

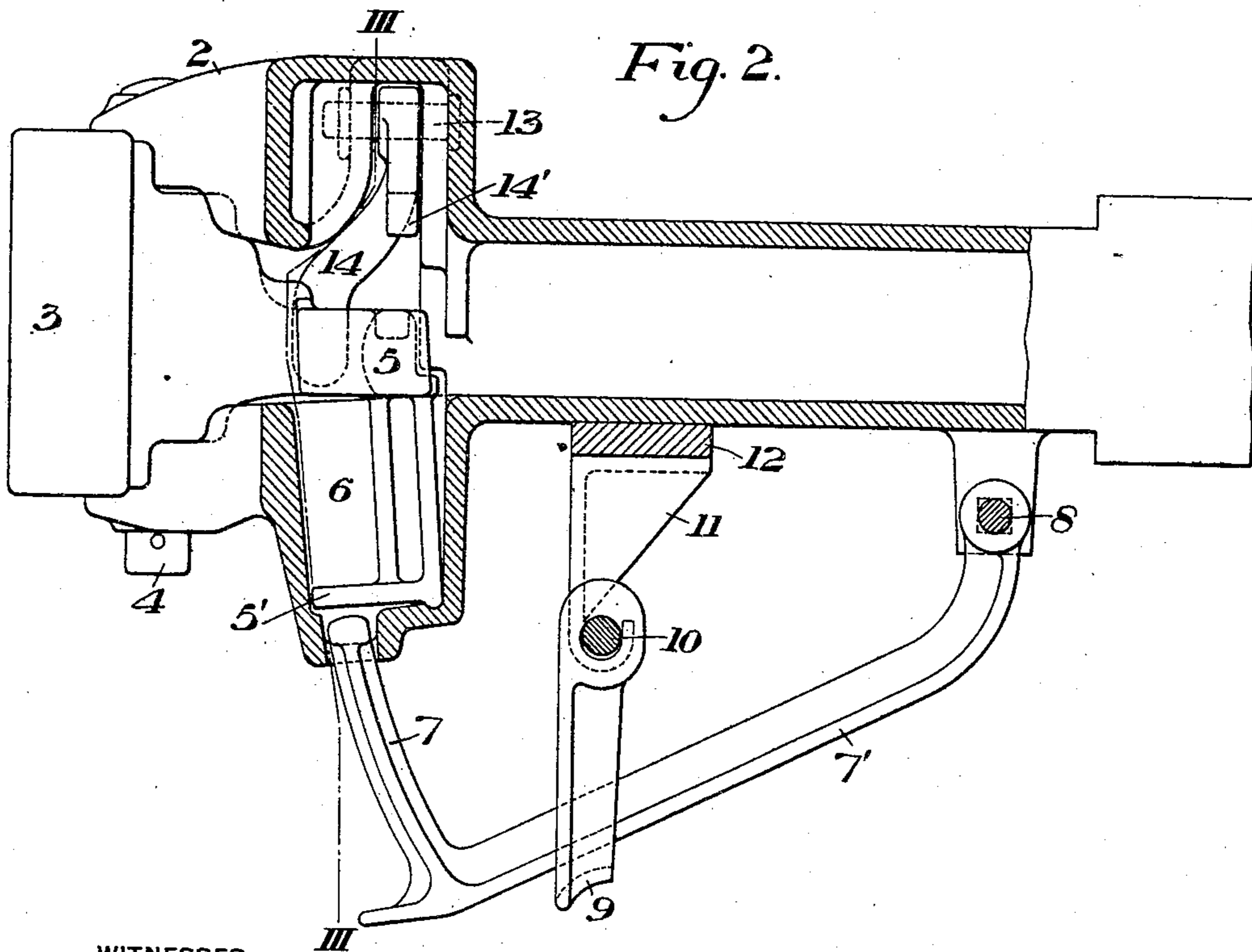
