

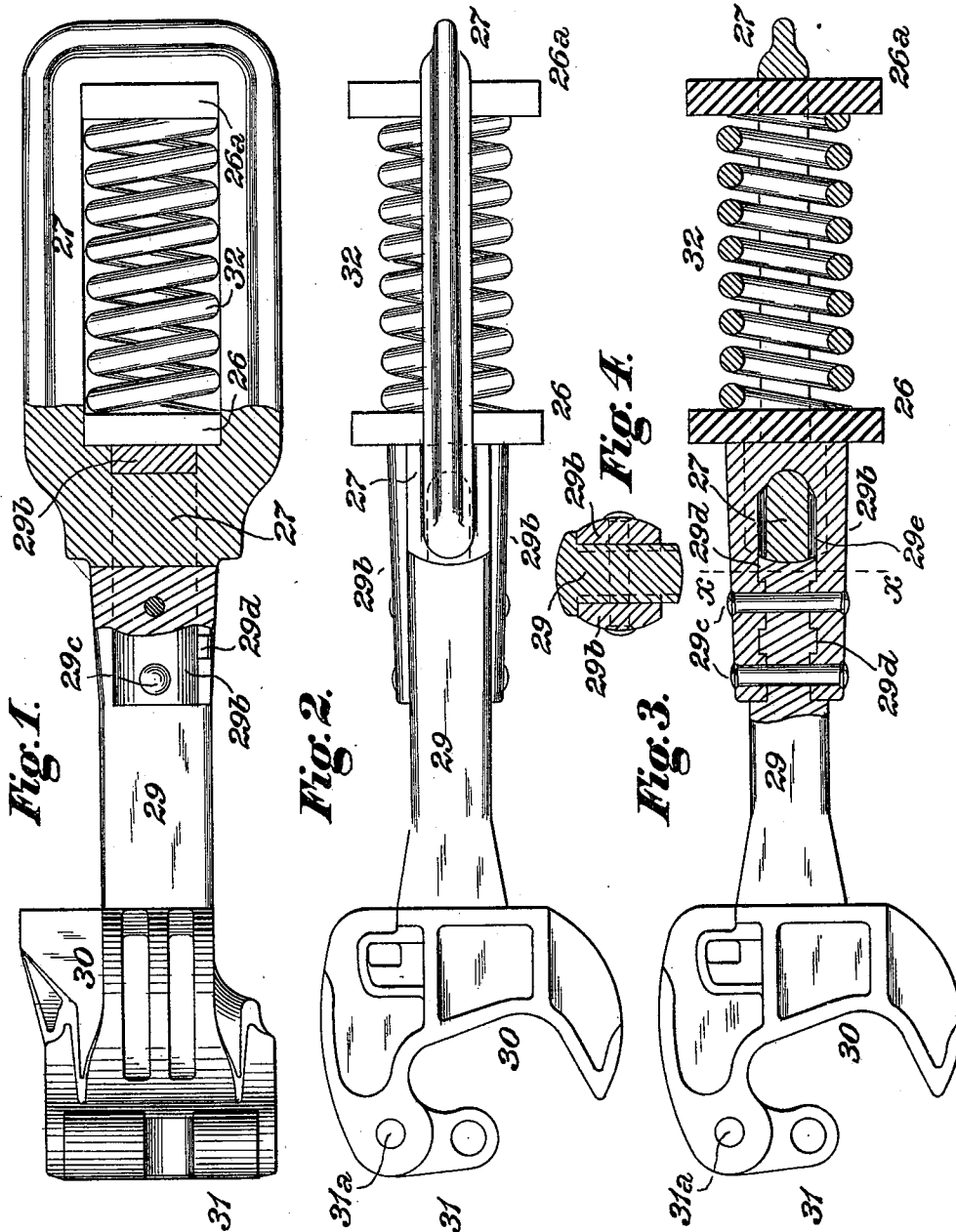
No. 672,114.

Patented Apr. 16, 1901.

G. WESTINGHOUSE.
DRAFT APPLIANCE FOR RAILWAY CARS.

(Application filed Aug. 1, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE WESTINGHOUSE, OF PITTSBURG, PENNSYLVANIA.

DRAFT APPLIANCE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 672,114, dated April 16, 1901.

Application filed August 1, 1900. Serial No. 25,537. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WESTINGHOUSE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Draft Appliances for Railroad-Cars, of which improvement the following is a specification.

