

# **HORSE CARE AND ANATOMY**

## **GROOMING**

### **1. GENERAL**

Good grooming is essential to the general health, condition, and appearance of the animals that are stabled, exercised, or worked. It cleans the hair and pores of the skin. This results in cleaner and healthier skin which is less likely to become infested with parasites such as lice and mange mites.

Good, vigorous grooming massages the underlying body muscles, and thus improves the horse's condition and fitness. In the field as well as in garrison, the press of other service demands or the **discomfort of trying weather conditions is never a valid excuse for failing to groom thoroughly at least once a day regardless of their duty status**. The value of grooming depends upon the thoroughness and speed with which it is done.

Leaders should encourage cadets to work hard and rapidly and do a thorough job in the minimum time required. Each individual's grooming should be inspected as soon as possible. Proper supervision of grooming is always essential, yet efficient grooming is possible only when the individual cadet can be taught to take personal pride in the appearance of his mount or mule team.

### **2. TIME OF GROOMING**

Before any horse or mule leaves the stables for work or exercise, grooming must occur. After a quick inspection for cuts or injuries sustained in the stall, the cadet picks the horse's feet. Once that is complete, the coat is brushed; mane is brushed and neatly arranged; tail is brushed; and eyes, nostrils, and dock are wiped clean.

On the return from work or exercise, grooming should proceed immediately. Heated, wet, or sweating animals should be cooled before being groomed or returned to their stall. A way to determine if an animal is cooled down is to touch the breast area, the flank, or neck with the back side of your hand. If these areas are dry or cool to the touch, generally the animal has adequately cooled down.

### **3. GROOMING EQUIPMENT**

Each mounted cadet should have the following grooming equipment:

- a. *Currycomb*: Used to groom animals that have long, thick coats, to remove caked mud, to loosen matted scurf and dirt in the hair. The currycomb produces the best effect when applied gently and in small circles, rather than with pressure and in long strokes. It should never be used on the legs from the knee down or the hocks down, about the head, or over any bony parts. The use of the currycomb should be prohibited in grooming of animals recently clipped, or that have a fine, thin coat of hair. In most cases, the hair may be loosened and ruffled sufficiently with a grooming cloth.
- b. *Horse Brush*: This is the principal tool used for grooming a horse. When properly used, it reaches the skin with the bristles or bush fibers penetrating through the hair of the coat.
- c. *Hoof Pick*: Used to clean the horse's feet, being careful not to use too much pressure, which could injure the tissue.
- d. *Grooming Cloth*: Used to remove dust and dirt from the coat, and used to wipe out the ears, eyes, nostrils, lips, and dock, and to give a final polish.

### **4. WASHING/DISINFECTING GROOMING EQUIPMENT**

Grooming tools should be washed occasionally to clean them and disinfect when necessary as a precaution against the spread of skin diseases. All grooming equipment should be cleaned in clean, soapy water and rinsed thoroughly.

### **5. METHOD OF GROOMING**

- a. *Cleaning out the foot*: Work from the heels toward the toe. Most important is a thorough cleaning between the frog and the bars. This area is most often cleaned improperly and is the usual seat for thrush. The cleft, or depression at the back of the frog, must be thoroughly cleaned but care must be taken that this depression is not deepened by cutting the horn.

At this time, inspect for thrush, loose nails, loose shoes, loose pieces of frog, and small under-run sections of frog that may harbor filth. A hoof that is well cleaned once daily and given the proper shoeing attention cannot develop thrush. Use of hoof conditioners is also important steps in foot grooming. They help keep the hoof supple and enable the farriers to work quickly and easily during reshoeing.

- b. *Brushing*: First use the currycomb on the near (left) side of the animal, beginning at the neck, the breast, withers, shoulders, and foreleg down the knee; then back, side, belly, croup, and hind leg down the hock, then repeat on the off (right) side.

Strike the edge of the currycomb against the edge of your heel frequently to free it of dirt. A currycomb should never be used about the head or legs, and from below the knees and hocks downward. When it is necessary to loosen mud or matted hair on the fleshy parts of the body, apply the currycomb gently. Use the horse brush to brush the animal in the same fashion as the currycomb, except that the brushing is allowed below the knee, hock, and about the head.

- c. *Grooming Cloth*: Finally with the grooming cloth, wipe about the ears, face, eyes, nostrils, lips, sheath, dock, and give a final polish to the coat.
- d. *Inspection*: Examine the feet to see that they have been thoroughly cleaned, especially in the depths of the commissures. Pass the fingertips against the lie of the hair to get a view of the skin. If the coat and skin is not clean, gray lines on the coat will mark the passage of the fingers and fingertips will be covered with scurf. Between the branches of the lower jaw, under the crownpiece of the halter or bridle, the bends of the knees and hock, the folds of the skin between the forelegs, the belly, the inner surface of the thighs, and the dock are the most frequently neglected when the work has not been thorough. Those regions should be checked when inspecting grooming.

## **HORSE AND MULE NAMES**

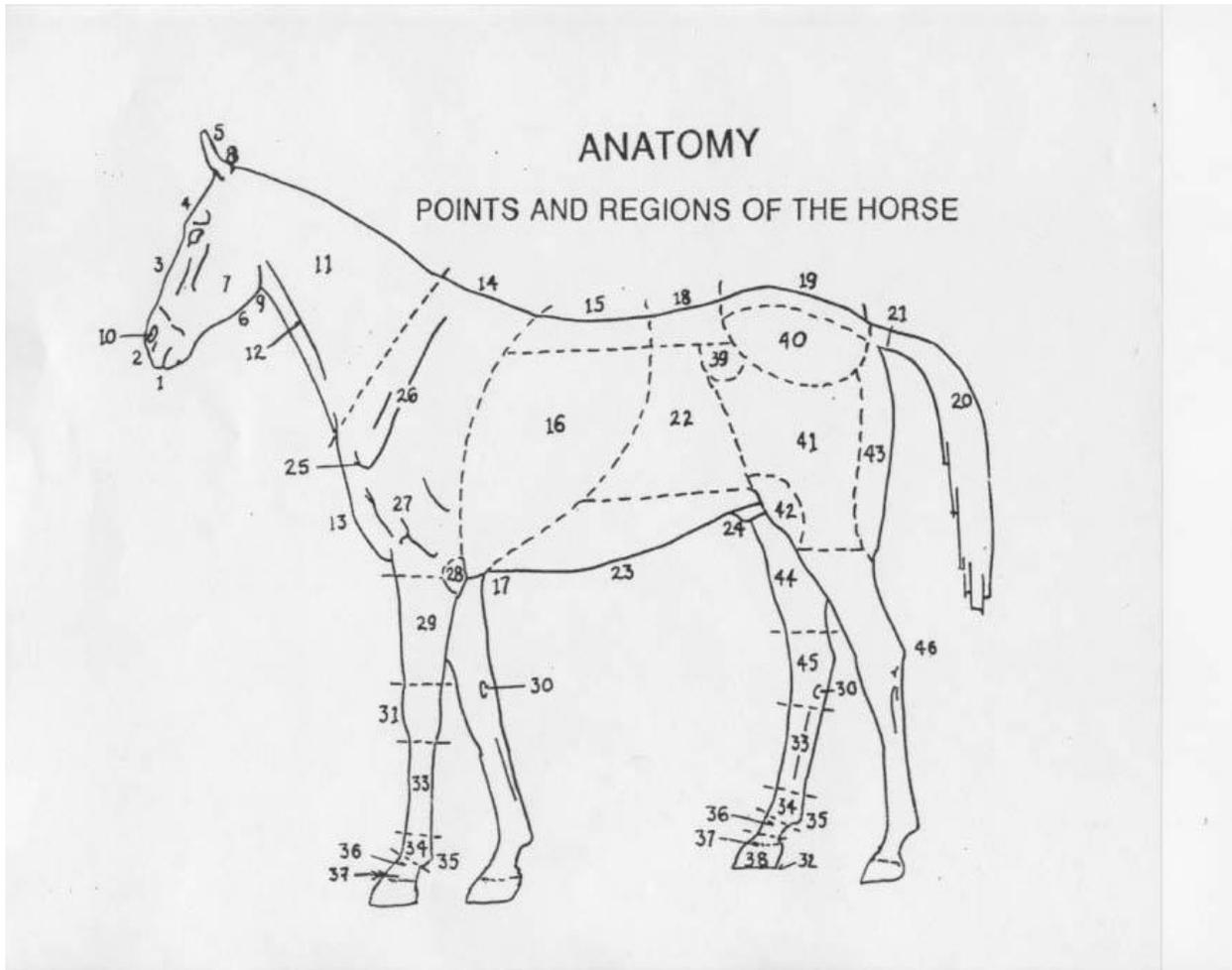
1. Artie
2. Beau
3. Bogey
4. Bradley
5. Buster
6. Cannon
7. Chappo
8. Chaz
9. Chex
10. Chica
11. Claty
12. Colonel
13. Cowboy
14. Dixie
15. Elvis
16. Fly
17. George
18. Grant
19. Hank
20. Harley
21. Honey
22. Hurricane
23. Ice Cube
24. Ike
25. Ivan
26. Jackson
27. Jake
28. Jeb
29. Jewels
30. John
31. Johnny
32. June
33. Kate
34. Kiwi
35. Lee
36. Lobo
37. Malo
38. Mandy
39. Momma
40. Payday
41. Pepe
42. Pershing
43. Pete
44. Pierre
45. Prince
46. Ranger
47. Raton
48. Reba
49. Red
50. Rocket
51. Rocky
52. Rodeo
53. Rusty
54. Sam
55. Shooter
56. Simmie
57. Sly
58. Solo
59. Sport
60. Street
61. Teddy
62. Tom
63. Travis
64. Tripp
65. Will
66. Zeke

## **ANATOMY OF HORSE**

### ***Points and Regions of Horse:***

1. Lips
2. Muzzle
3. Face
4. Forehead
5. Ears
6. Lower Jaw
7. Cheek
8. Poll
9. Throatlatch
10. Nostril
11. Neck (Line of mane/crest)
12. Windpipe
13. Breast
14. Withers
15. Back
16. Ribs or Barrel
17. Girth
18. Loins
19. Croup
20. Tail
21. Dock
22. Flank
23. Belly
24. Sheath
25. Point of Shoulder
26. Arm
27. Elbow
28. Forearm
29. Chestnut
30. Knee
31. Heel
32. Cannon
33. Fetlock
34. Fetlock Joint
35. Pastern
36. Coronet (Coronary Band)
37. Foot
38. Point of the Hip
39. Haunch
40. Thigh
41. Stifle
42. Buttock
43. Gaskin
44. Hock
45. Point of Hock

