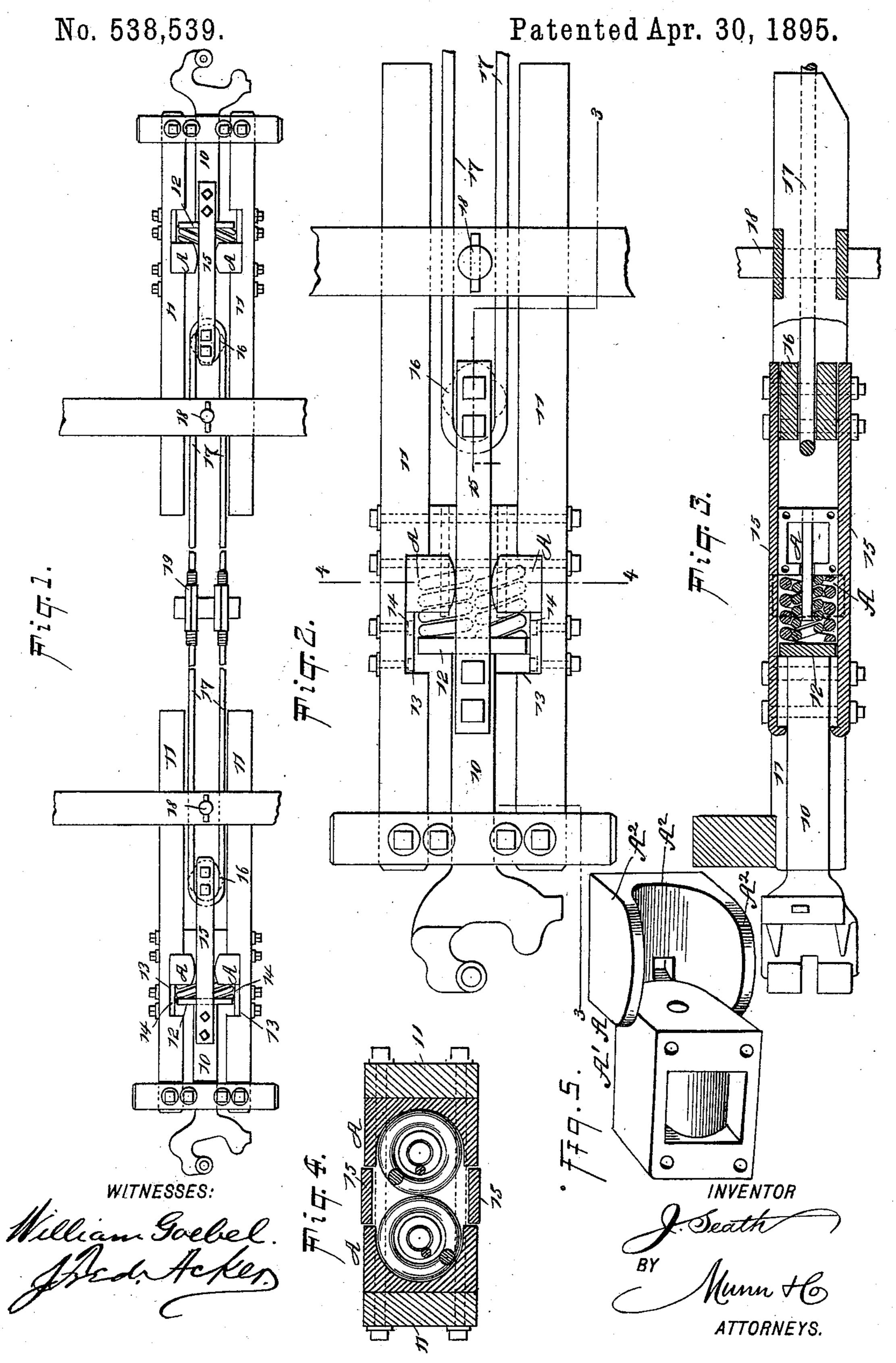
J. SEATH.
CONTINUOUS DRAW BAR ATTACHMENT.



## United States Patent Office.

JAMES SEATH, OF TERRE HAUTE, INDIANA.

## CONTINUOUS DRAW-BAR ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 538,539, dated April 30, 1895.

Application filed August 24, 1894. Serial No. 521, 183. (No model.)

To all whom it may concern:

Be it known that I, JAMES SEATH, of Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved 5 Continuous Draw-Bar Attachment for Railway Equipment, of which the following is a full, clear, and exact description.

The object of my invention is to provide a continuous drawbar attachment for railway 10 equipment, which will be practical, simple and durable, and capable of application readily to

any form of drawbar.

The invention consists in the novel construction and combination of the several 15 parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of refer-20 ence indicate corresponding parts in all the views.

Figure 1 is a plan view of two draw-bars and the improved coupling connecting the same. Fig. 2 is a plan view, upon a larger 25 scale, of one of the draw-bars and its connection. Fig. 3 is a vertical longitudinal section taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a transverse section taken transversely through the springs contained in the 30 draw-bar and their seats or pockets and through the draft or hitching timbers, the said section being taken substantially on the line 4 4 of Fig. 2; and Fig. 5 is a perspective view showing one of the spring seats or pock-35 ets detached.

