

No. 721,353.

PATENTED FEB. 24, 1903.

O. BEHNKE.
SADDLE FOR GUNS OR CRADLES.

APPLICATION FILED OCT. 6, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

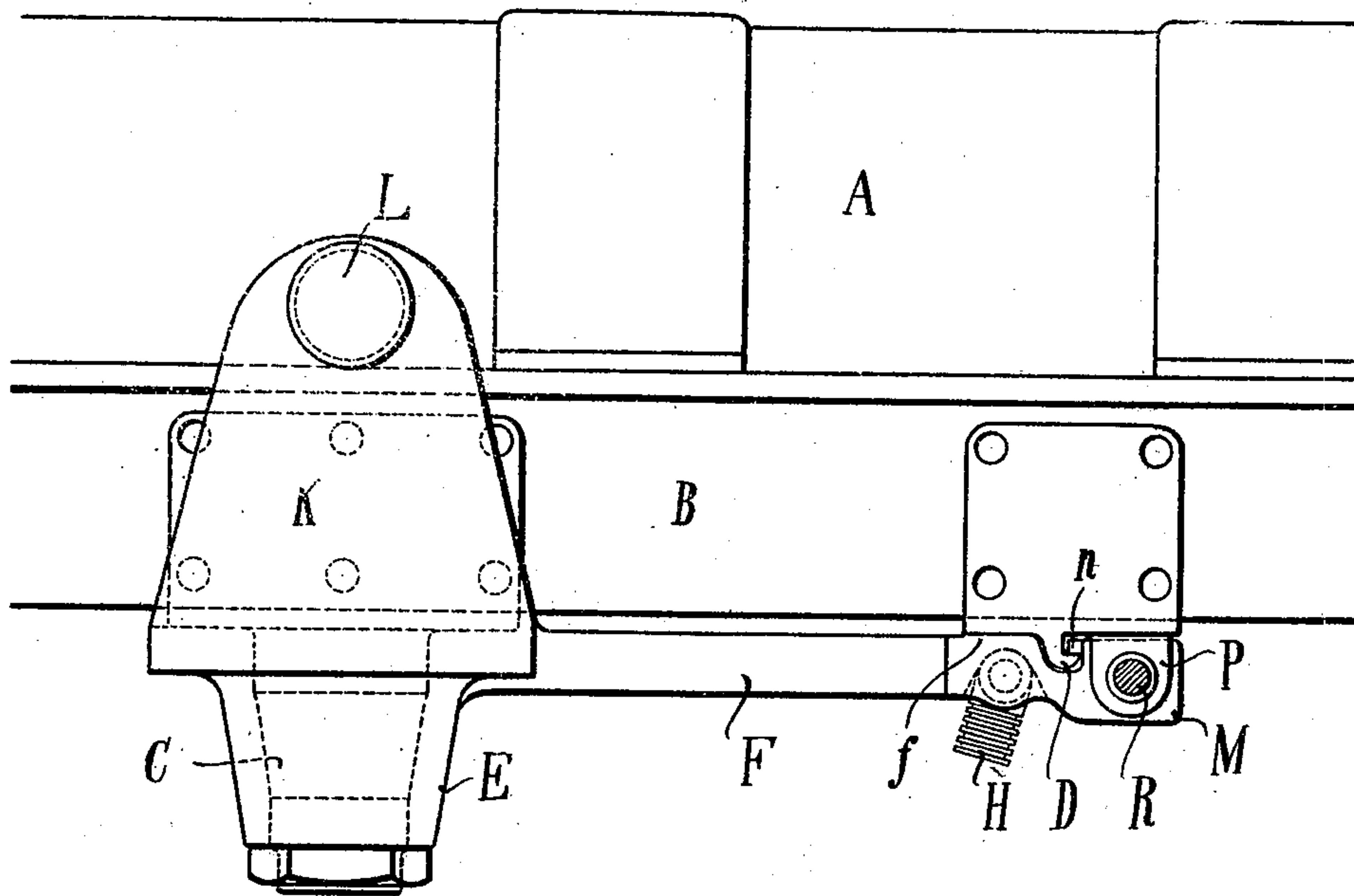
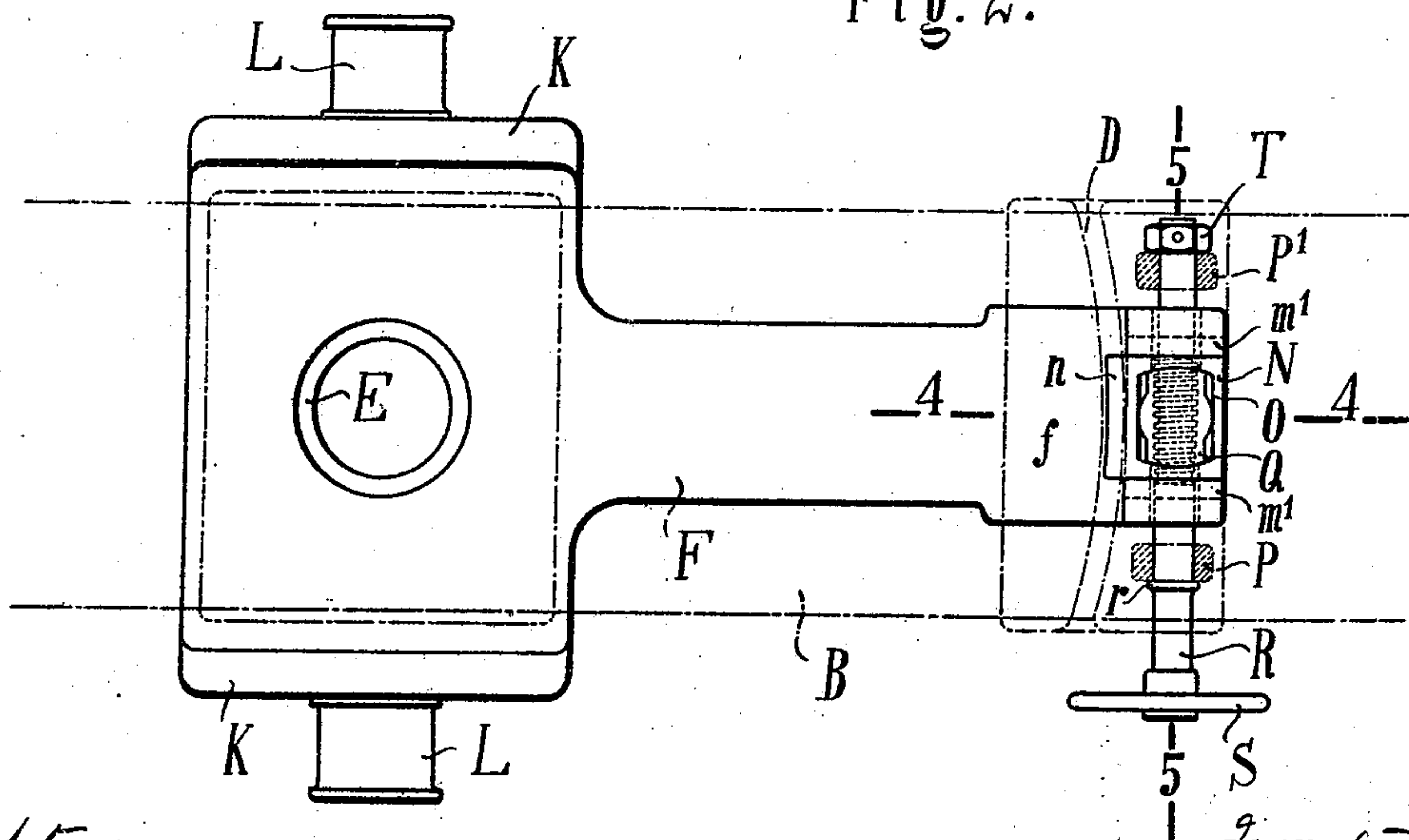


Fig. 2.



