

No. 734,406.

PATENTED JULY 21, 1903.

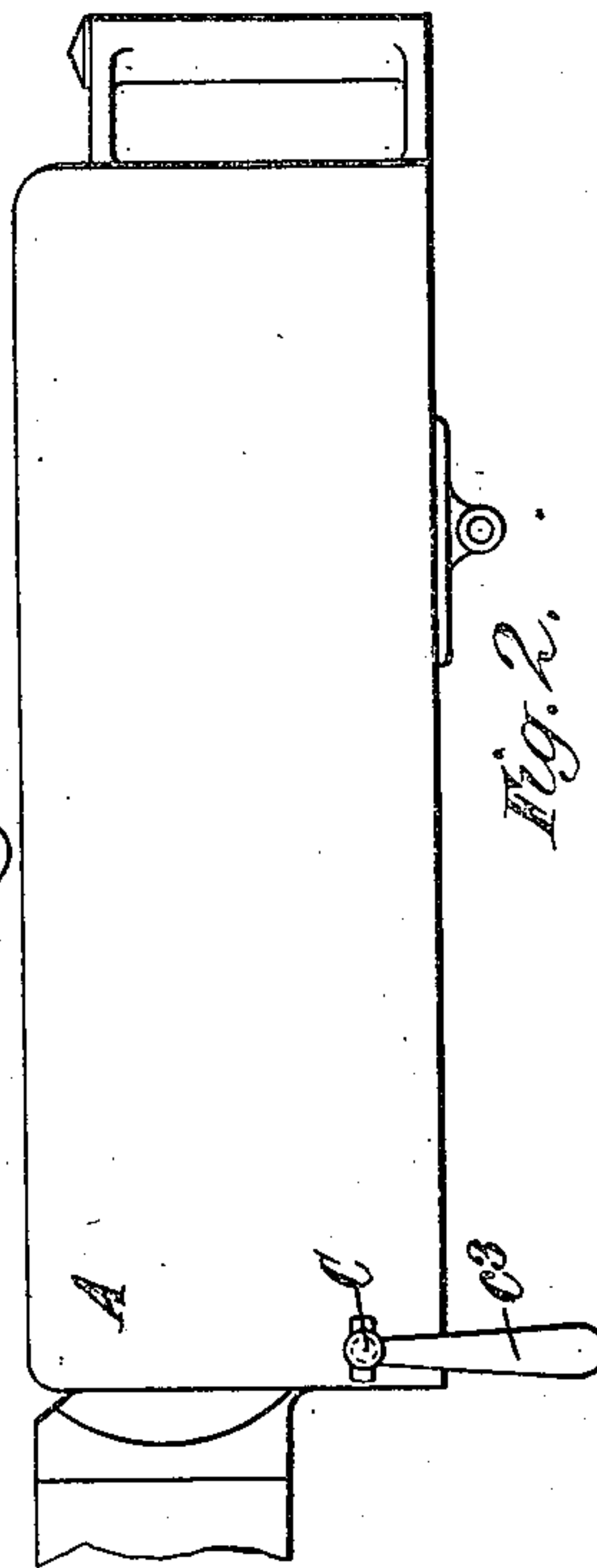
