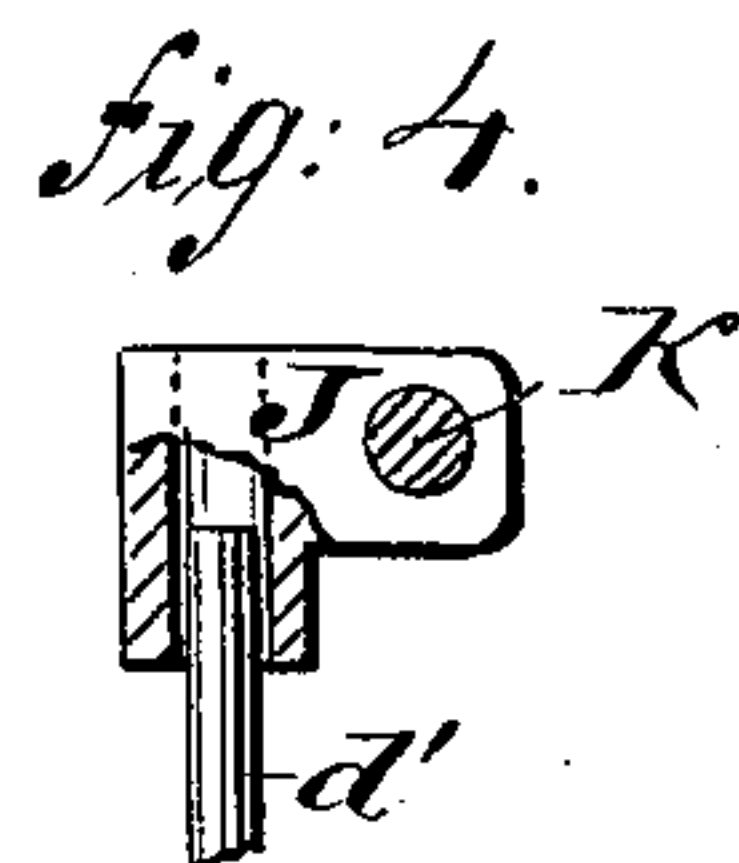
