

N.C. DRILL MANUAL, 1862

TITLE SECOND.

SCHOOL OF THE SOLDIER.

General Rules and division of the School of the Soldier.

70. The object of this school being the individual and progressive instruction of the recruits, the instructor never requires a movement to be executed until he has given an exact explanation of it; and he executes, himself, the movement which he commands, so as to join example to precept. He accustoms the recruit to take, by himself, the position which is explained - teaches him to rectify it only when required by his want of intelligence - and sees that all the movements are performed without precipitation.

71. Each movement should be understood before passing to another. After they have been properly executed in the order laid down in each lesson, the instructor no longer confines himself to that order; on the contrary, he should change it, that he may judge of the intelligence of the men.

72. The instructor allows the men to rest at the end of each part of the lessons, and oftener, if he thinks proper, especially at the commencement; for this purpose he commands REST.

73. 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 recruit, he commands, *in place*-REST; the soldier is then not required to preserve his immobility, but he always keeps one of his feet in its place.

74. When the instructor wishes to commence the instruction, he commands - ATTENTION; at this command the soldier takes his position, remains motionless, and fixes his attention.

75. The *School of the Soldier* will be divided into three parts: the first, comprehending what ought to be taught 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; also, long marches in double quick time and the run,

76. Each part will be divided into lessons, as follows:

PART FIRST.

Lesson 1. Position of the soldier without arms; Eyes right, left and front.

Lesson 2. Facings.

Lesson 3. Principles of the direct step in common and quick time.

Lesson 4. Principles of the direct step in double quick time and the run.

PART SECOND

Lesson 1. Principles of shouldered arms.

Lesson 2. Manual of arms.

Lesson 3. To load in four times and at will.

Lesson 4. Firings, direct, oblique, by file and by rank.

Lesson 5. To fire and load, kneeling and lying.

Lesson 6. Bayonet exercise.

PART THIRD.

Lesson 1. Union of eight or twelve men for instruction in the principles of alignment.

Lesson 2. The direct march, the oblique march, and the different steps.

Lesson 3. The march by the flank.

Lesson 4. Principles of wheeling and change of direction.

Lesson 5. Long marches in double quick time, and the run, with arms and knapsacks.

PART FIRST.

77. This will be taught, if practicable, to one recruit at a time; but three or four may be united, when the number be great, compared with that of the instructors. In this case the recruits will be placed in a single rank, at one pace from each other. In this part, the recruit will be without arms.

LESSON I.

Position of the Soldier.

78. Heels on the same line, as near each other as the conformation of the man will permit;
The feet turned out equally, and forming with each other something less than a right angle;
The knees straight without stiffness
The body erect on the hips, inclining a little forward;
The shoulders square and falling equally;
The arms hanging naturally;
The elbows near the body;
The palm of the hand turned a little to the front, the little finger behind the seam of the pantaloons;
The head erect and square to the front, without constraint;
The chin near the stock, without covering it;
The eyes fixed straight to the front, and striking the ground about the distance of fifteen paces.

REMARKS ON THE POSITION OF THE SOLDIER.

Heels on the same line;

79. Because, if one were in the rear of the other, the shoulder on that side would be thrown back, or the position of the soldier would be constrained.

Heels more or less closed;

Because, men who are knock-kneed, or who have legs with large calves, cannot, without constraint, make their heels touch while standing.

The feet equally turned out, and not forming too large an 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 incline the upper part of the body forward without rendering the whole position unsteady.

Knees extended without stiffness;

Because, if stiffened, constraint and fatigue would be unavoidable.

The body erect on the hips;

Because, it gives equilibrium to the position. The instructor will observe that many recruits have the bad habit of dropping a shoulder, of drawing in a side, or of advancing a hip, particularly the right, when under arms. These are defects he will labor to correct.

The upper part of the body inclining forward;

Because, commonly, recruits are disposed to do the reverse, to project the belly and to throw back the shoulders, when they wish to hold themselves erect, from which result great inconveniences in marching. The habit of inclining forward the upper part of the body is so important to contract, that the instructor must enforce it at the beginning, particularly with recruits who have naturally the opposite habit.

Shoulders square;

Because if the shoulders be advanced beyond the line of the breast, and the back arched (the defect called *round-shouldered*, not uncommon with recruits,) the man cannot align himself, nor use his piece with address. It is important, then, to correct this defect, and necessary to that end that the coat should set easy about the shoulders and arm pits; but in correcting this defect, the instructor should take care that the shoulders be not thrown too much to the rear, which would cause the belly to project, and the small of the back to be, curved.

SCHOOL OF THE SOLDIER-PART I.

The arms hanging naturally, elbows near the body, the palm of the hand a little turned to the front, the little finger behind the seam of the pantaloons;

Because these positions are equally important to the *shoulder arms*, and to prevent the man from occupying more space in a rank than is necessary to it free use of the piece; they have, moreover, the advantage of keeping in the shoulders.

The face straight to the front, and without constraint;

Because, if there be stiffness in the latter position, it would communicate itself to the whole of the upper part of the body, embarrass its movements and give pain and fatigue.

Eyes direct to the front;

Because, this is the surest means of maintaining the shoulders in line- an essential object, to be insisted on and attained.

80. The instructor having given the recruit the position of the soldier, without arms, will now teach him the turning of the head and eyes. He will command:

1. *Eyes*- RIGHT 2. FRONT.

81. At the word *right*, the recruit will turn the 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, or supposed to be in, the same rank.

82. At the second command the head will resume the direct or habitual position.

83. The movement of *Eyes* - LEFT will be executed by inverse means.

84. The instructor will take particular care that the movement of the head does not derange the squareness of the shoulders, which will happen if the movement of the former be too sudden.

85. When the instructor shall wish the recruit to pass from the state of attention to that of ease, he will command:

REST.

86. To cause a resumption of the habitual position, the instructor will command:

1. *Attention*. 2. SQUAD.

87. At the first word, the recruit will fix his attention; at the second, he will resume the prescribed position and steadiness.

LESSON II.

Facings.

88. Facings to the right or left will be executed in one *time*, or pause. The instructor will command:

1. *Squad*. 2. *Right (or left)* -FACE.

89. At the second command, raise the right foot slightly, turn on the left heel raising the toes a little, and then replace the right heel by the side of the left, and on the same line.

90. The full face to the rear (or front) will be executed in two *times*, or pauses. The instructor will command:

1. *Squad*. 2. ABOUT -FACE.

91. (*First time*.) At the word *about*, the recruit will turn on left heel, bring the left toe to the front, carry the right foot to the rear, the hollow opposite to, and full three inches from, the left heel, the feet square to each other.

92. (*Second time*.) At the word *face*, the recruit will turn on both heels, raise the toes a little, extend the hams, face to the rear, bringing, at the same time, the right heel by the side of the left.

93. The instructor will take care that these motions do not derange the position of the body.

LESSON III.

Principles of the Direct Step.

