N. KOCH.

PIVOT MOUNT FOR GUNS.

APPLICATION FILED MAR. 23, 1914.

1,108,763.

Patented Aug. 25, 1914.

2 SHEETS—SHEET 1.

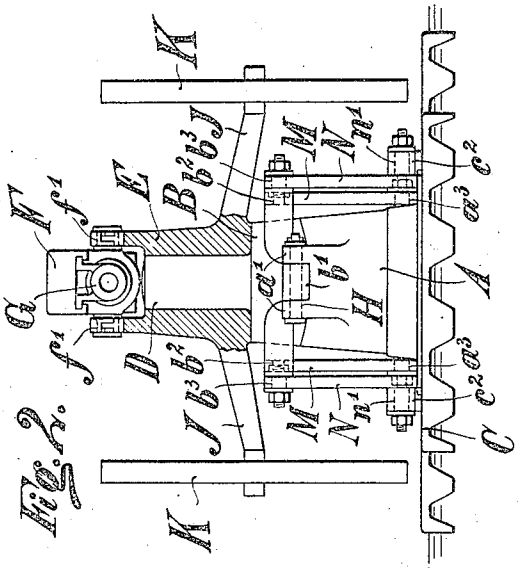


Fig. 2.

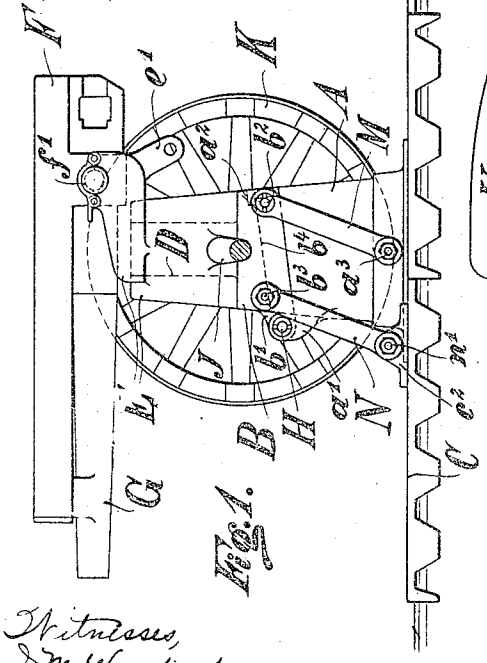


Fig. 1.

