

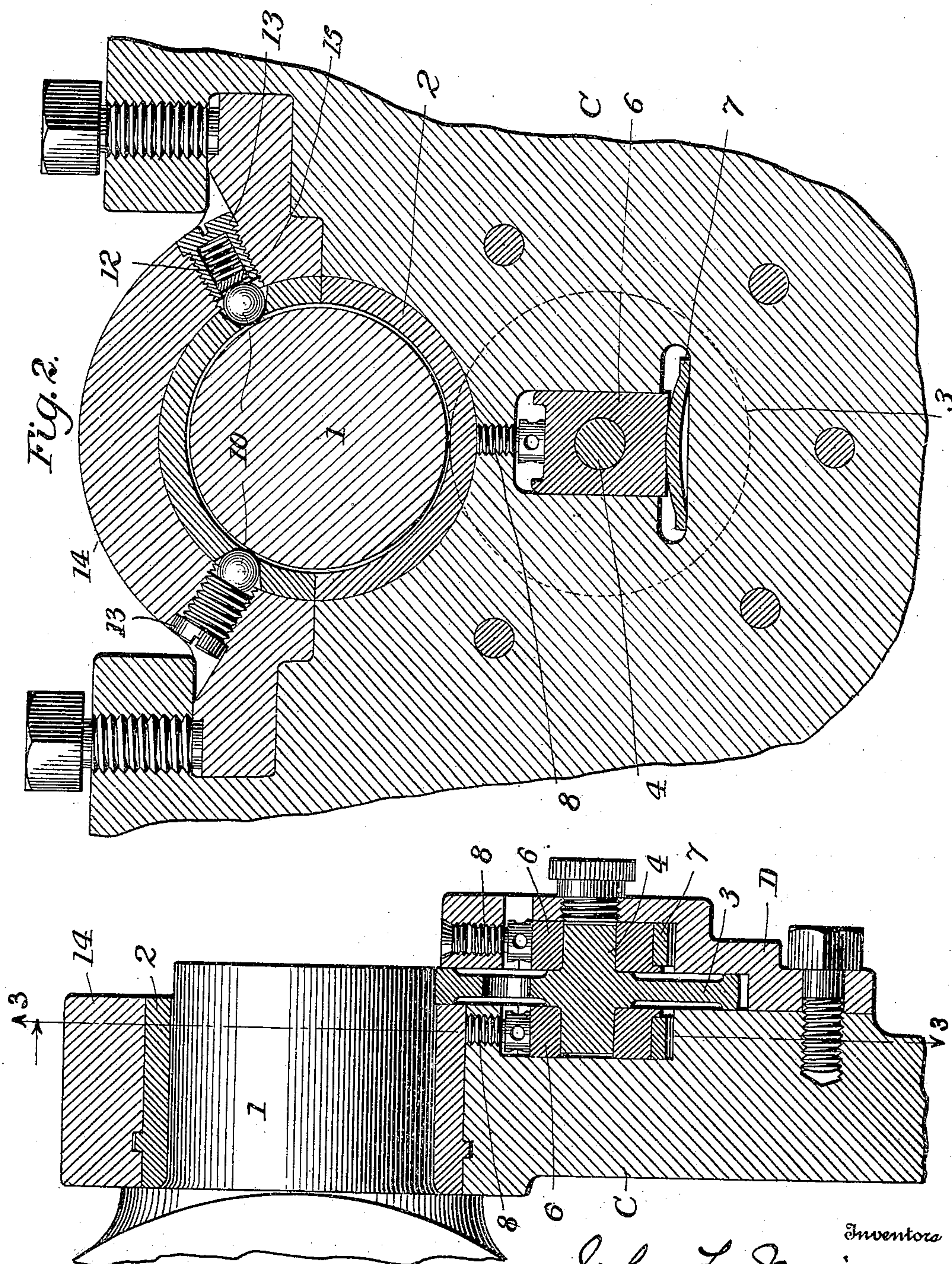
No. 814,859.

PATENTED MAR. 13, 1906.

J. F. MEIGS & H. G. JAKOBSSON.

PEDESTAL MOUNT.

APPLICATION FILED AUG. 19, 1903.



Witnesses

J. Hinkel
H. Gillman, Jr.

Fig. 1.

