No. 742,668. PATENTED OCT. 27, 1903.

J. C. JOYCE.

HOLDBACK FOR VEHICLES.

APPLICATION FILED FEB. 28, 1903.

NO MODEL.

Fig. 1.

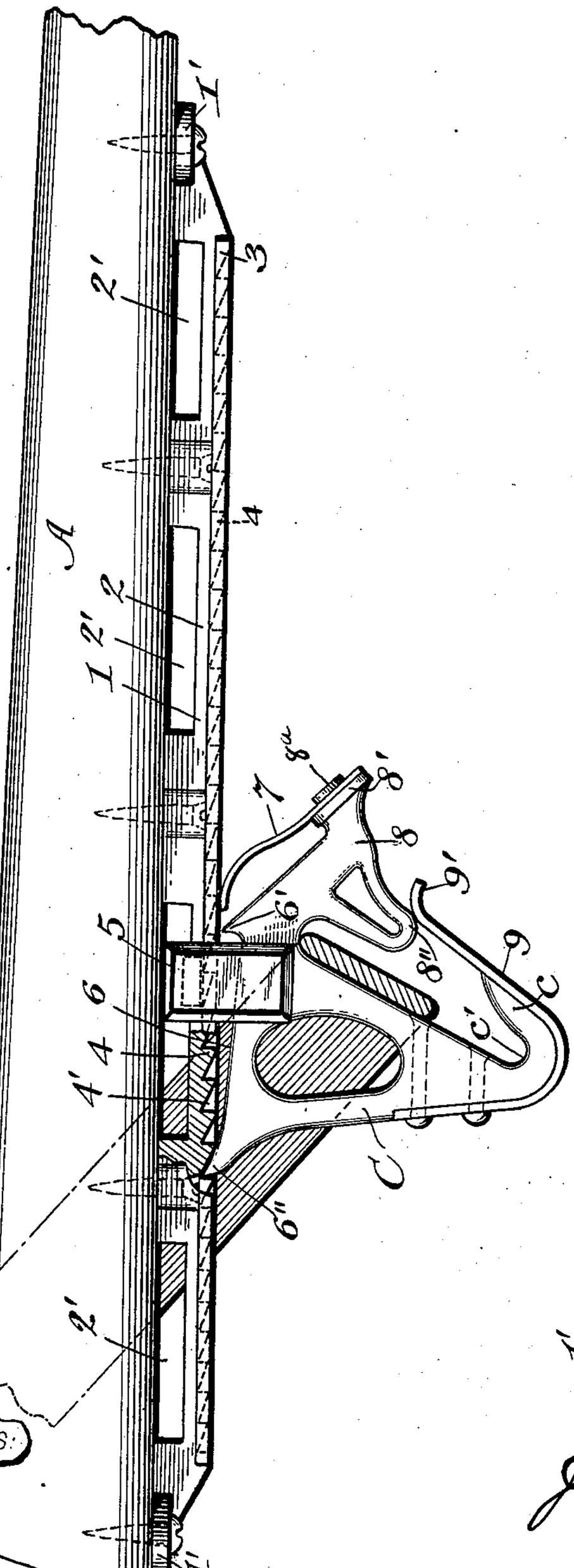

Fig. 2.

