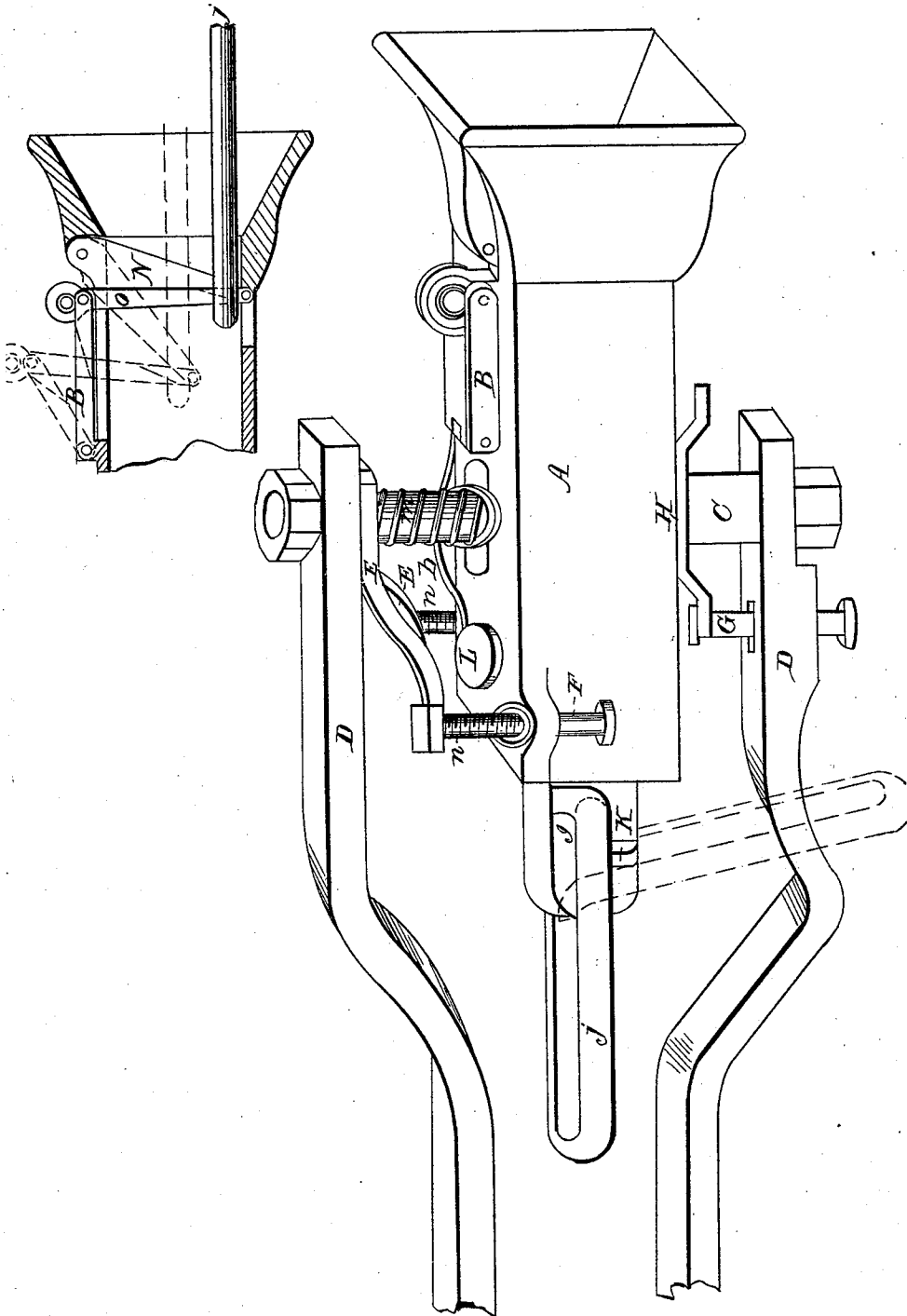


J. BOOTHROYD.
Car Coupling.

No. 18,132.

Patented Sept. 8, 1857.



UNITED STATES PATENT OFFICE.

JOSEPH BOOTHROYD, OF MICHIGAN CITY, INDIANA.

REVERSIBLE RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 18,132, dated September 8, 1857.

To all whom it may concern:

Be it known that I, JOSEPH BOOTHROYD, of Michigan City, in the county of Laporte and State of Indiana, have invented a new and useful apparatus which is an improvement in the manner of coupling railroad-cars, and which I denominate "A Revolving Self Car-Coupling;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, which makes a part of this specification, in which—

Figure 1 is a view of the apparatus. Fig. 2 shows the coupling pin, lever, &c.

In Fig. 1 A. is a bell-mouthed cast iron tube, made to revolve on the bolt C. D. D. are two wrought iron bars which are attached to the draw beam of the car. B is the upper and outside lever which carries the coupling pin and which is kept down by the spring *b*. (See Fig. 2.) E. E. are forked arms attached to the bolts F which with the spiral springs *n. n.* tend to keep the tube A. in a horizontal position and yet allow it sufficient vertical play. G. is a bolt passing through the bar D. and fitting a slot in the end of the arm H and will keep the tube from revolving while in the act of coupling. I. is a link attached to the tube A by bolt L. which passes through a slot in the link. J. is another link which works in a long slot in I. and when pushed back is held in a horizontal position by the rest K. When drawn forward of K. it falls and hangs perpendicularly as shown in red lines. The spiral spring M around the bolt C. will keep the tube A in its proper position and at the

same time allow a sufficient play to accommodate itself to high or low cars.

In Fig. 2. B is the upper and outside lever which carries the coupling pin. O is the coupling pin attached by one end to the lever B and at the other to the lower lever N. The two levers B. and N. working on joints upon the tube A. and upon joints one at each end of the coupling pin O.

It will be seen that my invention is a revolving apparatus, and presents at once either a link or a bell mouth, at pleasure to suit any other kind of coupling. The springs and slots are so arranged that the largest play of the cars is allowed without any danger of straining or breaking. The link J. may be drawn forward and drop down or shoved back, and turned up and in either case is out of the way when "bunting" another car off the track or on, and at the same time when shoved back will keep in a horizontal position if placed in that manner the whole being cheap and efficient.

I do not claim merely the arrangement for obtaining play in the coupling, nor do I claim coupling by the falling pin or latch, but

What I claim as my invention and desire to secure by Letters Patent is—

The device as herein described by which my couplings revolve so as to present either a bell-mouth or a link and at the same time admit of all necessary play to accommodate the motion of the cars.

JOSEPH BOOTHROYD.

Witnesses:

I. BIGELOW,
THOS. CRUX.