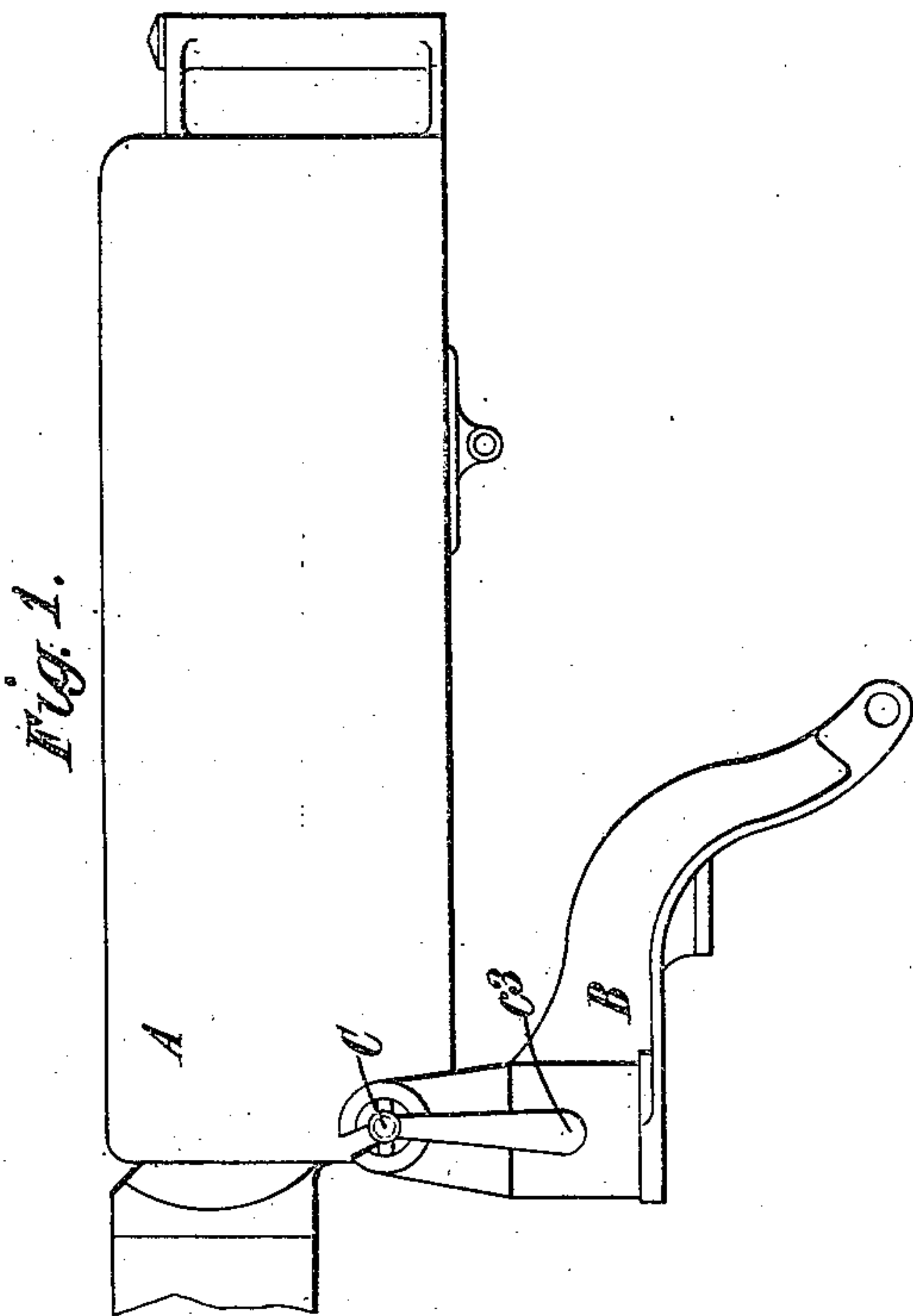
