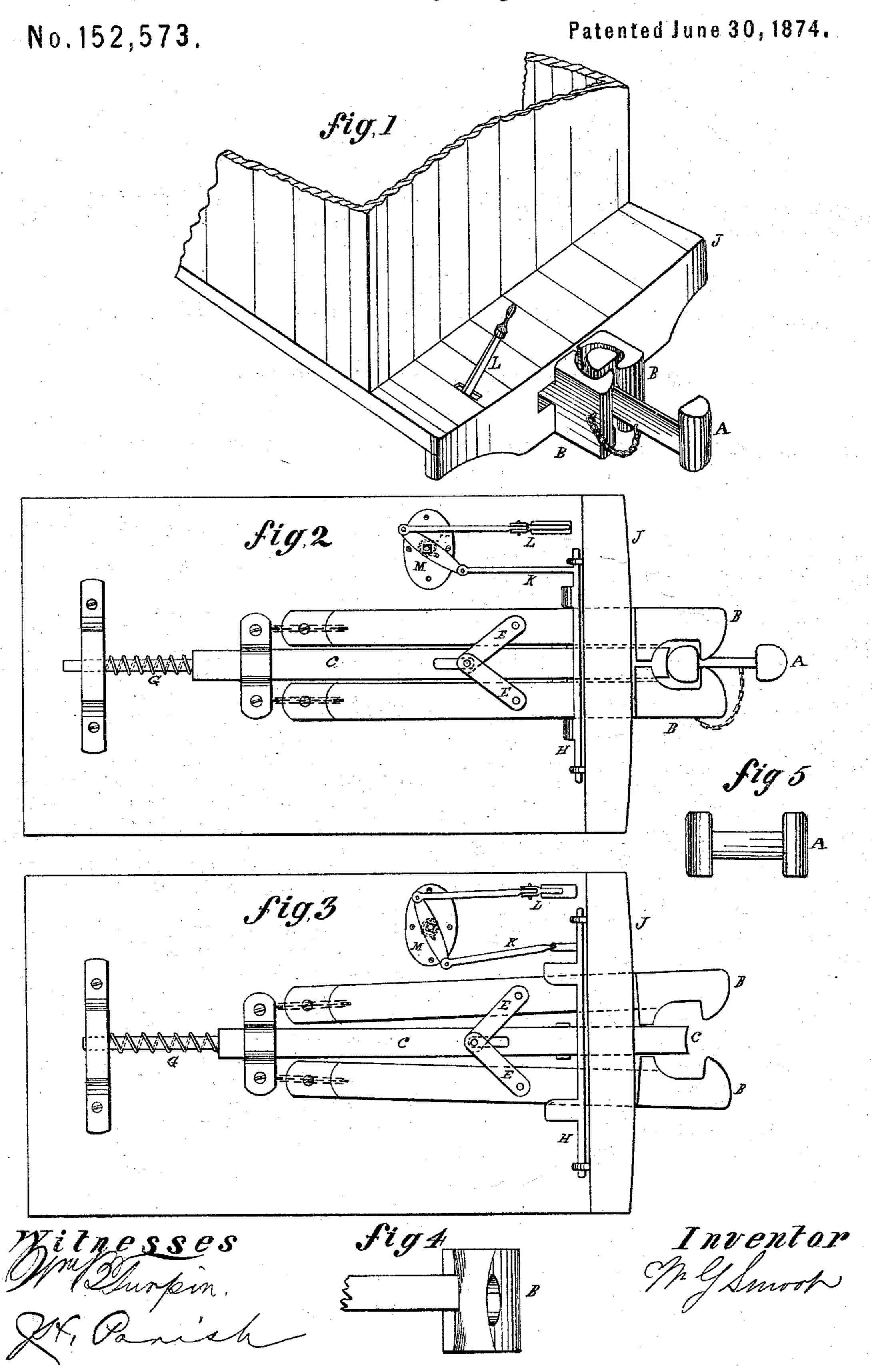
W. G. SMOOT. Car-Couplings.



United States Patent Office.

WILLIAM G. SMOOT, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 152,573, dated June 30, 1874; application filed May 14, 1874.

To all whom it may concern:

Be it known that I, WILLIAM G. SMOOT, of the city of Washington, District of Columbia, have invented new and useful Improvements in Self-Acting Car-Couplings; and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a front view of the jaws as attached to and operating in front of the platform of the car. Fig. 2 represents a view of the car-coupling with the jaws closed. Fig. 3 represents a view of the car-coupling with the jaws open ready for coupling. Fig. 4 is a detail of one of the jaws. Fig. 5 shows the shape of the double-headed connecting-link.

My invention relates to that class of couplings which are automatic in their operation; and consists in the construction and combination of devices, bereinafter described.

A represents the coupling link; B B, the jaws, and C the coupling tongue, which is forced forward by a spring, G. This tongue passes between the jaws B B, and is connected to them by means of toggle-arms E E. H represents a clamp for holding the jaws together after the link has entered. This clamp is operated by a spring which is under control of

the brakeman. The jaws are recessed in front, as seen in Fig. 4, so as to clasp the shank of the link loosely, and prevent its falling from between the jaws.

When the jaws are in the position shown in Fig. 3, on its entrance the link will drive the tongue backward until the jaws are drawn together by the toggle-arms E E, when the spring-lever M will throw the clamp over the jaws to hold them together. To uncouple, the lever L is drawn back, revolving the lever M and raising the clamp. As soon as the jaws are freed from the clamp the spring G forces the tongue out until they are pressed apart.

It will be perceived that, while the cars are coupled, the slot in the tongue, with the head C thereof, will always bear against the head of the link, and take up the slack.

of the link, and take up the slack.

I claim—

1. The combination of the jaws B B, tongue C, spring G, and toggle-arms E E, as and for the purposes set forth.

2. The combination of the jaws BB, tongue C, clamp H, and levers L and M, as and for the purpose set forth.

WILLIAM G. SMOOT.

Witnesses:

J. FRANKLIN REIGART, Jos. T. K. PLANT.