The drawbar 10 may be of any form, and as is customary, is placed between draft or hitching timbers 11, attached to the sills and transom of a car. The drawbar at its inner end 40 has bearing against a follower 12, the said follower being in the nature of a plate and loosely located between recesses 13, made in the inner face of the draft or hitching timbers, and a portion of the wall of each of said 45 recesses is provided with a wear plate 14, in order that the follower shall not wear or chafe

the said timbers.

Back of the follower, seats or pockets A, are stationarily located between the hitching tim-50 bers, as shown best in Figs. 1, 2 and 4. The said seats or pockets are provided in their front faces with recesses to receive springs,

and said springs have bearing against the follower, exerting tension thereon in an outward direction. The seats or pockets A are secured 55 to the hitching timbers by means of bolts, or their equivalents, extending through transverse perforations formed in the rear parts of the seats A behind the recesses which receive the springs, and the springs may be single, or 60 concentric springs may be used in each pocket as may be desired. The form of these seats A is clearly indicated in Fig. 5.

Straps 15, are bolted or otherwise secured to the drawbar 10, one at the top and the 65 other at the bottom, and these straps extend rearwardly over the rise reduced portion A' of the seats or pockets, and preferably between the rounded opposing edges of projecting portions A2, formed at top and bottom 70 of the forward enlarged portions of the said spring seats, as shown in Figs. 2 and 4, the said straps having free movement between said portions A<sup>2</sup>, and owing to the rounded form of the edges thereof, the drawhead is 75 permitted to move slightly from side to side being at the same time guided in its longitudinal movement over the said seats. The two straps 15 are connected at their rear ends by a thimble 16. A draft rod 17, is 80 passed around the thimble 16, being bent upon itself to form a loop for that purpose, and the members of the draft rod are carried rearward one at each side of the king bolt or center pin 18, and are preferably made to 85 terminate at their rear ends in turn buckles 19, or other devices capable of taking up slack. The thimble 16, is free to move between the members of the draft rod 17 when the drawbar is forced rearward or returns to 90 its normal position. Finally the draft rods of the two couplers on a car are connected, as shown in Fig. 1, rendering the drawbar attachment a continuous one.

The object of the connection being made 95 in the manner above set forth is that when the buffing springs are compressed by contact with the couplers of other cars, or other objects, the said springs allow the thimble 16 to be driven back into the opening between 100 the members of the draft rod, relieving any tendency to buckle on the part of the said rods.

Another feature of this device is the pas-

sage of the draft rods on either side of the king bolt or center pin, thereby enabling the center pin or king bolt to be made as long as desired, and preserving said bolt against in-

5 terference.

This device can be used with single or with multiple buffing springs according to the capacity or formation of the seats or pockets A, or it may be used in connection with other spring devices. When the drawhead contacts with an opposing coupler, and is pushed in ward, the buffing springs will be compressed, and the drawbar is free to slide in a rearward direction.

The action of this attachment having been described with reference to the buffing strain, I will now proceed to describe its action under draft strain, which does not differ materially from other continuous drawbar attach-

20 ments.

When the drawbar on one end of a car is drawn forward the draft rods connected with the said drawbar transfer the strain to the opposite end of the car and draw the other head in the same direction against its follower, thus compressing the buffing spring on the opposite end of the car, and the car is then pushed or pulled from the rear end. This is true of most continuous drawbar attachments, and the balance of the train in the rear of this particular car is pulled by the draft rods and the coupler, and any strain occurring from drawing the balance of the train is not transmitted to the car to which this device may be attached.

I desire it to be understood that I do not confine myself to the details of construction shown relative to the spring seats or pockets, or other portions of the device not herein-

40 after claimed.

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

1. In a continuous drawbar attachment for railway equipment, the combination, with a 45 yielding drawbar, of straps attached to opposite sides of the same, a thimble secured to the straps, and a draft rod passed around the said thimble and adapted for connection with the draft rod of another coupler, the thimble 50 having sliding movement between the members of the draft rod, substantially as and for the purpose set forth

the purpose set forth.

2. In a drawbar attachment for railway equipment, the combination, with hitching 55 timbers, a drawbar having sliding movement between said timbers, pockets or seats secured to the timbers, springs located in or against said pockets or seats, and a follower against which the springs and the drawbar have bear- 60 ing, of straps secured to opposite faces of the drawbar, extending rearwardly therefrom, a thimble located between the free ends of the straps, and a draft rod bent upon itself around the thimble, forming a link in which 65 the thimble has movement, the said rod being adapted for connection with the draft rod of a similar attachment located at the opposite end of the car, as and for the purpose specified.

3. In a draw-bar attachment, a rear spring seat having an enlarged front portion adapted to fit into recesses formed in the inner sides of the hitching timbers and having a recessed front face to receive the springs, the rear end 75 of said seat being of less width than the front portion and adapted to fit between the inner faces of the hitching timbers back of the recesses therein, and transverse bolts extending through the said reduced end of the seat and 80 adapted to secure the same to the hitching

timbers, substantially as set forth.

JAMES SEATH.

Witnesses:
LEWIS J. COX,
JOHN S. COX.