivot slackening its gait, in describing an are of five paces; the marching flank augments its gait, and regulates itself by the pivot during the whole of the wheel. At the command forward, all the troopers straighten their horses, the pivot and marching flank move forward in the gait at which the squad was originally marching.

## SABRE EXERCISE.

439. For instruction in the use of the sabre the men of the squad are on foot, and in one rank about nine feet apart.

The right side of the gripe is the side opposite the guard.
The left side of the gripe is the side next the guard.
Tierce is the position in which the edge of the blade is turned toward the right, the nails downward.

Quarte is the position in which the edge of the blade is turned to the left, the nails upward.
440. The squad being in position, the instructor commands:

## Draw-SABre.

Two times and two motions.
First motion. At the first part of the command, which is draw, turn the head slightly to the left, without changing the pesition of the body; unhook the sabre with the left hand, and bring the hilt to the front; run the right wrist through the sword-knot; scize the gripe, draw the blade six inches out of the scabbard, pressing the scabbard against the thigh with the left hand, which secures it at the upper ring, and turu the head to the front.

Second motion. At the last part of the command, which is sabre, draw the sabre quickly, raising the arm to the full extent; make a slight pause, carry the blade to the right shoulder, the back of it against the hollow of the shoulder, the wrist resting against the bip, the little finger on the outside of the gripe. This position is the same when mounted, except that the wrist then naturally falls upon the thigh.

## Present-Sabre.

## One time and one motion.

441. At the last part of the command, which is sabre, carry the sabre to the front, the arm half extended, the thumb opposite to, and six inches from the neck, the blade perpendicular, the edge to the left, the thumb extended on the right side of the gripe. the little finger by the side of the others.

## Carry-Sabre.

442. At the command subre, carry the back of the blade against the hollow of the shoulder, the wrist resting against the hip, the little finger on the outsidc of the gripe.

## Return-Sabre.

Two times and two motions.
443. First motion. At the command return, execute the first motion of return sabre.

Second motion. At the command sabre, carry the wrist opposite to, and six inches from, the left shoulder; lower the blade and pass it across and along the left arm, the point to the rear; turn the head slightly to the left, fixing the cyes on the opening of the scabbard; return the blade, free the wrist from the sword-knot, turn the head to tho front, drop the right land to the side, and hook up the sabre with the hilt to the rear.

## Guard.

One time and one motion.
444. At the command guard, carry the right foot two feet from the left, the heels on the same line; place the left hand, closed, six inches from the body, and as high as the elbow, the fingers toward the body, the little finger ncarer than the thumb (position of the bridle hand); at the same time, place the right hand in tierce at the height of, and three nches from the left band, the thumb extended on the back of the gripe, the little finger by the side of the others, the point of the sabre inclined to the left, and two feet bigher than the hand.

## In tierce-Point.

One time and three motions.
445. First motion. At the command point, raise the hand in tierce as bigh as the eyes, throw back the right shoulder, carrying the elbow to the rear, the point of the sabre to the frout, the edge upward.

Second motion. Thrust to the front, extending the arm to the full length.

Third motion. Return to the position of guard.
In quarte-РоیNт.

One time and three motions.
446. First motion. At the command point, lower the band in quarte wear the right hip, the thumb extended on the right side of the gripe, the point a little higher than the wrist.

Second motion. Thrust to the front, extending the arm the full length.

Third motion. Return to the position of guard.

> Left-Point.

One time and three motions.
447. First motion. At the command point, turn the head to the left, draw back the hand in tierce tuward the right, at the height of the neck, the edge upward, the point directed to the left.

Second motion. 'Thrust to the left, extending the arm to its full length.

Third motion. Return to the position of guard.

> Right-Point.

One time and three motions.
448. First motion. At the command point, turn the head to the right, carry the hand in quarte near the left breast, the edge upward, the point directed to the right.

Second motion. Thrust to the right, extending the arm to its full length.

Third motion. Return to the position of guard.

## Rear-Point. <br> One time and three motions.

449. First motion. At the command point, turn the head to the right and rear, bring the hand in quarte opposite to the right shoulder, the arm half extended, the blade horizontal, the point to the rear, the edge upward.

Second motion. Thrust to the rear, extending the arm to its full length.

Third motion. Return to the position of guard.

> Against infantry, left-Роint.

One time and three motions.
450. First motion. At the command point, turn the head to the left, raise the hand in tierce near the neck, the point of the sabre directed to the height of the breast of a man on foot.

Second motion. Thrust down in tierce.
Third motion. Return to the position of guard.

## Against infantry, right-Point.

One time and three motions.
451. First motion. At the command point, turn the head to the right, carry the hand in quarte near the right hip, the point of the sabre direeted at the height of the breast of a man on foot.

Second motion. Thrust in quarte.
Third motion. Return to the position of guard.
Front-CuT.

One time and three motions.
452. First motion. At the command cut, raise the sabre, the arm half extended, the hand a little above the head, the edge upward, the point to the rear, and higher than the hand.

Second motion. Cut, extending the arm to its full length, and give a back-handed cut, horizontally to the rear.

Third motion. Return to the position of guard.

## Right in tierce and carte-Cut.

One time and four motions.
453. First motion. At the command cut, execute the first motion of right cut.

Second motion. Execute the second motion of right cut.
Third motion. Turn the hand in quarte, and cut horizontally.
Fourth motion. Return to the position of guard.

## Left in quarte and tierce-Cut.

One time and four motions.
454. First motion. At the command eutt, execute the first motion of left cut.

Second motion. Execute the second motion of left cut.
Third motion. Turn the hand in tierce, and cuthorizontally.
Fourth motion. Return to the position of guard.

> In tierce--Parry.

One time and two motions.
455. First motion. At the command parry, earry the hand quickly a little to the front and right, the nails downward, without moving the elbow; the point inclined to the front, as high as the eyes, aud in the direction of the right shoulder: the thumb extended on the back of the gripe, and pressing agaiust the guard.

Second motion. Return to the position of guard.

## In quarte-Parry.

One time and two motions.
456. First motion. At the command parry, turn the band and carry it quickly to the front and left, the nails upward, the edge to the left, the point inclined to the front, as bigh as the eyes, and in the direction of the left shoulder; the thumb extended on the back of the gripe, and resting against the guard.

Second motion. Return to the position of guard.

For the head-Parry.
One time and tho motions.
457. First motion At the command parry, raise the sabre quickly
above the bead, the arm nearly extended, the edge upward, the point to the left, and about six inches higher than the head. The hand is carried more or less to the right, left, or rear, according to the position of the adversary.

Second motion. Return to the position of guard.

## Against infantry, right-Parrx.

One time and three motions.
458. First motion. At the command parry, turn the head to the right, throwing back the right shoulder, raise the sabre, the arm extended to the right, and rear, the point upward, the hand in tierce, the thumb extended on the back of the gripe, the edge to the left.

Sccond motion. Describe a circle quickly on the right, from rear to front, the arm extended; turn aside the bayonet with the back of the blade, bringing the hand as high as the head, the point upward.

Third motion. Return to the position of guard.

## Against infantry, left--Parry.

One time and three motions.
459. First motion. At the command parry, turn the head to the left, raise the sabre, the arm extended to the front and right, the point upward, the hand in tierce, the thumb extended on the back of the gripe, the back of the blade to the front.

Sccond motion. Describe a circle quickly on the left, from front to rear along the horse's neck, the arm extended; turn aside the bayonet with the back of the blade, bringiug the hand, still in tierce, above the left shoulder.

Third motion. Return to the position of guard.
460. When the troopers begin to execute the above cuts, thrusts and parries correctly, the instructor requires them to make the application of them by combined motions, as follows :

In tierce-Point and front cet.
In quarte-Point and front cut.
Lejt-Point and cut.
Right-Point and cut.
Real-Point and cut.
Against infantry, right-Point and cet.
Ayainst infantry, left-Point and cut.

## Inspection of Sabre.

One time and seven motions.
461. First motion. At the word sabre, exeeute the first time of draw sabre.

Second motion. Execute the secoud time of draw sabre.
Third motion. Prescut sabre.
Fourth motion. Turn the wrist inward to show the other side of the blade.

Fifth motion. Carry the sabre to the shoulder, as is preseribed in carry sabre.

Sixth motion. Execute the first time of return sabre.
Seventh motion. Exeeute the seeond time of return sabre.

## MANUAL FOR A BREECH-LOADING CARBINE, OR RIFLE, THE TROOPERS MOUNTED.

462. Whenever the troopers are not exereising with the carbine, or rifle, it is slung by a belt, which passes from the left shoulder to the right side, the muzzle down, and in sueh a position that it may be seized by the right hand at any moment, and at the same time be entirely out of the way when the trooper is exereising with the sabre or pistol.

The trooper, in condueting his horse to the ground before mounting, bas the earbine passed over the right shoulder, the muzzle in the air.

After mounting, let the earbine fall by the side.
At the first command to dismount, seize the carbine with the right hand a little above the band, and pass it over the right shoulder, the muzzle in the air.
463. The trooper being mounted, with the carbine hanging by his right side, the instructor commands :

## Advance-Carbine (or Rifle).

> Two times.

At the command adconce, seize the earbine at the small of the stoek with the right hand. At the command carbine (or rifte), elevate it, and place the butt upon the thigh, the muzzle at the height of the eye and oppesite to the right shoulder, the loek to the front.

## To load.

464. The squad being in the position of advance carbine (or rifle), the instructor commands: Load in four times.

## 1. Load.

One time and two motions.
First motion. At this command, place the carbine (or rifle) in the left hand, which seizes it a little below the band, the thumb along the stock, the muzzle elevated, at the hcight of, and opposite to the left shoulder, with the right hand move back the catch, and seize the lever with the thumb and first two fingers.

Second motion. Spring open the chamber, and carry the hand to the cartridge box and open it.

## 2. Charge-Cartridge.

## One time and two motions.

First motion. At the command cartridge, draw a cartridge and insert it in the barrel, and seize the lever with the thumb and first two fingers.

Second motion. Draw back the lever to its place, half-cock, remove the old cap, and carry the hand to the cap box, and open it.

## 3. Prime.

One time and one motion.
At the command prime, place a cap on the nipple, press it down with the thumb, let down the cock, and scize the piece by the small of the stock with the right hand.

## 4. Advance-Carbine.

One time.
As prescribed above.
To fire.
465. The squad being in the position of advance carbine, the instructor commands:

## Ready.

One time.
At this command let fall the carbine in the left hand as in the first motion of the load, cock it, and return to the position of adcance carbine.

Aim.
One time.
At this command, carry the butt to the shoulder with the right hand, support the picce with the thamb and first finger of the left hand, a little below the barrel, the others closed in order to hold the reins without slacking them; place the face against the stock, shat the left eye, dircet the right along the barrel to aim, and place the forefinger of the right hand on the trigger.

## Fire.

At the command fire, pass the forefinger against the trigger and fire, without lowering the head or turning it, and remain in this position.

If, after firing, the instructor wishes to loarl, he commands:

## Load.

At the command load, bring down the carbine to the first motion of lord; load at will, and take the position of adcance carbine.

If, after firing, the instructer does not wish to load, he commands :

## Advance-Carbine.

Which is done as already prescribed.
To drop the carbine, the instructer commands:

## Drop-Carbine.

One time.
At the command carbine, lower the muzzle of the carbine, and cast the butt to the rear.

## Inspection of arms.

466. The instructor commands :

## Inspection-Carbine.

One time and tioo motions.
First motion. At the command carbine, take the position of adconce carbine.

Second motion. Drop the carbine.

## MANUAL FOR COLT'S REVOLVERS. ${ }^{1}$

467. The troopers being mounted, the pistol either in the holster or pistol casc, the instructor commands :

## Draw-Pistol. ${ }^{2}$

## Two times and two motions.

First motion. At the first command, unbuckle the holster or pistol ease, seize the pistol by the handle with the right hand, holding it between the palm of the hand and the threc last fingers, the forefinger resting on the guard, the thumb on the handle.

Second motion. At the second command, draw out the pistol and elevate it, the guard to the front; the wrist at the height of, and six inches from the right shoulder.

## Load in six times.

## 1. Load.

One time and one motion.
Place the pistol in the bridle hand, holding it by the handle in frout of the body, the hammer between the thomb and forefinger, and turned to the left, the muzzle pointing upward. Carry the right hạd to the eartridge box and open it.

## 2. Handle-Cartridge.

One time and one motion.
Seize the cartridge with the thamb and the first two fingers, and earry it to the mouth.

## 3. Tear-Cartridge. <br> One time and one motion.

Bite off the end and carry the eartridge opposite the chamber nearest the lever, or, if the eartridge is furnished from the manufactory with the pistol, seize the end of the cord, which projects from one end of the cartridge, between the tecth, tear open the outer ease, and take ont the cartridge.

[^2]
## 4. Charge-Cartridge.

One time and two motions.
First motion. Empty the powder into the chamber, and insert the ball, pressing it down as far as possible with the thumb and forefinger: or, if it be a cartrilge furnished from the manufactory, simply insert it in the ehamber, pressing the ball down as before.

Second motion. Turn the pistol with the left hand, bringing the hammer toward the body, and coek it with the thumb of the right hand.

## 5. Ram-Cartridge.

## One time and two motions.

First motion. Seize the lever with the eatch, with the thumb and forefinger of the right hand ram down the ball, and replace the lever.

Second motion. Let down the hammer with the right hand, and carry the hand to the eartridge box.

Repeat as above directed until all the chambers are loaded.

## 6. Prime.

## One time and teo motions.

First motion. Lower the muzzle toward the right side by turning the wrist of the bridle hand, the muzzle pointing downward, the hammer to the front, the left wrist resting against the stomach: half-eock the pistol with the left thumb; turn the cylinder with the thumb and forefinger of the right hand until it elieks. Take a cap and press it on the eone. Turn the eylinder again until it clicks, and so on until all the eones are capped, the hammer resting on the safety noteh.

Second motion. Seize the pistol at the handle with the right hand, and bring it to the position of draw pistol.
468. The instructor wishing to fire, will command:

## Ready.

One time and tro, motions.
First motion. Place the pistol in the left hand, the little finger tonehing the key, the barrel nearly vertical, the muzzle a little inclined to the left and front, the guard to the front. the thumb on the head of the hammer, the forefinger along the guard.

Second motion. Cock the pistol, and bring it to the position of drow pistol.

## Am:

One time.
Lower the pistol, the arm half extended, and place the forefinger lightly on the trigger, the muzzle directed to the height. of a man's waist.

## Fire.

One time.
Press the forefinger steadily on the trigger, fire, and retake the position of drac pistol.

The men being at a ready, and the instructor wishing to fire all the barrels in quick succession, will give intimation to that effect, and command:

## 1. Aim. 2. Fire.

The men will aim and fire, come to the first position of ready, cock, aim, fire again, and so continue until the pistol is discharged; then take the position of draw pistol.
469. The instructor wishing to reload, commands:

Load at will.
Load.
One time.
Load the six chambers as heretofore directed, and take the position of drav pistol.

> Return-Pistol.

One time.
Lower the muzzle of the pistol, and return it to the muzzle or pistol-case.

## Articee VIII.

## SCHOOL OF THE TROOP.

470. The troopers being sufficiently instructed to manage their horses and use their arms, are passed to the school of the troop. The object of this school is to teach them to exercise properly together, and to execute all the movements of the troop, whether in column of platoons or in line.

Each movement, after having been correctly cxecuted by the right, is repeated by the left.

When the movements are all executed at the walk, the instructor causes them to be repeated at the trot, requiring always the same simultaneous action and the same precision. This gradation is also followed for excreise at the gallop; but the horses should not be kept long at this gait.

The troop is composed of all the troopers of a single company; for exereising it is formed in two ranks, and divided into two platoons. ${ }^{1}$ The troop is one half of the squadron, and when it forms a part of the squadron constituting one of the divisions, the officers and non-commissioned officers are posted as directed for a squadron in line; but where the troop acts singly, as will be sopposed in the school of the troop, the officers and non-commissioned officers take posts as directed for a company acting singly. (Sce No. 17.)

For the school of the troop, the troopers are under arms; if armed with the carbine it is always slung.
471. The troop being formed in two ranks, at open order, the trooper and file-closers at the head of their horses, the chiefs of platoon mounted, facing the platoon, at ten paces from and opposite the centre, the captain commands :

## 1. Attention. 2. Right-Dress. 3. Front.

He then commands :
In each platoon-and in each rank-C'ount by fours.
At this command, the troopers count off in both platoons at once. commencing on the right of each rank.

[^3]The captain then gives the eommand mount, which is executed as explained in the school of the trooper, No. 407.

At the command form-Ranks, the ehiefs of platoon move forward, face to the front by turning to the right about, and place themselves before the centre of their platoon, the eroup of their horses one pace from the head of the horses of the front rauk. The file-closers follow the rear rank.

## General principles of alignment.

472. The troopers, in order to align themselres, should regulate their shoulders upon those of the men on the side of the alignment, and fix the eyes upon the line of the eyes, so as to perceive the breast of the second trooper of their rank on the alignment; for this purpose, they should turn the head, remaining square upon their horses, feel lightly the boot of the man on the side of the alignment, and keep the horses straight in the ranks, that all may have a parallel direction.

The troopers of the rear rank, independently of the alignment, should be exactly behind their file-leaders, and in the same direction, taking eare to preserve the distance of two feet from head to croup.

## Successive alignment of the files in the troop.

473. The two files of the right (or left) are mored forward ten paces, and aligned parallel to the troop by the commands:
474. Two files from the right (or lefi), forwarl. 2. March.
475. Halt. 4. Right (or left)-Dress. 5. Front.

The captain then commands:

## 1. By fle right (or left)—Dress. 2. Front.

At the command dress, each file moves forward in succession and steadily, the troopers turning the head to the right, and taking the last steps slowly, in order to arrive abreast of the files already formed without passing beyond the alignment, obserring theu to halt, give the hand, relax the legs, and keep the head to the right until the command front.

Each file executes the same morement when the preceding one has arrived on the base of alignment, so that only oue file may align itself at the same time.

At the eommand front, turn the head to the front. The captain gives the command front when the last file is aligned.

When the troopers execute these alignments, this instruction is repeated in giving the two files of the right an oblique direction. For this propose, the two files having marched forward four paces, as has been prescribed, execute "half twh to the right (or left), and march six paces in this new direction.

The troop being unmasked, the remainder of the movement is executed by the same command and on the same principles as in the last casc; each file, as it arrives nearly opposite the place it is to occups, executes a half turn to the right (or left), so that, having left the troop by one straight line, it arrives upon the new alignment by another.
474. The two files of the right, or left, are made to rein back four paces, and align themselves parallel to the troop, and opposite the place they occupied in it, by the commands:

1. Two files from right (or left), backward. 2. March. 3. Halt. 4. Right (or left)-Dress. 5. Front.

The captain then commands :

## 1. By file, right (or left), backward-Dress. 2. Front.

At the command dress, each file reins back in succession, keeping perfectly straight, the troopers turning the head to the right, and passing a little to the rear of the files already formed, in order to come up abreast of them by a movement to the front, which renders the alignment more easy.

The troopers of the front rank rein back slowly, those of the rear rank regulate themselves upon their file-closers. preserving always their proper distance.

At the command front, turn the head to the front.
475. The alignment is then executed by twos (or by fours). For this purpose, the two or four files of the right move forward as has been prescribed, and the captain commands:

1. By twos (or by fours), right (or lefi)—Dress. 2. Front.

At the command dress, the files align themselves in succession by twos (or by fours), following the principles prescribed for the alignment by file, being particular to set out and arrive upon the alignment togetber.

At the command fromt, turn the head to the front.

## Alignment of the troop.

476. The captain, after having placed the right guide, so that no trooper will be compelled to rein back, commands :

## 1. Right-Dress. 2. Front.

At the command right-dress, all the troopers align themselves steadily but promptly to the right.

The troop being aligned, the captain commands:

## Front.

The captain causes three different alignments to be executed by the left, following the same principles, but by inverse means.

> To open and close the ranks.
477. To open the ranks, the captain commands :

1. Rear rank, open order.
2. Marchi.
3. Right-Dress.
4. Front.

At the command march, the front rank remains immovable, the rear rank reins back six paces, each trooper preserving the direction of his file-leader. The file-closers reign back until they are six paces from the rear rank. The chiefs of platoon move forward six paces, and face the centre of the platoons by turning to the left about.

At the command right-dress, the rear rank dresses to the right. At the command front, the head is turned to the front.

To close the ranks, the captain commands:

1. Rear rank, close order. 2. March. 3. Right-Dress.
2. Front.

At the command march, the rear rank closes upon the front to the distance of two fect, each tronper taking care to preserve the direction of his file-leader. The chiefs of platoon resume their places by a turn about to the right, and the file-closers take their proper distances from the rear rank.

At the command right-dress, the troop is aligned to the right. At the command front, the head is turned to the front.

## To reign back the troop.

478. The troop being at a halt, the captain eommands:

## 1. Tronp, backward. 2. Guide right (or left). 3. March.

At the command march, all the troopers reign back at once, regulating their movements by those of the right guide.

When the troop has reigned back some steps, the captain commands :

## 1. Troop. 2. Halt. 3. Right (or left)-Dress. 4. Front.

## To break the troop by file.

479. The troop being in line, the captain commands :

## 1. By file. 2. March.

At the command by file, the troopers of the first file (front and rear rank) gather their horses, and the others in snecession as soon as the file on the right is in motion. The chief of the first platoon, followed by the first sergeant, or guide of the right, posts himself in front of the first file.

At the command march, the ehief of the platoon, the guide, and the first file on the right moves straight to the front; they are followed by the next file; each file moves off when the haunches of the horses of the rear rank man, which has broken, arrives at the head of the horses of the front rank; each file marches six paces straight to the front, makes a quarter twrn to the right, and marches in the new direction until it reaches its place in the column, when it makes a quarter turn to the left.

The chief of the second platoon breaks with his first file, keeping abreast with, and one pace to his left. The first lieutenant is in the rank of file-elosers, opposite the centre of the column, and the second sergeant or guide of the left, follows the last file.

To break the platoon by the left, the movement is executed following the same principles, but by inverse means, at the commauds:

> 1. By the left file. 2. March.

## Direct march in column by file.

480. The troopers should keep their horses straight, and march at a free and equal gait; they should keep their eyes to the front, and con-
tinue in the direction of the column, so as to perceive only the trooper who marches before them, to mareh at the same gait with him, preserving always the distance of two feet from head to croup, that his own horse may not tread upon the heels of the horse in front. This distance should be recovered gradually when lost.

The column changes direction to the right or left, as prescribed, No. 410.

To halt the column, the captain commands:

## 1. Column. 2. Halt.

At the command halt, the troopers stop together in the direction of their file-leaders and at their distances, taking care to prevent the horses from stepping back.

To move off, the captain commands :

## 1. Column, forward. 2. Mareh.

At the command march, the troopers move off together.
The column being at a halt, if the captain wishes to commence the move at a trot, he conforms to what is prescribed, No. 423. In this case the chiefs of platoons more off promptly at the trot, that the troopers in their rear may take this gait at once, without marching first at a wall.

## Individual oblique march.

481. The column marching by file, the captain commands:
482. Left (or right) oblique. 2. MARCH.

At the command march, each trooper executes a quarter turn to the left, and moves forward in his new direction, all following parallel lines, and regnlating themselves toward the right, in order to keep on the same line and to preserve their distances on that side.

To return to the primitive direction the captain commands:

## Forward.

At this command, the troopers return to the original direction, by a quarter two to the right, in advancing, and move forward in the direction of their file-leaders.

The troop marching in column by file, to form it to the front, to the left, or on right, into line.
482. The column marching right in front, to form it to the front into line, the captain commands :

## 1. Front into line. 2. March. 3. Right-Dress. 4. Front.

At the command march, the first file continues to march straight forward. The others immediately commence obliquing to the left, march in their new direction, and each file makes a quarter turn to the right on coming opposite to the place he is to occupy in the troop. When the first file has marched twenty paces, the chicf of the first platoon commands halt. At this command, it halts square to the front, the guide on the right of the front rank man; the other files come up in succession on the left of the first, and dress to the right.

At the command front, turn the head to the front.
The captain gives the command right-dress, immediately after hult, and commands front when the last file is aligued.

The column marching left in front, the movement is executed following the same principles, but by inverse means.
483. The culumn marching right in front, to furm it iuto line upon its left flank, the captain commands:

1. Left into line. 2. Marcir. 3. Left—Drfss. 4. Front.

At the command march, the first file turns to the left, and moves straight forward; the other files continue to march on, and at two paces before arriving opposite the place they are to occupy in the troop, they turn in succession to the left.

When the first file has marched twenty paces, the chief of the first platoon commands halt. At this command it halts-the guide on the right of the front rank man: the other files come up and form in succession on the left of the first, and dress to the right.

At the command front, turn the head to the front. The captain gives the command right-dress, immediately after halt, and front when the last file is aligned.

A column marching left in front is formed into line on the right flank by inverse means.
484. The column marching right in front, to form in line upon the prolongation and in advance of its right flank, the captain commands:

1. On right into line. 2. Marcif. 3. Right—Dress. 4. Front.

At the command march, the first file turns to the right and moves straight forward ; the other filcs continue to march on, and each turns in succession to the right, at one pace beyond the point where the one preceding turned.

When the first file has marched twenty paces, the chief of the first
platoon commands halt. At this command it halts; the guide taking his place on the right of the front rauk, the other files come up and form in succession on the left of the first, and dress to the right.

A column marching left in front, is formed into line on the left by inverse means.

## Tu break the troops by twos or by fours.

485. The troop being in line, the captain commands:

## 1. By twos (or by fours). 2. March. 3. Guide left. .

At the first command, the chief of the first platoon places himself in front of the two or four files of the right; the right guide places himself on his right. At the command march, the first two or four files of the right move straight to the front; they are followed by the other files, who move off when the haunches of the horses of the rear rank are on a line with the heads of the horses of the front rank. These files march straight forward six paces, execute a querter turn to the right by troopers, and march in this direction antil they meet the column, when they take their places in it by making a quarter turn to the left.

The chief of the second platoun breaks with the first two or four files of his platoon, keeping abreast with them and at one pace from the flank of the column on the side of the guide, each rank of two or four preserving between them the distance of two feet.

The captain assures himself that the officers, the file-closers, and guide are properly placed.

The trooper on the left of the first rank of twos (or fours) is guide of the column; he keeps bis eyes to the front, moves straight forward, and marches so that the troopers of his rank may le at one pace from the croup of the horse of the chief of the first platoon. The trooper on the left of each of the other ranks, who is guide of his rank, preserves the head direct, and keeps at the distance of two feet from bis file-leader, and in the same direction; the other troopers of each rank look occasioually toward the guide, in order to align themselves and regulate their march upon him. They feel the boot lightly toward that side, and yield to all pressure coming from it. When the march is by fuurs, they resist all pressure coming from the side opposite the guide.

The column marching by twos or by fours, the captain commands:

## 1. Trot. 2. March.

At the command mareh, the troopers take the trot, taking care not to fret their horses.

When the column has marched a sufficient distance at the trot, the captain commands:

## 1. Walk. 2. March.

486. The column marching in column of twos or fours, right in front, to change direction, the captain commands:

## Head of the column to the left (or right).

At this command, the chief of the first platoon commands:

## 1. Left-Turn. 2. Formard.

At the command left, the left trooper, who is pivot, prepares to turn at the same gait, the trooper of the opposite side to lengthen his.

At the command turn, the first rank of twos or fours turns to the left. The pivot turas without changing his gait, describing an ere of a circle of five paces. The trooper on the opposite side turns in lengthening the gait; the other troopers turn the head toward the marching flank, to regulate their rate of march, feeling lightly the boot on the side of the pivot. At the command foruard, the troopers who had increased the gait, resume the precise pace at which they were before moving, and the head of the column marches straight forward in the new directiou. Each rank executes the same morement, on arriving upou the ground where the first has turned.

The column marching by twos or by fours, the captain halts it, as prescribed, school of the trooper.

To recommence the march, he commands:

## 1. Column, forward. 2. March. 3. Guide left.

487. The column marching by twos or by fours, the captain commands:

## 1. Left (or right) oblique. 2. МАRCH.

At the command march, each tronper executes a quarter turn to the left. The trooper on the left of the first rank, who is guide of the column, moves straight forward in the new direction, and parallel to the chief of the first platoon. The trooper on the left of each of the other ranks, who is guide of his rank, moves forward also in the new direction, observing the guide of the column so as to keep on the same line, and in a parallel direction with him.

The other troopers move forward, lookiug occasionally to the left, so as to align themselves upon their guide. Each one places the left
knee behind the right knee of the man on the left, and the head of his horse opposite the lower part of the neck of the horse on his left.

To return to the primitive direction, the captain commands:

## Forward.

At this command, the troopers return to the original direction, by a quarter twon to the right.

The troop marching in column by twos or by fours, to form it to the front, to the left, or on right into line.
488. The troop marching in column by twos or by fours, right in front, the captain commands:

1. Front into line. 2. March. 3. Right-Dress. 4. Front.

At the command march, the first two (or four) files continue to march straight forward: when they have marched thirty paces, the chief of the first platoon commands:

## Halt.

At this command, the first two (or four) files halt square to the front, the guide of the right returns to the right of the troop. All the other files of twos or fours oblique to the left, march in this direction, and come $n p$ in succession by a quarter turn to the right on coming opposite their places, and without command of the chiefs of platoon.

The captain, who moves to the right flank after the command march, commands the alignment when the chief of the first platoon commands halt.

As soon as the chiefs of platoon arrive upon the line, they place themsclves at the centre of their platoons and align themselves. The guide of the left returns to the left of the troop, when the last two (or four) files arrive upon the line. The first lieutenant superintends the alignment of the rear rank, and then takes his post in rear of the centre.
489. The column marching right in front, to form it into line on its left flank, the captain commands:

1. Left into line. 2. March. 3. Right-Dress. 4. Front.

At the command march, the four leading files turn to the left and move straight forward; when they have marched thirty paces, the chief of the first platoon commands:

## Halt.

At this command, the two (or four) leading files halt, and the guide places himsclf on the right of the troop. All the other files continue to march on, and at three paces before arriving opposite the place they are to occupy in the troop, turn in succession to the left, without the command of the chiefs of platoon.

The captains, the first lientenant, the chicfs of platoon, and the guide of the left, conform exactly to what is prescribed for the front into line.

490 The column marching right in front, to form line upon the prolongation and in advance of its right flank, the captain commands:

1. On the right into line. 2. March. 3. Right-Dress.
2. Front.

At the command march, the four leading files turn to the right, and march straight forward; when they have marched thirty paces, the chief of the first platoon commands halt.

At this command, the four leading files halt, and the right guide takes his place on the right of the troop. All the other files continue to march forward, each turning to the right in succession, and without the commands of the chiefs of platoon, at the distance three paces beyond the point where the preceding rank has turned, forming to the left, and upon the alignment of the first.

The captain, the first lieutenant, the chiefs of platoon, and the left guide, conform exactly to what is prescribed for the front into line.
491. The troop is broken by the left, at the commands:

1. By twos (or by fours) from the left. 2. March. 3. Guide right.

The column is exercised at the march in column, the changes of direction and the individual oblique marches. It is also exercised at the different formations, which are executed, following the same principles, but by inverse means, at the commands: 1. Front (right or lejt) into line. 2. March. 3. Left—Dress. 4. Froxt.
492. When the troop has acquired precision and regularity in the formations at the different gaits, the eaptain exercises it in breaking by fours from a halt at the trot, and at the gallop.

To form the troop to the left in one rank.
493. The troop being formed into two ranks, the captain commands :

## 1. Left into single rank. 2. March. 3. Front. 4. Halt. <br> 5. Right-Dress. 6. Front.

At the eommand march, the front rank moves forward six paces, dressing by the right; the trooper on the left of the rear rank turns to the left and moves forward; he is followed by all the other troopers of that rank, who exeentes the same movement in succession.
At the command front, the troopers of the left of the rear rank turn to the right, and the other troopers in succession, when they have arrived nearly opposite the place they are to occupy in the rank.
At the command halt, the trooper on the left halts, and so do the others in succession, on arriving ahreast of him.
At the command right-dress, all the troopers of the rear rank dress to the right.

At the command front, turn the head to the front.
To form the troop to the right in two ranks.
494. The troop being in one rank, the captain designates the trooper . Who is to be on the left of the front rank, also the one to be the right of the rear rank, and commands:

1. Right into two ranks. 2. March. 3. Right-Dress.

## - 4. Front.

At the command march, the front rank moves forward six paees, dressing by the right; the trooper on the right of the rear rank turns to the right as soon as the front rank has passed, and moves forward obliquely to the right; when he is nearly in rear of the trooper on the right of the front rank, he fronts by turning to the left. All the other troopers execute the same movement in succession, placing themselves exactly behind their file-leaders and at their proper distances.

At the command right-dress, all the troopers align themselves to the right.

At the command fromt, turn the head to the front.

## To form twos and fours at the same gait.

495. The troop marehing in column by file, right in front, to form twos the eaptain commands:

## 1. Form twos. 2. March.

At the command march, the first file cuntinues to march on, and
balts when it has marched ten paces; the second file obliques to the left, and comes up abreast of the first; on arriving there, it halts and dresses to the right. All the other files continuc to march straight forward, Nos. 2 and 4 exccuting their movement in the same manner but in succession, and when Nos. 1 and 3 , upon which they should form, have nearly arrived at their proper distance, and are about to halt.
496. The troop marching in column by twos, right in front, to form fours the captain commands:

## 1. Form fours. 2. March.

At the command march, the first two files continue to march on, and halt when they have gone ten paces: the two following files oblique to the left, and come up abrcast of the first two ; on arriving there, they halt, and dress to the right. All the other files continue to narch straight forward, Nos. 2 and 4 of cach rank execnting their movement in the same manner, when Nos. 1 and 2, upon which they should form, have nearly arrived at their proper distance, and are about to halt.
497. When a column is at a trot, the leading file or files pass to the walk; at the command march, the others continue to march at the trot, until they have arrived abreast of those on which they should form : then they pass to the wall.

When the column is at a gallop, the leading file or files pass to the trot at the command march; the others continue at the gallop, until they have executed their formation, when they pass to the trot.

When twos or fours are formed at the trot, or at the gallop, the guide is announced as soon as the first files have doubled. In executing the same movements at a walk, as the head of column halts, the guide is not annonnced.

In a column marching left in front, these movements are execnted by inverse means.

## To break by twos and by file at the same gait.

498. The troop marching in column loy fours, right in front, to break by twos the captain commands:

## 1. By twos. 2. Makch. 3. Guide left.

At the command by twos, all the troopers prepare to halt except Nos. 1 and 2 of the leading files. At the command march, Nos. 1 and 2 of the leading files continne to march at the same gait ; all the others halt. Files Nos. 3 and 4 of the leading rank oblique to the right at
the moment they are passed by the croup of the horses of the rear rank of Nos. 1 and 2, and place themselves in column behind them.

Each rank of four executes the same movement in regular succession, files Nos. 1 and 2 breaking as soon as files Nos. 3 and 4 of the rank which precedes them have commenced obliquing, in order to enter the column.

Files Nos. 1 and 2, which break to the front, regulate their gait so as to preserve their distances ; and files Nos. 3 and 4 keep their horses straight, so as not to constrain the movements of files Nos. 1 and 2.
499. The troop marching in column by twos, right in front, to break by file, the captain commands :

## 1. By file. 2. March.

At the command by file, all the troopers prepare to balt except the right file of the leading rank of twos. At the command march, the right file of the leading rank of twos continues to march at the same gait; all the others halt. The left file of this same rank obliques to the right the moment it is passed by the croup of the rear rank horse of No. 1, and places himself in column bchind the first file. The guide of the right takes his place in rear of the chief of the first platoon.

Each rank of twos executes the same movement in succession, files Nos. 1 and 2 breaking as soon as files Nos. 2 and 4, who precede them, have commenced obliquing, in order to enter the column.

Files 1 and 3, which break to the front, regulate their gait so as to have their distances. Files 2 and 4 keep their horses straight, so as not to constrain the movements of files 1 and 3 .

When the column is at a trot, the right files of the leading rank coutinue at that gait, all the others take the rulk at the command march, and resume the trot on entering the column. When the column is at the gallop, the files which are to break take the trot at the command march, and resume the gallop on entering the column.

The column marching left in front, the movement is executed by inverse means at the command: 1. By twos (or by file), from the left, march. If the column marehes by twos, the gnide is indicated to the right, immediately after the command march.

## To form twos and fours in doubling the gait.

500. The truop marching by file right in front, to form twos, the captain commands:

## 1. Form twos, trot. 2. March. 3. Guide left.

At the command form tros, wot, all the troopers prepare to trot, except the leading file, and take it at the command march. The second filc obliques to the left, and comes up abreast of the first, and on arriving there takes the walk; all the other filcs continne to move at the trot. Files 4 and 2 execute the movement in the same manner, when 3 and 1, upnn whom they are to form, have nearly arrived at their distance, and are abont to pass to the wall.
501. The troop marching in column of twos, right in front, to form fours, the captain commands:

## 1. Form fours, lrot. 2. March. 3. Guide left.

At the command form fours, trot, all the troopers, except the two leading files, prepare to take the trot, and take it at the command march. The two files following the first two oblique to the left, and come up abreast of these two, resuming the walk as they do so; all the other files continue to march forward at the trot. Files 1 and 2 of the next file of fours elose up upon the leading file. and pass to the walk, mhen Nos. 2 and 4 of the same file oblique to the left, and come up abreast of them, taking the walk, and so do all the remaining files in succession.

When the column is at the trot, the movement is executed on the same principles. At the command march, all the troopers, except the files at the head of the column, pass to the grallop, and resume the trot when the formation is cxecuted.

The column marchiug left in front, the morement is executed by inverse means.

## To break by twos and by file in doubling the gait.

502. The troop marching in column by fours, the captain commands:

## 1. By twos, trot. 2. March. 3. G'uide left.

At the command by ficos, trot. files 1 and 2 of the leading rank of fours prepare to trot. At the command murch, they commence the trot; all the other files continue to march at the ratk; files 3 and 4 take the trot in succession and oblique to the right, in order to place themselves in column behind files 1 and 2.

The movement being terminated the captain orders the walk.
503. The troop marching in column of twos, right in front, to break by file the captain commands:

## 1. By file, trot. 2. MaRch.

At the command by file, trot, the right file of the leading rank of twos prepares to trot. At the command march, it commences the trot, all the other files continue at the valk; files 2 and 4 assume the trot in succession and oblique to the right, in order to place themselves behind files 1 and 3 in the column.

When the column is at the trot, to break in doubling the gait, the captain commands: 1. By twos (or by file), gallop. 2. March.
504. The column marching left in front, the movement is executed by inverse means, at the commands: 1. By twos (or by file), from the left. 2. March. If the column is to march by twos, the guide is indicated to the right, immediately after the command march.

## SABRE EXERCISE.

505. The captain canses the sabre exercise to be executed at a halt; for this purpose be opens the ranks, and commands:
506. By the left (or right), open files. 2. March. 3. Right (or left)-Dress. 4. Front.

At the command march, the right trooper of each rank moves forward six paces; the one on the left of cach rank turns to the left, and moves forward; he is followed by all the other troopers of his rank, who execute the same movement as soon as they have the necessary space to put themselves in file at their proper distances. The second trooper from the right of each rank, after having marched three paces, turns and dresses to the right; each of the other troopers look occasionally to the rear, and perform the same movement in succession when at threc paces from the one who follows him, and dresses upon those already formed; the troopers of the rear rank place themselves exactly behind their file-leaders.

After the command march, the captain moves to the right of the front rank, and when the second trooper from the right has turned to the front, he commands, right-dress. After having rectified the alignment and the distances in the two ranks, he commands, front.
506. When the captain wishes to re-form the troop, he commands:

## 1. To the right (or left), close files. 2. March.

At the command march, the right trooper of each rank moves forward
six paces; all the other troopers execute a turn to the right, and move forward.

Each trooper, on arriving within two paces of the place be is to occupy in line, turns to the left, and places himself on the left of the troopers already formed, and dresses to the right. The captain closes the ranks as soon as they are formed.

## Direct march of the troop in line.

507. The most important point in the dircet mareh being to keep the horses straight in the ranks, it is iudispensable that the trooper should preserve the head direct.

To keep themselves aligned, the troopers should feel lightly the boot of the man on the side of the guide, and march at an equal gait. They should field to all pressure coming from the side of the guide, and resist that coming from the opposite side.

The guide should always march at a free and steady gait, and change it with steadiness in order to avoid irregularity in the ranks. If the troopers are in front or in rear of the alignment, too near or too far from the man on the side of the guile, they move from or approach him gradually. When the guide feels himself thrown out of his direction, he extends his arm to the front to indicate that there is too much pressure toward him. When the troopers carry the hand toward the opposite side, give a glance to the guide, and straighten their horses as soon as the guide is relieved.

The guide should be alternately to the right and to the left, that the troopers may acquire the habit of dressing equally well toward either direction.

50S. To march the troop forward, the captain commands:

## 1. Troop, forward. 2. Guide right (or left). 3. March.

At the command march, all the troopers move straight forward, at the same gait with the men on the side of the guide.

The troopers march straight forward, feeling the boot lightly on the side toward the guidc.

To halt the troop, the captain commands:

## 1. Troop. 2. Halt. 3. Right (or left)—Dress. 4. Front.

At the command halt, the troopers stop.
At the command right-dress, they align themselves, and at the command front, turn the head to the front.

After the troop has been exercised sufficiently in the direct march, at

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the uctk, it will be practiced at the trot, and afterward at the gatlop; when marching at a gallop, the troop should habitually pass to the trot and $t$ le wath, before being halted; but when the troopers are masters of their horses it may be halted from the gallop.

## Countermarch.

509. The troop baving arrived at the extremity of the ground, in order to change the direction, the captain commands:
510. Countermarch, by the right fank. 2. By file to the right. 3. March.

At the command countermurch, by, the right fank, the chiefs of platoon turn to the right, the chief of the first platoon placing bimself in front of his first file; the file-closers turn to the left, aud pass to the left of the troop, placing themselves abreast of the rear rank.

The guide of the right places himself promptly behind the guide of the left, facing to the rear, the croup of his horse at six paces from the rear rank.

At the command wrorch, the trooper on the right of each rank turns to the right, the rear rank man joining the front rank man; they then whecl together to the right, the latter lengthening his gait a little; they pass very near the croup of the horses of the rear rank, and are followed by the other troopers, who execute the same movement in succession, taking care to pass over the same ground.

When the first file is two paces from the right guide, who indicates the place where it is to form, the captain commands :

## 1. Front. 2. Halt. 3. Right—Dress. 4. Front.

The file-closers follow the morement, and resume their places as they arrive at them.

After haring commanded march. the captain moves rapidly to the flank by which the movement is executed, in order to direct the head of the column, and to re-form the troop to the rear upon a line parallel to the one it at first occupied.

The troop being aligned, the captain commands, front. At this command, the chiefs of platoon face to the front, by a turn to the left.

The countermarch should generally be exeeuted at the trot. For this purpose, after the second command, the captain indicates the gait.

This movement is executed by the left flank, by inverse means.

## The troop being in line, to form it in column with distance.

510. The captain commands:

\author{

1. Platoons, right wheel. 2. March. 3. Halt.
}

At the first command, the left file of each platoon prepares to step off promptly, and the pivot to turn upon its own ground.

At the command march, each platoon executes its wheel to the right, following the principles of the wheel on a fixed pivot, the marching flanks taking care to step off and wheel together.

At the command halt, the marehing flanks and all the troopers halt at the same instant, those of the rear rank resuming their places behind their file-leaders.

The captaiu commands halt, when the platoons have nearly completed the wheels.

The chiefs of platoon, without learing their platoons, observe that the movement is correctly executed.

During the movement, the guide of the left passes as file-closer behind the second file from the left of the secoud platoon.

## To march in column with distance.

511. In this order of coiumn the guides should preserve between them a distance equal to the front of their platoons, and regulate their gait upon that of the preceding guide.

The chiefs of platoon are responsible for the preservation of the distance, which should be half of the front of the platoon, assuming it to contain twelve filcs, measured from the croup of the horses of the rear rank of the leading platoon, to the head of the horses of the front rank of the rear platoon.

The troop being in open column, right in tront, the captain commands:

## 1. Column, forward. 2. March. 3. Guide left.

At the command march, both platoons put themselves in motion at the same time.

Before the column commences the march, the captain gives the guide of the first platoon a point of direction.

## Changes of direction.

512. In the open column, the changes of direction are executed by successive wheels on a movable pivot, so that the march of the column

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may not be retarded. The arc of a circle described by the pivots should be five puces.

The column being in march, to change the direction, the captain commands:

Head of column to the left or half-left (or to the right or half-right).
At this command, the chief of the first platoon commands: 1. Left -Turn. 2. Forward; which is executed on the principles' of the wheel upon a movable pivot.

The chief of the second platoon gives the same commands in time for his platoon to turn upon the same ground.

In this change of direction while marching, the guide of the right, at the command head of column to the left, moves rapidly to the side of the pivot, and places himself so that the head of his borse will mark the centre point of the arc described by the pivot.

Both platoons commence their wheel at two and a half paces before arriving abreast of the head of the horse of the guide of the right, so as to prevent the column from being thrown out. The guide resumes his place when the second platoon has completed its wheel.

## Individual oblique march.

513. The troop marching in column, with distance, right in front, to cause it to gain ground toward one of the flanks, without changing the front of the columns, the captain commauds:

## 1. Left (or right) oblique. 2. March.

At the command march, the troopers all execute, at the same time, a quarter turn to the right, so that the bead of each horse may be opposite the extremity of the neck of the horse on his right, and that the right knee of each trooper may be in rear of the left knee of the trooper on his right. This first movement being executed, the troopers move forward in the new direction, regulating themselves upon the guide.

The guide of the second platoon pays attention to march on the same line, to preserve his distance, and to keep in a direction exactly parallel to that of the gnide of the first platoon.

To resume the primitive direction, the captain commands :

## Forward.

At this command, the troopers straighten their horses, and move forward, regulating themselves upon the guide.

In the oblique march, the guide is always on the obliquing side,
without being indicated; and after the command forword, the gnide returas, without indication, to the side on which it was before the oblique.

To break by fours, by twos and by file; to form twos, fours and platoons at the same gait.
514. The troop marching in column with distance, right in front, to break by fours at the same gait, the captain commands:

## 1. By fours. 2. March. 3. Guide left.

At the command by fours, repeated by the chief of the first platoon, this officer places biuself in front of the first four files on the right; the right guide places himself on his right.

At the command march, which is also repeated by the chief of the platoon, this platoon breaks by fours as prescribed, No. 485 , and the chief of the second platoon commands halt.

The chief of the second platoon commands by fours, in sufficient time to command march, the moment the last four files of the first platoon commence the oblique morement in order to enter the column.
515. The troop marching in column by fours, right in front, to break by twos, at the same gait, the captain commands:

## 1. Bytwos. 2. March. 3. Guide left.

The chiefs of platoon conform to what is prescribed in order to break by fours, and give the commands, halt: and then, 1. By twos. 2. March; so as to cause no confusion in the column.
516. The troop marching in column by twos, right in front, to break by file at the same gait, the captain commands:

## 1. By file. 2. March.

Which is executed as prescribed for breaking by twos, the guide of the right placing himself behind the chief of the first platoon.
517. The troop, marching in column with distance, at the trot, right in front, to break by fours at the same gait, the captain commands :

## 1. By fours. 2. March. 3. Guide left.

At the first command, repeated by the chief of the first platoon, this officer and the guide of the right place themselves as prescribed, No. 514, and the chief of the second platoon commands, walk.

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At the command march, repeated by both the chiefs of platoon, the first platoon breaks by fours, as prescribed, No. 514. and the secoud platoon takes the valk.

The chief of the second platoon commands, by fours, trot, in sufficient time to command march, when the last four files of the first platoon commeace the oblique movement in order to euter the column.

The same principles are applicable to breaking by twos, and by file.

When the column is at the gallop, these movements are execu'ted on the principles just prescribed, the whole column except the first four files, passing to the trot, and resuming the gallop, as the files break in order to enter the column.
518. The troop marching in column by file, right in front, to form twos at the same gait, the captain commands:

## 1. Form twos. 2. March.

At the commands form turos, and march, repeated by the chief of the first platoon, this platoon executes the movement as prescribed, No. 500 ; the guide of the right moves to the right of the chief of the first platoon, who commands halt, after having marched ten paces. The other platoon continues to march by file, and executes the movement at the command of its chief, who does not command march until the first files of his platoon has arrived at its proper distance.
519. The troop marching in column by twos, right in front, to form fours, at the same gait, the captain commands:

## 1. Form fours. 2. March.

Which is executed as is prescribed for forming twos.
520. The troop marching in column of fours, right in front, to form - platoons at the same gait, the captain commands:

> 1. Form platoons. 2. March.

At the first command, the chief of the first platoon commands, form platoon.

At the command march, repeated by the chief of the first platoon, the guide of the right places himself on the right of this platoon, which forms as in front into line, No. 488 ; the chief of the platoon commands halt, after having marehed twenty paces.

The other platoon continues to march in column by fours, and forms at the command: 1. Form platoon-Marce ; given by its chief in suf-
ficient time to command halt, when the first four files of the platoon arrives at six paces from the platoon which precedes.
521. When the colnmn is at the trot, the same principles are conformed to, except that instead of halting, the first two or four files of the first platoon pass to the rath, at the command march given by their chief. The second platoon continues to march at the trot, and execute the movement at the same gait, the first two or four files of the platoon passing also to the walk, at the command march, given by the chief of the platoon when they arrive at their proper distances.

When the column is at the gallop, to form twos, fours, etc., the same principles are observed, the first two or four files of each platoon passing to the trot at command march, given by their chief.

When these formations are executed at the trot, and at the gullop, the guide is announced by the captain as soon as the first files have donbled, or the first platoon is formed; in the last case only each chief of platoon repeats the command of the guide as soon as bis platoon is formed.

To break by fours, by twos, and by file; to form twos, fours, and platoons, in doubling the gait.
522. The trooper marching in column with distance, right in front, to break by fours, in doubling the gait, the captain commands :

## 1. By fours, trot. 2. March. 3. Guide left.

At the first command, repeated by the chief of the first platoon, this officer and the guide of the right, place themselves as prescribed, No. 514.

At the command march, repeated by the chief of the first platoon, this platoon breaks by fours, as prescribed, No. 514.

The other platoon continues to march at the wolk; its chief commands, by fours, trot, in sufficient time to command march, the moment the last four files of the first platoon commences the oblique movement in order to enter the column.

These principles are applicable to breaking by twos and by file.
When the column is at the trot, to break at the gullop, the same principles are observed at the commands:

> 1. By fours, gallop. 2. March. 3. Guide left.
523. The troop marching in column by files, to form twos in doubling the gait, the captain commands :

## 1. Form twos, trot. 2. March. 3. Guide left.

At the commands form thoos, trot, and march, repeated by the chief of the first platoon, this platoon executes its movement as prescribed, No. 500 , and the guide of the right moves to the right of the chief of the first platoon.

At the first command, the chief of the second platoon commands, trot. At the command march, repeated by him, the second platoon takes the trot. He commands, form twos, in sufficient time to command march the moment the first file of the platoon is nearly at its proper distance: the first file then passes to the walk.
524. The troop marching in column of twos, to form fours, in doubling the gait, the captain commands:

## 1. Form fours, trot. 2. March. 3. Guide left.

Which is executed as prescribed for forming twos.
525. The troop marching in column by fours, to form platoon, in doubling the gait, the captain commands:

## 1. Form platoons, trot. 2. March. 3. Guide left.

At the first command, the chief of the first platoon commands, form platoon, trot.

The chief of the second platoon commands, trot.
At the command march, repeated by these officers, the first platoon forms as prescribed, No. 520, and the guide of the right places himself on the right of this platoon. The second platoon takes the trot. The chief of this platoon gives the command, form twos, in sufficient time to command march the moment the first file of his platoon is nearly at its proper distance ; the first file then passes to the walk.
526. The troop marching in column by twos to form fours, in doubling the gait, the captain commands :

1. Form fours, trot. 2. March. 3. Guide left.

Which is executed as prescribed for forming twos.
527. The troop marching in column by fours, to form platoons, in doubling the gait, the captain commands:

## 1. Form platoons, trot. 2. March. 3. Guide left.

At the first command, the chief of the first platoon commands, form platoon, trot.

The chief of the second platonn commands, trot. At the command
march, repeated by these officers, the first platoon forms as prescribed, No. 520, and the guide of the right places himself on the right of this platoon.

The second platoon takes the trot, and forms at the command form platoon, given by its chief in sufficient time to command march, when the first four files arrive at their proper distance from the first platoon; then these four files take the walk.

The captain commands guide left when the first platoon is formed, and gives a point of direction.

The chief of the second platoon commands the guide as soon as bis platoon is formed.

Wheu the column is at the trot, these formations are executed at the gallop, following the same principles, at the commands: 1. Form twos or form fours, or form platoons, gallop. 2. March.

The troop marching in column with distance, to face it in the opposite direction, and to face it to the front again.
528. The troop marching in open column, right in front, the captain comurands :

## 1. Platoons, left about wheel. 2. March.

At the first command, the trooper on the left of each platoon, who becomes the pivot, prepares to halt, without, however, slackeniug his pace.

At the command march, the pirots halt, and the marching flanks wheel at the gait in which the column was marching, regulating themselves upon the onter flank of the platoon at the head of the column, so as to complete the first half of the movement at the same instant.

The morement being nearly finished, the captain commauds:

## 1. Forward. 2. Guide right.

During this movemeut, the gnide of the left places himself on the left of the second platoon; the guide of the right takes his place as file-closer in rear of the second file from the right of the first platoon, and the other file-closers pass to the side opposite the guidc.

To cause the troop to resume its primitive direction, the captain commands :

1. Platoons, right about wheel. 2. March. 3. Forward. 4. Guide left.
2. The column being on the march, to balt it, the captain commands :

## 1. Column. 2. Halt.

At the first command, both platoons prepare to halt, and at the command halt, halt at the same time.

## To form line to the left.

530. The troop beiug in column with distance, right in front, to form it in line on its left flank, the captain commands:
> 1. Left into line, wheel. 2. March. 3. Halt. 4. RightDress. 5. Front.

At the first command, the guide of the right moves upon the prolongation of the guides of the column, at the distance of the front of a platoon, facing the side toward which the line will be formed.
At the command march, the troop wheels into line, the trooper on the left wing of each platoon serving as pivot, and turuing upon his own ground.
The captain commands halt the moment the marching flanks have nearly completed their movement, and then right-dress.

At this command, both platoons align themselves.
The troop being aligned, the captain commands, front.
During the wheel, the guide of the left resumes his place in line.
531. The formation of the troop into a column with distance, left in front; the march of this column; the changes of direction in a column; left in front; ete., etc., are executed upon the same principles as a column right in front, but by inverse means.

## To form line to the right by inversion.

532. The troop marching in open column, right in front, to form it in line upon its right flank by inversion, the captain changes the guide ; for this purpose, he commands :

## Guide right.

The captain passes by the head of the column to the side of the new guides, rectifies their direction, then balts the column, and commands:

1. By inversion, right into line, wheel. 2. March. 3. Halt. 4. Left-Dress. 5. Front.

Which is executed as prescribed for whecling into line by the left, but by inverse means.