94. The length of the direct step, or pace in common time, will be twenty-eight inches, reckoning from heel to heel, and, in swiftness, at the rate of ninety in a minute.

95. The instructor, seeing the recruit confirmed in his position, will explain to him the principle and mechanism of this step—placing himself six or seven paces from and facing to the recruit. He will himself execute slowly file step in the way of illustration, and then command:

1. *Squad, forward*. 2. *Common time*. 3. MARCH.

96. At the first command, the recruit will throw the weight of the body on the right leg, without bending the left knee.

97. At the third command, he will smartly, but without a jerk, carry straight forward the left foot twenty-eight inches from the right, the sole near the ground, the ham extended, the toe a little depressed, and, as also the knee slightly turned out; he will, at the same time, throw the weight of the body forward, and plant flat the left foot, without shock, precisely at the distance where it finds itself from the right when the weight of the body is brought forward, the whole of which will now rest on the advanced foot. The recruit will next, in like manner, advance the right foot and plant it as above, the heel twenty-eight inches from the heel of the left foot, and thus continue to march without crossing the legs, or striking the one against the other, without turning the shoulders and preserving always the face direct to the front.

98. When the instructor shall wish to arrest the march, he will command:

1. *Squad*. 2. HALT.

99. At the second command, which will be given at the instant when either foot is coming to the ground, the foot in the rear will be brought up, and planted by the side of the other, without shock.

100. The instructor will indicate, from time to time, to the recruit the cadence of the step, by giving the command *one* at the instant of raising a foot, and *two* at the instant it ought to be planted, observing the cadence of ninety steps in a minute. This method will contribute greatly to impress upon the mind the two motions into which the step is naturally divided.

101. Common time will be employed only in the first and second parts of the School of the Soldier. As soon as the recruit has acquired steadiness, has become established in the principles of shoulder arms and in the mechanism, length and swiftness of the stop in common time, he will be practiced only in quick time, the double quick time, and the run.

102. The principles of the stop in quick time are the same as for common time, but its swiftness is at the rate of one hundred and ten steps per minute.

103. The instructor wishing the squad to march in quick time, will command:

1. *Squad, forward* 2. MARCH.

Lesson IV.

Principles of the Double Quick Step.

104. The length of the double quick step is thirty-three inches, and its swiftness at the rate of one hundred and sixty-five steps per minute.

105. The instructor wishing to teach the recruits the principles and mechanism of the double quick step, will command:

1. *Double Quick Step.* 2. MARCH.

106. At the first command, the recruit will raise his hands to a level with his hips, the hands closed, the nails toward the body, the elbows to the rear.

107. At the second command, he will raise to the front his left leg bent, in order to give to the knee the greatest elevation, the part of the leg between the knee and the instep vertical, the toe depressed; he will then replace his foot in its former position with the right leg he will then execute what has just been prescribed for the left, and the alternate movement of the legs will be continued until the command:

1. *Squad.* 2. HALT.

108. At the second command, the recruit will bring the foot which is raised by the side of the other and dropping at the same time his hands by his side, will resume the position of the soldier without arms.

109. The instructor placing himself seven or eight paces from., and facing the recruit, will indicate the cadence by the commands, one and two, given alternately at the instant each foot should be brought to the ground, which at first it will be in common time, but its rapidity will be gradually augmented.

110. The recruit being sufficiently established in the principles of this step, the instructor will command.

1. *Squad, forward.* 2. *Double Quick.* 3. MARCH.

111. At the first command, the recruit will throw the weight of his body on the right leg.

112. At the second command, he will place his arms as indicated No. 106.

113. At the third command he will carry forward the left foot, the leg slightly bent, the knee somewhat raised -will plant his left foot, the toe first, thirty-three inches from the right, and with the right foot will then execute 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 natural, oscillatory motion to the arms.

114. The double quick step may be executed with different degrees of swiftness. Under urgent circumstances the cadence of this step may be increased to one hundred and eighty per minute. At this rate a distance of four thousand yards would be passed over in about twenty-five minutes.

115. The recruits will be exercised also in running.

116. The principles are the same as for the double quick step, the only difference consisting in a greater degree of swiftness.

117. It is recommended in marching at double quick time, Or the run, that the men should breathe as much as possible through the nose, keeping the mouth closed. Experience has proved that, by conforming to this principle, a man can. pass over at much longer distance and with less fatigue.

PART SECOND.

GENERAL RULES

118. The instructor will not pass the men to this second part until they shall be well established in the position of the body, and in the manner of marching at the different steps

119. He will then unite four men, whom he will place in the same rank, elbow to elbow, and instruct them in the position of shoulder arms, as follows

LESSON I.

Principles of Shoulder Arms

120. The recruit being placed as explained in the first lesson of the first part, the Instructor will cause him to bend the right arm slightly, and place the piece in it, in the following manner:

121. The piece in the right hand-the barrel nearly vertical and resting in the hollow of the shoulder-the guard to the front, the arm hanging nearly at its full length near the body; the thumb, and fore-finger 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.

122. Recruits are frequently seen with natural defects in the conformation of the shoulders, breast and hips. These the instructor will labor to correct in the lessons without arms, and afterwards, by steady endeavors, so that the appearance of the places, in the same line, may be uniform, and this without constraint to the men in their positions.

123. The instructor will have occasion to remark that recruits, on first bearing arms, are liable to derange their position by lowering the right shoulder and the right hand, or by sinking the hip and spreading out the elbows.

124. He will be careful to correct all these faults by continually rectifying the position; he will sometimes take away the piece to replace it the better; he will avoid fatiguing the recruits too much in the beginning, but labor by degrees to render this position so natural and easy that they may remain in it a long time without fatigue.

125. Finally, the instructor will take great care that the piece, at a shoulder, be not carried too high nor too low; if too high, the right elbow would spread out, the soldier would occupy too much space in his rank, and the piece be made to waver; if too low, the files would be too much closed, the soldier would not have the necessary space to handle his piece with facility, the right arm would become too much fatigued, and would draw down the shoulder.

126. The instructor, before passing to the second lesson, will cause to be repeated the movements of *eyes right, left, and front*, and the *facings*.

Lesson II. *Manual of Arms.*

127. The manual of arms will be taught to four men, placed, at first, in one rank; elbow to elbow, and afterwards in two ranks.

128. 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.

129. The rate (or swiftness) of each motion, in the manual of arms, with the exceptions herein indicated, is fixed at the ninetieth part of a minute; but, in order not to fatigue the attention, the instructor will, at first, look more particularly to the execution of the motions, without requiring a nice observance of the cadence, to which he will bring the recruits progressively, and after they shall have become a little familiarized with the handling of the piece.

130. As 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, nor even with a uniform swiftness, they will not be subjected to that cadence. The instructor will, however labor to cause these motions to be executed with promptness, and above all, with regularity

131. 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 execution of the other motions. As soon as the recruits shall well comprehend the positions of the several motions of a time, they will be taught to execute the time without resting on its different motions; the mechanism of the time will nevertheless be observed, as well to give a perfect use of the piece, as to avoid the sinking of, or slurring over either of the motions.