Witnesses:
H. E. Manning
H. E. Manning

Inventor:
O. Behnke
By H. E. Manning
att'y.

No. 721,353.

PATENTED FEB. 24, 1903.

O. BEHNKE.
SADDLE FOR GUNS OR CRADLES.

APPLICATION FILED OCT. 6, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

Fig. 3.

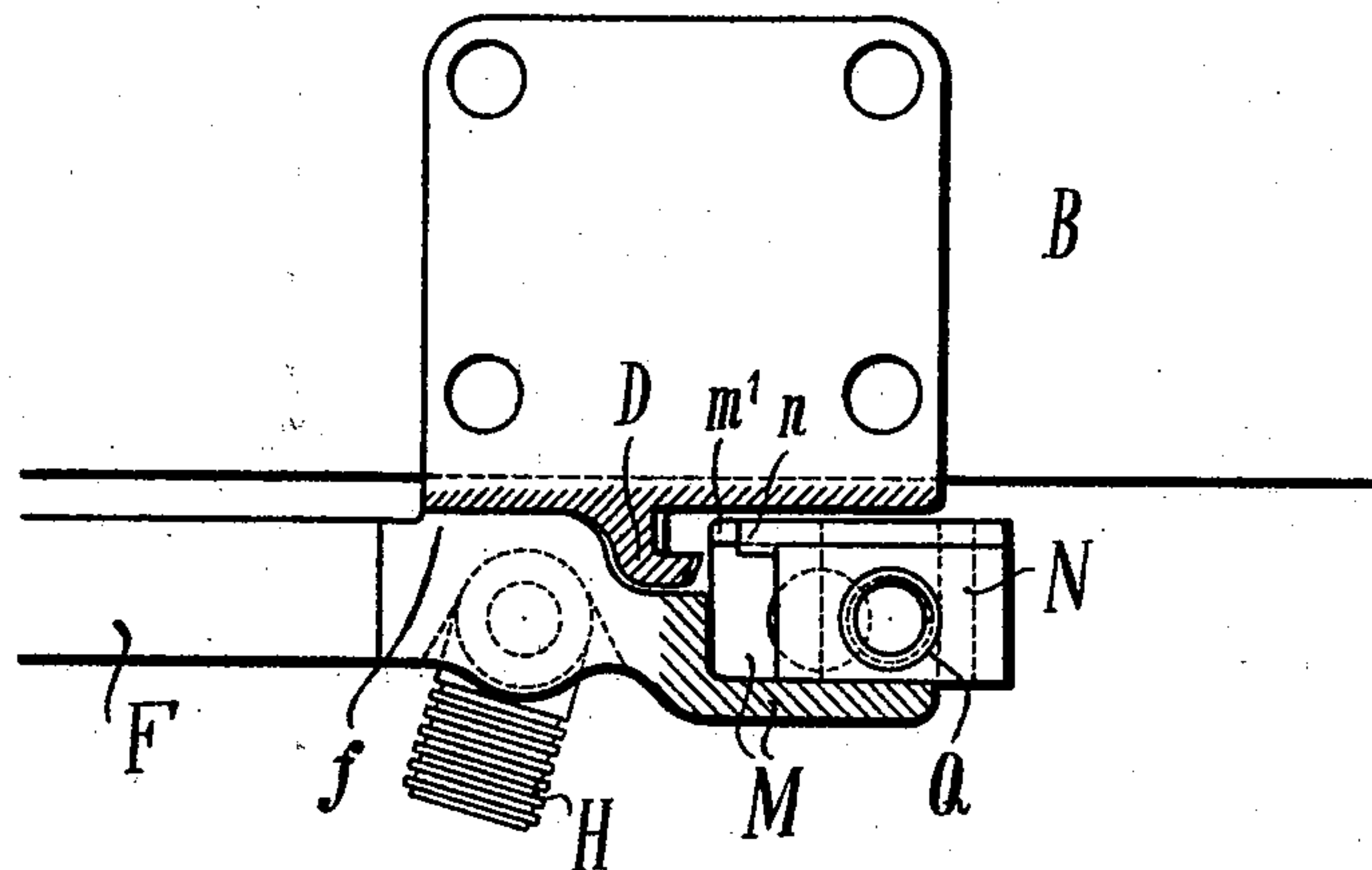


Fig. 4.

