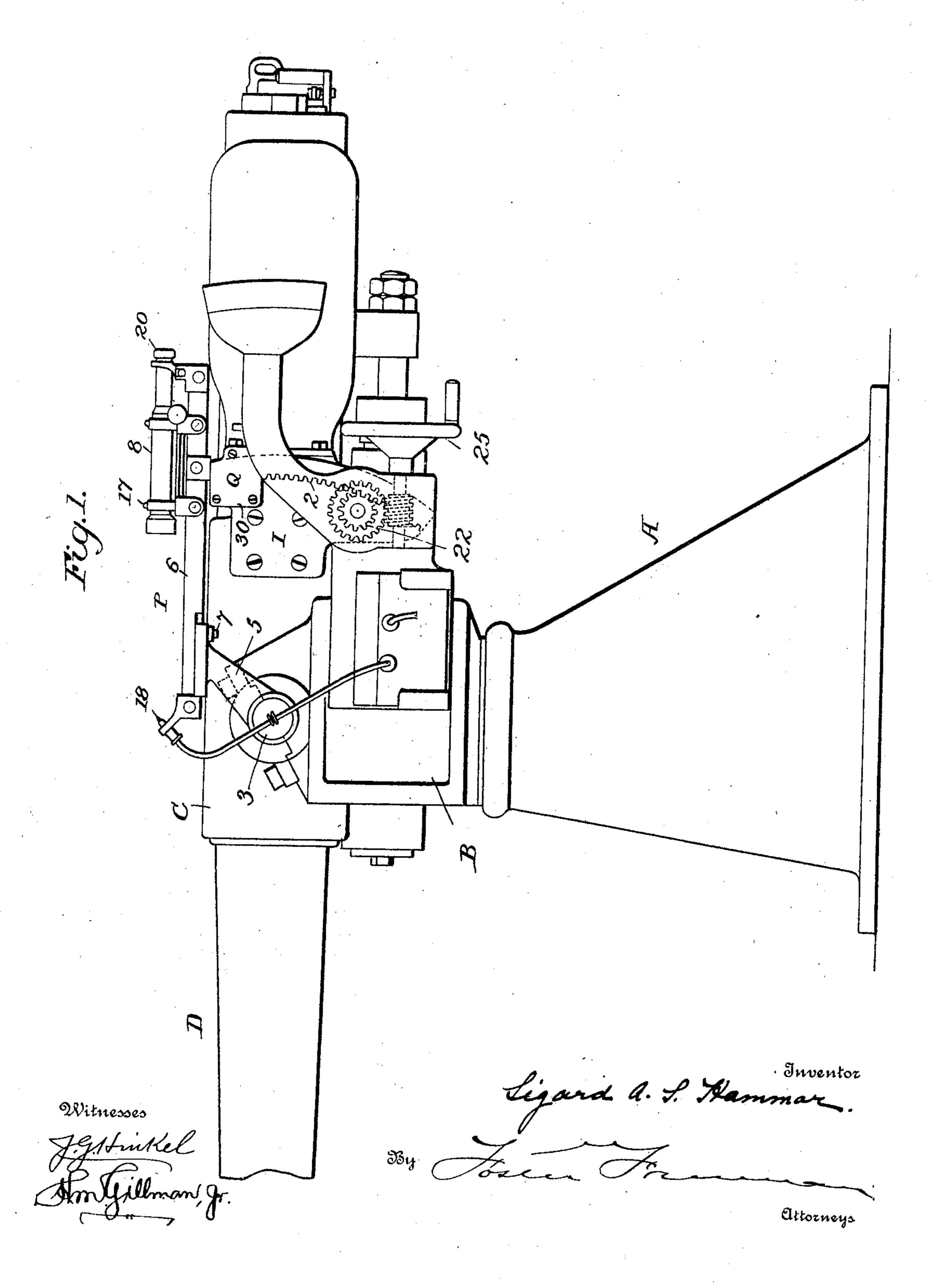
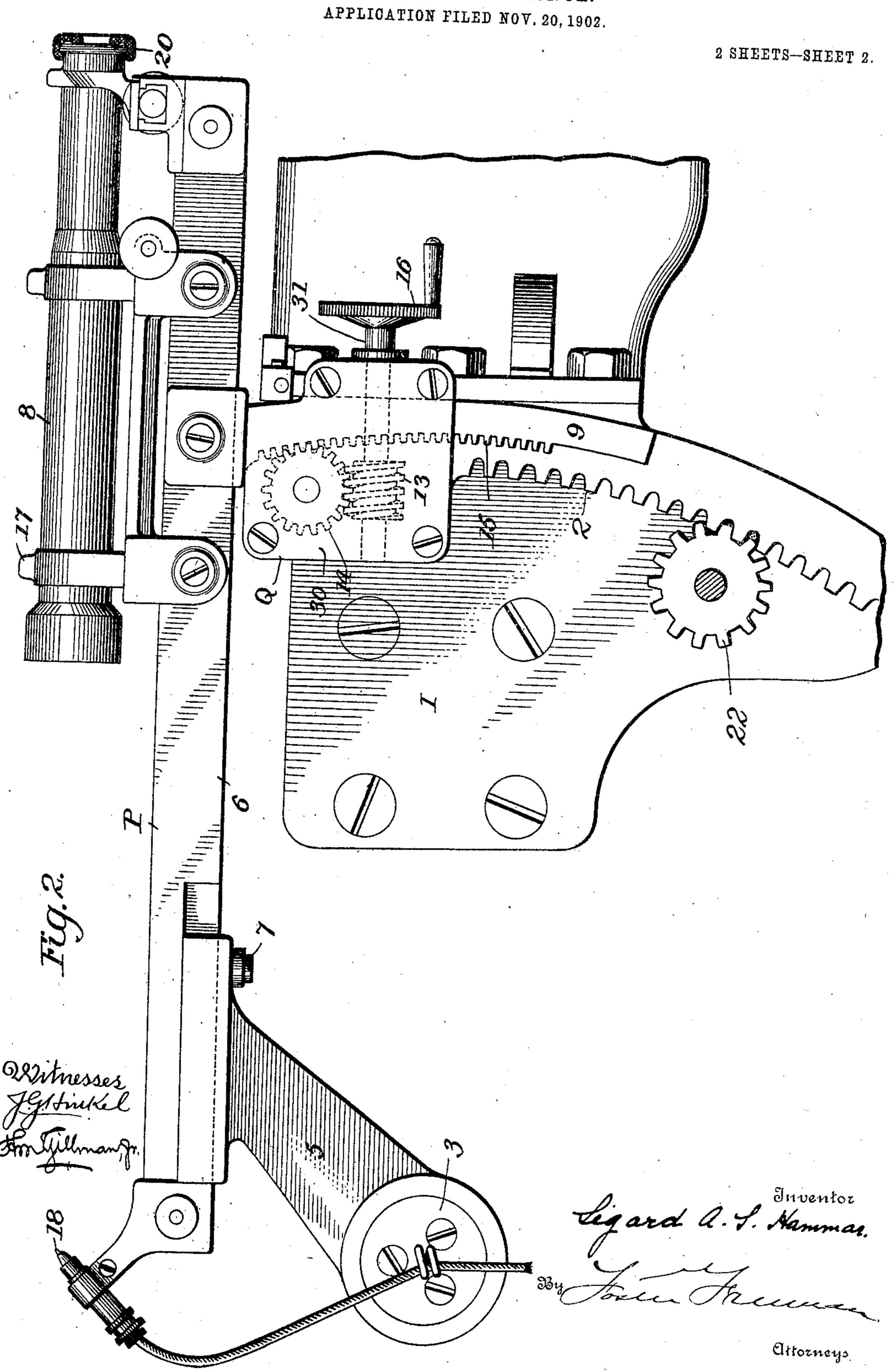
S. A. S. HAMMAR. SIGHT FOR ORDNANCE. APPLICATION FILED NOV. 20, 1902.