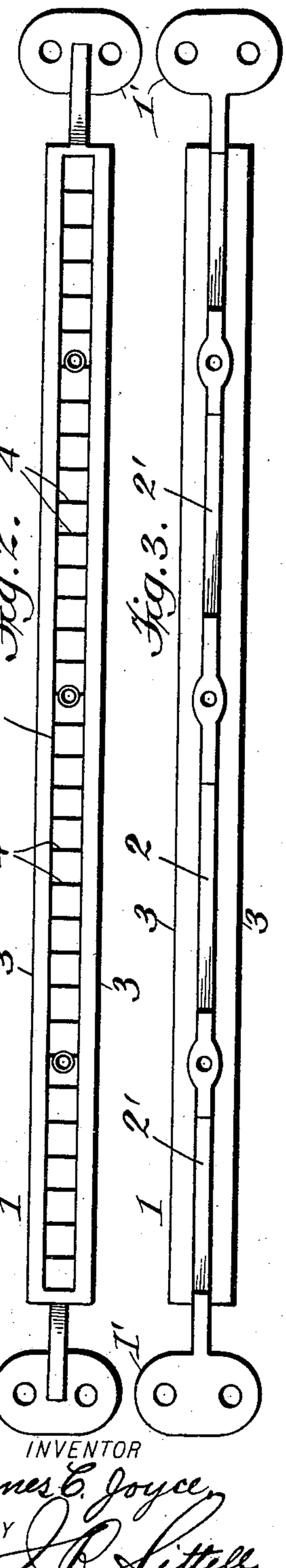

Fig. 3.

WITNESSES:

S. R. Appleman.

Chas. H. Davids.

INVENTOR

James C. Joyce,

BY J. R. Littell

his ATTORNEY.

No. 742,668. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

JAMES C. JOYCE, OF FLORIDA, NEW YORK.

HOLDBACK FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 742,668, dated October 27, 1903.

Application filed February 28, 1903. Serial No. 145,578. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. JOYCE, a citizen of the United States, residing at Florida, in the county of Orange and State of New York, have invented certain new and useful Improvements in Holdbacks for Vehicle-Shafts, of which the following is a specification.

My present invention pertains to holdback attachments or means for attaching the holdback-straps of harness to the shafts of vehicles.

An object of this invention is to provide adjustable devices to which holdback-straps may be attached, and which in a general way may be said to embody improvements upon a device for a similar purpose for which I obtained United States Letters Patent No. 692,674, dated February 4, 1902, to which reference may be had.

Certain specific objects of my present invention, however, relate to novel and improved means for attaching a holdback-strap directly to and at various positions relatively of a rail which is secured to a shaft.

Another specific object of my present invention is to provide means whereby a holdback-strap buckled so as to form a loop may be attached to the holdback while buckled or looped as aforesaid.

I accomplish these objects by means at once simple, convenient for instantaneous use, reliable and durable, and that can be produced at a small cost.

In the drawings, Figure 1 is a side elevation of the device attached to a part of a wagon-shaft, and Figs. 2 and 3 are respectively a bottom plan view and a top plan view of a rail.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, 1 designates a rail which has lugs 1′ 1′, one at each end thereof, by which with screws or rivets it may be attached to a wagon-shaft A. Screws or rivets may also for a similar purpose be passed through the rail and into the shaft A. The rail 1 comprises a rib 2, guides 3 3, and ratchet-teeth 4 4, the latter sunk in a longitudinal recess 4′, all substantially as shown and described in the Letters Patent before mentioned. A plurality of recesses 2′ 2′ are formed in the web 2 and are of suitable dimensions to permit a holdback-strap B to pass between the rail 1 and the shaft A.

A hook (herein designated in a general way as C) is fitted to slide freely on and lengthwise of the rail 1 and has undercut lugs 5 5, (one only being shown,) which engage the guides 3 and prevent motion of the hook C transversely of the rail 1. An engaging face 6 of the hook C has teeth 6′ and 6″ formed, respectively, at the front and near inner corners thereof, said teeth being severally properly formed to separately engage the ratchet-teeth 4.

On a bracket 8, which is integral with the hook C, is fixed a spring 7 by means of rivets 8ª, (one only being shown,) which engage in perforations in the spring 7 and in lugs 8′, formed on the bracket 8. The free end of the spring 7 presses against the guides 3, thus raising the forward end of the hook C and urging the tooth 6′ out of engagement and the tooth 6″ into engagement with the ratchet-teeth 4, the hook C being fulcrumed on the guides 3 by reason of the engagement of the lugs 5 with the latter. The hook C is recurved, forming a finger *c*, and a spring 9 is riveted to the former and curved around the latter and continued to meet and press against a projection 8″ of the bracket 8. The free end 9′ of the spring 9 is curved outwardly and, with the projection 8″, forms a guide for the edge of a strap which is to pass between said end 9′ and projection 8″. The projection 8″ and finger *c* are so positioned relatively of each other that the distance from one to the other is less than the breadth of a holdback-strap B. The distance from the projection 8″ to the root *c*′ of the finger *c* should be dimensionally at least equal to the transverse dimensions of the strap A.