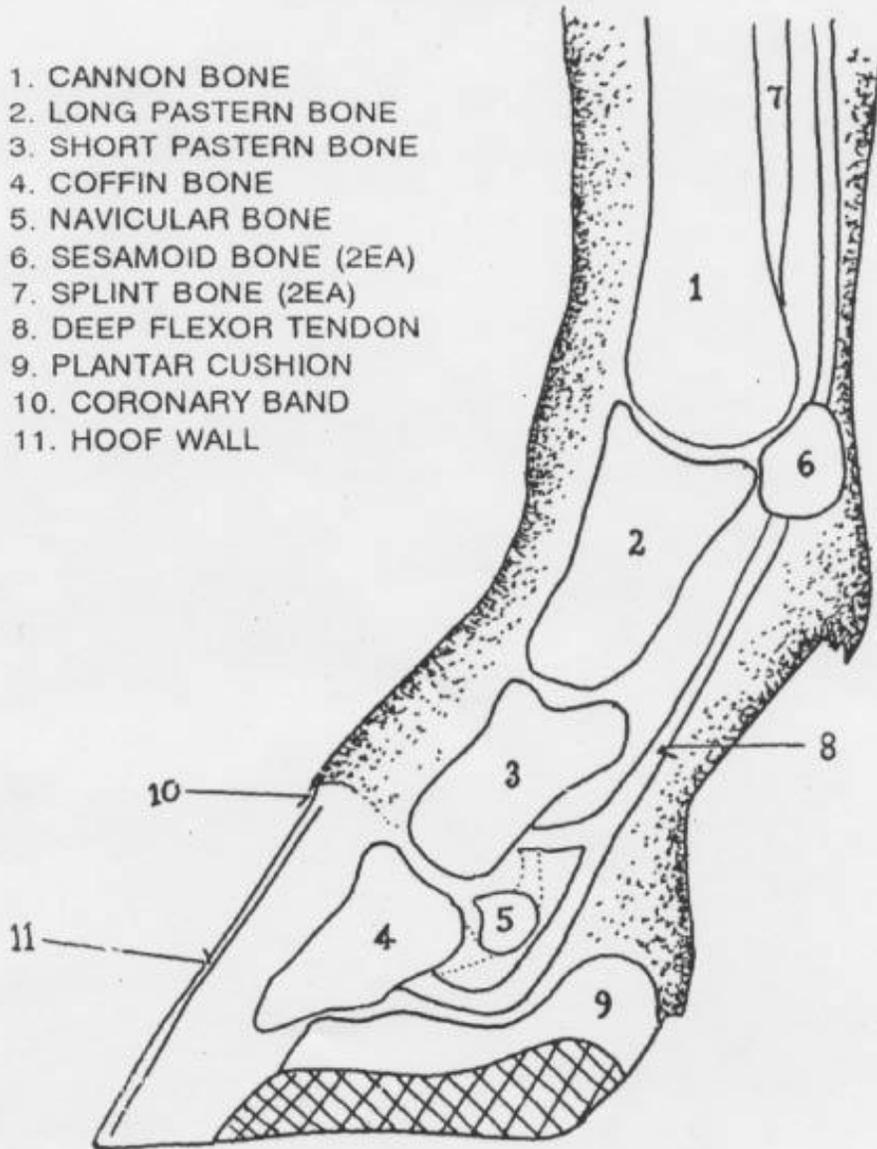
*Horse's Full Body:*



*Horse's Leg:*

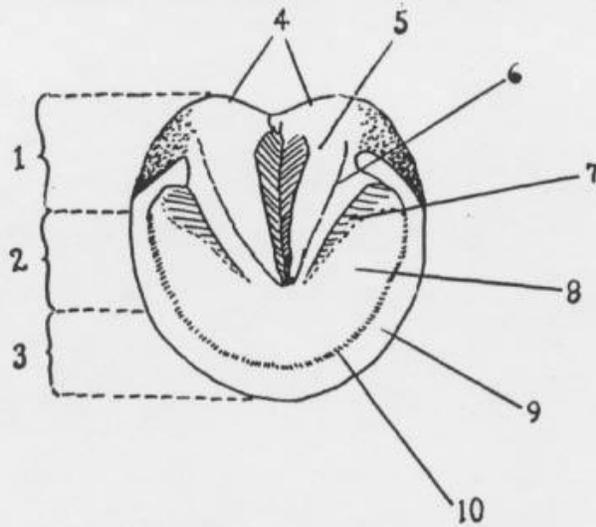
# THE HORSES LEG (BELOW THE KNEE)

1. CANNON BONE
2. LONG PASTERN BONE
3. SHORT PASTERN BONE
4. COFFIN BONE
5. NAVICULAR BONE
6. SESAMOID BONE (2EA)
7. SPLINT BONE (2EA)
8. DEEP FLEXOR TENDON
9. PLANTAR CUSHION
10. CORONARY BAND
11. HOOF WALL



*Horse's Foot:*

## THE HORSES FOOT



### SECTIONS OF HOOF

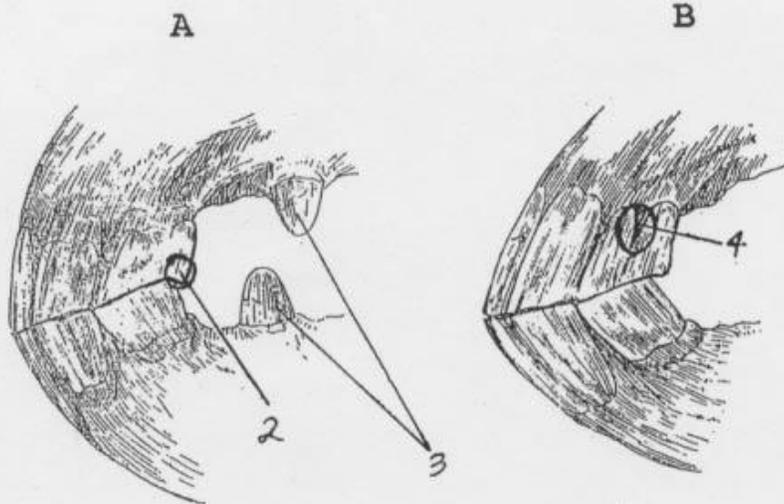
1. HEEL
2. QUARTER
3. TOE

### PARTS OF FOOT

4. BULBS
5. FROG
6. GROOVES
7. BARS
8. SOLE
9. HOOF WALL
10. WHITE LINE

*Horse's Mouth:*

## THE HORSES MOUTH

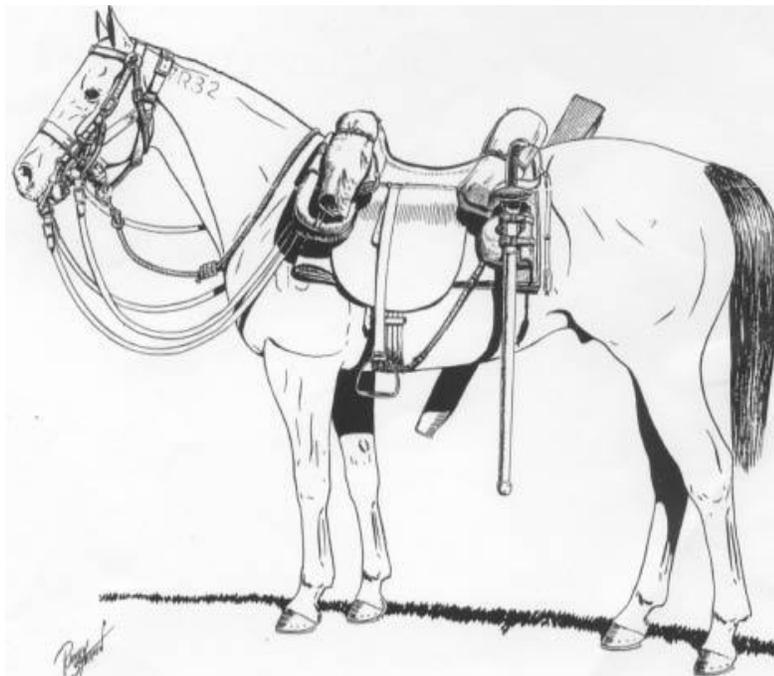


1. a) Seven year mouth      b) Fifteen year mouth
2. Seven year hook
3. Tushes (canines)
4. Galvayne's mark

**THE MILITARY HORSE**

A good military horse is one of sound and good conformation; in good condition for hard work and to withstand exposure; tranquil; pleasant to ride; and especially it should be perfectly quiet to mount; should move freely and true on a straight line; be manageable at all gaits and in changes of direction.

It should jump or pass obstacles of all nature; endure the pressure of ranks and leave them freely; bear all parts of the equipment; not frightened at the sight or sound of objects out-of-doors; be accustomed to use of arms; be unafraid of water and a good swimmer.



## **A HORSE'S PRAYER**

I pray thee Master, to care for me through long winter days and nights when I cannot earn my keep. Feed and water me, and give me a good warm bed that I may keep well, and duly repay all your kindness when Trail Riding season returns once more. Treat me kindly, and do not beat me when I do not understand what you want me to do, but watch me, please, and see if I might not be ill...my back, shoulders, or feet may be sore. Remember that I cannot go my own way, but must obey your commands, my Master, and that I serve you well and faithfully, to the best of my ability.

Please, Master, have mercy on me. Protect me from the hot sun, the fall rain, and winter's ice and snow. Remember that horses have long been the servants of man throughout the ages. We have pulled the prairie schooners from sea to shining sea. Plowed fields, that man might grow the food to keep body and soul together. We helped build the mighty railroads; stayed with the cowboy through night watch under the lonely stars. We died heroically with man on the battlefields of nations.

I shall do my part; I have learned to love thee well. So, my Master, when I am old, and can no longer perform on the trail, and thus serve you profitably, please do not turn me out to starve, or sell me to some cruel man. Just let me die at the beloved hands of my Master, and God will bless thee.

## **CHARACTERISTICS OF A MILITARY HORSE**

### ***A military mount must possess:***

1. Sufficient mobility to execute maneuvers at various speeds and ability to stand hard service while carrying weight.
2. Be preferably half-thoroughbred; sound, gentle under saddle, kind disposition, have free, bold, and prompt action at the walk, trot, and gallop. (These are the only natural gaits) He must be in good working flesh. Animals that are too thin to be in good working flesh will be rejected.
3. Acceptable animals must be between four and eight years old at the time of purchase. Must be over 15 hands high, weight between 950 and 1150 pounds, have good wind and good eyesight. The animal must be a gelding.

