

(No Model.)

I. N. ROBERTSON.
CAR COUPLING.

No. 584,706.

Patented June 15, 1897.

Fig. 1.

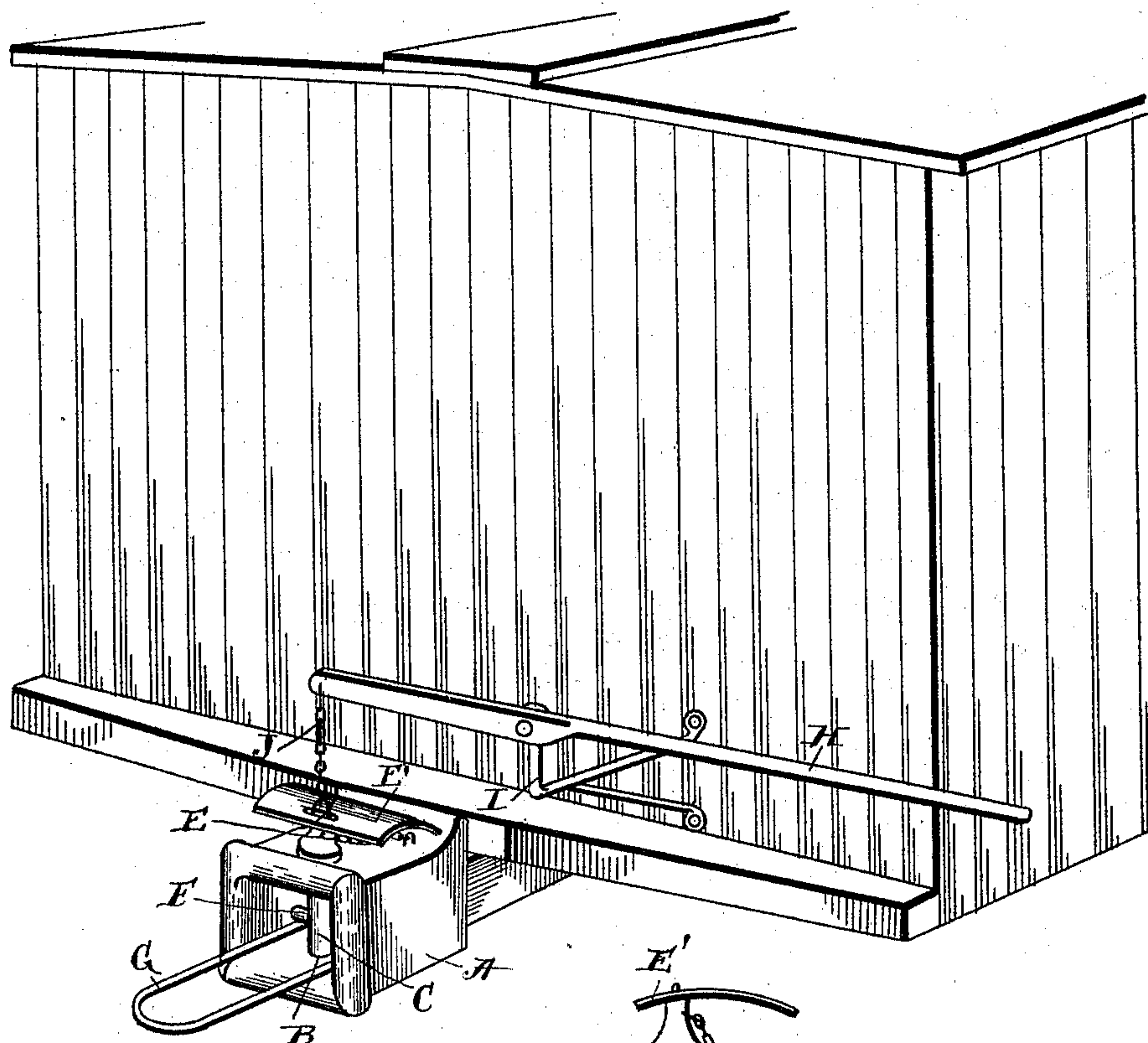


Fig. 2.