132 The manual of arms will be taught in the following progression: The instructor will command:

Support- ARMS. *One time and three motions.*

133. (*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 hand, 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.

134. (*Second motion.*) Turn the piece with the right hand, the barrel to the front; carry the piece to the left shoulder, and pass the fore-arm extended on the breast between the right hand and the cock; support the cock against the left fore-arm, the left hand resting on the right breast.

135. (*Third motion.*) Drop the right hand by the side.

136. When the instructor may wish to give repose in this position, he will command
REST.

137. At this command, the recruits will bring up smartly the right hand to the handle of the piece (small of the stock), when they will not be required to preserve silence, or steadiness of position.

138. When the instructor may wish the recruits to pass from this position to that of silence and steadiness, he will command:

1. *Attention.* 2. SQUAD.

139. At the second word, the recruits will resume the position of the third motion of support arms

Shoulder- ARMS. *One time and three motions.*

140. (*First motion.*) Grasp the piece with the right hand under and against the left fore-arm; seize it with the left hand at the lower band, the thumb extended; detach the piece slightly from the shoulder, the left fore-arm along the stock.

141. (*Second motion.*) Carry the piece vertically to the right shoulder with both hands, the rammer to the front, change the position of the right hand so as to embrace the guard with the thumb and fore-finger, slip the left hand to the height of the shoulder, the fingers extended and joined, the right arm nearly straight.

142. (*Third motion.*) Drop the right hand quickly by the side.

Present- ARMS

One time and two motions.

143. (*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 fore-arm horizontal and resting against the body, the hand as high as the elbow.

144. (*Second motion.*) Grasp the small of the stock with the right hand below and against the guard.

Shoulder- ARMS.

One time and two motions.

145. (*First motion.*) Bring the piece to the right shoulder, at the same time change the position of the right hand so as to embrace the guard with the thumb and fore-finger, slip up the left hand to the height of the shoulder, the fingers extended and joined, the right arm nearly straight.

146. (*Second motion.*) Drop the left hand quickly by the side.

Order- ARMS.

One time and two motions.

147. (*First motion.*) Seize the piece briskly with the left hand 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 above the lower band, 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.

148. (*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.

149. The hand low, the barrel between the thumb and fore-finger 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 (or beak) of the butt, against, and in a line with, the toe of the right foot, the barrel perpendicular.

150. When the instructor may wish to give repose in this position, he will command:

REST.

151. At this command, the recruits will not be required to preserve silence or steadiness.

152. When the instructor may wish the recruits to pass from this position to that of silence and steadiness, he will command:

1. *Attention.* 2. SQUAD.

153. At the second word, the recruits will resume the position of order arms.

Shoulder- ARMS.

One time and two motions.

154. (*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 body; seize the piece with the left hand below the right, and drop quickly the right hand to grasp the piece at the swell of the stock, the thumb and fore-finger embracing the guard; press the piece against the shoulder with the left hand, the right arm nearly straight.

155. (*Second motion.*) Drop the left hand quickly by the side.

Load in nine times.

1. LOAD.*

156. (*First motion.*) Same as the first position of present arms No. 143.

*Whenever the loadings and firings are to be executed, the instructor will cause the cartridge box to be brought to the front.

(*Second motion.*) Carry the piece to the left side with the left hand-but upon the ground-barrel to the front-piece inclined to the right and front resting upon the left thigh, muzzle six inches in front of the centre of the body-right hand grasping the piece just below the upper band, and left hand extended upon the piece.

(*Third motion.*) Seize the piece with the left hand at the muzzle and carry the right hand to the cartridge box.

2. *Handle*-CARTRIDGE.

One time and one motion.

157. Seize the cartridge with the thumb and next two fingers, and place it between the teeth.

3. *Tear*-CARTRIDGE.

One time and one motion.

158. Tear the paper to the powder, hold the cartridge 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.

159. Empty the powder into the barrel; disengage the ball from the paper with the right hand and the thumb and first two fingers of the left; insert it into the bore, the pointed end uppermost, and press it down with the right thumb; seize the head of the rammer with the thumb and fore-finger of the right hand, the other fingers closed, the elbows near the body.

5. *Draw*- RAMMER.

One time and three motions.

160. (*First motion.*) Half draw the rammer by extending, the right arm; steady it in this position with the left thumb; seize the rammer between the thumb and fore-finger of the right hand the thumb under and the finger over the rammer; fingers extended, palm of the hand to the front.

161. (*Second motion.*) Clear the rammer from the pipes by extending the arm; the rammer in prolongation of the pipes, palm of the hand to the front.

162. (*Third motion.*) Turn the rammer by closing the fingers, the little end passing near the left shoulder, turning the back of the hand to the front; steady it by extending the forefinger of the right hand; place the head of the rammer on the ball, the rammer in prolongation of the barrel.

6. *Ram*- CARTRIDGE.

One time and one motion.

163. 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 fore-finger on 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.

164. (*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 thumb under and fore-finger above the rammer, the fingers extended; clear the rammer from the bore by extending the arm, the palm to the front, the rammer in the prolongation of the bore.

165. (*Second motion.*) Turn the rammer, the head passing near the left shoulder, the fingers closed, the rammer held between the thumb and fore-finger-nails to the front; insert the rammer, until the hand reaches the muzzle.

166. (*Third motion.*) Force the rammer home by placing the little finger of the right hand on the head of the rammer; extend the left hand down the piece without depressing the shoulder.

8. PRIME.*-

One time and two motions.

167. (*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 stock, 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 inches below the right breast, the barrel upwards, the muzzle on a level with the eye.

168. (*Second motion.*) Half cock with the thumb of the right hand the fingers supported against the guard and the small of the stock-remove the old cap with one of the fingers of the right hand, and with the thumb and fore-finger of the same hand 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

169. (*First motion.*) Bring the piece. to the right, shoulder and I'll 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*.

170. (*Second motion.*) Drop the left hand quickly by the side.

READY.

One time and three motions.

171. (*First motion.*) Raise the piece slightly with the right hand, making a half face to the right on the left heel; 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 heel; grasp the piece with the left hand at the lower band and detach it slightly from the shoulder.

172. (*Second motion.*) Bring down the piece with both hands, the barrel upwards, the left thumb extended along the stock the butt below the right fore-arm, the small of the stock against the body and two inches below the right breast, the muzzle as high as the eye, the left elbow against the side; place at the same time the right thumb on the head of the cock, the other fingers under and against the guard.

173. (*Third motion.*) Cock, and seize the piece at the small of the stock without deranging the position of the butt.

AIM.

One time and one motion.

174. Raise the piece with both hands, and support the butt against the right shoulder; the left elbow down, the right as high as the shoulder; incline the head upon the butt, so that the right eye may perceive quickly the notch of the hausse, the front sight, and the object aimed at; the left eye closed, the right thumb extended along the stock, the fore-finger on the trigger.