To put the troop in column again, right in front, the captain commands: 1. Platoons, left uheel. 2. March. 3. Halt (or Forward). 4. Guide left.

## To form on right into line.

533. The troop marching in column with distance, right in front, to form it in line on the prolongation and in advance of its right flank, the captain commands :
534. On right into line. 2. March. 3. Guide-Right. 4. Front.

At the first command, the chief of the first platoon commands right, and at the command march, be commands turn; the platoon turns to the right and moves formard; when it has marched thirty paces, its chief commands hult, and then right-dress.

The second platoon continues to march forward, without approaching the line; as soon as it arrives abreast of the fourth file from the left of the first platoon, its chief commands: 1. Right-Turv. 2. Forward. The platoon then directs itself toward the place it is to occupy in line, and on arriving abreast of the file-closers, its chief commands hult, and then left-dress.

When the troop is aligned, the captain commands, front.

## To form on left into line by inversion.

534. The troop marching in column with distance, right in front, to form it in line upon the prolongation and in adrance of its left flank, the captain commands:
535. By inversion on left, into line. 2. March. 3. Guide left. 4. Front.

At the first command, the chief of the first platoon commands, left.
At the command march, he commands turn; the platoon turus to the left, and moves forward at the command forward; when it has marched thirty paces, its chief commands halt, and then left-dress.

The second platoon continues to march forwarl, without approaching the line; when it arrives abreast of the fourth file from the right of the first platoon, its chief commands: 1. Left-Turs. 2. Forward; this platoon directs itself toward the place it is to occupy in line, and on
arriving abreast of the file-closers, its chief commands halt, and then left—dress.

## To form front into line.

-535 . The troop being in column with distance, right in front, to form it in line upon the head of the column, the captain commands:

## 1. Front iņlo line. 2. March. 3. Guide right. 4. Front.

At the first command, the chief of the first platoon commands, platoon, forward, and the chief of the second commands, platoon, left $\hbar$ alf wheel.

At the command march, repeated by these officers, the first platoon moves forward; its chief repeats the indication of the guide, and when it has marched thirty paces, he commands: 1. Halt. 2. Right -Dress.

The chief of the second platoon, when the left half wheel is executed, commands: 1. Forward. 2. Guide right; and marches straight forward. When the right of his platoon arrives opposite the left of the first platoon, he commands: 1. Right half wheel. 2. Forward: and when he arrives ahreast of the file-closer: 1. Halt. 2. RightDress.

The troop being aligned, the captain commands, front.

## To form line faced to the rear, on the rear into column.

536. The troop being in column with distance, right in front, to form line faced to the rear, the captain commands :
537. Platoons, left about wheel. 2. March. 3. Front into line. 4. March. 5. Guide lefl. 6. Front.

At the second command, each platoon executes its wheel to the left about.

At the fourth command, the chief of the second platoon, now in front, when its wheel is nearly completed, commands, forward, guide left; and when it has marched thirty paces: 1. Halt. 2. LeftDress.

The chief of the second platoon, on completing three-fourths of his wheel, commands: 1. Forward. 2. Guide left, and dircets it toward the place it is to occupy in line, conforming in other respects to what is prescribed for front into line, when the column is left in front.

To form line faced to the rear on the head of the column.
537. The troop being in column with distance, right in front, to form line faced to the rear upon the head of the column, the captain commands:

1. By inversion, front into line. 2. Marcif. 3. Guide left.

At the first command, the chief of the first platoon commands, platoon, foruard; and the chief of the second, platoon, right half wheel.
At the command march, repeated by these officers, the movement is executed as prescribed for front into line, but by inverse means.

The captain without rectifying the alignment, commands:

1. Platoon, left about wheel. 2. March. 3. Halt. 4. RightDress. 5. Front.

## Movements by fours, the troop being in column with distance.

538. The troop being in columu with distance, right in front, to canse it to gain ground toward its left flank, the captain commands:

## 1. By fours, left wheel. 2. March. 3. Forward. 4. Guide right.

At the command march, each rank of fours executes its wheel to the left, according to the principles of the wheel on a fixed pivot; Nos. 4 turn upon themselves, sustaining with the left leg the haunches of their horses, in order not to constrain the movement of the rank immediately behind them; all the troopers regulate themselves toward the marching flanks.
539. To take a direction parallel to the first, and return to column with distance, the captain commands:

## 1. By fours, right wheel. 2. March. 3. Halt.

Which is executed on the same principles, but by inverse means.
If, instead of halting, the captain wishes the column to march forward, he commands: 1. Forward. 2. Guide left.
540. The troop being in column with distance, right in front, it is caused to gain ground toward its right flank by the commands: 1. By fours, right wheel. 2. March. 3. Forward. 4. Guide left; and to resume the primitive direction at the commands: 1. By fours, left wheel. 2. March. 3. Halt (or Forward). 4. Guide left.
541. The troop being in column with distance, right in front, to cause it to march to the rear, the captain commands :

1. By fours, left about wheel. 2. March. 3. Forward. 4. Guide righto

At-the command mareh, the movement is executed in each rank by fours, so as to throw the rear rank before the front rank, and the ranks of fours are inverted throughout the column.

If, instead of moving forward after the wheel to the left about by fours, the captain wishes to halt the column, he commands, halt.

To return to the primitive direction, the captain commands:

## 1. By fours, right about wheel. 2. March. 3. Halt. -

Which is executed as just prescribed, but by inverse means.
If the captain wishes the column to march forward, he commands:

1. Formard. 2. Guide left.
2. In all the movements to the left and to the right by fours, the chiefs of platoon move up abreast of the first rank of their platoons, on the side of the guide.

The captain, the file-closers, and the guides of the right and left, will preserve their places after the wheel to the left or right by fours is completed, facing in the new direction.

In the wheel to the left or right about by fours, the chiefs of platoon march behind the centre of their platoons, and the file-closers in front. The guide of the right is on the left of his platoon, and the guide of the left in front of his.

## WHEELINGS.

543. During the wheel, the chiefs of platoon keep at the centre of their platoons, and correctly aligned, keeping their horses upon the arc of a circle, more or less great, in proportion to their distance from the pivot. The files on the flanks of platoons close upon each other, all observing the progression of the marching flank, and keeping upou the ares they should describe.

## To wheel on a fixed pivot.

544. The troop is exercised in wheeling on a fixed pivot, first at the walk, then at the trot, also at the gallop.

The troop beiug balted and correctly aligned, the captain commands :

> 1. Troop in circle, to the right. 2. March.

Which is executed ou the principles prescribed, Nos. 434 and 435.

To halt the troop during the wheel, the captain commands:

1. Troop.
2. Halt.
3. Left-Dress.
4. Front.

At the first command, the troopers of the rear rank straighten their horses, and resume their places behind their file-leaders.

At the second command, all the troopers halt.
At the third command, the troop dresses to the left.
The troop being aligned, the captain commands front.
If, instead of halting, the captain wishes to resume the direct march, he commands :

## 1. Forward. 2. Guide left.

At the first command, the troopers of the rear rank straighten their horses, and place themselves behind their file leaders, and the whole troop moves forward at the gait in which it was marching before the wheel.
545. The troop wheeling to the right, at the wralk, or at the trot, the captain commands:

## 1. Troop in circle, left wheel. 2. March.

Which is executed as prescribed, Nos. 434 and 435 .
546 . The troop being halted, the eaptain commands:

1. Troop, $\left\{\begin{array}{l}\text { right (or left) wheel. } \\ \text { right about (or left about) wheel. } \\ \text { right half (or left half) wheel. }\end{array}\right\}$ 2. MARch.
2. Troop. 4. Halt. 5. Left (or right)-Dress. 6. Front.

To exercise the troop while marching at the wheels on a fixed pivot, the captain commands:

1. Troop, $\left\{\begin{array}{l}\text { right (or left) wheel. } \\ \text { right about (or left about) wheel. } \\ \text { right half (or left half) wheel. }\end{array}\right\}$ 2. March.
2. Formard. 4. Guide left (or guide right).

## To wheel on a movable pivot.

547. The troop marching in line, to change direction to the right, the captain commands:

## 1. Right-Turn. 2. Forward.

Which is executed as prescribed, No. 438 , the pivot describing an arc of a circle of fifteen pares.

## Movements by fours.

548. The troop being in line, to cause it to gain ground toward its right flank, the captain commands:

\author{

1. By fours, right wheel. 2. March. 3. Forward. 4. Guide left.
}

Which is executed as prescribed, No. 540. The chiefs of platoon march on the side of the guide, at one pace from and abreast of the. leadiug files of their platoon.

The guide of the right marches in front of the column, at one pace from the leading rank of eight, the guidc of the left behind the last rauk of eight of the second platoon.

To put the troop in line agaiñ, the captain commands:

1. By fours, left wheel. 2. March. 3. Halt. 4. RightDress. 5. Front.

Which is executed as prescribed, No. 540, the guides resuming their places in line.

The troop marching in line, to break it by platoons, to the right, and to form it again into line.
549. The troop marching in line, to cause it to gain ground toward its right flank, the captain commands:

## 1. Platoons, right wheel. 2. March. 3. Forward. 4. Guide left.

Which is exercised as prescribed, No. 510, the pivots halting short, and the left file of each platoon stepping out promptly, so as to arrive together iu column.

To put the troop in line again, the captain commands:

> 1. Platoons, left wheel. 2. Marci. 3. Forward. 4. Guide right.

The marching flanks regulate their movements so as to arrive together io line.

The troop marching in line, to break it to the front by platoons, and to re-form it.
550. The captain commands:

## 1. By platoon, to the fiont. 2. March. 3. Guide left.

At the command march, the first platoon continnes to march forward; its chief repeats the command, guide left. At the first command, the chief of the second platoon commands: Platoon, right half wheel, which is commenced at the command march; when it is executed, the chief of the platoon commands: 1. Forward. 2. Guide left; and marches it straight forward. When the left of his platoon arrives in the direction of the first platoon, he commands: 1. Left half wheel. 2. March. 3. Forward ; in order to take his position in column.

The movement is executed in the same manner at the trot, and at the gallop.
551. The troop marching in column with distance, right in front, to form it at the same gait, the captain commands:

## 1. Form troop. 2. March. 3. Guide right.

Which is executed in the same manner as front into line, No. 535 , except that, as the troop is on the march, the chief of the first platoon does not command platoon forward, or march, but repeats the command for the guide.

The troop marching at the trot, this movement is execnted on the same principles, except that the chief of the first platoon commands: 1. Walk. 2. March; the guide of the right moving up on the line with the chiefs of platoon, and the chief of the second platoon commands: 1. Walk. 2. March; on arriving in line. When the column is at the gallop, the platoons take the trot in succession.

The troop marching in line it is broken by the left by inverse means, at the commands: 1. By the left, by platoons to the front. 2. March. 3. Guide right.

The same movement may be performed by doubling the gait, at the commands: 1. By platoons to the front, trot. 2. March. 3. Guide left. At the first command, the chief of the first platoon commands, trot; the chief of the second commands, platoon, right half wheel, trot.

At the command march, the movement is execnted as before.
The line may be $\mathrm{r}^{-}$-formed at the commands: 1. Form troop, trot. 2. March. 3. Guide right. At the first command, the chief of the second platoon commands, platoon, left half wheel, trot. The first
platoon continues to march at a walk, and its chief repeats the command for the guide. When the second platoon arrives in line, its chief commands: 1. Walk. 2. Marci.

## THECHARGE.

552. The troop is exercised at the charge: 1. In line. 2. In column. 3. As foragers.

The charge in line, executed by the troop when in line; it should be as short as possible, so as to arrive in good order, and withotit fatiguing the horses.

The charge in column is exercised by the troop when broken into column of platoons with distance.

To execute the charge as foragers, all the troopers of the troop disperse, and direct themselves each upon the point he wishes to attack, observing not to lose sight of their officers, who charge with them.
553. The troop being iu line, the captain orders the sabres to be drawn, and the platoons to charge in succession.

For this purpose the captain adrances 240 paces to the front, taking a trumpeter with him; and when he wishes the morement to commence, he causes a signal to be giren.

The first platoon then mores forward at the commands: 1. Platoon, forward. 2. Guide right (or lcft). 3. March; by its chief. It passes, in succession from the walk to the trot, from the trot to the gallop, and from the gallop to the charge.

When the platoon has moved some sixty paces at the charge, the chief of platoou commauds: 1. Attention. 2. Platoon. 3. Halt. 4. Right-Dress. 5. Front.

At the command attention, the troopers carry the sabre to the shoulder. At the command platoon, they take the trot. At the command halt, they stop. At the command right-dress, they align themselves to the right. At the command front, turn the head to the front.

The second platoon follows when the first has halted.
554. To execute the charge by the troop, the captain places himself in front of the centre of his troop, and commands:

1. Troop, forvard. 2. Guide right (or left). 3. March.

When the troop has marched twenty paces, he commands:

## 1. Trot. 2. March.

At sixty paces farther, he commands:

## 1. Gallop. 2. March.

At eighty paces farther, he commands:

## Charge.

At this command, repeated by the chiefs of platoons, the troopers of both ranks take the position of raise, sabre. They give hand and lengthen the gallop, without losing control of their horses or disuniting.

When the troop has passed over sixty paces to the charge, the captain commands:

1. Attention. 2. Troop. 3. Halt. 4. Right-Dress. 5. Front.

At the command attention, repeated by the chiefs of platoon, the troopers prepare to slacken the pace, and carry the sabre to the shoulder.

At the command troop, the chiefs of platoon command platoon, and the troopers pass to the trot.

At the command halt, repeated by the chiefs of platoon, the troopers halt.

At the command right-dress, they align themselves to the right.
The troop being aligned, the captain commands front.
When the troop executes the charge correctly, instead of halting when the charge is finished, the captain commands:

## c 1. Attention. 2. Trot. 3. March.

555. At these commands, repeated by the chiefs of platoon, the troop passes to the trot, and be commands:

## 1. First (or second) platoon, as foragers. 2. Marciu.

At these commands, repeated by the chief of the platoon designated, the platoon moves forward at the gallop, and disperses as foragers. A trumpeter follows the chief of the platoon.

The other platoon follows at a trot; when it has passed over 150 paces, the captain causes the rally to be sounded. At this signal, repeated by the trumpeter of the platoon dispersed as foragers, the latter rally upon the other platoon by wheeling to the left about, and resuming their places in rank by the shortest line, the troopers entering the
ranks by the rear. When three-fourths of the platoon have rallied and are in line, the captain commands:

## 1. Allention. 2. Gallop. 3. March. 4. Charge.

The troop again executes the charge in line; the troopers who have not been able to rally, charge upon the flanks of the troop.
556. The troop marching in column with distance, at the trot, the captain commands:

## 1. To the charge. 2. March.

At the first command, the chief of the first platoon commands gallop.
At the command march, repeated by the chief of the first platoon, this platoon commences the gullop.

The other platoon follows at a trot, taking the gallop, when the first platoon has gotten 50 paces in front of it.

When the first platoon has passed over 80 paces at the gallop, its chief commands charge. At this command the platoou executes the charge; and when it has passed over 60 paces, its chief causes it to pass to the trot, by the commands: 1. Attention. 2. Trot. 3. March.

The other platoon pays attention to the movements of the first, so as to change the gait in time, and to resume the ordinary distance; the captain lualts the column when he thinks proper. These charges are executed, each platoon in turn taking the head of the column.
557. The troop marching in column with distance, at the trot, the captain commands:

## 1. First platoon, as foragers. 2. March.

At the command march, repeated by the chief of the first platoon, this platoon disperses as foragers. The troop continues to march at the trot, and when it has passed over 100 or 150 paces, the captain causes the rally to be sounded.

At this signal, the platoon rallies aud re-forms in the rear of the second.

> RALLYING.
558. To give the troopers the babit of rallying promptly, after having been dispersed as foragers, the captain places the troop at the extremity of the drill ground; and after giving notice to the files on the flanks of platoons, the file-closers and the trumpeters, to remain upon the line with him, he canses the disperse to be sounded. At this sig-
nal, the troopers disperse and charge as foragers; when they are at the distance of 100 or 200 paces, the captain canses the rally to be sounded.

The captain causes the troopers to disperse without confusion, and in rallying, see that they direct themselves to the right and left of the troop, in order to unmask the front of the troop, and to re-form in passing to the rear.

When the troopers rally without confusion, this movement is repeated without requiring the flank files, etc., to remain on the line of the troop. At the signal, the troop disperses in every direction to the front.

When the troop is dispersed, the captain causes the rally to be sonnded.

At this sigual, the officers, the non-commissioned officers, and the troopers, rejoin rapidly: the officers align themselves promptly upon the captain, aud the non-commissioned ofticers promptly mark the flanks of the platoons.

As soon as the captain has rallied two-thirds of the troop be moves forward, charges again, and halts.

These movements are first excented at the trot, and then at the gallop.

Light cavalry shonld be particularly exercised in charging as foragers and in rallying.

## SKIRMISHING.

559. The troop being in line, the captain commands :

## 1. First (or second) platoon, as stirmishers. 2. March.

At the first command, the chief of the first platoon orders the sabres to be returned, and the arms to be loaded; be then commands: 1 . Platoon, forword. 2. Guide right. 3. Trot.

At the command march, repeated by the chief of the platoon, this platoon mores forward at the trot. After marching 100 paces to the front, the chief of the platoon commands: 1. Six files frome right (or left), as skimishers. 2. Manch. 3. Guide right (or left).

At the first command, the senior file-closer places himself in front of the files of the left who are intended to support the skirmishers, and at the commaud march, cause them to halt and draw sabre.

At the command march, the six files of the right continue to more forward; after going ten paces they disperse as skirmishers, extending themselves so as to cover the cxposed part of a troop in passing beyond each of its flanks. The right trooper obliques to the right, the left
trooper to the left. The troopers of the rear rank come up as soon as possible, abreast of the front rank, each one placing himself on the left of the file-leaders, and as soon as they are in line, all take the position of adrance, carbine, or raise, pistol. They continue to march until the signal to halt.

The chief of platoon causes the halt to be sounded when the skirmishers are at 100 or 150 paces from the reserve.

The troopers keep at five paces apart, regulating themselves toward the guide during the time they act as skirmishers.

The chief of platoon places hinself in rear of the skirmishere, in order to superintend their movements.
When the captain wishes the skirmishers to re-enter the troop, he causes the rally to he sounded. At this signal, the chief of the platoon employed as skirmishers rallies his platoon, and then rejoins the troop at a yallop.

## Article I X.

## SCHOOL OF THE SQUADRON.

560. The object of the sehool of the squadron is to instruct four platoons to exccute together what has heen tanght to two, and to prepare the squadron to perform what it will be required to do when a part of the regiment.

To make the formations in line better understood, they are executed at first from a halt. Each movement, after having been correctly executed by the right, is repeated by the left.

The troopers are made to mount and dismonnt by the times, but without explanation.

The captain commanding requires the distance between the platoons to be preserved exactly in all the morements; he sees that the troopers are not constrained, and that the rear rank men are not only in the direetion of their file-leaders, but that there is always two feet between the head of their horses and the croup of those of the front rank.

The second captain is charged with the alignment of the rear rank and the rank of file-closers; he resumes his place in line at the command, front.

The captain commanding moves wherever his presence is most required; the treopers are required to observe absolute silence, and all ratifications are done by signs or in a low roice.

A large majority of the movements are the same, and are cxecuted by the same commands as those already laid down in the school of the troop; the only difference being that what is laid down as applicable to teo platoons, minst now be made to apply to four. All the movements of the squadron are indicated in the following number, those marked in italics not having been alrealy described in the school of the troop, are described farther on; for all the other movements a simple refcrence to corresponding movements in the school of the troop will be suffieient to make them all perfectly intelligible.

For the manner of forming the squadron, and the posts of the officers, see N 0.18 .

## MOVEMENTS OF THESQUADRON.

561. Successive alignment of platoons in the squadron. Alignment of the squadron.
To open and close ranks.
To break the squadron by fours.
Direct march in column by fours.
Cbange of direction.
Individual oblique march.
The squadron marching in column by fours, to form it to the front, to the left, or on right into line.

To regulate the rapidity of the gaits.
To form the squadron in one rank, and to form it in two ranks.
The squadron being in line, to form it in column with distance.
To march in column with distance.
Changes of direction by successive wheels.
Individual oblique march.
Change of gait, being in column with distance.
To break by fours, by twos and by file; to form twos, fours and platoons, at the same gait.

The squadron marching in column with distance, to face it to the opposite direction, and to face it again to the front.

To halt the column.
To form line on the left.
To break by the right to march to the left.
To form line to the right by inversiou.
To break to the vear by the right to march to the left.
To form on right into line.
To form on left into line, by inversion.
To break by platoons to the front.
To form front into line.
To break by platoons to the right, and to move forward after the wheel.

To form line to the front by inversion.
To break by platoons to the right, head of column to the left or half left.

To form line faced to the rear, on the rear of the column.
To form line faced to the rear, by inversion, on the rear of the colum.

To break by platoons to the right, head of column to the right or half right.

To form line faced to the rear, on the head of the column.
To form line faced to the rear, by inversion, on the head of the colnmn.

Movements by fours, the squadron being in column with distance•
Direct march of the squadron in line.
Countermarch.
Wheclings.
To wheel on a fixed pivot.
To wheel on a movable pivot.
Individual oblique march.
Obtique march by platoons.
Movements by fours.
The squadron being in tine, to conse it to gain ground to the rear, and to face it again to the front.

The squadron marching in line, to break by platoons to the right, and to form it again in line.

The squadron marehing in line, to march it to the reur by whecling the platrons about.

The squadron marching in line, to break it to the front by platoons, and to re-form it.

The squadron marching in line, to break it to the front by platoons, it doubling the gait, and to re-form it.

Passage of obstacles.
Charge.
Rallying.
Skirmishing.
The column by divisions.

Successice alignment of platoons in the squadron.
562. The squadron being in line, the captain commanding places the two non-commissioned officers, principal guides of the right and left, upon a line parallel to the front of the squatron, at thirty paces from the front rank, and facing each other.

On receiving notice from the captain commanding, the chief of the first platoon commands: 1. Platoon, forrard. 2. Guide right. 3. March. At the command march, the platoon moves forward; at one pace from the point which marks the new alignment, the chief of the platoon eommands: 1. Halt. 2. Right-Dress. At the command halt, the chief of the platoon and guide of the right establish themselves immediately, the latter bringing the head of his horse against the boot of the principal guide of the right.

The first platoon being correctly aligned, the first captain commands :

1. By platoon. right-Dress. 2. Front.

At the first command, the chief of the second platoon commands: 1. Platoon, forward. 2. Guide right. 3. March. Having arrived abreast of the file-closers of the platoon which forms the base of the alignment, he commands: 1. Halt. 2. Right-Dress, and at the same time moves forward on the line of the chief of that platoon. At the command halt, the platoon stops. At the command right - dress, all the troopers move forward together upon the alignment.

Each chief of platoon executes the same movement, commanding march, when the ove who precedes him has commanded halt. The gnide of the left, at the command halt, from the chief of the fousth platoon, brings up the head of his horse against the boot of the principal guide of the left. The squadron being aligned, the first captain commands, front.

This alignment being correctly executed, it is repeated, giving the new base of alicnment a dircction oblique to the front of the squadron. For this purpose the clief of the first platoon, on receiving notice from the captain commanding, moves his platoon twenty-four paces to the frout, causes it to execute a half whecl to the right at the commands: 1. Right half tehcel. 2. Forward ; and after marching at six paces in the new direction, he halts and aligns it. The first platoon being correctly aligned, the first captain commands:

## 1. By platoon, right-Dress. 2. Front.

The movement is executed by the platoons in succession; each chief of platoon moves straight forward and commands: 1. Right halfWheel. 2. Forward; in time to complete the wheel at the moment the right arrives opposite the left of the platoon which precedes it. - The squadron being aligued, the first captain commands, front.

## To break by the right, to march by the left.

563. The squadron being in line, the first captain commands :

## 1. Platcons, break by the right, to march to the left. 2. March.

At the first command, the chief of the first platoon commands: 1. Plutoon, forkard. 2. Guide lejt. At the command march, repeated by the chicf of the first platoon, this platoon marches ten paces to the front, turns to the left, and moves forward at the commands: 1. LeftTurn. 2. Forward.

The chief of the second platoon, and successively those of the third and fourth, command: 1. Platoon, forward. 2. Guide left; when the chief of the platoon on the right commands march; and they command
march, when the chief of that platoon, after having turned to the left, commands, forward.

## To break to the rear by the right, to march to the left.

564. The squadron being in line, the first captain commands :
565. Platoons, break by the right to the rear, to march to the left. 2. Marcir.

At the first command, the chief of the first platoon commands, platoon, right about wheel. At the command march, repeated by the chief of the first platoon, this platoon executes its wheel to the right about; when nearly terminated, its chief commands: 1. Forward. 2. Guide left; and after marching ten paces straight forward, be commands: 1. Right-Turn. 2. Formard. The chief of the second platoon, and those of the third and fourth in succession, commands, platoon, right about wheet, when the chief of the platoon on their right commands metrch, and they command march when that platoon has passed over three-fourths of its first wheel.

To break by platoons to the right, and to move forward afler the wheel.
565. The squadron being in line, the captain commanding commands :

1. Platoon, right wheel.
2. March. 3. Forward.
3. Guide left.

At the first command, the left file of cach platoon prepares to step off promptly, and the pivot to turn upon itself. At the command march, each platoon executcs its wheel to the right, following the principles of the wheel on a fixed pivot. At the third command, the platoons march straight forward.

## To form line to the front by inversion.

566. The squadron being in open column, right in front, to form line by inversion upon the head of the column, the first captain commands:
567. By inversion, front into line. 2. March. 3. Guide left.

## 4. Front.

At the first command, the chief of the first platoon commands, platoon, forward; and then the other chicfs of platoons command, platoon, right half wheel. At the command march, repeated by these officers, the movement is executed as prescribed, No. 535. but by inverse means.

This formation is executed in the same manner when the column is marching; in this case the chief of the first platoon does not command, platoon, forward, nor march, but repeats the indication of the guide.

To break by platoons to the right, head of column to the left or half left.
567. The squadron being in line, the first captain commands:

1. Platoons, right wheel-head of column to the left (or half left). 2. March. 3. Forward. 4. Guide left.

- At the command march, each platoon execntes its wheel to the right. At the third command, the chief of the first platoon commands: 1. Left-Tury. 2. Forward; the other platoons move on and turn in succession at the command of their chiefs, on the ground upon which the first had turned.

The first captain commands forurard. when the wheels are nearly completed, and gives a point of direction.

To form line faced to the rear by inversion, on the rear of the column.
568. The squadron being in column with distance, right in front, and obstacles are presented on its left flank, to form line ficed to the rear, the first captain commands:

1. Platoons, right about wheel. 2. MaRCH. 3. By inversion, front into line. 4. March. 5. Guide right. 6. Front.

At the second command, each platoon executes its wheel to the right about. At the fourth command, the chief of the fourth platoon, which becomes the head of the column, when its wheel is nearly completed, commands: 1. Formard, 2. Guide right; and when it has marched thirty paces: 1. Halt. 2. Right - Dress. The chiefs of the other platoons, at three-fourths of the wheel, command: 1. Forward. 2. Guide right; and direct themselves toward the place they are to occupy in linc, conforming, in other respects, to what is prescribed for by inversion, front into line, when the left is in front.

To break by platoons to the right, head of column to the right (or half right).
569. The squadron being in line, the first eaptain commands :

1. Platoons right wheel-head of column to the right (or half right). 2. March. 3. Forward. 4. Guide left.

At the command march, each platoon execntes its wheel to the right. At the third command, the chief of the first platoon commands: 1. Right-Turn. 2. Forward. The other platoons move on, and turn in succession at the commands of their chiefs, on the same ground. The first captain commands forward, when the wheels are nearly completed.

To form line faced to the rear, by inversion on the head of the column.
570. The squadron being in column with distance, right in front, and obstacles are presented on its right flank, to form line upon the head of the column. faced to the rear, the first captain commands :

## 1. Front into line. 2. March. 3. Guide right.

Which is executed as prescribed for front into line, right in front, No. 535 , bnt without rectifying the alignment.

The squadron being formed, the first captain immediately commands:

1. Platoons, right about wheel. 2. March. 3. Halt. 4. Left ——ress. 5. Front.

The movement is executed in the same manner, when the column is marching.

## Individual oblique march.

571. The squadron marching in line, to cause it to gain ground toward the right flank, without changing the front of the squadron, the first captain commands:

## 1. Right oblique. 2. March.

To resume the primitive direction, the first captain commands :

## Forward.

This movement is executed at a walk, or at a trot, but never at a gallop.

## Oblique march by platoons.

572. The squadron being in line, to cause it to gain ground toward its right flank, by the oblique march by platoons, the first captain commands :

## 1. Platoons, right half wheel. 2. March. 3.' Forward. 4. Guide right.

At the command mareh, each platoon executes its half wheel to the right, on a fixed pivot. At the third command, each platoon moves forward, conforming to the principles of the direct march.

To cause the squadron to resume the primitive direction, the first captain commands:

## 1. Platoons, left half wheel. 2. March. 3. Forward.

4. Guide right.

Which is executed as just prescribed, but by inverse means.
During this march, the right guide of the first platoon marches directly upon the point which has been indicated to him. The guides of the other platoons preserve their distances, take for file-leader the fourth trooper from the left of the platoon which precedes them, and keep it two paces from him. The second captain places himself behind the guide of the first platoon, in order to superintend his direction.

The squadron being in line, to cause it to gain ground to the rear, and to face it again to the front.
573. The squadron being in line, to face it in the opposite direction, the first captain commands :

1. By fours, right about wheel. 2. March. 3. Forward.

## 4. Guide left.

Which is executed as prescribed, No. 541. The chiefs of platoon, the file-closers, and the guides, wheel about individually, and march, the chiefs of platoon behind the centre of their platoons, the file-closers in front, and the guides of the right and left of the rear rank, now be-
come the front. At the fourth command, the file-closer nearest the guide passes to the left, in order to place himself in front of the guide, the first captain gives him a point of direction, which is also indicated to the guide of the right or left, who, in this morement, remains on the flank of the squadron.

The squadron is fraced again to the front, by a movement similar to the one just stated.

The squadron marching in line, to march it to the rear by wheeling the platoons about.
574. The squadron marching in line, guide right, the first captain commands:

1. Platoons, right about wheel. 2. March. 3. Forward. 4. Guide left.

At the command march, the pivots halt short, and turn upon themselves, the marching flanks step off at the same instant, regulating themselves by the right during the first half of the wheel, so as to arrive together in column, and by the left during the second half, so as to arrive together in line. In cach platoon, the rear rank and the fileclosers carry the hand toward the marching flank, in order to facilitate the movement. At the third command, the squadron resumes the direct march. At the fourth command, the indicated guide mores np on the line of the officers; he is immediately replaced, and a point of direction given.

In this movement, the guide of the right turns to the right, moves straight forward the extent of the front of a platoon. and turns again to the right, in order to place bimself on the left of the squadron. The guide of the left executes the same morement, to place himself on the right of the right of the squadron.

The squadron marching in line, to break it to the front by platoon, in doubling the gait, and to re-form it.
575. The first captain commands:

1. By platoons, to the front, trot. 2. March. 3. Guide left.

At the first command, the chief of the first platoon commands trot; and those of the other platoons command, platoon, right hatf wheel, trot. At the command march, repeated by these officers, the movement is executed as prescribed, No. 550 .

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The squadron marching in line at the trot, the movement is executed at the gallop, on the same principles.

The squadron marching in column with distance, right in front, to form it in doubling the gait, the first captain commands :

## 1. Form squadron, trot. 2. MaRch. 3. Guide right.

At the first command, the chicfs of the three last platoons command, platoon, left half wheel, trot. At the command mareh, repeated by the chiefs of the three last platoons, the first platoou continues to march straight forward at the walk, and its chief repeats the indication of the guide. The three other platoons exccute their half wheel to the left at the trot, on a fixed pivot. The half wheels being nearly terminated, the chiefs of these platoons command: 1. Forward. 2. Guide right; they move straight forward, and as soon as the right file of their platoon is in the direction of the left file of the platoon which precedes, they command: 1. Right half wheel. 2. March. 3. Forward; and then walk, in sufficient time to command march, when their platoon arrives in line; then the troopers resume the walk, and align themselves in marcbing. Each platoon after its half wheel to the left, moves straight forward on the point where it is to turn, and without obliquing toward the platoon which precedes it.

## Passage of obslacles.

576. The squadron marching in line, to execute the passage of obstacle, the first captain commands:

## 1. Obstacle. 2. First platoon. 3. Halt.

At the command halt, repeated by the chief of the first platoon, this platoon halts, and its chief immediately commands: 1. Left oblique, trot. 2. March; and this platoon doubles on the second. When the platoon which has aligued, is in rear of the one upon which it has doubled, its chief commands: 1. Forward. 2. Guide right. 3. Walk. 4. March.

To cause the platoon which has obliqued to return to its place, the first captain commands:

## 1. First platoon. 2. Into line.

At the command into line, the chief of the platoon commands: 1. Right oblique, trot. 2. Marca; when opposite the ground the platoon is to occupy, he commands: I. Forward. 2. Guide left. 3. Walk: and when the platoon is in line, mareh. The chief of the platoon com-
mands forvard, a little before its left file has passed beyond the right file of the platoon on which it is to form.

The second platoon exeeutes the same movement, in obliquing to the right, behind the first platoon; the third in obliquing to the left behind the fourth, and the fourth in obliquing to the right behind the third; eaeh platoon shonld always double upon that with which it forms the division.

5\%7. The squadron marching in line, to exeente the passage of obstacle upon the head of each platoon, the first eaptain commands :
> 1. In each platoon, by fours (or by twos), trot. 2. March. 3. Guide right.

At the first command, the chiefs of platoon commands by fours (or by twos, trot. At the eommand march, repeated by three offieers, eaeh platoon breaks by fours ; the ehiefs of platoon mareh at the head of their platoons; the guide of the right, who marches on the line of offieers, places himself on the right of the chief of the first platoon; the guide of the left, in rear of the fourth platoon, and the file-elosers on the right flank of their platoons. Eaeh platoon having thus broken in column, should assume a dircetion parallel to that one which is the guide, keeping on the same line, and always at the distanee of its front, to be able at any moment to re-form line.

To re-form the squadron, each platoou having broken by fours, or by twos at the trot, right in front, the first captain commands:

## 1. Form platoons. 2. Marcir. 3. Guide right.

At the first eommand, the chiefs of platoon eommand, form platoon. At the eommand murch, repeated by their officers, each platoon forms. If the ground does not permit all the platoons to form at onee, the one before which the obstacle is presented, forms in the rear of the other platoon of its division, and retakes its place in line as soon as practicable.

## SKIRMISHING.

578. When the squadron is in sight of the skirmishers, the first eaptain orders no signal except the rally. The chief of the skirmishers observes the morements of the squadron he eovers, and eonforms to them as soon as practieable, requiring his trumpeter to sound the necessary signals.

When the squadron ehanges front, the ehief of the skirmishers moves
upon the new front, unless the first captain gives orders to the contrary. If the squadron is out of sight of the skirmishers, the first captain causes the signals which correspond to the morements he executes to be sounded, in order to give notice to the chief of the skirmishers, who conforms to them as soon as practicable. The trumpeter who fullows the chief of the skirmishers should give the signals only upon the order of that officer. The skirmishers should execute their movement, only by the signals of the trumpeter who accompanies the officer who commands them.

The squadron being in line, the first eaptain commands:

## 1. First (or fourth) platoon, as skirmishers. 2. March.

At the first command, the chief of the first platoon orders the sabres to be returned, the holsters to be uncovered, and the arms to be loaded; he then commands: 1. Platoon, forward. 2. Guide right. 3. Trot. At the command mareh, repeated by the chief of the platoon, this platoon moves forward. After marching 100 paces to the front, the chief of the platoon commands : 1. Six files from right (or left), as skirmishers. 2. March. 3. Guide right (or left); which is executed as prescribed, No. 559. When the first captain wishes the skirmishers to re-enter the squadron, he causes the rally to be sounded. At this signal the chief of the skirmishers rallies his platoon, as prescribed, No. 559, and then rejoins the squadron at a gallop, directing himself upon one of the flanks to resume his place in line.
579. When the first captain wishes to relieve a platoon which is skirmishing, the chief of the new platoon moves forward upon the rescrve of the platoon which is acting as skirmishers. On coming up abreast of it, he orders out six files as skirmishers; the remaining files halt and draw sabres. As soon as the new skirmishers have passed five paces beyond those they are to relieve, the latter turn about and rally upon their reserve. The platoon having rallied, is conducted back to the squadron at a trot.
580. When the entire squadron is to act as skirmishers, the first captaiu orders the sabres to be returned, the bolsters to be uncovered, and the arms to be loaded; he then eommands:

## 1. Squadron, forward. 2. Guide right. 3. Trot. 4. March.

Having arriced at the point where the reserve is to be established, about 100 paces from the front of the body to be covered, and more if it bas been commanded, the first captain commands:

1. Three first (or last) platoons, as skirmishers. 2. March.

At the command march, the chicf of the platoon which is to support the skirmishers, halts that platoon, and canses sabres to be drawn. The chiefs of the three other platoons continue to march on, each directing himself by the shortest ronte, 100 paces to the front toward the part of the line his platoon is to occupy, and having reached it, he disperses his platoon as skirmishers. The right platoon eovers the right of the regiment, and extends 30 or 40 paces beyond it; another platoon eovers the centre, and the left platoon covers the left, cxtending also 30 or 40 paces beyond. The chicfs of these platoons remain 25 paces in rear of the line of skirmishers, and pass over the cxtent occupied by the troopers of their platoons. The reserve remains in rear of the eentre of the line of skirmishers.

The first captain, followed by the first sergeant, kecps babitually half-way between the reserve and the skirmishers, to direct the movements. The second captain, followed by the second scrgeant, passes the line, and gives notice to the first captain of everything that it is important for him to know.
581. If the first captain wishes to rally the skirmishers upon themselves, he eanses the rally of skirmishers to be sounded. At this signal each platoon rallies as rapidly as possible on its cbief. If the first eaptain then wishes to rally the squadron, he moves upon the point where he intends it shall form, and causes the rally to be sonnded where three-fourths of each platoon has rallied. At this new signal, the rescrve and each platoon of skirmishers move at a gallop upon the point where the captain commanding is placed. The troopers who did not rejoin their platoon when it rallied upon itself, direct themselves toward the squadron.

The squadron being dispersed as skirmishers, if the first captain wishes it to rally immediately, he orders the rally to be somnded ; at this signal, the officers, the skirmishers, and the reserve, rally non the point occupied by the first captain.

The troopers being dispersed as skirmishers, if the first captain wishes them to charge as foragers, he orders them to cease firing, and causes the disperse to be sounded. At this signal, the chiefs of platoon move forward in line, and the skirmishers draw sabres; they charge immediatcly. The reserve follows at the trot, or at the gallop, as may be necessary. After the charge, the first captain orders the rally to be sounded, when the troopers rally in rear of the reserve.

The skirmishers being rallied by platoons, if the first captain wishes to charge, be orders the charge to be sounded. At this signal, each chief of platoon eonducts his platoon to the charge, in good order; the reserve supports the movement at the trot or gallop. The first eaptain places himself so as to be able to direet the general movement. The
second eaptain charges with the platoon nearest to him. The platoons rally behind the reserve; the first captain moves upon that point at the same time that he orders the rally to be sounded.

## The Column by Divisions.

582. The squadron being in line, if the first captain wishes to form it into colunn by divisions, be commands:

## 1. Divisions, right (or lefi) wheel. 2. March. 3. Halt (or Forward). 4. Guide left (or right).

Which is executed in the same manner as the breaking of the troop or squadron into a column of platoons, either to halt or move forward without halting. The same movement may be exceuted when the squadron is marching in line.

The principles prescribed for the eolumn of platons are applicable to the march in columu by divisions, the difierent modes of passing from line into column, aud from column into line.

To gain ground toward its flauk or to the rear, employ the means prescribed for the column by platoons. The rheels about can be also executed by divisions. The distance measured from the croup of the horses of the rear rank of one division, to the head of the horses of the division which follows, should be equal to the front of the dirision, less the depth of the two ranks. In the wheels on a movable pirot by divisions, the ninth file of the platoon, upon which the wheel is executed, is the middle point of the radius of the wheel. The picot describes an are of circle of ten paces.
583. The squadron marching in column by platoons, right iu front, to form the divisions at the same gait, the first captain commands:

## 1. Form divisions. 2. March.

At the first command, the chiefs of the secoud and fourth platoons command, platoon, lcft half whcel. At the command march, repeated by the same officers, the second and fourth platoons execute a halfwheel to the left on a fixed pivot. The first and third platoons continue to march straight forwarl, and after having marched thirty paces, their chiefs command, halt. The chicfs of the second and fourth platoons, when the half wheel to the left is nearly terminated, command: 1. ForWard. 2. (inide right. They more straight forward, and as soon as the right of their platoon arrives in the direction of the left file of the platoon which precedes, they command: 1. light hulf wheel. 2. Marcif. 3. Forward. They move forward, and command halt, on
arriving abreast of the platoon belonging to the same division. The licutenants commanding the divisions theo eommand, left dress, move to the left of the division, reetify the aligmment, command front, and return to the centre of their platoons.
584. The squadron marching in column by divisions, right in front, to break the divisions by platoons, the first captain commands:

## 1. By platoons. 2. March. 3. Guide left.

At the first command, the ehiefs of the seeond and fourth platoons command, plutuon, riflit hulf uheel. At the eommand murch, repeated by the same offiecrs, the second and fourth platoons exeeute a half wheel to the right on a fixed pivot, and the first and third platoons continue to mareh on. The chiefs of the seeond and fourth platoons, the half wheel to the right being nearly terminated, command: 1. Forward. 2. Guide left; they move straight forward, and as soon as the left file of their platoons arrives in the dircetion of the left file of the platoon which precerles, they eommand: 1. Left hulf wheel. 2. March. 3. Forward ; and move forward in taking their proper distances.

The divisions are broken by platoons, on the same principles, in marehing at the trot or gallop.
585. The squadron marehing in column by platoons, right in front, to form divisions in doubling the gait, the first captain commands :

## 1. Form divisions, lrot. 2. Marich. 3. Guide lefl.

Which is executed as prescribed above, the first and third platoons continuing to mareb at the same gait, and the chiefs of the second and fourth platoons commanding: 1. Plutoon, left half wheel, trot. 2. March. 3. Forward. 4. Guide right; and: 1. Right half wheel. 2 March. 3. Forward. 4. Walk. When they arrive abreast of the platoon on whieh they form, they eommand: 5. March.
586. The squadron marehing in column ly dirisions, right in front, to break the division by platoons, in doubling the gait, the first captain eommands :

## 1. By platoons, trot. 2. March. 3. Guide right.

At the first eommand, the ehiefs of the first and third platouns eommand, trot; those of the second and fourth platoons eommand, platoon, right half wheel, trot. At the command march, repeated by the chiefs of platoon, the first and third platoons move forward at the trot. The second and fourth execute their half wheel to the right on a fixed pivot, at the trot, and the movement is completed as described above.
587. The squadron being in line, to break it by division by the right to march to the left, the first captain commands:

1. Divisions, break by the right-to march to the left. 2. Marcir.

Which is executed as prescribed for a column by platoons.
To break the squadron by divisions to the rear by the right, to march to the left, the first captain commands:

1. Divisions, break by the right to the rear-to march to the left. 2. March.

Which is executed as prescribed for the column of platoons.

## Articef X .

## EVOLUTIONS OF THE REGIMENT.

588. When the regiment is in line, the squadrons are drawn np on the same line, with intervals of twelve paces between them, and the field and staff of the regiment are posted as indicated, No. 18.

When it is in column right in front, and on the march, the guide is habitually to the left, and as constantly to the right when the left is in front; in the march of the column the colonel does not indicate the guide, except in cases where be sees proper to depart from the principle just laid down. Whenever the guide is indicated by the colonel, the captains commanding all repeat it.

Successive alignment of the squadrons in the regiment.
589. The regiment being in line, the colonel causes the right general gnide and the principal guide of the left of the first squadron to be placed thirty paces in front of the squadron opposite the right and left, and facing each other. The left general guide immediately places himself on the same line in front of the extreme left of the regiment, facing the right general guide.

The captain commanding the first squadron, on an intimation from the colonel, commauds: 1. Squadron, fortard. 2. Guide right. 3. March. The squadron having arrived within one pace of the new line, the captain commands halt. At this command the squadron halts, the captain, and the guides of the right and left adrance and align themselves; the first captain commands right-dress; and when the alignment is complete, front.

The colonel then commands:

## 1. Attention. 2. By squadron, right- DRESS.

At the second command, the captain commanding the second squadron commands: 1. Squad, forurrd. 2. Guide right. 3. March. The squadron laving reached the rank of file-closers of the first squadron.
the first eaptain commands: 1. Squidron. 2. Halt. The prineipal guide of the left throws himself out opposite the left of the squadron, faecs to the right, aud aligns himself on the guides in front of the first squadron: the officers and guides of the right and left align themselves eorrectly; the first captain throws himself to the left wing, and commands, right-dress. The squadron being aligned, the captain commands frout.

Eaeh captain commanding eauses the movement to be executed in suceession, and eommands march as soon as the one preceding him commands halt. The regiment being aligued, the colonel commands front.

## Alignment of the regiment.

590. The regiment being in line, the colonel causes the general guides to be fixed on the new line, facing each other, and the guides of the left to be plaeed on intermediate points, facing to the right; he then commands:

## 1. Attention. 2. Right-Dress.

At the second cominand, repeated by the eaptain commanding, the squadrons are aligned in such manner that the men of the front rank of each squadron may have the heads of their horses on the line of the guides. The regiment being aligned, the colonel commands frout.

## To break the regiment by fours.

591. The regiment being in line, the colonel commands:

## 1. Attention. 2. By fours. 3. March.

The second command is repeated by the captain commanding the first squadron. At the command march, repeated by the captain, the first squadron brealss by fours as in the school of the squadron. The first eaptain of the second squadron commands by fours, in time to eommand moreh at the instant the fourth platoon of the squadron which preecdes it, commences its movement. When the half of the second squadron has broken, the captain ehanges direetion in order to join the column. The other squadrons break in suecession in the same way, and ehange direction as directed for the second.

## To form platoons at the same gait.

592. The regiment marehing in column by fours, the right in front, the colonel cummands:

## 1. Attention. 2. Form platoons. 3. March.

The second command is repeated by the captain commanding the first squadron. At the command morch, also repeated by the captains, platoons are formed in the first squadron, as prescribed in the school of the squadron. The other squadrons continue to march, and platoons are formed in succession, in the same manner as in the first, at the commands: 1. Form platoons. 2. March.

## To break the platoons by fours at the same gait.

593. The regiment marching in column by platoons, right in front, the colonel commands :

## 1. Attention. 2. By fours. 3. March.

At the second command repeated by the captain commanding the first squadron, the first captains of the other squadrons command, column. At the command mareh, repeated by the captain commanding the first squadron, the captains commanding the other squadrun command halt. The first captain of the second squadron, and in succession those of the other squadrons, commands: 1. By fours 2. March; in sufficient time for the head of the squadron after it is broken to be at its proper distance from the rear of the squadron which precedes.

If the column is marching at a trot, the chiefs of squadron, except the first, take the waik at the command march, and at the proper time for breaking the squadrons, command: 1. By fours, trot. 2. March.

## To form platoons in doubling the gait.

594. The regiment marching in column of fours, right in front, the culonel commands:

## 1. Attention. 2. Form platoons, trot. 3. March.

At the second command, repeated by the captaiu commanding the first squadron, the chiefs of the other squadruns command trot. At the command morch, repeated by all the chiefs of squadrons, platoons are formed in the first squadron. The other squadrons take the trot, and form in succession at the command: 1. Form platoons. 2. March; given by each chief the nearest the head of his squadron, at its proper distance from the squadron which precedes.

## To break the platoons in doubling the gait.

595. The regiment marching in column of platoon, right in front the colonel commands:

## 1. Attention. 2. By fours, trot. 3. March.

The second command is repeated by the chief of the first squadron, and at the command march, this squadron breaks by fours. The other squadrons continue to march at a wall, and the chiefs command in succession: 1. By fours, trot. 2. March; at such time as to preserve their distance.

To form the regiment to the front, to the left, or upon the right into line.
596. The regiment marching in column by fours, the right in front, to form line to the front the colonel commands:

## 1. Attention. 2. Front, into line. 3. March.

At the second command, repeated by the chief of the first squadron, the chiefs of the other squadrons command, head of column to the half left. At the command march, repeated by the chiefs of squadron, the first squadron forms front into tine as directed for a single squadron. The other chiefs command, guide right, throw themselves at the bead of their squadron, and direct it by the shortest line to a point 100 paces behind the point the right of the squadron is to occopy in line; as soon as the bead of each squadron reaches this point, the chief commands, head of column to the half right, and when the third platoon of his squadron is in the new direction, he commands, front into line, in time to give the command march, at the moment the head of bis column arrives within thirty paces of the line of battle. The regiment being aligned, the colonel commands front.
597. The regiment marching in column by fours, the right in front, to form line to the left flank, the colonel commands:

## 1. Attention. 2. Left, into line. 3. March.

The second command is repeated by the chief of the first squadron. At the command march, repeated by him, the first squadron is formed into tine to the left, as prescribed in the school of the troop, No. 489. The other chiefs throw themselves to the head of their squadrons, and each, iu succession, commands left into linc, in time to command march the moment their first four files get to
the proper turning point. The regiment being aligned, the colonel commands front.

598 . The regiment marching in column hy fours, the right in front, to form the line on the prolongation of the right flauk, the colonel commands:

## 1. Attention. 2. On the right, into line. 3. March.

The second command is repeated by the chief of the first squadron. At the command march, also repeated by bim, he forms bis squadron into line on the right, as prescribed school of the troop, No. 490. The other chiefs of squadron command guide right, throw themselves to the head of their squadrons, and each commands upon the right into line in time to command march, at the proper point for turning to the right, in order to take its proper place in line. The regiment being ohliqued the colonel commands, fromt.

## To form the regiment into column with distance.

599. The regiment being in line, to break to the right by a general movement, the colonel commands :

## 1. Attention. 2. Platoons, right wheel. 3. Marcir.

The second command is repeated by all the captains commanding. At the command march, also repeated by them, the move is executed at the same time in all the squadrons, as prescribed in the school of the troop, No. 510. At the moment the platoons bave nearly completed the wheel, the captains commanding command halt. The chiefs of squadron see that the chiefs of platoon, guides, etc., take their proper posts. If the colonel wishes to put the column in march without halting, be commands, when the wheel lacks about one-fourth of its completion:

## 4. Forward.

This command is repeated by the chiefs of squadron.

## To break by the right to march to the left.

600. The regiment being in line, to break by successive movements from the right to pass before the front of the line, the colonel commands:
601. Attention. 2. Platoons, break by the right, to march to the left. 3. March.

At the second command, repeated by the captain commanding the first squadron, the chief of the first platoon commands: 1. Platoon, formard; 2. Guicle left. At the command march, repeated by the chief of the first squadrou, and by the chief of the first platoon, the movement is executed in the first squadron, as it is prescribed, school of the squadron, No, 563. The chiefs of the other squadrons repeat the second command in succession, in time to command march when the fourth platoon of the squadron which is on their right is opposite the centre of the second platoon of their squadron.

## To break to the rear by the right, to march to the left.

601. The regiment being in line, to break by successive movements, the right to pass by the rear of the line, the colonel commands :

## 1. Attention. 2. Platoons, break to the rear by the right, to march to the left. 3. March.

At the second command, repeated by the captain commanding the first squadron, the chief of the first platoon commands, platoon, right about wheel. At the command mareh, repeated by both these officers, the first squadron executes the morement as prescribed, school of the squadron, No. 564. The chiefs of the other squadrons repeat the commands in succession, in time to command mareh at the instant the fourth platoon of the squadron on their right, after having finished its right about and advance, has executed three-fourths of its change of direction to the right.

## To form the regiment into close column.

602. The regiment being in line, if it be the desire of the colonel to form it into a close colnmn, faced to the right, he commands:
603. Attention. 2. Squadrons, right wheel-form close column. 3. MaRch.

At the second command, the captains commanding squadrons command, squadron, right wheel. At the command march, repeated by the chiefs of squadrons, all the squadrons wheel to the right. The wheel being nearly completed, the chief of the first squadron throws himself to its left, and commands: 1. Squadron. 2. Halt. 3. Left-Dress. 4. Front. The chiefs of the other squadrons command: 1. Forward. 2. Gaide left; and at twelre paces from the squadron which precedes: 1. Squudron. 2. Halt. 3. 太eft-Dress. 4. Front.
603. The regiment being in line, to form a close column without changing the front, the colonel commands: 1. Attention. 2. Upon the third squadron, form close column. 3. March.

At the second command. the chief of the third squadron throws himself to its left, and commands: 1. Left-Dress. 2. Frgont. The chief of the sccond squadron commands, platoons, right wheel-fourth platoon, left half whecl. The chief of the first squadron commands, platoons, right wheel-head of column to the half right. The chief of the fourth squadron commands, platoons, right wheel-first platoon, right about uhecl. The ehief of the fifth squadron commands, platoons, right wheel-head of column to the half right.

At the eommand march, repeated by all the ehiefs of squadrons exeept that of the third, all the other squadrons break by platoons to the left and right; and when the wheels are nearly eompleted, each chief on the right cemmands: 1. Forwand. 2. Guide right; those on the left eommand: 1. Forward. 2. Guide left. Each one throws himself at the head of his eolumn to direet it.

The chief of the fourth platoon, second squadron, after having exeeuted the half wheel to the left, moves forward and commands: 1. Left -Turn. 2. Forward; so as to enter the column in a direetion parallel to the front of the third squadron, passing near the heads of the horses of the offieers. The other platoons of this squadron change direction on the same ground, and by the same eommands from their chiefs. The chief of the squadron eontinues to march at the head of his squadron, and eommands, platoons, right wheel, in time to eommand march when its fourth platoon has arrived opposite the right of the fourth platoon of the third squadron. The platoons haring executed the wheel, he eommands: 1. Halt. 2. Left-Dress. 3. Front.

The chief of the fourth platoon of the first squadron, after having executed his wheel to the left, commands: 1. Right-Turn. 2. ForWARD ; and direets himself diagonally to the front in such manner as to turn to the left on a line parallel to the front of the seeond squadron at the command, head of column to the half left, given by the ehief of the squadron when the fourth platoon arrives opposite the right flank of the squadron already formed. The rest of the morement is performed in preeisely the same manner as has been laid down for the second squadron.

The ehief of the first platoon of the fourth squadron, after having executed his right about wheel, moves forward, and commands: 1. Left -Tunn. 2. Forward ; so as to enter the column in a direction parallel to the third squadron, at the eommand, head of column to the left, given by the ehief of squadron, when this platoon has gained a distance of twelve paces in rear of the third squadron. The three
other platoons execute a right turn on the same ground on which the first platoon made its right about, and left turn on the same ground that the first did. As soon as the chief of the squadron finds himself opposite the left of the third squadron, he halts, allows his columer to pass bim, and gives the command, platoons, left uheel, in time to command mareh as soon as the fourth platoon gets opposite its place. The platoons having exeeuted the wheel, he commands: 1. Halt. 2. Left-Dress. 3. Front.

