(No Model.)

W. J. McLEAN.

CAR COUPLING.

No. 277,915. Patented May 22, 1883.

Fig. 1.

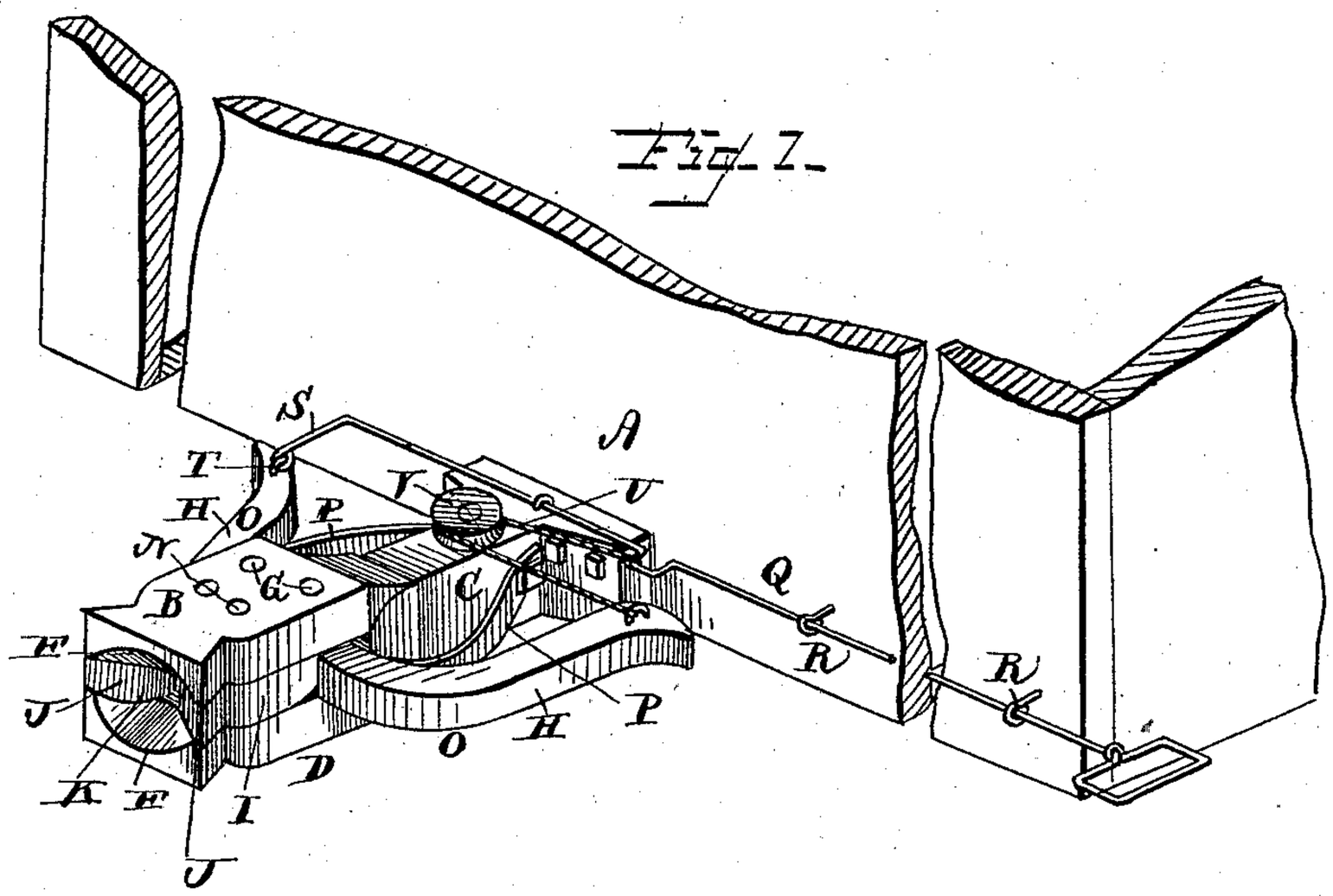


Fig. 2.