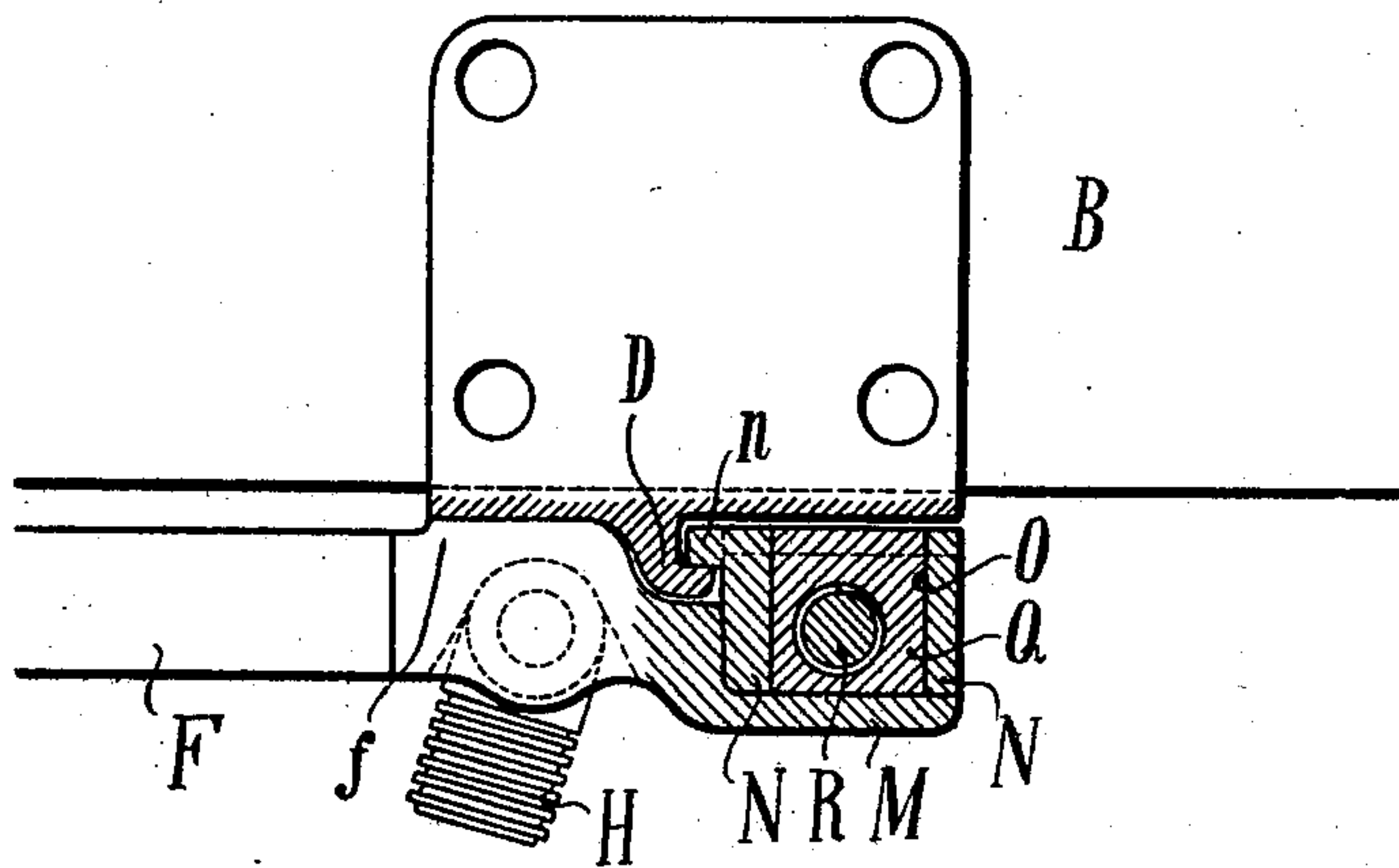
