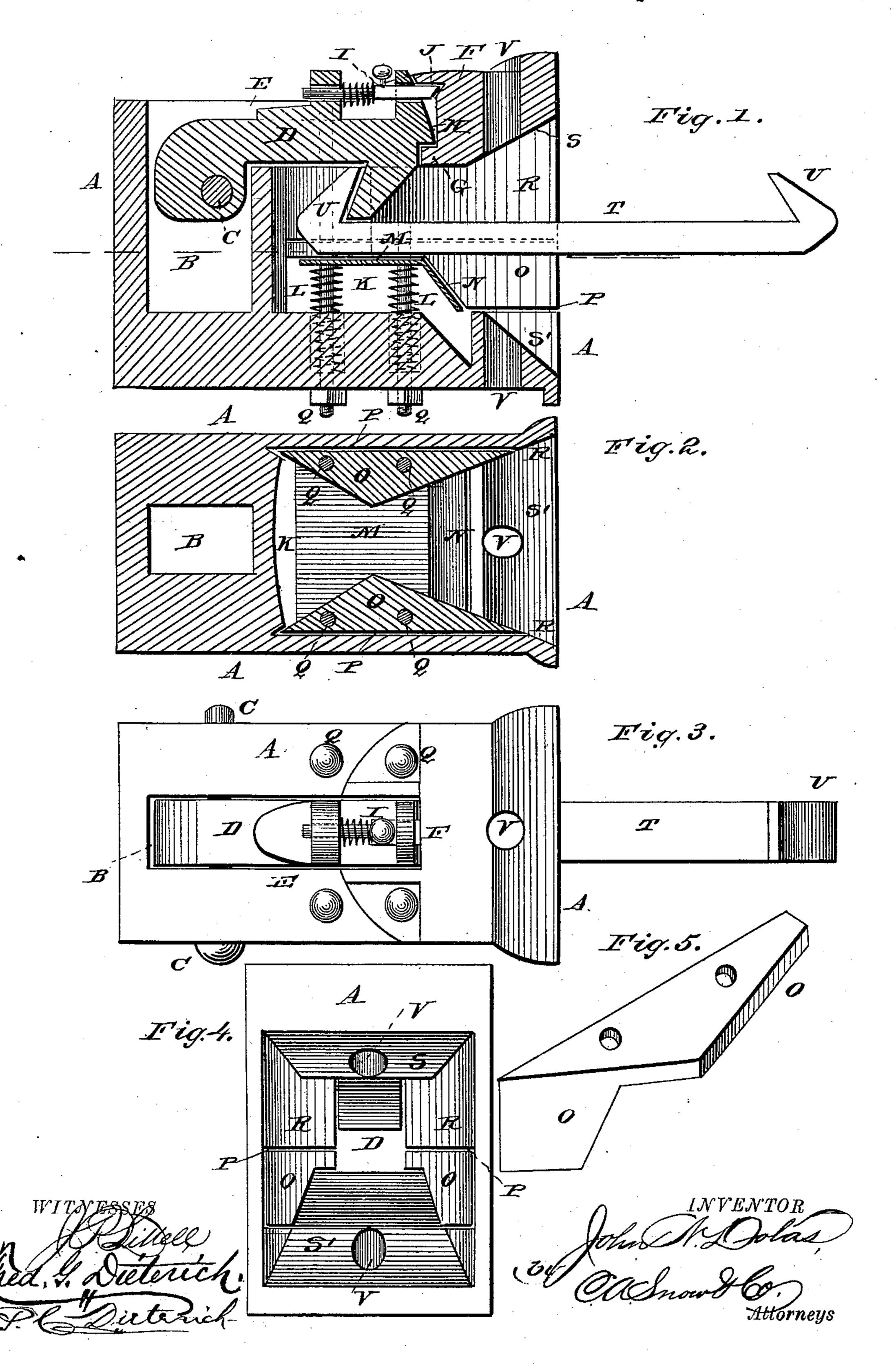
J. N. DOLAS. CAR COUPLING.

No. 256,202.

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United States Patent Office.

JOHN N. DOLAS, OF BUTTE CITY, MONTANA TERRITORY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 256,202, dated April 11, 1882.

Application filed January 21, 1882. (Model.)

To all whom it may concern:

Be it known that I, John N. Dolas, of Butte City, in the county of Silver Bow and Territory of Montana, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to car-couplings; and it has for its object to produce an efficient, safe, and durable coupling for freight or passenger

15 cars.

To this end it consists in certain improvements in the construction and operation of the same, substantially as will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a longitudinal vertical sectional view; Fig. 2, a horizontal sectional view. Fig. 3 is a top view. Fig. 4 is a front view; and Fig. 5 is a detail view of one of the securing-strips.