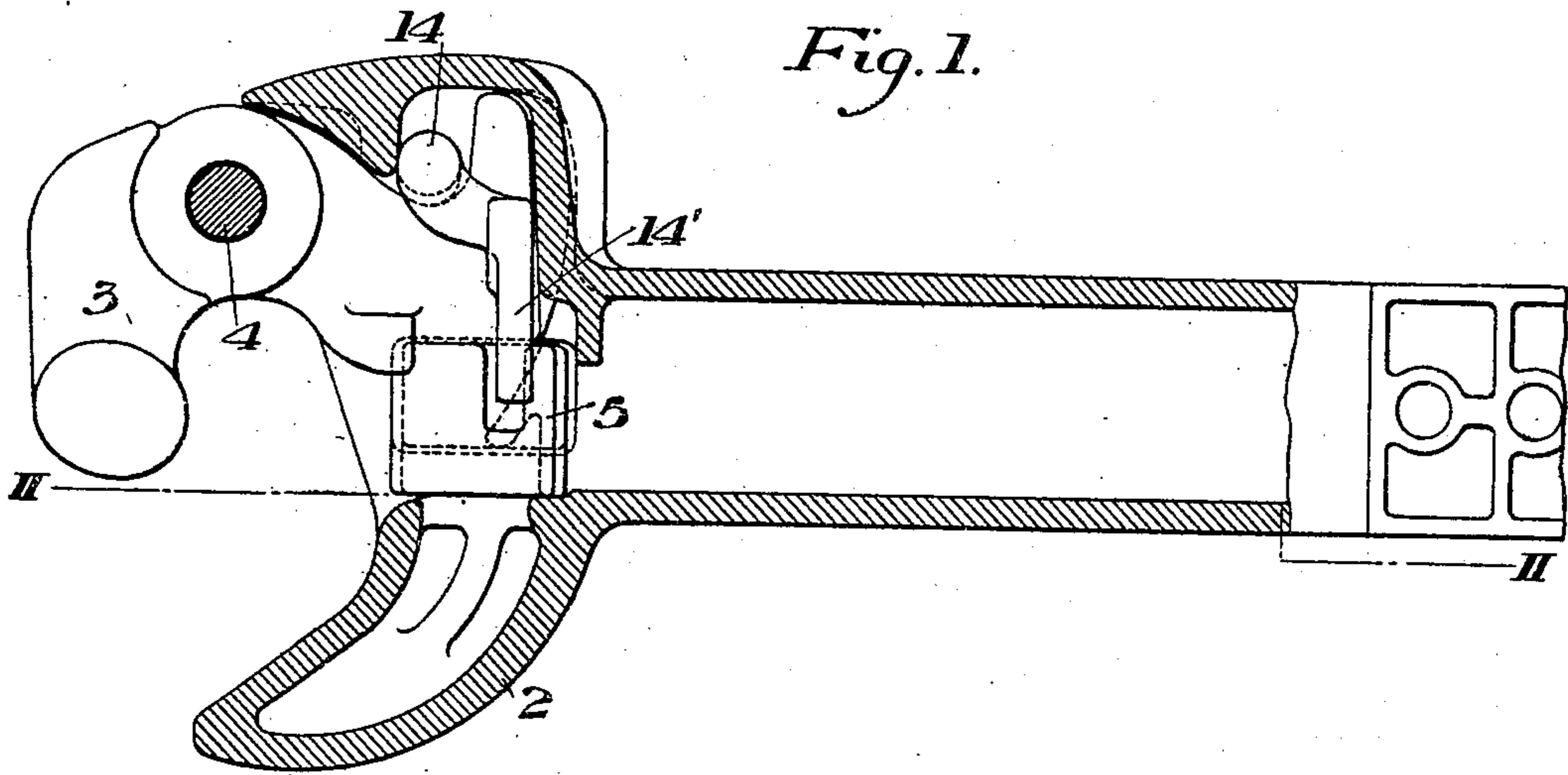
C. A. TOWER.
CAR COUPLING.

