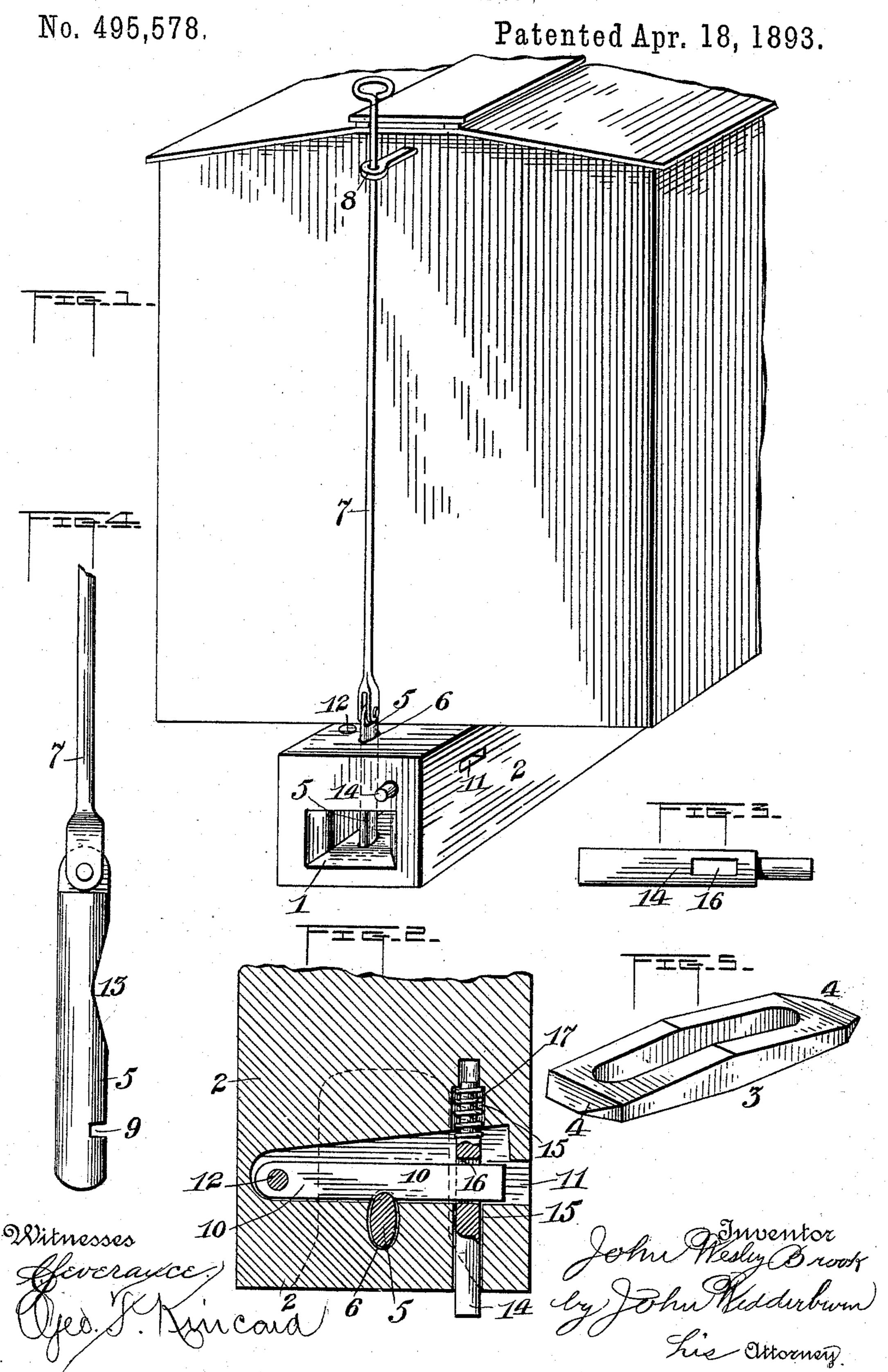
J. W. BROOK.
CAR COUPLING.



