Oct. 12, 1926. 1,602,764

W. T. GORTON

COMBINATION MOUNT FOR MACHINE GUNS

Filed August 20, 1925 2 Sheets-Sheet 1

Fig. 1.

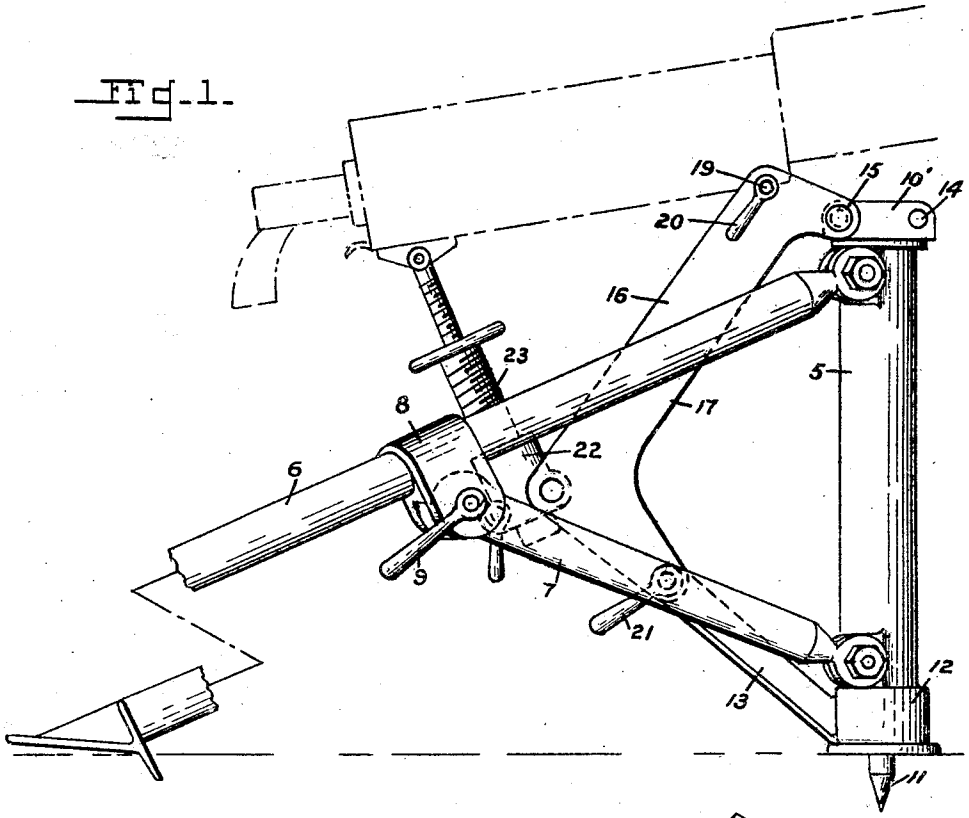
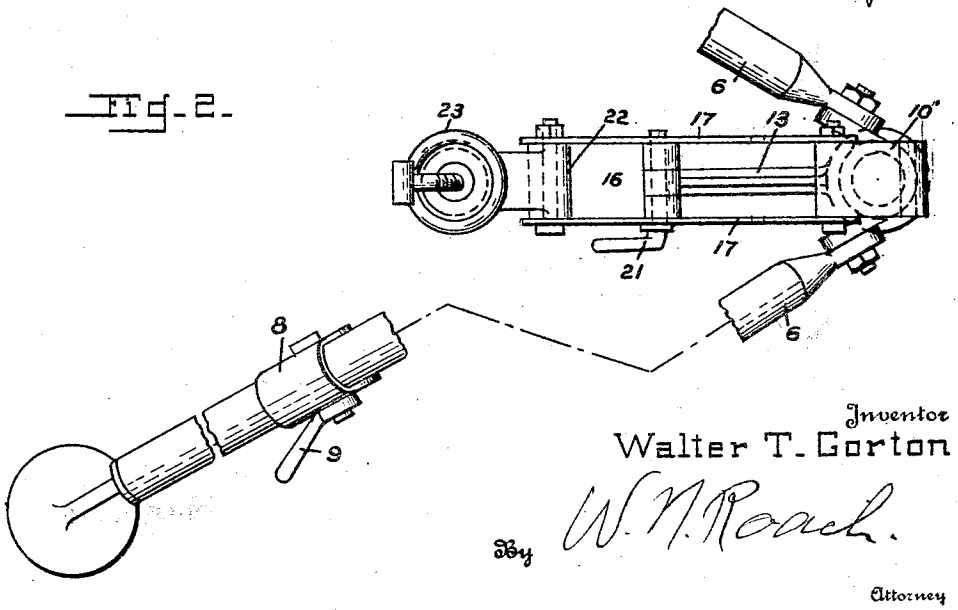


