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HANDBOOK ON
MACHINE GUN CART
MODEL 1917

Prepared by Ordnance Department



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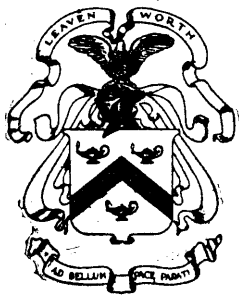
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WAR DEPARTMENT,
WASHINGTON, March 25, 1918.

The following pamphlet entitled "Handbook on Machine Gun Cart—Model 1917" is published for the information and guidance of all concerned.

(062.1 A. G. O.)

BY ORDER OF THE SECRETARY OF WAR,

PEYTON C. MARCH,
Major General, Acting Chief of Staff.

OFFICIAL:

H. P. McCAIN,
The Adjutant General.

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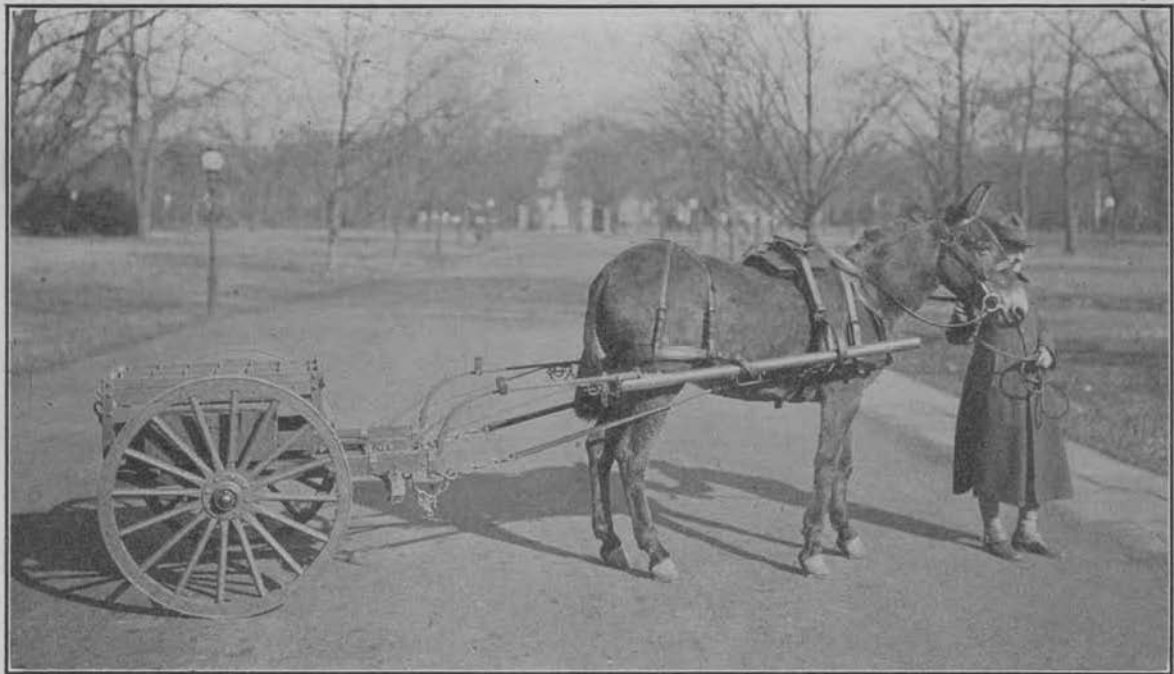
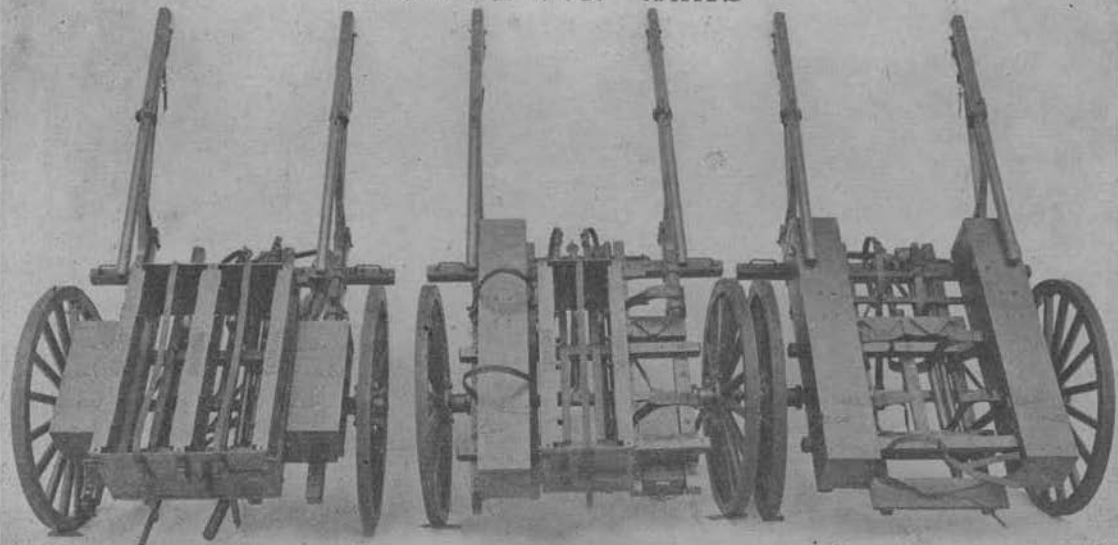


PLATE I

MACHINE GUN CARTS



AMMUNITION CART

GUN CART
PLATE II

SPARE GUN CART

PART I.

THE MACHINE GUN CARTS AND ACCESSORIES.

The term "Machine Gun Carts" is a general term used for three different carts for machine gun companies; namely, gun carts, ammunition carts, and spare gun carts. All of these are one mule carts, having the same general construction. They differ, however, in the assembly of ammunition racks, gun carrying cases, tripod supports and a few minor details.

All machine gun carts have detachable shafts, which are hinged near the middle.

One spare shaft is carried on the under side of each ammunition cart.

A towing pole and wooden cross pole are carried on the chassis of each cart. They are to be used for towing the carts by hand when the shafts are removed. The wooden cross pole mentioned above may also be inserted through the clips provided on the under side of the shaft just in the rear of the hinge. This provides means for towing the carts by hand with the shafts attached but folded at the hinge. The metal towing pole is unnecessary in such an assembly. These devices are more or less in the nature of emergency matériel. An emergency rope is also furnished.

A prop is provided on the under side of the front cross sill of each cart. This may be unhooked and allowed to hang in a vertical position when the cart is not in motion. It will support the front end of the cart and remove weight from the mule's back. It will also support the cart in a satisfactory manner when the mule is unhitched if the wheels are blocked. A convenient method to follow is to align the carts along a shallow ditch a few inches deep, this shallow ditch being dug in a straight line wherever it is desirable to line up the carts.

The gun and ammunition carts are designed to carry the following pioneers: one shovel, one pick mattock, and one broad hatchet. A broad hatchet is the only pioneer tool carried on the spare gun cart.

Brackets and leather straps for the broad hatchet will be found on the rear end of the ammunition carts and on the side of the gun chest on the spare gun cart.

The shovel is placed on the carts by inserting the handle over the middle of the axle from the rear of the cart, and strapping the shovel in place by means of straps provided near the rear end of the inner side sills of the chassis.

The pick mattock is placed on the carts by passing the handle through the clip provided on the inner side sill on the left side of the cart, working from the rear. When the pick mattock is shoved forward as far as it will go the strap and billet on the rear end of the adjacent outer side sills should be buckled around the blade of the pick mattock.

By turning the side retainers of the ammunition racks so that all spacers are down, ammunition cases containing twenty bandoleers each may be carried in the ammunition racks, two cases on the gun cart, and four cases on the ammunition cart. Each case contains 1200 rounds of ammunition.

THE GUN CART.

Each gun cart is provided with one gun chest for the machine gun, tripod supports and straps for the tripod, a rack for seven boxes (ammunition boxes, water boxes, tool boxes or belt loading machine boxes), and a metal tool box.

The gun cart is designed to carry heavy type machine guns and some accessories. It is best suited for carrying the Browning Machine Gun, Model of 1917, Water-cooled, and the Vickers Machine Gun, Model of 1915. It will also carry the Colt Machine Gun, cal. .30, and Lewis Gun. As the Colt and Lewis guns are air-cooled more ammunition may be carried in the spaces occupied by water boxes when the first two named guns are carried.

The fact that these carts have been designed to carry four different machine gun outfits accounts for some of the features which would not be necessary if the carts were designed for one gun only.