***Characteristics (Points):***

**Points Granted**

**Description**

***Appearance:***

5	<i>Height</i> - Over 15 hands, weigh between 950 and 1150 lbs, between four and eight years old.
10	<i>Form</i> - Close to the ground, good weight in accordance to height
10	<i>Quality</i> - Excellent class, stylish, without material blemish
10	<i>Action</i> - Free, bold and prompt
10	<i>Temperment</i> - Mild, gentle, free from vicious habits

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45 TOTAL

***Head and Neck:***

2	<i>Head</i> - Lean, well carried, fairly small, branches of under jaw (at throat) wide apart
2	<i>Muzzle</i> - Fine, thin compressed lips, mouth deep, nostrils large
1	<i>Forehead</i> - Broad and flat
1	<i>Ears</i> - Pointed, active and erect
2	<i>Neck</i> - Moderately long, tapering toward head, crest firm and longer than underside, large windpipe

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8 TOTAL

***Forequarters:***

8	<i>Legs</i> - Properly directed and placed, forearm large, long and well muscled, Cannon, short, flat, wide from front to rear. Tendons are distinctly defined.
2	<i>Feet</i> - Normal (round) shape and size in proportion to animal, well developed, elastic, frog, wide at heels
8	<i>Knees</i> - Large, wide in front, deep from front to rear, well directed

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18 TOTAL

**Hindquarters:**

8	<i>Legs-</i> Well directed, long gaskin, strongly muscled, short cannon, flat, wide from front to rear, tendons distinctly defined.
2	<i>Feet-</i> Normal (round) shape and size in proportion to animal, well developed, elastic frog, wide at the heels
8	<i>Hocks-</i> Large, wide from front to rear, well set and well directed

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*18 TOTAL*

**Body:**

2	<i>Withers-</i> Well muscled, not too thick nor too thin
1	<i>Shoulder-</i> Long, sloping
2	<i>Chest-</i> Wide, deep, well muscled
2	<i>Ribs-</i> Loose, well curved, sloping backwards
2	<i>Back-</i> Short, straight, well muscled
2	<i>Croup-</i> Long, muscular, normal slope

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*11 TOTAL*

**100 POINTS GRAND TOTAL**

# EQUITATION

## HANDLING OF HORSES DISMOUNTED

*GENERAL*- Horses, though inclined to be very docile and respond willingly to the wills of their masters, are inclined to become nervous if approached or handled in an abrupt or rough manner. The attitude of men handling animals should be one of firmness tempered with kindness. Quick movements are prone to excite them and should be avoided. They should be spoken to in a low, firm voice. Horses quickly sense fearfulness on the part of the individual handling them.

*LEADING*- Hold the right hand well up to the bit or halter, the bight of the rein or the end of the halter line in the left hand and lead the horse without looking at him, to the place designated.

*TIE TO THE LINE*- When tying the horse to any object, secure the halter line with an overhand knot with a quick release (also called a rein hitch, or clove hitch).. Be sure to tie the horse to a secure object that it cannot drag away and injure himself, another horse or person, and at a level that is even with or higher than his wither. Horses are timed on the picket line as they are stabled, each horse by its mate. The halter shank is passed over the picket line and the horse secured by a clove hitch knot (Fig. 19).

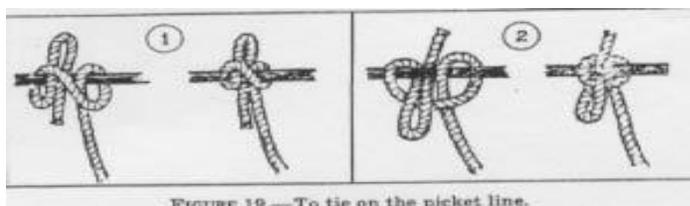


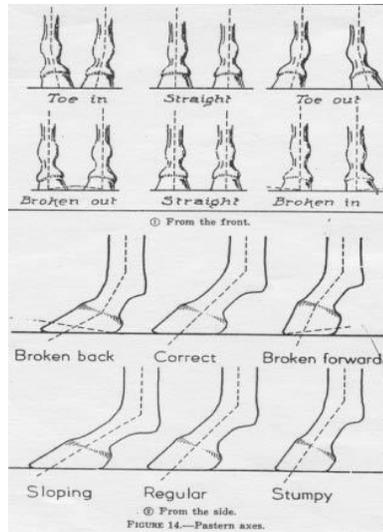
FIGURE 19.—To tie on the picket line.

*UNTIE*- Before untying, approach the horse from the near side, while gently saying “whoa” or “stand over” then advance quietly. Care should be taken not to touch him until he has indicated by a turn of the head or rising of the ears that he is conscious of your approach. Untie the animal and then turn him around towards the side from which he was approached.

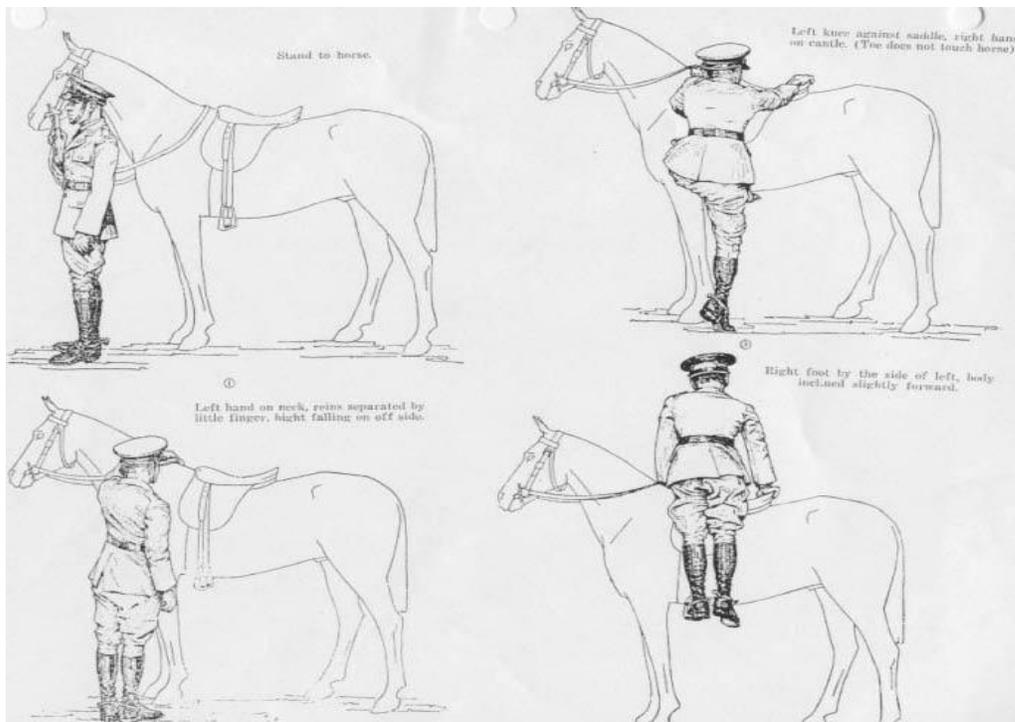
*HANDLING OF THE FEET*- Cadets will check the feet of the horses before mounting. The following figures (Fig. 13-14) show the correct pastern axes.

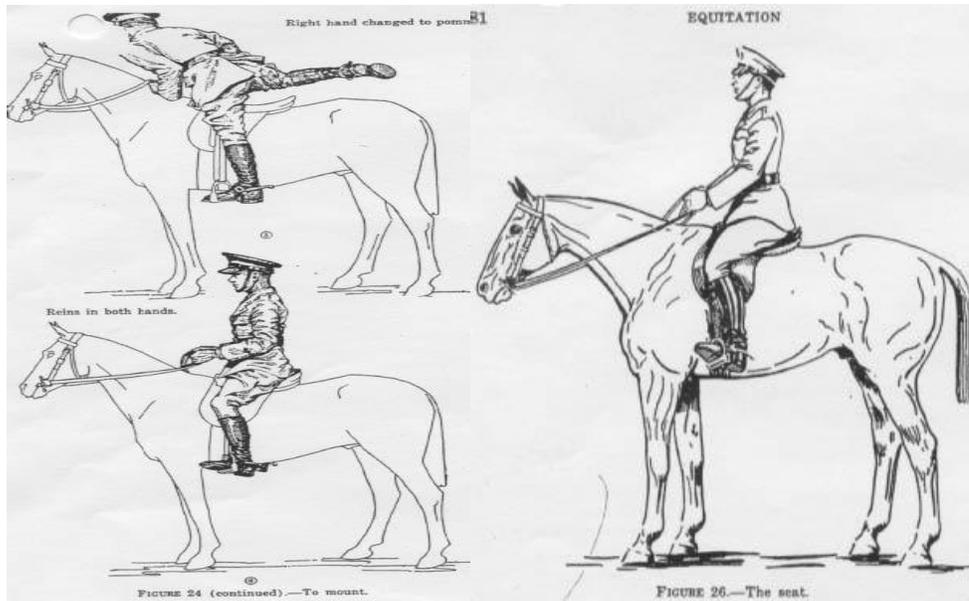


FIGURE 13.—Correct way to lift hind foot of a horse.



**STAND TO HORSE-** With the horse bridled, each cadet places himself on the near side of the horse, adjacent to the animal's head, at a modified position of attention, with the right hand grasping the reins of the horse 6 inches below the bit. The excess reins are held in the left hand at the cadet's side. The reins are always removed from the riding (over the neck) position prior to the "stand to horse". While at the position of "stand to horse," when the command "at ease" is given, the cadet relaxes his position, maintaining the grasp of the reins 6-12 inches below the bit in order to control the mount.



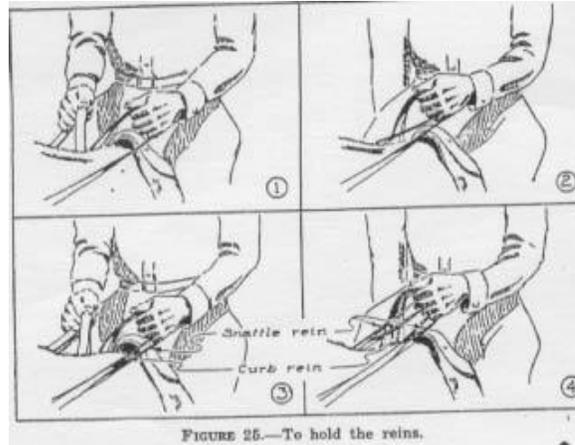


## **HANDLING OF THE HORSES MOUNTED**

*ADJUSTING AND HANDLING SINGLE REINS-* During the first lesson in riding the instructor causes the rider to hold the reins in both hands. After a few days, however, he commences to require them to hold the reins in the left hand, and similarly, in the right hand. He practices them in changing the reins from one hand to another; from both hands to one hand and back again; in lengthening and shortening the reins; in dropping and picking up the reins; and explains thoroughly the position of the hands and proper length at which to hold the reins.