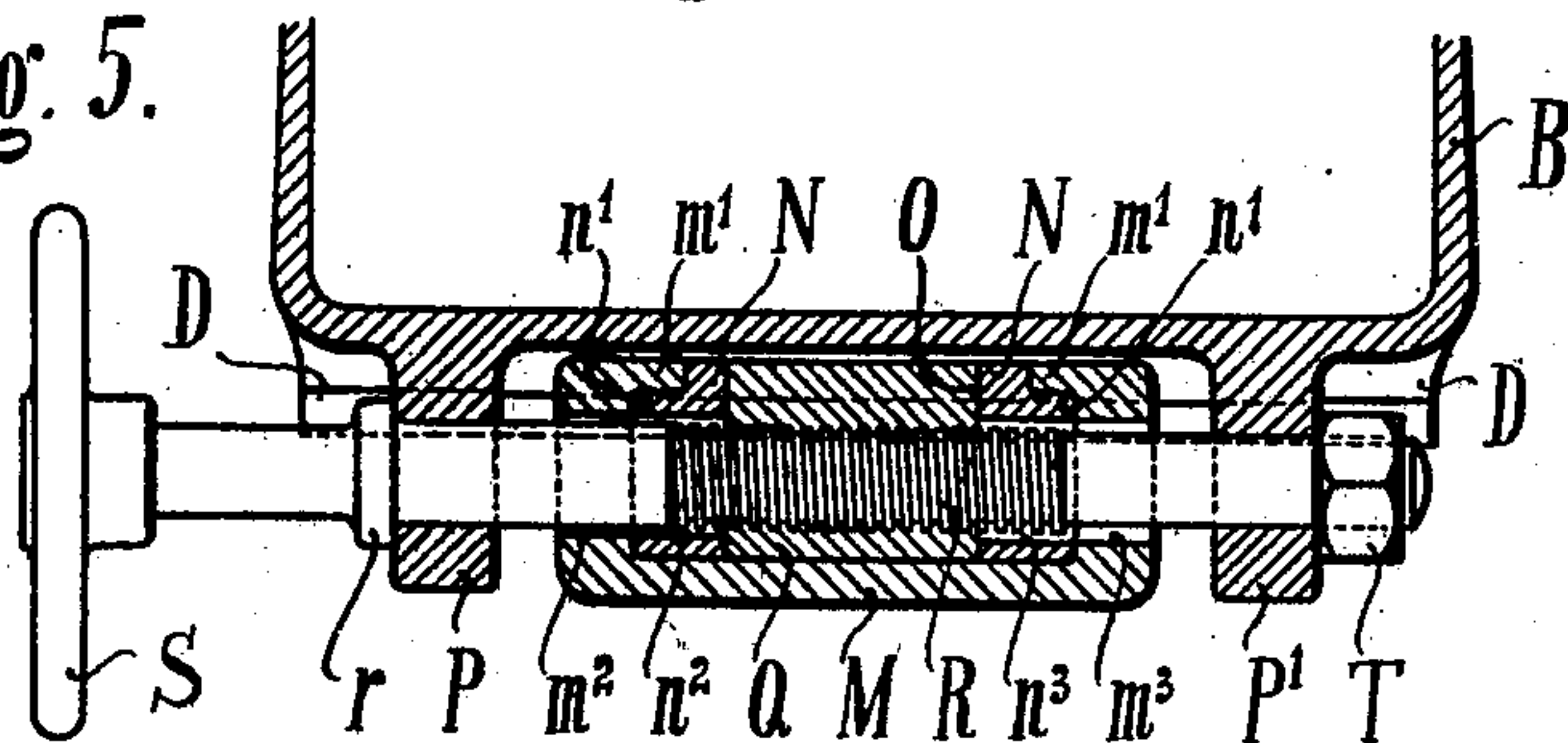