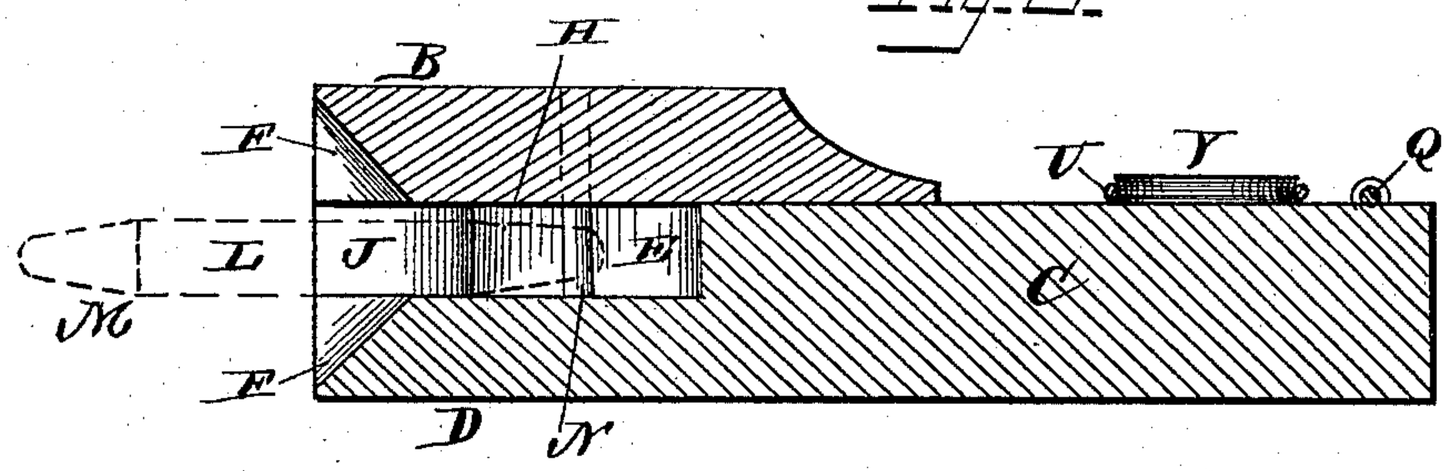
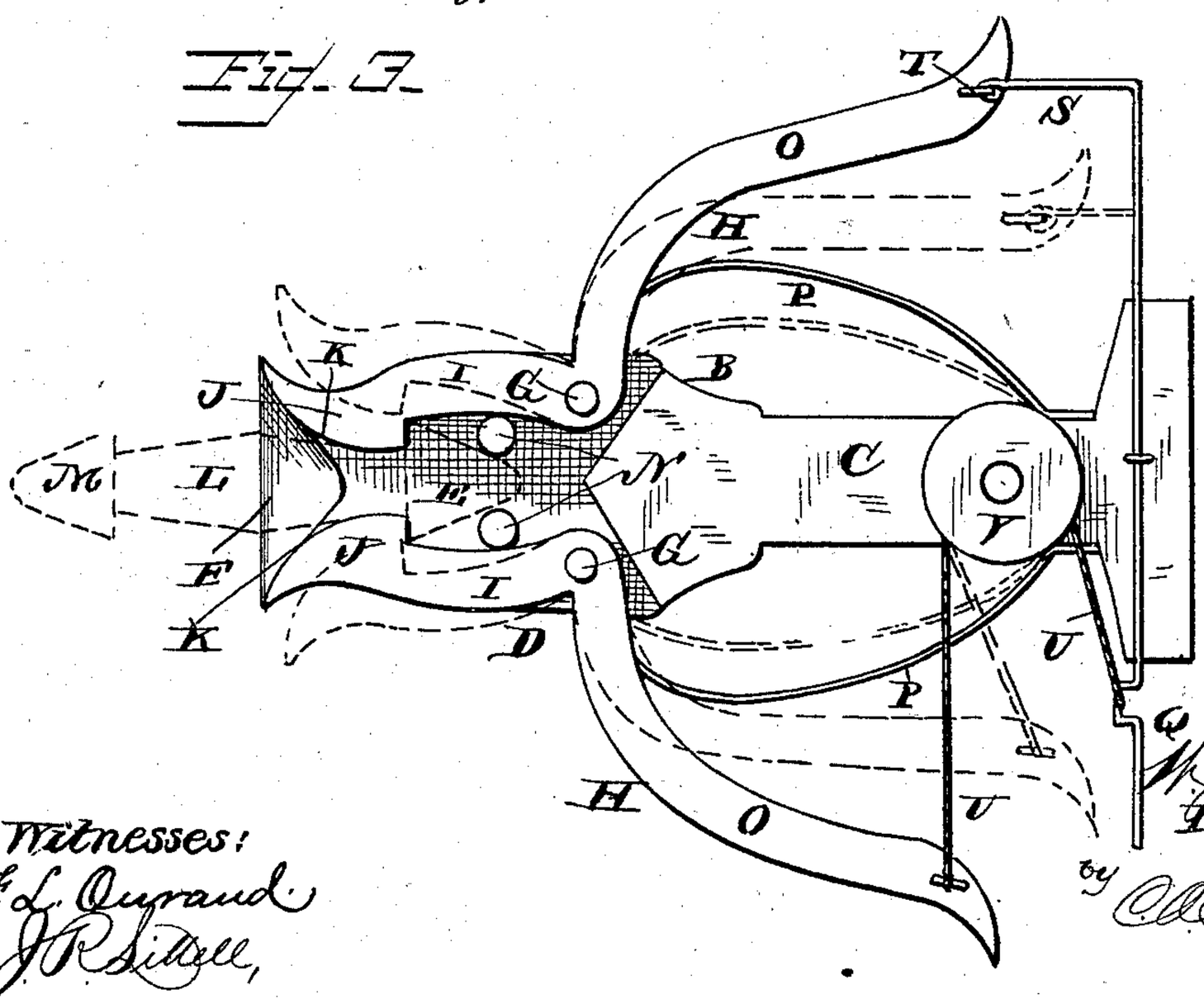