The chief of the first platoon of the fifth squadron, after having executed the wheel to the right, commands: 1. Right-Turn. 2. Forward ; and directs himself diagonally, in such manner as to turn to the left ou a line parallel to the fourth squadron, at the command, head of column to the half left, given by the chief of the syuadron when the first platoon reaches the left flank of the squadrons already formed. The squadron is then brought to its proper position in the column by the same commands and means as for the fourth squadron.
604. The regiment being in line, to form in close column, with the left in front, without changing the front, the colonel commands:

## 1. Attention. 2. Upon the third Squadron, form close column, the left in front. 3. March.

The commands are repeated, and the movements executed in accordance with the principles laid down above, with this difference, that the squadrons on the right form in rear of the squadron which serves as the basis of the formation, while those on the left form in advance of this same squadron; and that the alignment is to the right.
605. The regiment marching in line, if the colonel wishes to form a close column, faced to the right, without balting, he commands :

1. Attention. 2. Squadrons, right wheel, from close column. 3. March.

At the second command, the captains commanding command, squadrons, right wheel, trot. At the eommand mareh, repeated by the captains commanding, a movement is cxecuted. The wheel being nearly completed, the ehief of the first squadron commands: 1. Forward. 2. Guide left. 3. Walk. 4. March; the other chiefs of squadron command: 1. Forward. 2. Guide left; and at twelve paces from the precediag squadron: 1. Walk. 2. March.

To march in column.
6in. The principles of the march in colum wi.h distance, as pro-
scribed for the troop or squadron, are applicable to the march of the regiment; the squadrons are separated by a distance equal to the front of a platoon, plus twelve paces the interval between squadron in line.

The regiment being in column with distance, right in front, the colonel indicates to the adjutant the direction he wishes the column to take; he commands:

## 1. Attention. 2. Column, forward. 3. Marcir.

The second command is repeated by the chiefs of squadron. At the command march, also repeated by these officers, the movement is executed as for a single troop or squadron."

To balt the column, the colonel commands:

## 1. Attention. 2. Column. 3. Halt.

The second command is repeated by the chiefs of squadron, and at the command halt, all the platoons halt at once.

## To change the direction of the column with distance.

607. The regiment marching in column with distance, with the right in front, to change the direction, the colonel commands:

Head of column to the left.
At this command, repeated by the chief of the first squadron, this squadron executes the movement as is prescribed for the change of direction of a column of platoons, school of the troop, No. 512. Each of the chiefs of squalron, in succession, gives the same command when the head of his column reaches the point where the first squadron changed its direction. The principal guide of each squadron places himself at the wheeling point, and remains there until the last platoon of his squadron has commenced the wheel, when he is relicved by the guide of the succeeding squadron.
608. The regiment marching in colnmn with distance, with the right in front, to cause it to face in the opposite direction, the colonel commands :

## 1. Attention. 2. Platoon, left about wheel. 3. March. 4. Forward.

The last three commands are repeated by the chiefs of squadron; the movement is executed in all the squadrons, as prescribed for a single squadron, No. 574.
609. The regiment being in column with distance, at a halt or on the march, in order to gain ground in the direction of one of the flanks, the colonel commands :

1. Attention. 2. By fours to the left (or right). 3. Manch. 4. Forward.

The last three commands are repeated by the chiefs of squadron, and the movement is executed in all the squadrons, as prescribed for a single troop, No. 528.
610. The regiment being in column with distance, at a halt or on the march, to cause it to face in the opposite direction, the colonel commands:

1. Attention. 2. By fours, left (or right) about wheel. 3. March. 4. Formard.

The last three commands are repeated by the chiefs of squadrons, and the movement is executed as for a single troop or squadron, No. 573.
611. The regiment marching in column with distance, to cause it to gain ground to the left or right, without changing the front, the coloncl commands :

1. Attention. 2. Left (or right) oblique. 3. March.

The last two commands are repeated by the captains commanding, and the movement is executed in each squadron as prescribed for a single troop or squadron.

The column having obliqued sufficiently, the colonel commands:

## Forward.

This command is repeated by the chiefs of squadron, and the movement is executed as in a single troop.

To form the regiment into line upon one of its flanks, or on the prolongation of one of its flanks.
612. The regiment being in column with distance, with the right in front, to form in line upon its left flank, the colonel commands:

> 1. Attention. 2. Left into line, wheel. 3. March.

The second command is repeated by the captains commanding squadrons. At the command march, repeated by the chiefs of squad-
ron, the movement is executed in each squadron as prescribed, No. 530. The regiment being aligned, the colonel commands, front.
613. The regiment marching in column with distance, the right in front, to form into line on the prolongation of the right flank, the colonel commands:

## 1. Attention. 2. On the right into line. 3. March.

The second command is repeated by the chief of the first squadron. At the command march, also repeated by him, the movement is executed in the first squadron as prescribed for a single troop, No. 530. The chiefs of the other squadrons command guide right, throw themselves to the head of their columns, and in succession command, on the right into line, in time to command march, when the first platoon is twelve paces beyond the left of the one which precedes. The regiment being aligned, the colonel commands, front.

## To form the regiment into line to the front.

614. The regiment being in column with distance, the right in front, in order to form it into line upon the head of the column, the colonel commands:

## 1. Attention. 2. Front into line. 3. March.

At the second command, repeated by the captains commanding the first squadron, the chiefs of the others command, column, forward-head of column to the lutf left. At the command march, repeated by all the chiefs of squadron, the first squadron is formed as prescribed for a troop, No. 535. The chiefs of the other squadrons place themselves at the head of their column. The first platoon of each squadron having made a half whecl, is mored forward in a diagonal direction by command of its chiefs, the others following in regular succession. The chicfs of squadron command guide right as soon as the first platoon has changed its direction to the left. When the heal of the second squadron gets witbin sixty paces of the line, the ehief of the squadron commands, head of colum to the half right; the chicf of squadron commands, front into tine, in time to command march, when the third platoon has turned to the right, and the fourth platoon is marching toward its place in the line. The other squadrons are brought up upon the line in the same manner as the secoud. The regiment being aligned, the colunel commands front.
615. The regiment being in column with distance, the right in front, if it be the wish of the coloncl to bring it into line faced to the rear, he commands:

## 1. Attention. 2. Into line, faced to the rear. 3. March. -

At the second command, repeated by the chiefs of the first squadron, the chiefs of the other squadrons command, colunt, forvard-head of column to the half right.

At the command march, the first squadron performs the morement as directed for a single troop or squadron, No. 537. The second squadron, and the others in succession, march in a diagonal direction toward the line, the chicf of squadron at its head; when at the distance of sixty paces from the lice, he commands, head of column to the half left, followed by the command, into line faced to the rear, just as the third platoon has takeu the new direction, and before the fourth bas commenced the balf-whecl. The squadron is then formed into line in the same manner as the first, by the commands: 1. Platoon, left about wheel. 2. March. 3. Malt. 4. Right-Dress. 5. Front. The regiment being aligned, the colonel commands fromt.

To form a colunm with dislance into line by the union af two movements.
616. The regiment marching in column with distauce, the right in front, and a portion of the column having cbanged its direction to the right, if it is lesired to come into line faced to the front, the colonel balts the column, at the moment the fourth platoon of the squadron which last entered upon the new direction has marched forward twelve paces after turning to the right, and commands:

## 1. Attention. 2. To the left-and front into line. 3. March.

At the second command, repeated by the field officers, the chiefs of squadron who are in the new direction command, left iuto line, wheel. The chief of the squadron immediately in rear of the one which entered the new direction last, commands, frout into line. The chiefs of the other squadrons command, column, forrards head of column to the half left. At the command artich, repeated by the field officers and by the chiefs of squadron, the portion of the column in the new direction forms to the left into line, which the rear portion forms to the front into line. The regiment being aligned, the colonel commands, front.

The column marching left in front, and having changed direction to the left, is brought into line to the front upon the same principles, but by inverse means.
617. The regiment marching in column with distance right in front,
and one portion having changed direction to the left to form it into line faced to the rear, the colonel halts the column the moment the fourth platoon of the squadron which last entered the new direction has turned to the left, and commands :

1. Attention. 2. To the left-and upon the head of the third (or other) squadron-into line, faced to the rear. 3. March.

At the second command, repeated by the field officers, the chiefs of squadron whose squadrous are in the new direction (first and second) command, left into line, wheel. The chief of the squadron in rear of the last which is in the new direction (say the third), commands : by incersion, front into line. The ehiefs of the remaining squadrons command: 1. Column, forwarl. 2. Head of column to the half right. At the command metrech, repeated by the field officers and by the chiefs of squadrons, the squadrons are brought into line: those on the new line are bronght to the left into line, while those in rear, after having been bronght by inversion, front iuto line. complete the movement by platoons, left about, cheel. The regiment being aligned, the colonel commands frout.

The column marching left in front, having changed direction to the rigbt, a portion still being in the old direction, is brought into line upon the same principles, but by inverse means.
618. The regiment being in colnmn with distance, the right in front, to form front into line npon a line that the head of the column has passed, the colonel commands:

## 1. Attention. 2. Upon the third (or other) squadron, front into line. 3. Marcir.

At the second command, repeated by the field officers, the chiefs of squadrens which are in front of the designated squadron, command, platoons, right ubout wheel. The chief of the third squadron commands, frout into linc. The chiefs of the fourth and fifth squadrens command: 1. Colemn, forsaicl. 2. Head of column to the hulf left.

At the command marrle, repeated by the field officers and by the chiefs of squadron, the third squadron, and those in its rear, perform the movement frout info line with the right in front. The chiefs of the first and second squadrons, after having wheeled about by platoons, conform to what is prescribed for into line, faced to the rear, upon the heud of the column, except that they complete the movement by a left about wheel by platoons.

The regiment being aligncd, the colonel commands froit.

# To form a close column into line upon one of its flanks, or upon the prolongation of one of its flanks to the front. 

619. The regiment being in close columu, the right in front, to form it into line upon the left flank of the column, the colonel commands:
620. Attention. 2. By the rear of the column-left into line, wheel. 3. March.

At the second command, the chief of the fifth squadron commands, squadron, left wheel. The chiefs of the other squadrons command: 1. Squadrons, foricard. 2. Guide left. - At the command march, repeated by the chiefs of squadron, the first four squadrons move forward; the fifth executes its wheel to the left; when it is nearly completed, the chief commands: 1. Forward; and afterward: 2. Squadron. 3. Halt. 4. Left-Dress. 5. Front. The chief of the fourth squadron commands, squadron left wheel, in time to command march, when the fifth squadron has made two-thirds of its wheel to the left, completing the movement as directed for the fifth squadron. The chiefs of the other squadrons conform in succession to what has been prescribed for the fourth. The regiment being aligned, the colonel commands front.
620. The regiment marching in close column, the right in front, to form it into line on the prolongation of the right flank to the front, the colonel commands :

## 1. Attention. 2. On the right into line. 3. Marcir.

At the second command, the chief of the first squadron commands, right. At the command march, he commands turn; when the wheel is nearly completed, he commands: 1. Forward. 2. Guide right; and when the squadron reaches the new line: 1. Squadron. 2. Halt. 3. Right-Dress. 4. Front. The chiefs of the other squadrons command, guide right, throw themselves to the right of their squadrons, and command in succession, right, in time to give the command turn, when their squadron has gone the proper distance beyond the left of the squadron which precedes: the rest of the morement is executed as directed for the first squadron. The regiment being aligned, the colonel commands front.

## To deploy a close column.

621. The regiment being in close column, the right in front, to deploy it in advance of the head of the column, on one of the interior squadrons, the colonel commands :

## 1. Attention. 2. Upon the third squadron-deploy column. 3. March.

At the second command, the chiefs of the first and secoud squadrous command, platoons, right wheel; the chiefs of the fourth and fifth command, platoons, left wheel. The chief of the third squadron commands: 1. Squadron, formord; 2 Guide right. At the command march, repeated by all the chiefs of squadron, except that of the third, their squadrons break by platoons to the right and left, when the wheels are nearly complete, the chiefs of the first and second squadrons command: 1 . Forward. 2. Guide left; those of the third and fourth eommand: 1. Forward. 2. Guide right. They all throw themselves to the head of their column. The chiel of the third squadron gives the command march, when his front is unmasked; halts his squadron one pace behiud the line, and commands: 1. Right-Dress. 2. Front.

The chiefs of the other squadrons march at the bead of their respective columns, until they have reached the point on the right or left that the left or right of their squadron should be from the squadron which precedes them on the left or right ; they then halt in their awn persons, allow their squadrons to march past them, and command, platoons, left wheel, if they are on the right, and, platorms, right wheel, if they are on the left of the third squadron, in time to give the command march, the moment the rear platoon has gotten its proper interval ; the wheels being nearly completed, the chiefs on the right command: 1. Forward. 2. Guide left; those ou the left: 1. Forward. 2. Guide right. When the squadrons reach the rank of file-closers of the squadron on the left or right, the chiefs command: 1. Squadron. 2. Halt. 3. Left (or right)—Dress. 4. Front. The regiment being aligned, the colonel commands, front.
622. The squadron on the march in close column, right in front, to deploy forward without halting, the colonel commands:

## 1. Attention. 2. On the first squadron-deploy column. 3. March.

At the second command, the chief of the first squadrou commands Guide right, and throws himself in front of the centre of his squadron; the other chiefs command, platoons, left wheel, trot. At the command march, repeated by the chiefs of the last four squadrons, the first squadron continues to march; the others break by platoons, left wheel, trot, and when the wheel is nearly completed, each chicf of squadron commands: 1. Forward. 2. Guide right. After reaching the point the right of his squadron ought to occupy, he halts, allows his squadron to
march past him, and commands, platoons, right wheel, in time to com- ${ }^{*}$ mand march, when his first platoon has its proper place; the wheels being nearly completed, he commands: 1. Forward. 2. Guide right; throws himself in front of the centre of his squadron, and when he reaches the line on which the first is marching, commands: 1. Walk. 2. March.

## March in line.

623. The regiment being in line, to march it to the front, the colonel commands:

## 1. Attention. 2. Squadrons, furward. 3. The right (or left) squadron, the squadron of direction. 4. March.

The second command is repeated by the field officers, the chiefs of squadrons; at the third command, repeated by the field officers, the chiefs of squadron command, guide right (or left); and the adjutant indicates the direction to be taken by the guide of the right of the first squadron. At the command march, repeated by the field officers, and the chiefs of squadron, the regiment moves off, and the first squadron conforms to what is prescribed for the march of a single troop or squadron, No. 507 ; the others are careful to preserve the alignment and their intervals on the side of the guide.

The regiment marching in line is halted at the command:

1. Attention. 2. Squadrons. 3. Halt. 4. Right (or left)Dress.

The last three commands are repeated by the field officers and the chiefs of squadron. The captains align their squadrons, and command front. The regiment being aligned, the colonel commands front.
624. The regiment marching in line, with the guide right, to cause it to gain ground to the front and flank at the same time, the colonel commands:

1. Attention. 2. Platoons, right half wheel. 3. March. 4. Forward.

When the colonel wishes to renew the march to the front, he commands:

1. Attention. 2. Platocns, left half wheel. 3. March. 4. Forward.
2. To gain ground to the right without at the same time gaining to the front, the colonel commands:
3. Attention. 2. Platoons, right wheel. 3. March. 4. Forward.

The regiment having gained sufficient ground to the right, the colonel commands:

1. Attention. 2. Platoons, left wheel. 3. March. 4. Forward.
2. The regiment marching in line with the guide right, to cause it to march in retreat, the colonel commands:

## 1. Attention. 2. Platoons, right about wheel. 3. March. 4. Forward.

To cause it to resume the march to the front, the colonel commands :

1. Attention.
2. Platocns, left about wheel.
3. March.
4. Forward.

The last three commands are repeated by the field officers and chicfs of squadron.

## To change the front of the line.

627. The regiment being in line, if it is wished to change the front of the line so that it shall face to the right, the colonel commands :

## 1. Attention. 2. Change front on the right wing. 3. March.

At the sccond command, repeated by the field officers, the chiefs of squadron command, platoons right wheel. At the command march, repeated by the field officers and chiefs of squadron, all the squadrons break by platoons to the right; when the wheels are nearly completed, the chief of the first squadron commands: 1. Front into line. 2. March. 3. Guide right. The chiefs of the other squadrons command: 1. Formard. 2. Head of columm to the half left, the rest of the movement is executed as prescribed for coming front into line, the right being in front, No. 535. The regiment being aligned, the colonel commands fiont.
628. The regiment being in line, to cause it to change its front to the left, at the same time gaiuing ground to the rear, the colonel commands:

1. Attention. 2. Change front to rear on the right wing. 3. MaRCH.

At the second command, repeated by the field officers, the chiefs of squadrons command, platoons, right wheel. At the command march, repeated by the field officers and chiefs of squadron, all the squadrous break by platoons to the right; when the wheels are nearly completed, the chief of the first squadron commands: 1. By inversion, front into line. 2. March. 3. Guide left; the chiefs of the other squadrons command: 1. Formard. 2. Hend of column to the half right; the remainder of the movement is cxecuted upon the principles for coming into line, faced to the rear. The regiment being aligned, the colonel commands front.

## To pass a defile.

629. The regiment being in line, and it is proposed to pass a defilo in front of some point of the line, say the interval between the third and fourth squadrons, and the defile is wide enough to admit the front of a division, the colonel commands:
630. Attention. 2. On the fourth platcon of the third squadron, and the first of the fourth, pass the defile in front. 3. March.

At the second command, repeated by the field officers, the chief of the third squadron commands, platoons, left wheel-fourth platoon forward; that of the fourth squadron commands, ptatoons, right wheel first platoon, forward. The chiefs of the first two squadrons command, platoons, left wheel; and the chief of the fifth, platoons, right whee!. At the command march, repeated by the field officers and the chiefs of squadron, the two platoons designated march forward, and obliquing to the right and left, unite; all the others break to the left and right, and the wheels being nearly completed, the chiefs of the squadron on the right command: 1. Forward. 2. Guide left; those of the squadrons on the left: 1. Forward. 2. Guide right. The platoons of the right and left columns so regulate their march as that those of the same number coming from the head of the column shall reach the turning-point at the same time, so that when the turn is completed they may march through the defile abreast each other. The column thus formed passes the defile presenting the front of a division, and preserving the distances prescribed for a column of platoons.

When the two squadrons at the head of the column have cleared the defile, the colonel commands:

## 1. Attention. 2. Front into line. 3. March.

The second command is repeated by the field officers and the chiefs
of the third and fourth squadrons. At the command march, repeated by these same officers, these two squadrons form front into line, the head of the columns of platoous obliquing to the right and left, in order to regaiu the interval which should separate squadrons. The chiefs of the other squadrons continue to march forward, and command, those on the right, herel of column to the right; those on the left, head of column to the lcft. The columns move parallel to the line of battle, and when the heads of squadrons reach the proper points, those of the right column are brought on the left into line, and those of the left on the right into line. The regiment being aligned, the colonel commands front.
630. The regiment being in line, to pass a defile in rear of the line, the colonel commands :

1. Attention. 2. By platoons from the wings, to pass the defile in rear of the interval between the third and fourth squadrons. 3. MaRCh.

At the second command, repeated by the field officers, the chief of the first squadron commands, plutoons break to the rear by the right, to march to the left. At the command march, repeated by these same officers, the first squadron breaks as directed, schoel of the squadron, No. 564, and the column marcles toward the defile in a direction parallel to the regiment, until its head reaches the defile, when it turns to the left. The chief of the secoud squadron repeats these commands time enough to follow the first squadron at its proper distance; the chief of the fifth squadron at the same time commands: I. Platoons, break to the rear ly the left, to march to the right. 2. Marcn; so that the two columns may reach the defile at the same time, and join after turning into it, presenting the front of a division. The third and fourth squadrous break by the same commands, and pass through the defile in the same way as has been prescribed for the second and fifth. When the squadrons, after having passed the defile, reach the new line established in rear of the defile, the first turns to the left, and when the double column reaches it, the second turus to the left, and the fifth to the right. When the last platoon of each column lias turned into the line, and the two are separated by the interval between squadrons, the colonel, who marches in rear, commands:

1. Attentirn. 2. Column. 3. Halt. 4. To the left and right into line. 5. March. 6. Right-Dress.

All these ccmmands, except the first, are repeated by the field officers
and chiefs of squadron. The regiment being aligned, the colonel commauds front.

## The charge.

631. The regiment marching in line, the colonel commands:
632. Attention for the charge. 2. Draw-Sabre. 3. Trot. 4. March.

The third command is repeated by the field officers, and by the chiefs of squadron. At the command march, repeated by these same officers, the squadrons take the trot. After having gone 150 paces at this gait, the colouel commands :

## 1 Gallop. 2. March.

The first command is repeated by the field officers, and by the chiefs of squadron; and at the command march, also repeated by them, the squadrons take the gallop. After having gone about one hundred paces at this gait, and being only about sixty paces from the supgosed line, the colonel canses the charge to be sounded. At this sound, repeated by all the trumpets, all the officers command charge. The men of the front and rear ranks place their sabres in the positions for the charge (see school of the troop, No. 554).

The colonel wishing to arrest the charge, commands:

1. Attention. 2. Squadrons. 3. Halt. 4. Right (or left)Dress.

At the command attention, repeated by all the officers, the squadrons prepare to change the gait, and the troopers return sabres. At the command squadrons, repeated by the field officers and chiefs of squadron, the chiefs of platoon command platoon, and the squadrons take the trot. At the command halt, repeated by the field officers, the chiefs of squadron and chiefs of platoon, the squadrons halt.

At the command right (or left)-dress, repeated by the field officers and by the chiefs of squadron, the squadrons are aligned. The regimeut being aligned, the colonel commands front.

At the sound of the charge, the officers remain in their places in line; the colonel and other field officers place themselves upon the officers' line.

## Charge in column.

632. The charge in culumn is employed against infantry formed in
column or in square. For this purpose the regiment is formed in cluse column, and the squadrons take in succession a distance equal to double their front, so that the first squadron having charged, it is promptly followed by the second, which, if the first has made an opening in the square, throws itself into it, and completes its overthrow. In case the first squadron is repulsed, it retires by the right and left, to re-form in the rear, disengaging the front of the second squadron; this squadron renews the charge; if it does not succeed, it clears the ground for the third; aud thus they continue until the charge may have completely failed.

Such charges, made in rapid succession, onght to finish by breaking the square, if they are directed as they ought to be, against the angtes, which are the weakest points, unless guarded by artillery.

## Article XI.

## LIGHT ARTILLERY TACTICS.

## SCHOOLOFTHE PIECE.

633. Light artillerymen should, hefore receiving instruction in their duties at the picce, be familiar with the first part of the school of the soldier, as laid down in Infantry Tactics, and with the Manual of the Sabre, No. 440, and following. If intended for borse artillerymen, they should also be instructed in the duties of the trooper, No. 382, and following.

The drivers - one to cvery pair of horses - should have experience in the management of horses in harness.
634. The cannoneers of a picce, when united, constitute a gun detachment, which is composed ordinarily of nine men in mounted artillery, and eleven in horse artillery; two of whom-the gunner who commands the detachment, and the chief of caisson - should be corporals.

The detachment is formed by the gunner, who causes the cannoneers to form in two ranks, cighteen inches between them, elbows slightly turning. He tells the detachment off from the right, No. 1 lueing on the right of the rear rank, No. 2 on the right of the front rank, No. 3 on the left of No. 1, No. 4 on the left of No. 2, and so on, the even numbers being in the front, and the odd numbers in the rear rank. The clief of caisson is told off as No. 8. When the detachment is composed of more or less than eight men, the chief of caisson should be the highest cren number. When the detachment, from any cause, consists of less than nine men, the higher numbers are left out, and additional duties are imposed upon the cannoneers present.

When the chief of the piece, who should be a sergeant, is present, and is not acting as the instructor, he performs the duties and takes the position of the gunner, who then takes post one yard in rear of the right file, aud acts as file-closer, except when the chief of piece is out of ranks, when he resumes his post.

For purposes of instruction, each detachment should be halted in front of and facing the piece, the latter being unlimbered, and the
different numbers called upon suceessively, to perform their respective duties in detail, while the rest of the detachment are required to attend to the instruction, and to the manner in which the motions are performed.

## Posts of the cannoneers. Piece unlimbered.

635. The gunner is at the end of the trail handspike; Nos. 1 and 2 are about two feet outside the wheels, No. 1 on the right, and No. 2 on the left; with howitzers, they are rather in rear of the mnzzle; with guns, in line with the front part of the wheels. Nos. 3 and 4 are in line with the knob of the cascable, covering Nos. 1 and 2; No. 5 five yards in rear of the left wheel ; No. 6 in rear of the limber, which is turned about so as to face toward the piece (sec No. 29); and No. 7 on his left, covering No. 5 ; No. S, the chicf of the eaisson, is four yards in rear of the limber, and on its left ; all face to the left, which is the direction in which the muzzle of the piece is pointing.

The chief of the piece is opposite the middle of the trail handspike, outside of, and near the left eannoncers. In actual firing, be places himself where he can best observe the effect of the shot.

## Loading and firng.

636. The piece is supposed to be on the drill ground, unlimbered, and ready for action; the limber is in position behind the piece, and facing toward it, the end of the pole six yards from the end of the trail handspike; and the detachment in front of and facing the piece.

Before commencing the individual instruction of the cannoneers, the instructor should enter into an explanation of the different kinds of field guns, their names, and the names and uses of the difficrent parts of the gun and earriage before them. This done, he commences the instruction with the gunner, who commands and points the picce in action.
637. Commanding and pointing.-Tbe gunner is responsible for the manner in which the numbers diseharge their duty. He communicates the orders which be receives for the kind of ammunition to be fired; sending to No. 6 (who is charged with preparing the fuze) the time of flight or the distance for each round, when firing shells or spherical case shot. He should, when the firing is slow, see that each fuze is properly prepared, and make such corrcctions as are necessary; for this purpose, he, as well as No. 6, should be provided with a fuzegouge.

On receiving the command, or signal to commence firing, he gives the command loced; takes hold of the handspike at the end with the
right hand, and at the centre with the left; places his left knee against the left hand, bending over it, the right knee being slightly bent; looks over the top of the piece, and gives the direction. He then steps to the breech to give the elevation, which he does by placing the hausse (see No. 665) on its seat, taking hold of a handle of the elevating screw, drawing back his right foot, bending over his left knee, and sightiug through the slit in the hausse.

When the piece is loaded and pointed, he removes the hausse, gives the command ready, and stepping clear of the wheel to that side where he can best observe the effect of his shot, gives the command fire. As soon as the piece has been fired, he causes it to be run up to its former place, if the recoil has made it necessary.

When the instructor, instead of giving the command commence firing, gives that of load, the gunner repeats it, and performs the same duties as before, except that he does not command fire until the firing is ordered to commence. After the command to commence firing is given, the action is continned by the gunners without further command from the instructor, until the firing is ordered to cease. When the commands are all given by the instructor, as in loading by detail, the gunner performs the same duties, but withont repeating the commands.
638. Sponging and ramming.-Until the command load, No. 1 stands faced to the front, in line with the front of the wheels, holding the sponge about the middle of the staff in his right band, and trailing it at an angle of $45^{\circ}$, sponge head up.

The instructor commands:

## By detail-Load.

Three pauscs and four motions.
First motion. At the command load, No. 1 faces to the left, steps obliqnely to the right with his right foot, without moving his left, and at the same time brings the sponge to a perpendicular position by drawing his right hand up in line with the elbow. The sponge is grasped firmly in the hand, the rammer head held over the right toe, and the elbow kept close to the side.

Second motion. He steps obliquely to the left with his left foot, planting it about half-way between the piece and the wheel, and opposite the mnzzle, bringing the sponge at the same time across his body to the left, so that his right hand may be opposite the middle of the body, the sponge staff being inclined at an angle of $45^{\circ}$ across the front of it.

Third motion. He takes a side step to the right of thirty inches with the right foot, and bending the right knee, brings the sponge to a hori-
zontal position, extending the hands to the ends of the staff, the sponge head to the left, the back of the right hand up, and that of his left down, the sponge head pressing against the face of the picee.

Fouth motion. He inserts the sponge head, drops his left hand behind his thigh, shoulders square, feet equally turned out, straightens the right knee, bends the left, and, leaning over it, forces the sponge home.

## Sponge.

Threc pauses and four motions.
First motion. At the command sponge, No. I fixes his eye on the vent to see that it is elosed, gives two turns to the sponge, pressing it at the same time arainst the bottom of the bore.

Second motion. He draws out the sponge, at the same time straightening his left knee and bending his right, scizes the staff near the sponge head with his left hand, back of the hand down, and places the sponge against the face of the piece.

Third motion. He turns the sponge by bringing his hands together in the middle of the staff, giving a cant with each hand, throwing the sponge head over, at the same time turning his wrists, so as to bring the staff to a horizontal position; he then extends his hands to the ends of the staff, the back of the left up, that of the right down.

Daring the whole time of sponging, No. l keeps his eye on the rent. If at any time it is not closed, he will discontinne the manœurre, and command, stop vent.

Fourth motion. He introduces the rammer head into the muzzle as soon as No. 2 has inserted the charge, and joins his left hand to his right, easting his eyes to the front.

## Ram.

Tioo punses and three motions.
First motion. At the command ram, No. 1 rams home, throwing the weight of bis body with the rammer ; bending over his left knee, and passing his left arm, with the elbow slightly bent, and back of the hand np , in a borizontal position over the knee, until it points in the direction of the left trunnion; the right shoulder thrown back, and the eyes east toward the front until the eartridge is home.

Second motion. He jerks the sponge out with his right hand, allowing it to slide through the hand as far as the middle of the staff,
when he grasps it firmly, and seizing it close to the rammer head with the left hand, back of the hand up, plaees the rammer hand against the face of the piece, straightens his left knee and stauds erect; eyes to his own front.

Third motion. He then draws the sponge close to his body, and immediately steps lack outside the wheel, first with the right, then with the left foot; so that when the right foot is brought to it, the right hip may be on a line with the front of the wheel. In drawing the right foot to the left, be gives the sponge a eant with his left band, at the same time quitting it, and brings the sponge to a perpendicular position in the right hand, the rammer head resting on the right toe.

Ready. At this command, which is given as soon as the piece is loaded, or the firing about to commence, No. I breaks well off to the left with his left foot, bending the left kuee and straightening the right leg, drops the end of the sponge staff into the left hand, back of the hand down, and fixes his eyes on the mazzle. The heels should be parallel with the wheel, the body erect on the bannches, and the sponge and rammer held in both hands in a horizontal position, the sponge head to the left.

The piece having been fired, No. 1 rises on his right knee, and returns to his position as in the third motion of ram.

At the command load, he steps in and performs his duties in the same manner as before.

When the loading is not by detail, No. 1 goes through all his duties at the command locd, returns to his position outside the wheel, as given in the third motion of ram; breaks off at the eommand ready, and at the firing of the gun rises, steps in, and performs his duties as before. This be continues until the command cease firing is given, at which command he resumes the position he had before the first eommand load. If the sponging has been commenced when the command ceare firing is given, it is completed before No. 1 resumes his post.

In sponging and ramming, if the length of the piece requires it, the sponge and rammer are to be pressed home in two motions, No. 1 extending bis right hand to the eud of the staff as soon as it reaches the muzzle.

In sponging howitzers, No 1 presses the sponge to the bottom of the chamber, which should be well sponged out; he wipes the bore by rubbing its whole surface, without allowing the sponge to turn in bis hands.
639. Loading.-The instructor places No. 2 on the left of the piece, where he remains faced to the front until the eommand load. At this
command, he faces to his right, and by tro oblique steps, corresponding to those of No. 1, the first with his left foot, the second with his right, at the command too, he places himself near the muzzle of the piece. At the command three, he brings up his left foot to the sile of the right, and faces to the right, bringing his hands together to reccive the ammunition from No. 5 ; the cartridge in the right, the shot in the left hand. As soon as the sponge is withdrawn by No. 1, he faces to the left, and puts the aminunition into the muzzle, taking care tbat the seam of the cartridge does not come under the rent, and then steps back, commencing with his left foot, to his position outside the wheel, in the same manner that No. 1 does.

At the command ready, he breaks off well to the right with his right foot, bending the right knee, and straightening the left knee; the body erect on the bannches, the eyes fixcl on the muzzle.

The piece having been fired, No. 2 raises on his left leg, remains facing the piece until he hears the command load, or the firing of the gun; then steps in, and performs his duty as before. At the command cease firing, he resumes bis position outside the wheel, and faces to the front.

With the howitzer, No 2 puts in the charge so that the fuze may rest against the rammer head, and No. 1 rams it home very carefully.
640. Serving the cent.-The instructor places No. 3 on the right of the piece, on a line with the knob of the cascable, and covering No. 1; he holds the priming wire in his right hand, thamb through the rins, the thumbstall on the left thumb, and the tube pouch fastened to his waist.

At the command loal, he steps to his left, wipes the vent field (or surface around the vent) with the thumbstall, which he then holds pressed upon the vent, keeping his elbow raised; his fingers on the left side of the piece, so as to allow the gumeer to point over his thumb; the right hand on the tube pouch. When the piece is spouged, and the charge inserted by No. 2, he jumps to the end of the trail handspike, and, seizing it with both hands. prepares to move it to the right or left, on a signal from the gunner, who taps the right of the trail for a movement to the left, and the left of it for a morement to the right. As soon as the piece is pointed, the gunner raises both hands as a signal to No. 3, who then resumes his post.

At the command ready, be steps to the piece, pricks the cartridge, taking care not to move the charge, and covers the vent with his left hand as soon as the friction tube is inserted. At the command fire, he steps to his right, clear of the right wheel, and at the firing of the gun, or at the command lored, serves the vent as before.

No. 3 must keep the rent closed from the time the sponge enters the muzzle, until the charge is inserted by No. 2.
641. Firing.-The instructor places No. 4 on the left of the piece, spposite No. 3, and covering No. 2; he is equipped with a tube pouch and lanyard.

At the command load, No. 4 inserts the lanyard hook into the ring of a primer, and stands fast.

At the command ready, he steps in with the right foct, drops the tube in the rent, takes the lanyard in his right hand, moves to the rear so far as to keep the lanyard slack, but capable of being stretched, without altering his position, which should be outside the wheel, the left foot broken to the left and rear.

As soon as No. 3 is clear of the wheel after the command fire is given, No. 4 pulls the lanyard briskly and firmly, passing the hand, back up, in a downward direction to the rear, so as to keep the lanyard book from flying back in the direction of the face. Should the tube fail to explode the charge, the gunner immediately commands, don't advance, the primer has failed. Upon which No. 2 steps inside the wheel, close to the axletree, receives a priming wire over the wheel from No. 3, and a prepared primer from No. 4, pricks, inserts the primer, and resumes his post. At the command cease firing, No. 4 secures bis lanyard.

In the absence of No. 4, No. 3 discharges his duties; after pricking the cartridge, he prepares and inserts a friction tube, steps to his post, faces the vent, breaks to his rear with his left foot, and at the command fire, discharges the piece. He then resumes bis post, and tends the vent as before.
642. Serving Ammunition.-The instructor stations No. 5 fire yards in rear of the left wheel, and covering it, No. 7 in the rear of and near the left limber wheel, and No. 6 in rear of the limber chest to issue ammunition. He is prorided with a fuze-gouge, and prepares the shells or spherical case shot, according to the distance or time ordered, before delivering them to No. 5.

To cut the Fuze.-Place the projectile betwecn the knees, fuze uppermost, and support it with the left band. Holding the fuze-gouge in the right hand, place the left corner of its edge close to, and on the right of the graduated mark indicating the time desired; then cut away gradually until the composition is exposed for a length about equal to the width of the gouge. Care must be taken not to cut the fuzes more rapidly than the demand for shells or case shot requires.

At the command load, No. 5 runs to the ammunition chest, receives from No. 7 or No. 6 a single round, the shot in the right hand, the cartridge in bis left; takes it to the piece and delivers it to No. 2; returns
immediately for another round, and then halts at his post until the piece is fircd. In firing shell or spherical case, he exhibits the fuze to the gunner before delivering it to No. 2.

Ammunition pouches are worn by Nos. 5 and 7, hung from the left shoulder to the right side; the romd is so placed in the pouch that the cartridge will be to the front. When it is brought np, No. 5 holds open the pouch, and No. 2 takes out the round with both hands. In rapid firing with round shot and canister, Nos. 5 and 7 may alternate in delivering the charges. At the command cease firing, No. 5 carries the round back to No. 6. No. 6 should keep the lid of the ammunition chest closed as much as possible. At the command cease firing, he carefully replaces the ammunition in the chest, and secures the lid.
643. Loading by detail.-For the instruction of the cannoneers united for the service of the gun, the exercise is first conducted by detail, the instructor giving all the commands. His commands are: Load by detail-load ; two, three, four: sponge; two, three, four; ram; two, three: ready; fire; cease fluing.

When the men are sufficiently instructed to go through the mannal without detail, the commands of the instructor for that purpose are: load; commence firing; cease firing; or simply, commence firing, and cease firing. After the command commence firing, the action is continued as laid down for loading without detail, until the commaud cease firing is given, which is repeated by the chief of the piece and the gunner.

## Moving the piece by hand. Piece unlimbered.

644. To the front.-The cannoncers being at their posts, the instructor commands :

## 1. By hand to the front. 2. March. 3. Halt.

At the first command, the guncer seizes the end of the handspike, and Nos. 1, 2, 3 and 4, the spokes of the wheels. No. 1 with his left hand; Nos. 2, 3 and 4, with both hands; No. I holds the spouge with his right hand, the staff resting upon his right shoulder, sponge head down. At the secoud commaud they move the piece forwarl, the gunner raising the trail until the command halt is given, when all resume their posts.
645. To the rear.-The instructor commands:

## 1. By hand to the rear. 2. March. 3. Halt.

At the first command, the gunner, facing to the rear, seizes the handspike with his right hand; Nos. 1, 2, 3 and 4, seize the wheels as
before, except that No. 1, holding the sponge in his left hand, uses his right hand at the wheel. At the commaud march, they move the piece to the rear, the gunner raising the trail, until the command halt is given, when all resume their posts.

## Changing posts.

646. In order to instruct the men in all the duties at the piece, the instructor causes them to change posts.

For this purpose he commands:

## 1. Change posts. 2. March.

At the command change posts, the men on the right of the piece face to the rear ; those who have equipments lay them down ; No. 1 resting the sponge head on the nave of the wheel. At the command march, each man takes the place and equipments of the man in his front.

| No. 1 | takes | the place of No. 3. |  |
| :--- | :--- | :--- | :--- |
| No. 3 | $"$ | " | No. 8. |
| No. 8 | $"$ | $"$ | No. 6. |
| No. 6 | " | " | No. 7. |
| No. 7 | $"$ | $"$ | No. 5. |
| No. 5 | $"$ | $"$ | No. 4. |
| No. 4 | $"$ | $"$ | No. 2. |
| No. 2 | $"$ | " | No. 1. |

The gunner changes with one of the numbers, by special direction of the instructor.
647. Equipments.-The gunner, who is responsible for the equipments, either distributes them from the limber chest, or they may be hung on the neck of the cascable, and distributed by him to the proper numbers, at the command, take equipments, from the instructor. He receives them again at the command, replace equipments, making such disposition of them as may be directed.

## Limbering.

648. To the front.-The instructor commands :

## Limber to the front.

At this command, No. 1 steps up between the mazzle and the wheel, by the oblique steps indicated for loading; turns the staff, seizing it with the left hand, at the same time shifting his right, the back of the right up, that of the left down, and passes the sponge on its hook ;
rammer head to the rear, to No. 3, who receives the bead, secures it against the stop, and keys it up. The piece is then brought about by the cannoneers, and the limber, inclinheg to the right, passes to its place in front of it, be ng drawn, when the horses are not attaehed, by Nos. 6 and 7, who take hold of the end of the pole for the parpose.

To bring the pieee about, the gunuer and No. 5 pass to the right of the handspike, and, faeing toward the left, seize it, the gunner near the end, and No. 5 at the middle, and on his right, raise the trail and carry it round to the left: Nos. 1 and 2 bear down npon the muzzle, and Nus. 3 and 4 , each using hoth hands, bring the wheels around; No. 3 turning the right wheel to the rear, and No. 4 the left wheel to the front. When the piece is brought about, the trail is lowered; Nos. 3 and 4 step within the wheels to aroid the limber; Nos. 1 and 2 remaiu at the mazzle, and the gunner and No. 5 step up between Nus. 3 and 4 and the trail, the gunner first taking ont the bandspike, and passing it to No. 4, by whom it is put up.

As soon as the limber is in front of the piece, the gunuer eommands, halt, limber up; upon which the limber halts, the gunner and No. 5 raise the trail by means of the handles, and, assisted br Nos. 3 and 4 at the wheels, and Nos. 1 and 2 at the muzzle, run the picce forward, and plaee the luncte upon the pintle; the gumer then puts in the key, and all take their posts; when necessary, Nos. 6 and 7 assist at the trail in bringing the piece about, and in limbering up.
649. To the right (or left).-The instructor commands:

## Limber to the right (or left).

The trail is turned to the right (or left), and the piece limbered up as before: the limber incliniug to the right (or left), and taking its place by a right (or left) wheel.
650. To the rear. - The instructor commands:

## Limber to the rear.

The limber incliues to the right, and takes its place by wheeling about to the left; the piece is then limbered up as before.

## Posts of the cannoneers. Piece limbered.

651. Nos. 1 and 2 opposite the muzzle; Nos. 3 and 4 opposite the knob of the cascable; the gumer aml No. 5 opposite the rear, and Nos. 6 and 7 opposite the front parts of the limber wheels; No. 8 is on the left, and opposite the limber ehest of the caisson, All face to the front, which is now in the direetion of the pole instead of the 32
muzzle, and cover each other in lines one yard from the wheels; the even numbers on the right, the odd on the left. The chief of the piece is on the left, and, if not mounted, opposite the end of the pole; if mounted, he is near the leading driver, and on his left.

## To form the detachment.

652. To the front.-The instructor commands:

## Detachment-Front.

The gunner commands, camoneers, forvard, march; the even numbers move directly to the front; the odd numbers closing to the right upon them when clear of the picce. The gunner files them to the left, halts the detachment in front of the piece, and faces them to the front. No. $S$ moves directly forward, and takes his place in the detachment.
653. To the rear.-The instructor commands:

## Detachment-Rear.

The gunners command, cannoneers, rear face, march. At the command march, the odd numbers move directly to the rear, the even numbers closing to the right upon them after passing the picce, the detachment is filed to the left at the proper distance, halted by the gunner opposite the piece and faced to the front, No. 8 taking his proper place in the detachment.

In forming the detachments in line, they are always, after halting, dressed to the right by the gunner.

## Posts of the detachments at their pieces.

654. In front.-The detachment is in line facing to the front, two yards from the end of the pole or the leading horses.

In rear.-The centre of the detachment in two yards, behind the muzzle, and facing it.

On the right or left.-The detachment is in line opposite the axletree of the limber, and three yards from it. In horse artillery, it is in line with, and three yards from the leading horses. In all cases it faces to the front.

## Change of posts of detachments at their pieces.

655. From front to rear.-The detachments being in line, in front of their pieces, to post them in rear, the instructor commands:

## Detachments-Rear.

The gunner commands, camoneers, rear face, march. At the command march, Nos. I, 2, 3 and 4 oblique sufficiently to the left, and Nos. 5, 6, 7 and 8 to the right, move along the sides of their piece; reunite as soon as they have passed it, and are halted at the proper distance, faced to the frunt, and aligned to the right by the gunner.

From rear to front.-The instructor commands:

## Delachments-Front.

The gunner repeats the command, and adds march. At this command, the cannonecrs oblique; Nos. 1, 2, 3 and 4 to the right, Nos. $5,6,7$ and 8 to the left; pass their piece, rennite in front, and are halted and aligned to the right by the gunner.

From rear to right (or left). -The instructor commands:

## Detachments-right (or left.)

The gunner commands, right (or left) oblique, mareh, and afterward forward, and halt, in time to bring the detachment to its post on the right or left. He then aligns it to the right.

In horse artillery, to change from front to rear, the gunners command, left reverse, Marci; Forward; left reverse, March; Halt. The left reverse is execnted on the same principle as the left about wheel in cavalry tactics.

From rear to front.-The gunners command, right oflique, March; Forward. Left oblique, march; Forward; Halt.

From rear to right (or left).-The gunners command, right (or left) oblique; March; Forward; Halt.

From right (or left) to rear.-The gunners command, right (or left) reverse; March; Forward; right (or left) reverse, March; Halt.

If the piece is moving when the last change of post is ordered, the gunner halts, or slackens the pace until it passes, and then commands, left (or right) oblique. March; Forward.

The commands of the instructor in all these cases are the same as in mounted artillery. The movements are executed in the same manner when the detachments are dismounted.

## To post the cannoneers al the piece limbered.

656. The detachment being formed in line in front or rear, on the right or left, the instructor commands :

## Cannoneers, to your posts.

From the front.-The gunner passes the detachment to the right, and commands, to your posts, march. At this command, the cannoneers, Nos. 1 and 2, turning to the right, and opening out, file to their posts; balt at their proper places, and face to the front.

From the rear, right or left.-At the command camoneers, to your posts, the gunner, in each case, faces the detachment to the left, and marches the cannoneers by that flank to their posts.

## Moving the piece by hand. Piece limbered.

657. To the front.-The instructor commands:

## 1. Forward. 2. March. 3. Halt.

At the first command, Nos. 6 and 7 scize the end of the pole with both hands, the gunner and No. 5, facing toward the pole, seize the splinter-bar with one hand, and the pole with the other. Nos. 3 and 4 seize the spokes of the hind wheels with both hands, and Nos. 1 and 2 apply both hands at the head of the carriage. At the second command, all acting together, urge the piece forward until-the command hatt is given, when all resume their posts.

To the rear.-The instructor commands:

## 1. Backward. 2. March. 3. Halt.

At the first command, all face to the rear; Nos. 6 and 7 seize the end of the pole with both hands; No. 5 and the gunner seize the spokes of the limber, and Nos. 1, 2, 3 and 4 , those of the hind whecls. At the command mareh, all moving together, move the piece to the rear, Nos. 6 and 7 keeping it straight by the use of the polc. At the eommand halt, all resume their posts.

## Unlimbering, and coming into action.

To the front.-The iustructor commands:
Action-Front.
658. At this commaud, the gunner takes out the key, and assisted by No. 5, raises the trail from the pintle, and then commands drive on, upon which Nos. 6 and 7 reverse the limber, and proceed with it to the rear. Again reverse to the left, and halt so that the limber shall cover
the piece, with the end of the pole six yards from the end of the trail handspike. At the same time that the limber moves ofi, the piece is brought about in all respeets as in limbering to the front, exeept that the gunner and No. 5, withont lowering the trail, carry it about, each by means of the handle on his own sitl. Nos. 6 and $\bar{i}$, when necessary, assist at the trail, after placing the limber in position.

As soon as the piece is brought about, and the trail lowered, No. 4 takes out the handspike and passes it to the gunner, who fixes it in the trail. No. 1 takes out the sponge, No. 3 unkeying it, and No. 4 prepares his lanyard. All then take their posts as required when the piece is unlimbered.

To the right (or left). -The instruetor commands:

## Action, right (or left).

659. The piece is unlimbered in the same manuer as for uction, fiont, and placed in the required direction; the limber wheels to the left (or right), and takes its place in rear, by reversing to the left (or right).

To the rear.-The instructor commands :

## 1. Fire to the rear. 2. In battery.

660. At the command in bottery, the piece is unlimbered as before; the trail immediately lowered, and the gun prepared for action; the limber moves directly forward at the command dive on, from the gunner, and takes its place by eoming to the left about.

## Movements with the prolonge.

661. The piece being in battery, to fix the prolonge to fire rotiring, the instructor commands:

## Fix prolonge to fire retiring.

At this command, the limber inclines to the right, wheels to the left about, and halts four yards from the trail. No. 5 uncoils the prolonge and passes the toggle to the gunner, who fixes it in the trail by passing it upward through the lunctte, whilst he attaches the other end to the limber by passing the ring over the pintle and keying it.

At the command retire, the cannoneers face about and all march on the left of the piece, except Nos. 1 and 3 . They keep the implements in their hands, and, at the eummand halt, face abont, resume their posts, and go on with the firing.

Should the piece be loaded at the command retire, No. 3 puts in the priming wirc. At the command halt, he takes it out again, and No. 1
rams home. If the command load be given when the piece is in motion, No. 5 puts in the charge, and No. 2 serves vent, receiving from No. 3 the necessary implements for that purpose.

The piece being in action, to fix the prolonge to fire advascing, the instructor commands:

## Fix prolonge to fire advancing.

At this command, the limber passes its piece on the right and halts when in front of it, Nos. 1 and 3 stepping within the wheels to avoid the limber. No. 5 uncoils the prolonge, carries it to the front, gives the toggle to No. 2, who puts it in the lunette of the axle-strap, whilst he places the ring over the pintle and keys it.

In advancing, the men retain their implements and march at their posts. At the command halt, No. 2 takes out the toggle and commands drive on, upon which the limber takes its place in rear, and the firing is renewed.

When the piece is limbered, to fix the prolonge to fire retiring or advancing, the same commands are given. The piece is unlimbered, and the prolonge attached as before.

To fix the prolonge passing a ditch, or for any other purpose, the command is, fix prolonge. The prolonge is then fixed to the trail as before.

In moving with the prolonge, the gunner attends the bandspike, and in changes of direction, is careful to circulate the trail round in proper time to prevent the prolonge being cut by the wheels. No. 7 clears the prolonge from the limber wheels, and Nos. 1 and 2 from the gun wheels. In wheeling about the limber first backs a little and then describes a small circle. In passing a ditch the gunner takes out the bandspike.

In fixing the prolonge for any purpose, the caisson wheels or reverses, if necessary, so that the horses of the limber and caisson may face in the same direction.

To detach the prolonge from the limber and coil it up, the instructor commands :

## Coil prolonge.

At this command, the gunner takes out the toggle, and No. 5 takes off the ring and coils the prolonge, first passing the ring over the upper prolonge hook.

To coil the prolonge and limber the piece, the instructor commands, coil prolonge-limber to the rear. The prolonge is detached and coiled as before, the piece is run toward the limber, which reins back on re-
ceiving the command rein back from the gunner, and is limbered up. To limber to the front, right or left, the instructor commands, coil prolonge-limber to the front, right or left; which is executed as already described, the gunner commanding drive on, as soon as the prolonge is detached.

## Service of the gun with diminished numbers.

662. Disabled men are replaced as soon as possible by the highest numbers, or, if men are selected to replace them, the highest numbers will be reduced to fill the vacaneies thus created. During action, Nos. 1 and 2 may occasionally change places and numbers; the duties of No. 1 are very fatiguing.

Service of the piece by two men.-The gunner commands, points, serves the vent, and fires; No. 1 sponges, loads, and serves ammunition.

Three men.-The gunner commands, points, serves the vent, and fires; No. 1 sponges; No. 2 loads and serves ammunition.

Four men.-The gunuer commands and points; No. 1 sponges; No. 2 loads and serves ammunition; No. 3 serves the vent and fires.

Fice men.-The gunner commands and points; No. 1 sponges; No. 2 loads; No. 3 serves the vent and fires; No. 4 serves ammunition.

Six men.-The gunner commands and points; No. 1 sponges; No. 2 loads; No. 3 serves the vent and fires; No. 4 and 5 serve ammunition.

Seren men.-The gunner commands and points; No. 1 sponges; No. 2 loads; No. 3 serves the vent, and attends to the trail; No. 4 fires; No. 6 is at the limber, and serves ammuuition to No. 5, and occasionally changes with him.

Eight men.-No. 7 assists No. 6 ; the other numbers as before.

## Supply of ammunition when in action.

663. When it can be done without inconvenience, ammunition will be served direct from the rear chest of the caisson, No. 8 performing the duties prescribed for No. 6 at the limber ehest. At conrenient moments, the ammunition served out by No. 6 will be replaced from the rear caisson chest. If the ammunition chest on the limber of the piece is exhausted, the limber is replaced by that of the caisson, and the empty chest exchanged for the centre one of the caisson.

As a rule, the limber chests, and especially that of the piece, will be kept full at the expense of the others, so that in case of a sudden move-
ment on the field, there shall always be a sufficient supply of ammunition at hand.

## Pointing and ranges.

664. To point a piece, is to place it in such a position that the shot may reach the object it is intended to strike. To do this, the axis of the trunnions, being horizontal, the line of metal, called also the natural line of sight, must be so directed as to pass throngh the olject, and then the elevation given to the piece to throw the shot the required distance. The divertion is given from the trail, and the elevation from the breech; the trail being moved to the right and left by a handspike, and the breech raised or depressed by an elevating serew.

The axis of the pieec coincides with that of the eylinder of the bore.
The lime of sight in pointing is the line of direction from the eye to the object. It lies in a vertical plane, passing through, or parallel to the axis of the piece.

The angle of sight is the angle which the line of sight makes with the axis of the piece.

The natural line of sight is the straight line passing through the bighest points of the base ring, the swell of the muzale, muzzle sight, or muzzle band.

The natural angle of sight is the angle whieh the notural line of sight makes with the axis of the piece.

By range is commonly meant the distance between the piece and the object which the ball is intended to strike; or, the first graze of the ball upon the horizontal plane on which the carriage stands. Pointblank range is the distance between the piece and the point-blank. Extreme range is the distance between the piece and the point where the ball finally rests.
665. Theory of pointing.-The point-blank is the second point of intersection of the trajectory or curve deseribed by the projectile in its flight with the line of sight. As the angle of sight is increased, the projectile is thrown farther above the line of sight, and the trajectory and point-blank distance becomes more extended.

The point-blank range increases with the velocity, the diameter, and the density of the ball.

A piece is said to be aimed point-blenk when the line of metal, which is the natural line of sight, is directed upon the object. This must be the ease when the olyect is at point-blank distance. When at a greater distance, the pendulum hausse, or the tangent scale, is raised upon the breech until the sight is at the height which the degree of elevation for the distance may require. An artificial line of
sight, and an artificial point-blank are thus obtained, and the piece is aimed as befure.

Pcudulum hrusse.-The instrument at present in most general use in pointing field guns at objects beyond the natural point-blank, is ealled a pendulum hausse, of which the eomponent parts are denominated the scale, the sliter, and the seut. The scrle is made of sheet brass; at the lower end is a brass bulb filled with lead. The slider is of thin brass, and is retained in any desirable position ou the seale by means of a brass set serew with a milled head. The scale is passed through a slit in a piece of steel, with whieh it is connected by a brass serew, forming a pivot on whieh the seale eau vibrate laterally; this slit is made long enough to allow the seale to take a rertieal position in any ordinary cases of inequality of the ground on which the wheels of the carriage may rest. The ends of this pieee of steel form two journals, by means of which the scale is supported on the seat attached to the piece. The seat is of iron, and is fastened to the base of the breech by three serews, in such manner that the centres of the two journal notehes shall be at a distance from the axis equal to the radius of the base ring.

