

(No Model.)

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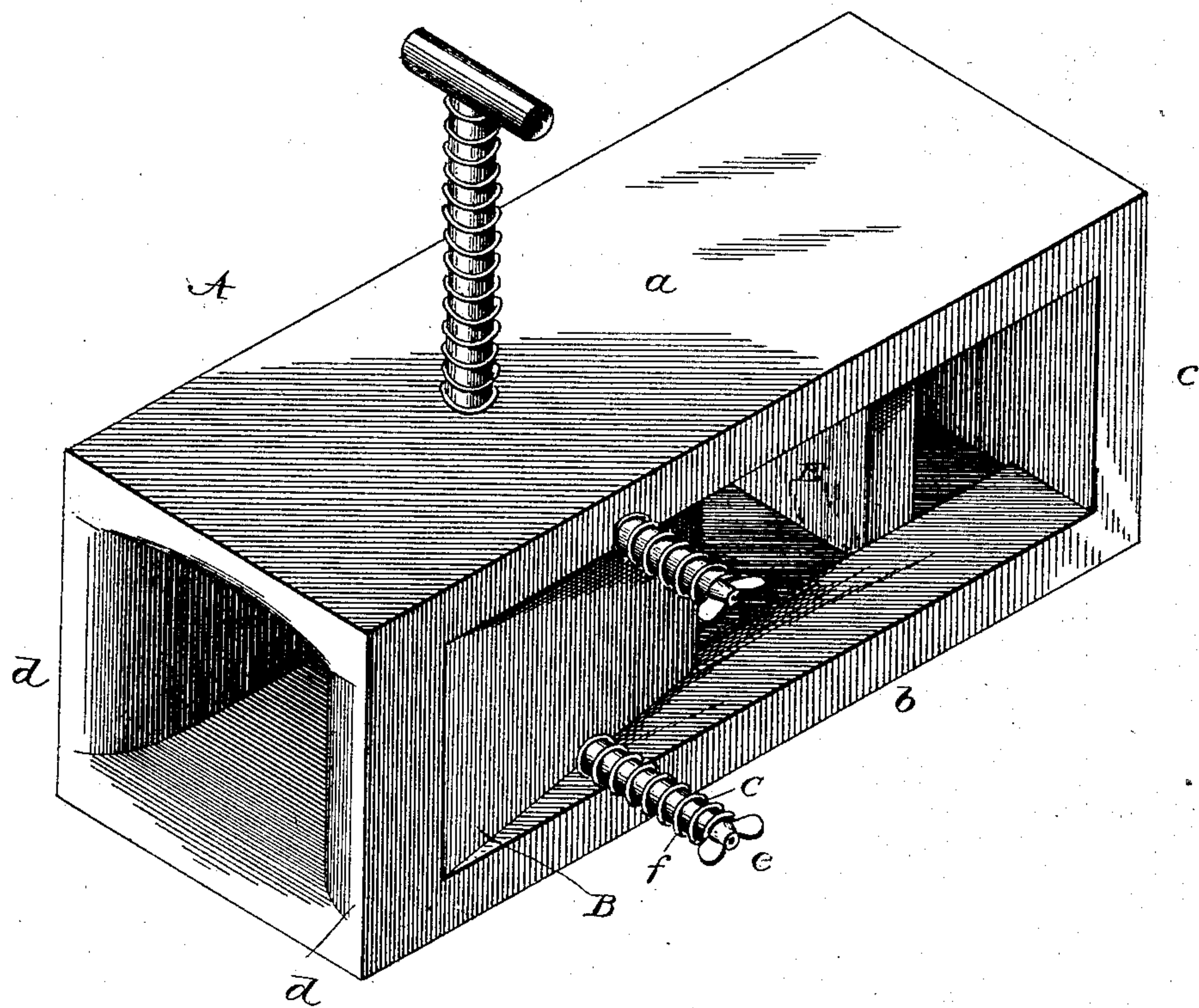
T. J. BRUCE.