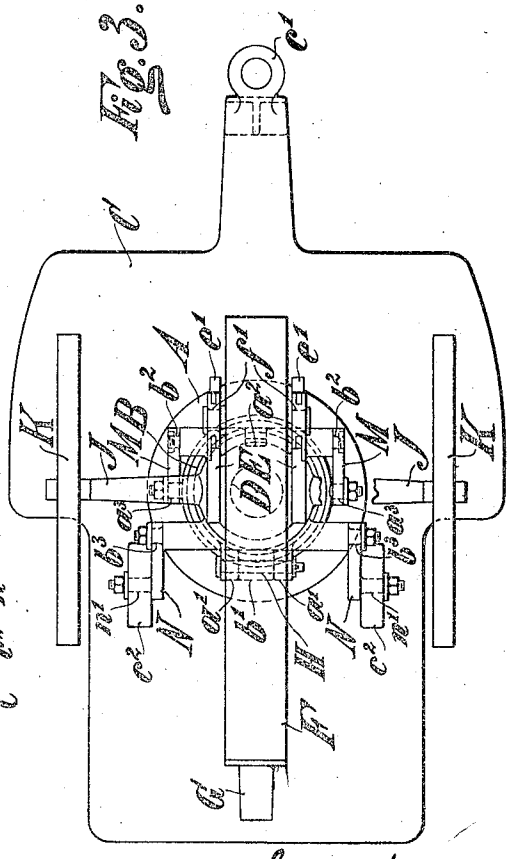


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

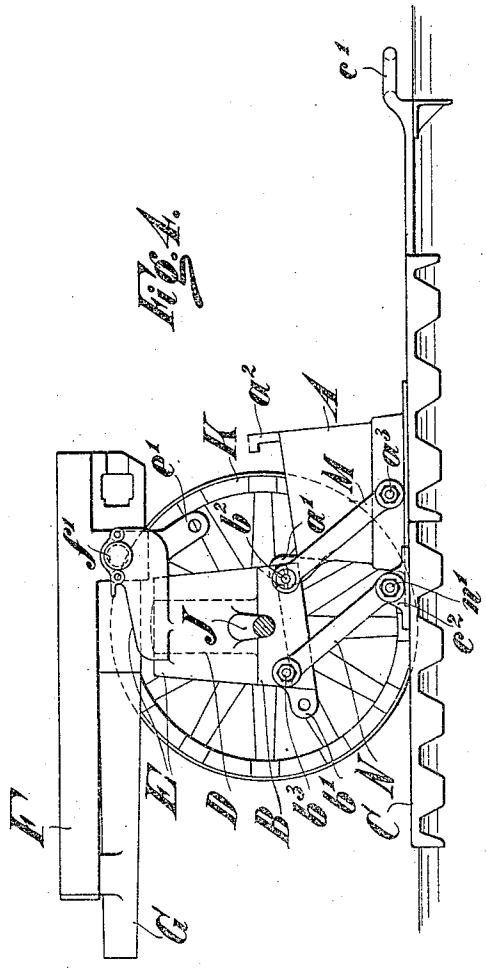
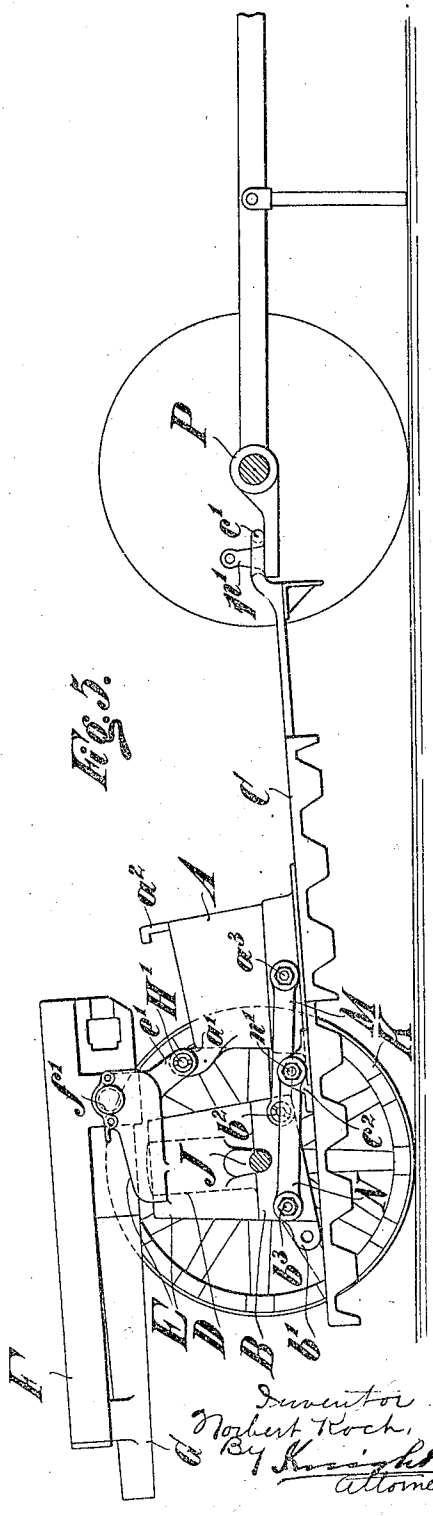


Fig. 5.



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PIVOT-MOUNT FOR GUNS.

1,108,763. Specification of Letters Patent. Patented Aug. 25, 1914.

Application filed March 23, 1914. Serial No. 826,689.

To all whom it may concern:

Be it known that I, NORBERT KOCH, residing at Essen-Rellinghausen, Germany, a subject of the Emperor of Germany, have invented a certain new and useful Improvement in Pivot-Mounts for Guns, of which the following is a specification.

The subject matter of the present invention resides in a pivot mount for guns intended for field use.

In the accompanying drawing one embodiment of the invention is illustrated, and Figure 1 shows a side view, in firing position, of the gun mount with one wheel removed; Fig. 2 a corresponding front view partly in section; Fig. 3 a top plan view of Fig. 1; Fig. 4, a side view of the gun mount with the parts in the position which they will take during the transformation from firing to traveling position; and Fig. 5 a side view of the gun mount and limber in limbered-up position.

The gun mount comprises a pivot mounting, the pedestal of which consists of two portions A and B. The lower portion A of the pedestal rests on a foundation plate C which is provided with a limber eye c^1. The upper portion B of the pedestal carries a vertical trunnion D, around which the trunnion fork E may be trained by means of a training gear, not shown in the drawing, and which is inserted between the trunnion fork and the pedestal portion B. The trunnion fork has bearings for the horizontal trunnions f^1 of the guide carrier F, on the under side of which the gun barrel G is guided. Between the trunnion fork and the guide carrier is inserted an elevating gear not shown in the drawing. On the trunnion fork are provided axle arms J for carriage wheels K, and two eyelets e^1 the use of which will be fully explained farther on.