The gun chest is designed to carry any one of the four guns mentioned above. The Lewis gun will fit best in the gun chest when the spade grip is attached. Where this is not furnished

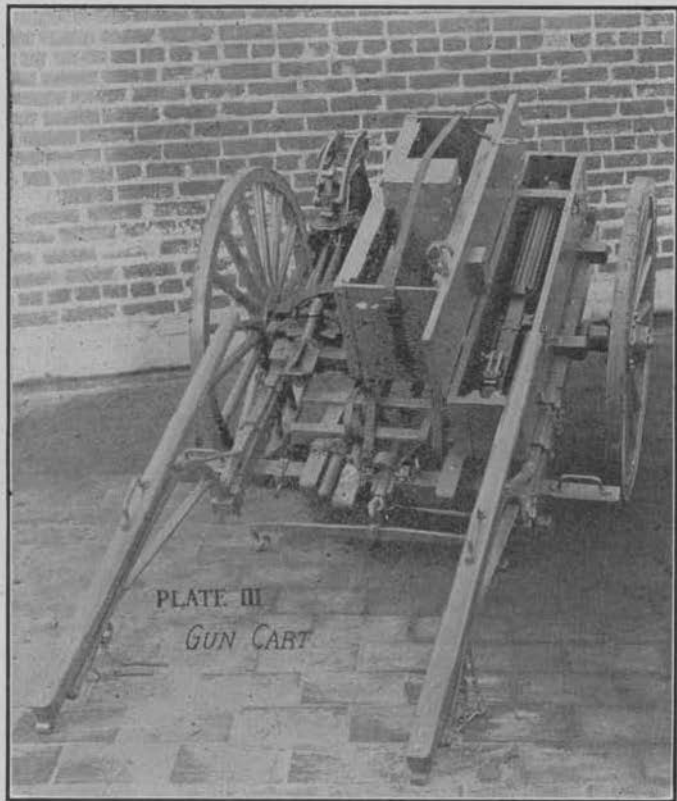


PLATE III

GUN CART

it will be necessary to fit wooden blocks in the gun chest to prevent movement of the Lewis gun. The stock must be removed. The gun chest cover block is bolted to the cover of the chest by two bolts. There are two pairs of bolts in the cover of the gun chest which will accommodate this block. The pair of holes nearer to the middle of the cover are used for holding the Browning gun in the gun chest. The other pair of holes are used with the Vickers gun. The above mentioned block may be turned on its edge and bolted to the cover by the same two bolts mentioned above when the Colt and Lewis guns are carried in the gun chest. The steel plate over the hole cut in the bottom of the gun chest may be removed to accommodate the Lewis gun.

A loose clamp block which has one side cut out to fit around the water jacket of the water-cooled gun may be set in the gains provided in the sides of the gun chest. When the water-cooled gun is placed in the chest the grooved side of this block should fit around the water jacket of the gun, holding it snugly in place. When the Colt and Lewis guns are in the gun chest this block should be inverted so that the flat side of the block will press against the upper side of the gun near the muzzle holding the gun snugly in place when the cover of the chest is closed.

A hole for the muzzle of the spare barrel for the Browning, Vickers and Lewis guns is provided in the lower clamping block in the gun chest. An adjustable clamping bolt is located in one side of the gun chest to hold the chambered end of the spare barrel. Three positions for this bolt are provided to accommodate spare barrels of three different lengths.

A canvas gun cover is provided for the water-cooled machine guns and should be on the guns while they are carried in the gun chest. When these covers are on the guns they will fit snugly in the chest. If gun covers are not available some other form of packing may be wrapped around the guns to make them fit properly in the gun chest. Enough tools have been provided each machine gun company so that slight modifications of carts may be easily accomplished by troops in the field.

The ammunition rack of the gun cart is provided with side retainers to which spacers are attached, for holding boxes. The ammunition rack will accommodate seven boxes, except

when the Lewis spacers are furnished. These accomodate only six boxes. Most of the carts issued are provided with only one set of side retainers and spacers, namely the set marked "Vickers". This set is also suitable for use with the Browning boxes. If more than one pair of side retainers is furnished the extra pairs may be carried below the pair in active use, the spacers being turned down at an angle of 90° so that they will not interfere with boxes placed in the ammunition rack.

The metal tool box is attached to the gun cart underneath the rear end of the chassis. The mule shoes, metallic spare parts for carts and other articles of this nature can be carried in this box.

No spare shaft is carried on the gun cart.

The tripod foot retainer on the gun cart is recessed on both top and bottom. One surface is recessed to accommodate the Russian model of the Colt tripod, and the opposite side is recessed for the Vickers and Browning tripod. The retainer may therefore be inverted to accomodate the different tripods used.

Two carrier slats with carrier straps attached are located in front of the ammunition rack. Various articles of equipment may be strapped in place here. Straps are also provided on the gun chest by means of which articles may be strapped to the cover of the gun chest. The range finder may be strapped in place here if road conditions are such that the instrument will not be injured by this mode of transportation.

The tool box and belt filling machine box may be strapped on the carrier slats mentioned above in order to provide more space for the ammunition in the ammunition rack. A list of articles carried on the gun cart follows:

- 1 Machine gun.
- 1 Machine gun cover.
- 1 Tripod.
- 1 Spare barrel.
- 1 Belt filling machine box and contents.
- 1 Cleaning rod.
- 2 Water boxes.
- 5 Ammunition boxes, containing loaded belts.
- 1 Steam Condensing Device.
- 1 Pair Asbestos Mittens.

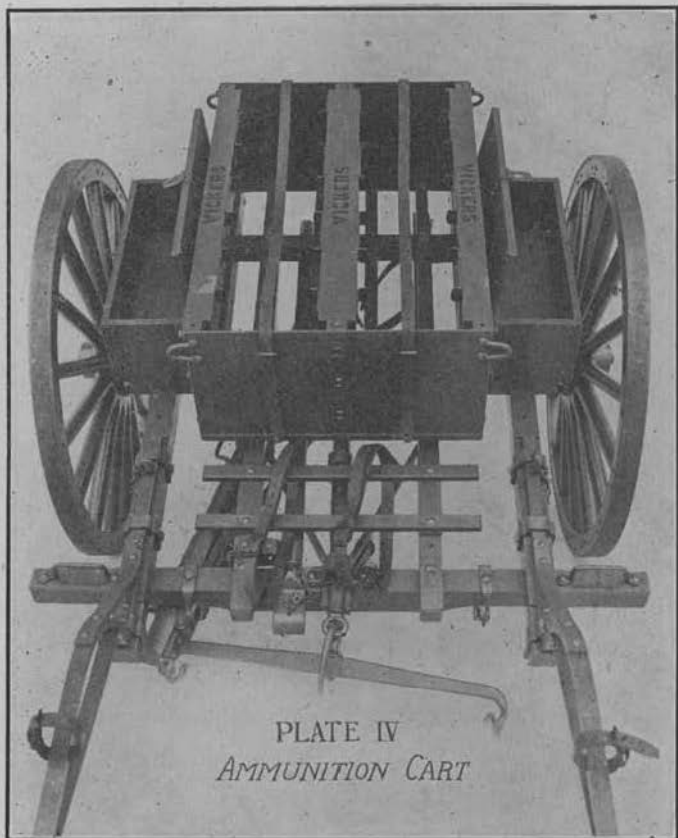


PLATE IV
AMMUNITION CART

- 1 Tool box and contents.
- 1 Pick Mattock.
- 1 Short handled shovel.
- 1 Broad hatchet.
- 1 Cart paulin.
- 1 Picket pin body.
- 1 Picket pin eye.
- 1 Picket rope section.
- 1 Gas mask for mule.
- 1 Emergency rope.
- Miscellaneous repair matériel.
- 1 Collapsible canvas water bucket.
- 1 Feed bag.
- 1 Grain bag.
- 1 Curry Comb.
- 1 Brush.
- Cleaning and preserving matériel.
- Fire control instrument not carried elsewhere.

THE AMMUNITION CART.

Each ammunition cart is provided with a double ammunition rack, two tool chests, and one spare shaft carried under the chassis. The ammunition rack will carry 14 boxes. If Lewis side retainers and spacers are furnished this number will be cut to 12.

Contents of the tool chests will include the machine gun cart repair outfit which will consist of:

- 1. A set of carpenter's tools.
 - 2. Miscellaneous repair matériel.
 - 3. Set of spare parts to be carried on the carts in the field.
- The ammunition cart will also carry the following articles:
- 12. Ammunition boxes containing loaded belts (250 rounds).
 - 2 Water boxes.
 - Spare parts for carts.
 - 1 Feed bag.
 - 1 Grain bag.
 - 1 Gas mask for mule.
 - 1 Brush.
 - 1 Curry Comb.