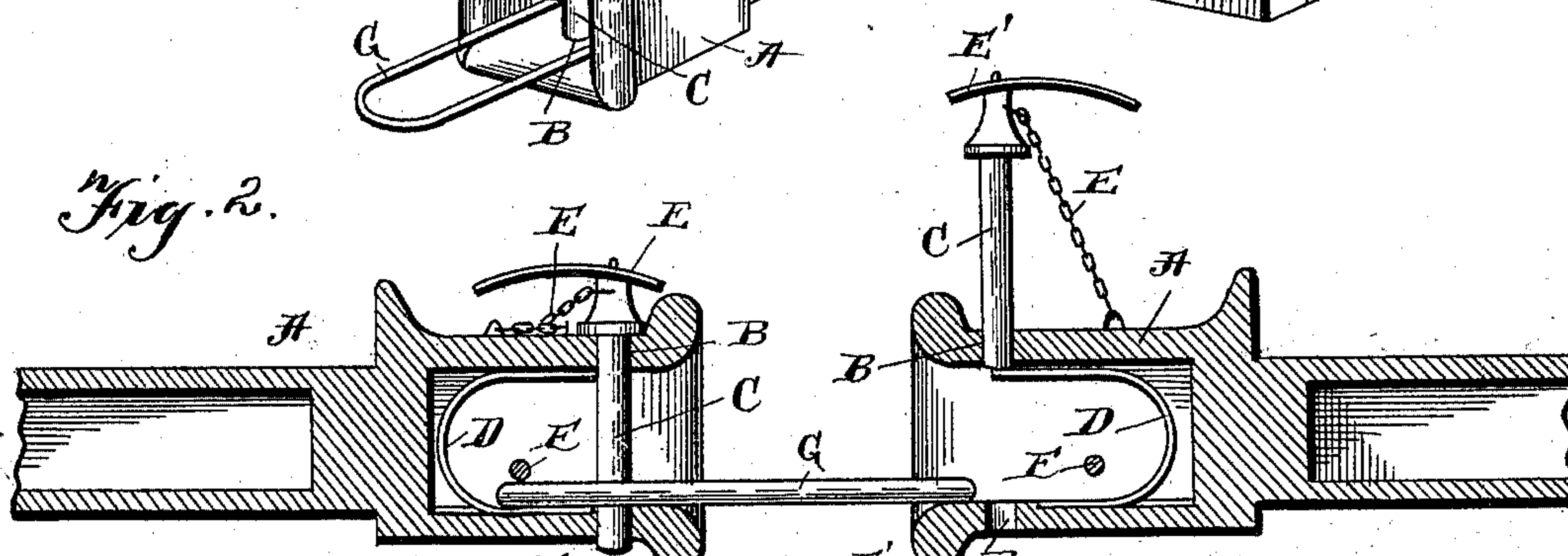
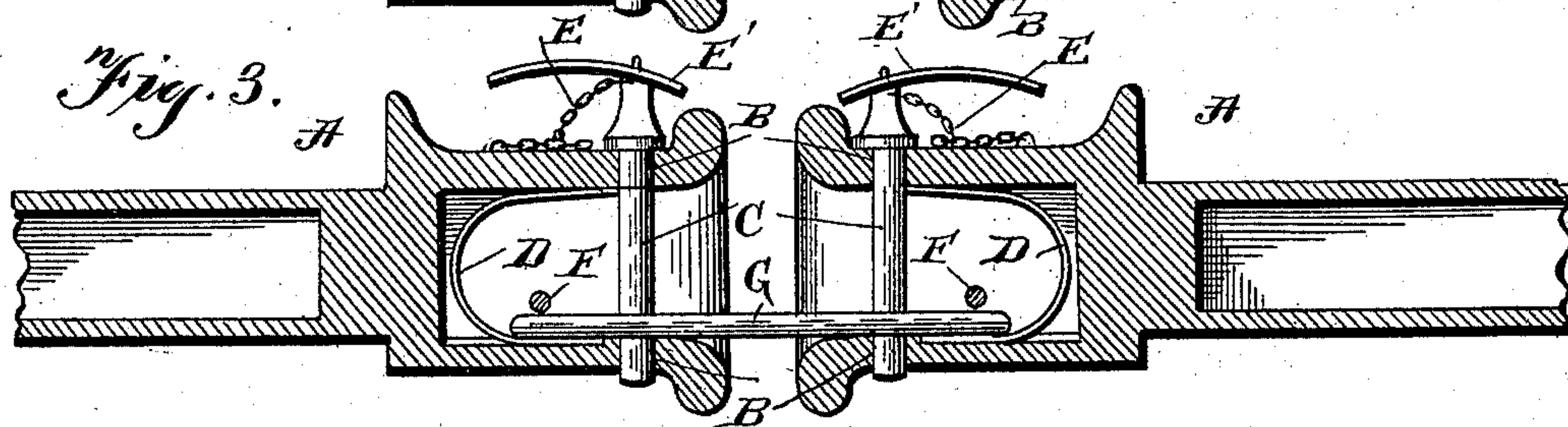


Fig. 3.