My invention more particularly relates to draft appliances which are employed in connection with automatic couplers; and its object is to provide simple, substantial, and inexpensive means by which strains of draft and buffing may be transmitted from a coupler to the spring or other resistance device by which they are taken up and which will in operation obviate liability to uncoupling in passing around short curves and relieve strains on the car-body which are encountered in passing curves with appliances of the constructions ordinarily heretofore employed.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side view, partly in vertical longitudinal central section, of a draft appliance, illustrating an application of my invention; Fig. 2, a plan or top view of the same; Fig. 3, a view, partly in plan and partly in horizontal longitudinal central section; and Fig. 4, a transverse section at the line *xx* of Fig. 3.

In the practice of my invention I provide a coupler-shank or draw-bar 29, the outer end of which carries a coupler-head 30, to which a knuckle 31 is pivoted by a vertical knuckle-pin 31^a. The coupler-head, which does not in and of itself constitute part of my present invention, is provided with a suitable locking mechanism and may be of any suitable and preferred form of what is known as the "vertical plane" or "Master Car-Builders'" type of automatic coupler. The coupler-shank is pivotally connected, as presently to be described, to a draft strap or yoke 27, which is adapted to surround and impart strains received by the coupler-head to a draft and buffing apparatus of any known and preferred construction, which in this instance is shown as a spring 32, interposed between front and back follower-plates 26 26^a, fitted in the draft strap.

The coupler-shank 29 is reduced in thickness at and adjacent to its inner or rear end

and is provided with lateral tongues 29^d, adapted to engage corresponding grooves in the side members of a bifurcated pivot-jaw 29^b, to the forward or outer portion of which the coupler-shank is secured by rivets 29^c. The forward end portion of the draft-strap 27 passes through the vertical central recess or passage 29^e of the pivot-jaw, which recess is open at the front and closed at the rear end of said pivot-jaw. The portion of the draft-strap which passes through the recess 29^e is provided with segmental vertical bearing-faces on its front and rear sides, said bearing-faces fitting against correspondingly-curved vertical bearing-faces on the rear end of the coupler-shank 29 and on the body of the pivot-jaw adjacent to the rear end thereof, as shown in Fig. 3. The inner or rear end of the pivot-jaw 29^b abuts against the front follower-plate.

In assembling the parts of the appliance the front end portion of the draft-strap 27 is slipped into position in the recess 29^e of the pivot-jaw 29^b, and the narrowed rear end portion of the coupler-shank 29 is then inserted in the recess 29^e, so as to abut against the adjoining bearing-face of the draft-strap and is secured in this position by the rivets 29^c. Under this construction it will be seen that the front end portion of the draft-strap constitutes a vertical pivot to which the coupler-shank 29 is coupled at its rear end, thus permitting the coupler-head 30 to traverse in a horizontal plane within a properly-limited range of movement when the car is passing around a curve, and thereby obviating or substantially reducing the tendency to uncouple on curves of short radius, which obtains where the coupler-shank and draft-strap are rigidly connected, and relieving the incidental strains on the car-frame. When the coupler-shank is swung upon its pivot on the draft-strap, the rear end of the pivot-jaw correspondingly moves the front follower-plate 26, against which it abuts, causing it to bear more strongly against the draft and buffing spring 32 on one side than on the other, and said spring as a resultant of such unequal lateral bearing of the follower-plate acts when the car passes from a curve to a tangent to return the coupler-head to and maintain it in normal position—that is to say, with the

longitudinal central plane of the coupler-shank in line with that of the draft-strap and of the car.

I claim as my invention and desire to secure by Letters Patent—

1. The combination of a coupler-head, a coupler-shank fixed thereto, a bifurcated pivot-jaw secured to the rear end of the coupler-shank, and a draft strap or yoke having segmental bearing-faces fitting correspondingly-curved bearing-faces on the coupler-shank and pivot-jaw.

2. The combination of a coupler-head, a coupler-shank fixed thereto, a bifurcated pivot-jaw secured to the rear end of the coupler-shank, a draft strap or yoke having segmental bearing-faces fitting correspondingly-curved bearing-faces on the coupler-shank

and pivot-jaw, a follower-plate bearing against the rear end of the pivot-jaw, and a spring bearing against the follower-plate.

3. The combination of a coupler-head, a coupler-shank fixed thereto and having its rear portion reduced in width and provided with lateral tongues, a bifurcated pivot-jaw having a central recess provided with grooves which receive the tongues of the coupler-shank, rivets connecting the coupler-shank and pivot-jaw, and a draft strap or yoke having segmental bearing-faces fitting corresponding bearing-faces on the coupler-shank and pivot-jaw.

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Witnesses:

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