- 1 Paulin for cart.
- 1 Mule cover.
- 1 Emergency rope.
- 1 Canvas Water Bucket, collapsible.
- 1 Broad Hatchet.
- 1 Pick Mattock.
- 1 Short handled shovel.
- Fire control instruments not carried elsewhere.
- 1 Picket pin body.
- 1 Picket pin eye.
- 1 Picket rope section.
- 1 Spare shaft.
- 1 Pair blinders.
- Cleaning and preserving matériel.
- Signal flags.

THE SPARE GUN CART.

Each spare gun cart is equipped with two gun chests. Provision is made for carrying two tripods between these gun chests. A rack is provided on the rear of the cart for carrying boxes. Two of these carts are issued to each machine gun company, to carry the four spare guns, tripods, tool boxes, cleaning rods, steam condensing devices, etc., in order that they may be kept near the company in the field for use in an emergency.

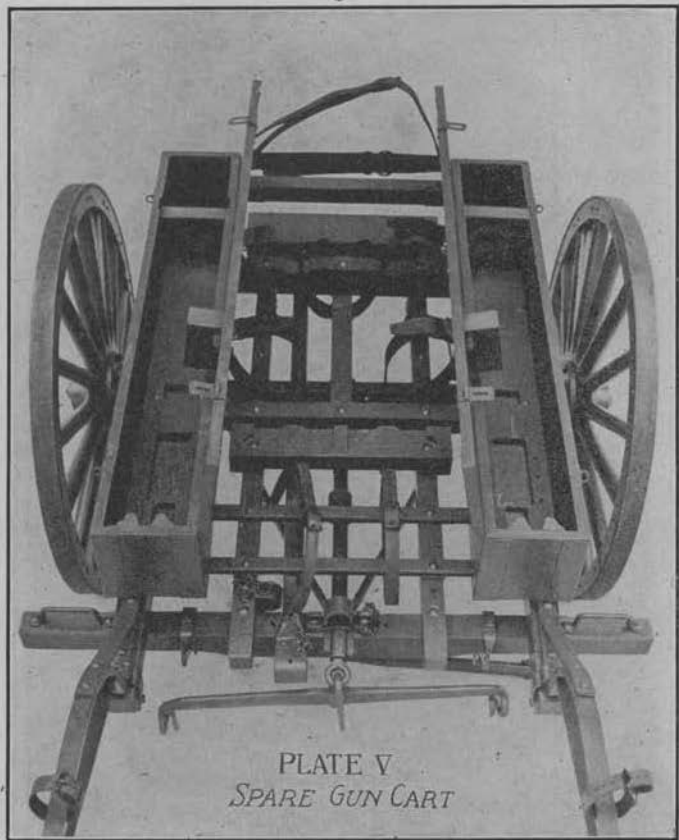


PLATE V
SPARE GUN CART

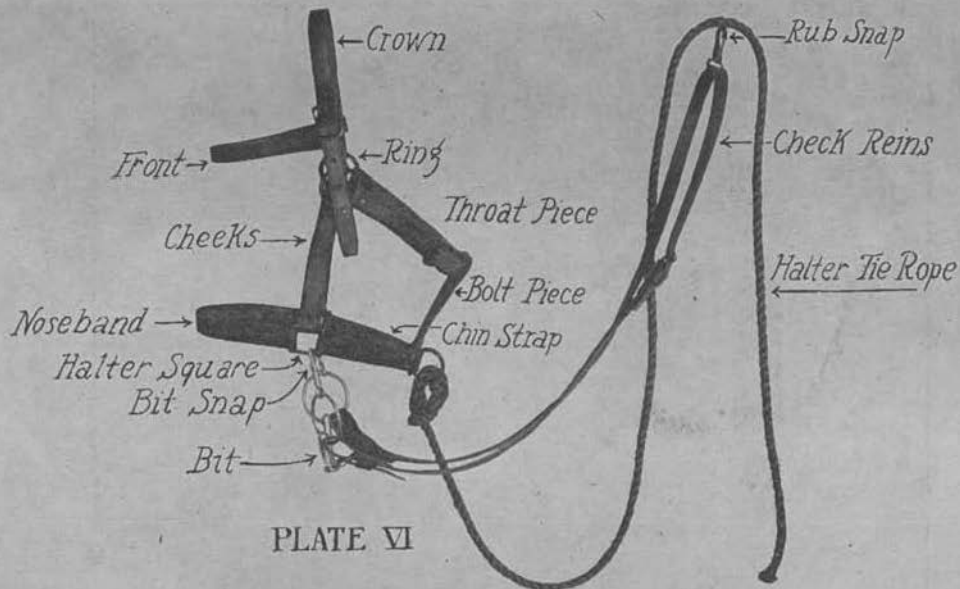


PLATE VI

HALTER BRIDLE

PLATE VII

Breast Collar

Neck Piece

Swivel Dee

Toggle

Toggle Chain

Swivel Dee

Trace Chain

Trace

BREAST COLLAR AND TRACES

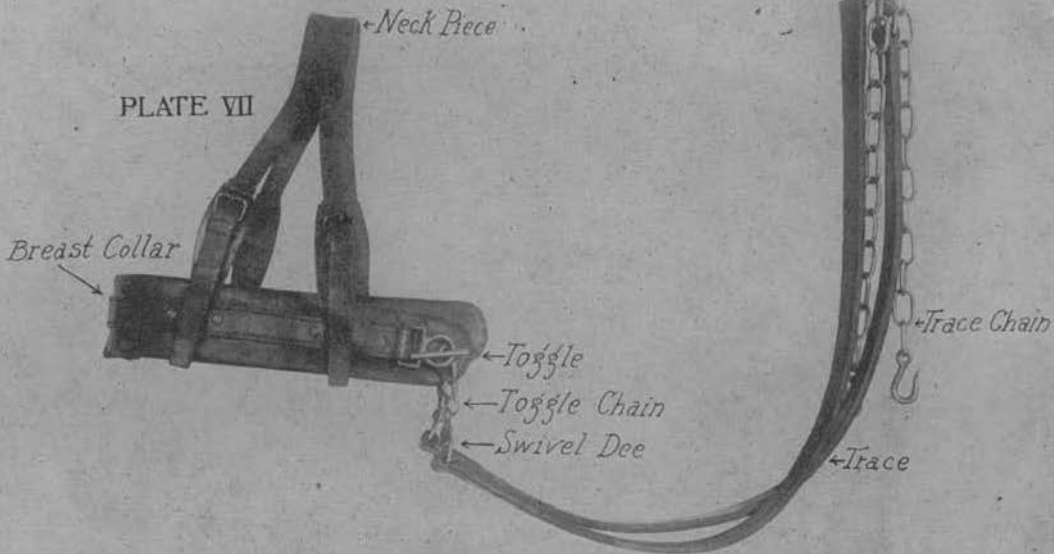
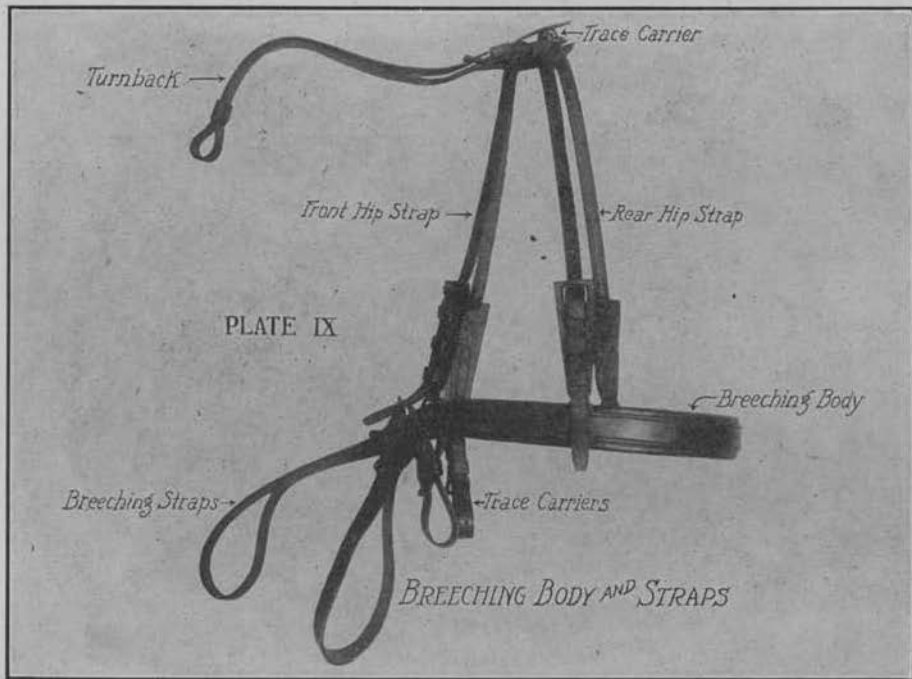


PLATE VIII



CART SADDLE, SHAFT TUGS AND BELLY BANDS



PART II.

THE MACHINE GUN CART HARNESS.