APPLICATION FILED JAN. 30, 1908.

969,575.

Patented Sept. 6, 1910.

3 SHEETS—SHEET 1.



WITNESSES

W. W. Swartz
R. A. Baldwin

INVENTOR

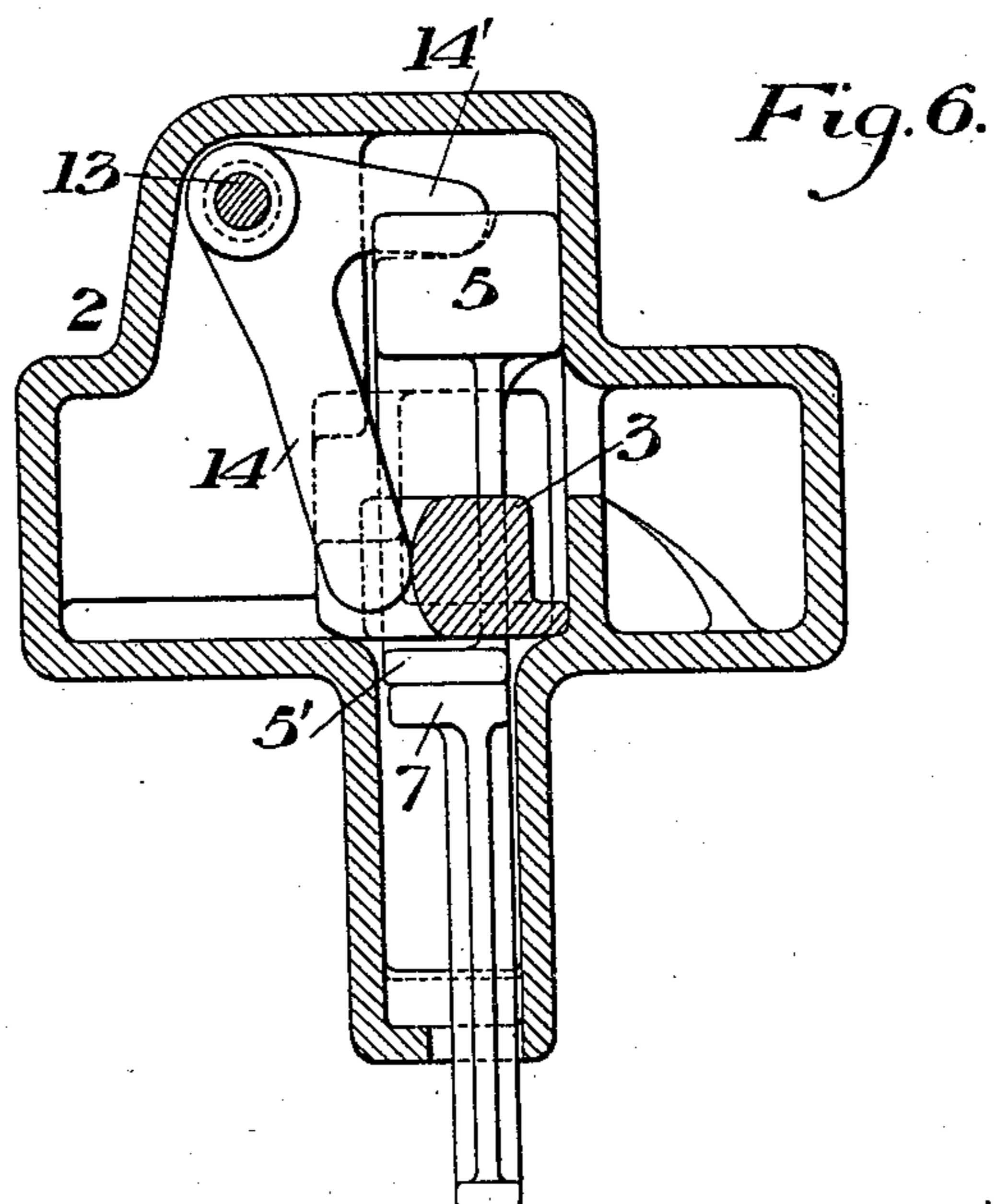
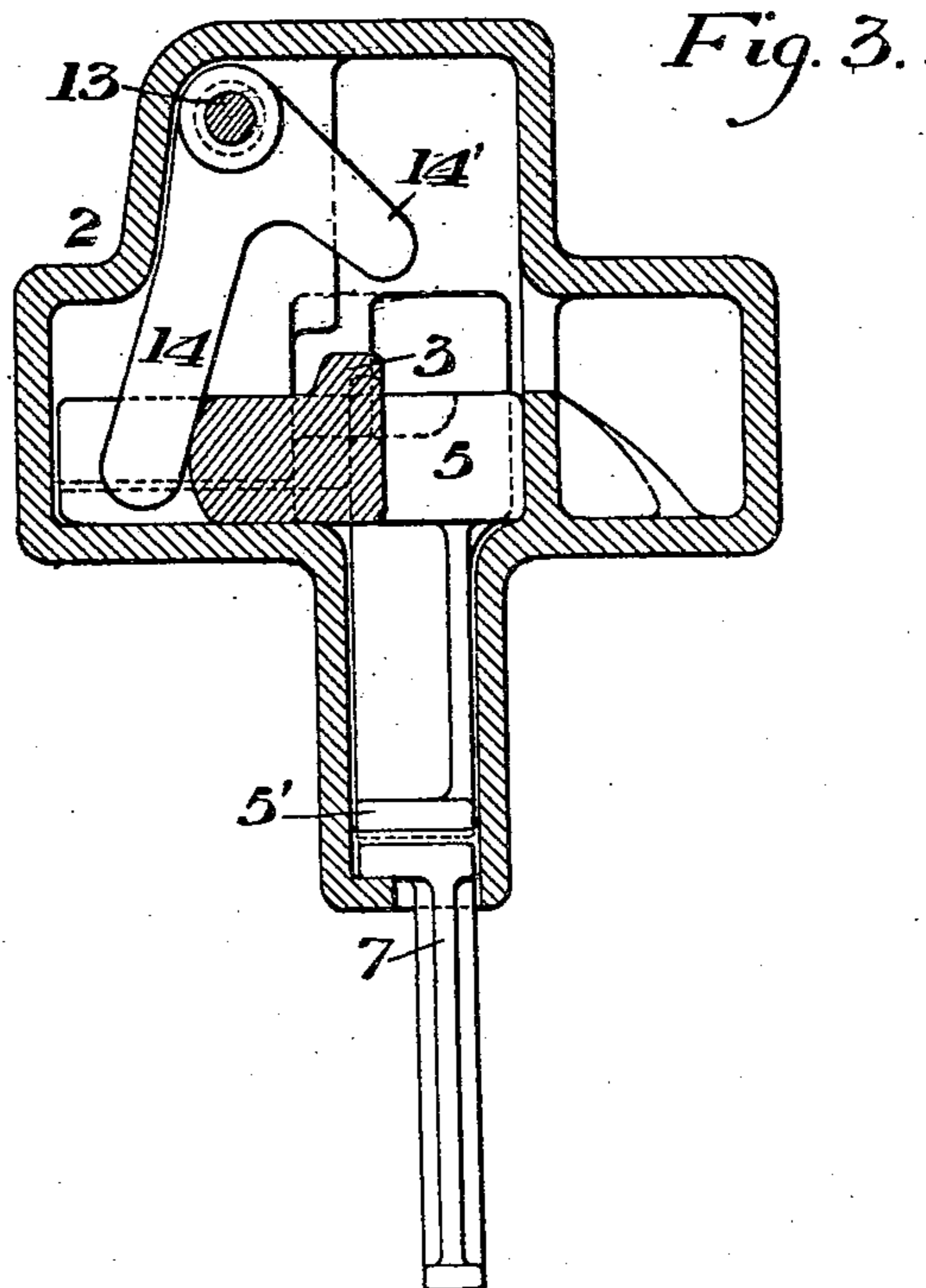
C. A. Tower,
by Baker, Byrnes & Parmelee,
his Attys.