175. When recruits are formed in two ranks to execute the firings, the front rank men will raise a little less the right elbow, in order to facilitate the aim of the rear rank men.

176. The rear rank men, in aiming, will each carry the right foot about eight inches to the right, and towards the left heel of the man next on the right, inclining the upper part of the body forward.

FIRE.

One time and one motion.

177. Press the fore-finger against the trigger, fire, without lowering or turning the head, and remain in this position.

178. Instructors will be careful to observe when the men fire, that they aim at some distinct object, and that the barrel be so directed that the line of fire and the line of sight be in the same vertical plane. They will often cause the firing to be executed on ground of different inclinations, in order to accustom the men to fire at objects either above or below them.

be, *shoulder arms* and executed from *return rammer*, in one time and two motions, as follows:

(*First motion.*) Raise the piece with the left hand, and take the position of *shoulder arms*, as indicated No. 146.

(*Second motion.*) Drop the left hand quickly by the side.

LOAD.

One time and one motion.

179. Bring down the piece with both hands, at the same time face to the front and take the position of *load* as indicated No. 156. Each rear rank man will bring his right foot by the side of the left.

180. The men being in this position, the instructor will cause the loading to be continued by the commands and means prescribed No. 156 and following.

181. If, after firing, the instructor should not wish the recruits to reload, he will command;

Shoulder-ARMS.

One time and one motion.

182. 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.

183. To accustom the recruits to wait for the command *fire*, the instructor, when they are in the position of aim, will command:

Recover-ARMS.

One time and one motion.

184. At the first part of the command, withdraw the finger from the trigger; at the command *arms*, retake the position of the third motion of *ready*.

185. The recruits being in the position of the third motion of *ready*, if the instructor should wish to bring them to it shoulder, he will command:

Shoulder-ARMS.

One time and one motion.

186. At the command *shoulder*, place the thumb upon the cock, the fore-finger on the trigger, half-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*.

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

Fix- BAYONET.

One time and four motions.

188. (*First, second, and third motions.*) Same as in first, second, and third motions in the first time of loading, except in the third motion, the right hand is carried to the bayonet, grasping it, with the little finger up.

189. (*Fourth motion.*) Draw the bayonet from the scabbard, fix it, seize the piece with the right hand at the muzzle, the left hand resting on the barrel, arm extended.

Shoulder- ARMS.

One time and two motions.

190. (*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 fore-finger embracing the guard, the right arm nearly extended.

191. (*Second motion.*) Drop briskly the left hand by the side.

192. The recruits being at ordered arms, if the instructor should wish to fix bayonets, he will give the command:

Fix Bayonets,

when the pieces will be brought to the left side at one motion, and held as prescribed in No. 188. At the second motion the bayonets will be fixed as in No. 189; immediately resume the position of *ordered arms*.

Charge- BAYONET.

One time and two motions.

193. (*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 heel, the feet square; seize the piece at the same time with the left hand a little above the lower band.

194. (*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, which will be supported against the hip; the point of the bayonet as high as the eye.

Shoulder- ARMS.

One time and two motions.

195. (*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 band to the height of the shoulder, the right hand nearly extended.

196. (*Second motion.*) Drop the left hand smartly by the side.

Trail- ARMS

One time and two motions.

197. (*First motion.*) The same as the first motion of order arms.

198. (*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 hip, will so hold the piece that the rear rank men may not touch with their bayonets the men in the front rank.

Shoulder- ARMS.

199. At the command *shoulder*, raise the piece perpendicularly in the right hand, the little finger in rear of the barrel; at the command *arms*, execute what has been prescribed for the *shoulder* from the position of *order arms*.

Unfix- BAYONET.

One time and four motions.

200. (*First and second motions.*) Same as in fix bayonet.

201. (*Third motion.*) Same as in *fix bayonet*, except turn the bayonet clasp with the right thumb, grasp the shank of the bayonet with the right hand, palms under thumb and fingers extended well at the blade of the bayonet.

202. (*Fourth motion.*) Wrench off the bayonet, return it to the scabbard, grasp the piece at the upper band with the right hand, lower the left hand along the barrel, the arm extended without depressing the shoulder.

Shoulder- ARMS.

One time and two motions.

203. (*First and second motion.*) The same as from *fix bayonet*, Nos. 190 and 191.

Secure- ARMS.

One time and three motions.

204. (*First motion.*) The same as the first motion of *support arms*, No. 133, except with the right hand seize the piece at the small of the stock.

205. (*Second motion.*) Turn the piece with both hands, the barrel to the front; bring it opposite the left shoulder, the butt against the hip, the left hand at the lower band, the thumb as high as the chin and extended on the rammer; the piece erect and detached from the shoulder, the left fore-arm against the piece.

206. (*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.

207. (*First motion.*) Raise the piece with the left band, 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 fore-arm along the piece.

208. (*Second motion.*) The same as the second motion of *shoulder arms from a support.*

209. (*Third motion.*) The same as the third motion of *shoulder arms from a support.*

Right shoulder shift- ARMS.

One time and two motions.

210. (*First motion.*) Detach the piece perpendicularly from the shoulder with the right band, 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.

211. (*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 upwards; let fall, at the same time, the left hand by the side.

Shoulder- ARMS.

One time and two motions.

212. (*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 guide-sight.

213. (*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.

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

Right Shoulder shift- ARMS.

One time and two motions.

215. (*First motion.*) Seize the piece with the right hand, below and near the left fore-arm, place the left hand under the butt, the heel of the butt between the first two fingers.

216. (*Second motion.*) Turn the piece with the left hand the lock plate upwards, carry it to the right shoulder, the left hand still holding the butt, the muzzle elevated; hold the piece in this position and-place the right hand upon the butt as is prescribed No. 210, and let fall the left hand by the side.

Shoulder- ARMS.

One time and two motions.

217. (*First motion.*) The same as the first motion of *shoulder arms*, No. 212.

218. (*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 fore-arm extended on the breast as is prescribed No. 134, and let fall the right hand by the side.

Arms- AT WILL.

One time and one motion.

219. At this command, carry the piece at pleasure on either shoulder, with one or both bands, the muzzle elevated.

Support-ARMS.

One time and one motion.

220. At this command, retake quickly the position of shoulder arms.

221. The recruits being at ordered arms, when the instructor shall wish to cause the pieces to be placed on the ground, he will command

Ground- ARMS.

One time and two motions

222. (*First motion.*) Turn the piece with the right hand, the barrel to the left, at the same time seize the cartridge box with the left hand, bend the body, advance the left foot, the heel opposite the lower band; lay the piece on the ground with the right hand, the toe of the butt on a line with the right toe, the knees slightly bent, the right heel raised.

223. (*Second motion.*) Rise up, bring the left foot by the side of the right, quit the cartridge box with the left hand, and drop the hands by the side.

Raise-ARMS

One time and two motions.

224. (*First motion.*) Seize the cartridge box with the left hand, bend the body, advance the left foot opposite the lower band, and seize the piece with the right hand.