Fig. 2.



Inventor
Walter T. Gorton
By W. M. Roach.
Attorney

Oct. 12, 1926. 1,602,764

W. T. GORTON

COMBINATION MOUNT FOR MACHINE GUNS

Filed August 20, 1925 2 Sheets-Sheet 2

Fig. 3.

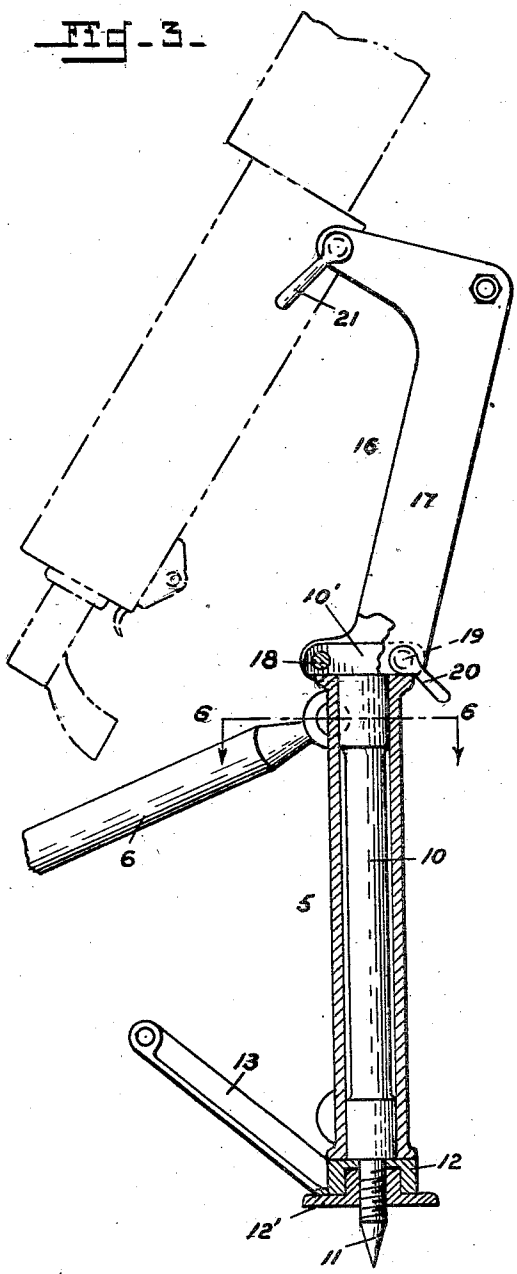


Fig. 4.

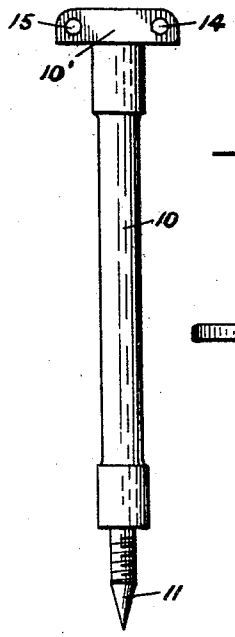


Fig. 5.