*HOLDING DOUBLE REINS IN BOTH HANDS-* (Fig. 25-3) The double reins are held in a manner similar to that prescribed for the single reins, except that the snaffle rein comes in to the hand under the little finger, and the curb rein enters the hand between the little finger and fourth finger.

*HOLDING DOUBLE REINS IN ONE HAND-* (Fig. 25-4) The double reins are held in a manner similar to that prescribed for the single reins except that the near snaffle enters the hand under the little finger, the near curb under the fourth finger, the off curb under the third finger or middle finger, the off snaffle under the index finger, and the bights emerge under the thumb.



*CAUTION-* It should not be forgotten that riding with the reins in both hands is a temporary measure for the better control of the horse; that to hold the reins in the right hand is merely a restful change, and that to hold the reins in the left hand is the normal method for the military horseman, the right hand then being free. Therefore, while the rider should be made proficient in all the methods of holding the reins, he should as the course of instruction progresses, come to ride more and more with the reins in the left hand. At the end of the course of instruction outlined herein, the rider should be able to control his horse easily and skillfully with the left hand, and should ride in that manner habitually, except when jumping obstacles.

### **POSITION MOUNTED, MILITARY SEAT**

*GENERAL-* The correct military seat permits the rider to remain master of his equilibrium whatever may be the actions of his horse. It must be secure in itself and provide ease and comfort for both horse and rider. Such a seat is dependent upon balance, augmented by suppleness, muscular control of the body, and use of the legs. A well developed military seat also places the rider in a position to regulate the application of the aids in a consistent and effective manner and to adjust the rider's center of balance to the movement and gaits of the horse. The military seat was considered then, as it is now, the most secure general-purpose seat for the rider, and the least punishing for the horse. To achieve this end, the position of the rider in the saddle is described in the following manner:

- The buttocks should be pushed well forward underneath the body and bear equally upon the middle of the saddle. The buttocks should not press against the cantle.
- The thighs should extend downward and slightly forward. They should rest without constraint upon their flat sides and clasp the horse evenly.
- The knees should be bent but without stiffness, and should clasp the horse snugly.
- The lower legs should extend downward and slightly backward; they should be in contact with the horse, but without contraction. When the lower leg is in proper position, the stirrup strap should hang vertically.
- The ball of the foot should rest easily on the treat of the stirrup, the heel slightly lower than the toe, the ankle without stiffness.

- If the rider is without stirrups, the feet should hang naturally, toes hanging down; they should be free from stiffness in the ankles.
- The upper part of the body should be easy, free, and erect. The spinal column should be especially supple in the small of the back.
- The shoulders should be thrown back evenly but without hollowing or stiffening the back.
- The arms should be free, the elbows falling naturally by the side.
- The reins should be held in one or both hands as is necessary.
- The head should be erect but without stiffness in the neck.
- The eyes should not be downcast but alert and glancing well to the front.

Despite the simplicity of this description, a good military seat is nearly impossible to achieve without first developing a degree of suppleness in the rider's body. It is the suppleness of the upper body, and of the lower back (loins) in particular that enable the rider to maintain the integrity of the seat.

*USE-* The military seat, while obligatory in the army, is also admirably adapted to all kinds of riding such as hunting, polo, jumping, and racing over obstacles. For certain of these activities, a different adjustment of stirrups may be necessary.

*THE SEAT-* The rider sits with his crotch squarely in the center of the saddle, his weight distributed forward from the points of his buttocks into his crotch and down onto the inner thighs, knees, and stirrups.

*AT HALT-* At the halt, the upper body-due to a slight forward inclination from the hip joint-is slightly in front of the perpendicular. Thus its' center of gravity is placed in front of the points of the buttocks. This facilitates correct placing of the thighs and proper distribution of weight.

*IN MOTION-* To be in balance when in motion, the upper body is inclined farther forward from the hips.

## **PRELIMINARY TRAINING MOUNTED**

### **1. SUPPLYING EXERCISES**

Every training session should begin with supplying exercises. Supplying exercise work the rider's neck, shoulders, loins, hip joints, knees and ankles.

### **2. BASIC RULES OF TRAINING AS A GROUP**

- A minimum of two horse interval at all times for safety reasons.
- While working on the rail, always ride your horse into the corners (square the corners)
- All movements are given with a two part command, example; "Trot...Ho." Do not execute the movement until you hear "Ho."

### **3. NATURAL AIDS: Legs, Weight, Reins, and Voice**

#### **4. CHANGE HANDS**

While in the left hand (left shoulder to the center of the arena, the lead rider is instructed to change hands. The lead rider will go to the next corner of the training arena and ride diagonally across the arena, taking the opposite hand (right hand) in the far corner. All others follow in trace. Each rider will change diagonals in the center of the arena.

#### **5. REINING METHODS**

*DIRECT-* With the rein entering each hand (left rein in left hand, right rein in right hand) held slightly above the crest of the withers and approx 8-10 inches apart. In turning right, for example, the hand is carried slightly to the right and drawn to the rear to a point where it becomes effective (the left rein becomes passive). This brings the horse's nose to the right shoulder. If moving, the horse is forced to turn to the right. The sharpness of the turn is regulated by the amount of tension on the right rein.

*BEARING-* Both reins entering the left hand, the effective rein, right or left, should bear against the side of the upper half of the neck (the sensitive part of the neck). The horse turns in the direction opposite of the side of the neck on which the rein lies. This is an artificial effect, not powerful, but used with trained horses to change directions without changing speed.

*OPEN METHOD-* With the reins held in the same manner as the direct rein method. In turning right, for example, the hand is carried the right and slightly to the front with no tension to the rear. This turns the horse's head and bends his neck to the right, throwing the bulk of his weight on the right foreleg. This tends to make him lose his balance and causes him to move right (also known as side pull or plow rein).

#### **6. SERPENTINES**

The serpentine is done at a trot during training, and started at a designated end of the arena. Following the lead person in trace, each rider will conduct continuous about back and forth across the width of the arena. Prior to making the next turn, you change to the appropriate diagonal, i.e.; left turn, right diagonal; right turn, left diagonal.

#### **7. CIRCLES**

Circles are done at a walk, trot, and gallop. When given the command at a trot, "Circle...Ho," each rider will make an approx 8 yard diameter circle, continuing to post on the outside foreleg throughout the circle, using the aids correctly to maintain the speed and control of the horse, and return to the rail. Re-take the track at the point it was left and at the proper interval.

#### **8. HALF CIRCLE AND ABOUT**

At the command of "Half Circle and About...Ho," being on the track or rail, at a walk or trot, each rider will execute a right or left about. Return back to the rail or track traveling in the opposite direction. The about should be made on the arc of a circle, 4 yards at a walk, 8 yards at a trot.

## **9. FIGURE EIGHT**

Figure Eight is executed using the entire training area, or as designated by the instructor. Riders will start their figure eight in a trot at the center of the course, transitioning to a canter at the first turn making a minimum of two complete runs through the course completing two figure eights. The purpose of this exercise is to make a rider apply all the correct aids, causing the horse to make the proper lead change at each turn (change of direction).

## **10. LEADS**

If you are in the right hand, instructed to put your horse in the right lead, you will take up the trot, creating enough distance between you and the other riders (at least 6 horse lengths), put your horse in a circle. At the top of the circle, apply the proper aids to get the horse in the right lead at a canter. Application of aids should be: shift your weight slightly to the left, left leg just behind the girth, right leg forward of the girth, toe touching the horse's elbow, left rein acting as the bearing rein, right rein becomes indirect (passive). This five-fold operation must be executed with harmony and tact to obtain results. The opposite applications must be made to put your horse in the left lead.

## **11. BACK THE HORSE**

With reins evenly adjusted, in both hands or single hand, shift weight slightly to the rear, give quick repeated applications (pulls) to the rear until the horse steps backward, one or two steps. After he takes his first step to the rear, relax the tension, just prior to the horse beginning the second step; apply the same amount of pressure (pull) to the rear. Apply the pressure prior to allowing the horse to settle in track (plant his legs).

## **12. JUMPING**

When jumping an obstacle, the rider must be balanced and have a firm and proper seat. Do not get ahead (leaning too far forward) or behind (leaning too far rearward) of the horse. During the approach, sit still, reins adjusted evenly, maintaining a light and even feel of the horse's mouth, using your legs only as much as needed to keep the horse from refusing the jump. During takeoff, let the horse lift your buttocks out of the saddle; keep your back firm, body inclined forward from the waist up. During landing, keep your buttocks out of the saddle until you feel the saddle contact your buttocks, at which time you can settle back into the saddle and recover the horse at the proper gait instructed. Consider three things prior to making a jump: the size of the jump, stride of the horse, and speed of the approach. The formula for figuring out the takeoff point at the jump is the height plus half of the width of the obstacle.

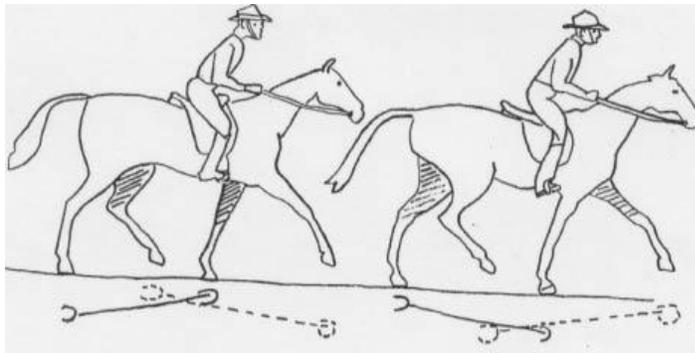
## **13. JUMP CHUTE**

Used once a rider has progressed to a point of freedom from falls. You may be required to ride through without reins or stirrups. It is valuable in teaching a rider to acquire tightness of the seat and a sense of balance independent of involuntary assistance from the hands.

## **POSITION MOUNTED**

*TO RISE TO THE TROT*- The horse being at a trot, the rider, to “rise to the trot”, includes the upper parts of the body forward, supports himself on the knees and stirrups and then permits himself to be impelled upward by the thrust of the horse’s hind leg (the left for example). He remains up during the stride of the right hind leg and sits down in time to be impelled upward again by the next thrust of the left hind leg. He continues in this way, avoiding the alternate strides of the trot. In order to catch the rhythm of the movement, the rider’s attention should be directed toward the sensation of the propulsion produced by the thrust of the hind leg, rather than toward the merely supporting effect of the forelegs. It is upon the hind legs of the horse, so to speak, that the rider rises, rather than upon the forelegs.

When learning to rise to trot, the beginner will make more rapid progress if he strokes his horse’s neck at each effort to rise. Stroking the horse’s neck assists the rider to catch the rhythm of the motion; it also causes him to incline the body forward at just about the proper angle.



To Rise to the Trot

This illustration shows the relative position of the feet of the horse. Solid lines show the feet on the ground; dotted lines show the feet in the air.