2 SHEETS-SHEET 1.



S. A. S. HAMMAR. SIGHT FOR ORDNANCE.



UNITED STATES PATENT OFFICE.

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SIGHT FOR ORDNANCE.

No. 810,644.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed November 20, 1902. Serial No. 132,120.

To all whom it may concern.

Be it known that I, Sigard A. S. Hammar, a subject of the King of Sweden and Norway, residing at South Bethlehem, in the county of Northampton and State of Pennsylvania, have invented a new and useful Improvement in Sights for Ordnance, of which the following is a specification.

My invention relates to sighting means for ordnance; and it consists in constructing the same as fully set forth hereinafter and as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of sufficient of a gun, gun-mount, and sighting means to illustrate my improvements. Fig. 2 is an enlarged side view of the parts connected with the sighting means.

The gun-mount is of any suitable character. As shown, there is a pedestal A, top carriage B, and cradle C, in which is seated the gun D. The cradle C is provided with trunnions 3, turning in bearings of the top carriage, and to one side of the cradle is bolted a plate 1, on which is a curved rack 2, and with the latter engages the pinion 22 of the main elevating gear-train carried by the top carriage, said train being operated from a handwheel 25.

30. The sighting devices are carried by a frame P, having an arm 5 recessed to receive one of the trunnions 3, so that the frame may swing about the latter, and preferably the upper bar 6 of the frame is bolted to the part 5 35 by a bolt 7, the parts being positioned according to the requirements of the gun and the construction facilitating the assembling of the same. At the rear end of the frame is supported the telescope 8, and a curved rack-40 bar 9 extends downward from said frame through a casing Q, formed in part by the plate 1 and in part by a cap-plate 30. Within the casing Q are the bearings for a shaft 31, carrying a worm-wheel 13, which engages 45 a pinion 14, the latter also engaging the rack 15 of the rack-bar 9, so that by turning the shaft 31, by means of a hand-wheel 16, the rack - bar and frame and telescope can be raised and lowered. It will be seen that l

while the telescope-frame is carried with the 50 cradle and gun it is also adjustable independently of the latter, so that it can be raised at the rear the number of degrees to which the gun is to be elevated, and the gun may be then swung down at the breech until the telescope is horizontal when the angle of elevation of the axis of the gun will be the same as the angle to which the telescope was first set.

The telescope is provided with the usual sights 17 18, the latter being electric, and to 60 the eyepiece of the telescope is affixed an annular pad 20, of elastic material, as rubber. This reduces the injurious effect resulting from the percussive action of the eyepiece upon the face of the gunner in firing.

Without limiting myself to the precise construction shown, I claim—

1. The combination with the top carriage and gun of a gun-mount, of a cradle swinging on the top carriage, elevating-gear supported 70 by the top carriage and an elevating-rack connected with the cradle, a frame composed

of two connected sections, one section carrying a telescope and provided with a rack, and the other section pivoted to the gun, and elevating-gear independent of the gun-elevating gear, carried by the cradle and constructed to raise and lower the said frame, substan-

tially as set forth.

2. The combination with the swinging cradle of a gun, of a rack-plate 1 connected to the cradle, and having a curved rack 2 thereon, a swinging frame carrying a telescope and provided with a rack 15, lying alongside of the rack 2, a casing formed in part by the 85 said plate and in part by a cap-plate 30, elevating-gear engaging the rack 15 and inclosed by said plates; and an external operating-handle for said gear, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SIGARD A. S. HAMMAR.

Witnesses:
Edwin A. Miller,
William E. Horne.