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W. W. Swartz
R. A. Balderson

INVENTOR

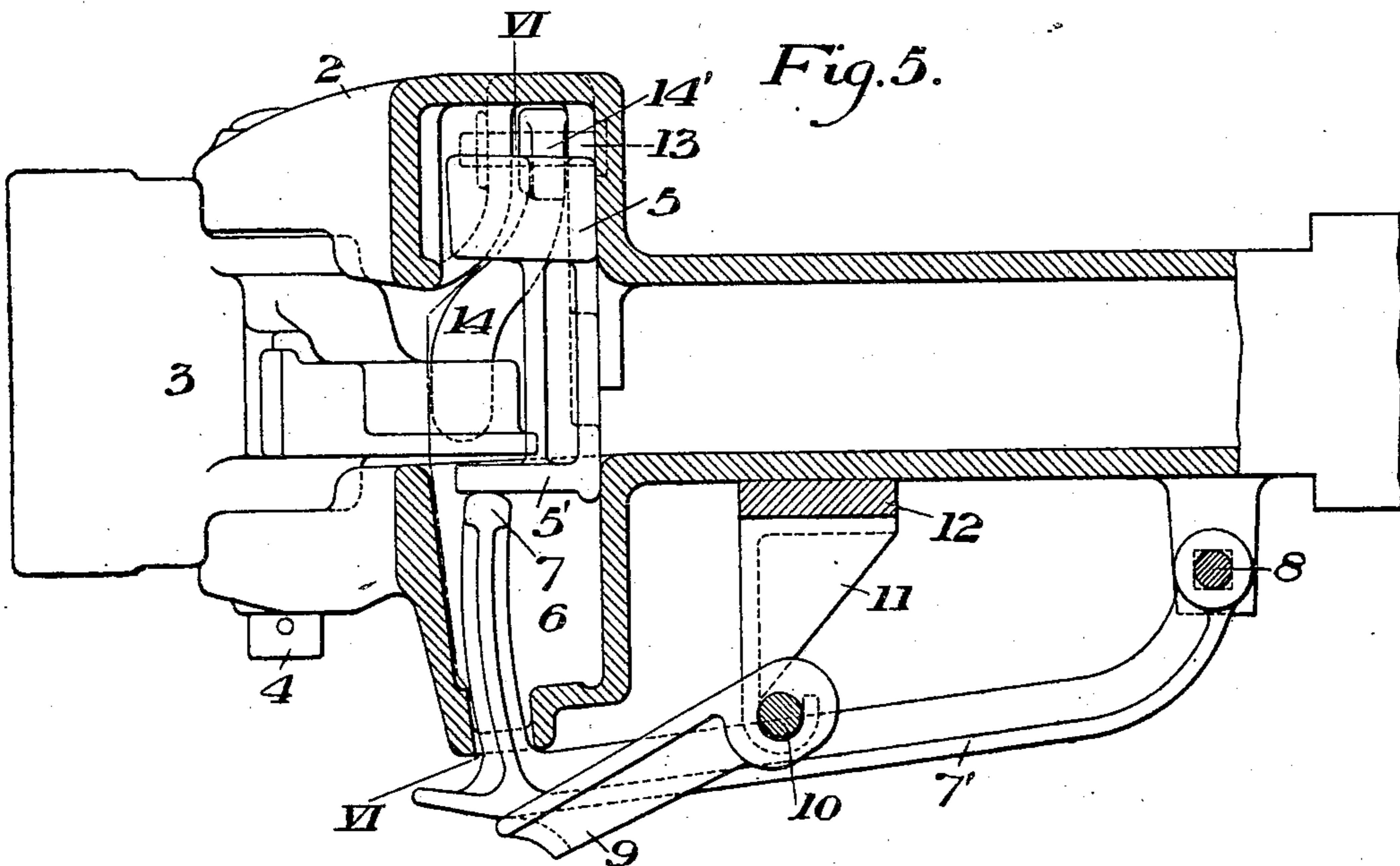
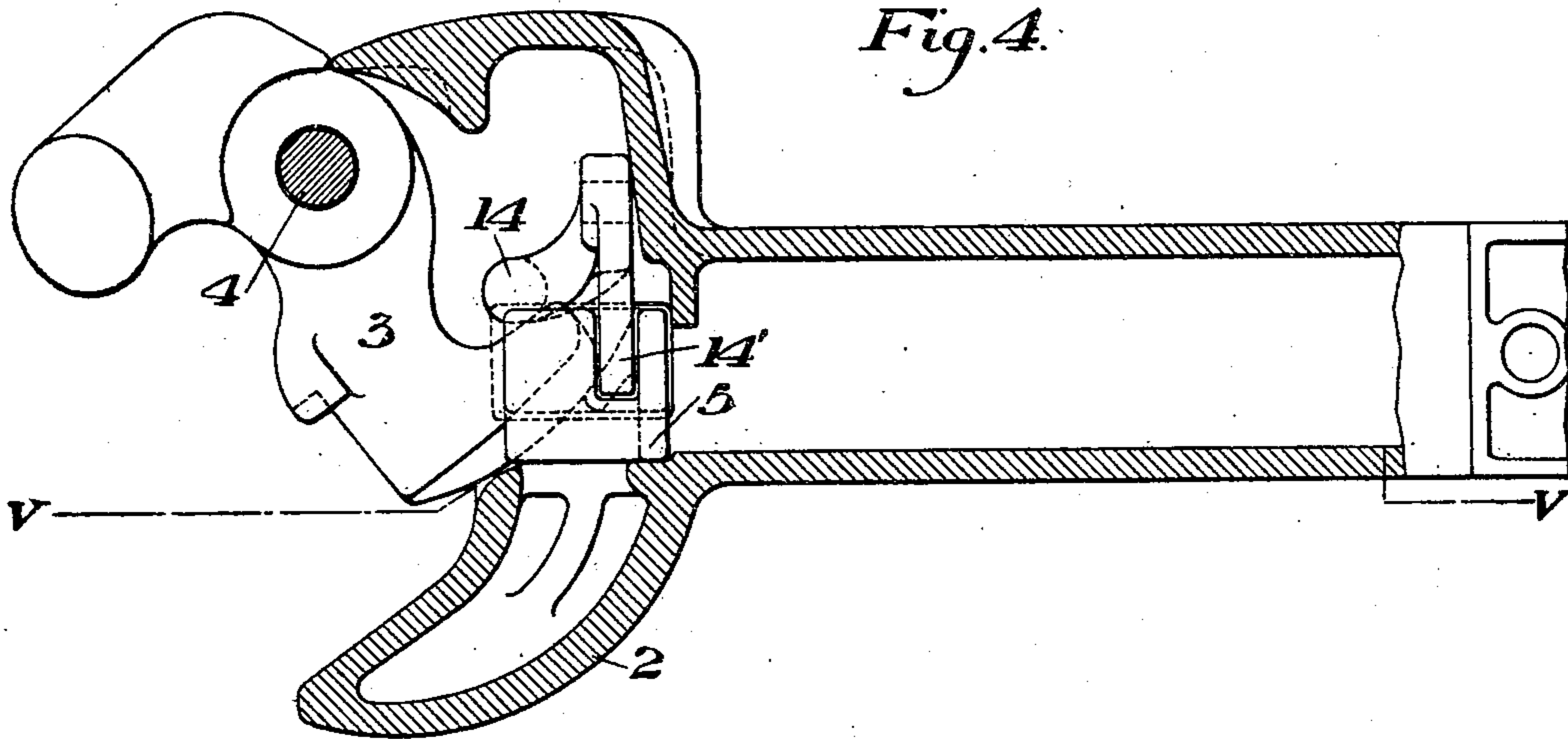
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3 SHEETS—SHEET 3.



