

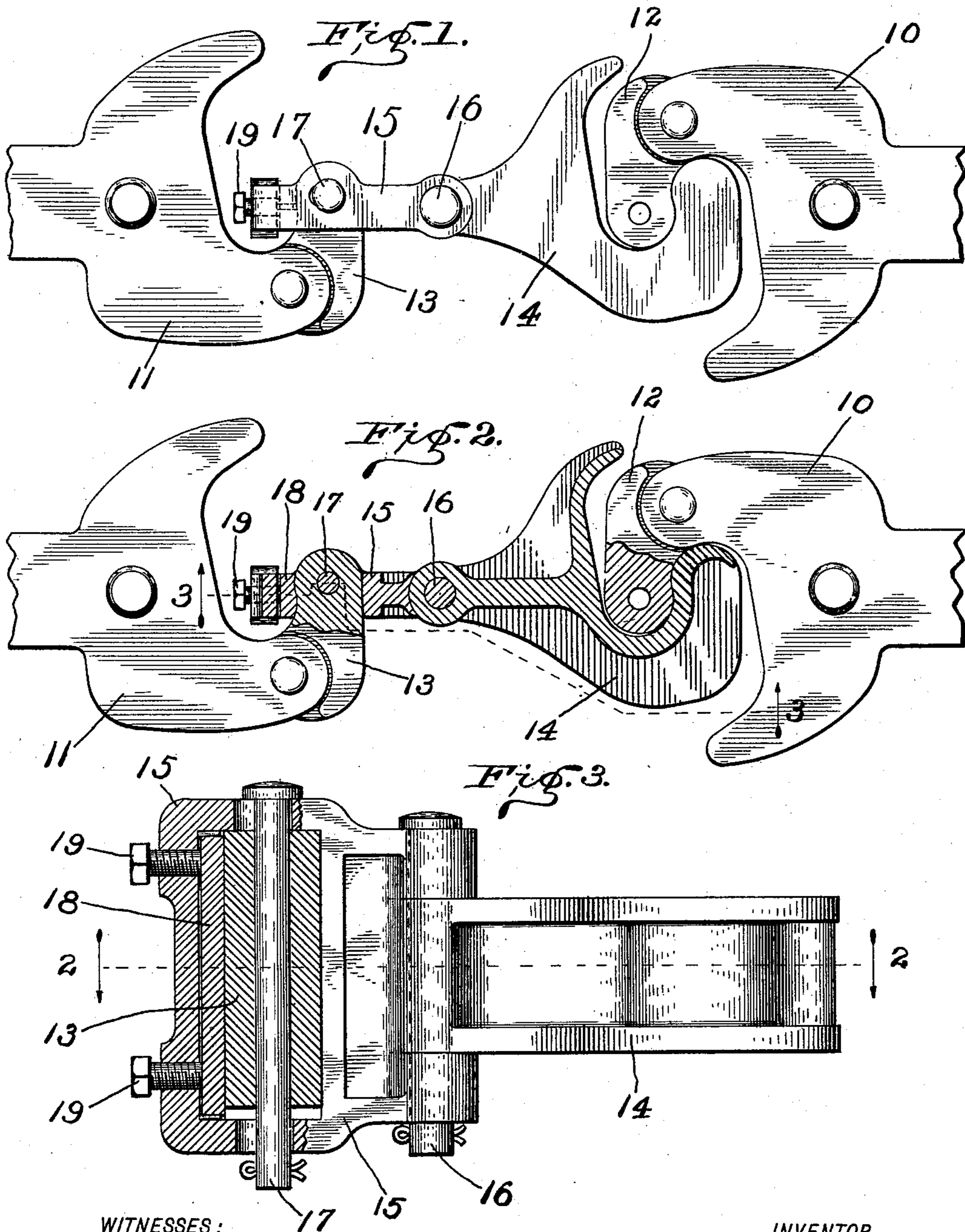
No. 689,644.

Patented Dec. 24, 1901.

B. F. HAUGH.
CAR COUPLING.

(Application filed Aug. 19, 1901.)

(No Model.)



WITNESSES:

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BENJAMIN F. HAUGH, OF INDIANAPOLIS, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 689,644, dated December 24, 1901.

