April 24, 1928. 1,667,182

H. C. ZIMMERMAN

MOUNT FOR GUNS

Filed Oct. 4, 1927

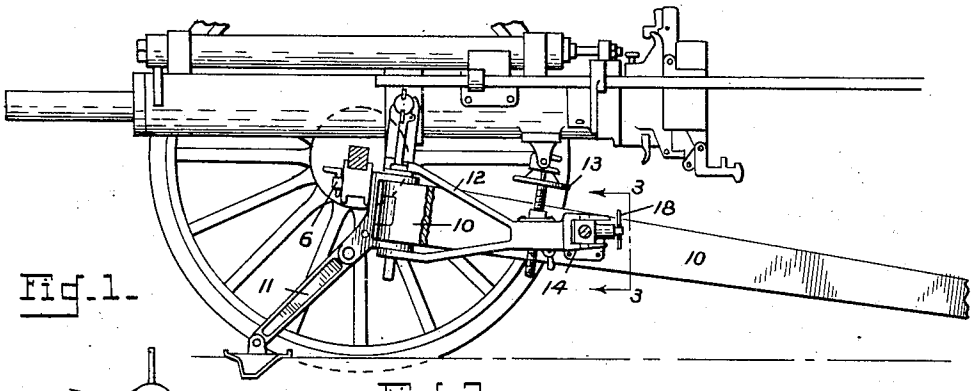


Fig. 1.

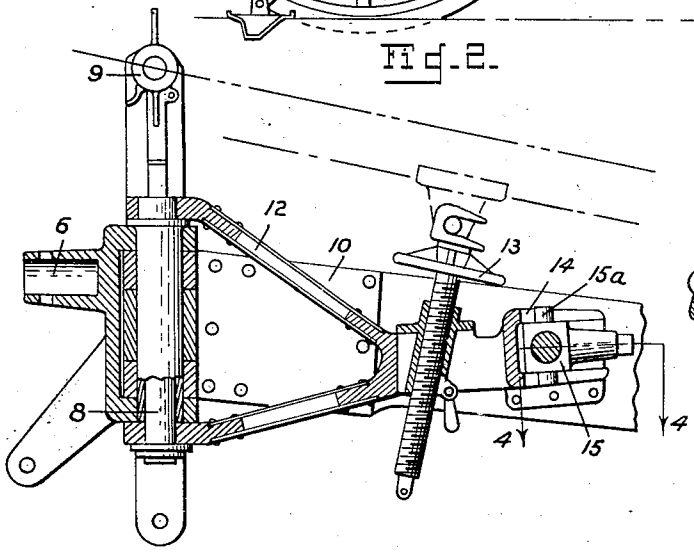


Fig. 2.

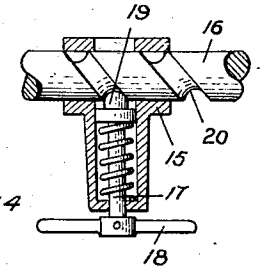


Fig. 4.

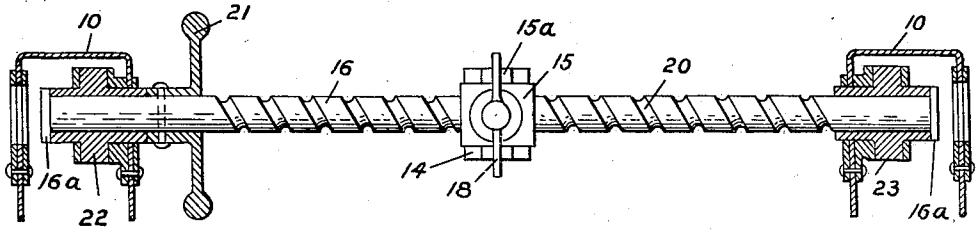


Fig. 3.

Inventor

H. C. Zimmerman

By W. M. Roach.

Attorney

Patented Apr. 24, 1928. 1,667,182

UNITED STATES PATENT OFFICE.

HARRY C. ZIMMERMAN, OF WASHINGTON, DISTRICT OF COLUMBIA.

MOUNT FOR GUNS.

Application filed October 4, 1927. Serial No. 223,923.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1883, 22 STAT. L., 625.)

The invention described herein may be used by the Government, or any of its officers or employees in prosecution of work for the Government, or by any other person in the United States, without payment to me of any royalty thereon, in accordance with the act of March 3, 1883.

The subject of this invention is a mount for guns.