225. (*Second motion.*) Raise the piece, bringing the left foot by the side of the right; turn the piece with the right hand, the rammer to the front; at the same time quit the cartridge box with the left hand, and drop this hand by the side.

226. The recruits being at ordered arms, with the bayonet in the scabbard, if the instructor wishes to cause an inspection of arms he will command:

Inspection-ARMS.

One time and four motions.

(*First and second motions.*) Same as in *fix* bayonet, No. 192, except that the left hand remains at the muzzle, and the rammer head is seized between the thumb and fore-finger, as in *draw rammer*.

227. (*Third motion.*) Spring rammer as prescribed in *loading*; lower the left hand along the piece to full extent of arm, grasping the piece at the muzzle band with the right hand.

228. (*Fourth motion.*) Bring the piece to position of *order arms*.

229. The instructor will then inspect in succession the piece of each recruit, in passing along the front of the rank. Each, 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 handle, and, after inspecting it, will return it to the recruit, who will receive it back with the right hand, and replace it in the position of *ordered arms*.

230. When the instructor shall have passed him, each recruit will retake the position proscribed at the command *inspection arms*, return the rammer, and resume the position of *ordered arms*.

231. If, instead of *inspection of arms*, the instructor should merely wish to cause bayonets to be fixed, he will command:

Fix-BAYONETS.

232. Take the position indicated in No. 192, fix bayonets as has been explained, and immediately resume the position of *ordered arms*.

233. If it be the wish of the instructor, after firing, to ascertain whether the pieces have been discharged, he will command:

Spring-RAMMERS.

234. Put the rammer in the barrel as has been explained above, and immediately retake the position of *ordered arms*.

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

236. Each recruit, after the instructor passes him, will return rammer and resume the position of *ordered arms*.

Remarks on the Manual of Arms.

237. The manual of arms frequently distorts the persons of recruits before they acquire ease and confidence in the several positions. The instructor will therefore frequently recur to elementary principles in the course of the lessons.

238. Recruits are also extremely liable to curve the sides and back, and to derange the shoulders, especially in loading. Consequently the instructor will not cause them to dwell too long, at a time in one position.

239. When, after some days of exercise in the manual of arms, the four men shall be well established in their use, the instructor will always terminate the lesson by marching the men for some time in one rank, and at one pace apart, in common and quick time, in order to confirm them more and more in the mechanism of the step; he will also teach them to mark time and to change step; which will be executed in the following manner:

To Mark Time.

240. The four men marching in the direct step, the instructor will command:

1. *Mark time.* 2. MARCH.

241. At the second command, which will be given at the instant a foot is coming to the ground, the recruits will make a semblance of marching, by bringing the heels by the side of each other, and observing the cadence of the step, by raising each foot alternately without advancing.

242. The instructor wishing the direct step to be resumed will command:

1. *Forward.* 2. MARCH.

243. At the second command, which will be given as prescribed above, the recruits will retake the step of twenty-eight inches,

To change step.

244. The squad being in march, the instructor will command:

1. *Change step.* 2. MARCH.

245. At the second command, which will be given at the instant either foot is coming to the ground, bring the foot which is in rear by the side of that which is in front, and step off again with the foot which was in front.

To march backwards.

246. The instructor wishing the squad to march backwards, will command:

1. *Squad backward* 2. MARCH.

247. At the second command, the recruits will stop off smartly with the left foot fourteen inches to the rear, reckoning from heel to heel, and so on with the feet in succession till the command *halt*, which will always be preceded by the caution *squad*. The men will halt at this command, and bring back the foot in front by the side of the other.

248. This step will always be executed in quick time.

249. The instructor will be watchful that the recruits march straight to the rear, and that the erect position of the body and the piece be not deranged.

LESSON III.

To load in four times.

250. The object of this lesson is to prepare the recruits to load at will, and to cause them to distinguish the times which require the greatest regularity and attention, such as *charge cartridge*, *ram cartridge* and *prime*. It will be divided as follows:

251. The first time will be executed at the end of the command; the three others at the commands, *two*, *three* and *four*.

The instructor will command:

1. *Load in four times*. 2. LOAD.

252. Execute the times to include to charge cartridge.

TWO.

253. Execute the times to include ram cartridge.

THREE.

254. Execute the times to include prime.

FOUR.

255. Execute the time of *shoulder arms*.

To load at will.

256. 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

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

258. The cadence prescribed No. 129, is not applicable to loading in four times, or at will.

LESSON IV

Firings.

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

The direct fire.

260. The instructor will give the following commands:

1. *Fire by squad*. 2. *Squad*. 3. READY. 4. AIM. 5. FIRE 6. LOAD.

261. These, several commands will be executed as has been proscribed in the *Manual of arms*. At the third command the men will come to the position of *ready* as heretofore 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.

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

263. The instructor will recommence the firing by the command:

1. *Squad*. 2. AIM. 3. FIRE. 4. LOAD.

264. When the instructor wishes the firing to cease he will command:

Cease firing.

265. At this command the men will cease firing but will load their pieces if unloaded, and afterwards bring them to a shoulder.

Oblique Firing.

266. 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.

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

268. At the cautionary command, *right oblique*, the two ranks will throw back the right shoulder and look steadily at the object to be hit.

269. At the command, *aim*, each front rank man will aim to the right without deranging the feet; each rear rank man will advance the left foot about eight inches toward the right heel of the man next on the right of his file leader and aim to the right, inclining the upper part of the body forward and bending a little the left knee.

Position of the two ranks in the Oblique Fire to the left.

270. At the cautionary command, *left oblique*, the two ranks will throw back the left shoulder and look steadily at the object to be hit.

271. At the command, *aim*, the front rank will take aim to the left without deranging the feet; each man in the rear will advance the right foot about eight 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,

272. 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 continue to load as if isolated.

To fire by file.

273. The fire by file will be executed by the two ranks, the files of which will fire successively, and without regulating on each other, except for the first fire.

274. The instructor will command:

1. *Fire by file*. 2. *Squad*. 3. READY. 4. COMMENCE FIRING.

275. At the third command, the two ranks will take the position prescribed in the direct fire.

276. At the fourth command, the file on the right will aim and fire; the rear rank man in aiming will take the position indicated No. 176.

277. The men of this file will load their pieces briskly and fire a second time; reload and fire again, and so on in continuation.

278. 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.

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

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

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

Cease-FIRING.

282. At this command, the men will cease firing. 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,

To fire by Rank.

283. The fire by rank will be executed by each entire rank, alternately.

284. The instructor will command:

1. *Fire by rank*, 2. *Squad*. 3. READY. 4. *Rear rank*, 5. AIM. 6. FIRE. 7. LOAD.

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

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

287. 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.

288. 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 right foot.

289. The instructor will recommence the firing by the rear rank, and will thus continue to alternate from rank to rank, until he shall wish the firing to cease, when he will command, *cease firing*, which will be executed as heretofore prescribed.

LESSON V.

