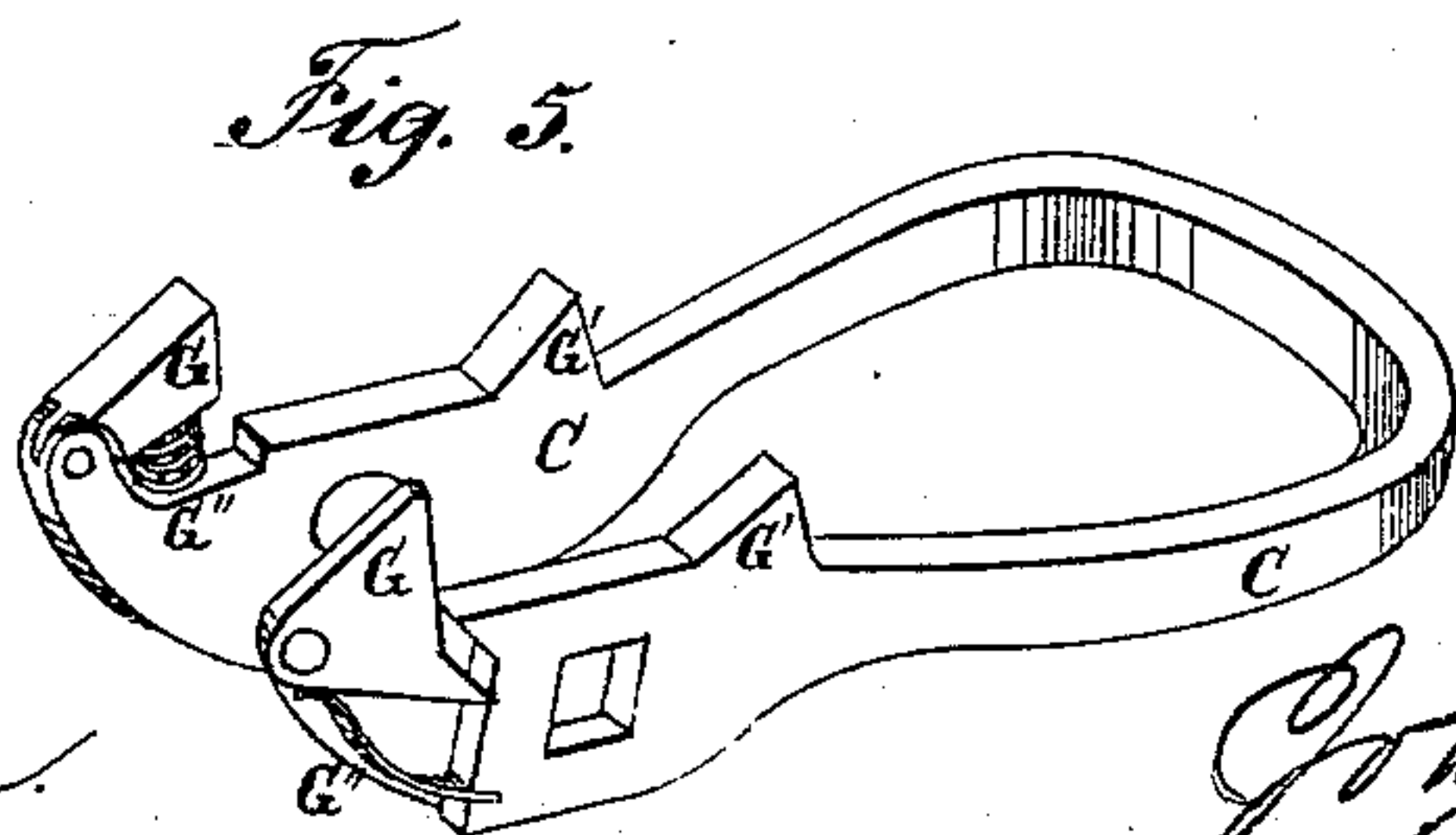
