

H. H. MORGAN & A. GERRY.

CAR-COUPLING.

No. 175,618.

Patented April 4, 1876.

FIG. 1.

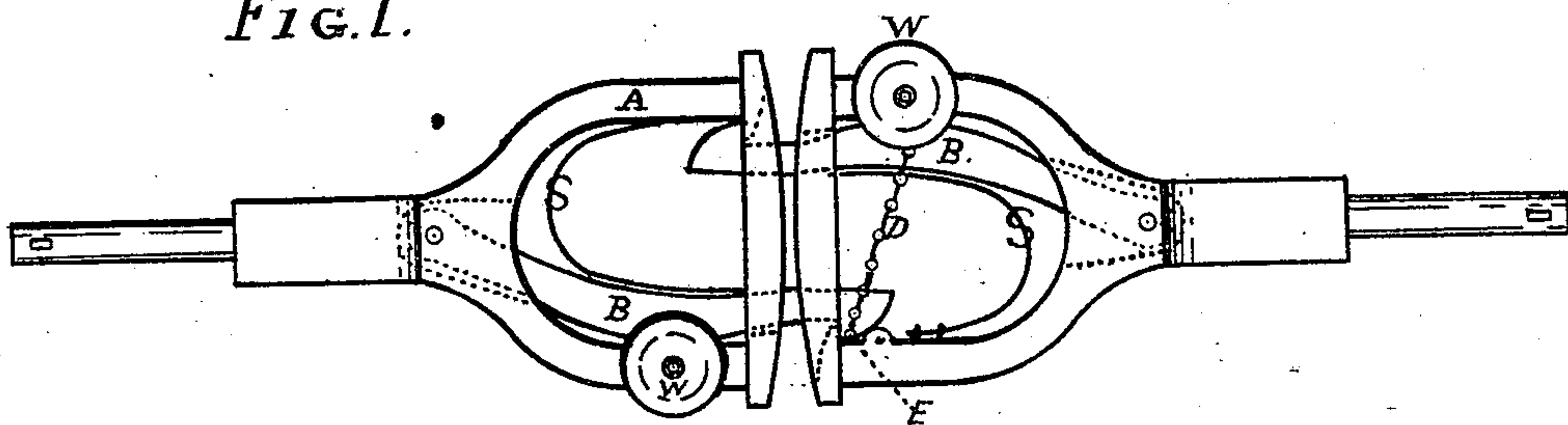


FIG. 2.

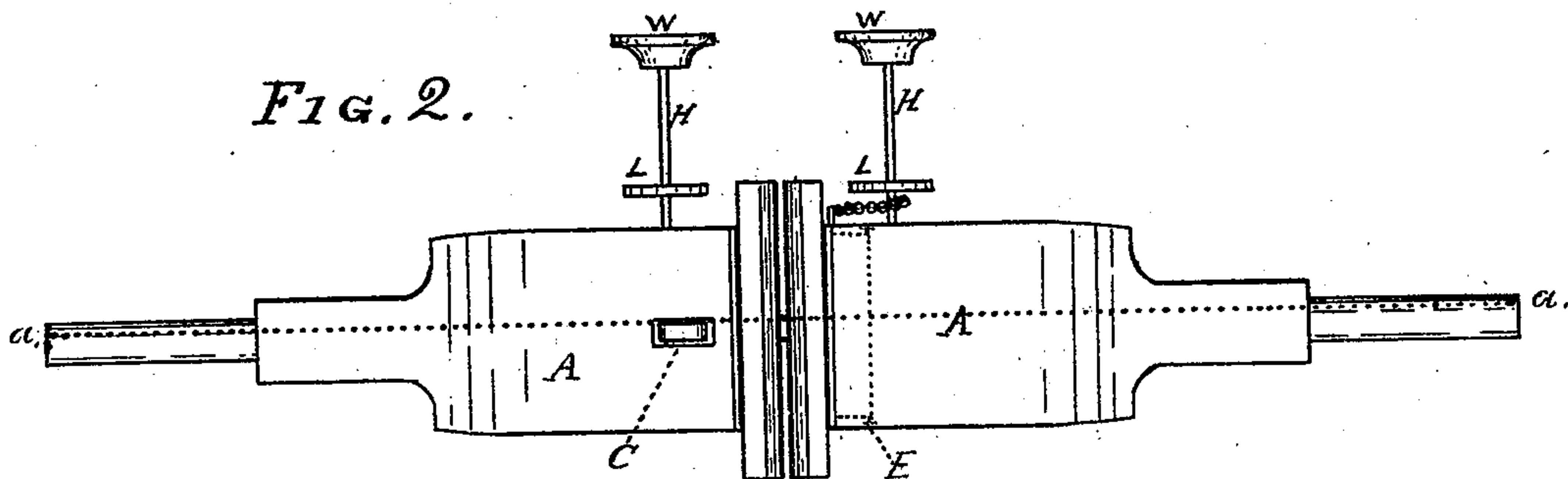
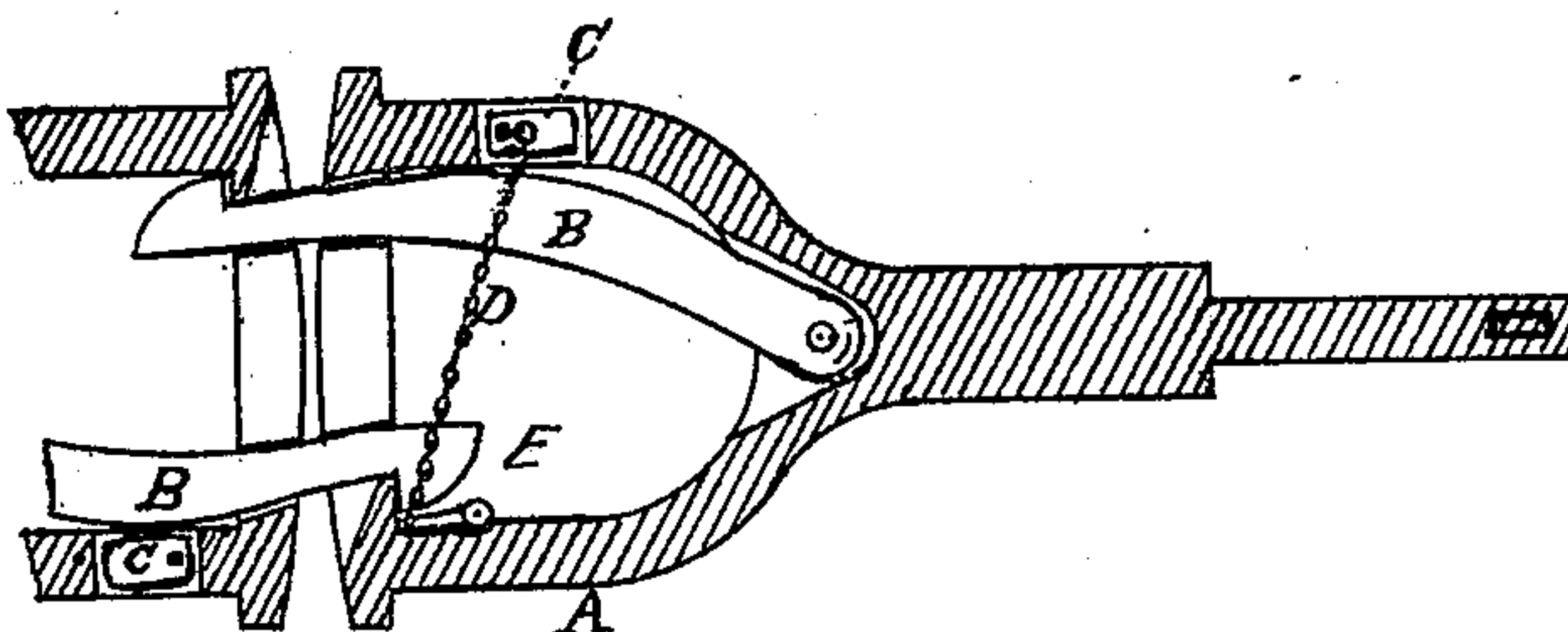