The machine gun cart harness is especially designed for use with machine gun carts. It is a single harness made of black harness leather. A list of the various component parts of this harness follows:

1. Halter Bridle.
2. Breast Collar.
3. Traces.
4. Cart Saddle.
5. Back bands complete with shaft tugs.
6. Turnback and hip straps.
7. Breeching Body.
8. Belly Band.
9. Breeching Straps.
10. Trace Carriers.
11. Halter Tie Rope.

No driving lines are furnished with this harness as they are not required. The nomenclature of the various parts of this harness is shown on plates in this hand book.

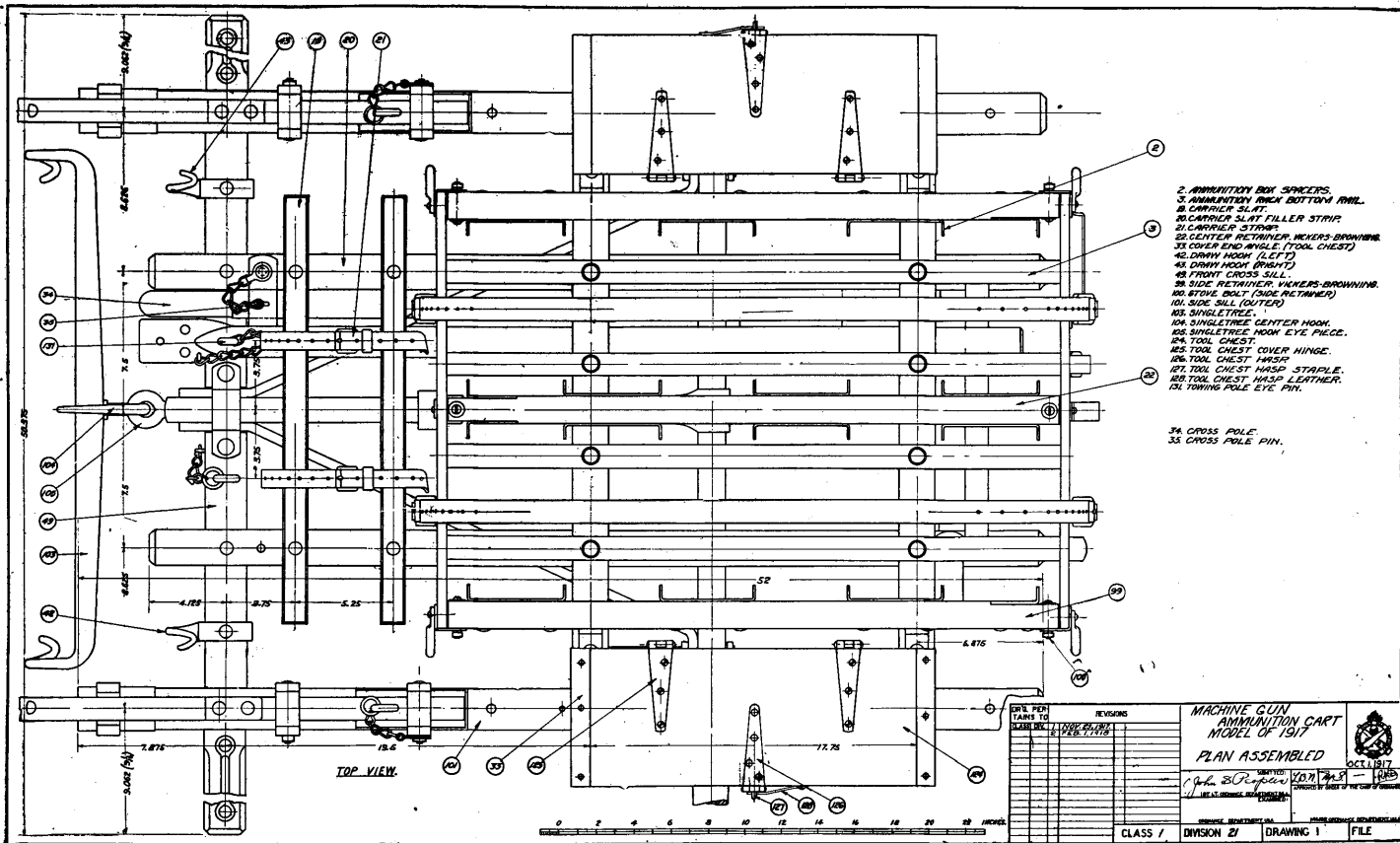
PART III.

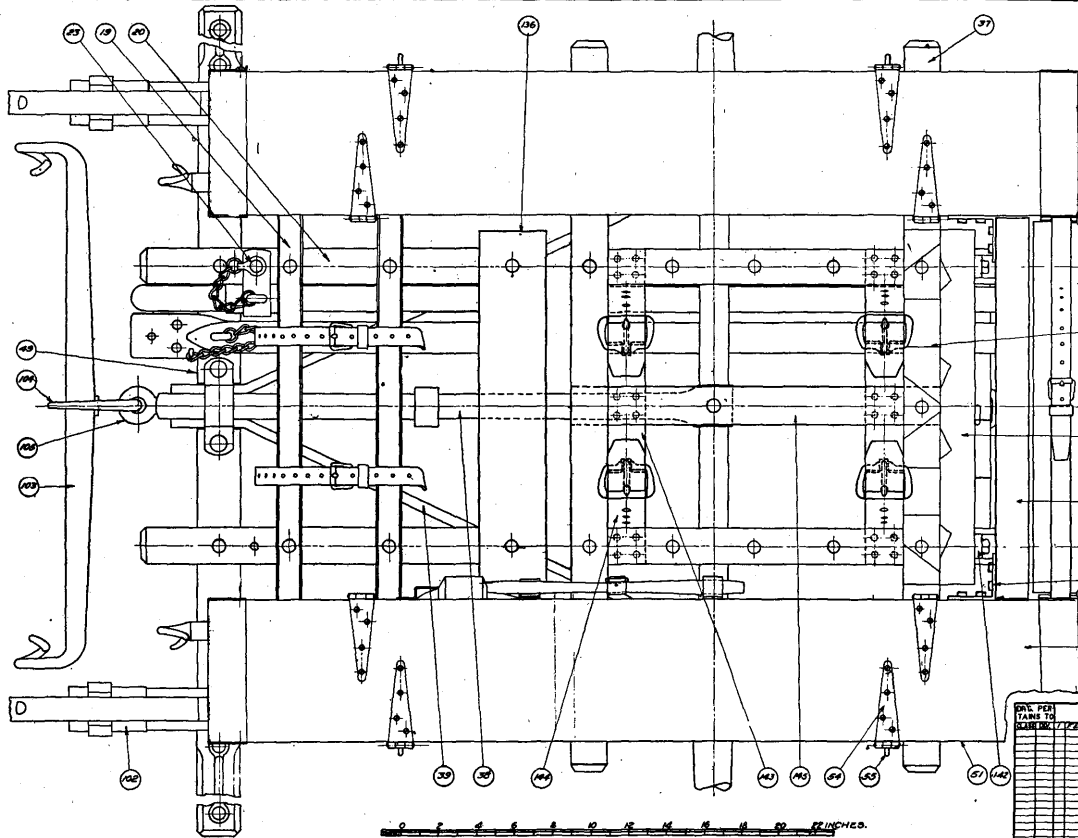
NOMENCLATURE OF CARTS.

6 Plates, Nos. X, XI, XII, XIII, XIV and XV are included in this hand book to give information concerning the nomenclature of the parts of the machine gun carts.

An alphabetical list of parts of carts is also included. Each item on this alphabetical list is preceded by a number shown on one of the six plates. By looking up any part of the cart and noting the number of that part it will be possible to find the name of the part bearing the same number in the alphabetical list of parts of carts in the hand book. Following the names of the parts in the alphabetical list are crosses placed in certain columns which indicate on which carts the different parts are used.