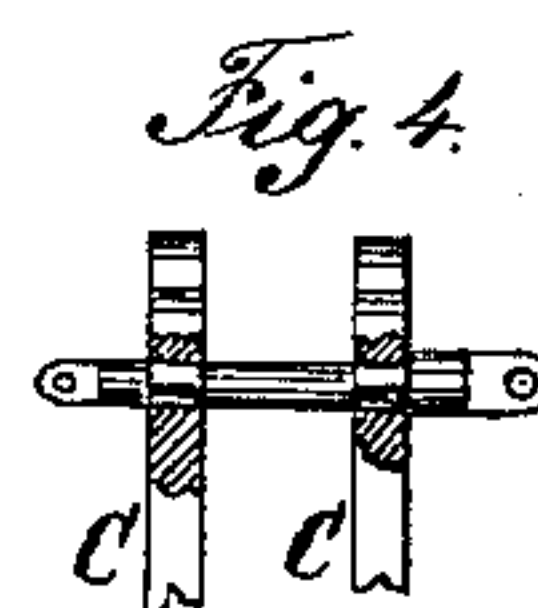
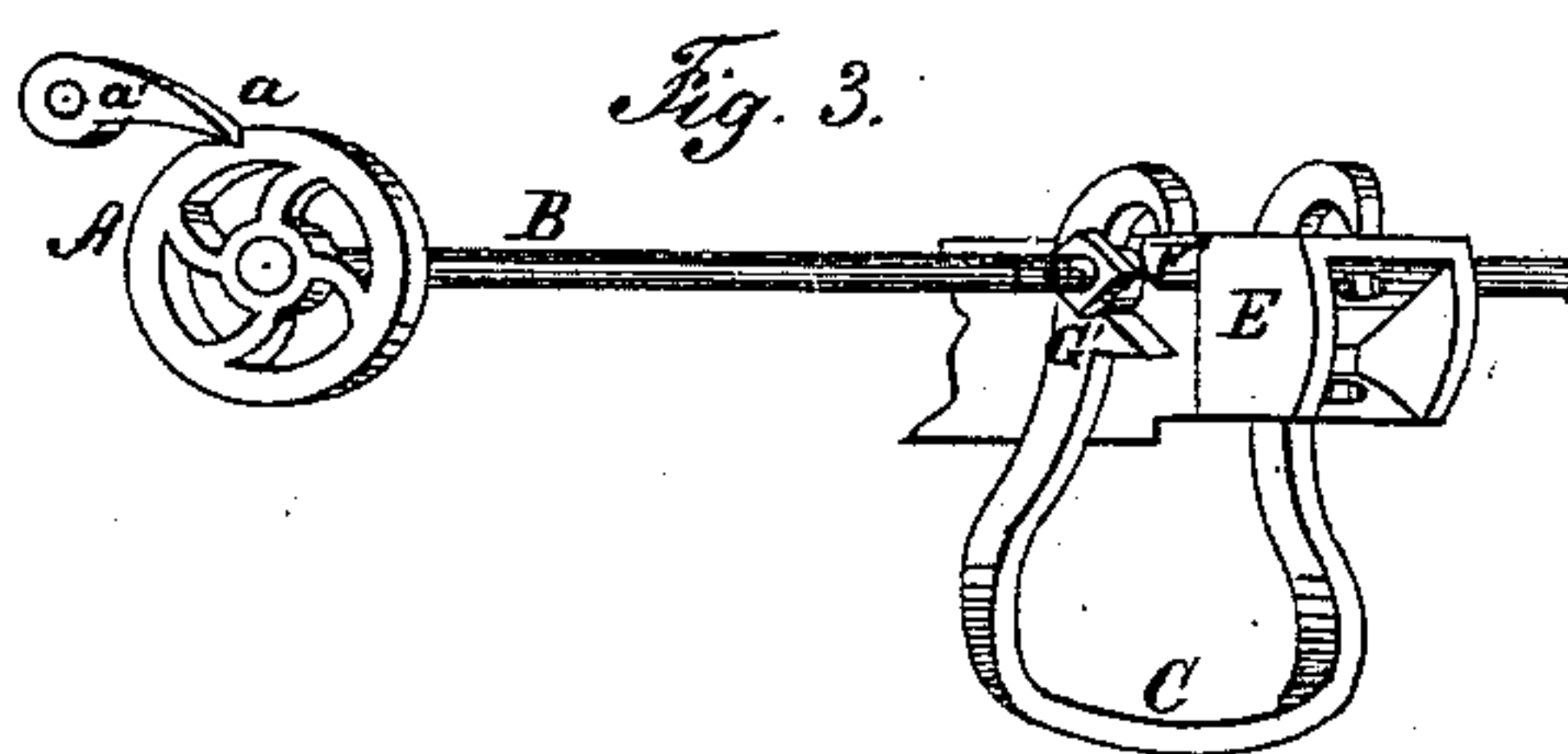