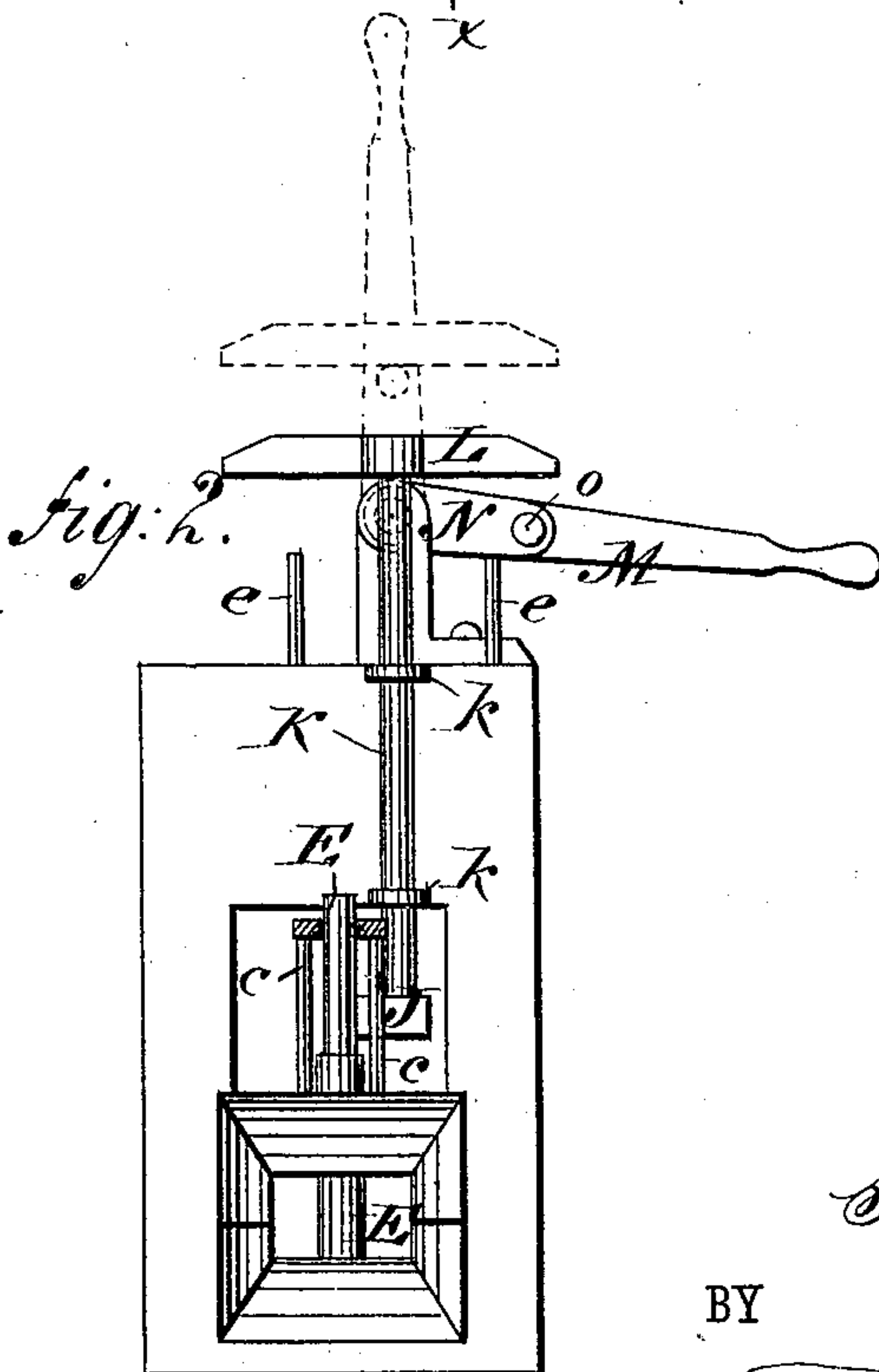
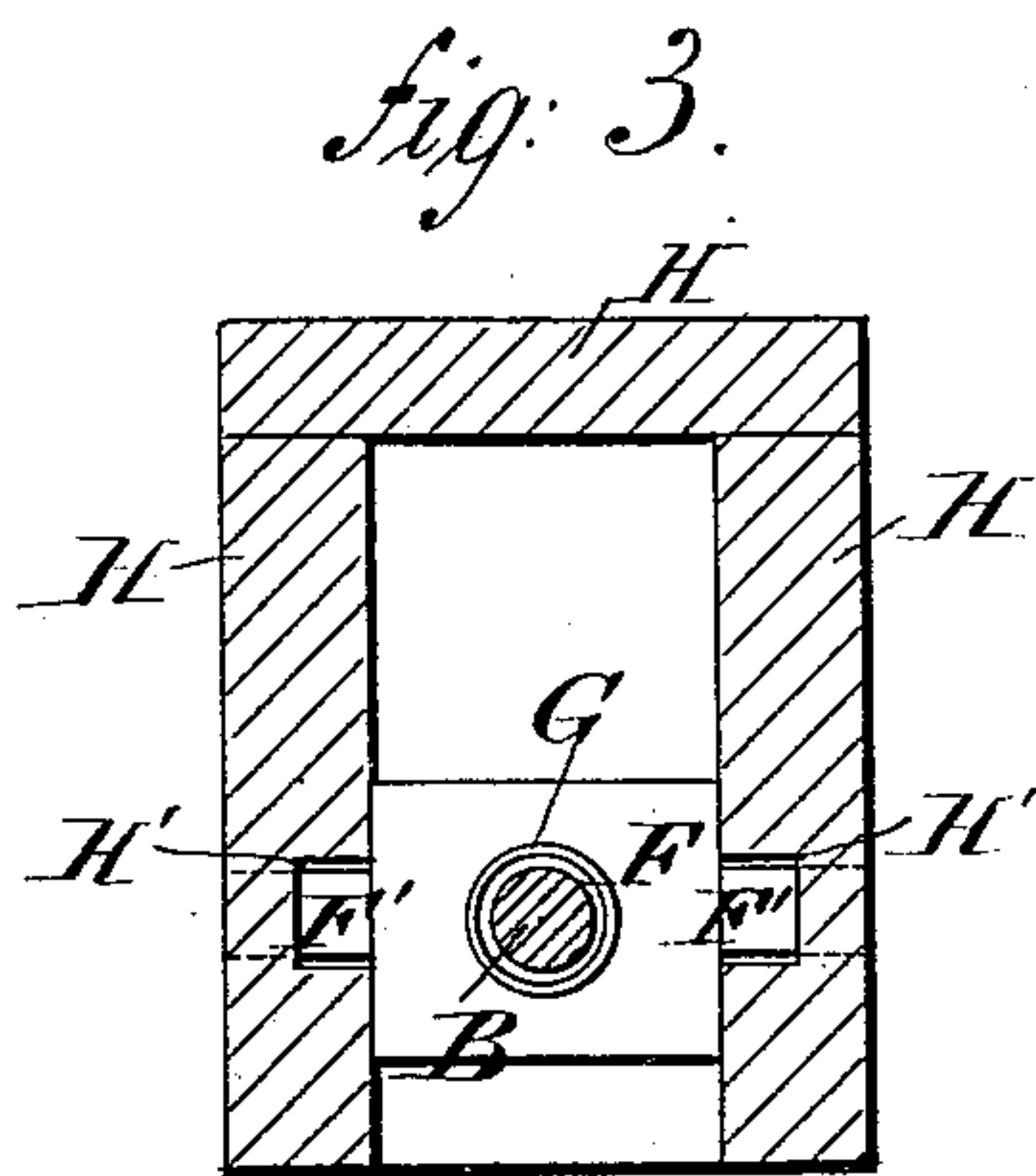