A muzzle sight of irou is serewed into the swell of the muzzle of guas, or into the middle of the mazzle ring of howitzers. The beight of the sight is eqnal to the dispart of the piece, so that a line from the top of the muzzle sight to the pivot of the seale is parallel to the axis of the pieee. Consequently, the vertical plane of sight passing through the centre line of the scale and the top of the mozzle sight will be also parallel to the axis in any position of the piece; the scale will therefore always indieate the angle which the line of sight makes with the axis.

The hausse, when not in use, is carried by the gunner in a leather pouch, suspended by a shoulder strap.

## On puinting.

666. As it is impossible to point a pieec correctly without knowing the distance of the object, artillery men should be frequently practised in estimating distances by the eye alone, and rectifying the estimate afterward, either by pacing the distance, or by aetual measurement with a tape-line or chain, until they aequire the habit of estimating them correctly.

Shells are intended to burst in the object aimed at; spherical case shot are intended to burst from fifty to seventy-five yards short of it.

Shell or spherical case firing, for long ranges, is less aecurate than that of solid shot.

At high elevations, a solid shot will range farther than a shell or
spherical case shot, of the same diameter, fired with an equal charge. But at low elevations, the shell or spherical case will have a greater initial velocity, and a longer range. If, however, the charges are proportioned to the weights of the projectiles, the solid shot will, in all cases, have the longest range.

The velocity or range of a shot is not affected in any appreciable degree by checking the recoil of the carriage, by using a tight wad, or by different degrees of ramming.

The principal causes which disturb the true flight of the projectile are as follows:

1st. If the wheels of the carriage are not upon the same horizontal plane, the projectile will deviate toward the lowest side of the carriage.

2d. If the direction of the wind is across the line of fire, deviations in the flight of the projectile will be occasioned, and in proportion to the strength of the wind the angle its direction makes with the line of fire and the relocity of the projectile.

3d. If the centre of gravity of the projectile be not coincident with the centre of figure, the projectile will deviate toward the heaviest side, that is, in the same direction that the centre of gravity of the projectile, while resting in the piece, lics with regard to the centre of figure. Therefore, if a shot be placed in the picce so that its centre of gravity is to the right of the centre of the ball, the shot will deviate to the right; and cice versa. If the centre of gravity be above the centre of figure, range will be increased; if below, it will be diminished.

Solid shot should be used from 350 yards upward; the use of canister should begin at 350 yards, and the rapidity of the fire increases as the range diminishes. In emergencies, double charges of canister may be used at 150 or 160 yards, with a single cartridge.

Spherical case should not, as a general rule, be used for a less range than 500 yards; and neither spherical case nor shells should be fired at rapidly advancing bodics, as, for instance, cavalry charging.

The fire of spherical case and of shells on bodies of caralry in fine or column, and in position, is often very effective. To the destructive effects of the projectile are added the confusion and disorder oceasioned amongst the horses by the noise of their explosion; but neither shells no r spherical case should be fired so rapidly as solid shot.

In case of necessity, solid shot may be fired from howitzers.

## SCHOOLOF THE BATTERY.

Composition af the battery, and the officers and men necessary to man it.
667. The battery is composed of four. six or eight pieces; six pieces will be supposed. It is divided into three sections of two picees each, denominated the right, centre and left sections, according to their position in line. The battery is commanded by a captain : each seetion is commanded by a lieutenant, called the chief of bection, and an additional licutenant is necessary to command the line of caissons. Each piece is commanded by a sergeant, as chief of the piece, while the gunner aud chief of eaisson are corporals. The officers and men necessary to man the battery constitute a compony, which is divided into as many plutoms as there are pieces. Each platoon is composed of the drivers and cannoueers of a single piece, and is commanded by the chief of the picce; the cannoncers uf a piece, as already stated in the school of the piece, constitute the gun detaehment. When the drivers and canoneers form together. the drivers form on the left.
Two platoons constitate a section.
In addition to the platoons, there should be a first (or orderly) sergeant attached to the company; a quartermaster-seryeant; two buglers or trumpeters; one guidon; and as many artificers as may be uecessary to keep the guns, carriages, harness, cte., in order.
When the company is formed, the platoons form in line in the order of their pieces.

## Posts of the officers, non-commissioned officers, etc.

668. The captain commanding goes where his presence may be necessary, or his commands best heard. His position, in the order in line, is four yards in front of the centre of the company; in the order in colunn, or when the company is fitced by "thenk, four yards ontside the flauk in the first case, and from the company in the second, and opposite the centre.

The lieutenants commanding sections in line, or in columu of sections, are two yards in front of the centres of their respective sections; in columns of platoons or of detrchments, or when faced by a flanl, they are two yards outside the marching tlank, and opposite the centres of their respective sections: except that when faced by a, fant ,
the chief of the leading section takes his place at the side of the lead. ing file.
The chief of the line of caissons, is four yards in rear of the centre of the company when it is in line; when it is in column, or faced by a flank, he is four yards outside the pivot flank, and opposite the centre of the company.
The chicfs of picces, when the company is in line, in column of sections, or faved by a flank, are on the right of the gun detachments of their respective platoons, in the front rank. In column of plutoons, or of detachments, they are one yard in front of the centre of their platoons or of their gun detachments.

The gunners, when the company is in line, or in column of sections, are one yard behind the right files of their respective gun detachments. In column of plutoons, or detachments, they are on the right of the gun detachment. When faced by a flank, they face with the company, and retain their relative positions.

The chiefs of cannons are in their places in the ranks as No. 8 of the gun detachments, or as the front rank men on the left of their platoons.
The first sergeant, when the company is in line, is on the right of the front rank, and one yard from it ; when it is in column, he is on the marching flauk, one yard outside the section, platoon, or detachment nearest him when in line. When the company faces by $a f t a n k$, be faces with it.
The quartermaster-sergeant is on the left of the company, and occupies positions corresponding to those of the first sergeant on the right.
When the company is in line, the buglers are on the right of the first sergcants, in one rank, and two yards from line ; in column, they are six yards in front or rear of the subdivision next them in line, according as that subdivision forms the head or rear of the column. When the company is faced by a flank, they face also.
The artificers occupy positions on the left of the company, corresponding to those of the musicians on the right.

The guidon forms with the musicians, or takes such position as the captain prescribes.

## Manning the Battery.

699. The gun detachments and teams, having been probably tolled off, are marched to the battery or park, with the teams in front.
The chiefs of pieces and caissons, when mounted, march with the teams; when the toams reach the battery, they are hitched by the drivers.

In forming the detachments they are formed in line, touching each other, and in positions corresponding to the positions of their pieces in the battery. The chiefs of section, etc., are at their posts as directed for the company in line.

The detachments are marched to the battery, either in column or in line, as circumstances may require.

Each detachment is halted by its gummer when opposite its piece, and wheeled into line.

If approaching from the front or rear, the detachments are formed in line facing the battery, in the same order as their pieces, and the eaptain commands:

## Detachments, opposite your pieces.

At this command, each detachment is wheded or faced in the proper direction by its gunner, marehed opposite its piece, and formed in line.

The captain, after all the detachments have leen halted in front or rear of their pieces, commands:

## Cannoneers, to your posts.

At this command the gunners face their detachments, and all take their posts, as directed in No. 656.

The position of the detachment in horse artillery, is babitually two paces in rear of the muzzle of the piece, but its position may be changed by the means laid down in No. 655.

During the mancuvres of mounted artillery, the cannoneers are seated on the ammunition chests as follows: The gunner and Nos. 5 and 6 , on the limber ehest of the piece, the gunner on the right, and No. 5 on the left: Nos. 1, 2 and 7 , on the limber chest of the eaisson, No. 2 on the right, and No. 1 on the left; Nos. 8,4 and 8 on the middle chest of the eaisson, No. 4 on the right, and No. 3 on the left.

When circumstances require it, Nos. 6 and 7 may be directed to mount the rear chest of the eaisson. They sit with their backs to the front, No. 6 on the right.

## To mount and dismount the Cannoneers.

670. To mount.-The eaptain halts the battery, if not already at a halt, and commands:

## 1. Cannoneers, prepare to mount. 2. Mount.

At the first command, the cannoneers run to their respective places, and stand facing the chests which they are to mount. The gunner and No. 5 in rear of the gun limher; No. 6 on the right of the gunner; Nos. 1 and 2 in rear of the caisson limber; No. 7 on the left of No. 1; Nos. 3 and 4 in front of the middle chest of the caisson; No. 8 on the right of No. 3. The gunner and Nos. 2 and 3 seize the handles with the right hand, and step upon the stocks with the left foot, and Nos. 5, 1 and 4, seize the handles with the left hand, and step upon the stocks with the right foot.

At the command mount, the gunner and Nos. 1, 2, 3, 4 and 5, spring into their seats. The gunner and Nos. 5, 1 and 2, seat themselves in their places with their backs to the front, and immediately face about, by throwing their legs ontward over the handles.

No. 8 then springs into his seat in the same manner as No. 3; Nos. 6 and 7 step in rear of their chests, place their hands upon them, step upon the stocks with their nearest fect, spring up, step over the boxes and take their scats, placing their hands on the shoulders of the men already scated in order to steady themselves.

When the command cemonper., mount, is given by itself, the men run to their places and spring into their seats at once, No. 8 taking his seat before No. 3.
671. To dismonent-The captain halts the carriages as before, and commands:

## 1. Cannoneers, prepare to dismount. 2. Dismount.

At the first command, the cannoncers stand up in their places, except the gunner and No. 5, who face about. At the second command, the whole jump off and run to their posts.

When the command comoneers, dismount, is given by itself, the men jump from their chests in the same manner.

The cannonecrs always dismount at the eommand, uction front, right (or left). They also dismount at the command in battery, as soon as the carriage on which they are mounted balts.

In horse artillery, the gunner dismounts the cannoneers when the command aetion front, right or left, or in battery, is given, and all move to their posts in double quick time, and unlimber as rapidly as possible.

The object of mounting the cannonecrs on the ammunition chests, is generally to enable the battery to make quick movements.

## To unpark.

672. Everything being prepared for manouvring, if the captain wishes to unpark hy the right, he commands:

## 1. By piece-from the right-front into column. 2. March.

At the command march, the right piece, followed by its caisson, marches direct to the front, and the captain indicates the direction it should take. The other pieces and caissons follow the movement of the right picce, each so regulating its march by that which precedes it, as to march in the same dircetion, and two yards behind. Each chief of section directs the mareh of his carriages, which are so conducted by their chicfs as to enter the column by the most simple movement. The column of picces is thus formed with a distance of two yards between the carriages; and in horse artillery with the same distance between the carriages and detachments.

The captain goes wherever his duty may require, but generally remains on the left flank, opposite the centre of the column.

The chief of the leading section places himself near the chief of the leading piece, and on his left; the other chiefs of sections four yards from the left flank, abreast the centres of their respective sections.

The chief of the line of caissons is in rear of the chicf of the centre section.

Each chief of piece and caisson, when mounted, is near his leading driver, on the left.

The trumpeter is near the captain.
When the battery is parked with the caissons in front, the captain causes it to unpark by the right by the same commands; the movements being execated in the same manner.

The battery may be unparked by the left according to the same principles and by iuverse means.

The column of pieces is not to be consilered a column of mancurre. It will be changed into a column of sections as som as the nature of the ground will permit. But the exigencies of service sometimes require that formations into line and battery should be made directly from the column of pieces. In such cases, the principles and commands laid down for similar formations from the column of sections, will govern. In the formations to the right or left, the pieces must ciose up, and wheel successively when opposite their proper places.

## To halt.

To halt the battery, when marching in column of pieces, the captain commands :

## 1. Column. 2. Halt.

- At the second command, repeated by the chiefs of sections, all the carriages are immediately halted.


## Change of gait.

673. The changes of gait, in column of pieces, are cxecuted by the following commands from the captain:

To pass from the walk to a trot.

## 1. Trot. 2. MARCH.

To pass from a trot to a walk.

## 1. Walk. 2. March.

At the first command, repeated by the chiefs of sections, all the drivers and others on horseback prepare to change the gait; and at the second, repeated in like manner, they pass at once to the gait indicated by the first command.

## To form sections.

674. When the battery is marching at a walk in column of pieses, to form sections at the same gait by gaining ground to the left, the captain commands :

## 1. Form sections, left oblique. 2. March. 3. Guide right.

The chief of the leading section repeats the commands, Form section, left oblique, march; guide right, in succession after the captain. At the command march, the two first carriages, piece and caisson, continue to march, and halt when they have advanced five gards. The two following gain their interval of fourteen yards by obliquing to the left, and place themselves abreast and parallel with the other two.

The other sections continue to march in columin of pieces, and are formed successively by their chiefs; each commanding, form section, left oblique, in time to command march, when the leading carriage of his section has arrived within five yards of its distance. The chief of section then commands, guide right.

When the column of pieces is marching at a trot, the formation is executed according to the same principles and by the same commands. But the leading carriages, instead of advancing five yards and halting
as before, pass to a walk as soon as the command march is repeated by the chief of section. The other sections continue to march at a trot, and execute the movement at that gait; the two leading carriages of each section passing to a walk at the command march, which must be given when they have closed to their proper distance.

When the column of pieces is at a halt, the formation is executed as prescribed for the column at a walk. In this case the carriages all move at the command marrh, and the leading ones halt after advancing five yards.

When the column of pieces is marching at a walk, to form sections at a trot gaining ground to the left, the captain commands:

## 1. Form sections, left oblique, trot. 2. March. 3. Guide right.

The chief of the leading section repeats the commands, form section, left oblique, trot; march; yuide riyht, in succession, after the captain. At the command march, the two leading carriages continue to march in the original direction at a walk. The two following oblique to the left, gain their interval at a trot, and resume the walk when opposite the leading carriages.

At the first command, the chiefs of the other sections command trot; and at the second, which they repeat, their sections commence the trot.

The chiefs of the second and third sections command, form section, left obtique, in time to command march, when the leading carriage of each section has nearly gained its distance. The leading carriage then resumes the walk, and the chief of section commands, guide right.

The chiefs of sections superintend their carriages, and take the posts assigned them in the order in column as soon as their sections are formed.

Sections are formed by gaining ground to the right according to the same principles and by inverse means.

The battery being in column of pieces, to form the caissons on the flank.
675. When the battery is in column of pieces with the caissons in rear, to form the pieces and caissons into separate columns, as in the flank march of a battery in line, the captain commands:

1. Caissons left (or caissons left, trot). 2. March. 3. Guide
right.

These commands are repeated by the chiefs of sections, the caissons oblique at once to the left, gain the interval of fourteen yards, and

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place themselves opposite their pieces; the pieces closing upon each other at the same time to the usual distance. The gait is regulated as in the formation of sections: and when the movement is performed at a walk, the leading carriage halts after advancing its own length.

The chiefs of sections take their places as in column of sections.
The caissons are formed on the right according to the same principles and by inverse means.

When the pieces are in rear, they are formed on the right or left of their caissons in the same manner and by corresponding commands.

## To march in column.

676. The battery being in column at a halt, to adrance, the captain commands:
677. Column, forward. 2. March. 3. Guide left (or right).

The commands forward, mareh; guide left (or right), are repeated by the chiefs of sections. At the command march, all the carriages advance, the guide maintains the direction, and the carriages, as well as the detachments of horse cannoneers, preserve their intervals and distances.

## To march by a flank.

677. The battery hoing in column, in march or at a halt, to gain ground to the left, the captain commands:

## 1: Column, by the left fank. 2. March.

The sommands, by the left tronk, march, are repeated by the chiefs of sections. At the command march, each carriage whecls at once to the left.

When the wheel is nearly completed, the captain commands:

## 1. Forward. 2. Guide right.

These commands are repeated by the chicfs of sections. At the command forvord, all the carriages march dircet to the front.

The line is regularly established, and the carriages aligned in each rank, with their distances of two, and intervals of fourteen yards. The chiefs of sections take their places between the leading carriages as in line.
To cause the battery to resume its original direction, the captain commands :

1. Battery, by the right flank. 2. March. 3. Forward. 4. Guide left.

The commands, by the right thenk, march; forrard; guite left, are repeated and executed according to the principles before described.

After the flank mareh, to march the battery in a direction opposite to the original one, the captain commands:

## 1. Battery, by the left flank. 2. March. 3. Forward. 4. Guide right.

In horse artillery the flank march is executed according to the same principles and by the same commands. The line formed by the flauk movement is established, and the carriages aligned in each rank, with distances of five and intervals of fourteen or twenty-one yards, according to the relative position of the picces and caissons. The detachments wheel in the same direction as their pieces; and, after following them during a part of the movement, place themselves by their sides. two yards from the wheels, with the heads of their leading horses on a line with the axle-trees of the limbers. In marching by the left flank they are on the left of their pieces, and the reverse when marching by the right. When sufficient ground has been gained to the flank, and the battery resumes its formation in column by marching in the original direction, the detachments wheel in the same direction as their pieces and place themselres in their rear. But when the march in column is in the opposite direction, they resme their places by allowing their pieces to pass them and then falling in their rear.

The flank march, to gain ground to the right, is executed according to the same principles and by inverse means.

In each case the captain and the chief of the line of caissons change their direction to the left or right, and conform to the movements of the battery.

## Oblique march.

678. The battery being in column, in march or at a halt, to cause it to march obliquely to gain ground to the front and left, the captain commands:

## 1. Column, left oblique. 2. Marcir. 3. Guide right.

The chiefs of sections repeat the commands, left obliquc; march; yride right. At the command mareh, all the carriages oblique at
once to the left, and march direct to the front in the new dircetion; moving in parallel lines, dressing by the right, and preserving their intervals from that flank.

In obliquing, the heads of the horses in each rank are on a line parallel to the original front of the column. The interval between the carriages is fourteen yards, measured parallel to the front; and only ten if measured perpendicularly to the oblique direction. Each carriage of the right file marebes in the prolongation of the left carritge of the rank which precedes its own, and at a distance of nine yards.

The officers conform to the movement and preserve their relative positions.

To resume the original direction the captain commands:

## Forward.

This command is repeated by the chiefs of sections, and the carriages resume the original direction by obliquing to the right.

If the captain wishes to halt the column for the purpose of rectifying its alignments, intervals, or obliquity, he commands:

## 1. Column. 2. Halt.

And to resume the march in the oblique direction:

## 1. Column. 2. March. 3. Guide right.

The commands halt; murch; guide right, are repeated by the chiefs of sections.

The right oblique is exceuted according the same principles and ly inverse means.

## Passage of carriages in column.

679. When the battery is marching in column at a walk, to change the relative positions of the front and rear ranks, without altering the gait, the captain commands:
680. Pieces pass your caissons (or caissons pass your pieces).

## 2. March.

These commands are repeated by the chiefs of sections; and at the command march, the leading carriages of each section halt. Those of the rear rank execute the passage without changing the gait, and halt as soon as they have reached their positions in front.

To continue the march without halting the carriages of the rear
rank, the captain commands forward, when the passage is nearly completed and the command is repeated by the chiefs of sections.

When the column is marching at a trot, the passage is executed according to the same principles and by the same commands, except that the carriages of the front rank move at a walk instead of halting at the command march. The carriages of the rear rank execute the passage at a trot, and then change the gait to a walk.

When the column is at a halt, the passage is executed according to the same principles and by the same commands. If the captain wishes to put the column in march immediately after the movement, he commands forward, when the passage is about being completed, and then guide left (or right). These commands are repeated by the chiefs of sections.

When the column is marching at a walk, to execute the passage at a trot, the captain commands :

1. Pieces pass your caissons, trot (or caissons pass your pieces, trot). 2. March.

These commands are repeated by the chiefs of sections. At the command march, the carriages of the front rank in each section continue to march at a walk. Those of the rear rank execute the passage at a trot, and resume the walk as soon as the passage is completed.

## About in column.

680. The battery being in column, in march or at a halt, to face it to the rear, the captain commands:

## 1. Pieces and caissons, left about. 2. March.

These commands are repeated by the chiefs of sections; and at the second all the carriages execute the about. When the movement is about being completed the captain commands, columu, halt; or forward, guide right (or left); the commands, halt, or forward, guide right (or left), are repeated by the chiefs of sections.

## Countermarch in column.

681. The battery being in column, in march or at a halt, to execute the countermarch in each scetion, the captain commands :

## 1. Countermarch. 2. March.

These commands are repeated by the chiefs of sections, and at the
second, each piece and its caisson execute the countermarch. When the movemont is about being completed, the captain commands, colum", halt ; or forward ; guide right (or left).

These commands are repeated as in the preceding paragraph.

## To change direction in column.

682. The battery being in column, in march or at a halt, to cause it to chavge direction to the left, the captain commands :

## Head of column to the left.

The chief of the leading section commands, teft wheel-March; and afterward, forword. At the command march, the pivot carriage executes the wheel without changing the gait. The carriage on the wheeling flank wheels in such a manner as to conform to its movement: increasing the gait, and preserving the intervals. At the command forward, the pivot carriage moves direct to the front, and the other resumes its original gait after completing the wheel and arriving upon the same linc. The carriages of the rear rank preserve their distance and fullow those of the front rank.

Each of the other sections, on arriving at the point where the first whecled, exccutes the same movement, and by the same commands from its chief.

Each chicf of scction must give the command left wheel in time to command march, when the heads of his leaders are three yards from the wheeling point. And the command forward must be given as soon as the leading pivot carriage has entered the new direction.

The change of direction to the right is executed according to the same principles and by inverse means.

## To diminish the front of a column on the march.

683. The battery marching at a walk in column of sections, to form column of pieces from the right, at that gait, the captain commands:

## 1. By the right, break sections. 2. March.

The chief of the leading section commands, successively, after the captain, by the right, break section; march. "At the command march, the two right carriages of the leading section continue to march at a walk, and all the other carriages halt. The left carriages of the leading section remain balted, until the leaders of the leading carriage are passed by the wheel borses of the rear carriage on the right. They
then oblique to the right, take their places in column, and follow the two leading carriages. The other sections are broken in succession by the same commands from their chiefs; the command march being given when the wheel horses of the left carriages of the next preceding section enter the right oblique.

When the column is marching at a trot, the column of pieces is formed according to the same principles and hy the same commands. But in this case the carriages which halted before slacken the gait to a walk, and resnme the trot to oblique, and enter the column.

When the column is at a halt, the movement is executed as prescribed for a column marching at a walk; the two right carriages of the leading section moving forward at a walk at the command march.

The battery marching at a walk in column of sections, to form column of pieces from the right at a trot, the captain commands :

## 1. By the right, break sections, trot. 2. Marci.

The chief of the leading section commands successively, after the captain, by the right, break section, trot; mareh; and at the right carriages of the leading section move forward at a moderate trot. The left carriages of the same section commence the trot on obliquing to enter the column.

The other sections are broken successively by the same commands from their chiefs; and the carriages are regulated by each other, as in breaking sections at a walk.

This formation is executed from the left, according to the same principles and by inverse means.

In column with the caissons on the flank, to replace them in front or rear.
684. The battery being in colnmn with the caissons on the flank, to re-establish them in rear of their pieces, the captain commands:

## 1. Caissons, rear (or caissons, rear, trot). 2. March.

Each chief of section repeats the commands in time to command march, when the leading piece of his section is to commence the movement. The piece at the head of the column moves forward with the required gait, and its caisson places itself in rear by an oblique. The other pieces move forward in snceession, and are followed by their caissons in like manner.

All the carriages preserve the usual distance in column.

This movement is performed with the different gaits, and according to the principles prescrihed for breaking sections.

The formation for placing the caissons in front is executed by the commands, caissons, front (or caissons, front, trot); march, the caissons obliquing successively in front of their pieces.

To pass from the order in column to the order in line, and the reverse.

In all formations in line or column, the movements are the same whether the pieces or caissons lead.

## Forward into line.

685. The battery being in column at a halt, to form it into line on the head of the column, gaining ground to the left, the captain com-mands :

## 1. Forward into line, left oblique. 2. March. 3. Guide right.

 4. Front.At the first command, the chief of the leading section commands, section, forward, and those of the other sections, section, left oblique. At the command march, repeated by the chiefs of sections, the leading section moves to the front, and its chief repeats the command for the guide. After advancing eightecn yards, or for horse artillery twentytwo, he commands, section, halt; right, dress.

Each of the other chiefs of sections repeats the command for the guide, and conducts his section by a left oblique, until by the direct march it may gain its proper interval from the section immediately on its right. He then commands, forward, and when within four yards of the line, section, halt; right, dress.

When the battery is aligned, the captain commands front.
The movement is executed on the opposite flank, according to the same principles, and by inverse means.

In this case the commands are, forward into line, right oblique, march; guide left, front.

The formation forward into line by a right or left oblique, executed in a similar manuer when the column is in march. In this case the chief of the leading section gives no command except for the guide, until he has advanced the distance hefore prescribed. He then halts his section as before.

## To form line faced to the rear.

686. The battery being in column at a halt, to form it into line faced to the rear, on the head of the column gaining ground to the left, the eaptain commands :
687. Into line, faced to the rear, left oblique. 2. March.

## 3. Guide righl. 4. Front.

At the first command, the chief of the lading section commands, section, forward; and those of the other sections, section, left oblique, At the command march, repeated by the chiefs of sections, the movement is executed as in No. 685, with the exception of the alignment, When the leading section has advanced eighteen yards, or for horse artillery twenty-two, it is halted by its chief until the centre section arrives upon the same line. He then commands, countermarch-march; and when the countermarch is ncarly completed, section, halt; left dress.

The centre section is balted upon the line, in like manner, until the left section comes up, and is then countermarched and aligned by the same commands.

When the left section arrives upon the line, it is countermarched before halting, and then aligned like the rest.

When the centre and left sections are countermarched, the commands, halt; left dress, should be given, if possible, when they are four yards in rear of the line on which the leading section is established.

When the battery is aligned, the captain commands front.
The movement is executed on the opposite flank, according to the same principles and by inverse means.

The formation into line, faced to the rear, by a right or left oblique, is executed in a similar manner when the column is in march. In this casc, as the leading section is already in motion, its chief only repeats the command for the guide as in N 0.685.

## To form line to the right or left.

687. The battery being in column, in march or at a halt, to form it into line to the left, the captain commands :
688. Left into line, wheel. 2. March. 3. Batlery-Halt. 4. Left -Dress. 5. Front.

At the first command the chiefs of sections command, section, left wheel; and at the second, which they repeat, all the sections wheel to
the left. Each chief of section commands, forward, guide left, as soon as his leading pirot carriage has taken the new direction.

When the rear carriages have completed the wheel, and the sections are in line, the captain commands, battery, hult; left dress.

The commands, halt, left dress, are repeated by the chiefs of sections, and when the alignment is completed the captain commands frout.

The battery is formed into line to the right according to the same principles and by inverse means.

## To form line on the right or left.

688. The battery marching in column, to form it into line on the right, the captain commands :
689. On the right into line. 2. March. 3. Guide right. 4. Front.

At the first command, the chief of the leading section commands, section, right wheel; and at the sccond, which he repeats, the section wheels to the right. As soon as the leading pirot carriage enters the new direction he commands, formard, guide right; and as the section completes the wheel and unmasks the column, he commands, section, halt; right dress.

The chiefs of the other sections repeat the command for the guide, and their section continnes to move forward. As each section passes the one preceding it in the formation, its chief establishes it on the line, with the proper interval, by the same commands. The commands, section, halt; right dress, are given when the section is four yards in rear of the line.

When the battery is aligncd, the captain commands front.
The line is formed on the left according to the same principles and by inverse means. The commands are, on the left into line, march; guide left; front.

When the column is at a halt, the line is formed on the right or left in the same manner. In this case, the chiefs of the two rear sections command, section, forward, and afterward repeat the commands, mareh; guide right (or left).

To break into column to the front.
689. The battery being in line at a halt, to break into column to the front from the right, the captain commands:

## 1. By section from the righl, front into column. <br> 2. March.

## 3. Guide left.

At the first command, the chief of the right section commands, section, forward; and those of the other sections, section, right oblique. At the command march, repeated by the chief of the right scction, that section moves forward, and its chief repeats the command for the suide.

Each of the other chiefs of sections repeats the commands, march, guide left, after the section on his right has commenced the movement, and when the leaders of its rear carriages are in line with bim. After obliquing sufficiently to gain the rear of the preceding sections, he commands fortcard.

- The movement is executed from the left according to the same principles and by inverse means.


## To break into column to the rear.

The battery being in line, in march or at a halt, to break into column to the rear from one of the flanks, the captain executes an about or a countermarch, according to the kind of carriage be may wish in front, then halts the battery, and breaks it into column to the front by the preceding manœuvre.

## To break into column lo lhe righl or left.

690. The battery being in line, in march or at a halt, to break it into columns to the left, the captain commands:

## 1. By section, lefl wheel. 2. Marcir. 3. Formard. 4. Guide left.

At the first command, the chiefs of sections command, section, left wheel; and at the sccond, repeated by those chiefs, all the sections wheel to the left. When the wheels are nearly completed the captain commands, forword, yuide left, and the chiefs of sections repeat the commands.

When the culnms is not to advance, the command, column, halt, is substituted for fortard, guide left.

The battery is broken into columu to the right according to the same principles and by inverse means.

## To break into columns to the front from one fank, to march toward the other.

691. The battery being in line at a halt, to break from the right to march to the left, the captain commands:
692. By section, break from the right, to march to the left. 2. March. 3. Guide left.

At the first command, the chief of the right section commands, section, forward; and at the second, which he repeats, the section moves forward, and he commands, guide left. After adrancing eleven yards be changes the direction to the left by the commands, section, left wheel; march; forward.

Each of the other chiefs of sections command, section, forward, in time to command march, when the limber wheels of the rear carriages in the scction precoding his own arrive in front of him. He then conducts the section to the front, changes its direction to the left, and places it in rear of the preceding section by the commands already prescribed for the section on the right.

The battery is broken from the left to march to the right, according to the same principles and by inverse means.

T'o break into column to the rear from one flank, to march toward the other.
692. The battery being in line at a balt, to break to the rear from one flank to march toward the other, the captain first exccutes an about or countermarch, according to the kind of carriage be may wish in front. He theu halts the battery and executcs the preceding manœeuvre.

To break into column to the front when the battery is marching in line.
693. The battery marching in line at a walk, to break into column to the front from the right, and at the same gait, the captain commands :

1. By the right, break into sections. 2. March. 3. Guide left.

The chief of the right section repeats the command for the guide, and his section continues to move at the same gait. At the command
march, the other sections are halted by the command, section, halt, from their chiefs.

The halted sections are put in motion successively by their chiefs; each commanding, section, right oblique, in time to command march. when the leaders of the rear carriages in the section on his right arrive opposite to him. The sections oblique and enter the column as described in No. 689.

When the battery is marching at a trot, the movement is executed according to the same principles. But the sections which halted in the proceding case slacken the gait to a walk at the commands, wath, march, from their chiefs. They again trot and enter the column by the commands: section, right oblique, trot; march; foruard.

When the battery is marching in line at a walk, to break into column from the right at a trot, the captain commands:

## 1. By the right, break into sections, trot. 2. March. 3. Guide left.

At the first command, the chief of the right section commands trot; and at the second, which be repeats, the section changes its gait to a trot. He afterward repeats the command guide left.

Each of the other sections continues to march at a walk until required to enter the column, when its chief conducts it, as already described, by the commands, section, right oblique, trot; march; jorward.

The battery is broken into column from the left, according to the same principles and by inverse means.

## To form line advancing.

694. When the battery is marching in column at a walk, to form it into line at a trot, gaining ground to the left, and continue the march, the captain commands:
695. Form line advancing, left oblique, trot. 2. March. 3. Guide right.

The chief of the leading section repeats the command for the guide, and his section continues to move at a walk.

At the first command the chicfs of the other sections command, section, teft obtique, trot. The command muich is repeated by the same chiefs; and when the oblique movement is commenced, they repeat the command, guide right. Each chief commands fortarel, as soon as his section has obliqued sufficiently to the left, and walk, in time to command morch, as it arrives on the line.

When the battery is marching in column at a trot, the movement is executed according to the same principles. In this case the captain does not command trot; and the chief of the leading section commands walk, march, successively, after the first and second commands of the captain. The chiefs of the other sections give the same commands as their sections arrive on the line.

The movement is executed so as to gain ground to the right, according to the same principles and by inverse means.

## To form double column on the centre section.

695. The battery being in line at a balt, to form double column on the centre section, the captain commands:

## 1. Double column on the centre. 2. March. 3. Guide right (or left).

At the first command, the chief of the centre section commands, section, forward; the chief of the right section, section, left oblique; and the chief of the left section, section, right oblique. At the command march, repeated by the chief of the centre section; that section marches to the front, and its chief repeats the command for the gaide.

When the wheel horses in the rear rank of the centre section have passed the leaders in the front rank of the other sections, the chiefs of those scctions repeat the command march, and the sections commence the oblique.

When the picce nearest the column is about entering it, in each of these sections, the chief of the right section commands, by the left, break section, march; and the chief of the left, by the right, break section, march. The right and left sections, without change of gait, then form into columns of pieces in rear of the right and left carriages of the centre section.

The chiefs of the flank sections are careful to make their picces enter the column at the proper time. And when the colnmn is formed they place themselves outside of it, four yards from the centres of their respective sections.

The chief of the line of caissons follows the movement, sees that his carriages do not enter the column too soon, and, when the column is formed, places himself four yards in rear of the centre.

When the battery is marching at a walk, to form the double column at the same gait, the captain commands:

## 1. Double column on the centre. 2. Marcir. 3. Guide right (or left).

The chief of the centre section repeats the command for the guide, and the section continucs to advance.

At the command march, the other sections are halted by the command, section, halt, from their chiefs. They are afterward formed into column by the commands and means prescribed for forming double column from a halt.

When the battery is marching at a trot, the double column is formed according to the same principles. In this case the flank sections pass to a walk, instead of halting as before, and resume the trot to oblique, and enter the column. The commands from their chiefs are, walk; march; section, left (or right) oblique, trot; march, and, by the left (or right), break section; march.

When the battery is marching at a walk, to form the double column at a trot, the captain commands:

## 1. Double column on the centre, trot. 2. March. 3. Guide right (or left).

At the first command, the chief of the centre section commands trot. At the second, which be repeats, the section moves forward at a moderate trot, and be repeats the command for the guide.

The flank sections continue to walk mutil the centre has advanced sufficiently to allow them to oblique, and are then formed into column as already prescribed; their chiefs commanding, scetion. left (or right) oblique, trot; march, and, by the left (or right), break section; march.

To form the double column with a battery of four pieces, the captain gives the same commands as with a battery of six. The right section is broken into column of pieces by the left, and the left section by the right. The chiefs of sections place themselves on the outer flanks of the column, abreast the leading drivers of the leading carriages. The senior chief repeats the command for the guide, and gives such other commands as are required for the head of the column; the leading carriages moving as a section for the time being.

## To deploy the double column into line to the front.

The battery being in double column at a halt, to form it into line to the frout, the captain commands:

## 1. Forward, into line. 2. March. 3. Front.

At the first command, the chief of the centre section commands, section, forioard; the chicf of the right section, section, iato line, right oblique; and the chief of the left section, section, into line, left oblique. At the command march, repeated by these chiefs, the centre section advances five yards, and its chief commands, section, halt; right (or left)-dress.

The flank sections oblique to the right and left; and as their pieces arrive in rear of their proper places on the line, they move forward, halt, and dress toward the centre without command.
As soon as the battery is aligned, the captain commands front.
When the column is marching, the mevement is executed in the same manner. In this case the chief of the centre section does not command, section, forvard; march; but halts and aligns his section after advancing five yards.
When the column is marching at a trot, to deploy it into line to the front at the same gait, without discontinuing the march, the captain commands:

## 1. Form line advancing. 2. March. 3. Guide right (or left).

At the first command, the chief of the centre section commands. walk: ; the chief of the right section, section, into line, right oblique: and the chief of the left section, section, into line, left oblique. At the command march, repeated by these chiefs, the centre section slackens its gait to a walk, and the flank sections deploy. As each piece arrives upon the line, its gait is changed to a walk without command. The movement is executed as in the preceding cases; but when the line is formed it continucs to advance; the captain commanding guide right (or left), which command is repeated by the chiefs of sections.

When the column is marching at a walk, to deploy it into line to the front at a trot, without discontinuing the mareh, the captain commands:

## 1. Form line advancing, trot. 2. March. 3. Guide right (or left).

At the first command the chief of the right section commands, section, into line, right oblique, trot; and the chief of the left section, section into line, left oblique, trot. At the command march, repeated by these chicfs, the Hank sectiens deploy at a trot; the centre section continues to march at a walk; and, the line haviug been formed as in the preceding case, the captain gives the command for the guide.

When the battery consists of four pieces, the double column is de-
ployed into line to the front by the same commands from the captain as when it consists of six. The chiefs of seetions give the same commands as in the other case, and then their sections are formed as in No. 674. When the line is to be halted, as in forming formurd into line, the senior chief commands, halt: right (or left) dress, as soon as the leading carriages have advanced tive yavis; and the alignment is made upon the central carriages.

To form the double column into line to the right or left.
697. The battery being in double column at a halt, to form it into line on the right, the captain commands :

## 1. To and on the right into line. 2. March. 3. Front.

At the first command, the chicf of the leading section commands, section, right wheel: and the other chiefs of sections, formard. At the second, repeated by those chiefs, the leading section wheels to the right and is established on the line as in No. 687. The other pieces advance under the direction of their eliefs and of the chiefs of seetions, wheel to the right in suecession as they arrive opposite their places, establish themselves on the line, and dress upon the pieces already aligned. When the alignment is completed, the eaptain commands front.

When the column is marching, the line is formed to the right in the same manner, except that the chiefs of the flank sections omit the commands, formard, mareh. The line is formed to the left according to the same prineiples and by inverse means.

When the battery consists of four pieces, the double column is deployed into line to the right or left by the same commands from the captain, as when it consists of six. In this ease the leading pieces are wheeled to the right or left, as a seetion, and established on the line. For this purpose the senior chief of section commands, right (or left) wheel; march; forward; guide right (or left); halt; right (or left) dress. The other picces move forward, wheel in succession as they arrive opposite their places, and form on the line as already deseribed.

## To advance in line.

69s. The battery being in line at a halt, to cause it to advance, the captain indicates to the guide the points on which he is to mareh, and commands:

1. Battery, forward. 2. MaRCH. 3. Guide right (or lefl). 35

The commands, forward; march; guide right (or left), are repeated by the chiefs of sections. At the command march, all the carriages move forward at a walk, and the chiefs of sections preserve the alignment toward that chief of carriage who serves as guide of the line. The guide marches steadily in the given direction, and the chiefs of carriages regulate their intervals and alignment by him.

The carriages of the rear rank follow those in front at their appropriate distance of two yards. The chief of the line of caissons superintends the march of the rear rank of carriages, and moves wherever his presence may be necessary for that purposc.

In horsc artiltery the detachments preserve their alignments, and follow their pieces at the proper distance.

## To halt the battery and align it.

699. When the battery is marching in line, to halt and align it, the eaptain commands:
700. Battery-Halt. 2. Right (or lefl)—Dress. 3. Front.

The commands, halt; right (or left) - dress, are repeated by the chiefs of sections. At the first command, the carriages and detachments halt, and at the second align themselves by the right (or left) in their respective ranks; the carriages dressing by the drivers of their wheel borses. The carriages are placed as squarely on the line as possible without opening or closing the intervals. The captain superintends the alignment of the front rank of carriages, and the chief of the line of caissons that of the rear; each placing himself for that purpose on the flank of the guide. When the battery is aligned, the captain commands front.

When the battery is halted, if it cannot be aligned by slight movements, the captain causes one or two carriages from one of the flanks or centre to advance four yards, or to a greater distance if necessary, and then causes the alignment to be made by the right, left, or centre, by the command, right, left, or, on the centre, drces. At this command, the carriages and detachments move forward and align themselves according to the principles just explained; the drivers balting a little in rear of the line, and dressing forward so as to place the carriage as squarely upon it as possible.

## To change direction in line.

700. The battery being in line at a balt, to wheel it to the right, the oaptain commands:

## 1. Battery, right wheel. 2. March. 3. Forward. 4. Bat-tery-Halt. 5. Right-Dress. 6. Front.

The commands, right wheel; murch; formard; hatt; right-dress, are repeated by the chiefs of sections.

At the cormmand march, the pirot carriage moves at a walk, and describes a quadrant (twenty-two yards) of a circle, whose radius is fourteen yards. The other carriages move at a trot and prescre their intervals from the pirot. They regulate their gaits according to their distances from the pivot, so as to remain as short a time as possible in rear of the line, without urging their horses injuriously, and so as to arrive upon it in succession. The carriages of the rear rank follow at the proper distance in the tracks of those in front.

At the command forword, which is given when the leading pirot carriage has described its are of twenty-two yards, that carriage moves direct to the front: and when the rear pivot carriage is in the new direction, the captain commands, battery; halt; right dress. The commands forward; hatt; right dress, are repeated by the chief of the right section immediately after the captain: and by the other chiefs in time to be applicable to their sections; the pirot carriages halting at the command halt, and the others halting and dressing toward the pivot as they arrive in succession on the line.

When the battery is aligued, the captain commands front.
The battery is wheeled to the left according to the same principles and by inverse means.

When the battery is at a halt or marching in line, to wheel it to the right and continue the march, the captain commands:

## 1. Battery, right wheel. 2. March. 3. Forward.

The movement is execnted as already described, except that the pivot carriage, after wheeling, continues to march in the new direction, and the others conform to its gait and direction as they arrive on the line.

The direction is changed to the left according to the same principles and by inverse means.

> FORMATIONS IN BATTERY.

In line with pieces in front to form in battery to the front.
701. When the battery is in line at a halt, with the pieces in front, to form in battery to the front, the captain commands:

## 1. In batteri. 2. Guide left. 3. March.

These commands are repeated by the chiefs of sections. At the command in battery, the eaissons stand fast, and the pieces advance. The intervals and alignment are preserved, and the ebiefs of pieces and sections march at their places in line. At the command mareh, which is given as soon as they have adranced seventeen yarls, the chiefs of pieees and sections halt, and the pieces execute an about. As soon as the about is completed, the pieces are balted, unlimbered, and prepared for firing; the limbers being taken to their piaces in battery by an about.

When the cannoneers are marching by the sides of their pieccs, they halt at the command march, allow their pieces to pass them, change sides, and more forward to the posts they are to occupy, when their pieces have completed the about. They are not required to observe any particular order during this movement.

When the cannoneers are mounted on the ammunition chest, those on the caissons dismount and run to their posts at the command in battery. Those on the pieces dismount after the about.

The ehiefs of pieces and seetions take their posts in battery as soon as the formation is completed.

In horse artillery, the movement is executed in the same manner, and by the same commands. But the pieces advance only ten yards before executing the about. The horses of the detachments do not advance. But at the command in battery, the cannoneers dismonnt and run to their posts.

After the formation, the captain rectifies the alignment, if necessary.
When the battery is marching in line with the pieces in front, it is formed in battery to the front, according to the same principles, and by the commands, in battery, morch. The caissons halt at the command in buttery; and in horse artillcry the detachments do the same; the cannoneers dismounting and running to their posts.

To form in battery to the front by throwing the caissons to the rear.
702. When the battery is in line at a balt, with the pieces in front, to form in battery to the front by throwing the caissons to the rear, the eaptain commands:

## Action front.

At this command, repeated by the chiefs of sections, the pieces are
unlimbered and wheeled about by hand; the limbers reversing to the left at the same time, and taking their places in battery, as deseribed in the school of the piece, No. 653. The caissons reverse to the left, move to the rear, reverse again to the left, and take their places in battery.

When the eannoneers are mounted on the ammnnition chests, they dismonnt and run to their posts, at the command action front.

In horse artiltery, when this mode of coming into action is resorted to, the detaebments move to the posts belonging to their horses in battery, before dismounting, except when the number of horses is so small, that they may be led to the rear by the horse holders. In this ease the captain commands dismont: immediately after, action front. When the detachments conduet their horses to the rear, they dismount without commaud from the captain.

The battery is generally in line at a halt, when this mode of coming into action is resorted to. It may also be used in suceessive formations by giving the command action fromt, when a part of the battery has been halted on the line. But with bad ground or heavy pieces this mode of coming into action should not be used.

## In line with caissons in front, to form in battery to the front.

703. When the battery is in line at a halt, with the caissons in front, to form in battery to the front, the captain commands :
704. Pieces, pass your caissons. 2. March. 3. In battery. 4. Guide left. 5. March.

These commands are repeated by the chiefs of sections: the pieces pass their caissons, and at the command in battery, given as soon as the pieces have passed their caissons, the formation is executed as prescribed in No. 702.

In horse artitlery, the command in battery is given when the detachments have passed the caissons.

When the battery is marching in line, with the caissons in front, it is formed in battery to the front according to the same principles, and by the commands, picces. pass your coissons (or pieces, pass your caissons, trot): maich: in beitery ; guide lift, mareh.

In line with pieces in front, to form in battery to the rear.
70t. When the battery is in line at a halt, with the pieces in front, to form in battery to the rear, the captain commands:

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1. Fire to the rear. 2. Caissons, pass your pieces, trot. 3. March. 4. In battery.

The three last commands are repeated by the chiefs of sections. At the third, the caissons pass their pieces at a brisk trot. And, at the fourth, which is given as soon as the caissons have passed, the cannoneers unlimber and prepare for firing.

The caissons advance seventeen yards beyond their pieces, execute an about together, and take their places in battery.

When the cannoneers are mounted on the ammunition chests, the caissons adrance serenteen yards beyond their pieces, and then halt to allow the cannoneers to dismonnt before executing the about. As soon as the caissons halt, the cannoneers dismount and run to their posts. When the battery is at a halt, as in the present case, it is considered better to dismount the cannoneers before commencing the movement. The chief of the line of caissons precedes the morement of his carriages, and places himself on the line to be occupied by their leaders, when the about is commenced. He takes his place in battery as soon as the about is completed and the carriages are on the line.

The chiefs of pieces and sections take their places in battery as soon as the formation is completed.

In horse artillery, at the command in battery, the detachments incline to the right, pass their pieces at a brisk trot, and take their places in battery by a left ahout. The cannoneers then dismount, run to their posts, nulimber, and prepare for firing.

When the battery is marching in line, with the pieces in front, the formation in battery to the rear is executed according to the same principles and by the same commands. At the command in battery, which is given as soon as the caissons have passed their pieces, the latter halt, the detachments in horse artillery pass them, and the movement is completed as already described.

## In line with caissons in front, to form in battery to the rear.

705. When the battery is in line at a halt, with the caissons in front, to form in battery to the rear, the captain commands:

## 1. Fire to the rear. 2. In battery.

At the command in battery, which is repeated by the chiefs of sections, the cannoneers unlimber and prepare for firing.

The chiefs of pieces and sections take their places in battery.

The caissons move at a brisk trot and take their places in battery, ander the superintendence of their cbief.

In horse artillery, at the command in battery, the detachments pass their pieces at a trot, move to their places in battery, dismount, and run to their posts.

When the battery is marching in line, with the caissons in front, the formation in battery to the rar is executed according to the same principles and by the same commands.

## In baltery, to form in line to the fromt.

706. Being in battery, to form in line to the front with the caissons in rear, the captain commands:

## Limber to the front.

This command is repeated by the chiefs of seetions, and the pieces are limbered as described in No. 648 ; the caissons closing at the same time to the proper distance without further command.

When the captain wishes to place the caissons in front, he commands, limber to the front; and while the pieces are limberiag, caissons, pass your pieces, trot; merch. The caissuns pass and halt in front of their pieces; or, if the captain wisbes the battery to advance, be commands, fortrard: guide right (or left), as the caissons are completing the passage, and the batiery moves forward at a walk.

In horse artillery, when the pieces are limbered to the front, the horse holders adrance within two yards of their picces: and there the cannoneers mount.

The captain rectifies the alignment, if necessary, and commands front.

When the battery is to adrance immediately, the captain commands, forward; guide right (or left), instead of buttery, halt: and the caisson, close on the maret.

When the captain wishes to place the caissons in front, he may canse the pieees to be limbered to the rear, and command:

1. Caissons pass your pieces, trot, pieces left about. 2. March.
2. Battery-Halt, or Forward-Guide right (or left).

These commands are repeated and executed as already preseribed; the pieces executing the about as soon as the ground has been unmasked by the caissons, and the battery halting or advancing as soon as the passinge is completed.

In horse artillery, when the pieces are limbered to the rear, the cannoneers run to their horses, monnt, and rejoin their pieces.

## In battery, to form in line to the rear.

707. When in battery, to form in line to the rear, the captain causes the pieces to be limbered to the rear; and then, if be wishes to place the caissons in front, eummands:

## 1. Caissons, left about; pieces, forward. 2. March. 3. Bat-tery-Halt, or Forward-Guide right (or lefi).

The tro first commands are repeated by the ehjefs of sections; the eaissons execute the abont ; and the pieces elose to their proper distanee. The third command, which is given at the moment the abont is finished, is repeated and executed as prescribed.

The eaptain reetifies the alignment if necessary, and commands front.

In horse artillery, the detachments oblique to the left to facilitate the movement of the eaissons. And then if the battery halts, they place themselves at once in rear of their pieces; or if it advances, they wait and do the same by wheeling to the right as they pass.

If the formation in line to the rear is to be executed by placing the pieces in front, the captain, after causing the pieces to be limbered to the rear, commands:

1. Pieces, pass your caissons; caissons, left about. 2. March.
2. Battery-Halt, or Forward-Guide right (or lefi).

The first two commands are repeated by the ehiefs of sections; the pieees pass their eaissons; and the eaissons exeente the about as soon as the ground is unmasked. The third eommand is repeated and exeented aceording to the principles preseribed in No. 698.

The eaptain rectifies the alignment if neeessary, and commands front.

In horse artillery, the detaehments plaee themselves behind their pieces as soon as they are passed by them.

In forming line to the rear, either with pieces or eaissons in front, the caissons may be placed at onee in front of their pieces for greater eonvenience in monnting the cannoneers. For this purpose, as soon as the captain has commanded, limber to the recer, he commands:

1. Caissons, in front of your piec:es (or caissons, in front of your pieces, (rot). 2. March.

These eommands are repeated by the chiefs of sections; and while the pieees are limbering, the caissons oblique to the right, move forward
near the middle of the interval between the leaders of the pieces, place themselves in front of them by two successive wheels to the left, and halt.

In horse artillery, when the caissons are ordered to the front of their pieces, the horse holders oblique to the left at the command march, and balt between the leading drivers of the pieces. As soon as the cannoneers are mounted, the detachments take their posts in rear of their pieces.

In column with pieces in front, to form in battery to the front.
708. When the battery is in column at a halt, with the pieces in front, to form in battery to the front by gaining ground to the left, the captain commands:

1. Forward, into battery, left oblique. 2. Marci. 3. Guide
right.

At the first command, the chicf of the leading section commands, section, forward; and those of the other sections, section, left oblique. The chief of the line of caissons moves quickly to the right of the leading section, to cause the caissons to halt at the proper time and to superintend their alignment. At the cominand march, repeated by the chiefs of sections, the movement is executed as prescribed in No. 685, for forming line to the front. But as each section arrives on the line, instead of balting, its chief forms it in battery to the front by the commands, in battery; march, which are executed as prescribed in No. 701.

The formation in battery to the front, by gaining gronnd to the right, is executed according to the same principles and by inverse means.

When the battery is marching in column, it is formed in battery to the front by applying the principles of No. 701.

In column, with caissons in front, to form in battery to the front.
709. When the battery is in column at a halt, with the caissons in front, to form in battery to the front by gaining ground to the left, the captain commands:

1. Forward, into battery, left oblique. 2. March. 3. Guide
right.

At the first command, the chief of the leading section commands,
section, forward; and those of the other sections, scction, left oblique. The chief of the line of caissons mores quickly to the right of the leading section, to halt the caissons at the proper time and to superintend their aligument. At the command march, repeated by the chiefs of sections, the movement is executed as prescribed in No. 701, for forming line to the front. But as each section arrives on the line, instead of halting, its chief forms it in battery to the front by the commands, pieces, pass your caissons; march; in. battery; march, which will be execnted as prescribed in No. 703.

The formation in battery to the front, by gaining gronnd to the right, is executed according to the same principles and by inverse means.

When the battery is marching in column, it is formed in battery to the front by applying the principles laid down in the latter part of No. 703.

In column, with pieces in front, to form in battery to the rear.
710. When the battery is in column at a balt, with the pieces in front, to form in battery to the rear by gaining ground to the left, the captain commands :

1. Into battery, faced to the rear, left oblique. 2. Мавсн. 3. Guide right.

At the first command, the chief of the leading section commands, section, formarl; and those of the other sections, section, ieft oblique. The chief of the line of caissons goes to the right of the leading section, to direct the about of the caissons, and to superintend their alignment. At the command march, repeated by the chiefs of sections, the movement is executed as prescribed in No. 685, for furming live to the front. But as each section arrives on the line, instead of balting, its chief forms it in battery to the rear by the commands, caissons, pass your pieces, trot; march; in buttery, which are executed as prescribed in No. 704.

The formation in battery to the rear, by gaining ground to the right, is executed according to the same principles and by inverse means.

When the battery is marching in column, it is formed into battery to the rear by applying the principles preseribed in the latter part of Nos. 685 and 704.

In column, with caissons in front, to form in battery to the rear.
711. The battery being in column at a halt, with the caissons in front, to form in battery to the rear by gaining ground to the left, the captain commands:

1. Into battery, fuced to the rear, left oblique. 2. March. 3. Guide right.

At the first command, the chief of the leading section commands, section, forward; and those of the other sections, section, teft obligue. The chief of the line of caissons goes to the right of the leading section, to direct the about of the eaissons, and to superintend their aligument. At the command march, repcated by the chicfs of scetions, the movement is executed as prescribed in No. 685 for forming line to the front. But as each section arrives on the line, instead of balting, its chief forms it into battery to the rear by the command in buttery, which is executed as prescribed in No. 704.

The formation in battery to the rear, by gaining ground to the right, is executed according to the same principles and by inverse means.

Wheu the battery is marching in column, it is formed into battery to the rear by applying the principles of Nos. 685 and 704.

In column, with pieces in front, to form in battery to the right or left.
712. When the battery is in column, in mareh, or at a halt, with the pieces in front, if the captain wishes to form it in battery to the left, by gaining ground to the right, he commands :

1. Fire to the left, by section, right wheel. 2. March. 3. Caissons, pass your pieces, trot. 4. March. 5. In battery.

At the first command, the chicfs of sections command, section, right wheel; and at the second, which they repeat, all the sections wheel to the right. The caissons follow their pieces at the proper distance.

At the commands, cuissons, pess, your pieces, trot; mareh, which are given before the completion of the wheel, and repeated by the chiefs of sections, all the caissons pass their pieces at a trot.

At the command in buttery, which is given and repeated in like manner as soon as the caissons have passed, and the pieces are square on the new line, all the sections form at once into battery to the rear, as preseribed in No. $70 \%$.

When the captain wishes to form in battery to the left, by gaining ground to the left, he commands:

## 1. Fire to the left, by section, left wheel. 2. March. 3. In battery. 4. March.

At the first command, the chiefs of sections command, section, left wheet; and at the second, which they repeat, all the sections wheel at once to the left.

At the command in battery, which is given and repeated as soon as the caissons have completed the whecl, all the sections form at once into battery to the front, as prescribed in No. 703.

