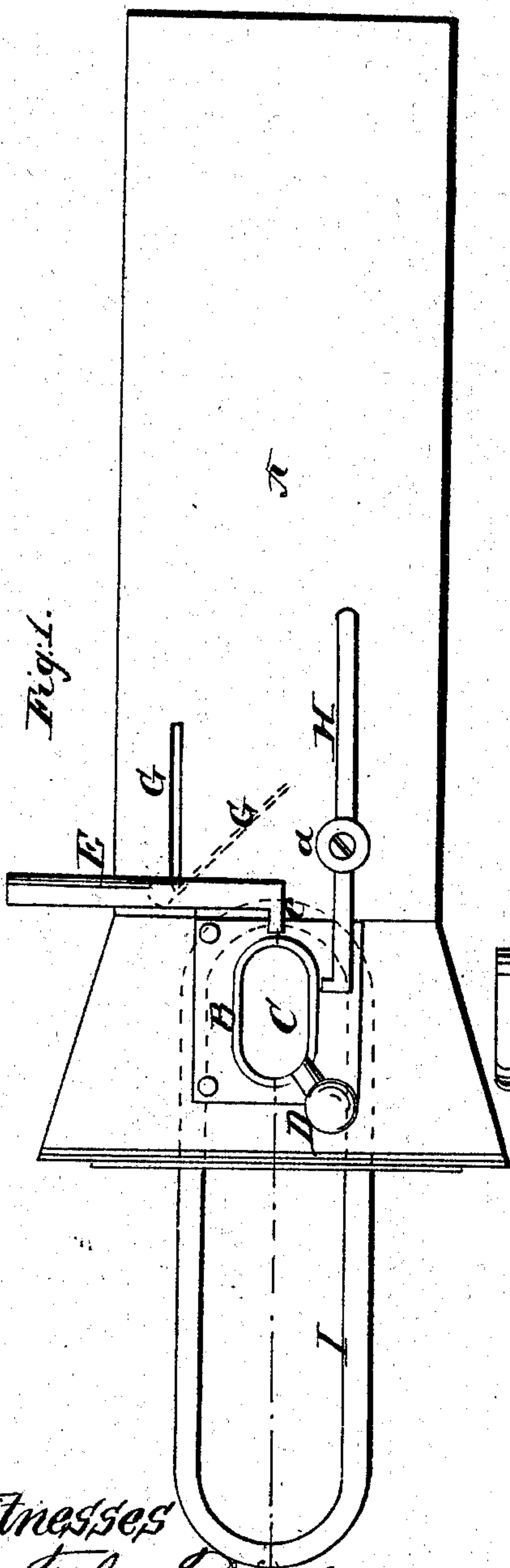


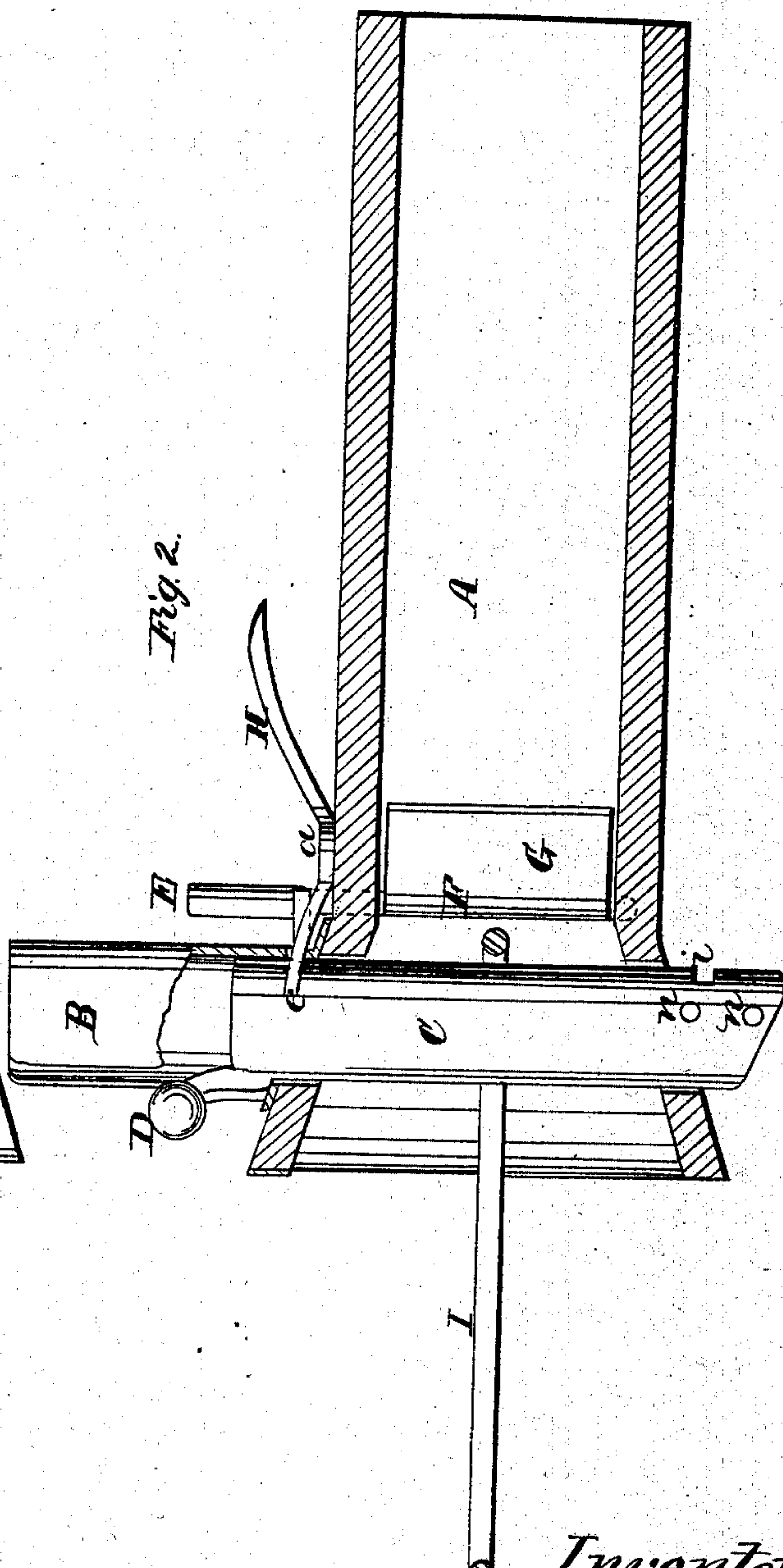
No. 60,012.


