

(No Model.)

T. NORDENFELT.
GUN MOUNTING FOR FIELD ARTILLERY.

No. 418,925.

Patented Jan. 7, 1890.

Fig. 1.

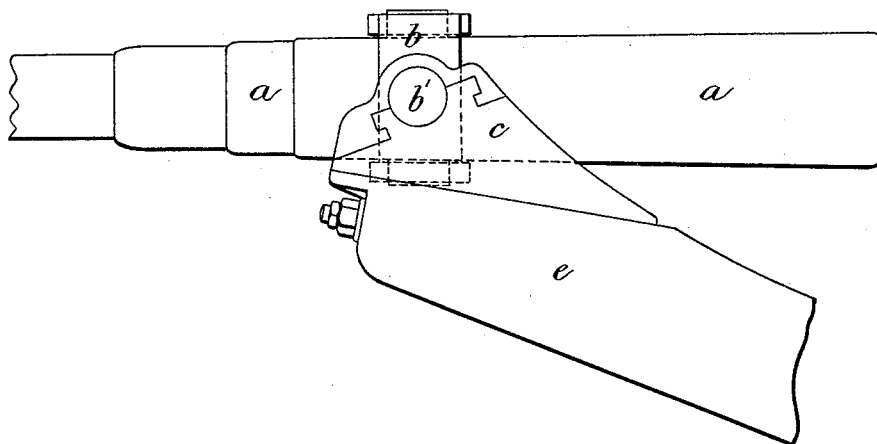


Fig. 2.

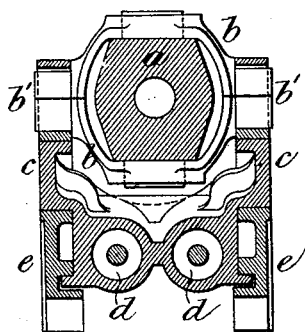
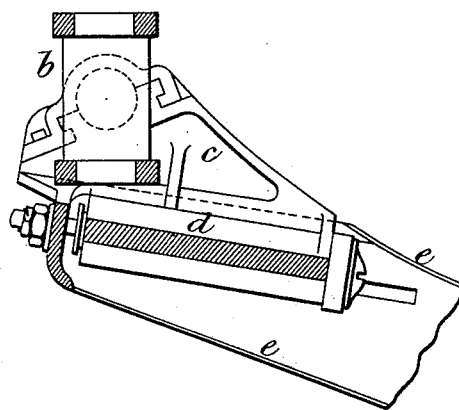


Fig. 3.



Witnesses

Baltus D'Long.
L. W. Brooke.

Inventor.

Thorsten Nordenfelt.

By his Atty.

Baldwin Davidson & Wright.

UNITED STATES PATENT OFFICE.

THORSTEN NORDENFELT, OF WESTMINSTER, ENGLAND, ASSIGNOR TO THE
MAXIM NORDENFELT GUNS AND AMMUNITION COMPANY, (LIMITED,) OF
SAME PLACE.

GUN-MOUNTING FOR FIELD ARTILLERY.

SPECIFICATION forming part of Letters Patent No. 418,925, dated January 7, 1890.

Application filed May 8, 1889. Serial No. 310,030. (No model.) Patented in England December 13, 1887, No. 17,170.

To all whom it may concern:

Be it known that I, THORSTEN NORDENFELT, civil engineer, a subject of the King of Sweden, residing at 53 Parliament Street, in the city of Westminster, England, have invented certain new and useful Improvements in Gun-Mountings for Field Artillery, (for which I have received Letters Patent in Great Britain, No. 17,170, dated December 13, 1887,) of which the following is a specification.

In my former patent of June 7, 1887, No. 364,366, I described a gun-mounting for field artillery. In this gun-mounting the gun is mounted within a cradle, so that it can slide longitudinally within it. The cradle carries compressors (hydraulic or otherwise) for checking the recoil, and springs for again running the gun forward when the recoil ceases. The cradle turns on a vertical pivot in a socket which forms part of a cross-head or fork-piece. The gun therefore can be trained sidewise in either direction to a considerable angle within this cradle or fork.

My present improvement has for its object to improve the construction of the mounting so as better to enable the gun to be trained sidewise in either direction. I now place the trunnions of the gun vertically and cause them to turn in bearings in a ring which has horizontal trunnions projecting from it. These are held in trunnion-bearings in a cradle which can slide backward along guides in the trail. I also form the cradle in one piece with hydraulic cylinders forming part of a compressor, while the piston-rods of the compressor-cylinders are secured to the front end of the trail.

Figure 1 of the drawings is a side elevation of part of a gun and a gun-mounting constructed as above described connecting it with the upper part of a trail. Fig. 2 is a cross-section, and Fig. 3 a longitudinal section.

a is the gun; *b* the ring, in which are the bearings for the trunnions of the gun.

b' are horizontal trunnions projecting from the ring. These are received in bearings on a cradle *c*, which has compressor-cylinders *d*, formed in one piece with it. The ring *b* is divided into two halves through the trunnions *b'*, to allow of the parts being readily got into position. The piston-rods of the cylinders *d* are attached, as shown, to the front end of the trail. The cradle can slide backward in guides at the upper part of the trail *e*. Its recoil is controlled by the compressor-cylinders, and after the recoil is brought back by springs within the cylinders.

By the above construction, as there is no socket below the compressor, the compressor-cylinders can be placed between the sides of the trail, so that they get protected by them, or a single compressor-cylinder only might be used.

What I claim is—

1. The combination, substantially as hereinbefore set forth, of the trail or carriage, the cradle adapted to slide backward on the carriage, the compressors for controlling the backward recoil interposed between the carriage and the cradle, the ring with horizontal trunnions mounted in bearings in the cradle, and the gun with vertical trunnions mounted in bearings in the ring.

2. The combination, substantially as hereinbefore set forth, of the trail or carriage, the cradle adapted to slide backward on the carriage and having a compressor cylinder or cylinders formed in one piece with it, the piston rod or rods of the cylinder or cylinders attached to the trail or carriage, the ring with horizontal trunnions mounted in bearings in the cradle, and the gun with vertical trunnions mounted in bearings in the ring.

THORSTEN NORDENFELT.

Witnesses:

F. A. NOEL,
I. H. STEWARD.