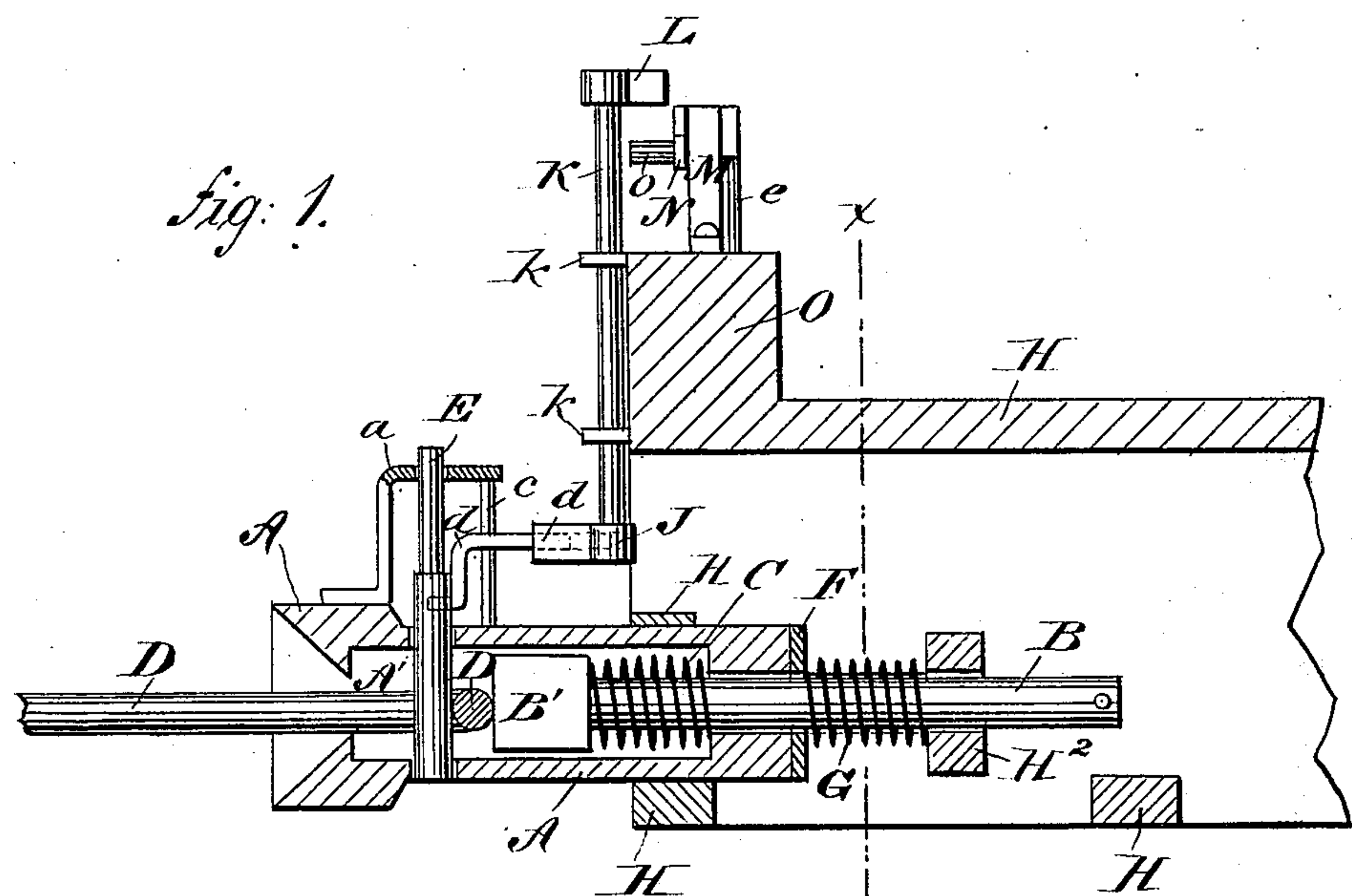