CAR COUPLING.

No. 348,720.

Patented Sept. 7, 1886.

Fig. 1.



Witnesses:

W. W. Mortimer.

Wm J. Little,

Inventor:

Thomas J. Bruce,

By his attorney

J. R. Little,

(No Model.)

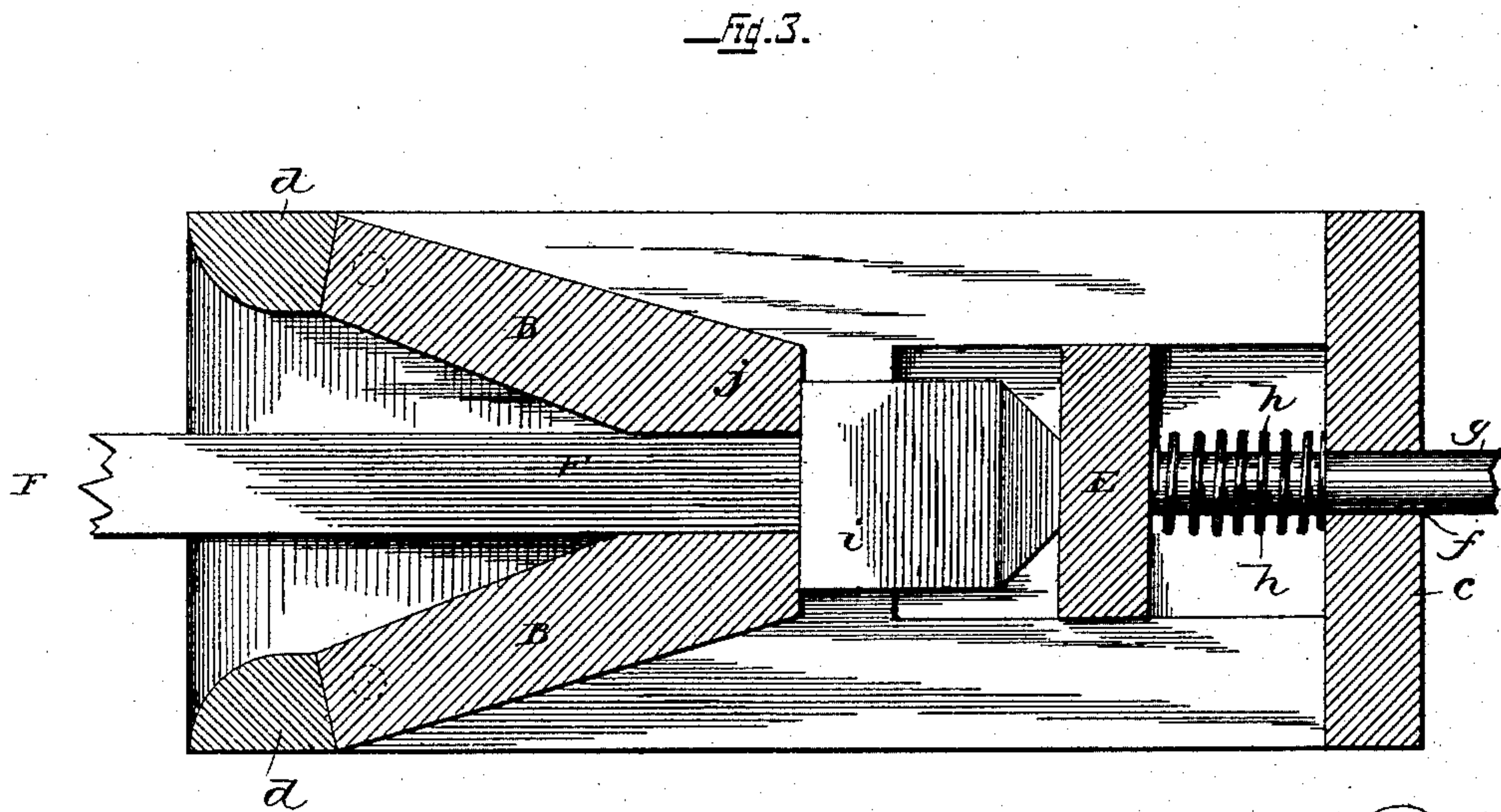
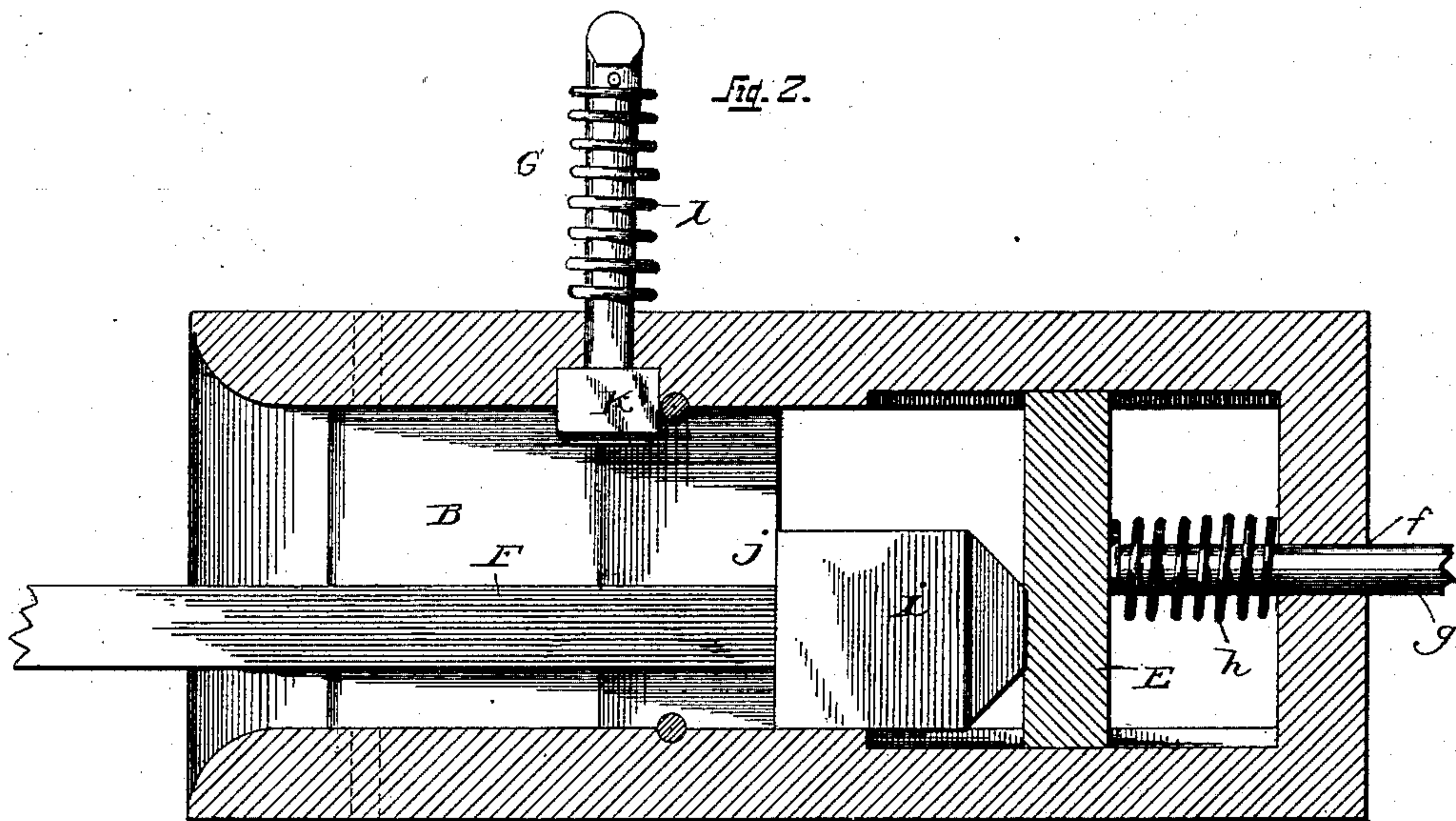
2 Sheets—Sheet 2.