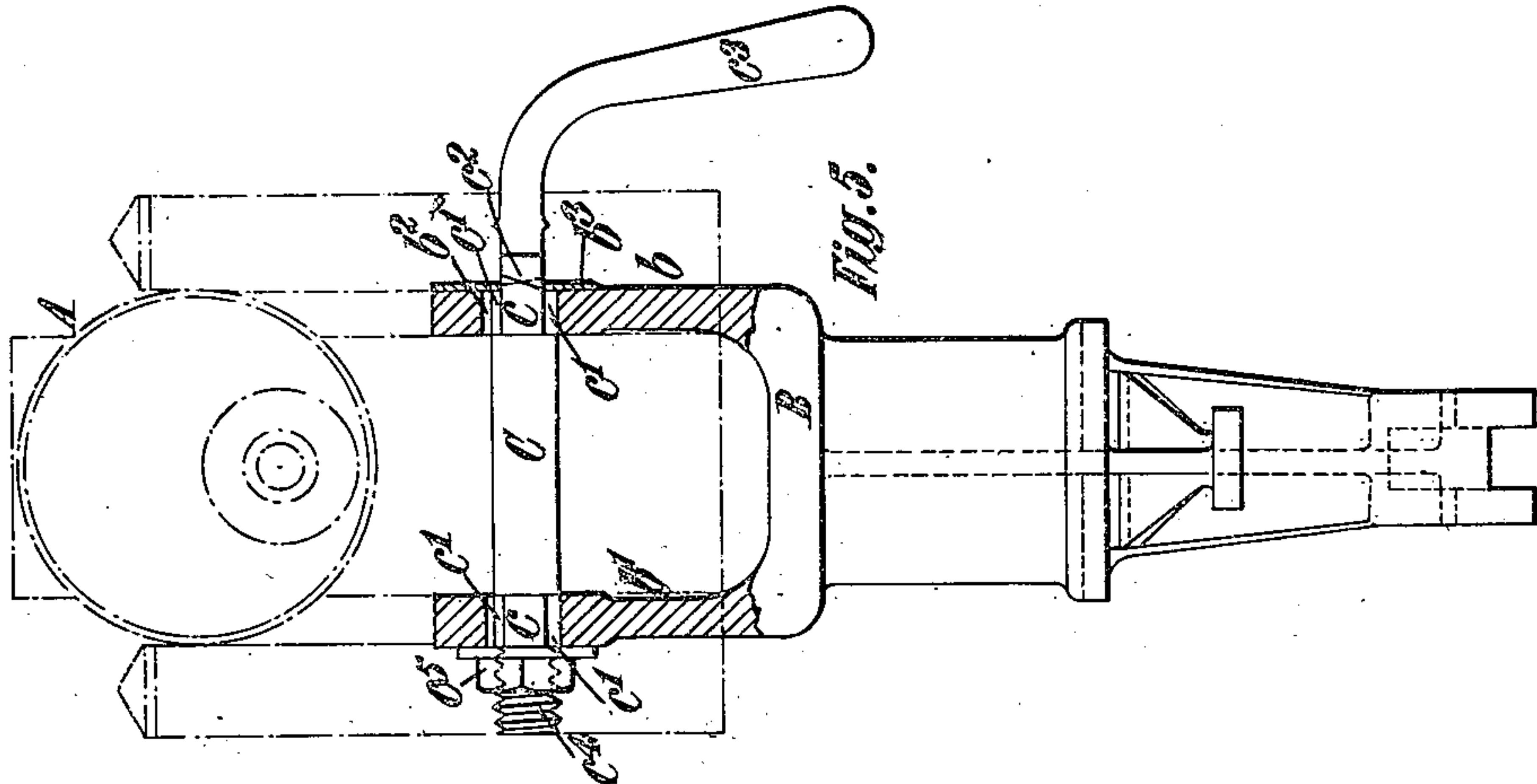
A. T. DAWSON & W. BURTON.