On the forward side of the pedestal portion B is provided an eyelet b^1 which engages between two other eyelets a^1 arranged on the pedestal portion A and which may be secured therein by means of a key bolt H, see Figs. 1, 2 and 3. A claw a^2 is moreover provided at the rear side of the pedestal portion A, which is intended to engage with a corresponding claw or recess in the pedestal portion B. Lastly two pair of links M N are journaled on the pedestal portion B by means of studs b^2 and b^3 respectively which extend from lateral projections of the pedestal portion B. The links M have hinged connections with the studs a^3 of the pedestal portion A while the links N engage with studs n^1 in bearings c^2 which are situated on the foundation plate C. These links are so constructed that they, together with the pedestal portion B and the pedestal portion A and the foundation plate C form link parallelograms. The forward part of the foundation plate C is narrower than the rear portion so that the wheels K may rest on the ground with the mount members in the position represented in Fig. 4.

With the gun in firing position, see Figs. 1, 2 and 3, the foundation plate C rests on the ground and the portion B on the pedestal portion A. The eyelet b^1 is coupled with the eyelets a^1 by means of the key bolt H, and the claw a^2 engages with the corresponding claw of the pedestal portion B; the wheels are raised from the ground. In this position of the parts, the trunnion fork E together with the wheels K, the guide carrier F and the gun barrel G may be trained 360° relative to the pivot pedestal A B, and the gun fired in each direction at highest possible elevation with sufficient stability.

To prepare the gun mount for traveling, the key bolt H is first removed from the eyelets a^1 b^1 and the pedestal portion B together with the links M N, the trunnion fork E, the wheels K, etc., is swung forward until the wheels K strike the ground, see Fig. 4. In order to provide room for the eyelets a^1 cuts b^1, Fig. 1, have been made in the pedestal portion B for the eyelets a^1. The foundation plate C together with the pedestal A and the links M N is thereupon raised until the foundation plate abuts against the eyelet b^1, see Fig. 5. Lastly the eyelets a^1 are secured in the eyelets e^1 by means of a bolt H^1 and the carriage is limbered up by bringing the trail eye c^1 in engagement with the hook p^1 of a limber P. After unlimbering the mount, the bolt H^1 is first removed from the eyelets a^1 e^1, thereupon the foundation plate C together with the pedestal portion A is laid down on the ground and the pedestal portion B lastly swung rearward, up on

the pedestal portion A. After inserting the key bolt H into the eyelets a^1 b^1, the gun is then in firing position.

I claim:

1. A pivot mount for guns comprising a fork with trunnion bearings, means for connecting carriage wheels to said fork, a pedestal on which said fork is mounted to turn around a vertical axis, a foundation plate and link connection between said foundation plate and said pedestal, whereby the mount may be transferred from traveling to firing position.

2. A pivot mount for guns comprising a fork with trunnion bearings, axle arms for the carriage wheels on said fork, a pedestal on which said fork is mounted to turn around a vertical axis, said pedestal having an upper portion and a lower portion, a foundation plate on which said lower portion of the pedestal is rigidly secured; link connection between said foundation plate and said upper portion of the pedestal, whereby the upper portion may be displaced from engagement with the lower portion and moved toward the foundation plate.

3. A pivot mount for guns comprising a fork with trunnion bearings, axle arms for the carriage wheels on said fork, a pedestal on which said fork is mounted to turn around a vertical axis, said pedestal having an upper portion and a lower portion, a foundation plate on which said lower portion of the pedestal is rigidly secured; link connection between said foundation plate and said upper portion of the pedestal, whereby the upper portion may be displaced from engagement with the lower portion and moved toward the foundation plate; suitable members for securing the upper portion of the pedestal in the two positions.

4. A pivot mount for guns comprising a fork with trunnion bearings, axle arms for the carriage wheels on said fork, a pedestal on which said fork is mounted to turn around a vertical axis, said pedestal having an upper portion and a lower portion, a foundation plate on which said lower portion of the pedestal is rigidly secured; link connection between said foundation plate and said upper portion of the pedestal, whereby the upper portion may be displaced from engagement with the lower portion and moved toward the foundation plate, said foundation plate having one portion narrower than the track of the wheels.

5. A pivot mount for guns comprising a fork with trunnion bearings, axle arms for the carriage wheels on said fork, a pedestal on which said fork is mounted to turn around a vertical axis, said pedestal having an upper portion and a lower portion, a foundation plate on which said lower portion of the pedestal is rigidly secured; link connection between said foundation plate and said upper portion of the pedestal, whereby the upper portion may be displaced from engagement with the lower portion and moved toward the foundation plate; said foundation plate being provided with a limber eye.

The foregoing specification signed at Barmen, Germany, this 2nd day of March, 1914.

NORBERT KOCH. [L. S.]

In presence of—

HELEN NUFER,

ALBERT NUFER.