The two formations in battery to the right, by gaining ground to the left or right, are exccuted according to the same principles and by inverse means.

In column, with caissons in front, to form in battery to the right or left.
713. When the battery is in colnmn, in march or at a balt, with the caissons in front, to form it in battery to the left, by gaining gronnd to the right, the captain commands :

1. Fire to the left, by section, right wheel. 2. March. 3. In BATTERY.

At the first commanil, the chiefs of sections command, section, right wheel; and at the sccond, which they repeat, the sections wheel at once to the right, and move to the front at the eommands, forword, guide rifht, from their chiefs.

At the command in battery, which is given and repeated as soon as the pieces are square on the new line, all the sections form at once into battery to the rear, as preseribed in No. 704.

To form in battery to the left, by gaining ground to the left, the eaptain commands:

1. Fire to the left, by section, left wheel. 2. March. 3. Pieces, pass your caissons. 4. Marcii. 5. In battery. 6. March.

At the first command, the chiefs of sections command, seetion, left wheel; and at the sccond, which they repeat, the sectious wheel at once to the left. The third and fourth commands are giren and repeated just before the completion of the wheel; and the fifth is given when the pieces have passed their caissons, and the latter are square upon
the new line. The sections are then formed in battery to the front as prescribed in No. 703.

The formations in battery to the right, by gaining ground to the right or left, are executed according to the same principles and by inverse means.

In column, with pieces in front, to form in battery on the right or left.
714. When the battery is marching in column, with the picces in frout, to form in battery on the right, the captain commands:

## 1. On the right, into battery. 2. March. 3. Guide right.

At the first command, the chief of the leading section commands, scetion, right wheel; and the chief of the line of caissons goes to that section. At the command march, repeated by the chief of the leading section, that section wheels to the right, and its chief conducts it to the line by the commands, formard, guide right. And then, without halting, it is formed into battery to the front, as preseribed in No. 703, by the commands, in battery, march, from its chief.

The other sections continue to adrance: and as each arrives opposite its place in battery, after passing the one preceding it in the formation, it is formed into battery by its chief, by the commands, section, right wheel; march; forvard; guide right; in battery; march; the command in battery being given as the caissons arrive in line with those already established.

The formation in battery on the left is excented according to the same principles and by inverse means.

When the battery is in column at a halt, it is formed in battery on the right or left according to the same principles. In this case, the chiefs of the two rear sections command, section, foruard, immediately after the first command of the captain, and then repeat the commands, march; guide right (or left).

In column, with caissons in front, to form in battery on the right or left.
715. When the battery is marehing in column, with the caissons in front, to form in battery on the right. the captain commands:

## 1. On the right, into battery. 2. March. 3. Guide right.

At the first command, the chief of the leading section commands,
section, right wheel; and the cbief of the line of caissons goes to that section. At the command march, repeated by the chief of the leading section, that section wheels to the right, and is conducted to the line by the commands, forward, guide right, from its chief; as soon as it reaches the line, the section is formed in battery to the front by the commands, pieces, pass your caissons; march; in battery; march, from its chief.

The other sections continue to advance, and as each arrives opposite its place in battery, after having passed the one preceding it in the formation, it is wheeled to the right, and formed into battery by its chief, in the same manner as the leading section.

The formation in battery on the left, is executed according to the same principles and by inverse means.

When the battery is in column at a halt, it is formed in battery on the right or left, according to the same principles; the chicfs of the two rear sections giving the additional commands prescribed in No. 714.

## To deploy the double column into battery to the front or rear.

716. The battery being in double column at a halt, to deploy it into battery to the front, the captain commands:

## 1. Forward into battery. 2. March.

At the first command, the chief of the centre section commands, section, forward; that of the right, section into line, right oblique; that of the left, section into line, left oblique; and the chief of the line of caissons goes to the leading scetion. At the command march, repeated by the chiefs of sections, the centre section advances five yards, and without balting, is formed into battery to the front as prescribed in No. 701 or 703, according to the kind of carriage in front.

The pieces of the flank sections are brought upon the line hy obliquing, and placed successively in battery without command; regulating by the centre section.

When the battery is marching in double column, it is deployed into battery to the front in the same manner, except that the chief of the centre section does not command, section, foruard; march.

When the battery is in donble colmmn, marching or at a balt, it is deployed into battery to the rear according to the principles prescribed in this No. and in No. 704 or 705 , according to the kind of carriage in front. The commands are:

\author{

1. Into battery, faced to the rear. 2. March.
}

When the battery consists of four pieces, the double column is deployed into battery to the front or rear, by the same commands from the captain as when it consists of six. The sections are formed into hattery as preseribed for the flank scetions in this number. The senior chicf of section, besides superintending the formation of his own, gives the commands required for the centre section, and the leading pieces conform to the movements of that section.

## To deploy the double column into battery to the right or left.

717. When the battery is in double column. marching or at a halt, to form it in battery to the right, the captain commands:

## 1. To and on the right, into battery. 2. March.

The centre section is formed in battery on the right, as prescribed for the leading section in No. 712 or 713 , according to the kind of carriage in front.

The other pieces are hrought into line as prescribed in No. 697, and, without halting, are formed successively in battery to the front without commands; regulating by the centre section.

The deployment into battery to the left is cxecuted according to the same principles and by inverse means.

When the battery consists of four pieces, the double column is deployed into battery to the right or left, by the same commands from the captain as when it consists of six. In this case the leading pieces are wheeled to the right or left as a section, and conducted to the line by the senior chicf of section. And then, without halting, they are formed into battery to the front by the same chief. The other pieces move forward, wheel in succession as they arrive opposite their places, and form in battery on the alignment of those already established.

## To pass from the order in battery to the order in column.

718. Being in battery, to form column, the captain first causes the line to be formed as prescribed in Nos. 706 or 707 , and then forms column by one of the manœuvres for passing from the order in line to the order in column.

## FIRINGS.

719. When cverything is prepared for firing, the captain commands:

## Commence Firing.

This command, given by itself or after load, is repeated by the chiefs of sections, and the firing immediately commenced.

The firing is discontinued by the command or signal, cease firing, which is repeated by the chiefs of sections and pieces.

When the battery is formed for action, the pieces are not loaded until the command loud or commence firiny is given by the captain. In successive formations, when this command is given, it is repeated in succession by the chiefs of sections, as their sections are formed on the line.

At the command cease firing, such pieces as are loaded must be discharged.

## To fire advancing.

720. When the battery is firing, to advance by half batteries, the captain commands:

## 1. Fire advancing, by half battery. 2. Right half battery-

 Advance.At the second command, the chief of the right half battery discontinues firing, causes bis pieces to be limbered to the front, and commands, forward, march; guile legt. Or, he may cause them to be limbered to the rear, and after executing the abont, command, forward, guide left. The half battery advances, and the caissons preserve their distance in battery.

As soon as the right half battery reaches the new position, previously indicated by the captain, its chief places it in battery, by the commands, halt; action, front; or in battery; march; the two last commands being giren in quick snccession. The caissons halt at these commauds; and as soon as the pieces are unlimbered, the firing is renewed by command from the chicf of half battery.

The fire of the left half battery is continued during the movernent of the right, care being takeu to direct the pieces so that their fire shall not injure the half battery in adrance.

As soon as the right half battery commences firing, the left moves forward with the guide to the right; and, after passing the right half battery as far as the latter has advanced, is formed into battery and the firing commenced. The movements of the left half battery are effected by commands and means corresponding to those of the right.

The right half battery again advances as soon as the left commences firing; and the two continne to advance alternately until the captain
causes the firing to cease. The battery is then aligned, or formed into line, to the front or rear, hy the proper commands from the captain.

While advancing by half battery, the captain places himsclf habitually with the most advanced portion of the battery, and is accompanied by the chicf of the centre section. The chief of the line of caissons remains habitually with the rear half battery.

In horse artillery, while advancing by balf battery, the detachments preserve their distance in battery. When the pieces are limbered to the front, the horse-bolders advance to enable the cannoneers to mount more readily; but as soon as the pieces advance, the detachments resume their distance in battery.

To fire advancing by half battery, commencing with the left, is executed according to the same principles and by inverse means.

The morement may also be executed by sections; the sections advancing in succession, according to their positions in the battery.

## To fire in retreat.

721. When the battery is firing, to retire by half batteries, the captain commands:

## 1. Fire retiring, by half battery. こ. Right half battery-Retire.

At the second command, the chief of the right half battery discontinues firing, limbers to the rear. and commands, caissons, left about, march. As soon as the about is completed, he commands, forward, guide right; and conducts the half battery to the ground previously indicated by the captain; the pieces preserving their distance in battery by marching nincteen yards in rear of the caissons. As soon as the ground has been reached, the chief of half battery commands, halt; in battery, and commences firing ; taking care not to injure the other half battery. The limbers and caissons remain facing toward the rear, as long as the firing in retreat continues.

As soon as the right half battery commences firing, the left retires with the guide to the left; and, after passing the right half battery as far as the latter has retired, it is formed into battery, and the firing again commenced. The movements are executed in a manner eorresponding to those of the other half battery.

The half batteries continue to retire alternately, until the captain causes the firing to ceasc. The battery is afterwards aligned, or formed into line to the front or rear, by appropriate commands from the captain.

While retiring by half battery, the captain remains habitually with
the portion of the battery nearest the enemy, and is accompanied by the chicf of the centre section. The chief of the line of caissons accompanies the other half battery.

In horse critillery, the detachments moves to the left to facilitate the about of the caissons. They afterward place themselves behind and follow them during the retrograde movement at the distance of two yards; remaining faced to the rear as long as the firing in retreat continues.

To fire retiring by half battery, commencing with the left, is executed according to the same principles and by inverse means.

The movement may also be executed by sections; the sections retiring in succession according to their positions in the battery.

## Movements for firing in echellon.

722. When the battery is in line at a halt with picces in front, to advance in echellon of pieces, the captain commands:
723. By piece from the righl, front into echellon. 2. March.

At the first command, the right piece moves forward, followed by its caisson. The next piece moves forward in like manner as soon as its leaders are abreast the wheel horses of the rear carriage on the right; and the other pieces commence the movement in succession according to the same rule.

The officers preserve the same relative positions as in line.
When the battery is marching in line at a walk or trot, the echellon is formed according to the same priuciples and by the same commands; the gaits being regnlated as in breaking scetions.

The battery advances in echellon of pieces from the left according to the same principles and by inverse means.

When the caissons are in front, the battery advances in echellon of pieces from the right or left according to the same principles and by the same commands.

When the battery is in echcllon, marching or at a halt, it may be formed into battery to the front, rear, right or left.

When firing in echellon to the front ur rear, the direction of the fire may be changed to the right or left. For this purpose the captain orders the firing to cease, and commands, action, right (or left). At this command, the trails of the pieces are turned to the left (or right), and the limbers and caissons take their places in rear of the pieces. But if retiring with the prolonge fixed, the caissons stand fast, and the limbers back to allow the trails to be turned in the proper direction.

The prolonge must be sufficiently slack to allow the recoil of the guns. This last method is only applicable to firing to the right when retiring by the right, and to the leift when retiring by the left.

## To fire to the rear.

723. When the battery is firing, to fire to the rear, the captain causes the firing to cease, and commands:
724. Fire to the rear. 2. Limbers and caissons, pass your pieces, trot. 3. March.

These commands are repeated by the chiefs of sections. At the command march, the pieces are wheeled about by turning the trails to the left; and the limbers and caissons oblique to the right, pass them, and take their places in battery by a left reverse.

In horse artillery, the horses follow their limbers, pass them, and take their places by wheeling about to the left.

## CHANGES OF FRONT IN BATTERY.

Change of front to fire to the right, left wing forward, and the reverse.
724. When the battery is fring. if the captain wishes to make a perpendicular change of front, to fire to the right, throwing forward the left wing, he discontinues firing, and commands:

1. Fire to the right. 2. Change front forward on the right piece. 3. March.

At the second command, the chief of the right section places the right piece in the new direction, by causing the trail to be moved to the left. He also canses the left piece of his section to be moved forward by hand, and established on the new line. When the ground is unmasked, the limbers and caissons of these pieces oblique to the left, move forwarl, and take their places in battery by wheeling to the right; the caissons aligning themselves by the chicf of the line of caissons established on the right.

The other chiets of sections cause their pieces to be limbered by the command, limber to the front; the caissons, and in horse urtillery the horse holders, also, closing upon the pieces while they are limbering. As soon as they are limbered the chiefs of sections command forcard.

At the second command, the chief of the line of caissons places him-
self on the left of the right piece of the centre section, facing to the front, to mark the right of the new line of caissons.

At the command march, repeated by the chiefs of the centre and left sections, these sections move to the front: and when each has arrived. opposite its place on the new line, its chief commands; section, right wheel; march; forward; and afterward, in battery, march, so as to form upon the alignment of the right section. When the caisson of the right piece of the centre section reaches the point where its piece wheeled, it wheels to the left, takes its distance in rear, wheels about and dresses to the right upon the line of caissons.

The other caisson of the same section obliques to the left when its pirce commences the wheel; and, after gaining its distance establishes itself on the line by wheeling and dressing to the right.

The pivot picce commences firing again, as soon as it is in position, and the others as they arrive on the line.

The change of front to fire to the left, right wing forward, is cxecuted according to the same principles and by inverse means.

In horse artillery, the detachments follow their pieces and halt at their proper distance from the line. That of the left piece of the right section, when limbercd, wheels to the left when its piece wheels to the, right, allows its caisson to pass it, and takes its place by wheeling about to the left. The horse holders of the pieces not limbered oblique to the left, with their limbers, and, like them, take their places in battery by whecling to the right. When it is decmed advisable, the captain may retain the cannoneers at their pieces, and allow all the horse holders to conduct their horses to the new linc. The same may be done in the other changes of frout.

Change of front to fire to the left, left wing forward, and the reverse.
725. When the battery is firing, if the captain wishes to make a perpendicular change of front-to fire to the left, throwing forward the left wing, he discontinues firing and commands:

1. Fire to the left. 2. Change front forward on the right piece. 3. March.

At the second command, the chief of the right section causes the right picce to be placed in the new direction at once, by moving the trail to the right; and the limber and caisson of that piece will oblique to the right, and take their placcs in its rear by wheeling to the left; the caisson dressing upon the chief of the line of caissons.

He also causes his left piece to be moved to its place and established on the line by hame ; the limber of this piece, passing it on the right, takes its place by wheeling to the left, its caisson obliques to the right, passes on the right, and in rear of the right caisson, and takes its place also by wheeling to the left.
The chiefs of the other sections cause them to be limbered to the front; and while limbering they command; cuissons pass your pieces, trot: march. When this is executed the chicf of the centre section commands section, right wheel, and that of the left forward.
At the command march, repeated by the chiefs of the centre and left sections, these sections move as ordered, with the caissons leading. The eentre section is conducted to the line by its chief and formed by the commands, forkard and in battery. The left section alvances five yards and is conducted to the line by two snccessive right half wheels. It is there formed in like manner upon the alignment of the right section.
At the second command from the captain, the chicf of the line of eaissous places himself in prolongation of the line, thirty-two yards on the right of the right piece, and faces to the front, to mark the left of the new line of caissons.
The pirot piece recommences firing as soon as it is unmasked; and the others when they arrive on the line.

The change of front to fire to the right, right wing forward, is exccnted according to the same principles and by inverse means.

In horse artittery, the horse holters of those pieces, which are placed on the line by hand, conduct the horses to their positions in battery by following their limbers.

Change of front to fire to the left, left wing to the rear, and the reverse.
726. When the battery is firing, if the captain wishes to make a perpendicular change of front to fire to the left, throwing the left wing to the rear, he canses the firing to cease, and commands:

1. Fire to the left. 2. Change front to the rear on the right piece. 3. March.

At the sceond command, the chief of the right section places the right piece in the new direction, by causing the trail to be moved to the right. He also causes the left piece of his section to be mored to the rear by hand, and established on the new line. The limbers and caissons of these pieces move at once to the right, obliquing sufficiently
to place themselves in rear of their respective pieces, and take their places by wheeling to the left or left about.

The other chiefs of sections command, limber to the rerrr, and immediately afterward, raissons in front of your pieces, trot; march. The caissons place themselves in front of their pieces, while they are limbering, and halt as prescribed in No. 707. The chiefs of these sections then command forward.

The chief of the line of caissons places himself in the prolongation of the line, thirty-two yards on the right of the right piece, and faces to the rear to mark the right of the new line of caissons.

At the command march, given by the captain, and repeated by the chiefs of the centre and left sections, the chiefs of these sections command guide left, and afterward in succession, section, left wheel; march; forward; in luttery. The carriages dress toward the pirot as they arrive on the line.
The pivot piece recommences firing as soou as it is unmasked; and the others when they arrive on the line.

- The change of front to fire to the right, right wing to the rear, is executed according to the same principles and by inverse means.
In horse artillery, the detachments pass their pieces at the command mareh, place themselves two yards in rear of the muzzles, follow them, and, at the command in battery, take their places. The horse holders of those pieces which are moved by hand, follow their limbers and conduct the horses to their positions, by movements corresponding to those of their caissons. When the left piece of the right section is limbered, the horses of the detachment are conducted to their places in the same manner as though the piece were unlimbered, except that the detachruent mounts.

Change of front to fire to the right, left wing to the rear, and the reverse.
727. When the battery is firing, if the captain wishes to make a "perpendicular elange of front to fire to the right, throwing the left wing to the rear, he discontinues firing and commands:

1. Fire to the right. 2. Change front to the rear on the right piece. 3. March.

At the second command, the chief of the right section commands, limbers und cuissons, in rear of your pieces, trot; march. The limbers and caissons oblique to the right, and pass their pieces with the limbers leading. As suon as the limbers have passed, they wheel
twice to the left and cover their pieces. The caissons pass their limbers and cover them in like manner. The chief of the section causes the trail of his right piece to be moved to the left, and his left piece to be placed upon the new alignment by hand.

The chiefs of other sections command, limber to the rear, and caissons in rear of your pieces, trot; march. When this is executed they command formord. s

At the second command, the chief of the line of caissons places himself on the left of the right piece of the centre section, facing to the rear, to mark the left of the new line of caissons.

At the command march, from the captain, repeated by the chiefs of the centre and left sections, those sections, as well as the limbers and caissons of the first, are established upon the new line as described in No. 724.

The pivot piece recommences firing as soon as it is placed in the new direction; and the others as they arrive on the line.

The change of front to fire to the left, right wing to the rear, is executed according to the same principles and by inverse means.

In horse artillery, the mounted detachments pass their pieces with the caissons at the command march, and take their places in rear of the muzzles by successive wheels to the left. The horse holders of the pieces which are moved by hand follow their limbers and wheel into their places in like manner. The remainder is executed as in No. 72 t .

## To pass a defile in front.

728. When the battery is firing, to pass a defile in front of the right section, the captain commands:

## 1. To the front, by the right section, pass the defile. 2. March.

At the first command, the chief of the right section discontinues firing, limbers his pieces to the front, and commands forward. At the command march, repeated by this chief, who atso commands guide left, the section moves forward, passes the defile, and is again established in battery, and the firing commencel hy his command.

As soon as the right section eommences firing, the centre is put in motion in like manner. Its chief conducts it through the defile by successive wheels, and forms it into battery in line with the first.

As soon as the eentre section commences firing, the left passes in like manner.

While one section is passing the defile, the others continue firing; care being taken not to injure the section in advance.

When the defle is in front of the left section, it is passed according to the same principles, commencing with that section.

When the defile is in front of the centre section, it is passerl according to the same principles, commencing with that section, and by the commands, to the front, by the centre section, pass the defile; march. Unless there is some reason to the contrary, the right section will pass before the left.

When the flank or oblique march is better suited to the nature of the ground, the chiefs of sections will give the required commands.

When the defile will admit but one picce at a time, the sections are broken by their chiefs in such a manner as to cause the nearest piece to enter first. The sections are re-formed by their chiefs immediately after passing the defile.

## To pass a defle in rear.

729. When the battery is firing, to pass a defile in rear of the centre section, the captain commands:
730. To the rear, by the right section, pass the defile. 2. March.

At the first command, the chief of the right- section discontinues firing, limbers to the rear, and commands, caissons, left about, pieces, forcord. At the command march, repeated by the chief of the right section, the caissons of that section execute the about, and the pieces close to their proper distance at a trot. As soon as the about is completed, the chief commands formurd, gride left, conducts the section throngh the defile by successive wheels, and forms it into battery in rear of its first position.

The left section is put in motion as soon as the right commences fring. It is conducted through the defile by its chief, and formed into battery in rear of its first position, by the principles already described.

The centre section moves as soon as the left commences firing. It is formed into battery in rear of its first position, and in line with the other two sections.

The passage of the defile may be caccuted, commencing with the left section, according to the same principles and by inverse means.

When the defile is in rear of one of the flanks, the morement should commence with the other. It shonld always end by passing the section or piece covering the defile.

When the defile will admit but one piece at a time, the sections are brokeu by their chiefs in such a manner as to cause the piece farthest from the defile to enter first; and the sections are again formed as soon as possible after leaving the defile.

## Article XII.

## HONORS PAID BY THE TROOPS—INSPECTIONS - REVIEWS, ETC.

## HONORS TO BE PAID BY THE TROOPS.

730. Whenever a person entitled to compliments from the troops visits any camp or military post, and the commanding officer has official notice of his presence, the troops are paraded to salnte him.

The Prcsident or Vice-President of the United States and the Gorernor of the State to which the troops belong, are to be saluted with the highest honors-all standards and colors drooping, officers and troops saluting, drums beating aud trumpets sounding.

A General commanding-in-chief is to be received-by cavalry, with sabres presented, trumpets sounding the march, and all the officers saluting, standards drooping; by infantry, with drums beating the march, colors droopiug, officers saluting and arms presented.

A Major-General is to be received-hy cavalry, with sabres presented, trumpets sounding twice the trumpet-flourish, and officers saluting; by infantry, with tbrce ruffles, colors drooping, officers saluting, and arms presented.

A Brigadier-General is to be received-by cavalry, with sabres presented, trumpets sounding once the trumpet-flourish, and officers saluting; by iufantry, with two ruffles, colors drooping, officers saluting, and arms presented.

An Adjutant-General or Inspector-General, if under the rank of a general officer, is to be received at a review or inspection of the troops under arms-by cavalry, with sabres presented, officers saluting; by infantry, officers saluting and arms presented. The same honors to be paid to any field officer authorized to review and inspect the troops, When the inspecting officer is junior to the officer commanding the parade, no compliments will be paid: he will be received only with swords drawn and arms shouldered.

All guards are to turn out and present arms to general officers as
often as they pass them, except the personal guards of general officers, which turn out only to the generals whose guards they are, and to oficers of superior rank.

To commanders of regiments, garrison, or camp, their own guard turn out, and present arms once a day; after which, they turn out with shouldered arms.

To the Members of the Cabinet; to the Chief Justice, the President of the Senate, and Spealier of the House of Representatircs of the United States; and to Gorernors within their rectice States and Territories the same honors will be paid as to a general commanding-in-chief.

Officers of a foreiyn service may be complimented with the honors due to their rank.

American and Foreign Envoys or Ministers will be received with the compliments due to a major-general.
731. The colors of a regiment passing a guard are to be saluted, the trumpets sounding, and the drums beating a march.

When general officers, or persons entitled to salute, pass in the rear of a guard, the officer is only to make his men stand shouldered, and not to face his guard about, or beat his drum.

When general officers, or persons entitled to a salute; pass guards while in the act of relieving, both guards are to salute, receiring the word of command from the senior officer of the whole.

All guards are to be under arms when armed parties approach their posts; and to parties commanded by commissioned officers they are to present their arms, drums beating a march, and officers saluting.

No compliments by guards or sentinels will be paid between retreat and reveille, except as prescribed for grand rounds.

All guard and sentinels are to pay the same compliments to the officers of the navy, marines and militia, in the service of the United States, as are directed to be paid to the officers of the army, according to their relative ranks.

It is equally the duty of non-commissioned officers and soldiers, at all times and in all situations, to pay the proper compliments to officers of the navy and marines, and to officers of other regiments, when in uniform, as to officers of their own particular regiments and corps.

Courtesy among military men is indispensable to discipline. Respect to superiors will not be confined to obedience on duty, but will be extended to all occasions. It is always the duty of the inferior to accost or to offer first the customary salutation, and of the superior to return such complimentary notice.

Sergeants, with swords drawn, will salute by bringing them to a present; with muskets, by bringing the left hand across the body, so as to strike the musket near the right shoulder. Corporals out of the ranks, and privates not sentrics, will carry their muskets at a shoulder as sergeants, and salute in like manner.

When a soldier without arms, or with side-arms only, meets an officer, he is to raise his hand to the right side of the visor of his cap, palm to the front, elbow raised as high as the shoulder, looking at the same time in a respectful and soldier-like manner at the officer, who will return the compliment thus offered.

A non-commissioned officer or soldier being seated, and without particular occupation, will rise on the approach of an offiecr, and make the customary salutation. If standing, he will turn toward the officer for the same purpose. If the parties remain in the same place or on the same ground, such compliment need not be repeated.

## Artillery Salutes.

732. The President of the United States and the Gocernor of the State to which the troops belong, to receive a salute of twenty-one guns.

The Vicc-President is to receive a salute of seventeen guns.
The Hcads of the great Exccutive Departments of the National Gorcrnment; the General commanding the army; the Licutencut-Gorernor or the State to which the troops belony; the Governors of other States and Territorics, fifteen guus.

A Major-General, thirteen guns.
A Brigadier-General, eleven guns.
Forcign ships-of-uar will be saluted in return for a similar compliment, gun for gun, on notice being officially received of such intention. If there be several posts in sight of, or within six miles of each other, the principal only shall reciprocate compliments with ships passing.

Officers of the Nary will be saluted according to relative rank.
Foreign Officers invited to visit a fort or post may be saluted according to their relative rank.

Enroys and Ministers of the United States and foreign powers are to be saluted with thirteen guns.

A general officer will be saluted but once in a year at each post, and only when notice of his intention to visit the post has been given.

Salutes to individuals are to be fired on their arrival only.
A national salute will be fired at meridian on the anniversary of the Independence of the United States, at each military post and camp provided with artillery and ammunition.

## Escorls of Honor.

733. Escorts of honor may be composcd of cavalry or infantry, or both, according to circumstances. They are guards of honor for the purpose of receiving and escorting personages of high rank, civil or military. The troops for this purpose will be selected for their soldierly appearance and superior discipline.

The escort will be drawn up in line, the centre opposite to the place where the personage presents himself, with an interval between the wings to receive him and his retiuue. On his appcarance, he will be reccived with the honors due to his rank. When he has taken his place in the line, the whole will be wheeled into platoons or companies, as the case may be, and take up the march. The same ceremony will be observed, and the same honors paid, on his leaving the escort.

When the position of the escort is at a considerable distance from the point where he is expeeted to be received, as, for instance, where a court-yard or wharf intervenes, a double line of sentinels will be posted from that point to the escort, facing inward, and the sentinels will successively salute as he passes.

An officer will be appointed to attend him, to bear sueh communications as he may have to make to the commander of the escort.

## Funeral Honors.

734. The funeral escort of a General commanding-in-chief, shall consist of a regiment of infantry, a squadron of cavalry, and six pieces of artillery.

That of a Major-General, a regiment of infantry, a squadron of cavalry, and four pieces of artillery.

That of a Brigadier-General, a regiment of infantry, one company of cavalry, and two pieces of artillery.

That of a Colonel, a regiment.
That of a Lieutenant-Colonel, six eompanies.
That of a Major, four companies.
That of a Captain, one company.
That of a Subaltern, half a eompany.
The funeral escort shall always be commanded by an officer of the same rank with the deceased; or, if none such be present, by one of the next inferior grade.

The funeral escort of a non-commissioned staff officer shall consist of sixteen rank and file, commanded by a sergeant.

That of a sergeant, of fourteen rank and file, commanded by a sergeant.

That of a corporal, of twelve rank and file, commanded by a corporal; and

That of a private, of eight rank and file, commanded by a corporal.
The escort will be formed in two ranks, opposite to the quarters or tent of the deceased, with shouldered arms and bayonets unfixed; the artillery and cavalry on the right of the infantry.

On the appearance of the corpse, the officer commanding the escort will command:
Present-Arms;
when the honors due to the deceased will be paid by the drums and trumpets. The music will then play an appropriate air, and the coffin will then be taken to the right, where it will be halted. The commander will next order:

1. Shoulder-Arms. 2. By company (or platoon), left wheel. 3. March. 4. Reverse-Arms. 5. Column, forward. 6. Guide right. 7. March.

The arms will be reversed at the order by bringing the firelock under the left arm, butt to the frout, barrel downward, left hand sustaining the lock, the right steadying the firelock behind the back; swords are reversed in a similar manner under the right arm.

The colnmn will be marched in slow time to solemn music, and on reaching the grave, will take a direction so that the guides shall be next to the grave. When the centre of the column is opposite the grave, the commander will order:

1. Column. 2. Halt. 3. Right into line, wheel. 4. Marcif.

The coffin is then brought along the front, to the opposite side of the grave, and the commander then orders:

1. Shoulder-Arms. 2. Present-Arms.

And when the coffin reaches the grave, he adds:

> 1. Shoulder-Arms. 2. Rest on-Arms.

The rest on arms is done by placing the muzzle on the left foot, both hands on the butt, the head on the bands or bowed, right knec bent.

After the funeral service is performed, and the coffin is lowered into the grave, the commander will order:

1. Attention. 2. Shoulder-Arms. 3. Load at will. 4. Load.

When three rounds of small arms will be fired by the escort, taking care to elevate the pieces.

This being done, the commander will order:

## 1. By company (or platoon), right wheel. 2. March. 3. Column, forward. 4. Guide left. 5. Quick-MARCh.

The music will not begrin to play until the escort is clear of the inclosure.

When the distance to the place of interment is considerable, the escort may march in common time and in column of route, after leaving the camp or garrison, and till it approaches the bnrial-ground.

The pall-bearers, six in number, will be selected from the grade of the deceased, or from the grade or grades next above or below it.

At the funeral of an officer, as many in commission of the army, division, brigade, or regiment, according to the rank of the deceased, as can conveniently be spared from other duties, will join in procession, in uniform, and with side-arms. The funeral of a nou-commissioned officer or private will be attended, in like manner, by the non-commissioned officers or privates of the regiment or company, according to the rank of the deceased, with side-arms only.

Persons joining in the procession follow the coffin in the inverse order of their rank.

The usual badge of military mourning is a piece of black crape around the left arm, above the elbow, and also upon the sword-hilt; and will be worn when in full or in undress.

As fanily mourning, crape will be worn by officers (when in uniform) only around the left arm.

The drums of a funcral escort will be covered with black crape, or thin black serge.

Funeral honors will be paid to deceased officers without military rank, according to their assimilated grades.

## INSPECTIONS OF THE TROOPS.

735. The inspection of troops, as a division, regiment, or other body composing a garrison or command, not less than a company, will generally be preceded by a revicw.

## Form of inspection for infantry.

The present example embraces a battalion of infantry. The inspecting officer and field and staff officers will be on foot.

The battalion being in the order of battle, the colonel will cause it to break in open column of eompanies, right in front. He will next order the ranks to be opened, when the color-rank and color-guard, under the direction of the adjutant, will take ten paces in front, and the band ten paces in rear of the column.

The colonel, seeing the ranks aligned, will command:

## 1. Officers and sergeants, to the front of your companies.

## 2. March.

The officers will form themselves in one rank, eight paees, and the non-commissioned officers in one rank, six paces in advance, along the whole fronts of their respective companies, from right to left, in the order of seniority; the pioneers and music of each company, in one rank, two paces bchind the non-commissioned officers.

The coloncl will next command:

## Field and staff, to the front-March.

The commissioned officers thus designated will form themselves in one rank, on a line equal to the front of the column, six paces in front of the colors, from right to left, in the order of seniority; and the non-commissioned staff, in a similar manner, two paces in rear of the preceding rank. The colonel, sceing the movement executed, will take post on the right of the lientenant-colonel, and wait the approach of the inspecting offieer. But such of the field officers as may be superior in rank to the inspector will not take post in front of the battalion.

The inspeetor will commence in front. After inspecting the dress and general appearance of the field and commissioned staff under arms, the inspector, accompanied by these officers, will pass down the open column, looking at every rank in front and rear.

The colonel will now command:

## 1. Oider arms. 2. Rest;

when the inspector will proceed to make a minnte inspection of the several ranks or divisions, in suceession, commencing in front.

As the inspector approaches the non-commissioned staff, eolor-rank, the eolor-guard, and the band, the adjutant will give the necessary orders for the inspection of arms, boxes and knapsacks. The colors will be planted firm in the gronnd, to cnable the color-bearers to display the contents of thir knapsacks. The non-commissioned staff may be dismissed as soon as inspected; but the color-rank and color-guard will remain until the colors are to be escorted to the place from which they were taken.

As the inspector successively approaches the companies, the captains will command :

\author{

1. Attention. 2. Company. 3. Inspection-Arms.
}

The inspecting officer will then go through the whole company, and minutely inspect the arms, accoutrements, and dress of each soldier. After this is done, the captain will command:
Open-Boxes;
when the ammunition and the boxes will be examined.
The captain will then command:

1. Shoulder-Arms. 2. Close order. 3. March. 4. OrderArms. 5. Stack-Arms. 6. To the rear, open order. 7. March. 8. Front rank-About-Face. 9. UnslingKnapsacks. 10. Open-Knapsacks.

The sergeants will face inward at the second command, and close upon the centre at the third, and stack their arms at the fifth command; at the sixth command they face outward, and resume their positions at the seventh. When the ranks are closed, preparatory to take arms, the sergeants will also close upon the centre, and at the word, take their arms and resume their places.
The knapsacks will be placed at the feet of the men, the flaps from them, with the great-coats on the flaps, and the knapsacks leaning on the great-coats. In this position the inspector will examine their contents, or so many of them as he may think vecessary, commencing with the non-commissioned officers, the men standing at attention.

When the iuspector has passed through the company, the captain will command:

Repack, Rnapsacks;
when each soldier will repack and buckle up his knapsack, leaving it on the ground, the number upward, turned from him, and then stand at rest.
The captain will then command:

## 1. Attention. 2. Company. 3. Sling, knapsacks.

At the word sling, each soldier will take his knapsack, holding it by the inner straps, and stand erect: at the last word he will replace it on his bask. The captain will continue:
4. Fromt rank-About-Face. 5. Close order. 6. March. 7. Tuke-Arms. 8. Shoulder-Arms. 9. Officers and Sergeants to your posts. 10. March.

And will cause the company to file off to their tents or quarters, except the company that is to re-cscort the colors, which will await the further orders of the coloncl.

In an extensive column, some of the rearmost companies may, after the inspection of dress and general appearance, be permitted to stack arms until just before the inspector appraches them, when they will be directed to treke arms and resume their position.

The inspection of the troops being ended, the field and staff will next accompany the inspector to the bospital, magazine, arsenal, quarters, sutler's shop, 'guard-house, and such other places as he may think proper to inspect. The captains and subalterns repair to their companies and sections to await the inspector.

The hospital being at all times an object of particular interest, it will be critically and minutely inspected.

The men will be formed in the company quarters in front of their respective bunks, and on the entrance of the inspector the word attention will be given by the senior non-commissioned officer present, when the whole will salute with the hand, without uncovering.

The inspector, attended by the company officers, will cxamine the general arrangement of the interior of the quarters, the bunks, bedding, cooking and table utensils, and such other objcets as may present themselves; and afterward the exterior.

The adjutant will exhibit to the inspector the regimental books and papers, including those relating to the transactions of the Council of Administration. The company books and papers will also be exhibited, the whole together, generally at the adjutant's office, and in the presence of the officers not otherwise particularly engaged.

The inspector will examine critically the books and accounts of the administrative and disbursing officers of the command, and the money and property in their keeping.

## Inspection of cavalry.

736. The regiment being in line as preseribed for a review, the colonel causes the companies to wheel to the right. He then orders the ranks to be opened; at which the standard-bearer, under the dircetion of the adjutant, is posted about twenty paces ahead of the eolumn.

The colonel seeing the ranks aligned, commands: 1. Ofifeers and noncommissioned offieers. 2. To the front of your companies-March; on which the officers furm themselres in one rank, twelve paces, and the non-commissioned officers in one rank, six paccs, in adrance, along the whole front of their respective troops, in the order of rank, the highest on the right, and the lowest on the left ; the trumpeters of each company, at the same time, take post on the alignment of the front rank, six paces from the right.
Seeing the last order in a train of execution, the colonel commands : 1. Field and staff. 2. To the front-March. The commissioned officers thus designated, form tlecmselves in one rank, twelve paces in front of the standards, in the following order, beginning on the right; lieu-tenant-colonel, major, adjutant, quartermaster, etc. The non-commissioned staff in a similar manner, six paces in rear of the preceding rank. The band is formed in one rank, ten paces in rear of the column, the chief musician four paces in front of it.
The colonel, if a higher officer inspects the column, now takes his post on the right of the lieutenant-colonel.

The inspection commences in front. After inspecting the dress and general appearance of the field and commissioned staff, the inspector, accompanied by these officers, passes down the column, looking at every rank, in front and in rear, with a riew to the same object. He afterward, in a like manner, passes and inspects the arms. As be successively approaches each company for this purpose, its captain commands: 1. Attention. 2. Inspeetion of-Arms.

The inspector then dismounts with the field and commissioned staff, for the purpose of inspecting horse furniture, and valises, preparatory to which, the colonel causes the column to dismount. The men being then in the position of stand to horse, the colonel commands rest, for the whole columu; when the inspector proceeds to make a minute inspection of the several ranks, in succession, commencing in front.
On approaching the non-commissioned staff and the band, the adjutant gives the necessary orders for the inspection of boses and valises; and in like manner as to the standard-bearer. The non-commissioned staff may be dismonnted as soon as inspected.
As the inspector successively approaches the companies, each eaptain commands: 1. Attention. 2. Unstrap valises. 3. Open boxes; when the valises are placed at the feet of the men, with the flaps from them. In this position the inspector may examine the contents of the whole, boxes and valises, or of as many as he may think necessary.
As the inspector passes each company, the captain orders the ralises to be repacked and restrapped, and the men to file off to their tents or quarters, except the company which is to escort the standard, which awaits the orders of the colonel.

FORMS OF PARADE.

737. On all parades of ceremony, such as Reviews, Guard Mounting, at Troop or Retreat parades, instead of the word rest, which allows the men to move or change the position of their bodies, the command will be parade, rest. At the last word of this command, the soldier will carry the right foot six inches in rear of the left heel, the left knee slightly bent, the body upright upon the right leg; the musket resting against the hollow of the right shoulder, the hands crossed in front, the backs of them outward, and the left hand uppermost. At the word attention, the soldier will resume the correct position at ordered arms. In the positions here indicated, the soldier will remain silent and motionless; and it is particnlarly enjoined upon all officers to cause the commands above given, on the part of the soldier, to be executed with great briskness and spirit.

Officers on all duties under arms are to have their swords drawn, without waiting for any werds of command for that purpose.

## Dress parade.

73S. There shall be daily one dress parade, at troop or retrect, as the commanding offieer may direct.

A signal will be beat or sounded half an hour before troop or retreat, for the music to assemble on the regimental parade, and each company to turn out under arms on its own parade, for roll call or inspection by its own officers.

Ten minutes after that sigual, the $A$ djutant's eall will be given, when the captains will march their companies (the band playing) to the regimental parade, where they take their positions in line as directed, No. 297. When the line is formed, the captain of the first company on notice from the adjutant, steps one pace to the front, and gives to his company the command order arms; parade, rest; which is repeated by each captain in succession to the left. The adjutant takes post two paces on the right of the line; the sergeant-major two paces on the left. The music will be formed in two ranks on the right of the adjutant. The senior officer present will take the command of the parade, and will take post at a suitable distance in front, opposite the centre, facing the line.

When the companies have ordered arms, the adjutant will order the music to bect off, when it will commence on the right, beat in front of the line to the left, and back to its place on the right.

When the music has ceased, the adjutant will step two paces to the front, face to the left, and command:

1. Attention. 2. Battalion. 3. Shoulder-Arms. 4. Prepare to open ranks. 5. To the rear, open order. 6. March.

At the sixth command, the ranks will be opened according to the system laid down in the Infantry Tactic ${ }^{\circ}$, the commissioned officers marching to the front, the company officers four paces, field officers six paces, opposite to their positions in the order of battle, where they will halt and dress. The adjutant, sceing the ranks aligned, will command :

## Front,

and march along the front to the centre, face to the right and pass the line of company officers eight or ten paces, when he will come to the right about, and command:

## Present-Arms;

when arms will be preseuted, officers saluting.
Sccing this executed, he will face about to the commanding officer, salute, and report, "Sir, the parade is formed." The adjutant will then, on intimation to that effect, take his station three paces on the left of the commanding officer, one pace retired, passing round his rear.

The commanding officer, having acknowledged the salute of the line by touching his hat, will, after the adjutant has taken his post, draw his sword, and command :

## 1. Battalion. 2. Shoulder-Arms;

and add such exercises as he may think proper, concluding with :

> Order-Arms;
then return his sword, and direct the adjutant to receive the reports.
The adjutant will now pass round the right of the commanding officer, advance upon the line, halt midway between him and the line of company officers, and command :

## 1. First sergeants, to the front and centre. 2. March.

At the first command, they will shoulder arms as sergeants, march iwo paces to the front, and face inward. At the second command, they will march to the ecntre, and halt. The adjutant vill then order:

> 1. Front-FACE. 2. Report.

At the last word, each in succession, beginning on the right, will salute by bringing the left hand smartly across the breast to the right shoulder, and report the result of the roll call previously made on the company parade.

The adjutant again commands:

## 1. First sergeants, outward-FACE. 2. To your posts-MARCH;

when they will resume their places, and order arms. The adjutant will now face to the commanding officer, salute, report absent officers, and give the result of the first sergeant's reports. The commanding officer will next direct the orders to be read, when the adjutant will face about, and announce:

## Attention to Orders.

He will then read the orders.
The orders having been read, the adjutant will face to the commanding officer, salute and report; when, on an intimation from the commander, he will face again to the line, and announce:

## Parade is dismissed.

All the officers will now return their swords, face inward and close on the adjutant, he having taken positivn in their line, the field officers on the flanks. The adjutant commands :

> 1. Front-FACE. 2. Forward-MARCH;
when they will march forward, dressing on the centre, the music playing, and when within six paces of the commander, the adjutant will give the word:

## Halt.

The officers will then salute the commanding officer by raising the hand to the cap, and there remain until he shall have communicated to them such instructions as he may have to give, or intimates that the ceremony is finished. As the officers disperse, the first sergeants will close the ranks of their respective companies, and march them to the company parades, where they will be dismissed, the band continuing to play until the companies clear the regimental parade.

All field and company officers and men will be present at dress parades, unless especially excused, or on some duty incompatible with such attendance.

A dross parade once a day will not be dispensed with, except on extraordinary and urgent occasions.

## Review of a battalion of infantry.

739. Preparatory to a review, the adjutant will cause a camp color to be placed 80 or 100 paces, or more, according to the length of the line, in front of, and opposite to where the centre of the battalion will rest, where the reviewing officer is supposed to take his station; and, although he may choose to quit that position, still the color is to be considered as the point to which all the movements and formatious are relative.

The adjutant will also cause points to be marked at suitable distances, for the wheelings of the divisions; so that their right flanks, in marching past, shall only be about four paces from the camp color, where it is supposed the reviewing officer places himself to receive the salute.

The battalion being formed in the order of battle, at shouldered arme, the colonel will command:

1. Battalion, prepare for review. 2. To the rear, open order.

## 3. March.

At the word march, the field and staff officers dismount; the company officers and the color-rank advance four paces in front of the front rank, and place themsclves opposite to their respective places in the order of battle. The color-guard replace the color-rank. The staff officers place themselves, according to rank, three paces on the right of the rank of company officers, and one pace from each other; the music takes post as at a parade. The non-commissioned staff take post one pace from each other, and three paces on the right of the front rank of the battalion.

When the ranks are aligned, the colonel will command:

## Front;

and place himself eight paces, and the lieutenant-colonel and major will place themselves two paces, in front of the rank of company officers, and opposite to their respective places in the order of battle, all facing to the front.

When the reviewing officer presents himself before the centre, and is fifty or sixty paces distant, the colonel will face about, and command:

> Present-ARms;
and resume his front. The men present arms, and the officers salute, so as to drop their swords with the last motion of the firelock. The
non-commissioned staff salute by bringing the sword to a poise, the bilt resting on the breast, the blade in front of the face, inclining a little outward. The music will play, and all the drums beat, according to the rank of the reviewing officer. The colors only salute such persons as, from their rank, and by regulation (see No. 730), are entitled to that honor. If the reviewing officer be junior in rank to the commandant of the parade, no compliment will be paid to him, but he will be received with arms carricd, and the officers will not salute as the column passes in review.

The reviewing officer having halted, and acknowledged the salute of the line by touching or raising his cap or hat, the colonel will face about and command :

## Shoulder-Arms;

when the men shoulder their pieces; the officers and non-commissioned staff recover their swords with the last motion, and the colonel faces to the front.

The reviewing officer will then go toward the right, the whole remaining perfectly steady, without paying any further complimeut, while he passes along the front of the battalion, and proceeds round the left flank, and along the rear of the file-closers, to the right. While the reviewing officer is going round the battalion, the band will play, and will cease when he has returned to the right flank of the troops.

When the reviewing officer turns off, to place himself by the camp color in front, the colonel will face to the line, and command:

## 1. Close order. 2. March.

At the first command, the field and company officers will face to the right about, and at the second command, all persons, except the colonel, will resume their places in the order of battle; the field and staff officers mount.

The reviewing officer having taken his position near the camp color, the colonel will command:

1. By company, right wheel. 2. Quick-March. 3. Pass in review. 4. Column, forward. 5. Guide right. 6. МАRch.

The battalion, in column of companies, right in front, will then, in common time, and at shouldered urms, be put in motion; the colonel four paces in front of the captain of the leading company; the lieu-tenant-colonel on a line with the leading company; the major on a line with the rear company; the adjutant on a line with the second com-

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pany; the sergeant-major on a line with the company next preceding the rear-each six paces from the flank (left) opposite to the reviewing officer; the staff officers in one rank, according to the order of precedency, from the right, four paces in rear of the column; the music, preceded by the principal musician, six paces before the colonel; the pioncers, preceded by a corporal, four paces before the principal musician ; and the quartermaster-sergeant two paces from the side opposite to the guides, and in line with the pioneers.

All other officers and non-commissioned officers will march past in the places prescribed for them in the march of an open column. The guides and soldiers will keep their heads steady to the front in passing in reviem.

The color-bearer will remain in the ranks while passing and saluting.
The music will begin to play at the command to march, and after passing the reviewing officer, wheel to the left out of the column, and take a position opposite and facing him, and will continue to play until the rear of the column shall have passed him, when it will cease, and follow in the rear of the battalion, unless the battalion is to pass in quick time also, in which case it will keep its position.

The officers will salute the reviewing officer when they arrive within six paces of him, and recover their swords when six paces past him. All officers, in saluting, will cast their eyes toward the reviewing officer.

The colonel, when he has saluted at the head of the battalion, will place himself near the reviewing officer, and will remain there until the rear has passed, when be will rejoin the battalion.

The colors will salute the reviewing officer, if entitled to it, when within six paces of him, and be raised when they have passed by him an equal distance. The drums will beat a march, or ruffle, according to the rank of the reviewing officer, at the same time that the colors salute.

When the column has passed the reviewing officer, the colonel will direct it to the ground it marched from, and command:

## Guide left;

in time for the guides to cover. The column having arrived on its ground, the colonel will command:

## 1. Column. 2. Halt;

form it in order of battle, and cause the ranks to be opencd. The review will terminate by the whole saluting as at the beginning.

If, however, instructions have been previously given to march the
troops past in quick time also, the colonel will, instead of changing the guides, halting the column, and wheeling it into line, as above directed, give the command :

## 1. Quick time. 2. March.

In passing the reviewing officer again, no salute will be offered by either officers or men. The music will have kept its position opposite the reviewing officer, and at the last command will commence playing, and, as the column approaches, will plaee itself in front of, and march off with the column, and continue to play until the battalion is halted on its original ground of formation. The review will terminate in the same manner us prescribed above. ${ }^{1}$

The colonel will afterward cause the troops to perform such exercises and manœuvres as the reviewing offieer may direet.

When two or more battalions are to be reviewed, they will be formed in parade order, with the proper intervals, and will also perform the same movements that are laid down fur a single battalion, observing the additional directions that are given for such movements when applied to the line. The brigadier-general and his staff, on foot, will place themselves opposite the eentre of the brigade ; the brigadiergeneral two paces in front of the rank of colonels; his aid two paces on his right, and one retired; and the other brigade staff officers, thuse having the rank of field officers, in the rank of lieutenant-eolonels and majors; and those below that rank, in the rank of company officers.

Iu passing in review, a major-general will be four paces in front of the coloncl of the leading battalion of his division; and the brigadiergeneral will be on the right of the colonels of the leading battalions of their brigades; staff officers on the left of their generals.

When the line exceeds two battalious, the reviewing offieer may cause them to march past in quick time only. In sneh cases the mounted officers only will salute.

A number of companies, less than a battalion, will be reviewed as a battalion, and a siugle company as if it were with the battalion. In the latter case, the company may pass in column of platoons.

If several brigades are to be reviewed together, or in one line, this further difference will be observed: the reviewing personage, joined by the general of the division, on the right of his division, will proceed down the line, parallel to its front, and when near the brigadier-generals respectively, will be saluted by their brigades in suceession. The music of each, after the prescribed salute, will play while the reviewing personage is in front, or in rear of it, and only then.

1 Or the battalion may pass a third time at the double quick, and then re-form

In marching in review, with several battalions, in common time, the music of each succeeding battalion will commence to play when the music of the preceding one has ceased, in order to follow its battalion. When marching in quick time, the music will begin to play when the rear company of the preceding battalion has passed the reviewing officer.

The reviewing officer or personage will acknowledge the salute by raising, or taking off his cap or hat, when the commander of the troops salutes him; and also when the colors pass. The remainder of the time occupied by the passage of the troops he will be covered.

## Review of a regiment of cavalry.

740. The regimeut being in liue, the captains one pace in advance of the centre of their companies, the lieutenants commanding platoons one pace in advance of the centre of their platoons, the colonel commands:
741. Attention. 2. Prepare for review. 3. Rear rank, open order. 4. March. 5. Right-Dress. 6. Front.

At the fourth command the ranks are opened, all the officers in the rank of file-closers advancing to the front, and placing themselves on the line of officers opposite to the position they before occupied. The staff officers place themselves on the right of the rank of company officers, according to their relative rank, one pace from each other. The quartermaster-sergeaut and the sergeant-major are on the right of the front rank of the regiment.

The colonel, lieutenant-colonel, major and adjutant are posted as in order of battle.

The music is formed, at the same time, in one rank on the right of the regiment, and ten paces from it.

After the ranks are opened, the colonel commands:

## 1. Attention. 2. Draw-Sabre.

In this parade order, the regiment awaits the approach of the personage who is to review it; for whose guidance a camp color will bave been placed eighty or one hundred and fifty paces in front of the centre, according to the extent of the line and the plain in front of it.

When the reviewing personage is midway between the camp color and the colonel, the latter turns his horse to the right about on his ground, and commands:

## 1. Attention. 2. Present-Sabre;

and resumes his proper front. The officers all salute.
When the reviewing personage, who has halted until the proper compliments are paid, advances, the colonel brings his sabre to a carry, turns about as before to the line, and commands:

## 1. Attention. 2. Carry-Sabre.

When the whole line remains perfectly steady, except the colonel, who resumes his proper front.

The reviewing personage now turns off to the right of the regiment, passes thence, in front of all the officers, to the left, around the left. and behind the rank of file-closers, to the right again. While he is passing aronnd the regiment, no matter what his rank, the music will play; and when he turns off to take his station near the camp color, the music will cease.

When the music ceases, the colonel turns about, and commands:

## 1. Attention. 2. Rear rank, close order. 3. March.

At the command march, all the officers from the rank of file-closers return to their position is that rank.

The reviewing personage having taken a position near the camp color, previously placed at a proper distance, the colonel causes the regiment to break into column of companies, right in front, and commands :

Pass in review.
At this command, the band and trumpeters repair to the head of the regimental column, six paces in front of the colonel. The quarter-master-sergeant places himself ten paces in front of the colonel, two paces from the flank opposite to the guides.

The quartermaster, surgeon, etc., in one rank, in the order in which they are named, four paces in rear of the last division.

The colonel is six paces in front of the captain of the leading company.

The lieutenant-colonel on a line with the first company, six paces from the flank opposite to the guide.

The major on a line with the last company, six paces from the side opposite to the guide.

The adjutant on a line with the second company, six paces from the flank opposite to the guide.

The sergeant-major on a line with the company next to the rear, six paces from the flank opposite to the guide.

Captains, two paces in advance of the centre of their companies.
Chiefs of platoons, two paces in advance of the centre of their platoons.

Officers of the rank of file-closers, on the side opposite the guide, on a line with the chiefs of platoons.

The column is then put in march, at a walk, with the guide on the side next to the reviewing personage.

The column first passes at a walk, and afterward, if required, at a trot.

When the head of the column arrives within fifty paces of the reviewing personage, the music commences to play.

The baud having passed, the chief musician causes it to wheel out of the column aud take position opposite to the reviewing personage; the music continues to play until the last company has passed, when it ceases, and follows in the rear.

Passing at a walk, all the officers salute with the sabre as they successively arrive within six paces of the reviewing personage, turning their heads toward him.

If more than one regiment passes, the different regiments will march with intervals of about forty paces between them.

## Review of a battery of artillery.

741. The battery being in line, with the trumpeters on the right, the captain commands:
742. Attention. 2. Prepare for review. 3. To the rear, open order. 4. March. 5. Right-Dress. 6. Front.

At the third commaud, the chief of the line of caissons commands, caissons, left reverse, and places himself on the right flank sixteen yards in rear of the line of picces, facing to the left, to mark the point where the right of the line of caissons is to rest. In horse artillery, the distance is twenty yards.

At the same command, the guauers face the detachments to the rear, in foot artillery by the command about-face; and in horse artillery, they command backward.

At the command march, repeated by the chief of the line of caissons, the caissons reverse to the left, move to the rear, reverse again to the left, and align themselves by appropriate commands from the chief of the line of caissons. As soon as the ground is unmasked, the gunners repeat the command march, at which the cannoneers in foot artillery march forward, and are formed six yards in rear of their pieces; the
chiefs of caissons joining their detachments at the same time. In horse artillery, the cannoneers rein back and are halted by the gunners at the same distance.

At the fifth command, the battery is aligned; the pieces and detachments by the captain, and the caissons by the chief of the line of caissons. At the sixth command, given by the captain when the alignment is completed, the chief of the line of caissons takes his post as in line. The captain then commauds:

## Draw-Swords.

This is executed by the officers, non-commissioned officers, and ©detachments only, and the captain takes his post as in line.

In this order, the battery awaits the approach of the revicwing officer. When he is midway between the camp color and the captain, the latter turns his horse to the right about and commands:

## Present-Swords.

He immediately resumes his front and salutes. The officers, noncommissioned officers, and detachments, all salute as in cavalry; and the music plays according to the rank of the reviewing officer.