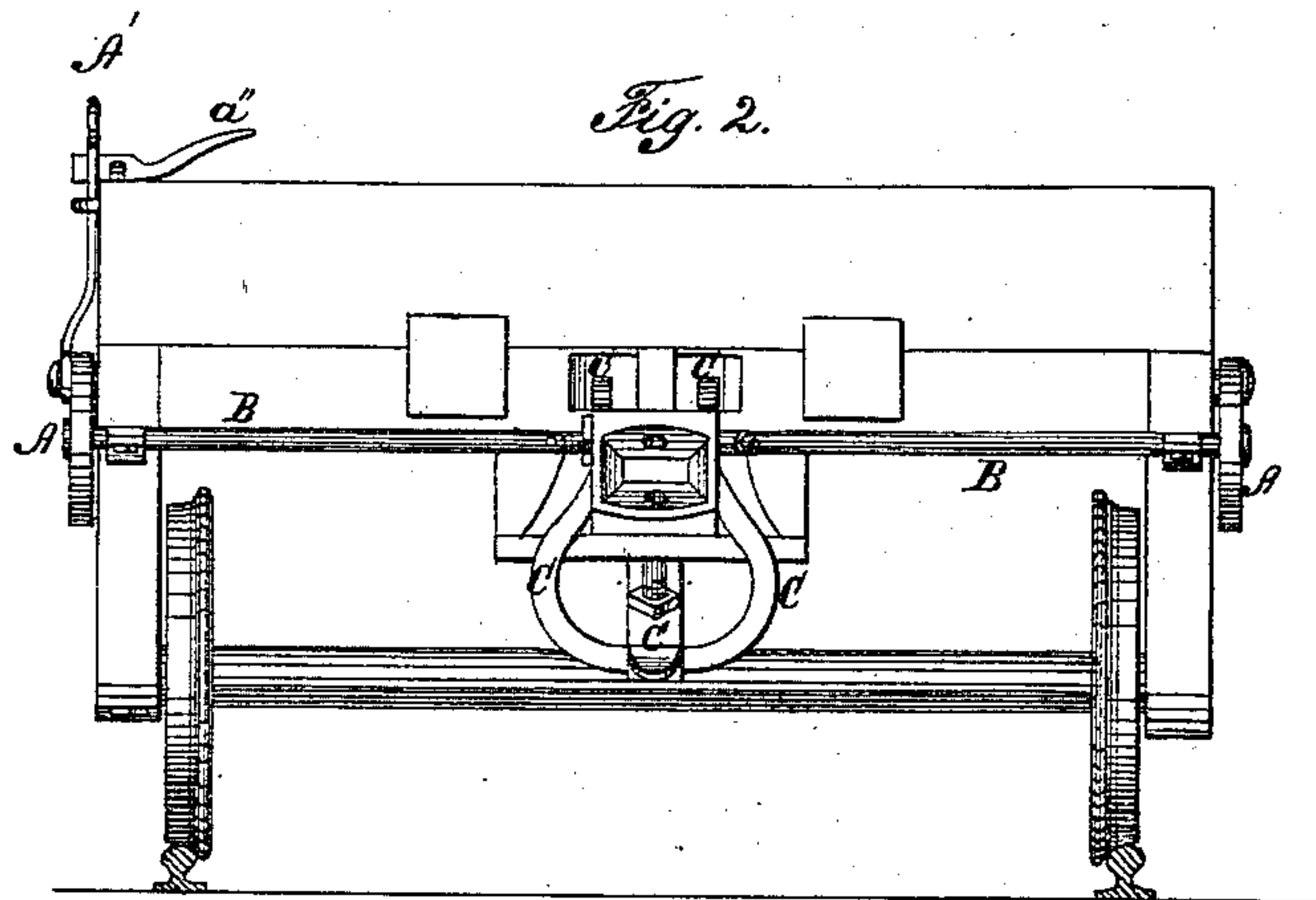