To fire and load kneeling.

290. In this exercise the squad 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.

291. The instructor will command:

FIRE AND LOAD KNEELING,

292. 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 in a position convenient for placing the right knee upon the ground in bending the left leg; place the right knee upon the ground; lower the piece, the left fore-arm 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.

293. He will next 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 seat himself, comfortably on the right heel,

294. 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; seize the hammer with the thumb, the fore-finger under the guard, cock and seize the piece at the small of the stock; bring the piece to the shoulder, *aim* and *fire*.

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

296. When loaded bring the piece to the front with the left hand, which holds it at the upper band; seize it at the same time with the right hand at the small of the stock; turn the piece, the barrel uppermost and nearly horizontal, the left elbow resting on the left thigh; half-cock, remove the old cap and prime, rise, and return to the ranks.

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

Fire and load lying.

298. In this exercise the squad will be in one rank and loaded: the instruction will be given individually and without times or motions.

299. The instructor will command:

FIRE AND LOAD LYING.

300. 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 piece nearly horizontal 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*.

301. As soon as he has fired, bring the piece down and turn upon his left side, still resting on his left elbow; bring back the piece until the cock is opposite his breast, the butt end resting on the ground; take out a cartridge with the right hand; seize the small of the stock with this hand, holding the cartridge with the thumb and two first fingers; he will then throw himself 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 cartridge draw rammer, ram cartridge, and return rammer.

302. 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.

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

LESSON VI.

Bayonet Exercise.

304. The bayonet exercise 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 Infantry*. 2. GUARD.

One time and two motions.

305. (*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.

306. (*Second motion*.) Carry the right foot twenty inches perpendicularly to the rear, the right heel on the prolongation of the left, the knees 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

307. 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 two motions.

308. Both motions the same as for *guard against infantry*, except that the right hand will be supported against the hip, and the bayonet held at the height of the eye, as in *charge bayonet*.

Shoulder-ARMS.

One time and one motion.

309. Spring 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.

PART THIRD.

310. When the recruits are well established in the *principles and mechanism of the step*, and *the position of the body, the manual of arms*, the instructor will unite eight men, at least, and twelve men, at most, in order to teach them the principles of alignment, the principles of the touch of elbows 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.

LESSON I.

Alignments.

311. The instructor will at first teach the recruits to align themselves man by man, in order the better to make them comprehend the principles of alignment; to this end, he will command the two men on the right flank to march two paces to the front, and having aligned them, he will caution the remainder of the squad to move up, as they may be successively called each by his number, and align themselves successively on the line of the first two men.

312. Each recruit, as designated by his number, will turn the head and eyes to the right as proscribed in the first lesson of the first part, and will march in *quick time two paces forward*, shortening the last, so as to find himself about six inches behind the new alignment, which he ought never to pass; he will next move up steadily by steps of two or three inches, the hams extended, to the side of the man next to him on the alignment, so that, without deranging the head, the line of the eyes, or that of the shoulders, he may find himself in the exact line of his neighbor, whose elbow he will lightly touch without opening his own.

313. The instructor seeing the rank well aligned, will command:

FRONT.

314. At this, the recruits will turn eyes to the front, and remain firm.

315. Alignments to the left will be executed on the same principles.

316. When the recruit shall have thus learned to align themselves man by man, correctly, and without groping or jostling, the instructor will cause the entire rank to align itself at once by the command:

Right (or left)- DRESS.

317. At this, the rank, except the two men placed in advance as, a basis of alignment, will move up in quick time, and place themselves on the new line, according to the principles prescribed No. 312.

318. The instructor, placed five or six paces in front, and facing the rank, will carefully observe that the principles are followed, and then pass to the flank that has served as the basis, to verify the alignment.

319. The instructor seeing the greater number of the rank well aligned, will command:

FRONT.

320. The instructor may afterwards order *this* or *that* file *forward* or *back*, designating each by its number. The file or files designated, only, will slightly turn the head towards the basis, to judge how much they ought to move up or back, steadily place themselves on the line, and then turn eyes to the front, without a particular command to that effect.

321. Alignments to the rear will be executed on the same principles, the recruits stopping back a little beyond the line, and then dressing up according to the principles prescribed No. 312, the instructor commanding:

Right (or left) backward-DRESS.

322. After each alignment, the instructor will examine the position of the men, and cause the rank to come to ordered arms, to prevent too much fatigue, and also the danger of negligence at shouldered arms.

LESSON II

323. The men having learned, in the first and second parts, to march with steadiness in common time, and to take steps equal in length and swiftness, will be exercised in the third part only in *quick time*, *double quick time*, and the *run*; the instructor will cause them to execute successively, at these different gaits, the march to the front, the facing about in marching, the march by the flank, the wheels at a halt and in marching, and the changes of direction to the side of the guides.

324. The instructor will inform the recruits that at the command *march*, they will always move off in *quick time*, unless this command should be preceded by that of *double quick*.

To march to the front.

325. The rank being correctly aligned, when the instructor shall wish to cause it to march by the front, he will place a well instructed man on the right or the left, according to the side on which he may wish the guide to be, and command:

1. *Squad, forward*. 2. *Guide right (or left)*. 3. MARCH.

326. At the command *march*, the rank will step off smartly with the left foot; the guide will take care to march straight to the front, keeping the shoulders always in a square with that line.

327. The instructor will observe, in marching to the front, that the men touch lightly the elbow towards the side of the guide; that they do not open out the left elbow, nor the right arm; that they yield to pressure coming from the side of the aide, and resist that coming from the opposite side; that they recover by insensible degrees the slight touch of the elbow, if lost; that they maintain the head direct to the front, no matter on which side the guide may be; and if found before or behind the alignment, that the man in fault corrects himself by shortening or lengthening the step, by degrees. almost insensible.

328. The instructor will labor to cause recruits to comprehend that the alignment can only be preserved, in marching, by the regularity of the step, the touch of the elbow, and the maintenance of the shoulders in a square with the line of direction; that if, for example, the step of some be longer than that of others, or if some march faster than others, a separation of elbows, and a loss of the alignment, would be inevitable; that if (it being required that the head should be direct to the front) they do not strictly observe the touch of elbows, it would be impossible for an individual to judge whether he marches abreast with his neighbor, or not, and whether there be not an interval between them.

329. The impulsion of the quick step having a tendency to make men too easy and free in their movements, the instructor will be careful to regulate the cadence of this step, and to habituate them to preserve always the erectness of the body, and the due length of the pace.

330. The men being well established in the principles of the direct march, the instructor will exercise them in marching obliquely. The rank being in march, the instructor will command

1. *Right (or left) oblique*. 2. MARCH.

331. At the second command, 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 touch elbows, they will glance along the shoulders of the nearest files towards the side to which they are obliquing, and will regulate their steps so that the shoulders shall always be behind that of their next neighbor on that side, and that his head shall conceal the heads of the other men in the rank. Besides this, the men should preserve the same length of pace, and the same degree of obliquity.