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UNITED STATES PATENT OFFICE.

ISAAC N. ROBERTSON, OF FAIRFIELD, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 584,706, dated June 15, 1897.

Application filed January 6, 1897. Serial No. 618,213. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. ROBERTSON, of Fairfield, in the county of Freestone and State of Texas, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

This invention pertains to car-couplings; and the object is to provide an improved automatically-tripped pin-supporting mechanism, and also to provide an improved device for holding the link in proper position for coupling, whereby the couplers of adjoining cars may be arranged to interlock automatically before coming together, thus avoiding the extreme danger incident to coupling cars as now generally practiced.

The invention consists in the novel features of construction hereinafter fully described and claimed, and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of my improved coupler in position upon a car, only a portion of the latter being shown. Fig. 2 is a vertical longitudinal sectional view of the couplers in position for automatically coupling. Fig. 3 is a similar view of the united couplers.

A designates the draw-head, recessed backward from its front end and formed with vertical passage B through the top and bottom walls to accommodate coupling-pin C. A rearwardly-bowed spring D is arranged in the draw-head cavity, being suitably secured on its lower end to the cavity-bottom, while its upper end is free and adapted to normally extend across pin-passage B, thereby serving to hold the pin in an elevated or raised position, as indicated in Fig. 2. Chain E, secured at one end to the draw-head and at its opposite end to the upper extremity of the pin, is of sufficient length to permit the pin to be raised to the position indicated in Fig. 2, but will not permit the entire withdrawal of the pin from the draw-head. For protecting chain E from sleet and snow, which might otherwise accumulate thereon and retard the movement of the pin C, I provide the slightly-

curved shield E', the same being secured at the end of the pin, as shown. Each draw-head is provided with a transverse rod F, arranged slightly above the cavity-bottom and between the pin-passage and the bowed-pin support, and is adapted to hold coupling-link G in horizontal position by being inserted thereunder and in proper adjustment for entering the adjacent draw-head.

For the coupling operation the draw-heads are arranged as indicated in Fig. 2, the coupling-pin being lowered in one of the heads and the link carried by said head with its rear end beneath the transverse rod, which holds it in proper horizontal position. In the other draw-head the pin is elevated and retained in its elevated position by the bowed spring. When the draw-heads join in the coupling operation, the link enters the draw-head carrying the elevated pin and moves backward therein to engagement with the bowed-spring holder, which is pressed backward, as will be understood, thus removing the support from the coupling-pin and permitting the same to drop through the link, the draw-heads being then joined, as indicated in Fig. 3. The lever H extends outward from the car end, being fulcrumed between its ends to a suitable bracket I and connected at its inner end by short chain J to the top of the pin, so that the pin may be raised for uncoupling the cars without the necessity of going therebetween. It will also be observed that all necessity of going between the cars is avoided, as the link is held in proper horizontal position. When the pin is raised by the operating-lever just described, or directly by hand when desired, the bowed-spring holder projects into its path, and thus an automatic support for the pin in its raised position is provided.

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

1. An improved car-coupling, consisting of a recessed draw-head having a vertical pin-passage, a substantially U-shaped backwardly-pressible spring arranged in vertical position in the draw-head with the spring extremities extending toward the front of the head, the upper extremity being arranged in advance of the lower extremity and extend-

ing normally across the line of the pin-passage, the shorter lower extremity of the spring stopping short of the line of the pin-passage and secured to the draw-head bottom, 5 the pin adapted to be held in raised position by the spring, and the link adapted to enter the draw-head and engage and move backward the spring and permit the pin to drop through the link, substantially as shown and 10 described.

2. The combination of the recessed draw-head formed with a vertical pin-passage, the pin adapted to move therein, the chain connected at one end to the draw-head and at its 15 opposite end to the pin for limiting the vertical movement of the pin, the backwardly-

bowed spring secured at its lower end to the bottom of the draw-head cavity and free at its upper end to normally extend across the path of the pin so as to hold the latter in an elevated position, and the link adapted to engage the bowed spring and move it backward so as to release the pin, and the transversely-arranged link-holding rod, substantially as shown and described. 2

In testimony whereof I affix my signature in presence of two witnesses.

ISAAC N. ROBERTSON.

Witnesses:

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