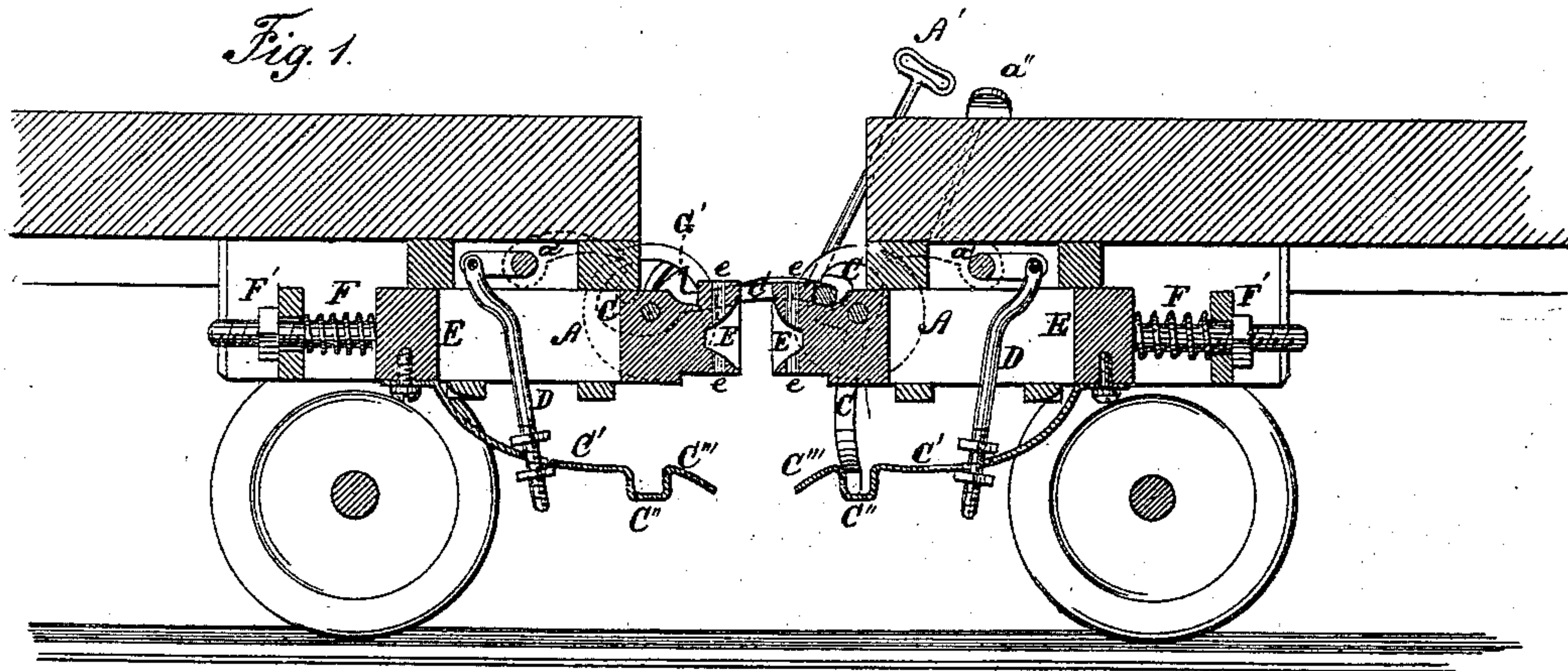