(Model.)

G. W. SHAW.
CAR COUPLING.

No. 250,761.

Patented Dec. 13, 1881.



WITNESSES:
A. Schehl.
C. Sedgwick

INVENTOR:
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. SHAW, OF TAYLORSVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF
TO THOMAS COLLIER AND JAMES W. WELLS, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 250,761, dated December 13, 1881.

Application filed March 28, 1881. (Model.)

To all whom it may concern:

Be it known that I, GEORGE W. SHAW, of Taylorsville, in the county of Spencer and State of Kentucky, have invented a new and useful
5 Improvement in Car-Couplings, of which the following is a specification.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation; Fig. 2, a front elevation; Fig. 3, a sectional elevation through
10 the frame-work on the line *x x*, Fig. 1, looking at the back of the plate F; Fig. 4, an enlarged sectional plan of plate J, which connects the T-shaped lifting-rod and the rigid crank-arm secured in the coupling-pin E.

15 Similar letters of reference indicate corresponding parts.

The object of my invention is to provide an improved car-coupling device which can be operated with ease and certainty from the plat-
20 forms of passenger-cars or low stock or flat cars, or from the tops of box-cars without going between them, said coupling device being adapted to use the ordinary form of draw-head and draw-bar.

25 I more particularly describe my invention as follows:

The draw-bar A is supported in the frame-work H of the car on all sides and slides longitudinally within said frame-work. The said
30 head A is divided into two parts, so as to permit the introduction of the head B' of the draw-bar bolt B into its interior. Said head B' being larger than the openings through the front and back ends of the draw-head, it secures the
35 draw-bar bolt B within the said head when the two parts of said draw-head A are firmly secured by proper bolt-connections. The spring C upon the bar B acts, between the back shoulder of the recess A' and the head B', to hold the
40 coupling-link D close to the coupling-pin E, as in Fig. 1.

The plate F is rigidly attached to the back end of the draw-head A, its projecting ends F' moving within the grooves or guideways H' in
45 the frame-work H, and by contact with the forward shoulders of said grooves H' causes the draw-head A to pull the car without strain upon the draw-bar bolt B. Between said plate F and the rigid cross-bar H² the spring G is loosely
50 ly coiled around the draw-bar B, and acts as a

buffer to receive the shock of coupling the cars, it being aided in such action by the forward spring, C.

The coupling-pin E, when withdrawn from the link D, has a bearing in the upper side of the
55 draw-head A and in the bracket-bearing *a*, between and in which and the said draw-head the rods *c* are rigidly fastened to guide the vertical movement of the crank-arm *d*, which latter is fastened in the side of the coupling-pin E,
60 and has a connection with the plate J by its upper arm, *d'*, passing with a sliding fit into a hole drilled through said plate, which connection permits the said arm *d'* to slide within the
65 plate J as the draw-head A, carrying the coupling-pin E, is by any means forced backward. In said plate J the foot of the vertically-movable bar K is fixed, said bar K being guided in bear-
70 ings *k* on the frame H, and having a T or cross head rigidly attached to its upper end, underneath which head L the pin *o* on the outer end of crank-arm N acts, on the raising of the hand-
75 lever M to the perpendicular position shown in dotted lines in Fig. 2, to lift the coupling-pin E and uncouple the cars by releasing the

A spring-catch may be employed to secure said lever M in such perpendicular position and hold the coupling-pin E up when it is not
80 desired to couple cars coming in contact with each other.

It is evident that when the draw-bar bolt B is pushed backward by the forcible entrance of the coupling D, and after the hand-lever M is depressed to the horizontal position, the coup-
85 ling-pin E will fall by its own and the super-added weight of the parts *d*, J, K, and L, and secure said link D, to couple the cars, as in Fig. 1. Standards *e*, secured to the transverse beam
90 O of the frame-work H, support the hand-lever M at either side in an approximately-horizontal position.

In applying my coupler to box-cars the vertical rod K, carrying the cross-head L, would be extended upward to permit the lever M to be
95 operated relatively to the other parts of my device, as above described, from the roof of said cars.

Instead of using the hand-lever M, carrying the crank-arm N, and causing the pin *o* on said
100

arm N to raise the coupling-pin E, as above described, I can use an ordinary hand-wheel, running on a central shaft suitably journaled in the frame-work of the car, and having a pin
5 or roller secured in its face near its circumference, which pin or roller will act under the cross-head L to raise the coupling-pin E in substantially similar manner to the pin o on the arm N, said hand-wheel, with pin or roller at-
10 tached, being but another form of lever to operate the parts.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The car-coupling pin E, having at the up- 15 per part a shoulder, and from thence to the end a diminished diameter, in combination with the bracket a, having a hole in line with the pin-holes of draw-head, as described.

2. The combination, with the pin E, guided 20 at the top in the bracket a, of the crank-arm d, fastened to the side of said pin, the guide-rods c c, and the plate J, connected with a movable bar, K, as and for the purpose specified.

GEORGE WILLIAM SHAW.

Witnesses:

J. B. HOPEWELL,
T. W. HEADY.