

A. RAY.
Car Coupling.

No. 88,736.

Patented April 6, 1869.

Fig. 1.

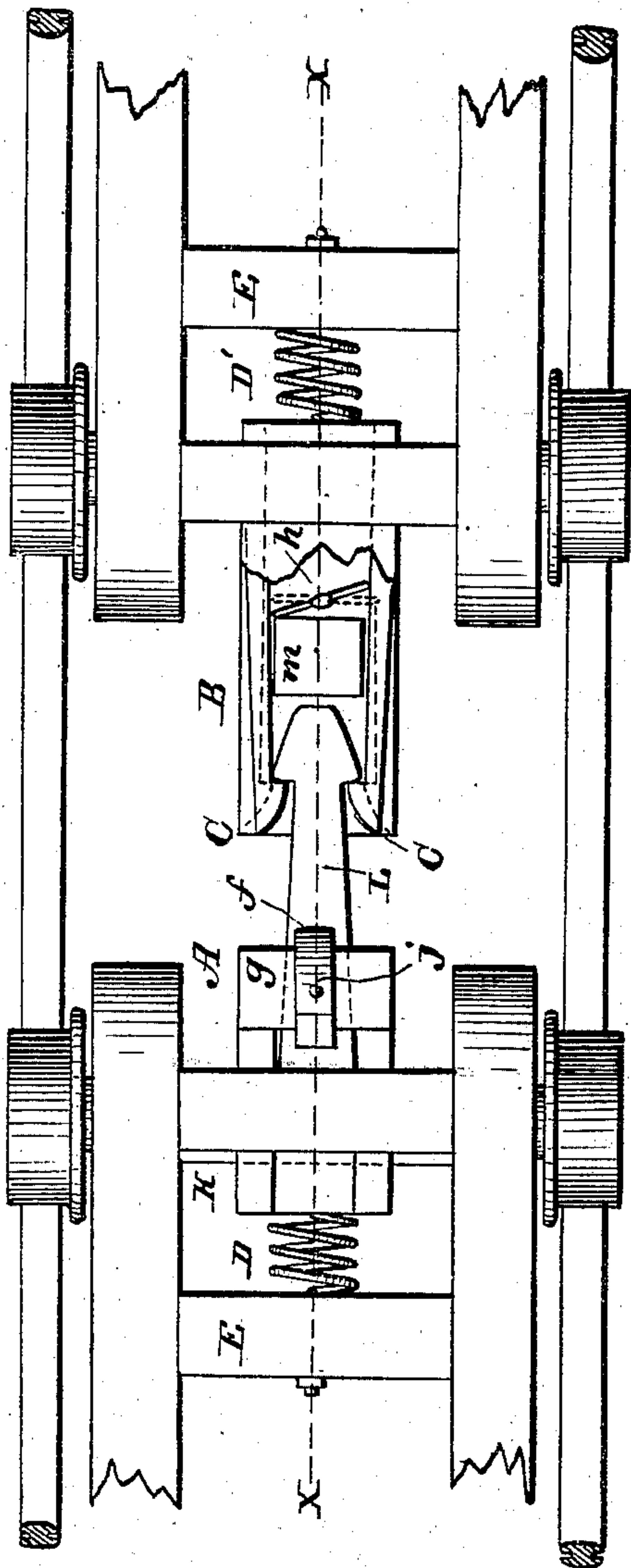
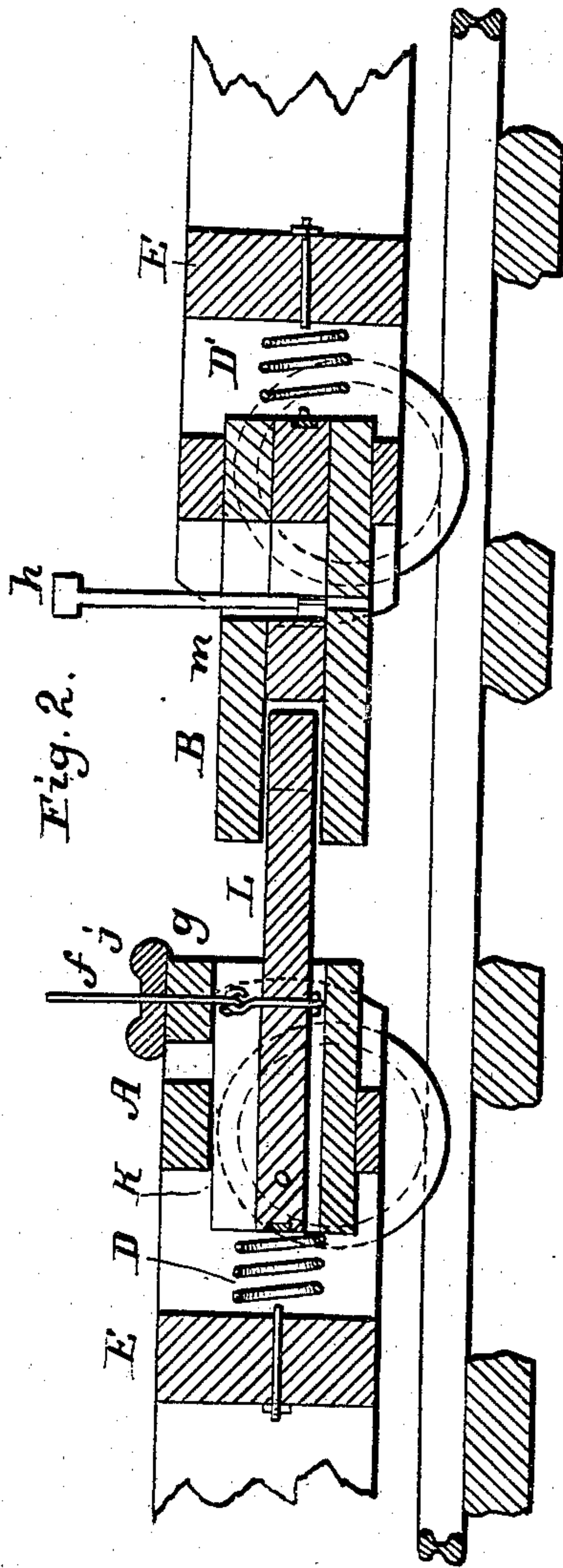