WITNESSES

W. W. Swartz
R. A. Balderson

INVENTOR

C. A. Tower,
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UNITED STATES PATENT OFFICE.

CLINTON A. TOWER, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

CAR-COUPLING.

969,575.

Specification of Letters Patent.

Patented Sept. 6, 1910.

Application filed January 30, 1908. Serial No. 413,409.

To all whom it may concern:

Be it known that I, CLINTON A. TOWER, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows my improved coupler in horizontal section; Fig. 2 is a vertical longitudinal section on the line II—II of Fig. 1; Fig. 3 is a vertical cross section on the line III—III of Fig. 2; Fig. 4 is a section similar to Fig. 1, showing the knuckle unlocked and open; Fig. 5 is a vertical longitudinal section on the line V—V of Fig. 4; and Fig. 6 is a vertical cross section on the line VI—VI of Fig. 5.

In the drawings, 2 represents the coupler-head, having a horizontally swinging knuckle 3 mounted on a vertical pivot pin 4.

5 is the upwardly and downwardly movable lock which is mounted for vertical movement within a recess 6 of the draw-head and has a downward extension 5' adapted to rest on the floor of the coupler when the device is locked. This lock is operated by an upwardly movable lifting arm 7, preferably made integral with and forming part of a lever 7' which is pivoted at 8 to the shank of the draw-bar and may be operated by a yoke 9 mounted on a rock shaft 10 which extends to the side of the car and is preferably journaled in a bracket 11 depending from the carry iron 12.

The opening device of the coupler consists of a bell crank lever which is pivoted

within the coupler on a horizontal axis 13 and has two arms 14 and 14', one extending back of the tail of the knuckle, and the other, 14', extending over the path of the vertically movable lock 5 so as to be engaged thereby. When this lock is lifted by the upward movement of the lifting arm 7 it first releases the knuckle, leaving the latter free to be swung open, and then, in its further upward movement, the head of the lock 5 engages the arm 14' and rocks it on the axis 13, moving the arm 14 forward and throwing the knuckle into open position.

Within the scope of my invention as defined in the claim the parts may be modified in various ways since

What I claim is:

A coupler head having a pocket depending below its bottom wall, a locking member having a portion extending downwardly into the pocket and having a support on the floor of said pocket when in the locked position, a lifting device extending upwardly into said pocket and into position to engage the lower end of the locking member, and a knuckle-opening member pivoted in the upper portion of the coupler head and arranged to be engaged and operated by the locking member when the latter is raised by the lifting member, substantially as described.

In testimony whereof, I have hereunto set my hand.

CLINTON A. TOWER.

Witnesses:

HARRY E. ORR,
CHAS. E. POPE.