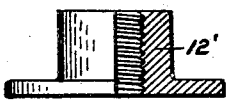
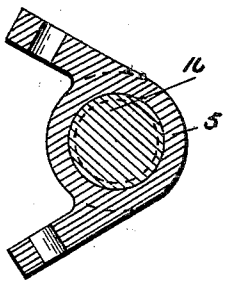


Fig. 6.



Inventor
Walter T. Gorton

By W. N. Roach.

Attorney

Patented Oct. 12, 1926.

1,602,764

UNITED STATES PATENT OFFICE.

WALTER T. GORTON, OF THE UNITED STATES ARMY.

COMBINATION MOUNT FOR MACHINE GUNS.

Application filed August 20, 1925. Serial No. 51,464.

(GRANTED UNDER 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.

This invention relates to a combination mount for machine guns.

The principal object of the present invention is to provide a conveniently foldable machine gun mount of the tripod type which in its normal application as a low mount when the gun is directed against ground targets insures stability and rigidity, and which may be instantly converted to a high mount when the gun is to be directed against aerial targets.

It is desirable because of weight limitations that in accomplishing this dual purpose the mount be not burdened with auxiliary devices and it is essential that there is preserved facility in manipulating the gun and adjusting the mount to its firing and folding positions.

Accordingly, I employ a mount of the split trail type in which a front leg passes axially through the tripod head. The element which serves to mount the gun for firing against both ground and aerial targets embodies a cradle pivoted to the head of the front leg. In its normal adjustment for low angle firing the cradle trunnions the gun at its forward pivoted end, the rear end carrying an elevating mechanism and held rigid by being removably attached to an extension on the foot of the front leg. In converting the cradle to an anti-aircraft adaptor to mount the gun for high angle firing it is disconnected from the extension and swung to the vertical, the rear end now serving to trunnion the gun by the same means through which it was connected to the extension.

To these and other ends, my invention consists in the construction, arrangement, and combination of elements, described hereinafter and pointed out in the claims forming a part of this specification.

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

Fig. 1 is a view in side elevation of a mount constructed in accordance with the invention and adjusted for low angle firing;

Fig. 2 is a plan view thereof with the gun removed;

Fig. 3 is a view in side elevation with the cradle swung to the vertical position to be used as an anti-aircraft adaptor;

Fig. 4 is a detail view of the stem;

Fig. 5 is a detail view of the nut;

Fig. 6 is a sectional view on the line 6—6 of Fig. 3, the legs removed.

Referring to the drawings by numerals of reference:

In carrying out the invention there is provided a tubular head 6 to the upper end of which are pivoted a pair of trail legs 6—6. Each leg is equipped with a brace 7 pivotally secured to the base of the head and jointed to the leg by a sliding clamp 8 whose movement provides for folding and for adjustment of the leg to conform to the contour of the ground. Locking of the brace is effected by means of a clamping handle 9, which in the present instance, binds the brace but may equally well be arranged to bind the trail leg.

Inserted in the tubular head 5 is a stem 10 constituting the front leg of the mount and terminating in a point 11 to facilitate entrance into the ground. For convenience in assembling, the foot of this leg is preferably a composite unit consisting of a collar 12 held in place by means of a nut 12′ threaded on the stem and receivable in a recess in the collar. The nut is headed and of convenient shape for contact with the ground. The collar is formed with an angled extension 13 for a purpose which will presently be described.

The head 10′ of the stem consists of a block provided transversely with a front aperture 12 and a rear aperture 15. A cradle 16 comprising a pair of spaced plates 17—17 is permanently pivoted at its extreme forward end by means of a pin 18 passing through the rear aperture 15. Im-

mediately above and in rear of this permanent attachment the cradle plates are each formed with an aperture 19 for receiving a trunnion pin 20 for mounting the gun when it is to be directed against ground targets. The trunnion apertures 19 are so positioned that they will be in alignment with the front aperture 14 in the head 10' and may there receive the trunnion pin 20 to secure the cradle in a vertical position when it is to be used as an anti-aircraft adaptor in high angle firing.