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No. 348,720.

Patented Sept. 7, 1886.



Witnesses:

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# UNITED STATES PATENT OFFICE.

THOMAS J. BRUCE, OF WHIG HILL, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 348,720, dated September 7, 1886.

Application filed June 25, 1886. Serial No. 206,233. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS J. BRUCE, a citizen of the United States, residing at Whig Hill, in the county of Forest and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car-couplings, and has for its object to provide a coupling which shall be simple in its construction, effective and automatic in its operation, strong and durable, and not likely to get out of order, and one that can be supplied at a comparatively slight cost.

With the above objects in view, the invention consists, in the combination, with a draw-head, of spring-actuated hinged jaws, a sliding bumper-block, a releasing bar, and a draw-bar.

The invention further consists in the improved construction and detailed arrangement of parts hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a car-coupling embodying my invention. Fig. 2 is a longitudinal vertical section of the same, and Fig. 3 is a horizontal section.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents the draw-head, which comprises the top and bottom strips, *a b*, connected at their rear ends by a vertical portion, *c*, and at their forward ends at each corner by a post, *d*.

Just in rear of the posts *d* are hinged or pivoted at their forward ends jaws B, which extend rearwardly.

Passing through the draw-head near the upper and lower ends thereof are bars C, having threaded outer ends, upon which threaded ends are mounted thumb-nuts *e*.

Upon the bars C, between the thumb-nuts and jaws, are mounted spiral springs *f*, the tension of which can be regulated by loosening or tightening the thumb-nuts, said spring serving to force the rear ends of the jaws inwardly. The jaws are, as shown, recessed at their upper and lower ends to permit the passage of said bars. The vertical portion *c* is provided centrally with a hole or opening,

*f'*, in which slides the bar *g* of the bumper-block E.

Upon the bar *g* is mounted a spiral spring, *h*, which bears against the rear face of the bumper-block at one end and against the inner face of the vertical portion *c* at its other end, said bumper-block serving to hold the head of the draw-bar in engagement with the pivoted or hinged jaws, as will be more fully set forth.

F represents the draw-bar, which is provided with the head *i*, thus forming shoulders *j*. When the draw-bar is inserted in the draw-head and forced rearwardly, the jaws are spread apart at their rear ends, and the head of the draw-bar passes said jaws and strikes the bumper-block, the rear ends of the jaws are forced toward each other by the spiral springs and engage the head of the draw-bar, thus holding it in place, and the bumper-block bears against the head of the draw-bar.

To force the jaws apart, I have provided a bar, G, which works in an opening in the upper side of the draw-head, and is provided with a cam-shaped head, *k*. When this bar is moved downwardly, it forces the jaws apart and allows the draw-bar to be removed.

For returning the releasing-bar to its normal position I have provided a spiral spring, *l*, mounted on said bar, and bearing against the outer side of the draw-head at one end and against a pin or projection at the upper end of the releasing-bar at its upper end.

A car-coupling constructed as thus described is simple, cheap, and durable, and is automatic and effective in its operation.

Having thus described my invention, what I claim, is—

The combination, with the draw-head having the open sides, of jaws pivoted in said sides at their forward ends, bars passing through the jaws, springs on the bars outside of the jaws, the thumb-nuts on the outer ends of the bars, the vertically-sliding spring-actuated releasing-bar fitting between the jaws, and the sliding spring-actuated bumper, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

Witnesses: THOMAS J. BRUCE.  
C. M. SHAWKEY,  
E. C. SHAWKEY.