Fig. 5.



Witnesses:
H. E. Manning
Harold Lewis

Inventor:
O. Behnke
By Truitt B. B.
attor.

UNITED STATES PATENT OFFICE.

OTTO BEHNKE, OF ESSEN-ON-THE-RUHR, GERMANY, ASSIGNOR TO FRIED. KRUPP, OF ESSEN-ON-THE-RUHR, GERMANY.

SADDLE FOR GUNS OR CRADLES.

SPECIFICATION forming part of Letters Patent No. 721,353, dated February 24, 1903.

Application filed October 6, 1902. Serial No. 126,244. (No model.)

To all whom it may concern:

Be it known that I, OTTO BEHNKE, a subject of the Emperor of Germany, and a resident of 36 Bismarckstrasse, Essen-on-the-Ruhr, Germany, have invented certain new and useful Improvements in Saddles for Guns or Cradles, of which the following is a specification.

This invention relates to a saddle for guns or cradles with a vertical trunnion, and especially to those saddles constructed in the form of a fork for embracing the gun or the cradle and having horizontal trunnions on the outer faces of the forks.

The object of the invention is to provide an arrangement which will adapt the gun or cradle to be placed into the saddle from above and to permit the fork of the saddle to be made comparatively narrow in consequence. This object is attained according to this invention by having a releasable claw on the saddle, gripping over a claw arranged on the gun-barrel or the cradle.

One embodiment of this invention is shown by way of illustration in the accompanying drawings employed in connection with a recoil-gun of that type which has a cradle mounted in the saddle through the medium of a vertical trunnion.

In said drawings, Figure 1 shows a side elevation of the saddle and the parts of the cradle and gun which come under consideration in connection therewith. Fig. 2 is a plan view of the saddle, the portion of the cradle lying above the saddle being shown in dotted lines. Fig. 3 shows, on an enlarged scale, the position of the releasable claw of the saddle when the cradle is being mounted in the saddle, several parts being shown in section. Fig. 4 is a section on the line 4 4 of Fig. 2 on an enlarged scale. Fig. 5 is a section on the line 5 5 of Fig. 2 on an enlarged scale.

The gun-barrel A is to be guided in a well-known manner through the medium of claws or the like upon the slide-track of the cradle B. The cradle B carries on the one hand a vertical trunnion C and on the other hand a claw D, curved concentric to the trunnion C. The vertical trunnion C on the cradle B is secured in a trunnion-bearing E on the saddle F. Beneath the seat *f* of the saddle is connected in a well-known manner the

screw-spindle H of the elevating mechanism. The saddle F is constructed in the form of a fork K at the bearing-point for the trunnion C, which fork confines the cradle with play. On its outer faces this fork is provided with horizontal trunnions L, which are to be mounted in a well-known manner in the gun-carriage. (Not shown in the drawings.)

The part M of the saddle lying toward the breech of the gun-barrel receives in a recess a claw-body N, which carries the claw *n*, engaging above the claw D of the cradle, and engages through its flanges *n'* beneath the flanges *m'* of the saddle. The claw-body N is provided with a recess O, which extends through it in a vertical direction and serves for the reception of the nut Q of the horizontal training mechanism. The faces of the nut Q, which bear against the walls of the recess O, are curved cylindrically. In engagement with the thread of this nut Q is an adjusting-spindle R of the horizontal training mechanism, which adjusting-spindle rests in bearings P P', arranged at opposite sides of the cradle B, and extends through bores *m*² *n*² and *m*³ *n*³ of the saddle F and the claw-body N with play. The adjusting-spindle R is held against longitudinal movement in its bearings through the medium of a shoulder *r* and a nut T screwed upon the end of said spindle and carries a hand-wheel S on its free end.