United States Patent Office.

JOHN WESLEY BROOK, OF TWIN BRIDGES, MONTANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 495,578, dated April 18, 1893.

Application filed July 19, 1892. Serial No. 440,467. (No model.)

To all whom it may concern:

Be it known that I, John Wesley Brook, of Twin Bridges, in the county of Madison and State of Montana, 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 appertains to make and use the same.

My invention relates to the class of carcouplings commonly known as link and pin
couplings, the object of my invention being
to produce a car-coupling which shall be simple in construction and operation, and automatic in its action, and my invention more
especially resides in the novel construction,
combination and arrangement of parts hereinafter fully set forth and pointed out in the
claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved car-coupling in position at the end of the car. Fig. 2 is a horizontal section of the drawhead. Fig. 2 3 is a side elevation of the trigger. Fig. 4 is a similar view of the pin and its connection with the lifting bar, and Fig. 5 is a detail perspective view of the link.

The mouth 1 of the drawhead 2 is made 30 with beveled sides to receive and guide the link 3, which tapers in width and thickness toward both ends, and has beveled ends 4 to guide the same with greater certainty into the mouth of the drawhead. The pin 5 is of an 35 oval or oblong shape in cross-section, and slides vertically in a correspondingly shaped aperture 6 in the drawhead, and is pivotally suspended at the end of a rod 7 sliding in eyes 8 on the car and reaching to the top of 40 the car. The pin 5 is provided on its rear side toward the lower end with a notch 9 in which engages a trigger 10 which is inserted into the drawhead through the aperture 11 in the side of the same, and is pivoted on a vertical pivot 45 pin 12, in the opposite side of the drawhead. The trigger rests against the pin when the latter is in its locking position at a point 13 where the rear side of the pin is concaved for that purpose. The trigger 10, when in en-50 gagement with the notch 9, holds the pin in position ready to drop into the link 3 when it I

enters the drawhead, and thus couple the cars. The trigger is automatically disengaged from the notch, and the pin allowed to drop into the link, by the contact and pressure of the 55 bumper of the other car upon the projecting end of the needle or push-pin 14, which slides in a cylindrical bearing 15, and is slotted at 16 to fit snugly upon and carry with it the trigger 10. A compressed spiral spring 17 is 60 provided at the rear end of the needle, which, when the pressure upon the end of the needle is removed, carries the needle forward, and with it the trigger, until it contacts with the rear edge of the coupling pin at the point 13, 65 and, when the coupling pin is raised, by a brakeman operating at the top of the car, out of locking engagement with the link, the spring 17 presses the trigger into engagement with the notch 9 as it rises to the level of the 70 trigger, retaining the pin in its position of disengagement.

a perspective view of my improved car-coupling in position at the end of the car. Fig. 2 what I claim, and desire to secure by Letters is a horizontal section of the drawhead. Fig. | Patent, is—

1. In a car coupling, the combination of a drawhead a coupling pin sliding vertically in the drawhead, said pin having a notch 9 at or near its lower extremity and a concave recess 13 above said notch, plate 10 pivoted in said 30 drawhead and passing through a slot in the rod 14 said rod having a coiled spring 17 encircling one of its ends substantially as and for the purpose set forth.

2. In a car coupling, the combination of a 85 drawhead a coupling pin sliding vertically in the drawhead, said pin having a notch 9 at or near its lower extremity and a concave recess 13 above said notch, plate 10 pivoted in said drawhead and passing through a slot in the 90 rod 14 said rod having a coiled spring 17 encircling one of its ends and a double wedge shaped loop 3 having beveled ends 4 substantially as and for the purpose set forth.

In testimony whereof I have signed this 95 specification in the presence of two subscribing witnesses.

JOHN WESLEY BROOK.

Witnesses:

FRED. A. MERCER, EUCLID L. HICKMAN.