The reviewing officer having halted and acknowledged the salute, the captain brings his sword to a carry, turns about to the line as before, and commands:

## Carry-Swords.

He immediately resumes his front, the reviewing officer turns off to the right of the battery, passes along its front, and returns to the right by passing between the files of carriages or in rear of the caissons. While the revicwing officer is passing around the battery, the music plays. It ceases when be turns off to take his post at the camp color.

When the music ceases, the captain turns about and commands:

## 1. Detachments. 2. Return-Swords. 3. Battery. 4. Close order. 5. March.

In horse artillery, the first and second commands are not given.
At the fourth command, the gunners in foot artillery command left face, and in horse artillery, foruard.

At the command march, repeated by the gunvers, the cannoneers in mounted artillery take their posts as prescribed in the school of the piece. The caissons, and in horsc artillery the cannoneers, close to their proper distances in line.

The reviewing officer having taken a position near the camp color, the captain causes the cannoneers to mount, if in foot artillery, and breaks the battery into column of sections to the right by the usual commands. He then commands :

## Pass in review;

and puts the column in march, at a walk, with the guide to the right. The captain then places himself at the head of the column, four yards in advance of the chief of the leading section. The trumpeters march four yards in advance of the captain; and the chief of the line of caissons outside the column, opposite the centre, and four yards frome the left flank.

When the head of the column has arrived within forty yards of the reviewing officer, the music begins to play; and as soon as the latter has passed, it wheels out of the column to a position in front of the reviewing officer, where it faces him, and continues to play until the column has passed. It then ceases, follows in rear of the battery, and resumes its place at the head of the column after the next change of direction.

All the officers salute in succession as they arrive within six yards of the reviewing officer; casting their eyes toward him at the,same time, and bringing their swords to a carry after having passed him six yards. As soon as the captain has saluted, he places himself near the reviewing officer, remains until the rear has passed, and then rejoius his battery.

The column is so conducted as to march parallel to the line on which the battery is to form, and far enough in its rear to enable the column to wheel into line. It is then wheeled into line, the ranks opened, and the revicw terminated by a salute as at the beginning.

Wheu instructions hare been previously given to pass a second time, either at a trot or gallop, it will be done before wheeling into line; the officers passing the second time without salute.

When artillery has been passing in review with other troops, and is marching in prolongation of the line on which the different corps are to form, it may be wheeled by sections to the right, and, after gaining the neccssary distance, countermarched and established on the line.

When a battery is to march past in line, or in column of half batteries, it will be done according to the principles already described. In line the officers will be at their usual posts. In column of half batteries the captaiu will be two yards in advance of the chief of the leading balf battery; each chief of half battery two yards in frout of the centre of his command; the chief of the centre section on the left of the leading half battery, four yards from the leading driver; and
the chief of the line of caissons in the same position with respect to the rear half battery.

In all cases the trumpeters are four yards in front of the captain.
When the battery is to be minutely inspected, the captain will cause the ranks of the detachments to be opened, if required, by the commands :

## 1. Detachments. 2. To the rear, open order. 4. March.

Which will be executed as in infantry or cavalry, as the case may require.

> GUARD MOUNTING.
742. At the first call for guard mounting, the men warned for duty turn out on their company parades for inspection by the first sergeants; and at the second call, repair to the regimental or garrison parade, conducted by the first sergeants. Each detachment, as it arrives, will, under the direction of the adjutant, take post on the left of the one that preceded it, in open order, arms shouldered and bayoncts fixed; the supernumaries five paces in the rear of the men of their respective companies; the first sergeants in rear of them. The sergeant-major will dress the ranks, count the files, verify the details, and when the guard is formed, roport to the adjutant, and take post two paces on the left of the front rank.

The adjutant then commands front, when the officer of the guard takes post twelve paces in front of the centre, the sergeants in one rank, four paces in the rear of the officers; and the corporals in one rank, four paces in the rear of the sergeants-all facing to the front. The adjutant then assigns their places in the guard.

The adjutant will then command:

1. Officer and non-commissioned officers. 2. About-Face. 3. Inspect your guards-MARCh.

The non-commissioned officers then take their posts. The commander of the guard then commands:

## 1. Order-Arms. 2. Inspection-Arms;

and inspects his guard. When there is no commissioned officer on the guard, the adjutant will inspect it. During inspection the band will play.

The inspection ended, the officer of the guard takes post as though the guard were a compauy of a battalion, in open order under review;
at the same time, alse, the officers of the day will take post in front of the centre of the guard; the old officer of the day three paces on the right of the new officer of the day, one pace retired.

The adjutant will now command :

## 1. Parade-Rest. 2. Troop-Beat off;

when the music, beginning on the right, will beat down the line on front of the officer of the guard to the left, and back to its place in the right, where it will cease to play.

The adjutant then commands :

## 1. Attention. 2. Shoulder-Arms. 3. Close order-March.

At the word close order, the officer will face about; at march, resume his post in line. The adjutant then commands:

## Present-Arms.

At which he will face to the new officer of the day, salute and report, "Sir, the guard is formed." The new officer of the day, after acknowledging the salute, will direct the adjutant to march the guard in review, or by flank to its post. But if the adjutant be senior to the officer of the day, he will report without saluting with the sword then, or when marching the guard in review.

In review, the guard march past the officer of the day, according to the order of review, conducted by the adjutant, marching on t'se left of the first division; the sergeant-major on the left of the last division.

When the column has passed the officer of the day, the officer of the guard marches it to its post, the adjutant and sergeant-major retiring. The music, which has wheeled out of the column, and taken post opposite the officer of the day, will cease, and the old officer of the day salute, and give the old or stauding orders to the new officer of the day. The supernumeraries, at the same time, will be marched by the first sergeants to their respective company parades, and dismissed.

In bad weather, or at night, or after fatiguing marches, the ceremony of turning off may be dispensed with, but not the inspection.

Grand guards, and other brigade guards, are organized and mounted on the brigade parade by the staff officer of the parade, under the direction of the field officer of the day of the brigade, according to the principles here prescribed for a police guard of a regiment. The detail of each regiment is assembled on the regimental parade, verified by the adjutant, and marched to the brigade parade by the senior
officer of the detail. After inspection and review, the officer of the day dircets the several gnards to their respective posts.

The officer of the old gnard, having his guard paraded, on the approach of the new guard, commands:

## Present-Arms.

The new guard will march, in quick time, past the old guard, at shouldered arms, officers saluting, and take post four paces on its right, where, being aligned with it, its commander will order:
Present-Arms.

The two officers will then approach each other, and salute. They will then return to their respective guards, and command:

## 1. Shoulder-Arms. 2. Order-Arms.

The officer of the new guard will now direct the detail for the advanced guard to be formed and marched to its post, the list of the guard made and divided into three reliefs, experienced soldiers placed over the arms of the guard and at the remote and responsible posts, and the young soldiers in posts near the guard for instruction in their duties, and will himself proceed to take possession of the guard-house, or guard-tent, and the articles and prisoners in charge of the guard.

During the time of relieving the sentinels and of calling in the small posts, the old commander will give to the new all the information and instructions relating to his post.

The first relief having been designated and ordered two paces to the front, the corporal of the new guard will take charge of it, and go to relieve the sentinels, accompanied by the corporal of the old guard, who will take command of the old sentinels, when the whole are relieved.

If the sentinels are numerous, the sergeants are to be employed, as well as the corporals, in relieving them.

The relief, with arms at a support, in two ranks, will march by a flank, conducted by the corporal on the side of the leading front-rank man; and the men will be numbered alternately in the front and rear rank, the man on the right of the front rank being No. 1. Should an officer approach, the corporal will command earry arms, and resume the support arms when the officer is passed.

The sentinels at the guard-house or guard-tent will be the first relieved and left behind; the others are relieved in succession.

When a sentinel sees the relief approaching, he will halt and face to
it with his arms at a shoulder. At six paces, the corporal will command:

## 1. Relief. 2. Halt.

When the relief will halt and carry arms. The corporal will then add, "No. 1," or "No. 2," or "No. 3," according to the number of the post.

## Arms-Port.

The two sentinels will, with arms at port, then approach each other, when the old sentinel, under the correction of the corporal, will whisper the instructions to the new sentinel. This done, the two sentinels will shoulder arms, and the old sentinel will pass, in quick time, to his place in rear of the relief. The corporal will then command:

## 1. Support-Arms. 2. Forward. 3. March.

And the relief proceeds in the same manner until the whole are relieved.

The detachments and sentinels from the old guard having come in, it will be marched, at shouldered arme, along the front of the new guard, in quick time, the new guard standing at presented arms; officers saluting, and the music of both guards beating, except at the outposts.

On arriving at the regimental or garrison parade, the commander of the old guard will send the detachments composing it, under charge of the non-commissioned officers, to their respective regiments. Before the men arc dismissed, their pieces will be drawn or discharged at a target. On rejoining their companions, the chiefs of squads will examine the arms, etc., of their men, and cause the whole to be put away in good order.

When the old guard has marched off fifty paces, the officer of the new guard will order his men to stack their arms, or place them in the arm-racks.

The commander of the guard will then make himself acquainted with all the instructions for his post, visit the sentinels, and question them and the non-commissioned officers relative to the instructions they may have received from other persons of the old guard.

Method of escorting and receiving the color of an infantry regiment.
743. When the regiment turns out under arms, and the color is wanted, one of the flank companies in its tour, or, if both be absent, a
battalion company, other than that of the color, will be put in march to receive and escort the color.

The march will be in the following order, in quick time and without music: the drum-major and field music, followed by the band; the escort in column by platoon, right in front, with arms shifted to the right shoulder (sce No. 768), and the color-bearer between the platoons.

Arrived in front of the tent or quarters of the colonel, the escort will form line, the field music and band on the right, and arms will be carried.

The moment the escort is in line, the color-bearer, preceded by the first lieutenant, and followed by a sergeant of the escort, will go to receive the color.

When the color-bearer shall come out, followed by the lieutenant and sergeant. he will halt before the entrance; the escort will present arms, and the drums will beat to the color.

After some twenty seconds, the captain will cause the beat to cease, arms to be shouldered, and then break by platoon into column; the color-bearer will place himself between the platoons, and the lieutenant and sergeant will resume their posts.

The escort will march back to the battalion to the somed of music in quick time, and in the same order as ahove.

## Honors paid to the color.

Arrived at the distance of twenty paces from the battalion, the escort will halt and the music cease; the colonel will place bimself six paces before the centre of the battalion, the color-bearer will approach the colonel, by the front, in quick time; when at the distance of ten paces he will halt: the colonel will cause arms to be presented, and to the color to be played, which being executed, the color-bearer will take bis place in the front rank of the color-guard, and the battalion, by command, shoulder arms.

The escort, field music, and band, will return in quick time to their several places in line of battle, marching by the rear of the battalion.

The color will be escorted back to the colonel's tent or quarters in the above order.

## Method of escorting and receiving the standard of a cavalry regiment.

744. The squadrons of a regiment, commencing with the first, furnish in turn the escort of the standard.

1 The captains commanding and the second captain, alternate in command of the escort.

The escort is composed of two platoons (a troop).
The first platoon of the escort furnishes the advanced guard, composed of two men in front, with the carbine or rifle adranced or pistol raised; a corporal and four men, with drawn sabres, mareh ten paces from them.

The trumpeters, formed by fours, and condncted by the adjutant, march ten paces from the four men who precedc.

The rest of the platoon, with drawn sabres, having the licutenant at its head, marches by fours, ten paces from the trumpeters.

The standard-bearer follows immediately after, between two sergeants.

The second platoon, with drawn sabres, having the second lieutenant at the head, follows the standard-bearer, marches by fours, and furnishes the rear guard, composed of a corporal and two men, who march with drawn sabres, ten paces in rear of the second platoon.

Two other meu, with the carbine or rifle adranced, or pistol raised, march ten paces in rear.

The captain marches four paces from the left flank, opposite to the standard-bearer.

The detachment having arrived where the standard is kept, without sounding the trumpets, is there formed into line.

The adjutant dismounts, takes the standard, and gives it to the standard-bearer.

## Reception of the standard.

As soon as the standard appears, the captain orders sabres to be presented; the trumpets sound to the standard.

After this signal has been twice repeated, the captain orders the sabres to be carried, and breaks in the same order in which be came; the trumpets sound the march.

When the standard arrives in front of the right or left wing of the regiment, the colonel orders the sabres to be drawn; the trumpets cease to sound, and, with the escort, take their place in liue, passing behind the regiment.

The standard-bearer, accompanied by the two sergeants, moves toward the centre of the regiment, parallel to the front, and balts before the colonel, fronting the regiment; the colonel then orders the sabres to be presented, and the trumpets to sound to the standard; he salutes with the sabre. The standard-bearer theu takes his place in line, and the colonel orders the sabres to be carried.

The field officers salute with the sabre when the standard passes hefore them.

The standard receives the same honors on its departure as on its arrival, and is escorted to the colonel's quarters in the order prescribed above.

## Reception of one body of troops by another.

745. The commanding officer of the receiving corps, having notified the commander of the other body of his intention, brings his command into line, so that it shall be on the right of the route which it is intended the other shall take. The commander of the body receiving the compliment, should have his command in column right in front; and when he sees the other body in line, or receives an intimation from its commanding officer that he is ready to receive him, he puts his colnmn in motion; when its head is within six paces of the left of the line on its right, the latter will be brought to a present, and will continue in that position until the rear of the column has passed the right of the line. The column passes at shouldered arms, each officer salnting as soon as he comes within six paces of the left of the line. When the rear of the column has passed some twenty-five or thirty paces beyond the right of the line, the column is brought into line, on the same side with the first line. As soon as this is done, the first line breaks into colnmn right in front, and marches past the second, reeeiving the same compliments that it extended when the other body passed. After marching past, it may be formed into line again as it was at first, when both commands may be brought to an order, the officers advancing and being presented; or the column may halt long enough to allow the other command, now in line, to re-form column, when both take up the march, the leading column serving as an escort for the other.

## ORJERS.

746. The orders of commanders of armies, divisions, brigadiers and regiments, are denominated orders of such an army, division, etc. And all orders are either general or special. Orders are numbered, general and special, in separate series, each beginuing with the year.

General orders provide for the organization, discipline, instruction, and movement of the troops ; anounce the hours for roll-calls and duties; the nomber and kind of gnards, and the time when they shall be relieved; police regulations, and the probibitions required by circumstances and localites; returns to be made, and their forms; laws and regulations for the forces; promotions and appointments; eulogies or censures to corps or individuals, and generally, whatever it may be important to make known to the whole command.

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Special orders are such as do not concern the troops generally, and need uot be published to the whole command; such as relate to the march of some particular corps, the establishment of some post, the detaching of individuals, the granting requests, ctc.

An order will state, at the head, the source, place and date, and at the foot, the name of the commander who gives it, followed by the signature and title of the staff officer by whom it is written, for example:

| For an army- | Head-quarters, Army of Occupıtion, |
| :---: | :---: |
| Corpus Christi, Texas. |  |

$\left.\begin{array}{c}\text { General (or Special) Orders, } \\ \text { No. } 1 .\end{array}\right\}$
By order of General Z. T., W. S. B., Adj't General.

Fur a division-
Head-quarters, 3d D., Va. M. Winchester, Va., Dec., 18-.

General (or Special) Orders, $\}$
By order of Major-General A. B.,
C. D., Assistront Adj't General, or Dirision Inspector.

For a brigade-
Head-querters, 9th Brigadc, Va. M., CAMP NEAR -, Jua. 18-.
$\left.\begin{array}{c}\text { Geueral (or Special) Orders, } \\ \text { No. -. }\end{array}\right\}$
By order of Brigadier-General F. G.
H. I., Assistant Adj't Gcuerul, or Brigade Inspector.

For a regiment-

Orders (or Special Orders), $\}$ No. -. $\}$

> Hecul-querters, 20th Regiment, Va. M.
> C-N., Angust 18-.

By order of Colonel 0. P. Q.,
R. S., Adjutant.

Orders are ordinarily transmitted through all the intermediate commanders in the order of rank. When an intermediate commander is omitted, the officer who gives the order shall inform him, and he who receives it shall report it to his immediate superior.

The orderly hours being fixed at each head-quarters, the staff offeers and chiefs of the special services, either attend in person, or send their assistants to obtain the orders of the day; and the first sergeants of
companies repair for that purpose to the regimental or garrison headquarters.

During marches and active operations, and when the regular orderly honrs cannot be observed, all orders will be either sent direct to the troops, or the respective commanders or corps will he informed when to sead to head-quarters for them.

## MUSTERS.

747. Musters of the volunteers and militia are made at least once a year, by the brigade inspectors. Where troops are in actual servicc mnsters are made every two months; nsually on the last day of every second month. In this case they are made by an inspector-general, if present, otherwise by an officer specially designated by the commander of the army, division, or brigade ; and in the absence of the inspectorgeneral or officer specially designated, the master is made by the commander of the post.

When one inspecting officer cannot inspect all the troops himself on the day specified, the commanding officer will designate such other competent officers as may be necessary, to assist him. All stated musters of the troops should be preceded by a minnte and careful inspection in the prescribed node; and if the command be more than a company, by a review, before inspection.

The mustering officer having inspected the companies in succession, beginning on the right, returns to the first company to master it. The company being at ordered arms, with open ranks, as when inspected, the captains will, as the mustering officer approaches, command:

## 1. Attention. 2. Company. 3. Shoulder-Arms. 4. Support -Arms.

The mustering officer will then call over the names on the roll, and each man, as his name is called, will distinctly answer here, and bring his piece to a carry, and to an order.

After each company is mustered, the captain will order it to be marched to the company parade, and there dismissed to quarters, to await the inspector's visit. After mustering the companies, the mustering officer, attended by the company commanders, will visit the guard and hospital, to verify the presence of the men reported there. The muster and pay rolls are made on printed forms in accordance with the directions on them. On the muster rolls companies are designated by the name of the captain, whether present or absent. The pay roll is left blank to fill up by the paymaster.

## THE ROSTER, OR DETAILS FOR SERVICE.

748. The duties performed by detail are of three elasses. The first class eomprises, first, grand guards and outposts; second, interior guards, as of magazine, hospital, etc.; third, orderlies; fourth, police guards.

The second class eomprises, first, detaehments to protect labor on military works, as field works, communications, ete.; second, working parties on sueh works; third, detaehments to proteet fatigues.

The third class arc all fatigues, without arms, in or out of camp. In the cavalry, stable guards form a separate roster, and count before fatigue.

The rosters are distinct for each elass. Offieers are named on them in the order of rank. The details are taken in suecession in the order of the roster, beginning at the head. Lientenants form one roster, the first and second lieutenants are entered on it alternately. The senior first lieutenant is the first on the roster; the senior second lieutenant is the second, ete. The captains form one roster, and are exempt from fatigue, except to superintend issues. A captain commanding a battalion temporarily, is exempt from detail, and duty falling to him passes. Lieutenant-eolonels and majors are on one roster. They may be detailed for duties of the first and second classes, when the importanee of the guards and detachments requires it. Their roster is kept at division and brigade lead-quarters. The rosters of the captains and licntenants are kept at regimental head-quarters, and those of the companies by the first sergeants. In the eompany, sergeants, corporals and privates form distinet rosters.

Officers and non-commissioned officers, and soldiers, take duties of the first class in the order stated, viz., the first for the detail, takes the grand guards; the next, the interior guards; the last, the police guard; and the same rule in regard to the details and duties of the seeond elass. In the details for the third elass, the senior officer takes the largest party. The party first for detail takes the serviee ont of camp.

When the offieer whose tour it is, is not able to take it, or is not present at the hour of marching, the next after him takes it. When a guard has passed the ehain of sentinels, or an interior gnard has reached its post, the officer whose tonr it was cannot then take it. He takes the tour of the officer who has taken his. When an officer is prevented by sickness from taking his tour, it passes. These rules apply equally to non-eommissioned officers and soldiers.

Duties of the first and second class are eredited on the roster when the guards or detachments have passed the chain of sentinels, or an
interior guard has reached its post; fatigue duties when the parties lave passed the chain or begun the duties in camp.

Every officer, non-commissioned officer, or soldier, on duty of the first class, or who is of the next detail for such duty, takes, when relieved, the duty of the second or third class that has fallen to him during that time, unless he has marehed for detachment of more than twenty-four hours.

Soldiers march with knapsacks for all dutics of the first class; and with arms and equipments complete on all working parties out of camp, unless otherwise ordered. In the cavalry, horses are packed for all mounted service; and dismounted men, and those whose horses are not in order, are preferred for the detail for dismounted service. Those who are mounted are never employed on those scrvices, if the number of the other class are sufficient.
Every non-commissioned officer and soldier in the cavalry detailed for dismounted service must, before he marches, take to the first sergeant of his troop, or sergeant of his squad, his horse equipments and valise ready packed. In case of alarm, the first sergeant sees that the horses of these men are equipped and led to the rendezvous.
In the field, artillerymen are not called upon for any duty outside their own batteries or camps.

These rules in regard to the roster apply also to service in garrison.

## DUTIES OF GUARDS.

749. Sentinels will be relieved every two hours, unless the state of the weather, or other causes, should make it necessary or proper that it be done at shorter or longer intervals.

Each relief. before mounting, is inspected by the commander of the guard or of its post. The corporal reports to him, and presents the old relief on its return.

The countersign, or watchword, is given to such persous as are entitled to pass during the night, and to officers, non-commissioned oficers, and sentinels of the guard. Interior guards receive the countersign only when ordered by the commander of the troops.

The perole is imparted to such officers only as have a right to visit the guards, and to make the grand rounds; and to officers commanding guards.

As soon as the new guard has been marched off, the officer of the day will repair to the office of the commanding officer and report for orders.

The officer of the day must see that the officer of the guard is furnished with the parole and countersigu befure retrect.
The officer of the day visits the guards during the day, at such times
as he may deem nceessary, and makes his rounds at night at least once after twelve o'clock.

Upon being relieved, the officer of the day will make such remarks in the report of the officer of the guard as circumstances require, and present the same at head-quarters.
© Commanders of guards learing their posts to visit their sentinels, or un other duty, are to mention their intention, and the probable time of their absence, to the next in command.

The officers are to remain constautly at their guards, except while visiting their sentinels, or necessarily engaged elsewhere on their proper duty.

Neither officers nor soldiers are to take off their clothing or accoutrements while they are on guard.

The officer of the guard must see that the countersign is duly communicated to the sentinels a little before twilight.

When a fire breaks out, or any alarm is raised in a garrison, all guards are to be immediately under arms.

Inexperienced officers are put on guard as supernumeraries, for the purpose of instruction.

Sentinels will not take orders, or allow themselves to be relieved, except by an officer or uon-commissioned officer of their guard or party, the officer of the day, or the commanding officer ; in which case the orders will be immediately notified to the commander of the guard by the officer giving them.

Sentinels will report every breach of orders or regulations they are instructed to enforce.

Sentinels must kecp themselves on the alert, observing everything that takes place within sight and hearing of their post. They will carry their arms habitually at support, or on either shoulder, but will never quit them. In wet weather, if there be no sentry-bos, they will secure arms.

No sentinel shall quit his post or bold conversation not necessary to the proper discharge of his duty.

All persons, of whatever rank in the service, are required to observe respect toward sentinels.

In case of disorder, a sontinel must call out the guard; and if a fire take place, he must cry-"Fire!" adding the number of his post. If, iu either case, the danger be great, he must discharge his firelock before calling out.

It is the duty of a sentinel to repeat all calls made from posts more distant from the main body of the guard thau his own, and no sentinel will be posted so distant as not to be heard by the guard, either directly or through other sentinels.

Sentinels will balt, come to attention, and present arms to general
and field officers, to the officer of the day, and to the commanding officer of the post. To all other officers they will carry arms.

When a sentinel, in bis sentry-box, sees an officer approaching, be will stand at attcution, and as the officer passes will salute him hy bring the left hand briskly to the musket, as high as the right shoulder.

The sentinel at any post of the guard, when he sces any hody of troops, or an officer entitled to compliment approach, must call: "Turn out the guard;" and announce who approaches.

Guards do not turn out as a matter of compliment after sunset ; but sentinels will, when officers in uniform approach, pay them proper attention, by facing to the proper front, and standing steady at shouldered coms. This will be observed until the evening is so far advanced that the sentinels begin challenging.

After retreat (or the hour appointed by the commanding officer), until hroad daylight, a sentinel challenges every person who approaches him, taking, at the same time, the position of arms port. He will suffer no person to come nearer than within reach of his bayonet, until the person has given the countersign.

A sentinel, in challenging, will call out- "Who comes there?" If answered-"Friend, with the countersign," and he be instructed to pass persons with the countersign, he will reply - "Adrance, friend, with the countersign." If answered - "Friends," he will reply - "Halt, friculs ; adcence, one, with the countersign." If answered -" Relief," "Patrol," or "Grand rounds," he will reply - " Halt. Advance, sergeant (or corporal), with the countersiyn,' and satisfy himself that the party is what it represeuts itself to be. If he have no authority to pass persons with the countersign, if the wrong countersign be given, or if the persons hare not the countersign, he will cause them to stand, and call-" Corporal of the guard."

In the daytime, when the scntinel before the guard sees the officer of the day approach, be will call - "Turn out the guurd, ofticer of the day." The guard will be paraded, and salute with presented arms.

When any person approaehes a post of the guard at night, the sentinel before the post, after challenging, canses him to halt until examined by a non-commissioned officer of the guard. If it be the officer of the day, or any other officer entitled to inspect the guard and to make the rounds, the non-commissioned officer will call - " Turn out the gutid," when the guard will be paraded at shouldered arms, and the officer of the guard, if he thinks necessary, may demand the countersigu and parole.

The officer of the day, wishing to make the rounds, will take an escort of a non-commissioned officer and two men. When the rounds are challenged by a sentinel, the sergeant will answer - "Grand
rounds," and the sentinel will reply-" Halt, grand rounds." Advance, sergeant, with the countersign." Upon which the sergeant advances and gives the conntersign. The sentinel will then cry-"Advance, rounds," and stand at a shoulder until they have passed.

When the sentinel before the guard challenges, and is answered "Grand rounds," he will reply - "Halt, grand rounds. Turn out the guard; grand rounds." Upon which the guard will be drawn up at sbouldered arms. The officer commanding the guard will then order a sergeant and two men to advance; when within ten paces, the sergeant challenges. The sergeant of the grand rounds answers - "Grand rowndr." The sergeant of the guard replies - "Adrance, sergeant, with the comtersign." The sergeant of the rounds advances alone, gives the countersign, and returns to bis round. The sergeant of the guard calls to his officer - "The counterwign is right," on which the officer of the guard calls - "Adeance, roumds." The officer of the rounds then advances alone, the guard standing at shouldered arms. The officer of the rounds passes along the front of the guard to the officer, who keeps his post on the right, and gives him the parole. He then examines the guard, orders back his escort, and, taking a new one, proceeds in the same manner to other guarls.

All material instructions giren to a sentinel on post by persons entitled to make grand rounds, ought to be promply notified to the commander of the guard.

Any general officer, or the commander of a post or garrison, may visit the guards of his command, anll go the grand rounds, and be received in the same manner as preseribed for the officer of the day.

## FORM OF GUARD REPORT.

Report of a Guard mounted at - , on the - , and relieved on the - .


## LIST OF THE GUARD.



LIST OF PRISONERS.

A. B. C.,

Lieut. ——, Regiment ——, Commanding the Guard.

## GUARDS.

750. Guards, in time of war, are bodies of men whose duties are to secure an army or place from being surprised by an enemy.

By a proper disposition of the guards and by a faithful discharge of the duties imposed upon them, a whole army can at all times, and
under all circumstances, be kept in readiness for action; the larger part of the army, eren in the pursuit of an enemy, and momentarily expecting to meet him, may with safety seek that repose which is so neeessary to keep up the physical energies of the forces; and as the guards generally constitute but a comparatively small portion of the command, and are frequently reliered, no soldier is likely to be called upon to endure an amount of fatigue greater than a man in his vigor ought to bear.
In erder that the guards of an army may protect it properly, they must be so posted as to cover both the front and flanks of the pesition, and at the same time have possession of all the avenues of approach to it. The ordinary arrangement of guards is such, that no matter how far the outer line may lie from the main body, it may rally from point to point, if driven in by an adrancing enemy, gaining strength each time, until it finally reaehes the main body. Thus eren the most advanced posts need never be cut off, while it would be impossible for an enemy to surprise the main body.

The usual arrangement consists of two or three lines of posts, within relief of each other, and extending around the main body as a centre, the exterior line throwing out a chain of sentinels in its front, and so distributed as to prevent the approach of any one without being seen.
4551. The inner line consists of what are denominated police gnards; there is a police guard fer each regiment, which is posted within the regimental camp (see camp of an infantry regiment). These guards are of sufficient strength to supply a chain of sentinels along the front and rear of the regiment, connecting it with the regiments on the right and left, thus forming a chain of sentinels close to and all around the camp.

The next liue consists of a uumber of strong detachments, termed pickets; they are posted upon the main arenues of approach to the position, and serve as supports to the exterior lines, upon which they rally wheu driven in by the enemy.

Next beyoud the pickets is the line of grand guards, and of course occupying a wider circumference; they are posted in the most farorable position for observing the enemy, and throw out the extreme line, called the line of outposts. The line of grand guards, while supported by the piekets, in turn furnishes support to the outposts when necessary.
Beside these various lines, patrols are kept up between the varions posts, to keep the one informed of the coudition of the other; and, also between the outposts and the extreme line of sentinels, to see that the duties of the latter are properly performed.

This arrangement secures positions farorable for observation and mutual support.
" The duties of the outposts, and of the grand guards which form their supports, are strictly those of observation. If attacked, they offer no resistance further than to enable them to feel the enemy perfectly, and never lose sight of him. The task of bolding the enemy in check by a vigorous resistance, so as to proeure sufficient time for the main body to make its disposition for battle, is consigned to the pickets." (Mahan.)

## Police guards.

752. The police guard is detailed every day from eaeh regiment, and eonsists of two sergeants, three corporals, two musicians, and men enough to furnish the neeessary sentinels and patrols. The men are taken from all the companies, from eaeh in proportion to its strength.

The guard is commanded by a lieutenant, under the supervision of a eaptain as regimental offieer of the day. It furnishes ten sentinels at the camp; one over the arms of the guard ; one at the eolonel's tent; three on the color front; one of them over the colors; three, fifty paees in rear of the field offieer's tents ; and one on eaeh flank, between it and the next regiment. If it is a flank regiment, one more sentinel is posted on the outer flank.

An advanced post is detaehed from the police guard, composed of a sergeant, a eorporal, a drummer, and nine men to furnish sentinels and the guard over the prisoners. The men are the first of the guard roster from each eompany. The men of the adranced post must not leave it under any pretext. Their meals are sent to the post. The advanced post furnishes three sentinels; two a few paees in front of the post, opposite the right and left wing of the regiment, posted so as to see as far as possible to the front, and one over the arms.

In the cavalry, dismounted men are employed in preference on the poliee guard. The mounted men on guard are sent in suecession, a part at a time, to groom their horses. The advanced post is always formed of mounted men.

In each company, a eorporal has charge of the stable guard. His tour begins at retreat, and ends at moruing stable-eall. The stable guard is large enough to relieve the men on post every two hours. They sleep in their tents, and are ealled by the eorporal when wanted. At retreat he eloses the streets of the eamp with eords, or uses other preeautions to prevent the escape of loose horses.

The officer of the day is charged with the order and cleanliness of the camp: a fatigue is furnished to him when the number of prizoners
is insufficient to clean the camp. He bas the calls beaten by the drummer of the guard.

The police guard and the advanced post pay the same honors as other guards. They talse arms when an armed body approaches.

The sentinel over the colors has orders not to permit them to be moved except in the presence of an escort; to let no one touch them but the color-bearer, or the sergeant of the police guard when he is accompanied by two armed men.

The sentinels on the color front permit no soldier to take arms from the stacks, except by order of some officer, or a non-commissioned officer of the guard. The sentinel at the colonel's tent has orders to warn him, day or night, of any unnsual morement in or about the camp.

The sentinels on the front, flanks, and rear, see that no soldier leaves camp with horse or arms unless conducted by a non-commissioned officer. They prevent non-commissioned officers and soldiers from passing out at night, except to go to the sinks, and mark if they return. They arrest, at any time, suspicious persons prowling about the camp, and at night, every one who attempts to enter, even the soldiers of other corps. Arrested persons are sent to the officer of the guard, who sends them, if necessary, to the officer of the day.

The sentinels on the front of the advanced post have orders to permit neither non-commissioned officers nor soldiers to pass the line, without reporting at the advanced post; to warn the advanced post of the approach of any armed body, and to arrest all suspicious persons. The sergeant sends persons so arrested to the officer of the guarrl, and warns him of the approach of any armed body.

The sentinel over the arms at the advanced post guards the prisoners and keeps sight of them, and suffers no one to converse with them without permission. They are only permitted to go to the sinks one at a time, and under a sentinel.

If any one is to be passed out of camp at night, the officer of the guard sends him under escort to the advanced post, and the sergeant of the post has him passed over the chain.

At retreat, the officer of the guard has the roll of his guard called, and inspects arms, to see that they are loaded and in order; and risits the advanced posts for the same purpose. The sergeant of the police guard, accompanied by two armed soldiers, folds the colors and lays them on the trestle in rear of the arms. He sees that the sutler's stores are then closed, and the men leave them, and that the kitehen fires are put out at the appointed hour.

The officer of the day satisfies himself frequently during the night of the vigilance of the police guard and advanced post. He prescribes
patrols and rounds to be made by the officer and non-commissioned officers of the guard. The officer of the guard orders them when he thinks necessary. He visits the sentinels frequently.

At reveille, the police guard takes arms; the officer of the guard inspects it and the advanced post. The sergeant replants the colors in place. At retreat and reveille the adraneed post takes arms; the sergeant makes his report to the officer of the guard when he visits the post.

When necessary, the camp is covered at night with small outposts, forming a double ebain of sentinels. These posts are under the orders of the commander of the police guard, and are visited by his patrols and rounds.

The offieer of the guard makes his report of his tour of serviee, including the advanced post, and sends it, after the guard is marched off, to the officer of the day.

When the regiment marches, the men of the police guard return to their companies, except those of the advanced post. In the cavalry, at the sound "boot and saddle," the officer of the guard sends one half the men to saddle and paek; when the regiment assembles, all the men join it.

When the camping party preeedes the regiment, and the new police guard marebes with the camping party, the guard, on reaehing the eamp, forms in line thirty paces in front of the eentre of the ground marked for the regiment. The officer of the guard furnishes the sentinels required by the eommander of the camping party. The advanced post takes its station.

The advaneed post of the old poliee gnard takes eharge of the prisoners on the march, and marehes, bayonets fixed, at the centre of the regiment. On reaehing camp, it turns over the prisoners to the new advanced post.

## PICKETS.

753. The detail for the pieket is made daily, and is composed of a lieutenant, two sergeants, four corporals, a drummer and about forty privates for each regiment. For a smaller foree, the picket is in proportion to the strength of the detachment. The duty of the pickets is to hold the enemy in check, and the points which they take up should, if possible, be susceptible of good defenee; sueh as villages, defiles, etc.; when these advantages do not present themselves, temporary obstacles, such as abatis, etc., should be resorted to. The points occupied by the piekets should be about midway between the line of outposts and the position of the main body.

Small posts should be thrown forward by the pickets, between them and the line of grand guards. These give greater security to the pickets, and furnish support to the grand guard.

## GRAND GUARDSAND OUTPOSTS.

754. The numbers, strength and position of grand guards are regulated by the commanders of brigades; in detached corps, hy the commanding officer. When it can be done, the grand guards of infantry and cavalry are combined, the cavalry furnishing the adranced sentinels. When the caralry is weak, the grand guards are infantry, but furnished with a few cavalry soldiers, to get and carry intelligence of the enemy.

The strength of the grand guard of a brigade will depend on the strength of the regiments, the nature of the country, the position of the enemy, and the disposition of the inhabitants. It is usually commanded by a captain.

Under the supervision of the generals of division and brigade, the grand guarls are especially under the direction of a field officer of the day in each brigade. In case of necessity, captains may be added to the roster of lieutenant-colonels and majors for this detail.

Grand guards usually mount at the same time as the other guards, but may mount before daybreak if the general of brigade thinks it necessary to double the outposts at this time. In this case they assemble and march without noise, and during the march throw out scouts; this precaution should always be taken in the first posting of a grand guard. The doubling of guards weakens the corps and fatigues the men, and should seldom be resorted to, and never when preparing to march or fight.
755. A grand guard is conducted to its post in the first instance by the field officer of the day, guided by one of the staff officers who accompanied the geueral in his reconnoissance. After the post has been established, the commander sends to the field officer of the day, when necessary, a soldier of the guard to guide the relieving guard to the post. He also sends to him in the evening a corporal or trusty man of the guard, for the note containing the parole and countersign, and sends them before dark to the outposts. He will not suffer bis guard to be relieved except by a guard of the brigade, or by special orders from competent authority.

If there is no pass to be observed or defended, the grand guards are placed near the centre of the ground they are to observe, on sheltered, and, if possible, bigh ground, the better to conceal their strength and observe the enemy; they ought not to be placed near the edge of a wood. When, during the day, they are placed very near, or in sight of the enemy, they fall back at night on parts selected farther to the rear.

After a grand guard is posted, the first eare of the commander and of the ficld officer of the day is to get news of the enemy: then to reconnoitre his position, and the roads, bridges, fords and defiles. This reconnoissance determines the force and position of the outposts and their sentinels day and night. These posts, when of infantry, should be about 200 paces in front of the line of grand gnards, and of cavalry from 600 to 800 ; and are commanded by officers or non-commissioned officers, according to their importance. Cavalry posts may be relieved every four or eight hours.

The commander of a grand guard receives detailed instructions from the general and field officers of the day of the brigade, and instructs the commanders of the outposts as to their duties, and the arrangements for the defence or retreat. The commanders of grand guards may, in urgent cases, change the positions of the outposts. If the outposts are to change their position at night, they wait until the grand guard has gotten its position, and darkness hides their movements from the enemy; then march silently and rapidly under charge of an officer.

In detached corps, small posts of picked men are at night sent forward on the roads by which the enemy may attack or turn the position. They watch the forks of the roads, keep silence, conceal themselves, light no fires, and often change place. They annuance the approach of an enemy by signals agreed upon, and retreat, by routes examined during the day, to places selected, and rejoin the gnard at daybreak.

Grand guards have special orders in each case, and the following in all cases: to inform the nearest posts and the field officer of the day, or the general of brigade, oif the march and movements of the enemy, and of the attacks they receive or fear; to examine every person passing near the post, particularly those coming from without; to arrest suspicions persons, and all soldiers and eamp-followers who try to pass out without permission, and to send to the general, unless otherwise directed, all country people who come in.
756. All out-guards stand to arms at night on the approach of patrols, rounds, or other parties; the sentinel over the arms will call them out.

The sentinels and videttes are placed on points from which they can see farthest, taking care not to break their connection with each other or with their posts. They are concealed from the enemy as much as possible by walls, or trees, or elevated ground. It is generally even of more advantage not to be secn than to see far. They shonld not be placed uear covers, where the enemy may capture them. A sentinel shonld always be ready to fire; videttes carry their carbines or pistols in their bands. A sentinel mnst be sure of the presence of an enemy before he fires; once satistied of that, he must fire, though all defence
on his part be useless, as the safety of the post may depend on it. Sentinels fire on all persons deserting to the cnemy.

If a sentinel's post must be where he cannot communicate with the guard, a corporal and three men are detached for it, or the sentinels are donbled, that one may communicate with the gnard. During the day communication may be made by signals, such as raising a cap or handkerchief. At night sentinels are placed on low ground, the better to see objects against the sky.

To lessen the duty of rounds, and keep more men on the alert at night, sentinels on outposts are relieved every hour. To prevent sentinels from being surprised, it is sometimes well to precede the countersign by signals, such as striking the musket with the band, striking the hands together, etc.

On the approach of any one at night, the outpost sentinel orders"Hult!" If the order is not obeyed, after being repeated once, he fires. If obeyed, he calls-"Who goes there?" If answered-" Rounds," or "Patrol," he says-"Adcance with the countersign." If more than one advance at the same time, or the person who advances fails to give the countersign or signal agreed on, the sentinel fires and falls back on his guard. The sentinel over the arms, as soon as his hail is answered, turns out the guard, and the corporal goes to reconnoitre. When it is desirable to hide the position of the sentinel from the enem'y, the hail is replaced by signals; the sentinels gire the signal, and those approaching the counter signal.
With raw troops, or when the light troops of the enemy are numerous and active, and when the country is broken or wooded, the night stormy or dark, sentinels should be doubled. In this case, while one watches, the other, called a fying sentinel, moves about, examining the paths and hollows.
The commanders of grand guards visit the sentinels often; change their position when necessary; make them repeat their orders; teach them under what circumstances and at what signals to retire, and partieularly not to fall back directly on their guard, if pursued, but to lead the enemy in a circuit.
757. At night half the men of the grand guard off post watch under arms, while the rest lie down, arms by their side. The horses are always bridled; the horsemen hold the reins and must not sleep. An hour before break of day, infantry grand guards stand to arms, and cavalry mount. At the outposts some of the infantry are all night under arms, some of the cavalyy on horseback.-

The commander of a grand guard regulates the numbers, the hours, and the march of patrols and rounds, according to the strength of his command and the necossity for precantion ; and, accompanied by those
who are to command the patrols and rounds during the night, he will reconnoitre all the routes they are to follow. Patrols and rounds march slowly, in silence, and with great precaution; halt frequently to listen and examine the ground. The rounds cousist of an officer or non-commissioned officer, and two or three men. Toward the break of day the patrols ought to be more frequent, and sent to greater distances. They examine the hollow ways and ground likely to conceal an enemy, but with great caution, to avoid being cot off or engaged in an unequal combat; if they meet the enemy, they fire and attempt to stop his march. While the patrols are out, the ontposts are under arms.

Caralry patrols should examine the country to a greater distance than infantry, and report to the infantry guard everything they observe. The morning patrols and scouts do not return until broad daylight; and when they return the night sentinels are withdrawn and the posts fur the day resumed.

On their return commanders of patrols report in regard to the ground and everything they have observed of the movements of the enemy or of his posts, and the commander of the grand guard reports to the field officers of the day. The fires of grand guards should be hidden by a wall, diteh, or other screen. To deceive the cnemy, fires are sometimes made on unoceupied ground. Fire are not permitted at small posts liable to surprise.

If a borly of troops attempt to enter the camp at night, unless their arrival has been announced, or the commander is known to, or is the bearer of a written order to the commander of the grand guard, be stops them, and sends the command under escort to the field officer of the day, and at the same time warns the posts near him.

Bearers of flags are not permitted to pass the outer chain of sentinels; their faces are turned from the post or army ; if necessary, their eyes are bandaged; a non-commissioned officer stays with them to prevent indiscretion on the part of sentinels.

The commander of the guarl receipts for dispatches, and sends them to the field officer of the day or general of brigade, and dismisses the bearer; but if be bas discovered what ought to be concealed from the enemy, he is detained as loug as necessary.

Deserters are disarmed at the outposts, and sent to the commander of the grand guard, who gets from them all the information he can concerniug the enemy. If many come at night, they are received cautiously, a few at a time. They are sent in the morning to the field officer of the day, or to the nearest post or camp, to be conducted to the general of the brigade. All suspected persons are secreted by the commanders of the outposts.

## Article XIII.

## DUTIES OF CAPTAINS-COMPANIES-DUTIES IN CAMP AND GARRISON, ETC.

758. Captains or commanders of companies fill one of the most important stations in the service, when they are viewed in relation to the dircet influence they exercise upon the soldiery; to them attaches the high responsibility of the instruction, good order, efficiency, and discipline of their companies; and no one should be willing to accept the post who is not qualified, or ready to qualify himself, for a faithful discharge of all the duties of the office.

It is the duty of every captain to make bimself familiar with tactics, at least so much of it as will enable him to command his company properly in every situation; and to become perfectly acquainted with its interior management.

In the case of a vacancy in the officc of captain, or in his absence, the command of the company devolves on the officer next in rank. Captains should require their lieutenants to assist them in the performance of all duties, the knowledge thus acquired being essential to every company officer.

In the volunteers and militia, the captain and lieutenant are elected by the company after its organization; the non-commissioned officers are cither elected in the same way ; or are selected by the captain.
759. Arms and accoutrements are issued by order of the adjutantgeneral to volunteer companies after their organization, and to such of the militia as the Governor may deem it proper to arm. Before a voluntecr company can receive its arms, the captain must procure the following certificate from the colonel of the regiment to which he is attached:

Form of Inspection Return to enable a Volunteer Company to receive Public Arms.

I, A. B., commandant of the - Regiment of Virginia Militia, do hereby certify, that on the -_ day of -_, I mustered and inspected the (troop of cavalry, company of artillery, company of light
infantry or riflemen, as the fact may be) commanded by Captain __ .......... (attached to or belonging to, as the fact may be) the said regiment: at which muster and inspection there were of the said company - men, fully and completely uniformed, in the mode prescribed by law.

Given under my hand this __ day of ——_, 18—. ${ }^{1}$
760. The militia laws of many of the States permit volunteer companies to choose their own uniforms; all experience proves that the plainest and simplest uniform is the best for service. It is a mistake to suppose that handsome and expensive uniforms are to be preferred; the best uniform is that which combines comfort, appropriateness and durability.

Plain and substantial overcoats, with capes, should always form a part of the uniform; and sonte simple fatigue dress, to be worn when off duty, or on fatigue, will always be found to be a great saving to the uniform.

Each man of the company should be provided with a knapsack for his clothing, a haversack for his rations, and one or two thick blankets. In addition, there should be one bedsaek for every two men, to be made of substantial linen or cotton goods; it should be made about six and a half feet long, by three and half feet wide, sewed up at both ends, and having a slit in the centre, provided with strings to tie it elose, so as to prevent the straw working out. The haversack is made of white linen or cotton duck; it is worn from the right shoulder to the left side it should be large enough to contain at least three day's rations of bread and meat, and would be much improved by having a small tin box in it large enough to contain the meat ration. The company should at all times be supplied with tents, ete., for service in the field; together with the requisite number of camp kettles, tin table furniture, etc.
761. There are several forms of tents-the common tent, covering an area of about seven fect square, and capable of accommodating from five to six men ; the wall tent, usually used by officers, ahout nine feet square, and having its roof protected by a second piece of canvas, known as the "fly;" the Sibley tent, which is eonical in shape, has but a single central pole, with an arrangement at the top to admit of a fire in the centre for cooking purposes, or for comfort in cold weather, and sufficiently large to accommodate from twelve to fifteen men; and the shelter tent of the French. The Sibley tent is in general use in the U. S. service.

A new invention has been lately introduced into the U. S. service,
which promises to be very useful: it is called the tent knapsaek, and serves the purpose of a knapsack on the march, and a shelter tent when in camp. It is a picce of gutta-percha, five feet three inches long, and three feet eight inches wide, with double edges on one side, and brass studs and button holes along two edges, and straps and buckles on the fourth; with two sticks, three feet eight inches long, by one and a half inches in diameter, and a small cord. When used as a knapsack, the clothing is packed in a cotton bag, and the gutta-perch sheet is folded around it, lapping at the ends. The clothing is thus protected by two or three thicknesses of gutta-percha; the knapsack adapts itself to the size of the contents, so that a compact and portable bundle can be made, whether the "kit" be entire or not; and with the cotton bag, it forms a couvenient, commodious, and desirable receptacle for all a soldier's clothing and necessaries.

The studs and eyclets along two edges of the tent knapsack are for the purpose of fastening a number of them together, and thus making a large sheet which may be used as a shelter tent. When used, the sheet is to be stretched on a eord supported by two sticks, or by two rifles, muskets, or carbines, and pinned down at the sides with small pins. The sheet of four knapsacks is ten feet six inches long, and seven feet four inches wide, and when pitched on a rope four feet fọur inches above the grouud, covers a horizontal space of six feet six inches wide, and seren feet four inches long, which will accommodate from five to seven men. Or four of these kuapsacks may be united, an edge pinned to the ground, and the opposite one secured to a pole facing a fire, forming a half-faced camp.
762. Every man should be provided with the following articles at all times, such as are not on the person to be kept in the knapsack:

Two woollen undershirts.
Two pair thick cotton drawers.
Four pair woollen socks.
Two pair stout shoes, with broad, thick soles, for fuotmen.
One pair boots, and one pair sboes, for horsemen.
Towels, handkerchiefs, comb and brush, and tooth-brush. Stout linen thread, large needles, a bit of wax, a few buttons, paper of pins, and a thimble, all contained in a small buckskin or stout cloth bag.

1n addition, every man should be supplied with a tin plate; quart cup with the handle well riveted on, so as to serve the soldier for making his coffee, etc., in ease of necessity, as well as for an ordinary drinking cup; knife, fork, and spoon. The plate may be carried in the knapsack, or on the outside of it under the straps, or all the plates of the company may be packed in the eamp-kettles; the cup may be carried on the waist belt or on the knapsack strap, and the knife, fork,
and spoon should be carried in a leatherb sheath which slips on to the waist belt, to be worn in front, and on the left of the centre of the body.

Every company should be provided with a small chest, partitioned off into several compartments, and large enough to contain a week or ten days' issue of the small rations, such as beans, rice, coffee, sugar, salt, ctc. The issues of bread, pork, cte., should be transported in the original packages.

When a militia company is called into service, the captain should, at the earliest possible moment, have it properly uniformed and equipped, and taught how to take care of its arms, clothing, ctc.; each man should be provided with his knapsack, haversack, blanket, knife and fork, spoon, tin plate, and cup.

Canteens are also necessary in most cases; they are worn over the haversack.
763. The captain shall cause the men of his company to be numbered in a regular series, including the non-commissioned officers, and divided into several squads, each to be put under the charge of a noncommissioned officer. As far as practicable, the men of each squad are quartered together.

Each of the lieutenants is charged with a squad for the supervision of its order and cleanliness; aud captains should require their subalterns to assist them in the performance of all company duties.

The utmost attention shonld be paid by captains to the cleanliness of their men, as to their persons, clothing, arms, accoutrements, and also as to their quarters or tents.

The name of each soldier should be labelled on his bunk in quarters, and his company number should be placed against his arms and accoutrements.

The arms are placed in arm-racks, the stoppers in the muzzles, the cocks let down, and the bayonets in their scabbards, the accoutrements suspended over the arms, and the swords or sabres, when these are worn, hung up by the belts on pegs.

The knapsack of ea $\cdot h$ man should be placed at the foot of his bunk when he is in quarters, packed with his effects, and ready to be slung; the overcoat rolled, strapped, and placed under the knapsack; the cap on a shelf, and his boots well cleaned. Dirty clothes should be kept in an appropriate part of the knapsack; nothing to be put under the bedding.

Cooking utensils and table furniture should be clean, and in their appropriate places; blacking and brushes out of sight; the fuel in boxes.

The cleaning up should take place at least once a week. The chiefs
of squads should eause bunks and bedding to be overhauled, lloors cleaner, and arms, accoutrements, etc., all put in order.

Non-eommissioned officers, in eharge of squads, should be held inmediately responsible that their men observe what is prescribed above : that they wash their hands and faees daily; that they brush or comb their heads and beards; that those who go on duty put their arins, accoutrements, dress, etc., iu the best order.

Commanders of companies should see that the arms and aceoutrements in possession of the men are always kept in good order, and that proper eare is taken in cleaning them.

Arms should not be faken to pieces without permission of an offieer. Bright barrels should be kept clean and free from rust without polishing them; eare should be taken not to bruise or bend the barrel. After firing, wash out the bore, wipe it dry, and then pass a bit of eloth, slightly greased, to the bottom. In these operations, a rod of wood with a loop on one end is to be used instead of the rammer. The barrel, when not in use, should be elosed with a stopper. For exercise, each man should keep himself provided with a pieee of sole leather to fit the cap or countersink of the hammer, to prevent breaking the nipple.

All field pieces in the possession of artillery companies should be kept clean and dry; their vents frequently examined to see that they are elear; the elevating screw wiped clean, worked and oiled. When tarpaulins are placed over them, they should oecasionally be removed, the guns and carriages brushed off, and, if damp, allowed to dry.

The implements should all be kept clean and under cover; the harness and leather articles should be brushed and greased with ueat's-foot oil as often as their condition requires it, and if they have a reddish hue, mix a little lamplack with the oil. First brush the leather, then pass over it a sponge wet with warm water, and apply the oil before the leather is quite dry.

Arms should not be left loaded in armories, quarters, or tents, or when the men are off duty, except by special orders. The ammunition in the possession of the men should be inspected frequently, and any damaged, wasted, or lost by negleet, should be paid for.

Knapsacks should be black; they should be marked on the outside with the number of the regiment, and on the inside with the letter of the eompany, and the number of the soldier, on such part as will readily be seen at inspections.

Haversacks should be marked on the flap with the number and name of the regiment, the letter of the company, and the number of the soldier.

Both officers and men should wear the prescribed uniform in camp or garrison.

In camp or quarters, the officers should visit the kitchen daily and inspect the kettles, food, ete., and at all times carefully attend to the messing and ceonomy of their companics.

The company rations are nsually taken charge of by the orderly sergeant. and issued daily to the couks by whom they are prepared and served to the company. The men of the company serve in turn as cooks, two being the usual number serving at ouce. When in camp, the men present themselves at meal times to the cooks, who issue to each man in turn his proper allowance; in garrison or quarters the tables are set out, and the cooks place each man's ration on his plate, and in his cup, lefore the company is marched in.

When not actually in the fich the ration is in most cases more than sufficient, so that by care on the part of the orderly sergeant and cooks, there is more or less saved on the rations of the company ; this saving is sold for the benefit of the company, and constitutes what is denominated the Company Fund.

## DUTIES IN CAMP AND GARRISON.

764. The duties in camp and garrison are to be conducted, as far as practicable, in the same manner aud on the same principles.

The Rereille is the signal for the men to rise, and the sentincls to leave off challenging. It is nsually soumber at dawn of day, except when the troops are on the march, when the sigual may be sounded at a much earlier homr. The men form on their company parade grounds, ant as soon as the ruveille cases the rolls are callel by the orderly sergeants, superintended by a commissionet apjicer.

Immediately after the roll call (after stable duty in the cavalry and light artillery), the tents or quarters should be put in order by the men of the companies, superintended by chiefs of squads: the parades, streets of the camp, etc., are cleaned by the police party of the day, in charge of a non-commissioned officer, and superintended by the officer of the day, and the guard house or guard tent ly the guard or the prisouers, if there are any.

Breakfust cull is somuded at - obloek in the morning, and is the signal for breakfast.

The Troop sounds at - oclock in the morning for the purpose of assembling the men for luty, inspeetion at guard mounting, and morning dress parade, when the commanding officer commands it.

The Surgeon's eall is to sound or beat at - o'clock in the morning, when the sick, able to go about, are conducted to the hospital by the
first sergeants of companies, who hand to the surgeon a list of all the sick in the company.

After the surgeon has passed upon the sick, the first sergeants proceed to make off the morning reports of their companies, which, after being signed by their captains, are taken to regimental beadquarters at first sergeant's call.