Rising to the trot (posting) is less fatiguing to both the horse and the rider, and is habitually employed, except at a slow trot. In rising to trot, the seat should be raised moderately; contact with the saddle should be resumed gently and without shock; the knees should be pressed snugly against the saddle; the lower leg should be kept perfectly still; the ankle joint supple and the heel slightly lower than the toe. The rider’s head should be up, and his eyes glancing well out to the front; he must not lower the head and look down toward the horse’s front feet.

While rising to the trot, rider should be posting the correct diagonal when riding in a training arena or a riding hail. At the left diagonal, the rider’s seat should make contact with the saddle the instant the left foreleg comes to the ground; at the right diagonal, the rider’s seat should make contact with the saddle the instant the right foreleg comes to the ground. When circling clockwise (right hand) at a trot, rider should be in the left diagonal, when circling counter-clockwise (left hand), rider should be in the right diagonal.

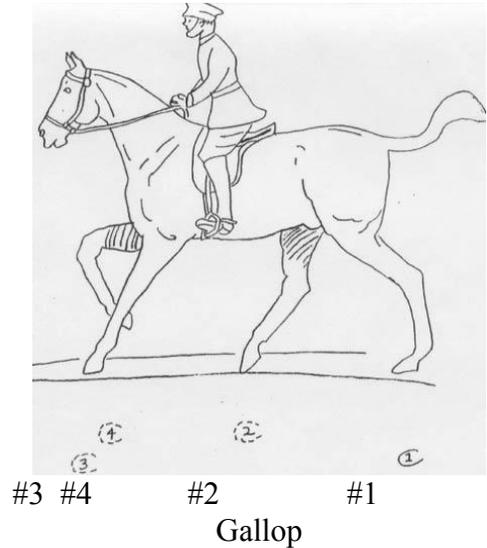
*TO SIT THE SLOW TROT*- The horse being at a slow trot, to sit to the trot, the rider inclines the upper part of the body forward sufficiently to overcome the forward reaction of the horse and keep in balance. The loin should be supple to absorb the minor impulses of the horse, the ankle joint relaxed, and the heel- slightly lower than the toe- should sink slightly at the termination of each beat of the trot.

*THE WALK*- a four-count cycle approx 4 MPH in the order indicated. The illustration shows the relative positions of the feet at this time.

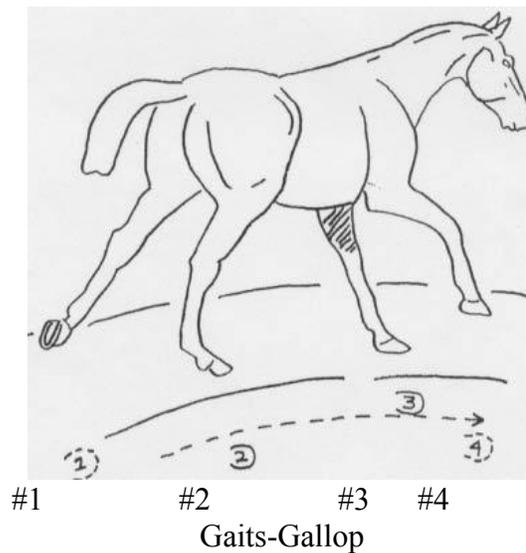


#2    #4    #3    #1  
Walk

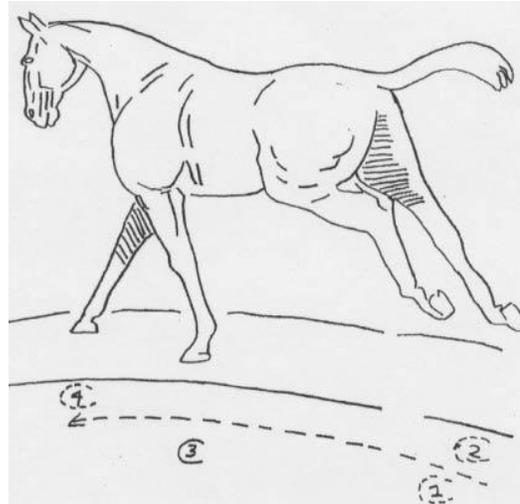
*THE GALLOP*- a three-count cycle approx 12 MPH in the order indicated, with the second and third feet landing almost simultaneously. The horse is beginning the right lead from the propulsion of the left hind. The illustration shows the relative positions of the feet at this time.



*MECHANISM OF GAITS*- The horse, in turning to the right, has the right lead in front and in the rear. The illustration shows the relative position of the feet at this time. Solid lines show the feet on the ground; dotted lines show the feet in the air (horse is galloping true).

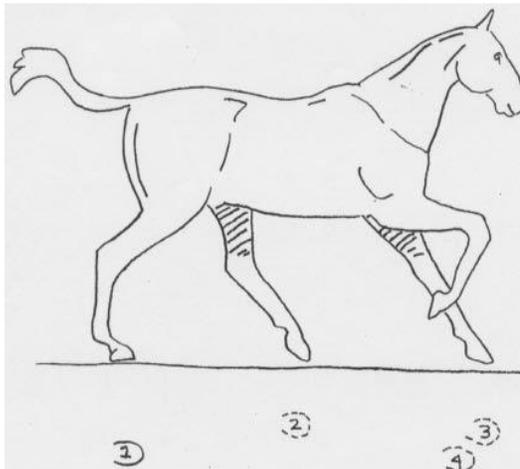


*FALSE GALLOP UNITED*- The horse, in turning to the left, has the right lead in front and in rear. The illustration shows the relative positions of the feet at this time. Solid lines show the feet on the ground; dotted lines show the feet in the air.



#4 #3 #1 #2  
False Gallop

*DISUNITED GALLOP*- The horse, begging the gallop from the propulsion of the right hind, is leading left in rear and right in front. The illustration shows the relative positions of the feet at this time.



#1 #2 #4 #3  
Disunited Gallop

## **REFERENCES**

1. Cavalry and Tactics, 1883, United States Army (extract edition: Troopers Manual, 1886, Fourth Cavalry Regiment, Ft. Huachuca, AZ).
2. Elementary Mounted Instruction, 1933 edition, The Field Artillery School.
3. Horsemanship and Horse mastership, 1935 and 1942, The Cavalry School, Ft Riley, KS (Vol. I, II, and III).
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**(FOR INTERNAL USE ONLY)**

# TACK AND HALF SECTION

## TACK

### 1. BRIDLES

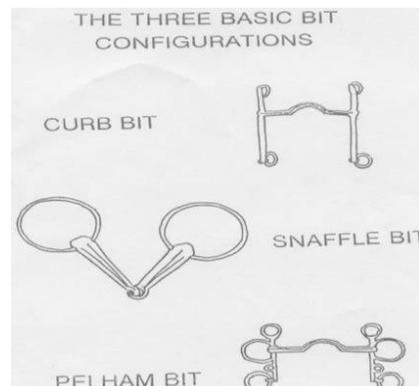
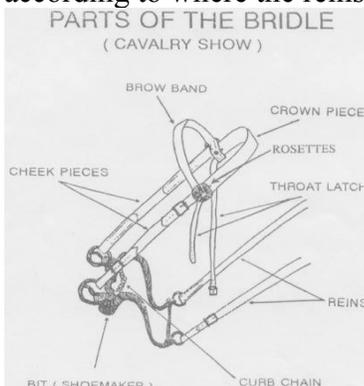
Bridles are classified as single or double (also called full). A single bridle is equipped with one bit; whereas, a double bridle is equipped with a curb and a snaffle bit (also known as a Bit and Bridoon), two headstalls and two sets of reins. The Bit refers to the curb, the Bridoon to the snaffle. The snaffle bit is installed in a horse's mouth first and the curb bit second, with a separate set of reins attached to each bit.

All bridles should be fitted so that the browband keeps the crownpiece from sliding back on the horse's neck, or pulling up against the ears. The throatlatch should be loosely buckled, enough to permit the hand, held in a vertical plane, to be passed between it and the throat without allowing the throatlatch to slide over the jawbone. The throatlatch prevents the headstall from sliding over the horse's head.

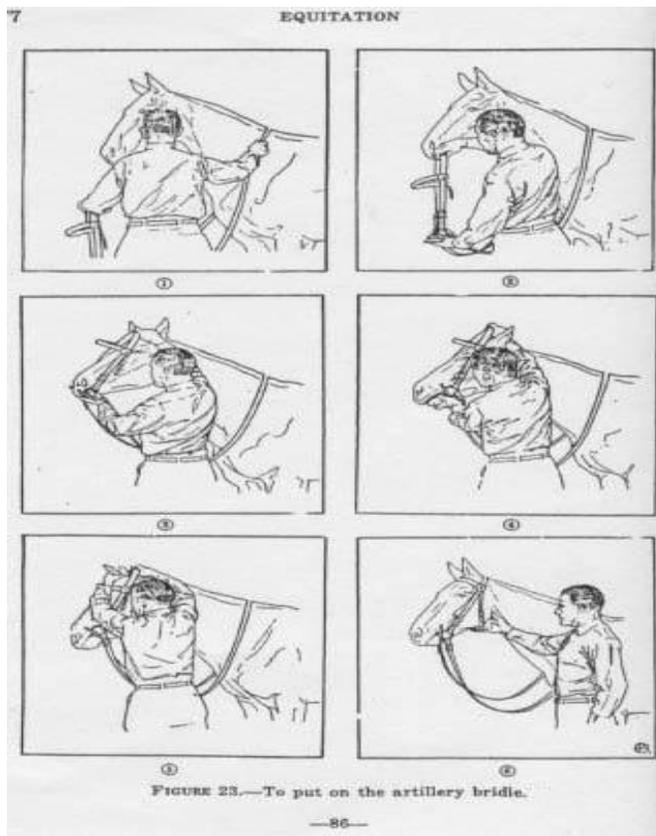
The cheek pieces on the bridle are adjusted so that the bit fits snugly in the corners of the mouth with one small wrinkle. A shorter adjustment (causes several wrinkles at the corners of the mouth) pinches the lips, while a longer adjustment (no wrinkles) allows the bit to strike the tushes (canine teeth). Either of the incorrect adjustments may cause pain and fretfulness in the horse. When a curb chain is used, it should be twisted until it is flat, fastened and adjusted so that two fingers held in a vertical plane, will fit between the chain and the lower jaw.

### 2. BITS

There is more variety of bits than any other article of horse equipment. The most common broad classifications are the snaffle, curb, and Pelham bits. The snaffle is a very mild bit, acting mainly on the lips of the horse. The curb bit is designed to act on the bars of the horse's mouth, rather than on the lips and tongue, and by leverage rather than direct pressure. The leverage action is dependent upon the curb chain acting on the underside of the lower jaw. The Pelham is a form of curb with a built in snaffle ring which allows work on either the lips or bars, according to where the reins are attached.