		<i>Gun</i>	<i>Amn.</i>	<i>Spare</i>
		<i>Cart</i>	<i>Cart</i>	<i>Gun</i>
				<i>Cart</i>
1	Ammunition box holding, down strap	x	x	
2	Ammunition box spacers.....	x	x	
3	Ammunition rack bottom rail.....	x	x	
4	Ammunition rack bracket.....	x	x	
5	Ammunition rack corner angle (left)..	x	x	
6	Ammunition rack corner angle (right).....	x	x	
7	Ammunition rack lower end board (small).....	x		
8	Ammunition rack lower end board (large).....		x	
9	Ammunition rack side sill.....	x	x	
10	Ammunition rack upper end board (small).....	x		
11	Ammunition rack upper end board (large).....		x	
12	Axle.....	x	x	x
13	Axle strap.....	x	x	x





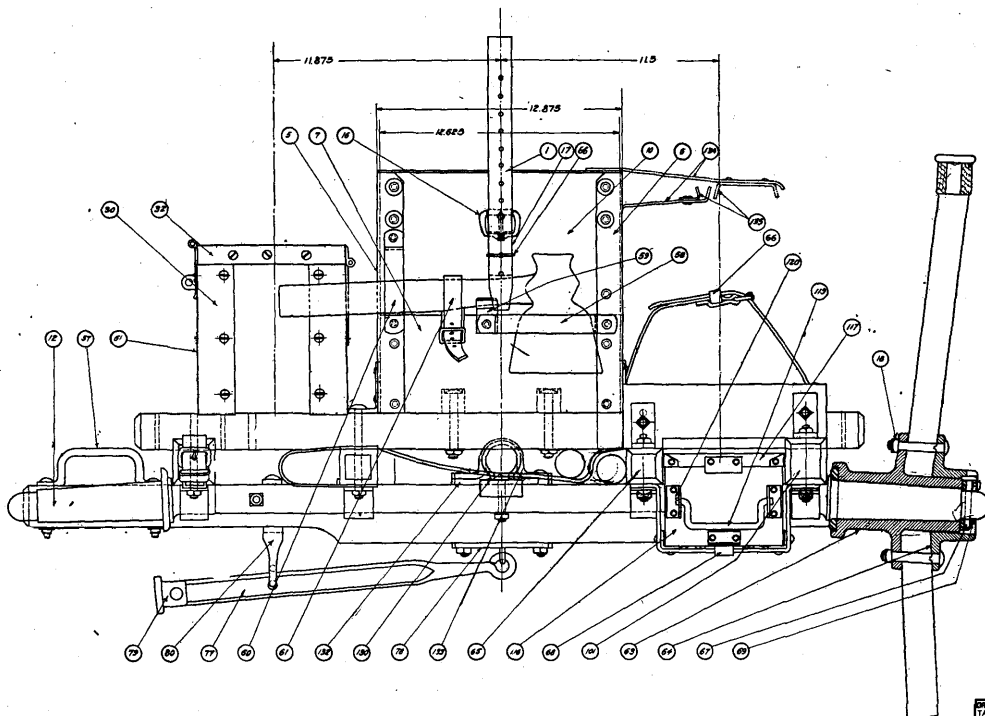
- 19 CARRIER SLAT
- 20 CARRIER SLAT FILLER STRIP
- 33 CHAIN EYE
- 37 CROSS SILL
- 38 DRAW BAR
- 39 DRAW BAR BRACE - LEFT
- 49 FRONT CROSS SILL
- 51 GUN CHEST
- 52 GUN CHEST COVER
- 54 GUN CHEST HINGE
- 55 GUN CHEST HINGE STAPLE
- 102 SIDE SILL END FERRULE
- 103 SINGLE TREE
- 104 SINGLE TREE CENTER NOOK
- 105 SINGLE TREE NOOK EYE-PIECE
- 138 TRIPPOD HEAD SUPPORT - DOUBLE
- 141 TRIPPOD HEAD RETAINER - DOUBLE
- 142 TRIPPOD HEAD RETAINER BRACKET
- 143 TRIPPOD HOLDING BULLET
- 144 TRIPPOD HOLDING STRAP
- 145 TRIPPOD STRAP BAR

- 81 REAR CROSS BOARD
- 82 REAR RETAINER
- 83 REAR RETAINER BRACKET
- 114 STRAP HOLDING IRON
- 136 TRIPPOD FOOT RETAINER - DOUBLE



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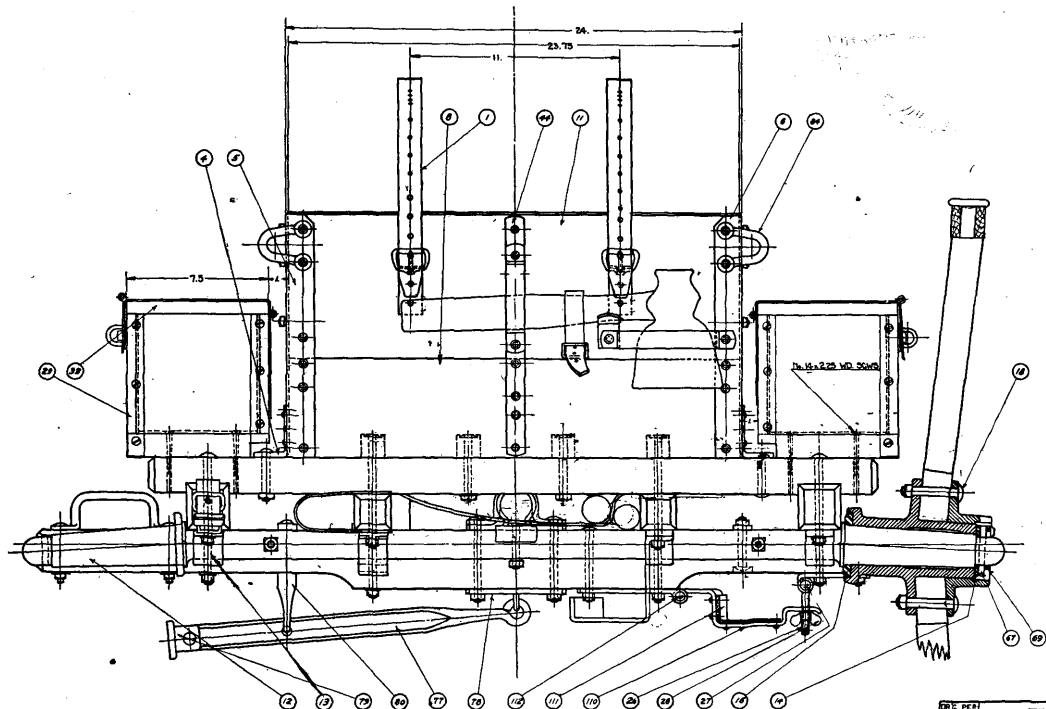
PLATE XI.



- 1. AMMUNITION BOX HOLDING DOWN STRAP.
- 2. AMMUNITION RACK CORNER ANGLE (L.F.T).
- 3. AMMUNITION RACK CORNER ANGLE (RIGHT).
- 4. AMMUNITION RACK LOWER END BOARD (SMALL).
- 5. AMMUNITION RACK UPPER END BOARD (SMALL).
- 6. AXLE.
- 7. BUCKLE.
- 8. BUCKLE CLIP.
- 9. CARRIAGE BOLT.
- 10. CORNER ANGLE (GUN CHEST).
- 11. COVER END ANGLE (GUN CHEST).
- 12. GUN CHEST.
- 13. HAND GEAR.
- 14. MITCHELL BLADE HOLDER.
- 15. MITCHELL HANDLE BRACKET.
- 16. MITCHELL HANDLE HOLDER.
- 17. MITCHELL HOLDING STRAP.
- 18. HUB BARREL.
- 19. HUB FLANGE (OUTER).
- 20. INNER SIDE SILL.
- 21. LINCX PIN.
- 22. LOCK CLIP.
- 23. LOCK RING.
- 24. PROP.
- 25. PROP BRACKET.
- 26. PROP FOOT.
- 27. PROP TRANSPORT HOOK.
- 28. SIDE SILL (OUTER).
- 29. TOOL BOX.
- 30. TOWING POLE CLIP.
- 31. TOWING POLE LOWER CLIP.
- 32. TOWING POLE UPPER CLIP.
- 33. TRIPPOD BRACE.
- 34. TRIPPOD CLIP.
- 35. CLAMP BLOCK (LOWER - IN GUN CHEST).
- 36. CLAMP BLOCK (UPPER - IN GUN CHEST).
- 37. ASSEMBLER.
- 38. TOOL BOX COVER.
- 39. TOOL BOX COVER HINGE (NOT SHOWN).
- 40. TOOL BOX HANDLE.
- 41. TOOL BOX HANDLE BRACKET.

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PLATE XIII.