In the normal low mounting the rear end of the cradle is directly secured to the extension 13 by means of a removable pin 21. This pin serves as a trunnion pin for mounting the gun when the cradle is in the vertical position, as seen in Figure 3. The extremities of the cradle are preferably offset at approximate right angles so as to obtain a proper disposition of the cradle without increasing its size and weight.

The cradle also carries at its rear end the housing 22 of an elevating mechanism 23 operable in a well known manner. The attachment of the housing serves as a spacer for the cradle plates in both positions of adjustment.

In traversing the gun the front leg or stem moves with the cradle which in the low mounting bears such relation to the trail legs that the amplitude of its traversing movement is defined thereby. This prevents the gunner from inadvertently moving the gun beyond the spread of the trail legs and insures stability during firing.

The mount folds umbrella fashion making a compact and neat unit for transportation while permitting it to be quickly erected.

I claim:—

1. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto at its upper end, braces attached to the base of the head, a sliding clamp for joining each brace to its corresponding leg, a stem having a head, inserted in the tubular head and constituting the front leg of the mount, a foot for said stem provided with an extension, a cradle including a pair of spaced plates pivoted at its extreme forward end to the rear of the head, said cradle provided with means at its front and rear for respectively trunnioning a gun for low angle and high angle firing, the former being securable to the head and the latter to the extension of the foot according to the position of adjustment of the cradle, and an elevating mechanism carried by and serving to space the cradle plates.

2. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto at its upper end, braces attached to the base of the head, a sliding clamp for joining each brace to its corresponding leg, a stem, having a head, inserted in the tubular head and constituting the front leg of the mount, a foot for said stem provided with an extension, a cradle pivoted at its extreme forward end to the rear of the head, said cradle provided with means at its front and rear for respectively trunnioning a gun for low angle and high angle firing, the former being securable to the head and the latter to the extension of the foot according to the position of adjustment of the cradle.

3. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto at its upper end, braces attached to the base of the head, a sliding clamp for joining each brace to its corresponding leg, a stem inserted in the tubular head and constituting the front leg of the mount, a foot for said stem, a cradle pivoted at its forward end to the head of the stem, said cradle provided with means at its front and rear for respectively trunnioning a gun for low angle and high angle firing, each of said means serving in respective positions of adjustment to additionally secure the cradle to the stem.

4. A mount for machine guns embodying a support, a cradle pivoted to the support, said cradle provided with means at its front and rear for respectively trunnioning a gun for low angle and high angle firing, each of said means serving in respective positions of adjustment to additionally secure the cradle to the support.

5. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto at its upper end, means for bracing the legs, a stem inserted in the tubular head and constituting the front leg, a foot for said stem, a cradle pivoted to the head of the stem, and means serving either as trunnions in mounting a gun for low angle or high angle firing or for respectively securing the cradle to the head and the foot of the stem.

6. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto at its upper end, means for bracing the legs, a stem inserted in the tubular head and constituting the front leg, a foot for said stem provided with an extension, and a cradle attached to the head of the stem and to said extension.

7. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto at its upper end, means for bracing the legs, a stem inserted in the tubular head and constituting the front leg, a foot for said stem, and a cradle attached to the head and foot of the stem, said cradle adapted to be raised to a vertical position and secured in place.

8. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto, a stem inserted in the tubular head

and constituting the front leg, a foot for said stem, and a cradle attached to the head and foot of the stem.

9. A mount for machine guns embodying a tubular head, a pair of trail legs pivoted thereto, a brace pivoted to the head and having a sliding connection with the corresponding leg whereby the mount may be folded umbrella fashion, and a member inserted through the tubular head to constitute a front leg for the mount.

10. A tripod mount for machine guns embodying a fixed front leg, a pair of pivoted trail legs, and respective braces connecting the front leg to each trail leg and permitting the tripod to be folded umbrella fashion.

WALTER T. GORTON.