Application filed August 19, 1901. Serial No. 72,541. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. HAUGH, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

Frequently in the handling of cars, especially in switching and making up of trains, it is desirable on account of short curves, which necessarily exist in some switches, and sometimes for other reasons that the distance between the cars or between the locomotive and the adjacent car be made somewhat greater than the customary length of the ordinary automatic coupler. It has been common to provide for this increased distance by means of a common link and pin, which the engaging points of such automatic couplers are commonly fitted to receive. This, however, is unsatisfactory in operation for the reason, among others, that it introduces two flexible points into the coupling, and consequently a not only unnecessary but detrimental slackness in the train or cut of cars in backing the same.

It is the object of my invention to provide a suitable means of increasing the distance between the cars or between the car and engine when necessary without entailing any of the disadvantages incident to the duplication of flexible joints or points in the coupling.

A car-coupling embodying my said invention will be first fully described and the novel features then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a top or plan view of a pair of ordinary automatic draw-heads, the draw-bars being broken away and said heads connected by a distance-piece embodying my said invention; Fig. 2, a similar view, except that the distance-piece is shown in section, the point of taking the section being indicated by the dotted line 2 2 in Fig. 3; and Fig. 3, a view of the distance-piece separately, on an enlarged scale, partially in side elevation and partially in section, the point of view being indicated by the dotted line 3 3 in Fig. 2, the direction of sight being indicated by the arrows at the end of said dotted line.

The draw-heads 10 and 11 and their engaging jaws or "knuckles" 12 and 13 are or may be of an ordinary and well-known design and construction and in the absence of my distance-piece operate in the ordinary and well-known manner. They will therefore not be further described herein, except incidentally in describing the invention.

The distance-piece embodying my invention is composed of two main parts 14 and 15, which are united by a pin 16, which when the parts are assembled and in use is the pivot of the one necessarily flexible joint between the cars. There is of course a slight flexibility between the part 14 and the draw-head 10 and its knuckle 12; but the union between these parts is of such a character that this does not interfere with the operation of backing the train or increase the slack in the train perceptibly. The form of this part 14 where it engages with the draw-head 10 and its jaw 12 is substantially the same as the form of the opposing draw-head 11 and its knuckle 13, so that the operation of coupling is precisely the same as where only the regular draw-heads and their coupling-knuckles are employed, except that it is preferable to make the knuckle on the part 14 solid, as shown, so that the pivoted knuckle 12 is always the one to be swung back preparatory to effecting the coupling between the cars. These matters being observed, the coupling of cars or of a locomotive onto a car takes place in exactly the same way as where the distance-piece is not used.

The member 15 of my improved distance-piece is to be rigidly or substantially rigidly secured to the knuckle 13 on the draw-head 11, which knuckle in using my invention should always be in its closed position, as shown. This part 15 has a horizontal mortise of a form to fit as closely as convenient over the knuckle 13, as shown. When in place, the part 15 and the knuckle 13 are secured together by the pin 17. In order to produce an entirely rigid connection between these parts, a suitable recess may be formed in the back side of the mortise, and a clamping-plate 18 may be inserted therein, which may be driven up by set-screws 19. The holes in the part 15, through which the pin 17 passes, are elongated or enlarged somewhat to accommodate

this, as best shown in Fig. 3. The mortise, however, may be fitted closely enough so that for ordinary use this clamping-plate will probably be unnecessary.

5 Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the draw-heads of a car-coupling, of a distance-piece composed
10 of two parts pivotally secured together one part being adapted to be secured substantially rigidly to one draw-head and the other part being adapted to engage in the ordinary manner with the other draw-head in perform-
15 ing the coupling operation.

2. The combination, with two draw-heads of a car-coupling, of a distance-piece composed of two parts, one part being adapted to engage with one of the draw-heads in a similar
20 manner as that in which the other draw-head ordinarily engages therewith, and the other part being adapted to be secured rigidly to

said other draw-head, and provided with a clamping-plate and screws by means of which rigidity may be secured. 25

3. The combination of the two ordinary draw-heads 10 and 11 and their engaging knuckles 12 and 13, with a distance-piece composed of two parts 14 and 15 united by a pin 16, one of said parts having a jaw correspond- 30 ing to the knuckle or jaw of the adjacent draw-head, and the other part being provided with a mortise adapted to be placed over the knuckle or jaw of the other draw-head, and a pin adapted to unite said part and said knuckle 35 or jaw.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 15th day of August, A. D. 1901.

BENJAMIN F. HAUGH. [L. S.]

Witnesses:

C. S. FRYE,

L. H. COLVIN.