- 1 AMMUNITION BOLT HOLDING DOWN STRAP
- 4 AMMUNITION RACK SHAPCKET
- 5 AMMUNITION RACK CORNER ANGLE - LEFT
- 6 AMMUNITION RACK CORNER ANGLE - RIGHT
- 8 AMMUNITION RACK LOWER END BOARD - LARGE
- 11 AMMUNITION RACK UPPER END BOARD - LARGE
- 12 AXLE
- 13 AXLE STRAP
- 14 AXLE WASHER - OUTER
- 15 AXLE WASHER - INNER
- 18 CARRIAGE BOLT
- 26 CLAMPING BOLT
- 27 CLAMPING BOLT PIVOT
- 28 CLAMPING BOLT WING NUT
- 29 CORNER ANGLE - TOOL CHEST
- 33 COVER END ANGLE - TOOL CHEST
- 44 END BOARD STRIP
- 67 LINCX PIN
- 69 LOCK RING
- 77 PROP
- 78 PROP BRACKET
- 79 PROP FOOT
- 80 PROP TRANSPORT HOOK
- 84 ROPE CARRYING LOOP
- 110 SPARE SHAFT CLAMP
- 111 SPARE SHAFT CLAMP LIVING
- 112 SPARE SHAFT CLAMP PIVOT

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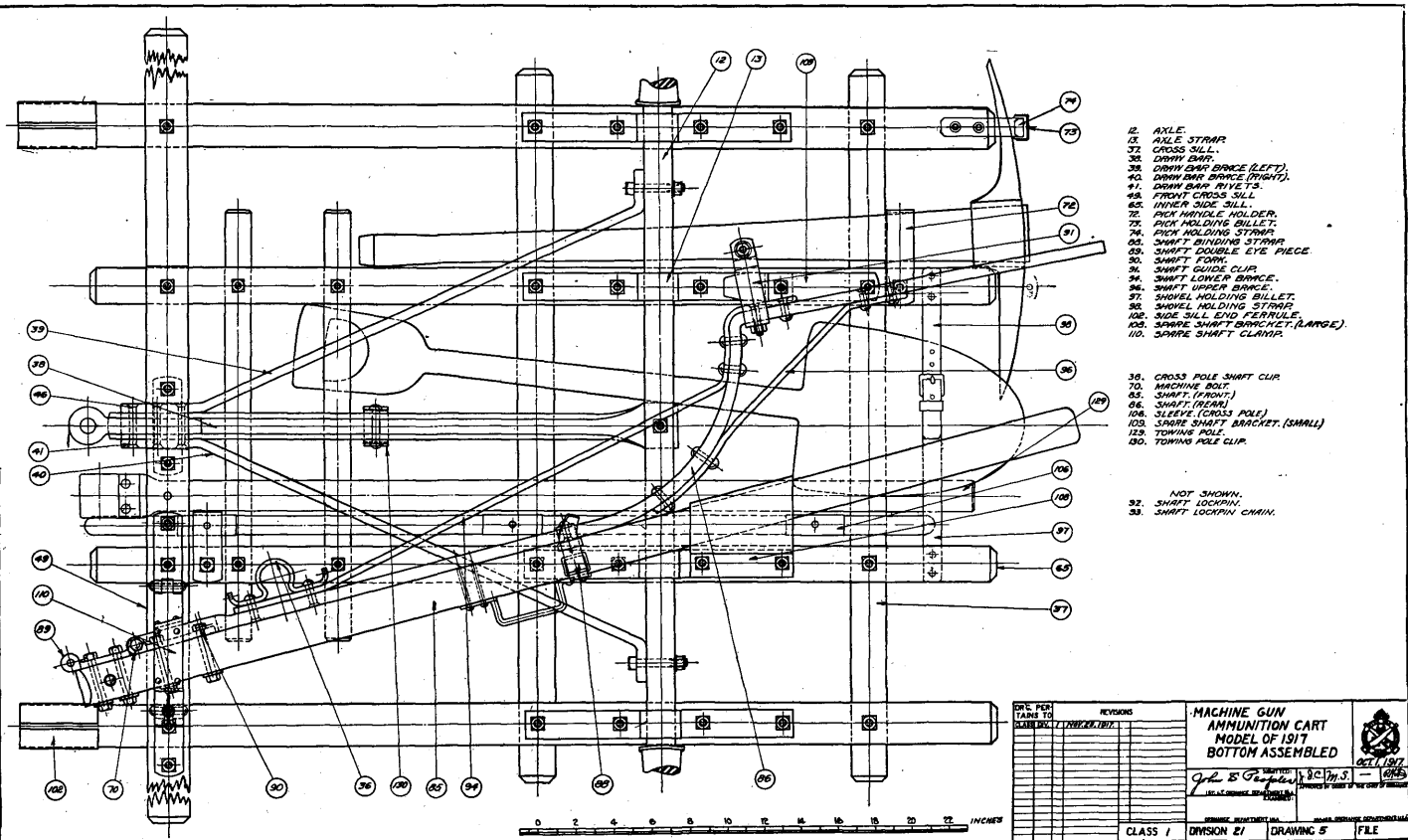
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PLATE XIV.



- 12. AXLE.
- 13. AXLE STRAP.
- 37. CROSS SILL.
- 38. DRAW BAR.
- 39. DRAW BAR BRACE (LEFT).
- 40. DRAW BAR BRACE (RIGHT).
- 41. DRAW BAR BIVETS.
- 48. FRONT CROSS SILL.
- 65. INNER SIDE SILL.
- 72. PICK HANDLE HOLDER.
- 73. PICK HOLDING BILLET.
- 74. PICK HOLDING STRAP.
- 68. SHAFT BINDING STRAP.
- 69. SHAFT DOUBLE EYE PIECE.
- 70. SHAFT FORM.
- 71. SHAFT GUIDE CLIP.
- 76. SHAFT LOWER BRACE.
- 84. SHAFT UPPER BRACE.
- 97. SHOVEL HOLDING BILLET.
- 88. SHOVEL HOLDING STRAP.
- 102. SIDE SILL END FERRULE.
- 109. SQUARE SHAFT BRACKET (LARGE).
- 110. SQUARE SHAFT CLAMP.

- 36. CROSS POLE SHAFT CLIP.
- 70. MACHINE BOLT.
- 63. SHAFT (FRONT).
- 66. SHAFT (REAR).
- 106. SLEEVE (CROSS POLE).
- 103. SQUARE SHAFT BRACKET (SMALL).
- 123. TOWING POLE.
- 130. TOWING POLE CLIP.

NOT SHOWN.
 92. SHAFT LOCKPIN.
 93. SHAFT LOCKPIN CHAIN.

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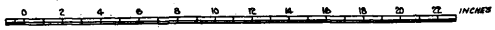


PLATE XV.

	<i>Gun</i>	<i>Amn.</i>	<i>Spare</i>	
	<i>Cart</i>	<i>Cart</i>	<i>Gun</i>	
			<i>Cart</i>	
14	Axle washer (outer).....	x	x	x
15	Axle washer (inner).....	x	x	x
16	Buckle.....	x	x	x
17	Buckle clip.....	x	x	x
18	Carriage bolt.....	x	x	x
19	Carrier slat.....	x	x	x
20	Carrier slat filler strip.....	x	x	x
21	Carrier strap.....	x	x	x
22a	Center retainer (Vickers, Browning).....		x	
22b	Center retainer (Colt).....		x	
22c	Center retainer (Lewis).....		x	
23	Chain eye.....	x	x	x
24	Clamp block (lower).....	x		x
25	Clamp block (upper).....	x		x
26	Clamping bolt.....		x	
27	Clamping bolt pivot.....		x	
28	Clamping bolt wing nut.....		x	
29	Corner angle (tool chest).....		x	
30	Corner angle (gun chest).....	x		x
31	Cotter pin chain.....	x	x	x
32	Cover end angle (gun chest).....	x		x
33	Cover end angle (tool chest).....		x	
34	Cross pole.....	x	x	x
35	Cross pole pin.....	x	x	x
36	Cross pole shaft clip.....	x	x	x
37	Cross sill.....	x	x	x
38	Draw bar.....	x	x	x
39	Draw bar brace (left).....	x	x	x
40	Draw bar brace (right).....	x	x	x
41	Draw bar rivets.....	x	x	x
42	Draw hook (left).....	x	x	x
43	Draw hook (right).....	x	x	x
44	End board strip.....		x	
45	End board bracket.....	x	x	
46	Eye rivet.....	x	x	x
47	Felloe.....	x	x	x
48	Felloe Plate.....	x	x	x
49	Front cross sill.....	x	x	x

	<i>Gun Cart</i>	<i>Amn. Cart</i>	<i>Spare Gun Cart</i>
50	Guide block.....	x	x
51	Gun chest.....	x	x
52	Gun chest cover.....	x	x
53	Gun chest cover block.....	x	x
54	Gun chest hasp.....	x	x
55	Gun chest hasp staple.....	x	x
56	Gun chest hasp leather.....	x	x
57	Hand Grip.....	x	x
58	Hatchet blade holder.....	x	x
59	Hatchet handle bracket.....	x	x
60	Hatchet handle holder.....	x	x
61	Hatchet holding strap.....	x	x
62	Hinged shaft stop.....	x	x
63	Hub barrel.....	x	x
64	Hub flange (outer).....	x	x
65	Inner side sill.....	x	x
66	Keeper.....	x	x
67	Linch pin.....	x	x
68	Lock clip.....	x	x
69	Lock ring.....	x	x
70	Machine bolt.....	x	x
71	Outer sill shaft clip (front).....	x	x
72	Pick handle holder.....	x	x
73	Pick holding billet.....	x	x
74	Pick holding strap.....	x	x
75	Pick strap wearing plate.....	x	x
76	Pick blade supporting bracket.....	x	x
77	Prop.....	x	x
78	Prop bracket.....	x	x
79	Prop foot.....	x	x
80	Prop transport hook.....	x	x
81	Rear cross board.....		x
82	Rear retainer.....		x
83	Rear retainer bracket.....		x
84	Rope carrying loop.....	x	
85	Shaft (front).....	x	x
86	Shaft (rear).....	x	x
87	Outer shaft clip (rear).....	x	x