PATENTED NOV. 27, 1866.

J. H. KAVANAGH.  
CAR COUPLING.



Witnesses  
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# United States Patent Office

## CAR COUPLING.

JOHN H. KAVANAGH, OF JOLIET, ILLINOIS.

*Letters Patent No. 60,012, dated November 27, 1866.*

### SPECIFICATION.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN H. KAVANAGH, of Joliet, in the county of Will, and State of Illinois, have invented a new and improved Car Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification.

The nature of my invention consists in so constructing the coupling of a car, that by elevating the pin in such a manner that when the cars approach each other, the link will enter the bumper that strikes the wing of a trip-lever, and cause the pin to fall and couple the cars. It further consists in providing an oval guide or tube for the coupling-pin to move up and down. I will now proceed to describe the construction and operation of my invention.

Figure 1 is a top plan view of my improved car coupling.

Figure 2 is a longitudinal vertical sectional elevation of the same from the line *x x*.

Letters of like name and kind refer to like parts in each of the figures.

A represents a car-bumper of common form, made of cast iron or other suitable metal. B is a tube or guide of oval form, that extends upward from the top of the bumper A to serve as a guide for the coupling-pin C, as it moves up and down, which is also of oval form, so as to correspond with the guide or tube B. D is a knob or handle secured to the top of the coupling-pin C, for the purpose of elevating the pin when desired to adjust it for coupling the cars. F is a vertical shaft having bearings in the upper and lower sides of the bumper A, at one side of the aperture where the link enters. Upon the top of this shaft F is a trip-lever E, upon the end of which is a lug or point *e*, that is turned in so as to fit in a corresponding hole *i*, in the coupling-pin C, to hold the said pin in an elevated position. In the aperture of the bumper, upon the shaft F, is a wing G, secured so that when the pin is raised and the lug or point *e* of the trip-lever is engaged in the hole *i*, the wing G stands at such an angle in the aperture of the bumper that, when the coupling-link enters the bumper, it strikes the wing G and presses it around, which turns the shaft F, and disengages the lug or point *e* of the lever E, from the coupling-pin or hole *i*, at which time the pin falls down through the loop of the link, and the cars are coupled. H is a lever pivoted at *a* to the top of the bumper A. This lever H is also provided with a lug or point for the purpose of engaging in holes *n n*, so as to hold the pin C in an elevated position when it is not designed to have the cars coupled. I is the coupling-link, of ordinary construction and form, which couples and holds the cars together.

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

1. The shaft F, provided with the wing G, and trip-lever E, connected to the bumper of a car, substantially as herein shown and described, and for the purposes set forth.
2. I claim the lever H, in combination with the coupling-pin C, substantially as shown and described, and for the purposes set forth.
3. I claim the tube or guide B, in combination with coupling-pin C, and shaft F, and trip-lever E, substantially as shown and described.

JOHN H. KAVANAGH.

Witnesses:

ROBERT WALSH,

DANIEL O'REILLY.