### 3. TO BRIDLE (SINGLE SNAFFLE) (FIG. 23)



*PROCEDURE*- The instructor commands: BRIDLE. Take the reins in the right hand, the crownpiece in the left hand. Approach the horse on the near side, passing the hand along the neck. Slip the reins over the horse's head and let them rest on his neck. Take the crownpiece in the right hand and the snaffle bit in the left hand. Bring the crownpiece in front of and slightly below its proper position. Insert the thumb into the side of the horse's mouth, above the tush, and press upon the lower jaw as to cause him to open his mouth. Insert the bit by raising the crownpiece and, with the left hand, quietly draw the ears under the crownpiece. Secure the throatlatch.

*ADJUSTMENTS*- The bridle should be adjusted so that the snaffle bit will touch lightly the upper corners of the lips, and so the throat-latch will admit four-finger-widths between it and the throat. A noseband, when used, should be adjusted so as to allow two-finger-widths between it and the nose.

*HALTER*- At the discretion of the instructor, the halter may be taken off before bridling, the reins being first passed over the horse's neck.

#### 4. UNBRIDLING (SINGLE SNAFFLE)

The instructor commands: UNBRIDLE. Stand on the near side of the horse and pass the reins over the horse's head, placing them on the bend of the arm. Unbuckle the throatlatch. Grasp the crownpiece in the right, and assisting with the left hand, quietly disengage the ears. Lower the crownpiece with the right hand and gently remove the bit from the horse's mouth with the left hand, care being taken not to allow the bit to come into contact with the teeth. Place the crownpiece in the palm of the left hand and, taking the reins in the right hand, pass them over the crownpiece. If the horse is not equipped with a halter, unbridle and push the bridle back so that the crownpiece will rest on the neck behind the poll. The horse may be held thus until a halter is put on, after which the bridle is removed.

## **5. DOUBLE BRIDLE (BIT AND BRIDOOON)**

*PROCEDURE-* The procedure prescribed for putting on the double bridle generally follows that of putting on the single snaffle bridle; the curb chain should be unhooked from one side, and great care should be taken not to bring the bits into contact with the horse's teeth.

*ADJUSTMENTS-* The bits should be of sufficient width to fit the horse's mouth, the branches of the curb touching lightly the outer surfaces of the lips. The snaffle should touch lightly the upper corners of the lips. The curb should rest just below the snaffle. The curb chain should lie flat in the chin groove and be of such length as to cause the reins, when stretched from the pommel of the saddle, to form a right angle with the branches of the curb. If the bit is placed high it is less severe; if placed low, it is very powerful; if placed too low its effects are painful. It should not be placed so low as to strike the teeth. When horses are restive it is often due solely to faulty adjustment of the bits and the curb chain. The noseband is adjusted as previously described. If tightened it renders the effect of the bits much more pronounced. If too much lowered and tightened it will make the effect of the curb bit too severe. With the bit and bridoon, the adjustment of the noseband requires the strictest attention.

*EFFECT OF SNAFFLE BIT-* The effect of the snaffle bit is very mild, because it is received more on the lips than on the bars of the mouth. Its action is upward and it tends to raise the head and neck. It is the bit more efficacious for relaxing the jaw by means of vibration.

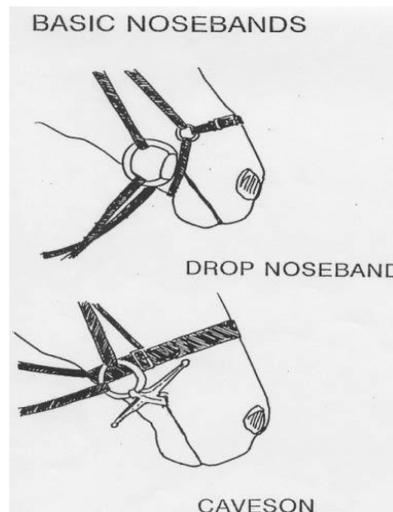
*EFFECT OF CURB BIT-* The effect of the curb bit is much more severe than that of the snaffle because it is received almost entirely on the bars of the mouth; the lips and the tongue ameliorate its pressure, but little. Its action is downward and it tends to lower the head and neck. If its pressure is maintained continuously, the bars of the mouth become deadened to sensation, the curb chain stops circulation, and the horse fails to respond properly to its action.

## **6. NOSEBANDS**

The two basic types of nosebands used at the Horse Cavalry Detachment are the Cavesson and Drop-Noseband. These consist of a wide adjustable leather band, which is held in place by either a separate strap over the crown or by loops in the cheek pieces of the bridle. They are used to prevent the horse from opening his mouth wide enough to escape the effect of the bit. They are also used to enhance the appearance of the bridle.

*CAVESSON*- Should be adjusted so that it is two-fingers-width below the cheek bones, and permits the width of two fingers to be inserted between it and the nose when the horse's mouth is closed. Care must be taken that the band is not so low that the corners of the mouth are not pinched between it and the bit.

*DROP NOSEBAND*- Designed and fitted on the horse's nose below the bit (i.e., between the bit and the nostrils). In addition to the other purpose of a noseband, the Drop-Noseband also assists in keeping the bit in place. It is adjusted to fit immediately below the bit without exerting pressure on the bit and the horse's mouth. You should be able to insert two fingers, held in a vertical plane, between it and the underside of the jaw.



## 7. McCLELLAN SADDLE

*HISTORY*- The McClellan Saddle (model 1859 and later modified) was named after its designer, CPT George B. McClellan, who later commanded a major portion of the Union Army during the Civil War. In 1855, CPT McClellan (then serving in the First Cavalry Regiment) was sent to Europe as a member of Commissioned Officers Study to research the armies of Europe, and the equipment they used. At the time, they were actively engaged in the Crimean War.

After McClellan's return, his report was published in book form and entered as a Senate Document in 1857. It was filled with descriptions and recommendations for many changes. The next year, CPT McClellan had several saddles made which had incorporated ideas for the ideal U.S. Military Saddle, one being the 1857 Trial Model. In 1859, a special board of officers recommended that McClellan's new saddle design replace the Grimsley saddle.

*SPECIFICATIONS:*

Weight stripped: 14 lbs, 13.5 oz.

Model used by HCD: 1885 with 1904 quarter strap modifications or with 1885 center fire fixed quarter straps

*SIX MODIFICATIONS DATES:* 1872, 1874, 1885, 1896, 1904, 1928

*CLEANING INSTRUCTIONS-* Completely disassemble saddle. Remove all leather parts. Clean all leather with a mixture of Murphy's Oil Soap (1 cup per gallon of water). Allow leather to partially dry. Oil with a mixture of Skidmores and U82 Saddle Oil. Allow saddle to air dry prior to reassembly.

*PARTS:*

2-side quarter straps and 4 running loops (check all wear areas)

2-quarter strap safes (check rivets on ring chape)

1-cinch. Scrub with mild soapy water and rinse **all** soap out. Air dry.

2-stirrup leathers with keeper loops. Check for wear and torn holes.

2-hooded stirrup. Old wooden blocks should be replaced with PVC and bolts. Check all rivets.

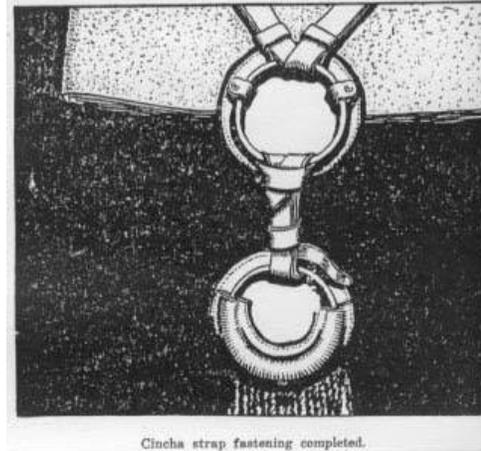
1-breast collar. Check both (2) billets and cinch strap.

*HARDWARE-* Check footman loops and rings. Tighten screws as needed. Check all stitching. 2-latigo straps. Check leather thong which holds the strap to the strap safe and cinch ring.

*SADDLE PADS-* Clean the horse side with a rubber curry. Remove all hair, sweat, and dirt. Rinse with a hose and allow to air dry. Do **not** use detergent or soap.

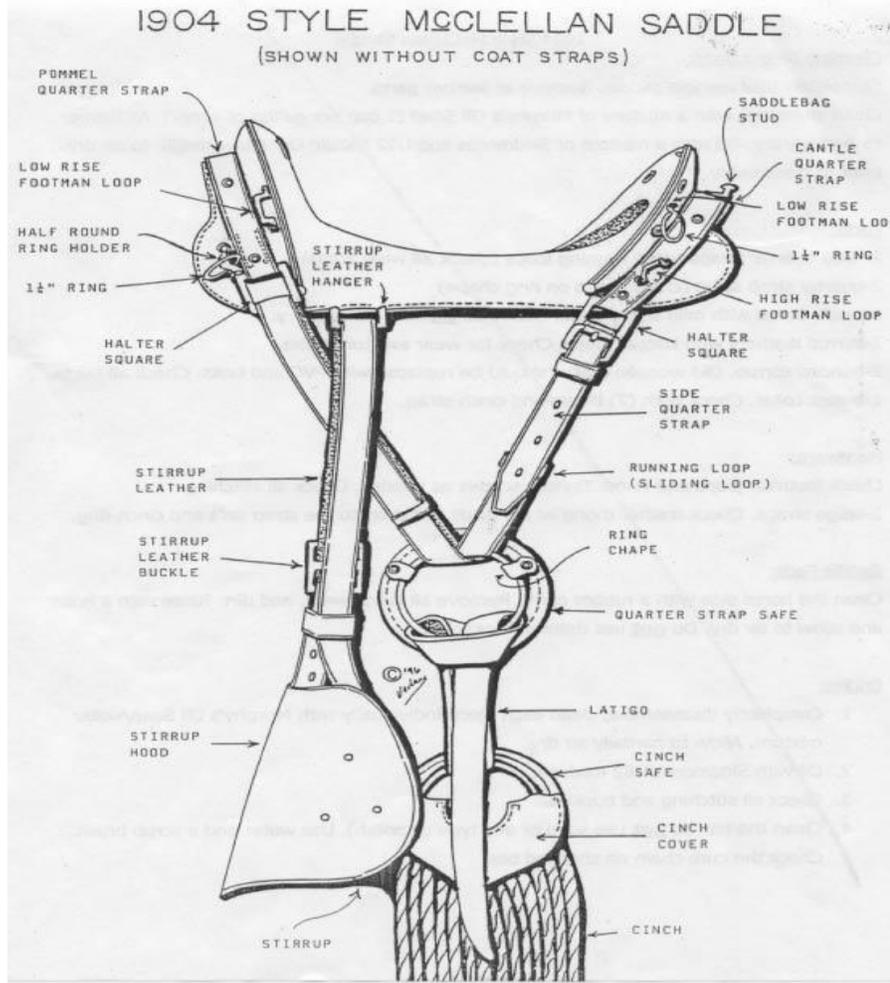
*BRIDLES-* Completely disassemble, clean each piece individually with Murphy's Oil Soap/water mixture. Allow to partially air dry. Oil with Skidmores/U82 mixture. Check all stitching and buckles. Clean the bit (do **not** use soap or any type of polish). Use water and a scrub brush. Check the curb chain on shanked bits.