332. The instructor, wishing to resume the primitive direction, will command:

1. *Forward*. 2. MARCH.

333. At the second command, each man will make a half face to the left (or right), and all will then march straight to the front, conforming to the principles of the direct march.

To march to the front in double quick time.

334. When the several principles, heretofore explained, have become familiar to the recruits, and they shall be well established in the position of the body, the bearing of arms, and the mechanism, length, and swiftness of the step, the instructor will pass them from *quick* to *double quick* time, and the reverse observing not to make them march obliquely in double quick time, till they are well established in the cadence of this step.

335. The squad being at a march in quick time, the instructor will command:

1. *Double quick*. 2. MARCH.

336. At the command *march*, which will be given when either foot is coming to the ground, the squad will step off in double quick time. The men will endeavor to follow the principles laid down in the first part of this book, and to preserve the alignment.

337. When the instructor wishes the squad to resume the step in quick time, he will command:

1. *Quick time.* 2. MARCH.

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

339. The squad being in march, the instructor will halt it by the commands and means prescribed Nos. 98 and 99. The command *halt*, will be given an instant before the foot is ready to be placed on the ground.

340. The squad being in march in double quick time, the instructor will occasionally cause it to mark time by the commands prescribed No. 240. The men will then mark double quick time, without altering the cadence of the step. He will also cause them to pass from the direct to the oblique step, and reciprocally, conforming to what has been prescribed No. 330, and following.

341. The squad being at a halt, the instructor will cause it to march in double quick time, by preceding the command *march*, by *double quick*.

342. The instructor will endeavor to regulate well the cadence of this step.

To face about in marching.

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

1. *Squad right about.* 2. MARCH.

344. At the command *march*, which will be given at the instant the left foot is coming to the ground, the recruit will bring this foot to the ground, and turning on it, will face to the rear; he will then place the right foot in the new direction, and step off with the left foot.

To march backwards.

345. The squad being at a halt, if the instructor should wish to march it in the back step, he will command:

1. *Squad backward.* 2. *Guide left (or right).* 3. MARCH.

346. The back step will be executed by the means prescribed No. 247.

347. The instructor, in this step, will be watchful that the men do not lean on each other.

348. As the march to the front in quick time should only be executed at shouldered arms, the instructor, in order not to fatigue the men too much, and also to prevent negligence in gait and position, will halt the squad from time to time, and cause arms to be ordered.

349. 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.*

350. If the instructor shall wish the pieces carried at a trail, he will give the command *trail arms*, before the command *double quick*. If, on the contrary, this command be 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 *shoulder arms*. *This rule is general.*

Lesson III.

The march by the flank.

351. The rank being at a halt, and correctly aligned, the instructor will command:

1. *Squad, right-FACE.* 2. *Forward.* 3. MARCH.

352. At the last part of the first command, the rank will face to the right; the even numbered men, after facing 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.

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

354. The march by the left flank will be executed by the same commands, substituting the word *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.

355. The instructor will place a well-instructed soldier by the side of the recruit who is at the head of the rank, to regulate the step, and to conduct him; and it will be enjoined on this recruit to march always elbow to elbow with the soldier.

356. The instructor will cause to be observed in the march, by the flank, the following rules:

That the step be executed according to the principles prescribed for the direct step;

Because these principles, without which men, placed elbow to elbow, in the same rank, cannot preserve unity and harmony of movement, are of a more necessary observance in marching in file.

That the head of the man who immediately precedes, covers the heads of all who are in front;

Because it is the most certain rule by which each man may maintain himself in the exact line of the file.

357. The instructor will place himself habitually five or six paces on the flank of the rank marching in file, to watch over the execution of the principles prescribed above. He will also place himself sometimes in its rear, halt, and suffer it to pass fifteen or twenty paces, the better to see whether the men cover each other accurately.

358. When he shall wish to halt the rank, marching by the flank, and to cause it to face to the front, he will command:
1. *Squad*. 2. HALT. 3. FRONT.

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

360. At the third command, each man will front by facing to the left, if marching by the right flank, and by a face to the right, if marching by the left flank. The rear rank men will at the same time move quickly into their places, so as to form the squad again into one rank.

361. When the men have become accustomed to marching by the flank, the instructor will cause them to change direction by file for this purpose, he will command:

1. *By file left (or right)*. 2. MARCH.

362. At the command march, the first file will change direction to the left (or right) in describing a small arc 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 wheel on the same spot where that which preceded it wheeled.

363. 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.

364. At the second command, which will be given a little before either foot comes to the ground, the recruits 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; the men will double or undouble rapidly.

365. If, in facing by the right or left flank, the squad should face to the rear, the men will, come into one rank, agreeably to the principles indicated No. 360. It is to be remarked that it is the men who are in rear who always move up to form into single rank and in such manner as never to invert the order of the numbers in the rank.

366. If, when the squad has been faced to the rear, the instructor should cause, it to face by the left flank, it is the even numbers who will double by moving to the right of the odd numbers; but if by the right flank, it is the odd numbers who will double to the left of the even numbers. Observe the two following rules in the facings, viz:

1. Never gain ground to the front in doubling.
2. Never reverse the order of the numbers in undoubling.

The front referred to, is the original or real front. The numbers would be reversed, if in counting, beginning on the right of the company, number two should call before number one. These rules apply to all facings, whether the company be marching or at a halt.

367. This lesson, like the preceding one, will be practiced with pieces at a shoulder; but the instructor may, to give relief by change, occasionally order *support arms*, and he will require of the recruits marching in this position, as much regularity as in the former.

The march by the flank in double quick time.

368. The principles of the march by the flank in double quick time, are the same as in quick time. The instructor will give the commands prescribed No. 351, taking care always to give the command *double quick* before that of *march*.

369. He will pay the greatest attention to the cadence of the step.

370. The instructor will cause the change of direction, and the march by the flank, to be executed in double quick time, by the same commands, and according to the same principles as in quick time.

371. The instructor will cause the pieces to be carried either on the *right shoulder* or at a *trail*.

372. The instructor will sometimes march the squad by the flank, without doubling the files.

373. The principles of this march are the same as in two ranks, and it will always be executed in quick time.

374. The instructor will give the commands prescribed No. 351, but he will be careful to caution the squad not to double files.

375. The instructor will be watchful that the men do not bend their knees unequally, which would cause them to tread on the heels of the men in front, and also to lose the cadence of the step and their distances.

376. The various movements in this lesson will be executed in single rank. In the changes of direction, the leading man will change direction without altering the length or the cadence of the step. The instructor will recall to the attention of the men, that in facing by the right or left flank in marching, they will not double, but march in one rank.

LESSON IV. WHEELINGS.

General Principles of Wheeling.

377. Wheelings are of two kinds: from halts, or on fixed pivots, and in march or on moveable pivots.

378. Wheeling on a fixed pivot takes place in passing a corps from the order in battle to the order in column, or from the latter to the former.

379. Wheels in marching take place in changes of direction in column, as often as this movement is executed to the side opposite to the guide.