The morning report of the company is made off in a book kept for that purpose, called the morning report look, and in accordance with Form No. 1. The rulings extend across both pages of the book when open; the report occupies but a single line each morning, so that if the number of lines are sufficient, a single beading will suffice for the reports of an entire month.

The Dinner call is sounded at - o'clock, and is the signal for dinner.

The Retreat is sounded at sunset, when there is a roll call and the orders for the day are read. When the weather permits, there is a dress parade at retreat, and the orders are read ont at the close of it. Each regiment or battalion has an independent parade, commanded by the colonel.

The Tattoo is sounded at - o'clock in the evening, when the rolls are called; no soldier is allowed to be out of his tent or quarters after this hour, without special permission.

In the cavalry, Stable calls are sounded immediately after reveille, and an bour and a half before retreat; Water calls at the hours directed by the commanding officer.

The Drummerg' call is beaten by the drums of the police guard five minutes before the time of beating the stated calls, when the field music assembles before the colors of their respective regiments, and as soon as the beat begins on the right is taken up along the line.

Calls for drills are sounded at such hours as the commanding officer may designate.
765. Daily duties must be announced in order, and the officers to perform them are detailed according to the rules of the roster.

The number and rank of the officers for daily duty, are to be reguulated by the strength and circumstances of the camp or garrison; the officers detailed for duty should remain in or about the camp or garrison during their tours of duty.

Besides the officers detailed for guard duty, the officers for daily duties in large commands are as follows:

A General officer of the dry for each division; a field officer of the day for each brigade; and a regimental officer of the day for each regiment.

In camps or garrisons of one regiment or less, the officers are as follows: officer of the day and officer of the guerd.

The General of the day is to superintend the regularity and discipline of the camp of the division, visit the guards and outposts, call ont and inspect the guards as often and at such times as he thinks proper; to receive all reports of guards, and make immediate communication of any extraordinary circumstances to his commanding officer, or to the General-in-chief.

The Field officer of the day has the immediate superintendence of the camp of the brigade; he is to be present at the mounting and dismounting of the brigade or grand gnards; he is to call them out to inspect them; to order such patrols, posts and outposts as may be necessary; to see that the grand guard is rigilant, that none are absent, and that their arms and accontrements are in order; that the officers and non-commissioned officers are acquainted with their duty, and that the sentries are properly posted, and have received proper orders.

The Regimental officer of the day in each regiment, and in commands less than a regiment, is charged with the order and cleanliness of the camp or garrison; he has the calls beaten by the drummer of the police guard; he atteuds the parading of the guards, and orders the roll to be called frequently and at unexpected periots, and reports everything extraordinary to the commander of the garrison or camp; he is to visit the hospital at various hours, and make a report of its state to the commanding officer. He should satisfy himself frequently during the night, of the vigilance of the police guard, and prescribe patrols and rounds to be made by the officer of the guard. He should give attention to the condition of the sinks, the regulation of the camp fires, the removal of rubbish, etc., and for these purposes a fatigne party will be furnished him when necessary.

## CAMPS.

## Camps of infantry.

766. Each company has its tents in two files, facing on a street perpendicular to the color line. The wilth of the street depends on the front of the camp, but should not be less than five paces. The interval between the ranks of tents is two paces; between the files of tents of adjacent companies, two paces: between regiments, twenty-two paces.

The color line is ten paces in front of the front rank of tents. The kitchens are twenty paces behind the rear rank of company tents; the non-commissioned staff and sutler, twenty paces in rear of the kitehens; the company officers, twenty paces farther in rear; and the field and staff, twenty paces in rear of the company officers.

The company officers are in rear of their respective companies; the captains on the right.

The colonel and licutenant-colonel are near the centre of the line of ficld and staff; the adjutant, a major and surgeon, on the right; the quartermaster, a major and assistant surgeon, on the left.

The police guard is at the centre of the line of the non-commissioned staff, the tents facing to the front, the stacks of arms on the left.

The advanced post of the police guard is abont 200 paces in front of the color line, and opposite the centre of the regiment or on the best ground; the prisoners' tent about four paces in rear. In a regiment of the second line, the adranced post of the police guard is 200 paces in rear of the line of its field and staff.

The horses of the staff officers and of the baggage train are twentyfive paces in rear of the tents of the ficld and staff: the wagons are parked on the same line, and the men of the train camped near them.

The sinks of the men are 150 paces in front of the color line-those of the officers 100 paces in rear of the train. Both are concealed by bushes. When convenient, the sinks of the men may be placed in rear or on a flank. A portion of the earth dug out for sinks to le thrown back occasionally.

The front of the camp of a regiment of 1,000 men in two ranks will be 400 paces, or one-fifth less paces than the number of files, if the camp is to have the same front as the troops in order of battle. But the front may be reduced to 190 paces by narrowing the company strects to five paces; and if it be desirable to reduce the front still more, the tents of companics may be pitched in single file-those of a division facing on the same street.

## Camp of cavalry.

767. In the cavalry, each company has one file of tents-the tents opening on the street facing the left of the camp.

The horses of each company are placed in a single file, facing the opening of the tents, and are fastened to pickets planted firmly in the ground, from three to six paces from the tents of the troops,

The interval between the file of tents should be such that, the regiment being broken into column of companies, each company should be on the extension of the line on which the horses are to be picketed.

The streets separating the squadrons are wider than those between the companics by the interval separatiug squadrons in line; these intervals are kept free from any ubstruction throughont the camp.

The horses of the rear rank are placed ou the left of those of their file-leaders.

The horses of the lientenants are placed on the right of their platoons; those of the eaptains on the right of the eompany.

Each horse oecupies a space of about two paces. The number of horses in the company fixes the depth of the eamp; and the distanee between the files of tents: the forage is placed between the tents.

The kitchens are tweuty paces in front of each file of tents.
The non-commissioned ofliecrs are in the tents of the front rank. Camp-followers, teansters, etc., are in the rear rank. The police guard in the rear rank, near the centre of the regiment.

The tents of the lieutenants are thirty paces in rear of the file of their company: the tents of the captains thirty paces in rear of the lieutenants.

The colonel's tent thirty paces in rear of the eaptains, near the centre of the regiment; the lientenant-eolonel on his right; the adjutant on bis left: the majors on the same line, opposite the second company on the right and left; the surgeon on the left of the adjutant.

The field and staff have their horses on the left of their tents, on the same line with the company horses; sick horses are placed in one line on the right or left of the camp. The men who attend them have a separate file of tents; the forges and wagons in rear of this file. The horses of the train and of camp-followers are in one or more files extending to the rear, behind the right or left squadron. The advanced post of the police guard is two bundred paees in front, opposite the centre of the regiment; the horses in one or more files.

The sinks for the men are one hundred and fifty paces in front-these for officers one hundred paces in rear of the camp.

## Camp of artillery.

768. The artillery is encamped near the troops to which it is attached, so as to be protected from aitack, and to contribute to the defence of the camp. Sentinels for the park are furnished by the artillery, and, when necessary, by the other troops.

For a battery of six pieces the tents are in three files-one for each section: distance between the ranks of tents fifteen paces; tents opening to the front. The borses of each section are pieketed in the file, ten paces to the left of the file of tents. In the horse artillery, or if the number of horses makes it neeessury, the horses are in two files on the right and left of the file of tonts. The kitchens are twenty-five paces in front of the front rank of tents. The tents of the officers are in the opposite files of company tents, twenty paces in rear of the rear rank-the captain on the right, the lieutenants on the left.

The park is opposite the centre of the camp, forty paces in rear of

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the officers' tents. The carriages in files four paces apart; distance between ranks of carriages sufficient for the horses when harnessed to them; the park guard is twenty-five paces in rear of the park. The sinks for the men one hundred and fifty paces in front; for the officers one hundred paces in rear. The harness is in the tents of the men.

## BIVOUACS.

769. A regiment of eavalry being in order of battle, in rear of the ground to be occupied, the colonel breaks it by platoons to the right. The horses of each platoon are placed in a single row, and fastened as preseribed for camps; near the enemy they remain saddled all night, with slackencd girths. The arms are at first stacked in rear of each row of horses; the sabres, with the bridles hung on them, are placed against the staeks.

The forage is placed on the right of each row of horses. Two stableguards for each platoon watch the horses.

A fire for each platoon is made near the color line, twenty paces to the left of the row of horses. A shelter is made for the men aronnd the fire, if possible, and each man then stands his arms and bridle against the shelter.

The fires and shelter for the officers are placed in rear of the line of those for the men.

The interval between the squadrons must be without obstruction throughout the whole depth of the bivouac.

The interval between the shelters should be such that the platoons can take up a line of battle freely to the front or rear.

The distance from the enemy decides the manner in which the horses are to be fed and led to water. When it is permitted to musaddle, the sadules are placed in the rear of the horses.

In infantry, the fires are made in rear of the color line, on the ground that wonld be occupied by the tents in camp. The companies are placed around them, and, if possible, construet shelters. When liable to surprise, the infantry should stand to arms at daybreak, and the cavalry mount until the return of the reconnoitering parties. If the arms are to be taken apart to clean, it must be done by detachments, snecessively.

## CANTONMENTS.

770. The eavalry should be placed under shelter whenerer the distance from the enemy, and from the ground where the troops are to form for battle, permit it. Taverns and farm-houses, with large stables and free aceess, are seleeted for quartering tbem.

The colonel indicates the place of assembling in case of alarn. It should generally be uutside the cantonment; the egress from it should be free; the retreat upon the other positions secure, and roads leading to it on the side of the enemy obstructed.

The necessary orders being given, as iu establishing a camp, the picket and graud guards are posted. A sentinel may be placed on a steeple or high house, and then the troops are marched to the quarters. The men sleep in the stables, if it is thought necessary.

The above applies in the main to infantry. Near the enemy, companies or platoons should be collected, as much as possible, in the same houses. If companies must be separated, they should be divided by platoons or squads. All take arms at daybreak.

Wheu cavalry aud infantry canton together, the latter furnish the guards by night, and the former by day.
Troops cantoned in presence of the enemy shonld be covered by advanced guards and natural or artificial obstacles. Cantonments taken during a cessation of hostilities should be established in rear of a line of defence, and in front of the point on which the troops would concentrate to receive an attack. The general commanding-inchief assigns the limits of their cantonments to the divisions, the commanders of divisions to brigades, and the commanders of brigades post their regiments. The position for each corps, in case of attack, is carefully pointed out by the generals.

## MARCHES.

771. For marching, the force, if a large one, is divided into as many columns as circumstances permit, without weakening any one too much. The object of the movement and the nature of the ground determine the order of march, the kind of troops in each column, and the number of columns. They ought to preserve their communications and be within supporting distance of each other. The commander of each column ought to know the strength and direction of the others.

The advance and rear guarls are usually light troops; their strength and composition depend on the nature of the ground and the position of the enemy. They serve to cover the movements of the army, and to bold the enemy in check until the general has time to makc his arrangements.
The "general," sounded one hour before the time of marching, is the signal to strike tents, to load the wagons, pack horses, etc., and send them to the place of assembling. The fires are then put out, and care taken to avoid burning straw, etc., or giving the enemy any other indication of the movements.

The "march" beats in the infantry, and the "advance" is sounded in the eavalry, in succession. as each is to take its place in the column. The infantry forms in column of companies or platoons; the cavalry in column of twos, fours, or of platoons; and the artillery by sections.

When the army should form suddenly to meet the enemy, the "longroll" is beat, and "to horse" sounded. The troops form rapidly in front of their camp.

Batteries of artillery and their caissons move with the corps to which they are attached; the field train and anbulances march at the rear of the columu; and the baggage with the rear guard.

Cavalry and infantry do not march together, unless the proximity of the enemy makes it necessary.

In cavalry marches, when distant from the enemy, each regiment, and, if possible, each squadron, forms a separate column, in order to keep up the same gait from front to rear, and to trot, when desirable, on good ground. In such cases, the cavalry may leave camp later, and can give more rest to the borses, and more atteution to the shoeing and barness.

After the march has commenced, the troops babitually take the route step. The men should not be allowed to straggle, or leave the ranks for any but a necessary purpose, and then but for a few moments at a time.

The geueral and field officers frequently stop, or send officers to the rear, to see that the troops march in the prescribed order, and keep their distances.

In approaching a defile, the colonels are warned; they close their regiments as they come up; each regiment passes separately. at an accelerated pacc. and in as close order as possible. The leading regiment having passed, and left room enough for the whole column in close order, balts, aud moves again as soon as the last regiment is through. In the cavalry, each squadron, before quickening the pace to rejoin the columu, takes its original order of march.

When a march is to be continued from day to day, the daily march should commence at a very early hour; the rate of going should be as regular as possible, not more than two and a half miles an hour; and the guides should be careful to prescrve their distance, so as to present oscillations in the rear of the column, which are very fatiguing to the men. At the expiration of every hour, or at little more, the halt is sounded, when the men are allowed to take their ease for about teu minutes, when the march is resumed. In this way a day's march of twenty miles or more may be made by mid-day, or a little later; the men get their dinners after getting into camp, have the afternoon to
rest, wash their clothing, clean their arms, etc., and are fresh for an early start on the following day.

In forced marches, or where the mareh is a long onc, the halt at noon may be from an hour to an hour and a half, when the men may loosen their belts, take a lunch, smoke, and take their ease in any way they choose, until the hour for resuming the march ; the mareh may be continued until the middle of the afternoon, and still the men will have time to get their cup of hot coffee for supper, and make themselves comfortable for the aight. The march of the first two days should be short, after that it may be increased to the required number of miles; the mareh from day to day should be as nearly of equal length as the convenience of fuel and water, etc., for camping purposes will admit.
772. A camping party, headel by the quartermaster of the command, precedes the column for the purpose of selecting and marking off the camp before the arrival of the troops. The camp is marked by placing camp colors on the line inteuded for the color line of the command.

When the column reaches the camp ground, the infantry comes into line on the color line; the cavalry in rear of its camp.

The number of men to be furnished for guards. pickets, and orderlies; the tatigue parties to be sent for wood and water for the cook, etc.; the hour of marching, etc., are then announced by the brigadiergencrals to the colonels, and by them to the field officers-the adjutant and captains formed in front of the regiment, the first sergeants taking post behind their captains. The adjutant then makes the details, and the first sergeants warn the men. The regimental officer of the day forms the picket, and sends the guards to their posts. The colors are then planted at the centre of the color line, and the arms are stacked on the line. The fatigue parties proceed to their dutics, and the men of the company not on detail pitch the tents.

In the eavalry, each troop moves a little in rear of the point at which its horses are to be secured, and forms in one rank; the men then dismount; a detail is made to hold the horses; the rest stack their arms and fix the picket rope; after the horses are attended to the tents are pitched, and eaeh horsemau places his arms at the side from the weather.

Artillery is brought into line, and the picket ropes fixed: the drivers mhitch, take off barness, secure their horses to the picket ropes, etc., whils the cannoneers proceed to pitch the tents.

## Article XIV.

## THE STAFF.

## Adjutant-general's department.

773. The general duties of the adjutant-general and of the assistant adjutant-generals have been laid down under the head of army organization.

The adjutant-generals of the several States are required to make annual returns of the strength and eondition of the wilitia, the state of the arms, ete., applicable to military purposes, to the governor or commander-in-ebief of the State, and to forward a consolidated return of the militia, arms, etc., to the President of the United States, through the adjutant-general of the United States army, agreeable to' a form furnished by him.

Assistant adjutant-generals, in addition to the duties already speeified in general terms, attend to the formation of their divisions or brigades, publish all orders received at division or brigade bead-quarters; issue all orders proeecding from the general commanding the division or brigate; preserve the records of the division or brigade; inspect and form dirision or brigade guards; prepare and keep the necessary rosters of the officers of the tivision or brigade; and regulate all details for duty depending upon the rosters.
774. It is the duty of the assistant adjutant-general of each brigade to prepare a morning report of the brigade every morning after the receipt of the regimental morning reports (see Form No. 2), in aecordance with Form No. 3, whieh is signed by him and the general commanding the brigade and forwarded to division head-quarters. The assistant adjutant-general of the division prepares, in like manner, a eonsolidated morning report of the division, to be transmitted to the adjutaut-general of the army eorps, or army of whieh the division forms a part. (See Form No. 4.)

Thus the commanding general is from day to day kept advised as to the exact strength and condition of his eommand.

The assistant adjutant-general of a detatebed brigade, division or
army in the field, has to prepare a monthly return of the command, to be signed by himself and his commanding general, to be forwarded to the adjntant-general at gencral head-quarters.
775. When orders are received at, or emanated from the headquarters of an army or army corps, the adjutant-general, or assistant adjutant-general, as the case may be, transmits copies to each of the assistant adjutant-generals at division head-quarters; the assistant adjutant-generals at division bead-quarters in turn transmit copies to the assistant at each of the brigade head-quarters, and from brigade head-quarters they go to the adjutants of regiments, by whom they are read to the troops on parade. When troops are on a campaign, the orders are given to officers of the staff, who report for them daily at the different head-quarters. See article "Orders."
776. The parole and countersign cmanate daily from head-quarters, in the form of " special orders;" copies of both, under seal, are transmitted to division head-quarters; from them to brigade head-quarters, and from brigade head-quarters to regimental head-quarters, provided there is any officer of the regiment who is entitled to the parole; if not, the countersign only is sent. Copies of one or both are sent to such persons of the division, brigade, or regiment, as may be entitled to them.

The parole is only sent to the field and regimental officers of the day, officers of guards, and to such otleer officers as may be entitled to visit and inspect guards.

The parole and countersign are usually sent out on small pieces of paper, so folded as to make it impossible to discover either without breaking the seal.
777. By the militia laws of Virginia, and most of the other States, the division and brigade inspectors are the chiefs of staff of their respective divisions and brigades, and they discharge the duties of assistant adjutant-generals in the divisions and brigades with which they serve.
778. The adjutants of regiments are the chiefs of the regimental staffs, and perform within their regiments the various duties required of them in the formation of their regiments, in all parades, inspections, manœuvres, formation of guards, etc. The adjutant publishes all orders received at regimental head-quarters, and issues all orders emanating from the head-quarters of the regiment; keeps a roster of the officers of the regiment, and makes all details for duty from the roster; has charge of the field-music, band, and pioneers; and discharges such other duty as his colonel may require.

At the first sergeant's call, the orderly sergeants of companies present the morning reports of their companies, made off in conformity
with the requirements of Form No. 1, and signed by their captains. The adjutant then procecds to make off the morning report of the regiment, as required in Form No. 2, which is signed by bimself and the colonel, and transmitted to brigade head-quarters.

On receiving the parole and countersign from brigade head-quarters, he sends a copy of both to the colonel and to the regimental officer of the day, and copies of the countersign to the surgeon, and such other of the staff officers of the regiment as, from the nature of their duties, may require it.

## The Quartermaster's department.

779. This department has to provide quarters and transportation for the troops; storage and transportation for all supplies; clothing; camp and garrison cquipage; eavalry and artillery horses; fuel; forage; straw ; and stationery. Its duties, when troops are in actual service, are very important, and embrace such a wide range of subjects that a large number of agents, and thorough organization, are indispensable.
780. Under the head of quarters are included all buildings for the use of an army; as quarters for men and officers, hospitals, storehouses, offices, and stables. When quarters are to be occupied, they are allotted by the quartermaster at the station, under the control of the commanding officer.

The number of rooms, and amount of fuel for officers and men, are as follows:

## Fuel for officers and men.

|  | Ruoms. |  |  | Cords of wood per month.* |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{x} \\ & \stackrel{y}{x} \\ & \stackrel{x}{4} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \stackrel{+}{y y} \\ & \stackrel{y}{x} \\ & \underset{\sim}{n} \end{aligned}$ |  |  |
| A Major-cteneral. | 5 | 1 |  | 1 | 5 |
| A Brigadier-General or Colo | 4 | 1 |  | 1 | 4 |
| A Lieutenant-Colonel or Major | 3 | 1 |  | 1 | $31 / 2$ |
| A Captain or Chaplain.......... | $\stackrel{2}{2}$ | 1 | ...... | 3/4 | 3 |
| Lientenant ................ | 1 | 1 | ...... | 1/2 | , |
| Military store-keeper | 1 | 1 |  |  |  |
| The General commanding the army............................ |  |  | 3 |  | 3 |
| The Commanding officer of a division or department. an Assistant or Deputy Quartermaster-General |  |  | 2 |  | 2 |
| The Commanding officer of a regiment or post. Quartermaster, Assistant Quartermaster. or Commissary of Subsistence. $\qquad$ |  |  | 1 | ...... | 1 |
| An acting Assistant Quarternaster when approved by the Quartermaster-General |  |  | 1 |  | 1 |
| Wagon and Forage master. Sergeant-Major, OrduanceSergeant or Quartermaster-Sergeant............................ | 1 | $\ldots .$. |  | $1 / 2$ | 1 |
| Each Non-commissioned officer, musician. private, officer's servant and washerwoman |  |  |  | $\frac{1}{13}$ | 1/6 |
| Each necessary fire for the sick in hospital to be regulated by the surgeon and commanding officer. not exceeding. $\qquad$ |  |  |  | 12 $1 / 2$ | 6 |
| Each guard-fire to be regulated by the commanding offcer. not exceeding $\qquad$ |  | ...... |  |  | 3 |
| A Commissary or Quartermaster's store-house, when ue cessary. not exceeding <br> A recimental or post mess. $\qquad$ | 1 |  |  |  | 1 |
| A regimental or post mess. <br> To every six non-commissioned officers, nusicians, and privates. servants and washerwomen. 225 square feet of rooms north of $35^{\circ} \mathrm{N}$. .. and 256 square feet south of that latitude. | 1 |  |  |  | 1 |

No officer shall occupy more than his proper quarters, except by order of the commanding officer, when there is an excess of quarters at the station. But the amount of quarters shall be reduced pro rata by the commanding offiecr when the number of officers and troops makes it necessary.

A mess room, and fuel for it, are allowed only when a majority of the officers of a post or regiment unite in a mess. Fuel for a mess room should not be used elsewhere, or for any other purpose.

Fuel issucd to officers or troops is public property for their use, and what is not actually consumed should be returned to the quartermaster's department. Fuel is issued only in the month when due.

[^4]In allotting quarters, officers have choice according to rank; but the commanding officer may direct the officers to be stationed convenient to their troops. An officer may select quarters occupied by a junior; but having made his choice, he must abide by it, and shall not again at the post displace a junior, unless himself displaced by a senior.

An officer arriving at a station should make requisition on the quartermaster for his quarters and fuel, accompanied by a copy of the order putting him on duty at the station. If in command of troops, his requisition should be for the whole, and designate the number of officers of each grade, of non-commissioned officers, soldiers and servants.
781. When troops are moved, or officers travel with escorts or stores, the means of transport provided shall be for the whole ccmmand. Proper orters in the case, and an exact return of the command, inclnding officers' servants and company women, will be furnished to the quartermaster who is to furnish the transportation. The baggage to be transported is limited to camp and garrison equipage and officers' baggage. Officers' baggage should not exceed (mess-chest and all personal effects included) as follows:

|  | In the Field. | Changing Stations. |
| :---: | :---: | :---: |
| General Officers | 125 pounds. | 1000 pounds. |
| Field Officers | $100{ }^{\circ}$ | 800 " |
| Captains | 80 " | 700 |
| Subalterns | 80 " | 600 " |

These amounts may be reduced pro rata by the commanding officer when necessary, and may be increased on transports by water, when proper, in special cases.

All the books, papers, and instrumeuts necessary for the duties of staff officers; also regimental and company desks, and the medicine chests of medical officers, must be transported.

Estimates of the medical director, approved by the commanding officer, for the transportation of the hospital service, and the sick, will be furnished to the quartermaster.

The baggage trains, ambulances for the sick and wounded, and all the means of transport, continue in charge of the proper officers of the quartermaster's department, under the control of the commanding officers.

When supplies are turned over to the quartermaster for transportation, each package must be directed, and its contents marked on it.

On transports, cabin passage is provided for the officers, and reasonable and proper accommodation for the troops, and, when possible, a separate apartment for the sick.
782. The forage ration is fourteen pounds of hay, and twelve pounds of oats, corn, or barley. Forage is issued to officers only in the month when due, and at their proper stations, and for the horses actually kept by them in service, not excecding in number as follows: In time of war, major-general, seven horses; brigadier-general, five; colonels who have the cavalry allowance, five; other colonels, four ; lieutenantcolonels and majors who have the cavalry allowance, four ; other lieu-tenant-colonels and majors, three; captains who have the cavalry allowance, three; all other officers entitled to forage, two: and in time of peace, general and field officers, three horses; officers below the rank of field officers in the regiment of cavalry, etc., two horses; all other officers entitled to forage, one horse.

No officer is allowed to sell forage issued to him. Forage issued to puhlic horses or cattle is public property; whatever is not consumed is accounted for.
783. Issues of stationery are made quarterly, in amount as follows:

| -2 |
| :--- | :--- |

Steel pens，with one holder to twelve pens，may be issued in place of quills，and envelopes in place of envelope paper，at the rate of 100 to the quire．

To each officer is allowed an inkstand，one stamp，paper－folder，sand－ box，wafer－box，and as many lead pencils as may be required．

Necessary stationery for military courts and boards will be furnished on the requisition of the recorder，approved by the presiding officer．

Regimental，company，and post books，and printed blanks for the officers of quartermaster and pay departments，will be procured by requisition on the quartermaster－genemal．

Postage and despatches by telegraph on public business，paid by an officer，will be refunded to him on his certificate to the amount，and to the necessity of the communication by telegraph．

784．Supplies of clothing and camp and garrison equipage will be sent by the quartermaster－general to the officers of his department sta－ tioned with the troops．The contents of each package，and the sizes of the clothing in it，will be marked on it．

The allowance of camp and garrison equipage is as follows：

| － |  |  | 号 |  |  |  | 位 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A General．． | 3 |  | 1 |  | 1 |  |  |
| Field and staff officer above the rank of captain．．．．．．．．．．．．．．．．． | 2 |  | 1 |  | 1 |  |  |
| Other staff ofticers and captains．． |  |  | 1 |  | 1 |  |  |
| Subalterns of a company，to every two． | 1 |  | 1 |  | 1 |  |  |
| To every fifteen foot and thirteen mounted men．．．．．．．．．．．．．．．．．．．． | 1 | 2 | 2 | 2 | 2 | 2 | 5 |

Bed sacks and straw are provided for troops in garrison．Requi－ sitions will be sent to the quartermaster－general for the authorized flags，colors，staudards，guidons，drums，fifes，bugles and trumpets．

Commanders of companies draw the clothing of their men，and the camp and garrison equipage for the officers and men of their company． The camp and garrison equipage of other officers is drawn on their own receipts．

When clothing is needed for issue to the men，the company com－ mander will procure it from the quartermaster on requisition，approved by the commanding officer．

Commanders of companies take receipts of their men for the clothing issued to them, on a receipt roll, witnessed by an offieer or noncommissioned officer. Eaeh soldier's elothing account is kept by the captain in a company book, the account setting forth the money value of the clothing received and receipted for.
785. Every separate command should have its quartermaster; if it is a regiment, or less, one of the subalterns may discharge the duty by order of the commanding officers: if a brigade or division, an officer of the quartermaster department is assigned by the quartermastergeneral. In the volunteers and militia, quartermasters are appointed by the colonels, brigadier-generals, or major-generals of regiments, brigades, or divisions; but while quartermasters so appointed must obey the directions of their commanding officers, their aceountability as officers of the quartermaster's department is just the same.

All requisitions for supplies, for transportation, forage, ete., are made upon the quartermaster of the command requiring them; if it is in his power to fill the requisition, he does so; if not he makes his requisition upon the next higher officer of the department, and so on.

In order to facilitate the operations of the department. depots of supplies, in eharge of depôt quartermasters, are established at eonvenient points, and from which quartermaster's supplies are drawn upon proper requisition.

In order to secure a proper accountability on the part of the officers of the quartermaster's department, the quartermaster-geueral should institute a proper system of returns, accounts, ete., requiring all officers of the department to conform strictly to their requirements, and in the settlement of their aecounts to present satisfactory vouehers for all money or public property expended. For the necessary forms see the general regulations of the United States army.

## Subsistence department.

786. Every command should have its commissary or assistant commissary; when the command is less than a regiment, the same officer may, and usually does discharge the duties of both commissary and quartermaster.

Subsistence supplies are issued on requisitions approved by the commanding officer, in the same way that quartermaster's supplies are issued. The commissary must, however, so regulate his own requisitions upon purehasing or depôt commissaries, as to keep on hand a sufficient supply to meet the wants of the troops.

Good and suffieient store-room for the subsistence stores will be proeured by the commissary from the quartermaster.
787. The ration is three-fourths of a pound of pork or bacon, or one and a fourth pounds of fresh or salt beef; eighteen ounces of bread or flour, or twelve ounces of hard bread, or one and a fourth pounds of corn meal, and at the rate, to one hundred rations, of eight quarts of peas or beans, or, in lieu thereof, ten pounds of rice; six pounds of coffee; twelve pounds of sugar; four quarts of vinegar; one and a half pounds of tallow, or one and a fourth pounds of adamantine, or one pound sperm candles; four pounds of soap, and two quarts of salt.

On a campaign, or on marches, or on board transports, the ration of hard bread is one pound.

Fresh beef, when it can be procured, should be furnished at least twice a week; the beef to be procured, if possible, by contract.
788. Company provision returns are usually made every week or ten days, in accordance with Form No. 12; the return must be signed by the commanding officer of the regiment, or post, when the command is less than a regiment.

When it is practicable, a consolidated return for the regiment or post is made aud signed by the commanding officer (see Form 13) ; but the return must state the allowance for each compauy, in order to prevent any confusion in the issues.

Issucs to the hospital are made on returns by the medical officer, for such provisions only as are actually required for the sick and the attendants. The cost of such parts of the ration as are issued is charged to the hospital at contract or cost prices, and the hospital is credited by the whole number of complete rations due through the month at contract or cost prices; the balance, constituting the hospital fund, or any portion of it, may be expended by the commissary, on the requisition of the medical officer, in the purchase of any article for the subsistence or comfort of the sick.

An extra issue of fifteen pounds of candles per month may be made to the principal guard of each camp or garrison, on the order of the commanding officer. Extra issues of soap, candles and vinegar are permitted to the hospital when the surgeon does not avail himself of the commutation of the hospital ration, or when there is no hospital fund; salt in small quantities is issued for public horses and cattle. When the officers of the medical department find anti-scorbutics necessary for the health of the troops, the commanding officer may order issues of fresh vegetables, pickled onions, sauer-kraut, or molasses, with an extra quantity of rice and vinegar. Potatoes are usually issued at the rate of one pound per ration, and onions at the rate of three bushels in lieu of one of beans. Troops at sea are recommended to draw rice and an extra issue of molasses in lieu of beans.

When a soldier is detached on duty, and it is impracticable to carry his subsistence with him, it will be commuted at seventy-five cents a day, to be paid by the commissary, when due, or in advance, on the order of the commanding officer. The ration of a soldier stationed where be has no opportunity of messing, is commuted at forty cents.
789. As in the case of the quartermaster's department, the commis-sary-general should organize such a system of returvs, accounts, etc., on the part of the officers of the department, as to ensure a proper accountability on their part. See the army regulations for the necessary forms.

## Medical department.

790. The senior medical officer, on duty with any body of troops in the field, will, unless otherwise specially ordered, be ex officio the medical director; and will have the general control of the medical officers, and the supervision of the hospitals under their charge.

The senior medical officers of a hospital distribute the patients, according to convenience and the nature of their complaints, into wards or divisions, under the particular charge of the several assistant surgeons, and should visit them himself each day, as frequently as the state of the sick may require.

His prescriptions of medicine and diet are written down at once in the proper register, with the name of the patient and the number of his bed; the assistauts fill up the diet table for the day, and direct the administration of the prescribed medicine.

He should enforce the proper hospital regulations to promote health and prevent contagion, by ventilated aud not crowded rooms, scrupulous cleanliness, frequent changes of bedding, linen, etc.
791. At surgeon's call, the sick then in the companies will be conducted to the hospital by the first sergeants, who will each hand to the surgeon, in his company book, a list of all the sick of the company, on which the surgeon shall state who are to remain or go into hospital ; who are to return to quarters as sick or convalescent; what duties the convalescents in quarters are capable of; what cases are feigned; and any other information in regard to the sick of the company be may have to communicate to the captain. He will then make a morning report of the sick to the commanding officer (Form No. 17).

## Pay department.

792. The troops should be paid in such manner that the arrears shall at no time exceed two months, unless the circumstances of the

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case render it unavoidable. The paymaster-general should take care, by timely remittances, that the paymasters have the necessary funds to pay the troops.

The payments, except to officers and discharged soldiers, are made on muster and pay rolls; those of companies and detachments are signed by the company or detachment commander; those of the hospital are signed by the surgeon; and all muster and pay rolls are signed by the mustering and inspecting officer.

Copies of the necessary blank forms for muster and pay rolls may always be obtained from the office of the Adjutant-General U. S. Army, Washington. These blanks are too large to be properly represented in a work like this.

When a company is paraded for payment, the men should be called to the pay table one at a time, commencing with the non-commissioned officers, who are paid according to rank; the privates are called in alphabetical order. Every member of the company, or detachment, must, on receiving his pay, sign his name opposite his name in the pay roll, and his signature must be witnessed by the captain, or some other officer of the company, or detachment, whose duty it is to be present when the company, or detachment, is paid.

Officers are paid on certified accounts, as in Form 5.

## FORM No. 1.




FORM No. 2.
Nrowning $F$ Report of the $\qquad$ Regiment of $\qquad$ Commancled by Cholonel $\qquad$
$\qquad$

-     -         - 



SHATLIM,
Date,

(Signet) A. B.
A, jurtant.

## FORM No. 3.

Mornina Report of ——Brigade Division. Army of $\qquad$ Commanded by Brigadier-cteneral $\qquad$

(Signef) A. B.
Assistant Adidant-FAneral

## FORM NO. 4

Noxraing Reproxt of $\qquad$ Tivibicom, $\qquad$ frmay, Commanded ly Majur-Ctemeral

(signed) (:. D
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$\dagger$ Thise columa ineledes the enture forec.
Signed) A. F.
Issisfant Adjutant-Gencrat 1









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\text { FORM NO. } 7
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[^6]$$
\text { Form No. } 8
$$
Requisition for Forage for Public Horses, Mules, and Oxen, in the service of - for - days, commencing the


[^7]Form No. 9.


[^8]
## Form No. 10.



[^9]508 MANUAL FOR VOLUNTEERS AND MILITIA.


[^10]
## Form No. 12.


The A. C. S. will issue agreeably to the above return.
———Commanding Post or Regiment.

510 MANUAL FOR VOLUNTEERS AND MILITIA.
Form No. 13 .

Table，
Showing the Quantity in Bulk of any Number of Rations，from 1 to 100,000 ．

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Form No, 14.

THE STAFF.
513
Form No. 15.

| NAMES. |  |  |  | COMPLAINT. |  |  |  | Discharged from service. |  |  | 官 | REMARKS. |
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## Form No. 16.

Prescription Book, Diet Book, and Diet Table.

The spaces in the Prescription Book are to be filled up with the preseription at length, the times of administering the medicines, and the quantities to be given at each time. The diet of the patients will be divided into full, half, and low, to be designated in the Diet Book by the letters F., H., and L.; and in order that the steward may have precise instructions for delivering the hospital stores, ete., the surgeon will, from time to time, insert in the Diet Book written directions of the quantity of each article in his store-room, which he may think uecessary to each degree of diet. To cach ten patients, for example, on low diet, a certain quantity of tea, sugar, ete. To each ten on half diet, a certain quautity of rice, milk, etc. These proportions will soon become familiar to the steward, who has only to refer to the letters in the Diet Book to ascertain the whole quantity of any article to be delivered for the day, as well as the quantity for each ward. When any liquor is directed, or any other article not contained in these general instructions of the surgeon, the precise quantity directed for each patient will be notod in the Diet Book. The Diet Tables aro to be filled up daily from the Diet Book, and hung up in each ward of a general hospital.
Form No． 17.
Morning Report of the Surgeon of a Regiment，Post，or Garrison．

| D $\triangle$ T E 。 | COMPANY． | $\begin{gathered} \text { Remaining } \\ \text { at } \\ \text { Lastr } \\ \text { Report. } \end{gathered}$ |  | Total． |  |  |  |  | 䔍 | Remaining． |  |  | REMARKS． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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## Article XV.

## BATTLES.

793. A battle is a general action between two armies; if only a small portion of the forces are engaged, it is usually denominated a combat, an affair, a skirmish, etc., according to the character of the engagement. Battles are of three kinds: 1st. Defensive battles, or those fought in a chosen position by an army which awaits the attack of an encmy. 2d. Offensive battles, or those made by an army which attacks the enemy drawn up in position and awaiting the attack. 3d. The mixed or mforeseen battles, which occur between two armies meeting on the march.
794. When an army awaits the attack, it takes its position and forms its line of battle according to the nature of the ground, and the supposed character and strength of the enemy's forces. When some important position is to be protected by an army, such as when a siege is to be covered, a capital to be protected, depôts of supplies guarded, or some point important to the operations of the campaign is to be beld, such battles are usually given.
795. The first condition to be satisfied by a position is, that the openings shall be more farorable for falling on the enemy when be has approached to the desired point, than those which he can have for attacking our line. Second, the artillery should be posted as to command all the avenues by which the enemy can approach. Third, we should, if possible, have good ground upon which to manœuvre our troops unseen by the cnemy. Fourth, we should have a full view of the enemy as be adrances to the attack. Fifth, the flanks of our line should be well protected by natural or artificial obstacles. Sixth, we should have the means for effecting a retreat in the event of a defeat, without exposing the army to destruction.

It is seldom that all these conditions can be satisfied at the same time; sometimes the very means of satisfying one may be in violation of another. A river, a forest, or a mountain, which secures the flank of an army, may become an obstacle to a retreat; again, the
position may be difficult of attack in front, or on the wings, aud at the same time unfarorable for retreat.

We may sometimes be obliged to make the attack at all hazards, to prevent the junction of two of the enemy's corps to cut off forces that are separated from the main body by a river, etc. As a general rule, the attacking force has a moral superiority over the defensive, but this advantage is frequently counterbalanced by other conditions.
796. When we are acting on the offensive, the main thing is to seize upon the decisive point of the field. This point is determined by the configuration of the ground, the position of the coutending forces, the object to be attained by the battle; or by a combination of these.
797. It frequently happens that battles result from the meeting of armies in motion, both parties acting on the offensive. Indeed, an army that is acting on the defensive may, on the approach of the enemy, advance to meet him while on the march. Battles of this kind may partake of the mixed character of offensive and defensive actions, or they may be in the nature of a surprise to both armies.
798. An order of battle is the particular disposition giren to the troops for a determined manœuvre on the field of battle. A line of buttle is the general name applied to troops drawn up in their usual order, without any determined manceuvre; it may apply to defensive positions or to offensive operations, where no particular object has been decided on. Military writers lay down twelve orders of battle, viz:

1st. The simple parallel order, in which the two armies occupy parallel lines. This is regarded as the worst possible position for a battle, for the two parties bere fight with equal chances, and the combat must continue until accident, superior numbers, or mere physical strength decides the day ; skill can bave but little influence in such a contest.

2d. The parallel order with a crotchet, in which one of the wings is thrown forward or back, giving the line this form. This order is sometimes used in defensive position, and in the offensive with the crotchet thrown forward. Wellington, at Waterloo, formed the parallel order with the retired crotchet on the right flank.

3d. The parallel order reinforced on one or both wings. This order may in certain cases secure the victory, but it has many objections. The weak part of the line is too near the enemy, and may, notwithstanding the efforts of the general to the contrary, become engaged, and run the risk of defeat, thereby counterbalancing the adrantages gained by having a strong point. Neither will the reinforced part of the line be able to profit by any success it may gain, and take the
enemy's line in flank and rear, without endangering its connection with the rest of the line.

4th. The parallel order reinforced on the centre. The same objections are applicable to this as to the last.

5th. The simple oblique order, in which the two lines are oblique to each other.

6th. The oblique order reinforced on the assailing wing. Tbis is suited to an inferior army attacking a supcrior, for it enables the gencral to carry the mass of his force on a single point of the enemy's line, while the weaker wing is out of reach of immediate attack, and holds the remainder of the enemy's line in check by acting as a rescrve ready to be concentrated on the favorable point as occasion may require.

7th. The perpendicular order on one or both wings, in which the attacking force occupies one or more lines perpendicular to the defensive, and on one or both of its flanks. A battle may begin with this order, but soon it must change to the oblique. An attack upon both wings can only be made with safety when the attacking force is vastly superior.

Sth. The concave order, in which the army occupies a curve concave to the enemy; in this order the wings are in adrance of the centre. It may be used with advantage in some cases and in particular localities.

9 th. The convex order, in which the army is disposed in a curve convex to the enemy, the centre being thus thrown in advance of the wings. This order is sometimes formed to cover a defile, to attack a concave line, or to oppose an attack before or after the passage of a river.

10 th. The order by echelon on one or both wings, in which the army is arranged in echelon from right to left, or from left to right. This order on one wing may be frequently employed with advantage; but if it be made on both wings, there is the same objection to its use as to the perpendicular order on both wings.

11th. The order by echelon on the centre, in which the centre is in the advance, and the wings are disposed in echelon to the right and left. This order may be employed with success against an army formed in a thin or too extended line of battle, for then it would penetrate and break the line.

The echelon order possesses many advantages. The several corps composing the army may manouvre separately, and, consequently, with greater ease. Each echelon covers the flank of the one which precedes it; and all may be combined to effect a given object, and extended without weakening any part too much.

12th. The combined orders of attack in columns on the centre and one wing at the same time. This is better suited than either of the others for attacking a strong line.
799. No general rule can be laid down as to which of these orders of battle should be employed, or whether either should be exclusively followed throughout the battle. The question must be decided by the general bimself on the ground, where all the circumstances may be duly considered. An order well suited to one position might he the worst pussible in another.

Whatever the plan adopted by the attacking general, he sbould endearor to dislodge the enemy, by piercing or turning his line. If he can conceal his real intentions and deceive the enemy respecting the true point of attack, success will be more certain.

S00. We will now diecuss the particular manner of arranging the troops on the line of battle, or the manner of employing each arm, beginning with the infuntry, as this is the most important.

Pusition and formation.-On the field of battle, whether the object be to attack or defend, the infantry is divided into three bodics-an adranced guard, the main body, and a reserre. Their relative proportion will depend upon the total force and the character of the position occupied. The adranced 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 adranced guard; and the rescrve should be strong enough to repair any disaster that may befall the main body, or to profit by its success in accomplishing the complete orerthrow of the enemy.

These three bodies are separated from each other by intervals which will depend npon the nature of the ground. The advanced guard occupying the front; the main body at a distance from one bundred and fifty to three bundred paces in its rear; and the reserve at a like intercal in 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 interrals may, if requisite, be reduced to eighty or one hundred paces.

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 evolntion, or for defence against cavalry, the formation of columns of battalions is best. To repel the enemy's attack by a fire, and in some cases, to present a less farorable mark to his artillers, the battalions are deployed. The battalions, whether deployed or in column, preserve the proper inter-
vals for evolutions; these intervals may be increased in obstructed ground without weakening the defence.

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 indcpendent 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.
801. Defence.-When the position is taken up to receive the enemy's attack, and there either to remain on the defensive, or to assume the offeusive, 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 of skirmishers, who, for this purpose, are thrown forward three or four hundred paces to feel the enemy, and are only reinforced when closely pressed.

Whether the advanced-guard shall maintain its ground obstinately until reinforced by the main hody, 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 the 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.

As a general rule, troops should be placed as much out of view as practicable, before they go 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 fifty paces, will prove effective, if resolutely made.

The reserve is composed of the most reliahle 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 he 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.
802. 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.

The main body and reserve follow the advanced-guard in column, 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 ad-vanced-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.

If the attack by the main hody is made with the bayonet, the interval between it and the columns of the reserve may be lessened to eighty or one hundred paces. The flanks of the columns of attack, and the intervals between them, shonld 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.
803. Pursuit.-If the assailed retires, the pursuit may 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 precedel by skirmishers. The line in close order will follow these troops until it attains a good position to receive the enemy, should be make an offensive movement, when it will be halted and formed in readiness for ac-

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tion. 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.
804. 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 faee the enemy, or else behind the line in their rear, which should hold the assailants in eheck, 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 fore moving off together, if the encmy shows no disposition to follow up his suceess with encrgy; or, in the contrary case, by retiring by successive portions; the line which withdraws falling some 150 paecs by the rear of the one by which it is covered, whilst falling back, and then forming, to cover iu 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, eovered by skirmishers, if the pursuit is made by infantry alone; if by caralry, the retreat must be made with great circnmspection; the troops retiring slowly and in good order, adopting the formation against cavalry; never hastening the mareh, unless wear a good position for defence, which should be attained as rapidly as possible, unless closcly pressed by the cavalry.

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 apon 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.
805. Measures for protructing an enyagement. - In the attack, as in the defence, it may frequently become an ebject to protract an engagement, without coming to any deeisive result; either for the purpose of holding a position for a certain time, to favor other objects, as the arrival of reiuforcements; or to occupy an adversary upon one point, whilst a déeisive blow is preparing on another. This game can be played only upou ground favorable to alterations from the defensive to the offensive; and should only be intrusted to troops thoroughly con-
versant with the duties of skirmishers. The main body is kept some two thousand paces to the rear of the skirmishers in such affairs; taking adrantage of the ground, and making suitable dispositions of the troops to avoid the effeets of the enemy's artillery. Small columns are thrown forward between itself and the troops engaged, which take post in covered ground, to be on hand to support the skirmishers. The troops engaged should be promptly reinforced, when the enemy presses onward; and attempts should be made, by eharging him in flank, to foree him to retire. The troops in aetion should be frequently relieved, and the opportunity should be seized, when the fresh troops come up, to make an onward movement on the enemy, and force him from any points he may have gained.
806. Defence against cacalry.-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, or either of the two contiguous to it. The safety of infantry against earalry, will depend upon the preservation of perfect coolness, good order, and connection in the ranks; the avoidance of any precipitate movements which might bring about a surprise; and the husbanding of its ammunition, and reservation of its fire, until the enemy is within a deadly range. Well-diseiplined infantry, whilst in position, and when not exposed to a fire of artillery, may securely trust to its own resourees 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.
807. Defence, etc., against artillery.-Infantry may take advantage, either of covers presented by the features of the ground, or of oceasionally shifting its position, to avoid the fire of artillery. Very slight undulations, 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 band, the chances of casualties, when within point-blank range, may be diminished by moving forward, or backward, some fifty paces; if the fire be a ricochet, the position should be shifted some fifty 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; when, lying down, they ean pick off the officers, men and horses.

S08. 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 openiug 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 manœurre succeeds in drawing the fire of the guns, and any confusion is observed among the men, then a rush must be made immediately upon them with the bayonet.

The detachment against the supports of the battery will make its dispositions according to the kind of troops which composes 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; or else they may 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 cavalry.

## CATALRY.

S09. Position.-This arm is usually placed in the rear of the infantry, on ground farorable to its manœurres, and where it will be masked from fire uutil the moment arrives to bring it into action; bere, 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 warer, or show signs of disorganization from the assaults of the other arms.

Formation.-The habitual formation of cavalry for the attack is a line of two ranks, with a reserve or support in 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 daugers; for, if the front line is brought up by the enemy, after a successful charge, it can
retire and rally in 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.

Cavalry is seldom called on to nse firearms. When on outpost 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 firc. In this case their movements are regulated in the same way as other skirmishers.
810. Defences.-The defensive qualities of cavalry lie in the offensire. 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 eavalry renders its service invaluable in retreats when the enemy pursues with vigor. In such cases it sbould be held in constant realiness to take advantage of every spot farorable to its action; and by short and energetic charges, force the enemy to move with circumspection.

S11. Attack against infantry.-So long as infantry maintains its position firmly, particularly if the gromnd is at all unfavorable to the movements of cavalry, the chances are against a successful attack by the latter. Cavalry should therefore wait patiently until a way is prepared for its action, by the fire of artillery on the enemy's infantry; or until the infantry has become erippled 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 Hanks; 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 sfyares on the flanks as most valnerable, frow their position.

The formation usually recommended for charging against squares, is that of three squadrons in line at donble distance; the leading squadron being followed by the others, either directly in its rear; or else the squadrons may be formed in echelon, successirely 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 each wheeling to
the right or left, on retiring, to leave the way clear for its successor. A fourth squadron in column follows those in line, to surround the square, and make prisoners if it should be broken by the charge.

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 it is attempted to throw away its fire at this distance. In an attack where several squares are in line, if one fires to sccond another it should instantly be changed.
812. Attack against artillery.-In attacks against artillery, the detachment of cavalry should be divided into three bodies; one-fourth of the detachment being eharged 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 of the battery. When the battery has a fair sweep over the ground along which they must advance, they should, by manœuvering and false attacks, try to confuse the artillerist, and draw their fire before making their charge.

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

## ARTILLERY.

S13. 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 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 murements the reverse generally obtains.
814. 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 ke 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 the fire.

The distance between the batteries should not be much over 600 paces, so that by their fire they may cover well the gromed intervening between them, and afford mutnal support ; the light guns beiner plaeed 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 varions 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 variations in the effect of the shot, of the weight of metal of the batteries.

Those positions for batteries should be avoided from whieh 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 approaehed even within good musket-range of them.

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

A sufficient number of picees-seleeting for the object in view borse artillery in preference to any other - should be held in reserve for a moment of need, to be thrown upon a point where the enemy's progress threatens danger, or to be used in covering the retreat.

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 earry 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 suceessful, might entail a fatal disaster on the assailed, from the loss of so many pieces at onee.

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

S15. Attcck.-In the outset of offensive movements, good positions should be selected for the heaviest pieces, from which they can maintain a strong fire on the enemy until the lighter picees and the columns of attack are brought into action. These positions should be taken on the flanks of the ground oecupied by the assailant, or on the centre, if more favorable to the end to be attained. In all eases, wide intervals should be lett between the heary 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,

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care should be taken not to place other troops behind the point occupied by a battery, where they would be exposed to the return fire of the assailed; when this cannot be avoided, the troops sbould be so placed as to be covered by any undulation of the ground, or else be deployed in time to lessen the effects of the shot.

The artillery which moves with the column of attack should be divided into several strong batteries, as the ohject 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 beiug sufficient for the fire manœuvres of the other troops, in large bodies. The manœuvres of thesc batteries should be made with promptitude, so that no time may be lost for the action of their fire. They should get rapidly orer unfavorable ground to good positions for firing, and maintain these as long as possible; detaching, in such cases, a few pieces to accompany the column 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.

## Articee XVI.

## COURTS MARTIAl.

S16. Courts Martial are military courts instituted for the investigation and punishment of all offences committed by officers, soldiers, sutlers, retainers to the camp, and persons serring with the army, in violation of military law and the custom of war. Their powers and duties are laid down in general terms in the Articles of War, from Article 64 to 91 inclusive.
817. Commissioned officers clothed with military rank, and entitled to command, are the only persons in the United States service who are eligible as members of courts martial ; this excludes all paymasters, surgeons, and assistant-surgeons whose rank is only assimilated.
818. Courts martial are of three kinds, General, Regimental and Gorrison.

A general court martial is competent to take jurisdiction orer any offence of a military nature that can be committed by military persons; and its powers to award punishments are coextensive with this right. Commissioned officers are not amenable to any other than a general court martial, and it is provided by Article 75 of the Articles of War, that they shall not be tried by officers of an inferior rank, if it can be avoided.
819. A general court martial can only be appointed or assembled by the President of the United States, by the Governor of a State as com-mander-in-chief of the forces of the State, by a general commanding an army, or by a general or colonel commanding a separate military department. The warrant for assembling the court, or the appointment of the members thereof, is in the form of an order, and issues directly from the officer to whom the law has delegated such power.
820. It is provided by Article 64 of the Articles of War, that general courts martial may consist of any number of members, from five to thirteen inclusively; but they shall not consist of less than thirteen when that number can be convened without manifest injury to the service. It is to be observed, however, that the officer empowered to appoint a court is invested with discretionary authority as to the num-
ber of officers which shall compose it, and their rank relatively to that of the accused.
821. The proceedings and decisions of general courts martial are subject to review or revision by the officer ordering the same, or the officer commanding the troops for the time being. In the United States service no sentence of a general court inartial in time of peace, extending to the loss of life, or the dismission of a commissioned oflicer; or which shall, eitber in time of peace of war, respect a general officer, cannot be carried into execution, until after the whole proceedings shall have been transmitted to the Secretary of War, to be laid before the President of the United States for his confirmation or disapproval, and orders in the case. All other sentences may be confirmed and executed by the officer ordering the court, or the commanding officer for the time being, as the case may be. Every officer anthorized to order a general court martial shall have power to pardon or mitigate any punishment ordered by such court, except the sentence of death, or of cashiering an officer.
822. Regimental and garrison courts martial take cognizance of and punish officers of minor degree. The regimental court martial is ordered by the colonel or other commander of the regiment, for the trial of offences in the regiment ; it consists of three commissioned officers.

Garrison courts martial are in like manner composed of three commissioned officers, and appointed by the commanders of garrisons, forts, barracks, or other places, where the troops consist of mixed corps.

The proceedings of regimental and garrison courts martial are submitted to the officers ordering them, or to their successors in command, for revision and decision on the sentences pronounced. The jurisdicdiction of these conrts is very limited, and can in no case extend to the trial of capital cases or commissioned officers.

## THETRIAL.

823. A court martial having been deemed necessary to investigate the conduct of an officer or soldier, against whom a charge has been preferred, the order appointing the members and judge advocate to compose the same, as well as the time and place of meeting, is duly promulgated.

When the hour bas arrived for assembling, the members of the court martial take their places at the table according to rank, on the right and left of the president, the latter at the head of the table. The judge advocate is seated opposite to the president. The prisoner and bis council (if he has any) have a place assigned, with the necessary
accommodation for writing, on the right hand of the judge advocate. The witness stands near the judge advocate, on his left hand. In case a third party, as prosecutor, should be permitted to appear, he will he placed to the left of the judge advocate. The court being seated and called to order, no member can leave his seat without the permission of the president.

It is usual for the judge advocate to prepare a copy of the charges for the use of the court, which is placed upon the table previous to the arraignment.

The court having been called to order, and any preliminary matter which may bave required their attention being disposed of, it is proclaimed opeu. The parties are then called, and appear in court.

The prisoner, unless there be danger of escape or rescue, must appear without fetters, and free from shackles of any kind; when the court adjourns, the prisoner, if a soldier, is remanded to the hands of the guard.

The judge adrocate now reads the order for the assembling of the conrt. It is proper also to read the charges to be investigated, so that the court may have before them the matter which they are about to swear that they will "truly try and determine."
824. The order for convening the court having been read, the judge advocate asks the prisoner if he has any objection to any member present, named in the order, or any cause of challenge to present.

Peremptory challenge or challenges are not permitted, but the prisoner must assign his reasons in writing, or if brief, the judge adrocate will record them as stated.

In case a member should be challenged (and only one can be challenged at a time), the reasons therefor, and, when susceptible of such, the reply or explanation offered, are committed to writing as a part of the minutes of the court, aud make a portion of the proceedings ; and the court is cleared in order to deliberate and decide on the objection assigned. The member objected to always withdraws during the discussion which follows, and, of course, does not vote on the question. Upon the reopening of the court, the judge adrocate (by direction of the court) makes known the decision, and the challenged member resumes his seat, or withdraws altogether, as the case may be, and a member in waiting, or supernumerary, if any be detailed, snpplies bis place.