Infantry accompanying guns of 37 m/m caliber are moved either by hand or wheeled transport and because of their tactical employment they must be capable of rapid adjustment to the traveling and firing position. In the present invention the provision for this rapid adjustment is associated with the traversing mechanism so that the gun may be quickly trained on a new target.

With the foregoing and other objects in view, my invention resides in the novel arrangement and combination of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

A practical embodiment of the invention is illustrated in the accompanying drawings, wherein:

Fig. 1 is a view in side elevation, parts broken away, showing the mount in the firing position;

Fig. 2 is a detail sectional view through the pintle assembly;

Fig. 3 is a detail sectional view on the line 3—3 of Fig. 1;

Fig. 4 is a detail sectional view on the line 4—4 of Fig. 2.

Referring to the drawings by numerals of reference:

The mount is of a standard type which in general comprises a tripod having a forwardly extending stud 6 to provide for its suspension from the axle 7 of a wheeled unit. The pintle 8 is in the form of a yoke, the upper end 9 being fitted to receive the cradle trunnions and the lower portion pivotally carrying a pair of trails 10—10, a front leg 11, and a Y-frame 12. This frame carries the elevating mechanism 13 and terminates at its rear extremity in a fork 14 which engages vertical studs 15ª on a housing 15 freely slidable on a traversing screw 16. Mounted in the housing 15 is a plunger 17 having a handle 18 on its outer end and having its inner end 19 shaped to engage a thread 20 of a wide pitch in the traversing screw. With the plunger engaged the pivoted frame 12 and elevating mechanism 13 to which the breech end of the gun is secured will be firmly locked thereby maintaining the gun in its position of azimuth while with the plunger disengaged the frame and gun may be freely swung about the pintle.

In order that the traversing screw may be rotated to cooperate with the locking plunger in effecting minor adjustments a hand-wheel 21 is fixed to the screw adjacent one of the trails. The hand-wheel and a headed end 16ª on the screw serve to prevent lateral displacement of the screw with respect to a coupling 22 connecting it pivotally to the left hand trail. The opposite coupling 23 by engaging only the headed end 16ª of the screw limits the extension of the trails but permits the right hand trail to be folded against its mate.

In changing the mount from the firing to the travelling position the gun is removed and the plunger 17 is retracted and moved to the left until the housing, carrying with it the frame 12 abuts against the hand-wheel 21. The right hand trail, when the customary transom (not shown) is removed may then be folded against the left trail to form a compact unit convenient for carrying by hand or serving as a coupling to a limber.

The hand wheel is in a very favorable position for manipulation by the gun pointer and for avoiding interference with the gun server.

I claim:

1. A mount for guns including a pair of pivoted trails, couplings in the trails, a traversing screw mounted in said couplings and headed at each end to limit extension of the trails, a hand-wheel fixed to the screw adjacent one trail and cooperating with the coupling to prevent lateral displacement of the screw with respect to said trail, a housing freely slidable on the screw, a plunger mounted in said housing and normally engaging a thread of the screw and a pivoted gun carrying frame engaging the housing and movable therewith.

2. A mount for guns including a pair of pivoted trails, a traversing screw mounted in the trails and limiting their extension, a hand-wheel fixed to the screw and arranged

to prevent lateral displacement of the screw with respect to one of the trails, a housing freely slidable on the screw, a plunger mounted in said housing and normally engaging a thread of the screw and a pivoted gun-carrying frame engaging the housing and movable therewith.

3. A mount for guns including a pair of pivoted trails, a traversing screw mounted in the trails and limiting their extension, a hand-wheel fixed to the screw and arranged to prevent lateral displacement of the screw with respect to one of the trails, a pivoted gun-carrying frame movable along the screw and a releasable connection between said frame and screw.

4. In a gun mount, a traversing screw, a hand-wheel for rotating the screw, a housing freely slidable on the screw, a plunger mounted in said housing and normally engaging a thread of the screw and a pivoted gun-carrying frame engaging the housing and movable therewith.

5. In a gun mount, a traversing screw, means for rotating the screw, a pivoted gun-carrying frame movable along the screw and means for releasably locking the frame to the screw without locking the screw against rotation.

6. In a gun mount, a traversing screw, means for rotating the screw, a pivoted gun-carrying frame movable along the screw and a releasable connection between said frame and screw.

7. In a gun mount, a traversing screw, a gun supporting element and means connecting the element to the screw for traversing the element, said means releasable whereby the element may be traversed independently of the screw.

HARRY C. ZIMMERMAN.