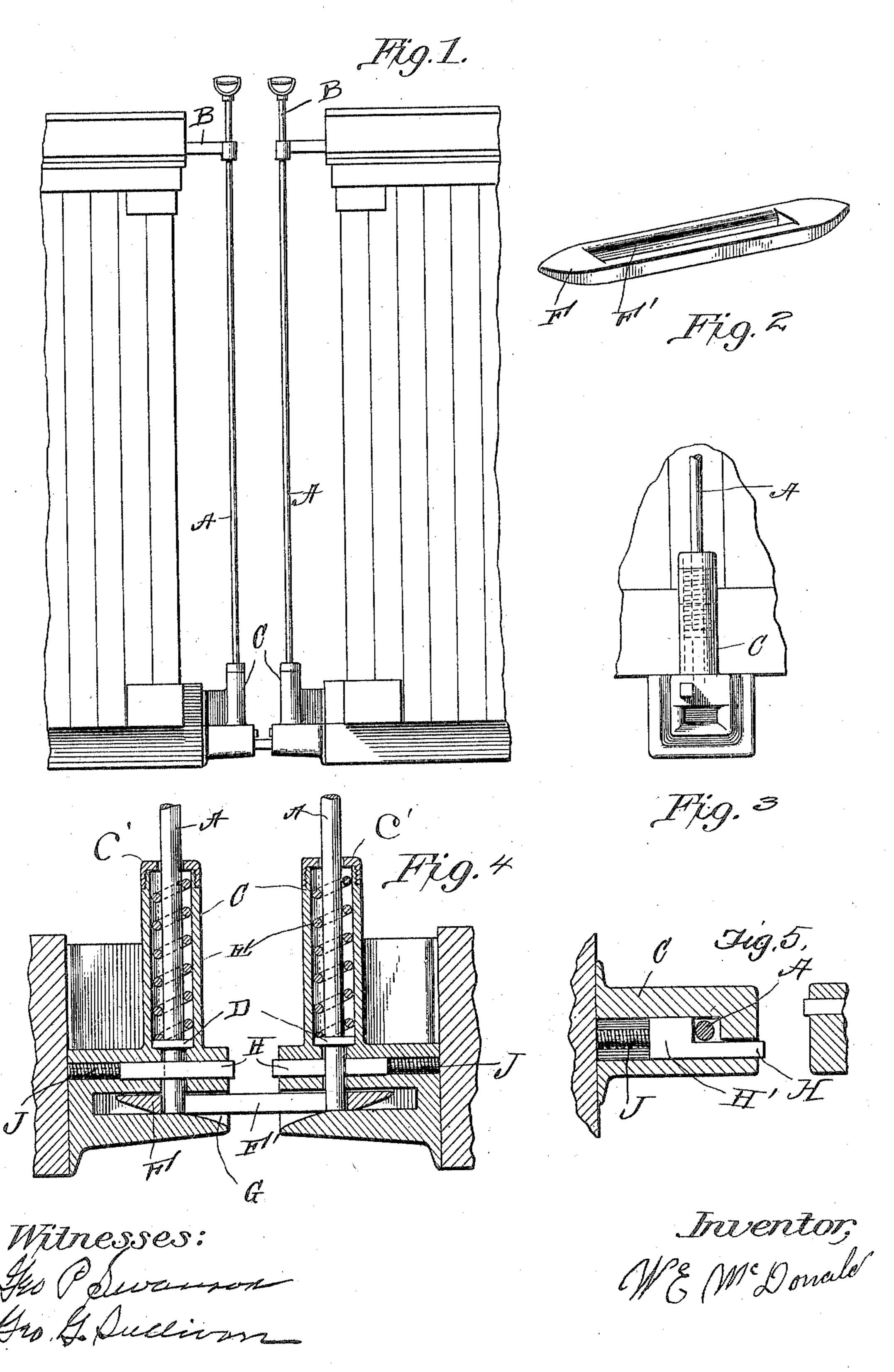
## W. E. MoDONALD. CAR COUPLING. APPLICATION FILED AUG. 3, 1905.



## UNITED STATES PATENT OFFICE.

## WILLIAM E. McDONALD, OF TUSCUMBIA, MISSOURI.

## CAR-COUPLING.

No. 817,088.

Specification of Letters Patent.

Patented April 3, 1906.

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To all whom it may concern:

Be it known that I, WILLIAM E. McDon-ALD, a citizen of the United States, and a resident of Tuscumbia, Miller county, Missouri, 5 have invented a new Improvement in Car-Couplings, of which the following is a description.

This invention relates to new and useful improvements in car-couplers; and the obro ject of the invention is to produce a simple and efficient device of this character in which cars may be coupled together automatically without the necessity of a person going between the cars, and comprises a vertically-15 movable spring-pressed coupling-rod and a spring-pressed catch adapted to allow the rod to fall to engage a link.

My invention is illustrated in the accom-

panying drawings, in which—

Figure 1 is a side elevation showing two cars equipped with my invention and coupled together. Fig. 2 is a detail view of a coupling-link. Fig. 3 is a front elevation of a coupling-head, showing parts in elevation. Fig. 4 is an enlarged vertical sectional view through two couplers connected together, and Fig. 5 is a transverse section through one coupler-head.

Referring to the drawings by letter, A A 30 designate two rods which are guided at their upper ends in bracket-arms, while their lower ends are mounted in the casings C, in the chambered portion of which is mounted a spring E, bearing against a shoulder D upon 35 said rod and its upper end bearing against a flange of said casing, the purpose of said spring being to hold the rod normally at its lowest throw and extending through the horizontally chambered or recessed portion 40 of the casing and adapted to receive the link F, having an adjustable slot F' therein. Each casing or housing C has an apertured cap, which is provided with screw-threads, adapted to fit over the top of the casing, and to pass. Said link has an elongated slot therein and is preferably tapering in order that it will conveninetly enter the opening G, formed in the casing.

H designates a spring - pressed member having a head H', and a spring J serves to

normally hold said member H at its farthest outward throw, in which farthest outward limit it will serve as means for supporting the rod A under the tension of said spring E. 55 One end of said member H projects out through the opening in the casing and is adapted to contact with a similar member upon an adjacent car, whereby said members may be pushed back within their casings to 60 allow the two rods A, one upon each car, to fall for the purpose of engagement with the same link, an end of which is adapted to be positioned in each opening G of the two coupler-heads.

In operation when it is desired to couple the cars the link may be placed in one of the openings G, and as the cars come together the members are pushed back in the chambered portion of the casing, when the spring- 70 pressed rods are thrown down, their lower movements being limited by the collar D upon each rod. When it is desired to uncouple the cars, the rods are raised by the hand-wheels at the tops thereof, and said 75 spring-pressed members are thrown out and

the link will be disconnected.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is— A car-coupler, comprising, in combination with a coupler-head, having an opening for the reception of a link, a casing or housing extending upward from the top of the coupler-head, an apertured cap having threaded connection 85 with the top of said casing, a rod passing through said cap and a shoulder upon said rod, a spring pressing between said shoulder and said cap, a spring-pressed rod-supporting member, having a shank portion extend- 90 ing through an opening into the recessed part of the coupler-head, the inner end of said member having an offset adapted to contact with a shoulder formed in the recess in which said member is positioned, and a 95 spring bearing against said member and upon which offset a rod is held in a raised position, as set forth.

WM. E. McDONALD.

Witnesses:

J. L. Prock, ARTHUR CLARK