FIG. 3.



Attest,

John H. Redstone
Albert C. Redstone,

Inventors,

Henry H. Morgan
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UNITED STATES PATENT OFFICE.

HENRY H. MORGAN AND ALBERT GERRY, OF OAKLAND, CALIFORNIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **175,618**, dated April 4, 1876; application filed June 3, 1875.

To all whom it may concern:

Be it known that we, HENRY H. MORGAN and ALBERT GERRY, both of Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had to the accompanying drawing.

Figure 1 is a plan view, Fig. 2 is a side elevation, and Fig. 3 is a sectional plan view, showing the construction and general arrangement of the car-coupling.

Our invention relates to that class of car-couplings where hook-levers are employed to operate automatically, and couple the cars as the bumpers come together.

The object of our invention is fourfold. First, it secures the automatic coupling of the cars as they come together; secondly, they are uncoupled by a single operation from one of the platforms or from the side of the car without passing in between the cars; thirdly, they remain uncoupled when switching and backing the cars into the switch; fourthly, the couplings allow the necessary lateral and vertical motion of the cars without any danger of uncoupling.

A shows the frame or body of the coupling. B represents the hook-levers, which hold the bumpers in contact. C represents the cams, which are operated for uncoupling and holding the couplings open. D represents the chain, which connects the rods H with the tripping plates E, to prevent the hook B from catching and holding the cars together.

The following is the operation: The bumpers being coupled together, as shown, the hand-wheel L or W is operated, turning the cam C and raising out the lever B, the flattened end of the cam resting against the lever, which is held in position by the pressure of the spring S. The chain D is attached to the shaft H, to which the cam C is also attached, and is operated by means of the hand-wheels W or L, which, being turned, wind up the

chain D and lift out the outer edge of the plate E until it is even with the projection that catches the hook B, and so they remain connected, whenever the bumpers are brought together, until the cam C is operated and the chain unwound, releasing the plate E, then the hooks B being allowed to fall in behind the projection and lock or couple, as has been shown.

We have used a well-known device for insuring the coupling when the bumpers meet a little out of line—that is, we have made the slot of sufficient height to accommodate the different heights of the bumpers when the two meet; also, the inclined edges designed to allow the levers to strike to one side, and be guided or slide into the center or opening. The end of the hook being also angular or inclined, they unitedly give sufficient lateral motion to insure the dropping of the hook behind the jaw projection. The hooks are operated by the spring S. The attachment of the bumper to the frame of the car may be similar to that of the ordinary bumper, and may replace the same, and be attached in the usual way.

The advantages of this coupling are its simplicity and cheapness of construction, and its perfect adaptation to all the requirements of an automatic car-coupler.

In case the chain D and plate E are not used, the cams would have to be operated separately upon each platform.

What we claim, and desire to secure by Letters Patent, is—

The tripping-plate E, in combination with the cam C, when operated by means of the hand-wheel W or L and chain D, in the manner and for the purposes set forth.

HENRY H. MORGAN.
ALBERT GERRY.

Witnesses:

JOHN H. REDSTONE,
ALBERT E. REDSTONE.