JOHN DINSMORE.

Improvement in Car-Couplings.

No. 126,136.

Patented April 30, 1872.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN DINSMORE, OF DINSMORE STATION, PENNSYLVANIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO JOSHUA LEE, OF NEW LISBON, OHIO.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 126,136, dated April 30, 1872.

### SPECIFICATION.

Be it known that I, JOHN DINSMORE, of Dinsmore Station, county of Washington, State of Pennsylvania, have invented a new and Improved Automatic Car-Coupler; and I hereby declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing which forms a part of this specification.

My invention relates to the forming of a car-coupler which will fasten or couple automatically when pushed against another car, and form a secure and safe attachment.

In the drawing, Figure 1 is a sectional view, by plan, through the center of the cars longitudinally, in which E E are the iron headers. C C are links which drop over the upper projection of either header. A A are wheels, to which the bar B, (Fig. 2,) is attached, and to which the link C is rigidly fastened. A' is lever for turning the wheels B. a' is a pawl, which sets into a ratchet on the wheel B. a'' is a step-lever, which raises the pawl a', presses down the rod D and spring C', and releases the link C from the recess C''. The other car should show a similar arrangement of levers, A' and a''. F F are elasticity springs. F' F' are nuts. e e are pin-holes. C''' C''' are beveled so that a link, C, not in use would slip into the recess C''.

Fig. 2 is an end view of the car, in which similar letters represent similar parts.

Fig. 3 is separate view of wheel A, rod B, link C, and rabbet F'', behind the end of the header F.

Fig. 4 is a view of the rod upon which the link is directly attached.

Fig. 5 is a view of the link, showing spring-hooks G G and springs G'' G''.

My invention consists as follows: To wheels A A, which set against the outside of the car at the end, I attach a rod, B, shown in Fig. 2, and at the middle of this rod I attach a link, as shown in Figs. 3 or 5, rigidly, so that it will be movable only as the rod B is turned by the wheel A. To the wheel A I attach a rod, A',

which projects to the top of the car, and is there retained by passing through an eye attached to the car. A foot-lever, a'', is attached to the car beside the rod A', so that by pressing with the foot on the lever a'' the pawl a', (which sets into a ratchet on the periphery of the wheel A,) will be raised, and, at the same time, the link C will be disengaged from the recess C'' in the spring C' beneath, through the action of the rod D. The link can now be raised by pulling up the lever A' until the link stands erect against the end of the car, leaning slightly back to prevent its toppling over. It is now set ready to be pushed against another car. This supposes the link on the other car to be hanging down, as shown at the right in Fig. 1, and its hooked end covering the rabbet F'', as shown in Fig. 3. When the cars are brought together, the link C, which is nearly poised, will fall over into the rabbet F'', pushing back the link-hook which covers the latter, which flies into position again as soon as the link is in its place, and locks the opening again until raised by the levers A' a''. The link may be made so that these hooks at its end may be swung back, instead of moving the whole link. This device is shown in Fig. 5 by two different arrangements of springs. Others may be used. The iron headers are so formed as to carry a link, if necessary, that it may be fastened in the usual manner to a car not provided with this improvement by means of coupling-pins. e e are holes for inserting these pins when required.

There are projections G' G' shown in Figs. 3 and 5, and at the left in Fig. 1, which, should the other link be in use, throws it out of its rabbet when it is desired to uncouple the cars.

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

1. The links C C, provided with hooks G' G' and G G, headers E with rabbet F'', when the same are constructed and operate in combination, as set forth.

2. The combination of wheels A A, rod B B, pawl a', levers A' and a'', link C, rod D, spring C', recess C'', and bevel C''', when the

same are constructed and arranged and operate substantially as set forth and shown.

3. The link C, provided with stationary or spring-hooks or latches G G and projections G' G', when constructed as and for the purposes set forth.

4. The coupler, composed of the parts set

forth in the preceding claims, when the same are made to work in combination, substantially as set forth and shown.

JOHN DINSMORE.

Witnesses:

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