The placing of the cradle B between the forks K of the saddle is accomplished in the following manner: The cradle is so placed from above into the fork of the saddle that the vertical trunnion C enters the trunnion-bearing E of the saddle and so that the portion of the cradle carrying the claw D rests upon the seat *f* of the saddle. The nut Q of the horizontal training mechanism is now inserted in the recess O of the claw-body N and, together with the latter, is shoved into the portion M of the saddle a sufficient distance to cause the claw *n* to grip over the claw D of the cradle. Finally the adjusting-spindle R is introduced through the bearing P into the bores *m*² and *n*² and then screwed into the nut Q until it extends through the bores *n*³ and *m*³ and the bearing P'. Then by screwing on the nut T the adjusting-spindle R is

secured against movement in the direction of its axis. The hand-wheel S, and through it the spindle R, being set in rotation for the purpose of horizontal training, said spindle, according to the direction of its turning, advances in the nut Q toward one side or the other and swings the cradle B upon its vertical trunnion C, either through the medium of the shoulder r impinging the bearing P or through the medium of the nut T impinging the bearing P'. During this swinging movement the axis of the spindle R assumes positions at different angles to the length of the saddle. This causes the nut Q to have a slight turning motion in the recess O, which is permitted by the cylindrical form of its limiting-faces which bear upon the walls of this recess.

Having thus described the invention, the following is what is claimed as new therein:

1. In a gun-mount, in combination with a saddle and a gun or its cradle mounted therein through the medium of a vertical trunnion; a claw fixed upon the gun or its cradle, and curved concentric to said vertical trunnion, a removable claw sliding longitudinally of the gun into and out of engagement with the fixed claw, undercut flanges on the saddle holding the removable claw against lateral movement, and means for securing the removable claw in engagement with the fixed claw.

2. In a gun-mount, in combination with a saddle and a gun or its cradle to be mounted therein, a fixed claw upon one of said parts, a removable claw carried by the other of said parts and engaging over the fixed claw, and a horizontal training-screw securing the removable claw in engaged relation with the fixed claw.

3. In a gun-mount, in combination with a saddle and a gun or its cradle mounted in said saddle through the medium of a vertical trunnion; a fixed claw on one of said parts curved concentric to the vertical trunnion, a remov-

able claw secured to the other of said parts, and a horizontal training-screw securing the removable claw in engaged relation with the fixed claw.

4. In a gun-mount, in combination with a saddle and a gun or its cradle mounted therein through the medium of a vertical trunnion; a claw fixed upon said gun or its cradle and curved concentrically with said vertical trunnion, a removable claw engaging with the saddle through the medium of undercut flanges, and sliding on said flanges into and out of engagement with the fixed claw, and the horizontal training-screw working through said removable claw and holding it in engaged relation with the fixed claw.

5. In a gun-mount, in combination with a saddle and a gun or its cradle mounted therein through the medium of a vertical trunnion; a fixed claw on said gun or cradle, curved concentric to the vertical trunnion, a removable claw engaging the saddle through the medium of undercut flanges, and formed with a recess, a horizontal training-nut mounted in said recess near the removable claw, and the horizontal training-screw mounted in fixed bearings and extending through the removable claw and working in the nut held therein, and retaining said removable claw in engaged relation with the fixed claw.

6. The combination with a means for securing a gun or its cradle to its mount comprising two claws, of a horizontal training-nut mounted within one of the claws, and a horizontal training-screw working through the claw and the nut and securing the claw into engagement with the other claw.

The foregoing specification signed at Dusseldorf, Germany, this 20th day of September, 1902.

OTTO BEHNKE.

In presence of—

WILLIAM ESSENWEIN,
PETER LIEBER.