

**NO. 1691; INSTRUCTIONS FOR
MOUNTING, USING AND CARING FOR
DISAPPEARING CARRIAGES, L.
F., MODEL OF 1894 MI FOR 10-INCH
GUNS, MODELS OF 1888, 1888 MI AND
1888 MII, MAY 20, 1904**

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VARIOUS

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U.S. Ordnance dept.

INSTRUCTIONS
FOR MOUNTING, USING, AND CARING FOR
DISAPPEARING CARRIAGES

L. F. MODEL OF 1894 M1

FOR

10-INCH GUNS

Models of 1888, 1888 M1, and 1888 M11

(TEN PLATES)

MAY 20, 1904

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By order of the Secretary of War:

WILLIAM CROZIER,
Brigadier General, Chief of Ordnance.

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**INSTRUCTIONS FOR MOUNTING, USING, AND CARING FOR DISAPPEARING
CARRIAGES, L. F., MODEL 1894 M1, FOR 10-INCH GUNS, MODELS 1888,
1888 M1 AND M11.**

(Thirteen plates.)

(The points in italics are of particular importance, or concern the safety of the carriage, and should be specially noted.)

GENERAL DESCRIPTION.

THE EMPLACEMENT (Pl. I).—Emplacements for these carriages are entirely of concrete, permitting traversing through a field of fire of 140°. A semicircle of six steps leads from the loading platform down to the gun platform. Being for a front pintle carriage, this is on two levels. The base ring rests on the upper level around the counterweight well. Fifteen and a half inches lower is placed the rear traverse rail on the second level.

The anchor bolts are set in the concrete as the emplacement is constructed, the depressions for the thrust plates being also provided.

THE CARRIAGE (Pls. II, III, IV, and V).—The carriage is the front pintle type and mounts guns of the 1888, 1888 M1 and M11 models.

It embodies many additions and improvements on the original model, the principal ones of which are new tripping device having strong single pawls and allowing tripping from either side, elevation counterbalance device, wire rope retraction with motor, 3-inch telescopic sight and sighting platform, elevation disk and pointer with gearing, buffer valve, azimuth pointer, electrical contacts and conduits, safety firing switch and cables, and telephone bracket.

The rear traverse rail, in four sections, allows a field of fire of 140°. In some emplacements an extension rail is used and a field of fire of 170° obtained. Stops are provided to prevent running the carriage off the rail. The piece may be elevated from 5° depression to 12° elevation.

The elevating system is so constructed that the gun is at an angle of about 5° elevation when in the loading position if recoiling to the nineteenth notch with any angle of elevation in battery.

ACTION OF CARRIAGE.—Upon firing the piece the gun lever axle is moved to the rear by the recoiling energy of the gun, carrying the