Corresponding parts in the figures are de-

noted by the same letters of reference.

. Referring by letter to the drawings, A designates the draw-head, at the rear portion of 30 which is formed a chamber or compartment, B, in which is pivoted, by means of a transverse pin or bolt, C, a coupling-hook, D, working in a longitudinal slot, E, in the top of the draw-head. The front wall, F, of slot E is 35 formed with a shoulder, G, on which, by means of a corresponding shoulder, H, formed in the front of the hook end of hook D, the latter rests when in position to hold the coupling-link. The hook D is also provided with a spring-latch, I, 40 of suitable construction, on its top, at the front end thereof, which is adapted to engage a notch or recess, J, in the wall F of slot E to hold the coupling-hook securely in position.

K denotes a shallow compartment in the bottom of the draw-head and at the front thereof, in which are fitted suitable springs, L, (preferably four vertical ordinary coiled springs, situated one at each corner of the compartment, as shown in the drawings,) supporting a horizontal plate, M, having its front edge, N, turned

downwardly and outwardly, as shown, to facilitate the entrance of the coupling-link.

O O denote wedges or securing-strips, fitting in correspondingly shaped recesses P P at the insides of the mouth of the draw-head, to hold 55 the plate M in position, and vertical bolts Q may be provided at each side the draw-head, which pass through perforations in the draw-head, strips O, plate M, and through the springs L, to hold the springs, plate, and securing-strips in position. It will thus be seen that by removing the bolts Q the wedges or strips O may be removed, and after them the plate M, so that the springs or plate may be adjusted, or, in case they have been in any way dam-65 aged, readily replaced.

The sides R R of the mouth of the draw-head are beveled forwardly and outwardly at their forward part, and the part or portion in rear of the pivoted coupling-hook is beveled rearwardly 70 and outwardly to allow room for lateral play of the coupling-link when in position. The top and bettom S S' of the draw-head are beveled respectively forwardly and upwardly and forwardly and downwardly, as usual.

The coupling link or barT to be used in connection with my invention consists simply of a straight bar having two hooked beveled ends, UU, and where one car is higher than the other this coupling-bar may be bent or formed with 80 a step at its center to accommodate this irregularity in height.

To enable cars not provided with my improved coupling to be coupled with cars that are provided therewith, I form a vertical perforation, V, in the front part of the draw-head, by means of which the ordinary pin and-link

coupling may be effected.

By reference to the above description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. In coupling, the coupling-bolt enters the draw-head, the four beveled sides thereof serving to guide it to the center thereof, where it strikes the pivoted coupling-hook, which, being then rigid, causes it to force the plate forming the floor of the draw-head downwardly, so as to allow the coupling bar or bolt to pass in behind the coupling-hook, when the springs under the plate 100

force the latter upwardly to its normal position, thus locking the coupling-bar in place. To uncouple, it is only necessary to draw back the latch on the coupling-hook and lift the latter from engagement with the coupling-bar, when it can be readily withdrawn from the draw-head.

My improved coupling is efficient, durable, simple, and can be constructed at a comparato tively small expense.

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

1. In a car-coupling, the herein-described plate, forming the floor of the draw-head, and having its front edge turned downwardly and outwardly, the whole capable of being depressed by the coupling link or bar as it enters the draw-head, springs being interposed under the plate to force it to its normal position after passage of the link or bar, substantially as herein shown and specified.

2. The combination, with the coupling-hook pivoted in the top of the draw-head and adapted to be held rigidly in place by a spring-latch or other suitable means, of the plate arranged underneath the same, and capable of being depressed and returned to its normal position by suitable springs arranged under the same, sub-

stantially as and for the purpose herein specified.

3. The combination, with the coupling hook D, pivoted at the rear of the draw-head and working in a longitudinal slot, E, in the top thereof, and provided with a spring-latch, I, and shoulder H, adapted to engage respectively a notch or recess, J, and shoulder G in the front wall of slot E, of the plate M, having its front edge, N, turned downwardly and outwardly and held in its position under the hook D by wedges or securing pieces or strips O, the 40 plate M being capable of depression and return to its normal position by action of springs L, interposed in a recess under the same, all arranged and operating substantially as and for the purpose herein shown and specified.

4. The combination, with the plate M, wedges or strips O, and springs L, of the vertical bolts Q, passing through perforations in the same to hold or secure them in position, as set forth.

In testimony that I claim the foregoing as 50 my own I have hereto affixed my signature in presence of two witnesses.

JOHN N. DOLAS.

Witnesses:

ALBERT W. NODDIN, VALENTINE KROPF.