The judge advocate cannot be challenged on any pretence whatever.
825. The judge advocate then proceeds to administer the prescribed oath; the members of the court, and the judge advocate, stand; the person or persons to be sworn lift the right hand, ungloved, when the judge advocate recites in an audible voice: "You, Colonel A. B., Major
B. C., Major D. F., and Captain G. H. (thus naming, with his rank, each member of the court), do swear that you will well and truly try and determine," etc., etc. "So belp you God." (See 69th Article of War.)

The presiding officer then administers the oath to the judge advocate, who observes the same form ; during which time all the members of the court remaiu standing, and observe the most decorons silence and attention.

The same oath prescribed to be taken by the merabers of a general court martial, is directed to be taken by the members of a regimental aud garrison court martial. No particular oath of secrecy is required of the recorder. as he is a member of the court.

Whenerer several persons are to be tried by the same court martial, upon different ebarges, the court must be resworn at the commencement of cach trial, and the record of each case made up separately and signed by the presideut and judge advocate.
826. The court having been sworn in the presence of the prisoner, the judge advocate reads the charge to the prisoner in open court, whom the judge advocate arraigns, by addressing by his proper title or rank, and name. "You have heard the charges preferred against you; how say you-guilty, or not guilty?"

The prisoner may plead guilty or not gnilty; but it must be made simply and unqualified, as nothing exculpatory can at this time be received. No speciol justification can be offered as a plea, as such would be an anticipation of the defence. He may stand mute, that is, refuse to answer; or answer foreign to the purpose; or may plead in bar of trial.

The ordinary plea is "not guilty," upon whicb the trial proceeds. The plea being recorded, the judge advocate calls the first witness, and gives notice that should there be any persons present in court who have been summoned as witnesses, they will retire uutil called for, as it is a rule that the witnesses of neither party can be present during the examination of other witnesses.
827. The witness is sworn by the judge advocate, and the same form of administering the oath is observed as was indicated for swearing in of the members. The words are: "You do swear (or affirm) that the evidence you shall give iu the cause now in hearing, shall be the truth, the whole truth, and nothing but the truth, so help you God."

The name, rank, regiment, or corps, or distinctive condition of the witness is recorded by the judge advocate at length, so that the person may by the description be easily identified.

The examination of the witnesses is always in the presence of every member of the court; and the "countenance, looks and gestures of a
witness" are considered of importance as adding to or taking from the weight of his testimony. The testimony is sometimes given in the form of a narrative, but more frequently by interrogations. Narration in many eases is the most natural and easy methorl to observe, but iuterogation is the more direct and searching means of soliciting evidence, and also the more certain. All eridence received is recorded in the order in which it is giren, and as nearly as may be in the very words of the witness. In case a witness shonld be too ill to attend the court, the latter may adjourn to the room or bedside of the former to receive his cridence. Questions are reduced to writing by the party originating them, and read alond by the judge advocate, who writes them on the proceedings. Should an objection be made to a question on examination, the court is cleared, and a majority of voices determines whether it shall be put or not.

A question having ben rejected, is not. therefore, expunged from the record, of which it makes a part, unless by consent of the parties before the court, hut appears on the record, with the decision of the court. A party before the court cannot object to a question put by the court, though he may to a question put by a member of it, before the cullective opinion of the court has been expressed in relation to it. All questions originating with members, and which have been received, are recorded as "by the court," but when made the subjcet of discussion, and rejection. they are entered upou the record as "by a member."

When a witness is sworn, the party who calls him commences the examination, which is styled the examination in chief: that being finished, the opposite party asks what questions he may deem necessary, and this latter interrogation is called the cross-examination. A re-examination of the witness, by the first party, follows the crossexamination, uprin such points as the latter may have touched on, and then the court put such questions as they may deem requisite to elicit the whole truth.

The examination of the witness having been completed, his evidence, if deemed necessary by the court, or if desired by him, is read over previous to his leaving, to give him the opportunity of correcting any errors therein. Acerdingly, any remark or explanation, with such a view, is entered on the proceedings: but no erasure or obliteration of what has been previously stated can be made.

Should either party perceive, after haring concluded bis case, that a material question has been omitter, he submits it to the court, who will always allow it to be put.

The witnesses called by the prosecutor haring been examined, and all the evidence to substantiate the charges submitted to the court, the prisoner enters upon his defence. should it be necessary for prepara-
tion, the court, at the request of the prisoner, wonld grant time to enable him to proceed with more certainty or precision.

Witnesses for the defence are examined in the same order as those presented on the part of the execution. The prosecutor crossexamines, and the prisoner re-examines to the same extent allowed to the prosecutor.
828. The examination of witnesses baving been closed, the prisoner takes his time to address the court, when, by argument and statement of facts as shown in the evidence, he presents to the court every consideration which may tend to weaken the foree of the prosecution. The greatest liberty consistent with strict propriety, especially in regard to third persons not before the court, is at all times allowed a prisoner ; and he therefore may impeach, by evidence, the character of witnesses brought against him, and remark on their testimony and the motives by which they and the prosecutor appear to have been actuated. Coarse and insulting language cannot, however, be tolerated.

Should either party, in the course of their examination of the witnesses, or by bringing forward new ones for that purpose, introduce new matter, the opposite one has the right of calling other witnesses to rebut such new matter.

The address (or defence) of the prisoner, prepared subsequent to the reception of all the testimony, is read by the prisoner, or if any cause should prevent his so doing, it may be, at the request of the prisoner, read by his counsel, the judge advocate, or a military friend.

The judge advocate, or the prosecntor, can always claim the right of replying to the defence of the prisoner, and the court will generally grant a reasonable time for the preparation of it. When the reply has been read, the trial is closed. Should the prisoner have examined witnesses as to matter not touched upon in the course of the prosecution; or should he have reflected upon the credibility of the prosecutor's evidence, the prosecutor is allowed to examine witnesses to the new matter, and for the re-establishment of the character of his witnesses.

## FINDING.

829. The charges having been investigated by the production and examination of all the evidence which the parties have deemed necessary, it is now the business of the court to decide upon the question of guilt.

It is necessary, however, before procecding to this stage of the trial, that cach and every allegation made against the prisoner should be fully inquired into; and this, too, entirely without reference to the
proof of any one item, which might even call for the uttermost sentence which a court martial can award, either against the life or the commission of the offender: and so, too, must a distinet judgment be pronounced upon every specification adduced in support of the charges.

Every member should fully satisfy himself of the extent and value of the testimony on record: and, for this purpose, a fair copy of the proceedings is laid upon the table or read over by the judge advocate, for the convenicnce of reference, aud to make certain, while the subject or prarticulars of the evidence is still fresh in the minds of the members, that such copy is a faithfnl transcript of the same.

This is of importance when the case is intricate, or the testimony voluminous: and it is also a very neefnl practice for the judge advocate, in such cases, to prepare an index, or short notes of the evidence. in order that reference to the record may be made more easy.

It is competent for the court at this stage of the proceedings, to call back a witness for the purpose of asking any particular question thougbt necessary ; but the parties must be present during such further examination. Indeed, before the finding, the court can recall a witness at any time.
830. The court having had sufficient time for a re-cxamination of the evidence, if necessary, and for deliberation and free discussion, the president, baving ascertained that every member is ready to give his opinion, signifies to the judge advocate to proceed. The latter then reads. in consecutive order, the specifications to each charge, and addresses each member, beginning with the youngest: "From the evidence in the matter now before you, how say you of the specification or eharge-is the prisoner guilty or not guilty?" The vote upon eacb specification of the charge having been given and recorded, the opinion on the charge is then given, and so on in succession for all the specifications and charges which hare been the subject of investigation. In order to avoid the exposure of each individnal opinion as his vote is giren, the members write upon slips of paper the opinion, guilty or not guilty, and hand them to the judge adrocate, who, after receiving every vote, arranges them, and announces the verdict. As the vote of each member is given, the judge adrocate makes a minute of the same, which should be carefully retained by bim, to meet the possible contingency of proceedings in the common law courts, touching the legality of the acts of the court martial.

The majority of the voices determines the conviction or acquittal of the prisoner, except in such cases as when (upon conviction) the law absolutely, and without any discretion in the court, condemns bim to suffer death. Iu all such cases, a two-third vote is necessary to convic-
tion, and the record must explicitly state that two-thirds of the court concurred in the finding.

Should it happen, by the organization of the court. or from the accident of siekness or death of any of the members, that there is an equality of votes upon the finding, the doubt must be resolved in favor of the prisoncr, and he most have the beucfit of acquittal.
831. The degree of guilt of which the prisoner is found, or the extent to which the charge is proved, ought to be well defined and clearly expressed; and so, likewise, the mode of declaring the prisoner acquitted, is a matter of some importance. Acquittals which are characterized by the terms, honorably; most honorably; fully; or most fully, should le employed when the nature of the charge makes them necessary: but in gencral, when no circumstances exist which call for emphatic opininious, a simple verdict of acquittal is the better formula. To declare that the charges rere not proced is improper.

In the deliberation of the court upon the finding to be declared, it is proper to observe the distinctions which may be made between the crime as alleged in the charge, and the degree of offence prored. A court martial, therefore, may, in some instances, fiud a prisoner guilty of the offence in a less degree than that stated. But a court martial, although empowered to find him guilty in a less degree, cannot find a higher degree of guilt than that alleged in the charge.

The finding declared by a majority, or specitic proportion of all the court, when the law, in particular offences, requires such, is the decision of the court, and the minority are bound by it.

## OF THESENTENCE.

832. The court, having determined the finding of innocence or guilt of the prisoner, proceed to the conclusion of their labors by pronouncing an acquittal, or affixing the punishment, according to the nature and degree of the offence.

Whaterer may have been the opinion of a member as to the finding of the court, he must, upon a conviction being declared by the legal number of rotes, give his opinion as to the nature aud degree of punishment, and apportion the same according to the degree of crime of which the majority have found the prisoner guilty. The minority then act independently of their individual opinions, and award punishment according and adequate to the offence of the accused. If the prisoner has been convicted of a particular offence, for which punishment is prescribed by law, every member must vote the punishment which the law has prescribed. In cases not provided fur by special penalty, it is of importance to the court to consider what kinds and degrees of pun-
ishment are legally applieable to the ease, and none should be inflieted exeept such as are in aceordance with the custom of war in like cases, or the common law of the land.
833. In passing sentence, courts martial should be eareful to employ elear and unambiguous language, so that the kind and degree of punishment shall be set forth definitely and precisely; and the mode of inflicting eapital punishment should be designated. The military laws do not say how a eriminal, offending against such laws, shall be put to death, but leare it to the eustom of war. Shooting or hanging is the method determined by such eustom. A spy is generally hanged; and mutiny, accompanied with loss of life, is punished by the same means. Descrtion, disobedience of orders, or other military erimes, usually by shooting.

## CONFIRMATION OF SENTENCE—REVISION.

834. When the proceedings of a court martial are submitted to the officer ordering the same, for his confirmation or disapproval and orders, it becomes his duty to peruse, in the most careful manner, the reeord of the court, and to ascertain any error which may have been admitted. Or should the record be found perfect in all its parts, he is to signify his decision thereon, and give his orders accordingly. But if any mistake or error in the conduet of the trial be presented to view, the proceedings of the court may be sent back to them for revisiou. The offieer who directs the court to reconvene, to reconsider its original opinion, points out, at the same time, the particular eause which makes a reconsideration necessary; and the court is therefore bound to reexamine, with deliberation and care, the reasons apon which the former opinions rested. The principal cause for requiring courts martial to revise their judgments is when an insufficient or uudue weight has been given to the testimony, aud is supposed to arise from inadvertence, misenception of the law, or the custom of war: or where an exorbitant, inadequate, or illegal punishment has been awardel.

Every offeer having authority to review the proceedings of courts martial, has power to suspend the execution of the sentence, to pardon or mitigate any punishment ordered by such court. He eannot, however, alter or commute the punishment, even with the eonsent of the party senteneed.

## OF THE JUDGE ADVOCATE.

835. By the laws of the United States it is made the duty of the jutge advocate to "prosecute in the name of the United States, but
shall so far consider himself as counsel for the prisoner, after the said prisoner shall have made his plea, as to object to any leading question to any of the witnesses, or any question to the prisoner, the answer to which might tend to eriminate himself; and administer to each member of tho court. before they procecd upon any trial, the following oath, which sball also be taken by all the members of the regimental and garrison courts martial."

The charges upon which a prisoner is to be tried having been placed iu the hands of the judge advocate, he is to ascertain what witnesses or evidence will be recessary, both for the prosecution and defence, and thereupon summon every person whose testimony may be required. This duty should be performed at the earliest period possible, to avoid any delay in the proceedings. He is to furnish the accused party with a copy of the eharges as soon as possible, or ascertain if such has been transmitted to him from another source; and should any alteration be made in the eharges, the prisoner should be immediately apprized of it.

Between the adjournment of one day, and the meeting on the next, the judge advocate prepares a fair copy of the proceedings, which, upon the reassembling of the court, is read over.

The business of the court having been concluded, the record of the proceedings is signed by the president of the court, and countersigned by the judge adrocate.
836. The duties of a judge adrocate before a court of inquiry are in many respeets the same as officiating before a general court martial, though of limited extent.

A court of inquiry may be composed of from one to three officers, with a judge advoeate, or suitable person as recorder, to reduce the pruceedings and evidence to writing; all of whom are to be sworn according to a prescribed oath. (See 95 th Article of War.)

The judge advocate prepares the ease fur investigation. He summons the neeessary witnesses, and gives notice to the parties interested, as to the place and time of meeting. He swears the witnesses in the same way as they are sworn before a court martial, and he records the testimony and keeps the proceedings from day to day.

The business of the court having been completed, the record will be authentieated by the signatures of the president and the judge advoeate, and by the latter transmitted to the authority by which the court was convened.
837. Form of order for concening a general court martial.

Adjutrent-Geurral's Office. Wasmington, Jan. - 18-.
$\left.\begin{array}{c}\text { General Orders, } \\ \text { No. -. }\end{array}\right\}$
A general court martial will assemble at ———, at ten o'elock, A. m., the 15 th instant, or as soon thereafter as practicable, for the trial of ——, and such prisoners as may be brought before it.

Detail for the court.

1. Colonel A. B....................... . 1st Regiment of Infantry.
2. Colonel C. D........................ 2d " " Cavalry.
3. Major E. F........................ 3d "، "Artillery.
4. Major G. H....................... 5th " " Infantry.
5. Captain L. M..................... . 1st " "Dragoons.
6. Captain N. O.................... 4th " "Infantry.
7. Etc., etc., etc.

Captain P. S., of the 2d regiment of artillery, is appointed the judge advocate of the court.

Should any of the officers named in the detail be prevented from attending at the time and place specified, the court will nevertheless procecd to, and continue the business before it, provided the number of members present be not less than the mininnm prescribed by law-the above being the greatest number [when the eourt is composed of less than thirteen members] that can be convened without manifest injury to the service.

By command of Major-General S.
S. C., Adjutant-General.
838. Furm of the proceedings of a general court martial.

Proceedings of a general court martial, convened at ——, by virtue of the following order, viz:

> (Here insert the order.) $$
\text { - o'elock, A. м., Jan. 15th, 18-. }
$$

The court met pursuant to the above order. Present:
Colonel A. B..................... . 1st Regiment of Infantry.
Colonel C. D....................... 2d ". " Cavalry.
Major E. F........................ 3d ". " Artillery.
Major G. IL...................... . 5th ". " Infantry.
Captain L. M.................. . 1st ". " Dragoons.
Etc., etc
Etc., etc.
......................... -_-_-_-_-_-_-_
Captain 1. S., of the $2 d$ regiment of artillery, juige alvocate.
Captain T. W., Sth regiment of infantry. the accused. also present.

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 MANUAL FOR VOLUNTEERS AND MILITIA.The judge adrocate having read the order conveuing the court, asked Captain T. W. if he had any objection to any member named therein, to whieh be replied-
(If any challenge is made, it must be now, and to one member at a time.)
The court was then duly sworn by the judge advocate, and the judge advocate was duly sworn by the presiding officer of the court, in the presence of the accused.
(It is at this stage of the proceedings that the accused makes his request for the pricilege of introducing his counsel, and will also, if he desires it, state his rersons for postponement of the trial. These matters being setthen, the conrt proceeds.)

The charges were read aloud by the judge advocate. Judge adrocate (addressing the accused): "Captain T. W., you have heard the charge, or charges, preferred against you ; how say you-guilty or not guilty?"

To which the accused, Captain T. W., pleaded as follows:-(The .judge adrocute here gives notice, that should there be any persons present in rourt, wh, have been summoned as witnesses, they must retire and wait mutil called for.)

Capt. D. N., second regiment of artillery, a witness on the part of the prosecution, was duly sworn.

Question by the judge advocate.
Answer.
Question.
Answer.
Cross-examined by the accused.
Answer.
Question.
Answer.
(The cxamination of the witness being completed, his testimony is read over to him, and corrected if necessary-when the next witness is eulled. The judge adcocate hariny presented all the eridence for the prosecution, states such fact, and announces that the prosccution is closed-when the accused enters upon the defence.)

Lieutenant A. B., 3 d Regiment of Iufantry, a wituess for the defence, was duly sworn.

Question by the accused.
Answer. Question.
Answer.


Cross-examined.
Question by judge advocate.


Question by the court.
Answer.
Question. Answer.

Answer.
(The evidence on both silles having been heard, the accused askn for time to prepare his defence.)

The court adjourned to meet again at ten oclock, a. M., on the - inst.

$$
\text { Ten o`clock, A. s., }-, 18-
$$

The court met pursuant to adjoumment. Present, Colonel A. B.; Colonel C. D.; Major E. F.; Major G. H.; Captain J. M., etc., etc.

Captain P. S., judge advocate, and Captain T. W., the accused.
The procecdings of yesterday were read over, when the accused, Captain T. W., presented and read ( $\omega$ which was read by his council) the written defence (A.) appended to these procecdings.
(Should the jutge adcocate intend to reply, he would notify the court, and ask for the requisite time for preparation.)

The statements of the parties being thus in possession of the court, the court was cleared for deliberation; and having maturely considered the evidenec adduced, find Captain T. W., of the 8th Regiment of Infantry, as follows:

Of the first specification of 1st charge, -_, Guilty.
Of the second specification of 1st charge, ———, Not guilty.
Of the third specification of 1st charge, - Guilty.
Of the First charge, $\quad$ _—, Guilty.
Of the first specification of 2 d charge, ——— Not guilty.
Of the second specification of 2 d charge, —. Not guilty.
Of the Second charge, -_ Not guilty.
And the court do therefore sentence the said Captain T. W. of the 8 th Regiment of Infantry, - to -
(Signed)
A. B.,

> Colonel 1st Regiment of Infantry, and President of the C. M. (Signed) Judge Adrocate.
There being no further business before them, the court adjourned sine die. (Signed) A. B.,
Colonel 1st Regiment of Infantry, and President of the C. M. (Signed)
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## ARTICLESOF WAR.

## AN ACT FOR ESTABLISHING RULES AND ARTICLES FOR THE GOVERNMENT OF THE ARMIES OF THE CONFEDERATE STATES.

Section 1. The Congress of the Confederate Strates of America do enact, That, from and after the passage of this Act, the following sball be the rules and articles by which the armies of the Confederates States shall be governed:

Article 1. Every officer now in the army of the Confederate States shall, in six months from the passing of this Act, and every officer who shall hereafter be appointed, shall, before he enters on the duties of his office, subscribe these rules and regulations.

Art. 2. It is earnestly recommended to all officers and soldiers diligently to attend divine scrvice; and all officers who shall behave indecently or irreverently at any place of divine worship, shall, if commissioned officers, be brought before a general court martial, there to be publicly and severely reprimanded by the President; if noncommissioned officers or soldiers, every person so offending shall, for his tirst offence, forfeit one-sixth of a dollar, to be deducted out of his next pay; for the second offence, he shall not only forfeit a like sum, but be confined twenty-four hours; and for every like offence, shall suffer and pay in like manuer; which money, so forfeited, shall be applied, by the captain or senior officer of the troop or company, to the use of the sick soldiers of the company or troop to which the offender belongs.

Art. 3. Any non-commissioned officer or soldier who shall use any profane oath or execration, shall incur the penalties expressed in the foregoing article; and a commissioned officer shall forfeit and pay, for each and every such offence, one dollar, to be applied as in the preceding article.

Art. 4. Every chaplain, commissioned in the army or armies of the Confederate States, who shall absent himself from the duties assigned bim (excepting in cases of sickness or leave of absence), sball, on conviction thereof before a court martial, be fined not exceeding one

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month's pay, besides the loss of bis pay during his absence; or be discharged, as the said court martial shall judge proper.

Ant. 5. Any officer or soldier who shall use contemptuons or disrespectful words against the President of the Confederate States, against the Vice-President thereof, against the Congress of the Confederate States, or against the Chief Magistrate or Legislature of any of the Confederate States, in which he may be quartered, if a commissioned officer, shall be cashiered, or otherwise punished, as a court martial shall direct; if a non-commissioned officer or soldier, he shall suffer such punisbment as shall be inflicted on him by the sentence of a court martial.

Art. 6. Any officer or soldier who shall behave himself with contempt or disrespect toward his commanding officer, shall be punisher, according to the nature of his offence, by the judgment of a court martial.

Art. 7. Any officer or soldier who shall begin, excite, cause, or join in any mutiny or sedition, in any troop or company in the service of the Confederate States, or in any party, post, detachment, or guard, shall suffer death, or such other punishment as by a court martial shall be inflicted.

Ant. 8. Any officer, non-commissioned officer, or soldier, who, being present at any mutiny or sedition, does not use his atmost endeavor to suppress the same, or, coming to the knowledge of any intended mutiny, does not, without delay. give information thereof to his commanding officer, shall be punished by the sentence of a court martial with death, or otherwise, according to the nature of his oflence.

Art. 9. Any officer or soldier who shall strike his superior officer, or draw or lift up any weapon, or offer any violence against bim, being in the execution of his office, on any pretence whatsoever, or shall disobey any lawful command of his superior officer, shall suffer death, or such other punishment as shall, according to the nature of his offence, be inflicted upon him by the sentence of a court martial.

Art. 10. Every non-commissioned officer or soldier, who shall enlist himself in the service of the Conferlerate States, shall at the time of his so enlisting, or within six days afterward, have the Articles for the government of the armies of the Confederate States read to him, and shall, by the oficer who enlisted him, or by the commanding officer of the troop or company into which be was enlisted, be taken before the next justice of the peace, or chief magistrate of any city or town corporate, not being an officer of the army, or where recourse cannot be had to the civil magistrate, before the judge advocate, and in his presence shall take the following oath or affirmation: "I, A. B., do
solemnly swear, or affirm (as the case may be), that I will bear true allegiance to the Confederate States of America, and that I will serve them honestly and faithfully against all their enemies or opposers whatsoever ; and observe and obey the orders of the President of the Confederate States, and the orders of the offieers appointed over me, according to the Rules and Articles for the gevernment of the armies of the Confederate States." Which justice, magistrate, or judge advocate is to give to the offieer a certificate, signifying that the man enlisted did take the said oath or affirmation.

Art. 11. After a non-commissioned offieer or soldier shall have been duly enlisted and sworn, he shall not be dismissed the service without a discharge in writing; and no discharge granted to him shall be sufficient which is not signed by a field officer of the regimeat to which be belongs, or commanding officer, where no field officer of the regiment is present; and no diseharge shall be given to a non-commissioned officer or soldier before his term of service has expired, bat by order of the President, the Secretary of War, the commanding officer of a department, or the sentence of a general court martial ; nor shall a commissioned officer be discharged from the service, but by order of the President of the Confederate States, or by sentence of a general court martial.

Art. 12. Every colonel, or other officer commanding a regiment, troop, or company, and aetually quartered with it, may give furloughs to non-commissioned officers or soldiers, in such numbers, and for so long a time, as he shall judge to be most consistent with the good of the service; and a captain, or other inferior oficer, commanding a troop or company, or in any garrison, fort, or barrack of the Confederate States (bis field officer being absent), may give furloughs to non-commissioned offieers and soldiers, for a time not exceeding twenty days in six months, but not to more than two persons to be absent at the same time, excepting some extraordinary occasion should require it.

Art. 13. At every muster, the commanding offieer of each regiment, troop, or eompany, there present, shall give to the commissary of musters, or other ofticer who musters the said regiment, troop, or company, certificates signed by himself, signifying how long such officers as shall not appear at the said mnster have been absent, and the reason of their absence. In like manver, the commanding officer of every troop or company shall give ecrtificates, signifying the reasons of the absence of the non-commissioned officers and private soldiers; which reasons and time of absence shall be inserted in the muster rolls opposite the names of the respective absent officers and soldiers. The certificates shall, together with the muster rolls, be remitted by
the commissary of musters, or other officer mostering, to the Department of War, as speedily as the distance of the place will admit.

Ant. 14. Every officer who shall be convicted before a general eourt martial of having signed a false certificate relating to the absence of either officer or private soldier, or relative to his or their pay, shall be cashiered.

Art. 15. Every officer who shall knowingly make a false muster of man or horse, and every officer or commissary of musters who shall willingly sign, direct, or allow the signing of muster rolls wherein such false muster is contained, shall, upon proof made thereof, by two witnesses, before a general court martial, be cashiered, and shall be thereby utterly disabled to have or hold any office or employment in the service of the Confederate States.

Art. 16. Any commissary of musters, or other officer, who shall be convicted of having taken money, or other thing, by way of gratification, on mustering any regiment, troop, or eompany, or on signing muster rolls, shall be displaced from his office, and shall be thereby utterly disabled to have or hold any office or employment in the servico of the Confederate States.

Art. 17. Any officer who shall presume to muster a person as a soldier who is not a soldier, shall be dcemed guilty of having made a false muster, and shall suffer accordingly.

Art. 18. Every officer who shall knowingly make a false return to the Department of War, or to any of his superior officers authorized to call for such returns, of the state of the regiment, troop, or eompany, or garrison, under his command: or of the arms, ammunition, clothing, or other stores thereunto belonging, shall, on conviction thereof before a court martial, be cashiered.

Art. 19. The commanding officer of every regiment, troop, or indcpendent company or garrison of the Confederate States, shall, in the beginning of every month, remit, through the proper channels, to the Department of War, an exact return of the regiment, troop, independent company or garrison under his command, specifying the names of the officers then absent from their posts, with the reasons for and the time of their abseace. And any officer who shall be convicted of having, through neglect or design, omitted sending such returns, shall be punished, according to the nature of his crime, by the judgment of a general court martial.

Art. 20. All officers and soldiers who have reccived pay, or have been duly enlisted in the service of the Confederate States, and shall be eonvicted of having deserted the same, shall suffer death, or such other punishment as, by sentence of a court martial, shall be inflicted.

Ant. 21. Any non-commissioned officer or soldier who shall, without
leave from his commanding officer, absent himself from his troop, company, or detachment, shall, upon being convicted thereof, be punished according to the nature of his offence, at the discretion of a court martial.

Ant. 22. No non-eommissioned officer or soldier shall enlist himself in any other regiment, troop, or company, without a regular discharge from the regiment troop, or company in which be last served, on the penalty of being reputed a deserter, and suffering accordingly. And in case any officer shall knowingly receive and entertain such noncommissioned officer or soldicr, or shall not, after his being discovered to be a deserter, immediately confine him, and give notice thereof to the corps in which be last servel, the said officer sball, by a court martial, be easbiered.

Ant. 23. Any officer or soldier who shall be convicted of baving advised or persuaded any other officer or soldier to desert the service of the Confederate States, shall suffer death, or such other punishment as shall be inflicted upon him by the sentence of a court martial.

Art. 2t. No officer or soldier shall use"any reproachful or provoking speeches or gestures to another, upon pain, if an officer, of being put in arrest; if a soldier, confined, and of asking pardon of the party offended, in the presence of his eommanding officer.

Art. 25. No officer or soldier shall send a challenge to anotber officer or soldier, to fight a duel, or accept a challenge if sent, upon pain, if a commissioned officer, of being cashiered: if a non-commissioned officer or soldier, of suffering eorporal punishment, at the discretion of a court martial.

Art. 26. If any commissioned or nou-commissioned officer commanding a guard shall knowingly or willingly suffer any person whatsoever to go forth to fight a duel, be shall be punished as a cballenger; and all seconds, promoters, and carriers of challenges, in order to duels, shall be deemed principals, and be punished accordingly. And it shall be the duty of every efficer commanding an army, regiment, company, post, or detachment, who is knowing to a challenge being giren or accepted by any officer, non-commissioned officer, or soldier, under his command, or has reason to beliere the same to be the case, immediately to arrest and bring to trial such offenders.

Art. 27. All officers, of what condition socver, have power to part and quell all quarrels, frays, and disorders, thongh the persons concerned should lielong to another regiment, troop, or company: and either to order officers into arrest, or non-commissiuned officers or soldiers into confinement, until their proper superior officers shall be acquainted therewith; and whosoever shall refuse to obey such officer
(though of an inferior rank), or shall draw his sword upon him, shall be punished at the discretion of a general court nartial.

Art. 28. Any officer or soldier who shall upbraid another for refusing a challenge, shall himself be punished as a challenger; and all officers and soldiers are hereby discharged from any disgrace or opinion of disadvantage which might arise from their having refused to accept of challenges, as they will only have acted in obedience to the laws, and done their duty as good soldiers who subject themselves to diseipline.

Art. 29. No sutler shall be permitted to sell any kind of liquors or victuals, or to keep their bouses or shops open for the entertainment of soldiers, after nine at night, or before the beating of the reveille, or upon Sundays, during divine service or sermon, on the penalty of heing dismissed from all future sutling.

Art. 30. All officers commanding in the field, forts, barracks, or garrisons of the Confederate States, are hereby required to see that the persons permitted to sutle shall supply the soldiers with good and wholesome provisions, or other articles, at a reasonable price, as they shall be answerable for their neglect.

Art. 31. No officer commauding in any of the garrisons, forts, or barracks of the Confederate States, shall exact exorbitant prices for houses or stalls, let out to sutlers, or connive at the like exactions in others; nor by his own authority, and for his private advantage, lay any duty or impositiou upon, or be iuterested in, the sale of any victuals, liquors, or other necessaries of life brought into the garrison, fort or barracks, for the use of the soldicrs, on the penalty of being discharged from the service.

Art. 32. Every officer commanding in quarters, garrisons, or on the march, shall keep good order, and to the utmost of his power, redress a!l abuses or disorders which may be committed by any officer or soldier under bis command; if, upou complaint made to bim of officers or soldicrs beating or otherwise ill-treating any persou, or disturbing fairs or markets, or of committing any kind of riots, to the disquieting of the citizens of the Confederate States, he, the said commander, who shall refuse or omit to see justice done to the offender or offeuders, and reparation made to the party or parties injured, as far as part of the offender's pay shall enable him or them, shall, upon proof thereof, be cashiered, or otherwise punished, as a general court martial shall direct.

Art. 33. When any commissioned officer or soldier shall be accused of a capital crime, or of having used violence, or commitied any offence against the person or property of any of the Confederate States, such as is punisbable by the known laws of the land, the commanding officer
and officers of every regiment, troop, or company, to which the person or persons so accused shall belong, are hereby required, upon application duly made by, or in behalf of, the party or parties injured, to use their utmost endeavors to deliver over such accused person or persons to the civil magistrate, and likewise to be aiding and assisting to the officers of justice in apprehending and securing the person or persons so accuscd, in order to hring him or them to trial. If any commanding officer or officers shall wilfnlly neglect, or shall refuse, upon the application aforesaid, to deliver over sucb accused person or persons to the civil magistrates, or to he aiding and assisting to the officers of justice in apprebending such person or persons, the officer or officers so offending shall be cashiered.

Akт. 34. If any officer shall think himself wronged by his colonel, or the commanding officer of the reriment, and shall, upon due application being made to him be refused redress, he may complain to the general commanding in the State or Territory where such regiment shall be stationed, in order to obtain justice; who is hereby required to examine into said complaint, and take proper measures for redressing the wrong complained of, and transmit, as soon as possible, to the Department of War, a true state of such complaint, with the proceedings had thereon.

ARt. 35. If any inferior officer or soldier shall think himself wronged by his captain or other officer, he is to complain thereof to the commanding officer of the regiment, who is hereby recuired to summon a regimental court martial, for the doing justice to the complainant; from which regimental court martial either party may, if he think himself still aggrieved, appeal to a general court martial. But if, upon a second hearing, the appeal shall appear vexatious and groundless, the person so appealing shall be punished at the diseretion of said court martial.

Art. 36. Any commissioned officer, store-keeper, or commissary, who shall be convicted at a general conrt martial of having sold, without a proper order for that purpose. embezzled, misapplied, or wilfully, or through neglect, suffered any of the provisions, forage, arms, clothing, ammunition, or other military stores belonging to the Confederate States, to be spuiled or damaged, shall, at his own expense, make good the loss or damage, and shall, moreover, forfeit all his pay, and be dismissed from the service.

Arv. 37. Any non-commissioned officer or soldier who shall be convicted at a regimental court martial of having sold, or designedly, or through neglect, wasted the ammunition delivered out to him, to be employed in the service of the Confederate States, shall be punished at the discretion of such court.

Art. 38. Every non-commissioned officer or soldier, who shall be convicted before a court martial of having sold, lost, or spoiled, through neglect, his horse, arms, elothes, or accoutrements, shall nndergo such weekly stoppages (not excceding the half of his pay) as such court martial shall judge sufficient, for repairing the loss or damage; and shall suffer confinement, or such other corporal punishment as his crime shall deserve.

Arr. 39. Erery officer who shall be convicted before a court martial of having embezzled or misapplied any money with which he may have been intrusted, for the payment of the men under his command, or for enlisting men into the service, or for other purposes, if a commissioned officer, shall be cashiered, and compelled to refund the money; if a non-commissioned officer, shall be reduced to the ranks, be put under stoppages until the money be made good, and suffer such corporal punishment as such court martial shall direct.

Art. 40. Every captain of a troop or company is charged with the arms, accontrements, ammunition, clothing, or other warlike stores belonging to the troop or company under his command, which he is to be accountable for to his colonel in case of their beiug lost, spoiled, or damaged, not by unavoidable accidents, or on actual service.

Art. 41. All non-commissioned officers and soldiers who shall be found one mile from the camp without leave, in writing, from their commanding officer, shall suffer such punishment as shall be inflicted upon them by the sentence of a court martial.

Art. 42. No officer or soldier shall lic ont of his quarters, garrison, or camp without leave from his superior officer, upon penalty of being punished according to the nature of his offence, by the sentence of a court martial.

Art. 43. Every non-commissioned officer and soldier shall retire to his quarters or tent at the beating of the retreat; in default of which he shall be punished according to the nature of his offence.

Art. 44. No officer, non-commissioned officer, or soldier shall fail in repairing, at the time fixed, to the place of parade, of exercise, or other rendezvous appointed by his commanding officer, if not prevented by sickness or some other evident necessity, or shall go from the said place of rendezvous without leave from his commanding officer, before he shall be regularly dismissed or relieved, ou the penalty of being punished, according to the nature of his offence, by the sentence of a court martial.

- Art. 45. Any commissioned officer who shall be found drunk on his guard, party, or other duty, shall be cashiered. Any non-commissioned officer or soldier so offending shall suffer such corporal pnuishment as shall be inflicted by the sentence of a ourt martial.

Ant. 46. Any sentinel who shall be found slecping upon his post, or shall leave it before he shall be regularly relieved, shall suffer death, or such other punishment, as shall be inflieted by the sentence of a court martial.

Ant. 47. No soldier, belonging to any regiment, troop or company, shall hire another to do his daty for him, or be excused from duty hat in cases of sickness, disability or leave of absence; and every such soldier found guilty of hiring his duty, as also the party so bired to do another's duty, shall be punished at the discretion of a regimental court martial.

Art. 48. And every non-commissioned officer conniving at such biring of duty aforesaid shall be reduced; and every cominissioned officer knowing and allowing such ill practices in the service, shall be punished by the judgment of a general court martial.

Art. 49. Any officer belonging to the service of the Confederate States, who, by discharging of firearms. drawing of swords, beating of drums, or by any other means whatsoever, shall occasion false alarms in camp, garrison or quarters, shall suffer death, or such other punishment as shall be ordered by the sentence of a general court martial.

Art. 50. Any officer or soldier who shall, without urgent necessity, or without the leave of his superior officer, quit his guard, platoon or division, shall be punished, according to the nature of his offence, by the sentence of a court martial.

Ant. 51. No officer or soldier shall do violence to any person who brings provisions or other necessaries to the camp, garrison or quarters of the forces of the Confederate States, employed in any parts out of the said States, upon pain of death or such other punishment as a court martial shall direct.

Art. 52. Any officer or soldier who shall misbehave himself before the enemy, run away, or shamefully abandon any fort, post or guard, which be or they may be commanded to defend, or speak words inducing others to do the like, or shall cast away his arms and ammunition, or who shall quit his post or colors to plunder and pillage, every such offender, being duly convicted thereof, shall suffer death, or such other punishment as shall be ordered by the sentence of a general court martial.

Art. 53. Any person belonging to the armies of the Confederate States, who shall make known the watchword to any person who is not entitled to receive it according to the rules and discipline of war, or shall presume to give a parole or watchword different from what he receired, shall suffer death, or such other punishment as shall be ordered by the sentence of a general court martial.

Art. 54. All officers and soldiers are to behave themselves orderly in
quarters and on their march; and whoever shall commit any waste, or spoil, either in walks or trees, parks, warrens, fish-ponds, houses or gardens, corn-ficlds, enclosures of meadows, or shall maliciously destroy any property whatsoever belonging to the inhabitants of the Confederate States, unless by order of the then commander-in-chief of armies of the said States, shall (hesides such penalties as they are liable to by law), be punished, according to the nature and degree of the offence, by the judgment of a regimental or general court martial.

Art. 55. Whosoever, belonging to the armies of the Confederate States in foreign parts, shall force a safeguard, shall suffer dcath.

Art. 56. Whosoever shall relieve the enemy with money, victuals or ammunition, or shall knowingly harbor or protect an enemy, shall suffer death or such other punishment as shall be ordered by the sentence of a court martial.

Ant. 57. Whosoever shall be convicted of holding correspondence with, or giving intelligence to the enemy, either directly or indirectly, shall suffer death or such other punishment as shall be ordered by the sentence of a court martial.

Авт. 58. All public stores taken in the enemy's camp, towns, forts or magazines, whether of artillery, ammunition, clothing, forage or provisions, shall be secured for the service of the Confederate States; for the neglect of which the commanding officer is to be answerable.

Art. 59. If any commander of any garrison, fortress or post, shall be compclled, by the officers and soldiers under his command, to give up to the enemy, or to abandon it, the commissioned officers, non-commissioned officers or soldiers who shall be convicted of having so offended, shall suffer death or such other punishment as shall be inflicted upou them by the sentence of a court martial.

Art. 60. All sutlers and retainers to the camp, and all persons whatsoever, serving with the armies of the Confederate States in the field, though not enlisted soldiers, are to be subject to orders, according to the rules and discipline of war.

Art. 61. Officers having brevets or commissions of a prior date to those of the corps in which they serve, will take place, on courts martial or of inquiry, and on boards detailed for military purposes, when composed of different corps, according to the ranks given them in their brevets or former commissions; but in the regiment, corps or company to which such officers belong, they shall do duty and take rank, both in courts and on boards as aforesaid, which shall be composed of their own corps, according to the commissions by which they there mustered.

Art. 62. If, upou marches, guards, or in quarters, different corps shall happen to join, or do duty together, the officer highest in rank,
according to the commission by which he is mustered, in the army. nary, marine corps, or militia, there on duty by orders from competent authority, shall command the whole, and give orders for what is needful for the service, unless otherwise directed by the President of the Confederate States, in orders of special assignment providing for the case.

Art. 63. The functions of the engiveers being generally confined to the most elevated branch of military science, they are not to assume, nor are they subject to be ordered on any duty beyond the line of their immediate profession, except by the special order of the President of the Confederate States: but they are to receive every mark of respect to which their rank in the army may entitle them respectively, and are liable to be transferred, at the discretion of the President, from one corps to another, regard being paid to rank.

Art. 64. General courts martial may consist of any number of commissioned officers; from five to thirteen, inclusively ; but they shall not consist of less than thirteen where that number can be convened without manifest injury to the service.

Art. 65. Any general oficer commanding an army, or colonel commanding a separate department, may appoint general courts martial whenever necessary. But no sentence of a court martial shall be carried into execution until after the whole proceedings shall have been laid before the officer ordering the same, or the officer commanding the troops for the time being; neither shall any sentence of a general court martial, in the time of peacc, exteuding to the lozs of life, or the dismission of a commissioned officer, or which shall, either in time of peace or war, respect a gencral officer, be carried into execution, until after the whole proccedings shall have been transmitted to the Secretary of War, to be laid before the President of the Confederate States for his confirmation or disapproval and orders in the case. All other sentences may be confirmed and executed by the officer ordering the court to assemble, or the commanding officer fur the time being, as the case may be.

Ant. 66. Every officer commanding a regiment or corps may appoint, for his own regiment or corps, courts martial, to consist of three commissioned officers, for the trial and punishment of offences not capital, and decide upon their sentences. For the same purpose, all officers commanding any of the garrisons, forts, barracks, or other places where the troops consist of different corps, may assemble courts martial, to consist of three commissioned officers, and decide upon their sentences.

Art. 67. No garrison or regimental court martial shall have the power to try capital cases or commissioned officers; neither shall they inflict a fine exceeding one month's pay, nor imprison, nor put to hard labor, any non-commissioned officer or soldier for a longer time than one month.

Art. 68. Whenever it may be found convenient and necessary to the public service, the officers of the marincs shall be associated with the officers of the land forces, for the purpose of holding courts martial, and trying offenders belonging to either; and, in such eases, the orders of the seuior officer of either corps who may be present and duly authorized, shall be received and obeyed.

Art. 69. The judge advocate, or some person deputed by him, or by the general, or officer commanding the army, detachment, or garrison, shall prosecute in the name of the Confederate States, but shall so far consider himself as counsel for the prisoner, after the said prisoner shall have made his plea, as to object to any leading question to any of the witncsses, or any question to the prisouer, the answer to which might tend to criminate himself, and administer to each member of the court: before they proceed upon any trial, the following oath, which shall also be taken by all members of the regimental and garrison courts martial :
"You, A. B., do swear that you will well and truly try and determine, according to evidence, the matter now before you, between the Confederate States of Amcrica and the prisoner to be tried, and that you will duly administer justice, according to the provisions of 'An Act establishing Rules and Articles for the government of the armies of the Confederate States,' without partiality, favor, or affection; and if any doubt should arise, not explained by said Articles, according to your conscience, the best of your understanding, and the custom of war in like cases; and you do furtber swear that you will not divulge the scntence of the court until it shall be published by the proper authority; neither will you disclose or discover the vote or opinion of any particular member of the court martial, unless required to give evidence thereof, as a witness, by a court of justice, in a due course of law. So help you God."

And so soon as the said oath shall have been administered to the respective nembers, the president of the court shall administer to the judge adrocate, or person officiating as such, an oath in the following words:
"You, A. B., do swear, that you will not disclose or discover the vote or opinion of any particular member of the court martial, unless required to give evidence thereof, as a witness, by a court of justice, in due course of law; nor divulge the sentence of the court to any but the proper authority, until it shall be duly disclosed by the same. So help you God."

Art. 70. When a prisoner, arraigned before a general court martial, shall, from obstinacy and deliberate design, stand mute, or answer foreign to the purpose, the court may proceed to trial and judgment as if the prisoner had regularly pleaded not guilty.

Art. 71. When a member shall be ehallenged by a prisoner, he must state his eause of ehallenge, of whieh the court shall, after due deliberation, determine the relevaney or validity, and deoide aecordingly; and no challenge to more than one member at a time shall be received by the eourt.

Art. 72. All the members of a court martial are to behave with deeeney and calmness; and in giving their votes are to begin with the youngest in commission.

Art. 73. All persons who give evidence before a court martial are to be examined on oath or affirmation, in the following form:
"You swear or affirn (as the ease may be) the evidence you shall give in the cause now in hearing shall be the truth, the whole truth, and nothing but the truth. So help you Gad."

Art. 74. On the trials of eases not eapital, before courts martial, the deposition of witnesses, not in the line or staff of the army, may be taken before some justice of the peace, and read in evidence; provided the proseeutor and person aceused are present at the taking the same, or are duly notified thereof.

Ant. 75. No officer shall be tried but by a general eourt martiol, nor by offieers of an inferior rank, it it can be avoided. Nor shall any proceedings of trials be earried on, exeepting between the hours of eight in the morning and three in the afternoon; excepting in eases which, in the opinion of the officer appointing the eourt martial, require immediate example.

Art. 76. No person whatsoever shall use any menacing words, signs, or gestures, in presence of a court martial, or shall eause any disorder or riot, or disturb their proceedings, on the penalty of being punished at the diseretion of the said court martial.

Art. 77. Whenever any offieer shall be charged with a erime, he shall be arrested and eonfined in his barraeks, quarters, or tent, and deprived of his sword by the commanding offieer. And any officer who shall leave his eonfiuement before he shall be set at liberty by the commanding effieer, or by a superior officer, shall be eashicred.

Anc. 78. Non-commissioned officers and soldiers, eharged with erimes, shall be confined until tried by a eourt martial or released by proper authority.

ARt. 79. No officer or soldier who shall be put in arrest shall continue in confinement more than eight days, or until sueh time as a court martial ean be assembled.

Art. 80. No officer eommanding a guard, or provost marshal, shall refuse to receive or keep any prisoner committed to his eharge by an officer belonging to the forees of the Confederate States; provided the offieer committing shall, at the same time, deliver an account in
writing, signed by himself, of the crime of which the said prisoner is charged.

Art. 81. No officer commanding a guard, or provost marshal, shallpresume to release any person committed to his charge without proper authority for so doing, nor shall he suffer any person to escape, on the penalty of being punished for it by the sentence of a court martial.

Art. 82. Every ofiicer or provost marshal, to whose charge prisoners shall be committed, shall, within twenty-four hours after such commitment, or as soon as he shall be relieved from his guard, make report in writing, to the commanding officer, of their names, their crimes, and the names of the officers vho committed them, on the penalty of being punished for disobedience or neglect, at the discretion of a court martial.

Art. 83. Any commissioned officer convicted before a general court martial of conduct unbecoming an officer and a gentleman, shall be dismissed the service.

Art. 84. In cases where a court martial may think it proper to sentence a commissioned officer to be suspended from command, they shall have power also to suspend his pay aud emolnments for the same time. according to the nature and heinousness of the offence.

Art. 85. In all cases where a commissioned officer is cashiered for eowardice or frand, it shall be added in the sentence, that the crime, name, and place of abode, and punishment of the delinquent, he published in the newspapers in and about the camp, and of the particular State from which the offender came, or where he usually resides; after which it shall be deemed scandalous for an officer to associate with him.

Art. 86. The commanding officer of any post or detachment, in which there-shall not be a number of officers adequate to form a general court martial, shall, in cases which require the cognizance of such a court, report to the commanding officer of the department, who shall order a court to be assembled at the nearest post or department, and the party accused, with necessary wituesses, to be transported to the place where the said court shall be assembled.

Art. 87. No person shall be sentenced to suffer death but by the concurreuce of two-thirds of the members of a general court martial, nor except iu the cases hercin expressly mentioned; and no officer, non-commissioned officer, soldier, or follower of the army, shall be tried a second time for the same offence.

Art. 88. No person shall be liable to be tried and punished by a general court martial for any offence which shall appear to have been committed more than two years before the issuing of the order for such trial, unless the person, by reason of having absented himself, or some
other manifest impediment, shall not have been amenable to justice within that period.

Art. 89. Every offieer authorized to order a general eourt martial shall have power to pardon or mitigate any punishment ordered by such court, except the sentence of death, or of cashiering an officer; which, in the eases where he has authority (by Auticle 65) to carry them into exeeution, he may suspend, until the pleasure of the President of the Confederate States can be known; which suspension, together with copies of the proeeedings of the court martial, the said officer shall immediately transmit to the President for his determination. Aud the colonel or eommanding officer of the regiment or garrison where any regimental or garrison court martial shall be held, may pardon or mitigate any punishment ordered by such court to be inflicted.

Art. 90. Everyjudge advocate, or person ofieiating as such, at any geveral court martial, shall transmit, with as much expedition as the opportunity of time and distance of place can admit, the original proceedings and sentence of such court martial to the Secretary of War; which said original proceedings and sentence shall be carcfully kept and preserved in the office of said Secretary, to the end that the persons entitled thereto may be enabled, upon application to the said officer, to obtain copies thereof.

The party tried by any general court martial shall, upon demand thereof, made by bimself, or ly any person or persons in his behalf, be entitled to a copy nf the sentence and proeeedings of such court martial.

Art. 91. In cases where the general or commanding uffieer may order a court of inquiry to eximine into the nature of any transaction, accusation, or imputation against any offieer or soldier, the said court sbal! consist of one or more officers, not exceeding three, and a judge advocate, or other suitable person, as a recorder, to reduce the proceedings and evidence to writing; all of whom shall be sworn to the laithful performanee of their duty. This court shall have the same power to summon witnesses as a court martial, and to examine them on oath. But they shall not give their opinion on the merits of the case, excepting they shall be thereto specially recfuired. The parties accused shall also be permitted to cross-examine and interrogate the witnesses, so as to investigate fully the circumstances in the question.

Art. 92. The proceedings of a court of inquiry must be authenticated by the signature of the recorder and the president, and delivered to the commanding officer, and the said proceedings may be admitted as evidence by a court martial, in eases not capital, or extending to the
dismission of an officer, provided that the circumstances are such that oral testimony cannot be obtained. But as eourts of inquiry may be perverted to dishonorable purposes, and may be considered as engines of destruction to military merit, in the hands of weak and envious commandants, they are bereby probibited, unless directed by the President of the Confederate States, or demanded by the accused.

Ant. 93. The judge advocate or recorder shall administer to the members the following oath:
"You shall well and truly examine and inquire, according to your cvidence, into the matter now before you, without partiality, favor, affection, prejudice, or hope of reward. So belp you God."

After which the president shall administer to the judge advocate or recorder, the following oath:
"You, A. B., do swear that you will, according to your best abilities, accurately and impartially record the proceedings of the court, and the evidence to be given in the case in hearing. So help you God."

Themitnesses shall take the same oath as witnesses sworn before a court martial.

Art. 94. When any commissioned officer shall die or be killed in the service of the Confederate States, the major of the regiment, or the offler doing the major's duty in his absence, or in any post or garrison, the seeond officer in command, or the assistant military agent, shall immediately secure all his cffects or equipage, then in camp or quarters, and shall make an inventory thercof, and forthwith transmit the same to the office of the Department of War, to the end that his executors or administrators may receive the same.

Art. 95. When any non-commissioned officer or soldier shall die, or be killed in the service of the Confederate States, the then commanding officer of the troop or company shall, in the presence of twe other eommissioned officers, take an aecount of what effects he dicd possessed of, above his arms and accoutrements, and transmit the same to the office of the Department of War, which said effects are to be accounted for, and paid to the representatives of such deceased non-commissioned officer or soldier. And in ease any of the officers, so authorized to take care of the effects of such deceased non-commissioned officers and soldiers, should, before they have accounted to their representatives for the same, have occasion to leave the regiment or post, by preferment or otherwise, they shall, before they be permitted to quit the same, deposit in the hands of the commanding officer, or of the assistant military agent, all the effects of such deceased non-eommissioned officers and soldiers, in order that the same may be secured for, and paid to their respective representatives.

Aвт. 96. All officers, conductors, gunners, matrosses, drivers, or other persons whatsoever, receiving pay or hire in the service of the artillery or corps of engineers of the Confedcrate States, shall be governed by the aforesaid Rules and Articles, and shall be subject to be tried by courts martial, in like manner with the officers and soldiers of the other troops in the serrice of the Confederate States.

Art. 97. The officers and soldiers of any troops, whether militia or others, being mustered and in pay of the Confederate States, shall, at all times and all places, when joined or acting in eonjunction with the regular forces of the Confederate States, be governed by these Rules and Articles of War, and shall be subject to be tried by courts martial, in like manner with the officers and soldiers in the regular forces; save only that such courts martial shall be composed entirely of militia officers.

Art. 98. All officers serving by eommission from the authority of any particular State, shall, on all detachments, courts martial or other duty, whercin they may be employed in conjunction with the regular forces of the Coufederate States, take rank next after all officers of the like grade in said regular forces, notwithstanding the commissions of such militia or State offieers may be elder than the commissions of the officers of the regular forces of the Confederate States.

Art. 99. All erimes not capital, and all disorders and neglects which officers and soldiers may be guilty of, to the prejudice of good order and military discipline, though not mentioned in the foregoing Articles of War, are to be taken cognizance of by a general or regimental eourt martial, according to the nature and degree of the offence, and be punished at their discretion.

Art. 100. The President of the Confederate States shall have power to prescribe the uniform of the army.

Art. 101. The foregoing Articles are to be read and pullished, once in every six months, to every garrison, regiment, troop, or company mustered, or to be mustered, in the service of the Confederate States, and are to be duly observed and obeyed by all officers and soldiers who are, or shall be, in said service.

Sec. 2. And be it further enacted, That in time of war, all persons not citizens of, or owing allegiance to the Confederate States of America, who shall be found lurking as spies in and about the fortifieations or encampments of the armies of the Confederate States, or any of them, shall suffer death, according to the law and usage of nations, by sentence of a general court martial.


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[^0]:    1 The proportion in our service is two pieces to every thousand men, and one in reserve.

[^1]:    * When the company is in good discipline, the files may be furmed in two ranks at once, each man having his proper number in the company depending upon his height, and being able to take his appropriate place withont creating confusion.

[^2]:    1 With very little modification this manual will serve for Colt's Carbine and Rifle.
    2 If it is a carbine or rifle, the command will be, advance-carbine (or rifle).

[^3]:    1 If the platoons are small, or if the instructor wishes to exercise the troop in the school of the squadron. he may cause it to be formed in a single rank.

[^4]:    * Or coal. at the rate of 1.50 lbs anthracite or 30 bushels bituminous to the cord.

[^5]:    I certify, on honor, that the above requisition is correct and just, and that fuel has not been drawn for any part of the time above charged.

    Received, $\quad$ of coal, in full of the above requisition.
    R. S., Commanding Company.

[^6]:    I certify, on honor, that the above requisition is correct and just, and that I have not drawn fuel for any part of the time above charged.
    

    Note.-This form will be used for individual officers, hospitals, guards, etc.

[^7]:    I certify, on bonor, that the above requisition is correct and just ; that I have now in service the number of animals I

    Received at——, on the ——day of ———, 18—, of ——, Quartermaster ——or pounds of corn, pounds of oats, pounds of hay requisition. (Signed duplicates).

[^8]:    ——5̄ bushels

[^9]:    G. H., Conemanding Company.
    in full of the above requisition.

[^10]:    I certify that the above requisition is correct, and that I have not drawn stationery for any part of the time specified.
    