380. In wheels from a halt, the pivot man only turns in his place, without advancing or receding.

381. In the wheels in marching, the pivot takes steps of nine or eleven inches, according as the squad is marching in quick or double quick time, so as to clear the wheeling point, which is necessary, in order that the subdivisions of a column may change direction without losing their distances, as will be explained in the school of the company.

382. The man on the wheeling flank will take the full step of twenty-eight inches, or thirty-three inches, according to the gait.

Wheeling from a halt, or on a fixed pivot.

383. The rank being at a halt, the instructor will place a well-instructed man on the wheeling flank to conduct it, and then command:

1. *By squad, right wheel.* 2. MARCH.

384. At the second command, the rank will step off with their left foot, turning at the same time the head a little to the left, the eyes fixed on the line of the eyes of the men to their left; the pivot-man will merely mark time in gradually turning his body, in order to conform himself to the movement of the marching flank; the man who conducts this flank will take steps of twenty-eight inches, and from the first stop advance a little the left shoulder, cast his eyes from time to time along the rank, and feel constantly the elbow of the next man lightly, but never push him.

385. The other man will feel lightly the elbow of the next man towards the pivot, resist pressure coming from the opposite side, and each will conform himself to the marching flank—shortening his step according to his approximation to the pivot.

386. The instructor will make the rank wheel round the circle once or twice before halting, in order to cause the principles to be the better understood, and he will be watchful that the centre does not break.

387. He will cause the wheel to the left to be executed according to the same principles.

388. When the instructor shall wish to arrest the wheel, he will command:

1. *Squad.* 2. HALT.

389. At the second command, the rank will halt, and no man stir. The instructor, going to the flank opposite the pivot, will place the two outer men of that flank in the direction he may wish to give to the rank, without however displacing the pivot, who will conform the line of his shoulders to this direction. The instructor will take care to have between these two men, and the pivot, only the space necessary to contain the other men. He will then command:

Left (or right)- DRESS.

390. At this, the rank will place itself on the alignment of the two men established as the basis, in conformity with the principles prescribed.

391. The instructor will next command FRONT, which will be executed as prescribed No. 314.

Remarks on the principles of the Wheel from a halt.

392. *Turn a little the head towards the marching flank, and fix the eyes on the line of the eyes of the men who are on that side;*

Because, otherwise, it would be impossible for each man to regulate the length of his step so as to conform his own movement to that of the marching flank.

Touch lightly the elbow of the next man towards the pivot;

In order that the files may not open out in the wheel.

Resist pressure that comes from the side of the marching flank;

Because, if this principle be neglected, the pivot, which ought to be a fixed point, in wheels from a halt, might be pushed out of its place by pressure.

Wheeling in marching, or on a movable pivot.

393. When the recruits have been taught to execute well the wheel from a halt, they will be taught to wheel in marching.

394. To this end, the rank being in march, when the instructor shall wish to cause it to change direction to the reverse flank (to the side opposite to the guide or pivot flank,) he will command:

1. *Right (or left) wheel.* 2. MARCH.

395. The first command will be given when the rank is yet *four* paces from the wheeling point.

396. At the second command, the wheel will be executed in the same manner as from a halt, except that the touch of the elbow will remain towards the marching flank (or side of the guide) 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 thus gain ground forward in describing a small curve 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 his eyes on the ground over which he will have to pass.

397. The wheel being ended, the instructor will command:

1. *Forward.* 2. MARCH.

398. The first command will be pronounced when *four* paces are yet required to complete the change of direction.

399. At the command *march*, which will be given at the instant of completing the wheel, the man who conducts the marching flank will direct himself straight forward; the pivot man and all the rank 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.

400. 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.

401. The first command will be given when the rank is yet *four* paces from the turning point.

402. 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 slackening or quickening the cadence, and without shortening or lengthening the step. The whole rank will promptly conform itself to the new direction; to effect which, each man will advance the shoulder opposite to the guide, take the double quick step, to carry himself in the new direction, turn the head and eyes to the side of the guide, and retake the touch of the elbow on that side, in placing himself on the alignment of the guide, from whom he will take the step, and then resume the direct position of the head. Each man will thus arrive successively on the alignment.

Wheeling and changing direction to the side of the guide, in double quick time.

403. When the recruits comprehend and execute well, in quick time, the wheels at a halt and in marching, and the change of direction to the side of the guide, the instructor will cause the same movements to be repeated in double quick time.

404. These various movements will be executed by the same commands and according to the 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 eleven 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.

405. The instructor, in order not to fatigue the recruits, and not to divide their attention, will cause them to execute the several movements of which this lesson is composed, first without arms, and next, after the mechanism be well comprehended, with arms.

LESSON V.

Long marches in double quick time and the run.

406. The instructor will cause to be resumed the exercises in double quick time and the run, with arms and knapsacks.

407. He will cause long marches to be executed in double quick time, both by the front and by the flank, and by constant practice will lead the men to pass over a distance of five miles in sixty minutes. The pieces will be carried on either shoulder, and sometimes at a trail.

408. He will also exercise them in long marches, 411. Number two of the rear rank will turn his piece, lock square to the front, and pass it to his front rank man, who will seize it with his right hand about the middle band and incline it forward, resting the neck of the bayonet on that of his own bayonet and close to the blade.

at a run, the pieces carried at will; the men will be instructed to keep as united as possible, without however exacting much regularity, which is impracticable.

409. The run, in actual service, will only be resorted to when it may be highly important to reach a given point with great promptitude.

Stack arms.

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

Stack-ARMS

410. At this command, number two of the front rank will pass his piece before him, seize it with the left hand about the middle band; slope it across the body, barrel to the rear, the butt three inches above the right toe of the man on his left, muzzle six inches to the right of his right shoulder.

411. Number two of the rear rank will turn his piece, lock square to the front, and pass it to his front rank man, who will seize it with his right hand about the middle band and incline it forward, resting the neck of the bayonet on that of his own bayonet and close to the blade. Number one of the front rank will turn the barrel of his piece square to the front, slope it across the body, place the neck of his bayonet, above the necks, and between the blades of the other two bayonets, holding the piece with the right hand at the middle band, the butt three inches from the ground at his right toe.

412. Number two of the front rank will throw the butt of the rear rank man's piece about thirty inches to the front, at the same time resting the butt of his own piece on the ground on the left, and a little in rear of his left toe. At the same instant, number one of the front rank will rest the butt of his piece on the ground, a little on front of his right toe. Number one of the rear rank will incline his piece on the stack thus formed.

413. 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.

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

Take-ARMS.

413. At this command number one of the rear rank will retake his piece. Number two of the front rank will seize his own piece with the left hand at the middle band, and his rear rank man's piece in like manner with his right hand; and number one of the front rank will seize his piece with his right hand in the same manner. These two men will raise the stack, bring the butts together and disengage the bayonets. Number two of the rear rank will receive his piece from his front rank man, and all will resume the position of *ordered arms*.