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM J. McLEAN, OF JACKSON, LOUISIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 277,915, dated May 22, 1883.

Application filed March 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, W. JAMES MCLEAN, a citizen of the United States, residing at Jackson, in the parish of East Feliciana and State of Louisiana, have invented a new and useful Automatic Car-Coupling, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to car-couplings of that class which have spring-actuated arms to clasp the head of the coupling-bar by which an automatic coupling is effected, and the cars can be uncoupled without going between the same.

The invention has for its object to provide a coupling possessing superior advantages in point of convenience, inexpensiveness, and general efficiency.

In the drawings, Figure 1 is a perspective view of the end of a car equipped with my improved coupling. Fig. 2 is a vertical longitudinal sectional view of the coupling. Fig. 3 is a top view of the same, the cap-plate of the draw-head being removed.

Referring to the drawings, A designates the end of the car, and B is the draw-head, which latter comprises a stem, C, by which it is secured in position, and a head portion, D. In the head portion D is formed a transverse slot or recess, E, preferably extending to the front of the portion D, where the latter is beveled above and below the said slot, as shown at F, to form the mouth of the draw-head. In the slot E are fulcrumed on vertical pins G G two arms, H H, one being arranged at each side the draw-head. The portion I of these arms that is accommodated in the slot E has a hook-shaped head, J, that is beveled, as shown at K, to admit of the easy entrance of the coupling-bar L, which latter is formed with arrow-heads M M at its ends, that are clasped by the hooks J J and retained in the draw-head. When the cars are of varying heights, a bent coupling-bar is to be used, and in case one of the cars should jump the track or fall over an embankment, the said bar will readily force the arm out against the tension of its actuating-spring and become automatically uncoupled. Vertical pins N N are arranged inside the slot E, forward of the fulcrum of the arms H H and between the latter, which pins serve to limit the entrance of the coupling-bar into the draw-head, and also to limit the inward movement of the said arms H H. The portion O of the arms that projects from the draw-head is curved outwardly and rearwardly, as shown, and forwardly-projecting flat springs P P, that are secured to the stem of the draw-head, engage the said arms to force their hook-shaped heads together.

Q is an uncoupling-lever, that is arranged to slide in eyes R on the end of the car, and is provided with a right-angular extension, S, which is pivotally connected to the rear end of one of the arms H, as shown at T. From the end of the other arm extends a chain or rope, U, passing around a pulley, V, journaled on the stem C and connected to the lever or rod Q, so that the latter will simultaneously draw the rear ends of the arms together to uncouple.

I claim as my invention—

As an improvement in car-couplings, the combination of the draw-head, comprising the stem portion C and head portion D, in which latter is formed the transverse slot E, the arms H H, each having a portion, I, that is accommodated in the slot E, and provided with the hook-head J, and the portion O, projecting from the fulcrum of the arm in the slot out from the side of the draw-head and curved outwardly and rearwardly, the vertical pins N N, arranged inside slot E, in front of the fulcrums of the arms, to limit the entrance of the coupling-bar and to limit movement of the arms, the flat springs P P, secured at their rear ends to each side of the stem of the draw-head and projecting forwardly, so that their free ends engage the inner curved edge of the projecting portion O of the arms, the transversely-disposed lever Q, having the right-angular extension S, connected to the rear end of one of the arms, and the chain or rope V, secured to the rear end of the other arm and passing around a pulley journaled on top the stem C and secured to the lever Q, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM JAMES MCLEAN.

Witnesses:
THOS. S. JONES,
GEO. H. WILEY.