*CINCHA STRAP-* The cincha strap is fastened as follows: pass the end through the upper ring to the front and seize it with the left hand. Place the fingers of the right hand between the outside folds of the strap and, pulling from the horse with the right hand, take up the slack with the left hand. Cross the strap over the folds and with the right hand pass the end of it underneath and through the upper ring back to the folds, then out and down, under the loop that crosses the folds, and draw it tight. Weave the end into the folds of the cincha strap.



*QUARTER STRAP*- To adjust the quarter straps; after placing the saddle in the middle of the horse's back, the quarter-strap ring should be pushed forward and fixed by the sliding loops so that, when tightened, the cincha will not be over his floating ribs. If the sliding loops become loose, it will be well to fix the quarter-strap ring in place by the use of a short thong or by putting a rivet through the quarter strap in rear of the quarter-strap ring. The quarter strap should be adjusted to such a length that the quarter strap ring is over the lower edge of the blanket. The buckles of the quarter strap should be against the cantle halter square.

*STIRRUP STRAP*- The stirrup strap should be put on the saddle so that the hair side of the leather encircles the stirrup loop on the saddle and the spreader of the stirrup. This leaves the flesh side of the leather out. The buckle of the stirrup strap should be inside, at the front of the stirrup, and against it.



## 8. SADDLES AND PADS

McClellan tack varies depending on the rank of the individual rider:

*ENLISTED SADDLE*- a complete McClellan saddle with carbine boot, saber scabbard straps, saddle bags, bed roll, wood stirrups with hood, breast collar with U.S. stamp on center of collar, grey felt pad or wool blanket, and plain brass bridle rosettes.

*OFFICER SADDLE*- (LTC and below), a McClellan saddle with saber scabbard straps, saddle bags, bed roll, stirrups with hood, plain brass heart breast collar plate, field officer pad with one gold border, and brass bridle rosette with eagle.

*COLONEL SADDLE*- a McClellan saddle with saber scabbard straps, black metal stirrup irons (English type), plain brass heart breast collar plate, field officer pad with one gold border and eagle, and brass bridle rosette with eagle.

Pads are 1 inch felt pad, covered for events by a maroon blanket with "TAMU" in the corners.

# **FIELD ARTILLERY HALF SECTION**

## **NARRATION FOR FIELD GUN DRILL**

On the field at this time is the artillery section composed of the Model 1902 Field Gun and Limber. The gun was found several years ago and rebuilt. It is pulled by a team of horses using the Model 1916 Artillery Harness designed by the French army in World War I.

The gun was designed by Captain Charles Wheeler of the ordnance department in 1899. It was produced in 1902 to 1905 with minor changes. It is officially designated as a field gun and could be used for both direct and indirect fire. The gun used both iron sights on the barrel and panoramic sights. The shield provided protection for the crew from enemy direct fire and was folded into position when the gun was unlimbered for action. The 3 inch designation of the gun was derived from the caliber of the bore. The gun had an effective range of 6,500 yards and fired a 15 pound shrapnel or explosive shell.

The gun was used in the field artillery from 1902 until World War I when the French 75mm replaced the Model 1902. The gun was used for training in the regular Army until 1930 when it was declared obsolete. The reserves and ROTC detachments continued to use the gun for a number of years after that until replaced by more modern pieces.

The horses in the team are trained to pull in pairs. Only the near side horses are ridden normally and the off side horses are controlled by the riders, or drivers, by a special unit of reins.

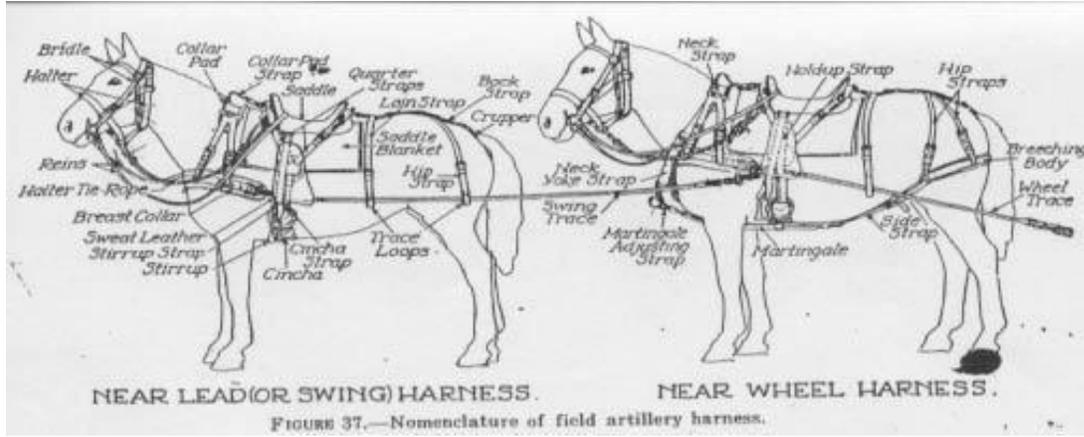
Part of the gun crew rides on the limber which carried the tools and basic load of ammunition for the gun. The gun's trail hooks to the pintle of the limber for movement. When the gun was put into action, the limber and drivers moved to the rear of the piece with the caisson and its' limber. A complete gun section consisted of a gun, its' limber and a caisson and its' limber. Four to six sections were grouped into a field artillery battery and commanded by a captain. Until the advent of indirect fire howitzers about the turn of this century, artillerymen shared the same dangers as infantry and cavalry on the front lines, many times being able to look right at the enemy they were trying to shoot across a field.

Our section today is pulled by a team of 4 horses specially trained to harness. A full team normally consisted of 6 horses but due to injury, sickness, and death the teams sometimes had to be reduced to 4.

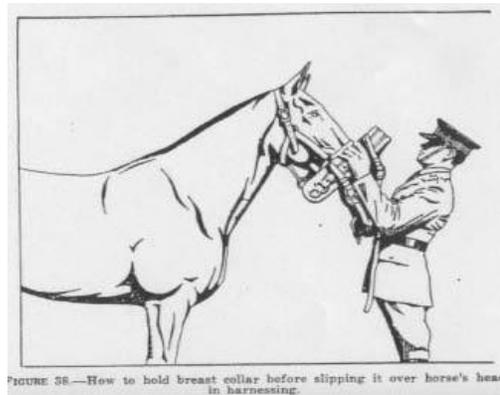
At the completion of the Field Gun Drill, the crew will fire a round signaling the completion of the drill.

**PROPER ADJUSTMENTS OF EQUIPMENT FOR TEAMS**

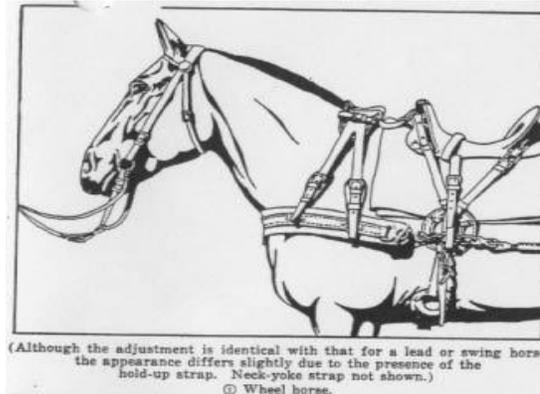
**NEAR LEAD/WHEEL HARNESS:**



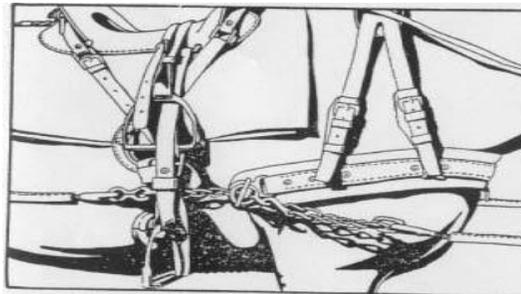
**BREAST COLLAR:**



**WHEEL HORSE COLLAR:**



**LEAD/SWINGER HORSE COLLAR:**



② Lead or swing horse.  
FIGURE 39.—A properly adjusted collar.  
—150—

**NECK-YOKE STRAPS:**

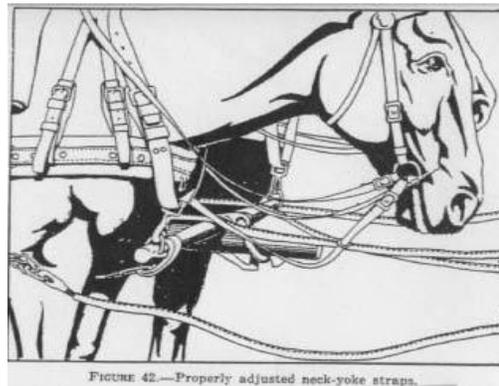


FIGURE 42.—Properly adjusted neck-yoke straps.

**BACK AND CRUPPER:**

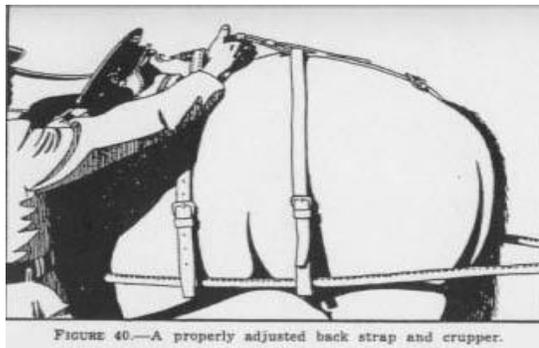


FIGURE 40.—A properly adjusted back strap and crupper.

**BREECHING:**

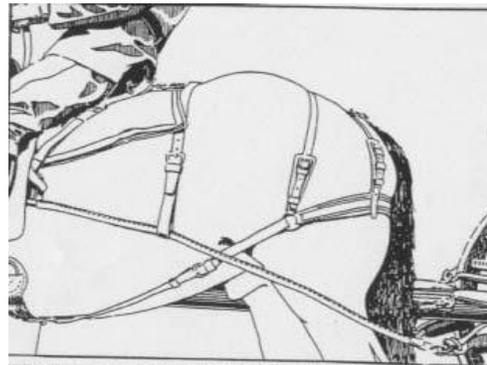


FIGURE 41.—A properly adjusted breeching. (The horse is being backed.)

