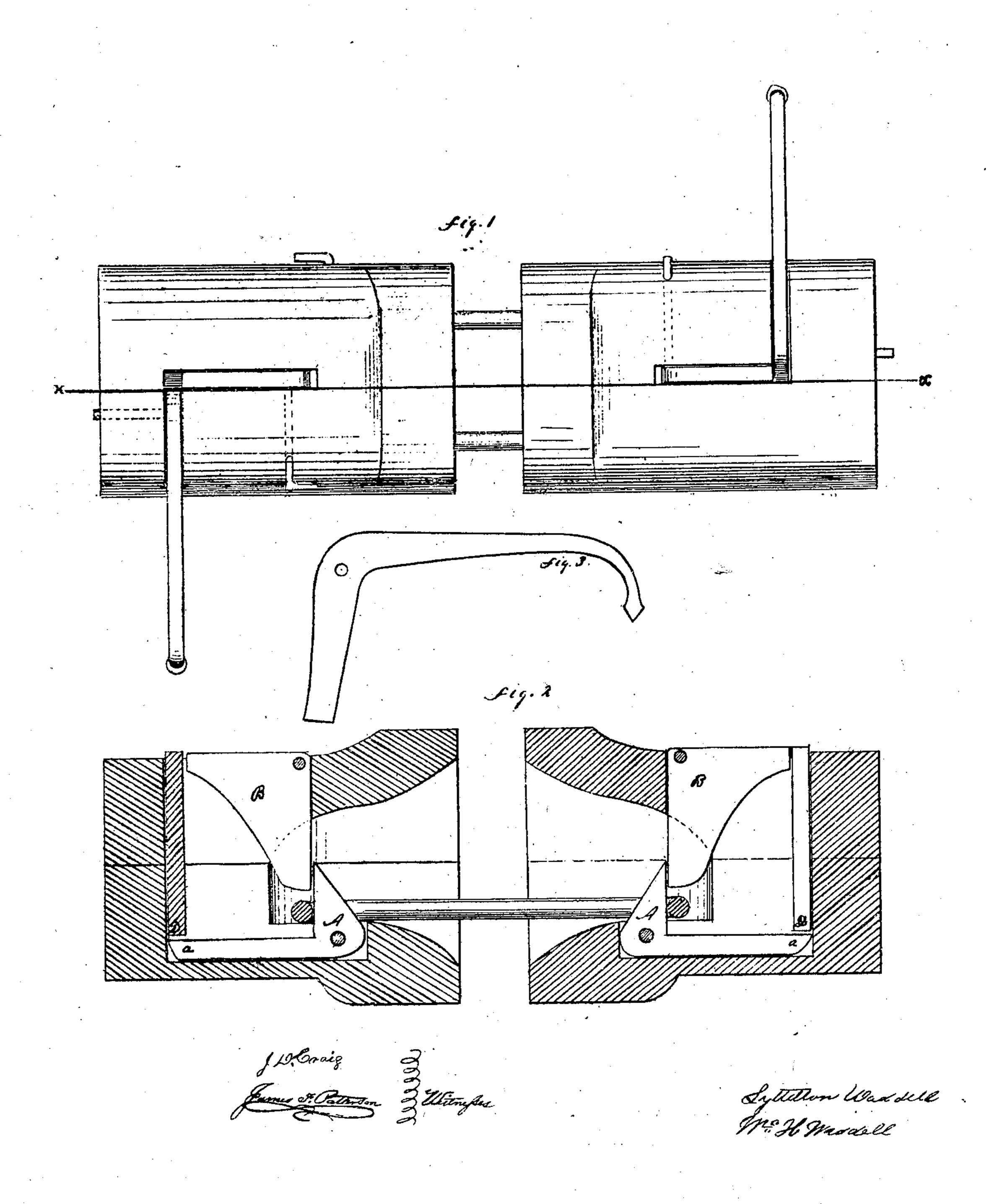
## L's M.H. Maddell, Car Coupling. 7. 28,620. Fatented Sunc. 5. 1860.



## UNITED STATES PATENT OFFICE.

L. WADDELL AND W. H. WADDELL, OF STAUNTON, VIRGINIA.

CAR-COUPLING.

Specification of Letters Patent No. 28,620, dated June 5, 1860.

To all whom it may concern:

Be it known that we, L. Waddell and W. H. Waddell, of Staunton, in the county of Augusta and State of Virginia, have in-5 vented a new and Improved Mode of Coupling and Detaching Railroad-Cars; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings 10 and to the letters of reference marked thereon.

Figure 1 is a top view of a cast-iron "buffer"-head, with a bell-mouth opening for the reception of the link. Fig. 2 is a 15 sectional view through the vertical line x x.

A a is a latch which is fitted in a groove in the bottom of, and moves upon a bolt running through the "buffer"-head.

B, is a swinging plate which yields and 20 admits the link when the cars come together.

Fig. 3 represents a lever, one arm of which rests upon the top as shown in Fig. 1, and the other immediately above, and nearly contiguous to, the bar of the latch at the point

25 marked a as shown in Fig. 2.

When the cars are to be coupled, the link, which is held in proper position by the swinging plate, will invariably enter the bell-mouth on the opposite side, when there 30 is not too great difference in the height of cars, and in that event the link may be elevated or lowered by the lengthening or shortening of the plate. Entering the bellmouth, the link passes over the latch, and 35 when over cannot escape, the plate being so

arranged that it cannot be pushed up by the link, while its own weight prevents it from moving by any jostling of the cars. When the cars are in motion the arm of the lever at the point D comes in contact with the 40 end of the latch-bar at the point a, and the greater the strain the more securely are the cars coupled. To detach the cars, the lever is raised, which throws the point D off the bar of the latch, which being relieved per- 45 mits the latch to move until it is sufficiently inclined for the link to pass over easily and detach the cars.

We do not claim the swinging plate for the purpose of admitting the link, that being 50 somewhat the principle both of the swinging pin and tumbler catch, which are common. Nor do we claim it for the purpose of preventing the escape of the link, but only so far as it may be a novelty as a device for hold- 55 ing the link in such a position as to insure certainty in coupling. We do not claim the peculiar shape of the "buffer"-head.

What we claim as new in this invention and desire to secure by Letters Patent is— 60

The combination of the lever and latch in the manner described, with especial reference to the security of the coupling and the easy detachment of cars when in motion and even going up grade.

LYTTELTON WADDELL. WM. H. WADDELL.

Witnesses:

J. D. CRAIG, JAMES F. PATTERSON.