GUN MOUNTING.

APPLICATION FILED MAR. 16, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:  
James L. Norris, Jr.  
N. L. Bogan

Inventor's  
Arthur T. Dawson  
Walter Burton  
By James L. Norris  
attys.

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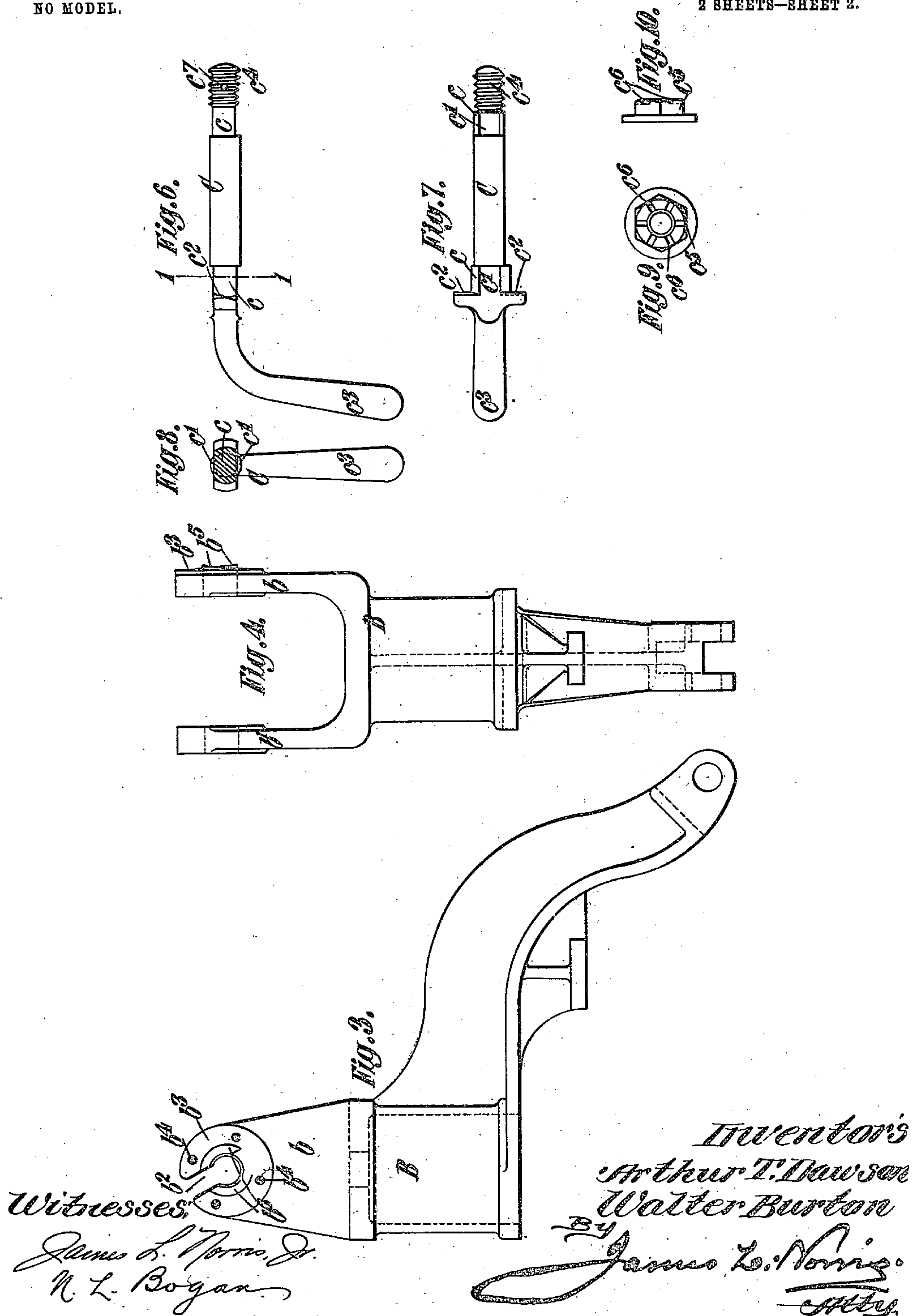
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NO MODEL.

2 SHEETS—SHEET 2.





# UNITED STATES PATENT OFFICE.

ARTHUR TREVOR DAWSON AND WALTER BURTON, OF WESTMINSTER, ENGLAND, ASSIGNORS TO VICKERS SONS & MAXIM, LIMITED, OF LONDON, ENGLAND.

## GUN-MOUNTING.

SPECIFICATION forming part of Letters Patent No. 734,406, dated July 21, 1903.

Application filed March 16, 1903. Serial No. 148,068. (No model.)

*To all whom it may concern:*

Be it known that we, ARTHUR TREVOR DAWSON, lieutenant of the Royal Navy, director and superintendent of ordnance works, and  
5 WALTER BURTON, engineer, both subjects of the King of Great Britain, residing at 32 Victoria street, Westminster, in the county of London, England, have invented certain new and useful Improvements Relating to Gun-  
10 Mountings, of which the following is a specification.

This invention has reference to gun-mountings, particularly those of the kind used for Maxim R. C. guns, and has for its chief ob-  
15 ject to provide for the rigidity of the gun when mounted, and consequently increased accuracy of fire, and to insure the rapid and easy mounting and dismounting of the gun, especially when the latter is used in connec-  
20 tion with the transport saddle equipments.

According to our invention we form the cross-head with slots or gaps extending radially from the trunnion-bearings, so that the joint-pin or trunnion of the gun can be in-  
25 serted laterally into the trunnion-bearings when mounting the gun. One member of said cross-head is furnished with inclined surfaces, with which corresponding inclined projections on the joint-pin or trunnion are  
30 adapted to engage by an angular movement of the latter to lock the said joint-pin or trunnion to the cross-head.

We will now describe our invention more fully with reference to the accompanying  
35 drawings, in which—

Figure 1 is a side elevation of the gun and its joint-pin or trunnion mounted in the cross-head in accordance with our invention. Fig. 2 is a side elevation of the said gun and its  
40 joint-pin or trunnion removed from the cross-head. Fig. 3 is a side elevation, and Fig. 4 a front elevation, of the said cross-head. Fig. 5 is a sectional front elevation of the said cross-head with the joint-pin or trunnion in  
45 place therein, the gun being indicated in dotted lines. Fig. 6 is a side elevation, Fig. 7 a plan, and Fig. 8 a cross-section on the line 11, showing the joint-pin detached. Figs. 9 and 10 are respectively a front view and a  
50 side view of a nut for said joint-pin.