	<i>Gun</i>	<i>Amn.</i>	<i>Spare</i>	
	<i>Cart</i>	<i>Cart</i>	<i>Gun</i>	
	<i>Cart</i>	<i>Cart</i>	<i>Cart</i>	
88	Shaft binding strap.....	x	x	x
89	Shaft double eye piece.....	x	x	x
90	Shaft fork.....	x	x	x
91	Shaft guide clip.....	x	x	x
92	Shaft lock pin.....	x	x	x
93	Shaft lock pin chain.....	x	x	x
94	Shaft lower brace.....	x	x	x
95	Shaft pin.....	x	x	x
96	Shaft upper brace.....	x	x	x
97	Shovel holding billet.....	x	x	
98	Shovel holding strap.....	x	x	
99a	Side retainer (Vickers-Browning).....	x	x	
99b	Side retainer (Colt).....	x	x	
99c	Side retainer (Lewis).....	x	x	
100	Stove bolt (side retainer).....	x	x	
101	Side sill (outer).....	x	x	x
102	Side sill end ferrule.....	x	x	x
103	Singletree.....	x	x	x
104	Singletree center hook.....	x	x	x
105	Singletree hook eye-piece.....	x	x	x
106	Sleeve (cross pole).....	x	x	x
107	Spare barrel holding belt.....	x		x
108	Spare shaft bracket (large).....		x	
109	Spare shaft bracket (small).....		x	
110	Spare shaft clamp.....		x	
111	Spare shaft clamp lining.....		x	
112	Spare shaft clamp pivot.....		x	
113	Spoke.....	x	x	x
114	Strap holding iron.....			x
115	Tire.....	x	x	x
116	Tool box.....	x		x
117	Tool box cover.....	x		x
118	Tool box cover hinge.....	x		xx
119	Tool box handle.....	x		x
120	Tool box handle bracket.....	x		x
121	Tool box hanger (front).....	x		x
122	Tool box hanger (rear).....	x		x
123	Tool box hanger angle.....	x		x

	<i>Gun</i>	<i>Amn.</i>	<i>Spare</i>
	<i>Cart</i>	<i>Cart</i>	<i>Gun</i>
			<i>Cart</i>
124	Tool chest.....	x	
125	Tool chest cover hinge.....	x	
126	Tool chest hasp.....	x	
127	Tool chest hasp staple.....	x	
128	Tool chest hasp leather.....	x	
129	Towing pole.....	x	x
130	Towing pole clip.....	x	x
131	Towing pole eye pin.....	x	x
132	Towing pole lower clip.....	x	x
133	Towing pole upper clip.....	x	x
134	Tripod brace.....	x	x
135	Tripod clip.....	x	x
136	Tripod foot retainer (double).....		x
137	Tripod foot retainer (single).....	x	
138	Tripod head support (double).....		x
139	Tripod head support (single).....	x	
140	Tripod head retainer (single).....	x	
141	Tripod head retainer (double).....		x
142	Tripod head retainer bracket.....	x	x
143	Tripod holding billet.....	x	x
144	Tripod holding strap.....	x	x
145	Tripod strap bar.....		x

PART IV.

SPARE PARTS CARRIED ON THE CARTS.

The following set of spare parts for carts is issued to be carried on carts in the field. Twelve of these sets are supplied to each machine gun company equipped with machine gun carts. They may be carried in the metal tool box on the gun cart and in the tool chest on the ammunition cart.

- (a) 1 set wood screws, assorted.
- (b) 1 set bolts, nuts and washers, assorted.
- (c) 1 set of pins with chains attached.
- (d) 4 lynch pins and lock rings, assembled.
- (e) 6 chain eyes.
- (f) 1 set of rivets for carts.
- (g) 4 outer washers for axles.
- (h) 8 cotter pins .125 x .75 inches.

Note: A complete set of base spare parts is provided in addition to the spare parts listed above.

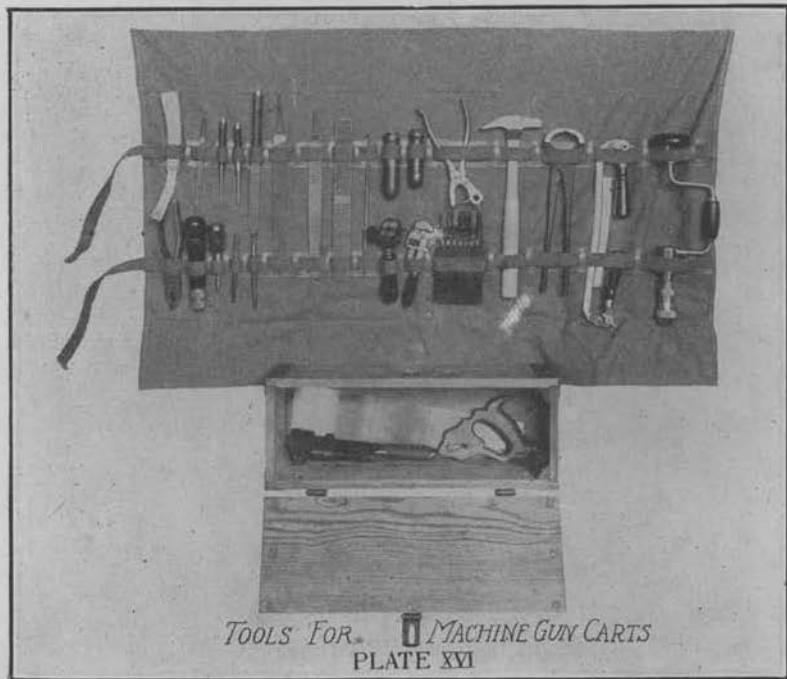
PART V.

MISCELLANEOUS REPAIR MATERIAL FOR CARTS.

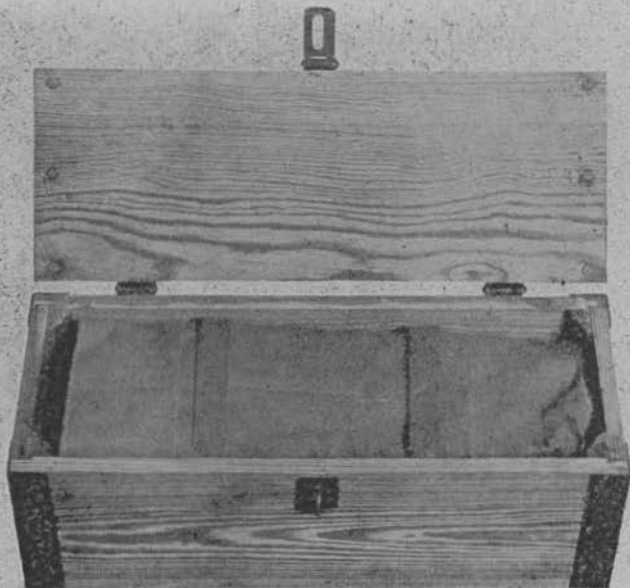
This set of repair material is designed to be carried on machine gun carts in the field. Part of it will be carried in the metal tool box on the gun cart. Articles which might be damaged while being carried in the metal tool box should be carried in one of the tool chests on the ammunition carts.

List of articles in one set:

- (a) 2 sets mule shoes.
- (b) 3 dozen mule shoe nails.
- (c) $\frac{1}{2}$ lb. spool of tinned annealed steel wire No. 16.
- (d) 1 roll sheet iron, 30 guage, 4' x 48'.
- (e) 1 lb. can harness soap.
- (f) 1 lb. can axle grease.
- (g) 1 electric flash light with 2 extra batteries.
- (h) Oil stone for oil or water, mounted in box.



TOOLS FOR  MACHINE GUN CARTS
PLATE XVI



TOOLS FOR CART IN TOOL CHEST
PLATE XVII

PART VI.

TOOLS FOR MACHINE GUN CARTS.