The operation and advantages of my present invention will be readily understood and appreciated. The rail 1 being attached to a shaft A, a holdback-strap B may, if desired, be attached to the shaft by passing said strap between the latter and the rail 1 at any one of the recesses 2′ and thereafter looping and buckling said strap in the usual manner, a particular recess 2′ being chosen for the purpose mentioned with due regard for the length of the strap B. In the preferred use of my invention, however, the hook C will be slid

upon the rail 1, as shown in Fig. 1, and a strap may be secured to said hook either by passing one end of said strap through the recess formed by the finger *c*, spring 9, and bracket 8 with the body of the hook C or by passing the strap in a looped form from the end of and longitudinally of the shaft A and thereafter inserting the strap B edgewise into the guide formed by the free end 9′ of the spring and the projection 8″ of the bracket and pressing the strap B into the recess, which, as before mentioned, is formed to receive it. Pressure applied to the strap B in the direction indicated by an arrow will assist the spring 7 in causing the tooth 6″ to engage a ratchet-tooth 4. Pressure applied to the strap B in a direction forwardly of the shaft A will cause it to move the hook C forwardly of and clear of the rail 1 and if continued will cause the hook C and strap B to move off of the shaft A at the forward end of the latter. Accidental rocking of the hook C forwardly of the rail 1 will cause the tooth 6′ to engage a ratchet-tooth 4, and thus maintain the hook C in a before-adjusted position on the shaft A.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claims.

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

1. A holdback for vehicle-shafts, and comprising a hook; means for securing said hook in various positions longitudinally of the shaft; a finger *c*, integral with the hook; and a bracket 8, integral with the hook, and a spring adapted to yieldingly close the space between said bracket and hook.

2. A holdback for vehicle-shafts, and comprising a hook; means for securing said hook in various positions longitudinally of the shaft; a finger *c*, integral with the hook, a bracket 8, integral with the hook, and a spring attached to the hook contacting the finger *c* and the bracket 8.

3. A holdback for vehicle-shafts, and comprising a hook; means for securing said hook in various positions longitudinally of the shaft; a finger *c*, integral with the hook; a bracket 8, integral with the hook, a spring attached to the hook, and contacting the finger *c* and the bracket 8, and having a curved end 9′.

4. A holdback for vehicle-shafts and comprising a hook; means for securing said hook in various positions longitudinally of the shaft, a finger *c* integral with the hook; a bracket 8 integral with the hook and having a projection 8″; and a spring attached to the hook, and contacting the finger *c*, and the projection 8″.

5. A holdback for vehicle-shafts, and comprising a hook; means for securing said hook in various positions longitudinally of the shaft; a finger *c* integral with the hook; a bracket 8 integral with the hook; and a spring attached to the hook, and contacting the finger *c* and the projection 8″, and having a curved end 9′.

6. A holdback for vehicle-shafts comprising a toothed rail, means for attaching said rail lengthwise of the shaft, a hook adjustable longitudinally of the rail and having two teeth adapted to separately engage the teeth on the rail and means for normally holding one of said teeth out of engagement.

7. A holdback for vehicle-shafts, comprising a toothed bar adapted to be secured to the shaft, a hook slidably secured to said bar and adapted to engage the teeth thereon, said hook having a holdback-strap-receiving slot open at one side and a spring bridging said opening and adapted to be sprung outward by engagement of the strap at insertion thereof.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

JAMES C. JOYCE.

Witnesses:
CHAS. H. DAVIDS,
J. C. PYBAS.