By

Inventors
John F. Meigs
Herman G. Jakobson
Forster, Brown & Watson, Attorneys

UNITED STATES PATENT OFFICE.

JOHN F. MEIGS AND HERMAN G. JAKOBSSON, OF SOUTH BETHLEHEM, PENNSYLVANIA, ASSIGNORS TO BETHLEHEM STEEL COMPANY, OF SOUTH BETHLEHEM, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

PEDESTAL-MOUNT.

No. 814,859.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed August 19, 1903. Serial No. 170,035.

To all whom it may concern:

Be it known that we, JOHN F. MEIGS, a citizen of the United States, and HERMAN G. JAKOBSSON, a citizen of Sweden, residing at South Bethlehem, Northampton county, Pennsylvania, have invented certain new and useful Improvements in Pedestal-Mounts, of which the following is a specification.

Our invention relates to gun-mounts; and it consists of antifriction-bearings upon which the trunnions of the gun may rest, preferably spring-supported, so that the trunnions may take their bearings upon the bushings or frame-sockets in firing, and to this end the parts are constructed as fully set forth hereinafter and as illustrated in the accompanying drawings, in which—

Figure 1 is a detail section of the bearings for one trunnion of a gun, illustrating our invention. Fig. 2 is a section on the line 3 3, Fig. 1.

Each trunnion 1 instead of having a machine fit in the bearing 2 has a small play therein and projects beyond the end of the bearing, and the projecting portion rests upon the antifriction-wheel 3, the shaft 4 of which bears in boxes 6, each supported by a strong curved spring 7, resting upon the bottom of a recess in which the box is guided. As shown, the recess for the inner box is in the top carriage C, while the recess of the outer box is in a bracket D, attached to the top carriage, although each recess may be in the top carriage or in a bracket.

Each box is adjustable in its recess by means of a set-screw 8, bearing against the top of the box. The parts are so adjusted that each trunnion 1 rests on the wheel 3 out of contact with the bearing or bushing 2, so that instead of the contact of the extended surfaces of the trunnion and bearing there is normally only the frictional contact of the surfaces of the small shaft 4 and its boxes, friction being thereby greatly reduced, while on firing the gun the trunnions seat against the bearings 2 without injury, due to the small play of the trunnion and the yielding action of the springs.

In order to properly center the trunnion

within the bearing 2, there are antifriction-bearings 10, shown as ball-bearings, each ball extending through a recess of the bushing or bearing 2 in contact with the face of the trunnion and forced against the latter by a spring 12 within a recessed screw 13, extending through the cap 14, a washer 15 intervening between the spring and ball.

While we have described specifically an arrangement of parts which we have found effective, it will be evident that the antifriction-wheels 3 may be supported and adjusted in different ways and that other antifriction-bearings than the ball-bearings 10 may be employed. Where we have referred to the bushing 2 as a part separate from the frame of the gun, it will of course be understood that it may be integral therewith.

Without limiting ourselves to the precise construction and arrangement of parts shown, we claim as our invention—

1. The combination with a gun and its trunnions, of a bearing for each trunnion, greater in internal diameter than the latter, and means for normally centering and supporting the trunnions independently of the bearings, for the purpose set forth.

2. The combination with a gun and its trunnions, of a bearing for each trunnion, said bearings being greater in internal diameter than said trunnions, and a series of separated antifriction-bearings for normally centering each of the said trunnions in its bearings, for the purpose set forth.

3. The combination with a gun and its trunnions, of a bearing for each trunnion, said bearings being greater in internal diameter than said trunnions, and a series of separated spring-seated antifriction-bearings for centering each of the said trunnions in its bearing, for the purpose set forth.

4. The combination with the trunnions of a gun, and with fixed bearings beyond which the trunnions project, of antifriction-bearings on which the said trunnions rest, said antifriction-bearings being located outside the fixed bearings, and said gun-bearings being of larger internal diameter than said trunnions, and means independent of the bear-

ings for normally centering the trunnions in the gun-bearings, for the purpose set forth.

5 5. The combination with the trunnion of a gun, of the antifriction-wheel 3, antifriction-balls 10, and springs forcing the same toward the trunnion, substantially as set forth.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

JOHN F. MEIGS.

HERMAN G. JAKOBSSON

Witnesses:

J. E. MATHEWS.

E. A. MILLER.