## MANAGING THE PAIR

*GENERAL*- The driver rides the near horse, which is managed by the legs, reins, voice and weight (pt. two); the off horse is managed by the reins, voice, and whip.

*REINS*- The bridle reins of the off horse are used for gathering him, for steadying him, for checking his gait, for halting him, and for reining him back. The lash is habitually carried in the left hand (fig. 52). When necessary to use the bridle reins of the off horse, the driver draws them toward his right thigh, using the right hand, still holding the lash in his left hand. The roller, fastened to the off saddle, changes the direction of the force applied and serves to transmit an equal tension to both reins. Unless the off horse is well trained and prompt in conforming to the movements of the near horse, the driver must frequently make use of the direct rein in controlling him. He may reach over and feel the right rein in front of the roller, in order to turn horse's head to the right and induce him to step into a turn in that direction. The coupling rein may properly be used to lead the off horse into a turn to the left, but it must never be used to check his gait. Its use for the latter purpose has the effect of pulling the head in, preventing the horse from traveling squarely and causing galls and injuries on his outside shoulder. When so held the leash of the reins of the off horse should come in under the little finger and out over the forefinger. The reins are held securely by closing the hand and by clamping the reins against the forefinger with the thumb (fig. 53).

**FIG. 52 & 53**

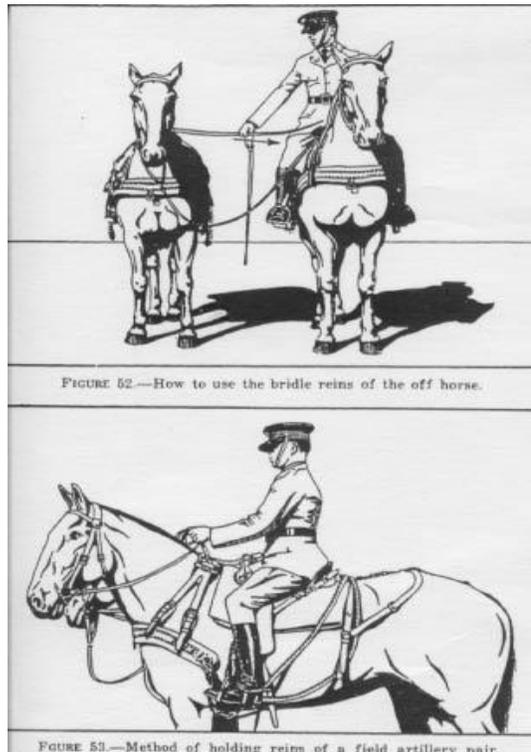


FIGURE 52.—How to use the bridle reins of the off horse.

FIGURE 53.—Method of holding reins of a field artillery pair.

*WHIP*- The whip is habitually carried by drivers of field artillery teams. It will cause much harm and little good unless drivers are thoroughly instructed in its use. It is never used on

the head or the neck. It is applied by a simple motion of the wrist, and like the leg aids, commences with mild, gentle taps which are gradually increased in their severity until obedience is obtained, when its action ceases. If applied in such manner as to cause the horse to jump or jerk into the collar, it will cause sore shoulders, broken harness, and balky horses. The horses should not be afraid of the whip. A sure indication that a pair has been driven by a cadet who understands the proper use of the whip is that the horses permit head, ears, and neck to be stroked with it, and show no sign of nervousness or fear when it is brandished around their heads or over their necks.

The whip applied by gentle taps on the left shoulder of the off horse, should cause him to move his forehand to the right; applied on the right shoulder, it should cause him to move his forehand to the left; applied on the near side slightly in the rear of the place for a rider's leg to act, it should cause him to move his haunches to the right; applied similarly on the off side, his haunches should move to the left; applied behind the saddle, on the croup near the right hip, it should cause him, while remaining close to his mate, to move straight to the front.

While driving, the whip is habitually carried hanging from the right wrist. At ceremonies it is carried so as to point obliquely to the left over the driver's left forearm. Drivers are forbidden to use the lash of the off bridle as a whip.

### **MANEUVERING THE PAIR**

*GENERAL-* Both horses should be gathered before moving from a halt, before halting, and before changing gait or direction; the off horse by a slight pressure or a slight additional pressure on the bit. The near horse is then required to move in the desired manner or to halt, while the off horse, by the use of the reins, whip, or voice, as may be necessary, is made to conform to the movement. By proper training the two horses are accustomed to work together evenly and to effect changes of gait and direction simultaneously. The off horse must neither crowd the near horse nor travel too widely from him. In all movements involving a change of direction, the horse on the outside of the turn, having the greater circumference to pass over, must quicken his movements slightly; but in order that the draft during the turn may be kept as even as possible, he should remain behind the inside horse and be brought abreast of him only when the turn has been completed and the straight-ahead movement in the new direction begun. The driver causes the horse on the inside of the turn to move over the arc of a circle of which the radius is 6 yards.

*INDIVIDUAL DRILL-* Each driver should work individually under supervision on the following: moving his pair forward; to the flank, about, and the oblique; and executing changes in gait, halting, and circling; backing; and side stepping. As soon as the drivers have become proficient in these movements individually they are drilled in a group of pairs, first at a walk then at a trot. This to accustom them to handling their pairs by command. The drill includes the movements of the preceding paragraph and in addition the following: Alignment; passing from line to column and from column to line; and marching in column and line. When drivers have learned to handle their pairs at the walk and trot, movements at the gallop may be taken up.

## **MANEUVERING THE TEAM**

*GENERAL*- Each movement of a team requires the careful cooperation of the drivers of that team. Good driving is the key to draft efficiency and mobility. The necessity for firm, tactful horsemanship on the part of a field artillery driver cannot be overemphasized.

*FORMATION*- Following instruction in maneuvering the pair, teams are formed with traces unhooked and the drivers instructed in the commands and movements pertaining to the team hitched. Pairs and drivers are rotated through the three positions of pairs in the team. This instruction is continued with the traces hooked, so that the drivers will be prepared to take up the management of their horses in draft.

*COMMAND AND EXECUTION*- Command for the maneuvering of a field artillery team are in general the same for the individually mounted man. Their execution is neither abrupt nor too rapid.

*RATES OF SPEED*- The average rates of speed for the authorized gaits for a field artillery team are the same as those for the single mount, i.e.:

The walk, 4 miles per hour

The trot, 8 miles per hour

The gallop, 12 miles per hour

## **TO POST TEAMS WITH CARRIAGES**

The command is TEAMS TO YOUR CARRIAGES. The teams proceed direct to their carriages. When the team reaches its proper position the wheel driver commands: 1. TEAM, 2. HALT, and places his pair for hitching.

## TO PLACE THE WHEEL PAIR FOR HITCHING

There are three methods of placing the wheel pair in position for hitching to the carriages (fig. 54-56). The use of the third method is advised inasmuch as the wheel driver needs no assistance.

FIG. 54-55

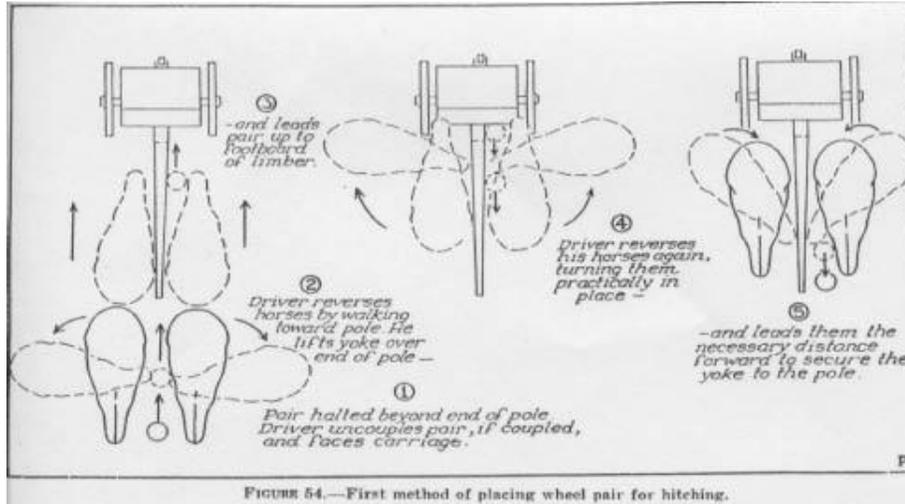


FIGURE 54.—First method of placing wheel pair for hitching.

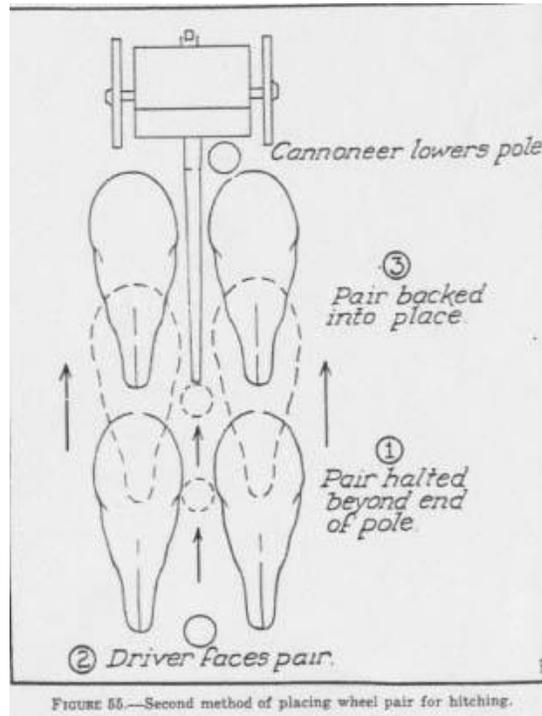


FIGURE 55.—Second method of placing wheel pair for hitching.



**ESCORT WAGON HARNESS**

1. BRIDLE
2. LEAD DRIVING LINE
3. WHEEL DRIVING LINE
4. COLLAR
5. TRACE AND HAME
6. CHECK REIN
7. OUTSIDE CHECK
8. CROSS CHECK
9. TURNBACK
10. CRUPPER
11. LOIN STRAP
12. BELLY BAND
13. MARKET TUG
14. BACK BAND
15. TRACE
16. BREAST STRAP
17. CHOKE STRAP
18. REIN STRAP
19. SIDE STRAP
20. LAZY STRAP
21. BASE\*
22. LEADUP\*
23. HIP STRAPS\*
24. SAFE\*
25. BREECHING
26. HAME STRAP

\*(BREECHING INCLUDES THE FOLLOWING PART NUMBERS: 21, 22, 23, & 24)