A canvas roll containing the tools listed below is issued for the use of machine gun companies. Twelve of these sets of tools are issued to each machine gun company. The canvas roll containing these tools will fit in one of the tool chests on the ammunition cart:

Bit brace.
 Hand vice.
 Saw.
 Drawing knife.
 Awl and tool set.
 Cold chisel.
 Set of wood bits.
 Screw driver.
Reamer bit.
 Horse rasp.
 Wood rasp.
 Round bastard file.
 Farrier's hammer.
 Regular taper saw file.
 Leather punch.
 Pinchers, shoeing and cutting.
 File handles.
 Framing chisel.
 Screw driver.
 Wrench.
 Pliers.
 Punchers.
 Farrier's knife, wood handle, $\frac{3}{4}$ " blade.

PART VII.

CRATING CARTS FOR SHIPMENT.

Plates Nos. XVIII, XIX and XX.

Three views of the carts crated for shipment are shown in this book to illustrate a satisfactory method of crating.

The importance of the matter of efficient crating of carts is emphasized. The percentage of space wasted in loading carts for shipment should be reduced to a minimum for both domestic and export shipment.

*Crate for foreign shipment
of Machine Gun Carts 3/2/18*

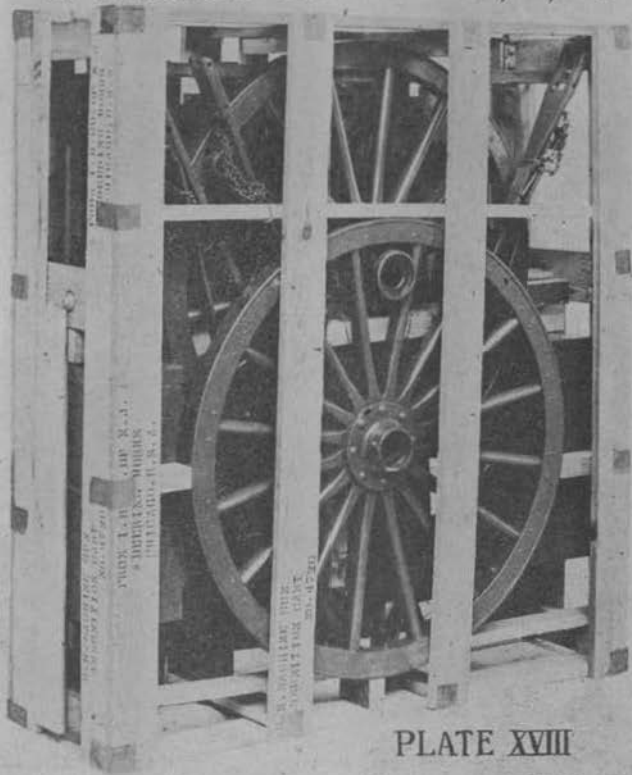


PLATE XVIII

*Crate adopted for export shipment
of Machine Gun Carts 3/2/18*

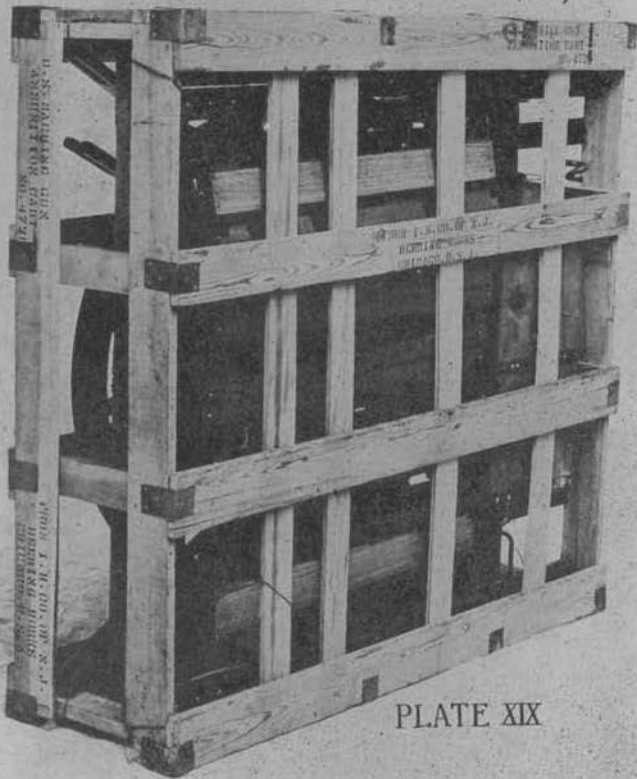


PLATE XIX

*Crate adopted for export shipment
of Machine Gun Carts 3/2/18*

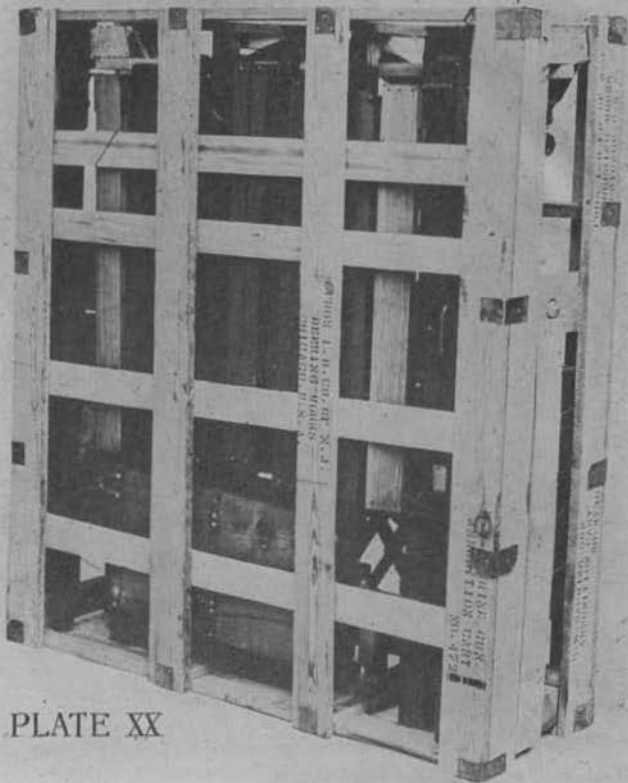


PLATE XX

PART VIII.

LIST OF MATÉRIEL FOR AN INFANTRY MACHINE GUN
COMPANY.

The following is a list of articles carried by an Infantry Machine Gun Company equipped with machine gun carts:

- 16 Water-cooled machine guns.
- 16 Gun covers.
- 16 Tripods.
- 16 Spare barrels.
- 12 Belt filling machine boxes and contents.
- 52 Water boxes.
- 204 Ammunition boxes containing: 1 belt, loaded, 250 rounds.
- 16 Steam condensing devices.
- 16 Pairs of asbestos mittens.
- 16 Tool boxes and contents.
- 16 Cleaning rods.
- 4 Plane tables 40 cm. square with canvas cases and tripods.
- 4 Protractors alidade with scales in meters.
- 4 Protractors (semicircular).
- 4 Panoramic sights with tripods, attachable to either gun or tripod.
- 4 Range finders with tripods.
- 16 Clinometers.
- 6 Brunton transits with luminous needles, dials and level bubbles. (May be substituted by prismatic or lensatic compasses.)
- 4 Angle of site instruments.
- 12 Gun carts.
- 12 Ammunition carts.
- 2 Spare gun carts.
- 24 Pick mattocks.
- 24 Shovels, short-handled.
- 26 Broad hatchets.
- 12 Picket pins and picket pin eyes.
- 6 Picket rope sections.

- 26 Paulins, cart.
- 26 Gas masks, mule.
- 26 Emergency ropes.
- 26 Mule covers.
- 12 Spare shafts.
- 26 Cart harness, complete.
- 12 Machine Gun Cart Repair Outfits each consisting of:
 - A. Set of Field Spare Parts for carts:
 - 1 Set of wood screws, assorted.
 - 1 Set of bolts, nuts and washers.
 - 1 Set of pins with chains attached.
 - 4 Linch pins and rings, assembled.
 - 6 Chain eyes.
 - 1 Set of rivets for carts.
 - 4 Outer washers for axle shown on drawing 15-1K-10.
 - 8 Cotter pins .125 x .75 inches.
 - B. Set of Miscellaneous Repair Matériel:
 - 2 Sets mule shoes.
 - 3 Doz. mule shoe nails.
 - ½ lb. spool of tinned annealed steel wire No. 16.
 - 1 Roll sheet iron, 30 gauge, 4' x 48'.
 - 1 Lb. can harness soap.
 - 1 Lb. can axle grease.
 - 1 Electric flash light with 2 extra batteries.
 - 1 Oil stone for oil or water, mounted in box.
 - C. Tool Kit and Tools for Machine Gun Carts:
 - 1 Canvas roll with pockets for containing the following:
 - Bit brace.
 - Hand vise.
 - Back saw.
 - Drawing knife.
 - Awl and tool sets.
 - Cold chisel.
 - Set of wood bits.
 - Screw driver bit.
 - Reamer bit.
 - Horse rasp.
 - Wood rasp.
 - Round bastard file.