Fig. 2.



Witnesses:

J. Snowden Bell.
Wm. A. McKenney

Inventor:

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United States Patent Office.

A. RAY, OF GRANVILLE, MISSOURI.

Letters Patent No. 88,736, dated April 6, 1869.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, A. RAY, of Granville, in the county of Monroe, and State of Missouri, have invented a new and useful Improvement in the Mode of Coupling Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, in which—

Figure 1 represents a plan view.

Figure 2 represents a section taken through the line *x*.

The object of my invention is to produce a simple and efficient railroad-car coupling, by means of which the danger in exposing the person may be avoided.

To enable others skilled in the art to make and use it, I will proceed to describe its construction and operation.

A represents the coupling-box, containing the arrow-head tongue *L*, which is pivoted upon the shaft *k*, which passes through the rear of the box.

D represents the spring connecting the tongue *L* with the tie *E*.

f represents the regulating screw-rod, which passes through the short tie *g*, being furnished, above the tie, with a nut, *I*, and having its lower end terminate in a hook, which is linked to a similar rod passing through the tongue *L*.

B represents the socket-box, having elastic jaws, which are notched at their extremities, and face each other, and contain the stop-block, *m*.

h represents the lever, with a T-handle passing perpendicularly through the box, and having flanges near its lower end and inside the box, of sufficient length to press open the jaws, when turned across, the red lines representing the jaws when open.

D' represents the spring connecting the rear of the socket-box with the tie *E*.

In coupling cars by my method, the train has to be run backward or forward, as the case may be, and when the tongue *L* comes in contact with the jaws *c c*, it

forces them to open and receive it, and after the head of the tongue has passed the notches at the end of the jaws, the jaws will spring back over the arrow-head, and the cars are coupled.

To facilitate the backing of the cars, I use the check, or stop-block *m*, it pressing against the arrow-head tongue, when the engine is reversed, thus forcing the train backward. The springs *D D'*, at the rear of the coupling-boxes, are of use to ease them from sudden jarring.

When it is desirable to uncouple the cars, all that is necessary is to turn the lever *h* crosswise, which will cause the jaws to be sprung apart, and allow the cars to disconnect, and avoiding the danger of being crushed between the cars.

Another great advantage, which is obvious, is that the jaws, being elastic, will allow the cars to uncouple of themselves, if one is thrown from the track, as, when the cars are thrown abruptly out of line, the tongue will be forced to bear with an unequal pressure on one side, prizing the jaws apart, and allowing the tongue to drop out, so preventing the danger of an accident to one car throwing all the rest from the track.

The regulating screw-rod allows the coupling to be adjusted to cars of an uneven height.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The combination and arrangement of the spring-jaws *c c* with the stop, or check-block *m*, the lever *h*, the arrow-head tongue *L*, the regulating screw-rod *f*, and the springs *D D'*, all arranged and operated substantially as and for the purposes hereinbefore described.

A. RAY.

Witnesses:

G. W. JONES,
J. W. JACOBS.