A is the gun, B the cross-head, and C the joint-pin or trunnion. The forked members  $b\ b'$  are radially slotted or gapped at  $b^2$ , and one of them (viz.,  $b$ ) has a plate or disk of steel or other appropriate metal  $b^3$  secured on  
55 the outer face thereof by rivets  $b^4$  or other suitable retaining devices. This disk or plate is slotted or gapped in correspondence with the slotted or gapped portion of the cross-head and is provided with inclined curved  
60 surfaces  $b^5\ b^5$ . The joint-pin C is formed with cylindrical portions  $c\ c$ , which fit the holes in the members  $b\ b'$  of the cross-head, these portions being also formed with flats  $c'\ c'$  to suit the slots or gaps  $b^2$ , so that said joint-pin  
65 can be passed laterally into place within the cross-head through the said slots or gaps. The joint-pin also has near one of its ends two inclined projections  $c^2\ c^2$ , which correspond with the aforesaid inclined surfaces  $b^5$   
70 on the plate or disk  $b^3$ . The end of the joint-pin adjacent to said inclined projections  $c^2$  is bent to form a handle  $c^3$  and the opposite end is screw-threaded at  $c^4$  to receive the nut  
75  $c^5$ , which can be adjusted thereon in accordance with the width of the jaws of the cross-head. Said nut is formed with numerous radial grooves  $c^6\ c^6$ , and the threaded end of the joint-pin has a transverse hole  $c^7$   
80 therein, so that when the nut has been adjusted in the required position it can be locked in such position by a split pin passed through said hole  $c^7$  or by other appropriate means. The central portion of the joint-pin  
85 is cylindrical and fits the gun loosely, so that when the parts are mounted in the cross-head the gun can be turned about said central cylindrical portion in varying its angle of elevation. The said joint-pin can be left  
90 in position in the gun when the latter is dismounted, so that it will only be necessary to slide the flattened portions  $c'\ c'$  of the joint-pin through the said slots or gaps  $b^2$  of the cross-head in order to mount the gun. Then  
95 by moving the joint-pin angularly by means of its handle  $c^3$  the aforesaid inclined projections  $c^2$  thereon will be caused to engage with the inclined surfaces  $b^5$  of the aforesaid disk or plate  $b^3$ , whereby the joint-pin will be  
100 securely clamped in place in the cross-head



and the gun be capable of turning thereon during its elevation or depression. We prefer to place the said disk or plate  $b^3$  on the left-hand member of the cross-head, as shown in the drawings.

What we claim, and desire to secure by Letters Patent of the United States, is—

1. In a gun-mounting; the combination with the cross-head, of a rotary joint-pin carried by the gun, radially-slotted bearings in the cross-head for enabling said pin to be laterally inserted into said bearings and means for locking said pin in the bearings by an angular movement thereof, substantially as described.

2. In a gun-mounting; the combination with the cross-head, of a rotary joint-pin carried by the gun, inclined projections on said pin, radially-slotted bearings in the cross-head, and inclined surfaces on one of the forked members of said cross-head for the said inclined projections of the joint-pin to engage with when the latter is angularly moved substantially as described.

3. In a gun-mounting; the combination with the cross-head, of a rotary joint-pin carried by the gun, inclined projections on said pin, radially-slotted bearings in the cross-

head, flattened portions on said joint-pin to enter said radial slots of the bearings, and inclined surfaces on the outer face of one of the forked members of said cross-head for said inclined projections of the joint-pin to engage with, substantially as described.

4. In a gun-mounting; the combination with the cross-head, of a rotary joint-pin carried by the gun, inclined projections near one end of said pin, an adjustable nut near the other end of said pin, radially-slotted bearings in the cross-head, flattened portions on said pin to enter the radial slots of the bearings, a plate provided with inclined surfaces and adapted to be affixed to the outer face of one of the forked members of said cross-head for said inclined projections of the joint-pin to engage with, and a crank-handle on said joint-pin for turning it, substantially as described.

In testimony whereof we have hereunto set our hands, in presence of two subscribing witnesses, this 25th day of February, 1903.

ARTHUR TREVOR DAWSON.  
WALTER BURTON.

Witnesses:

HENRY KING,  
PHILIP MAINS.