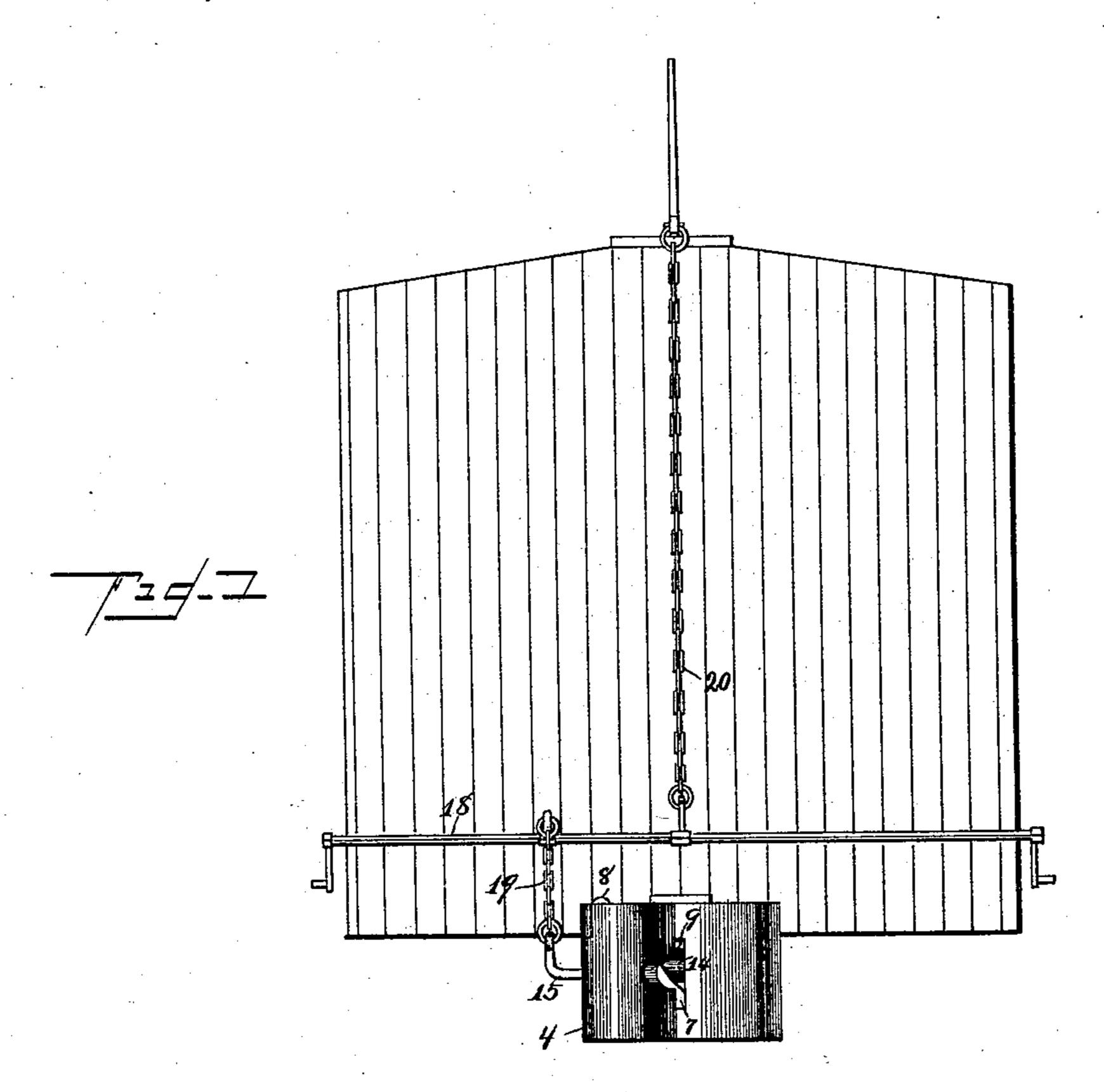
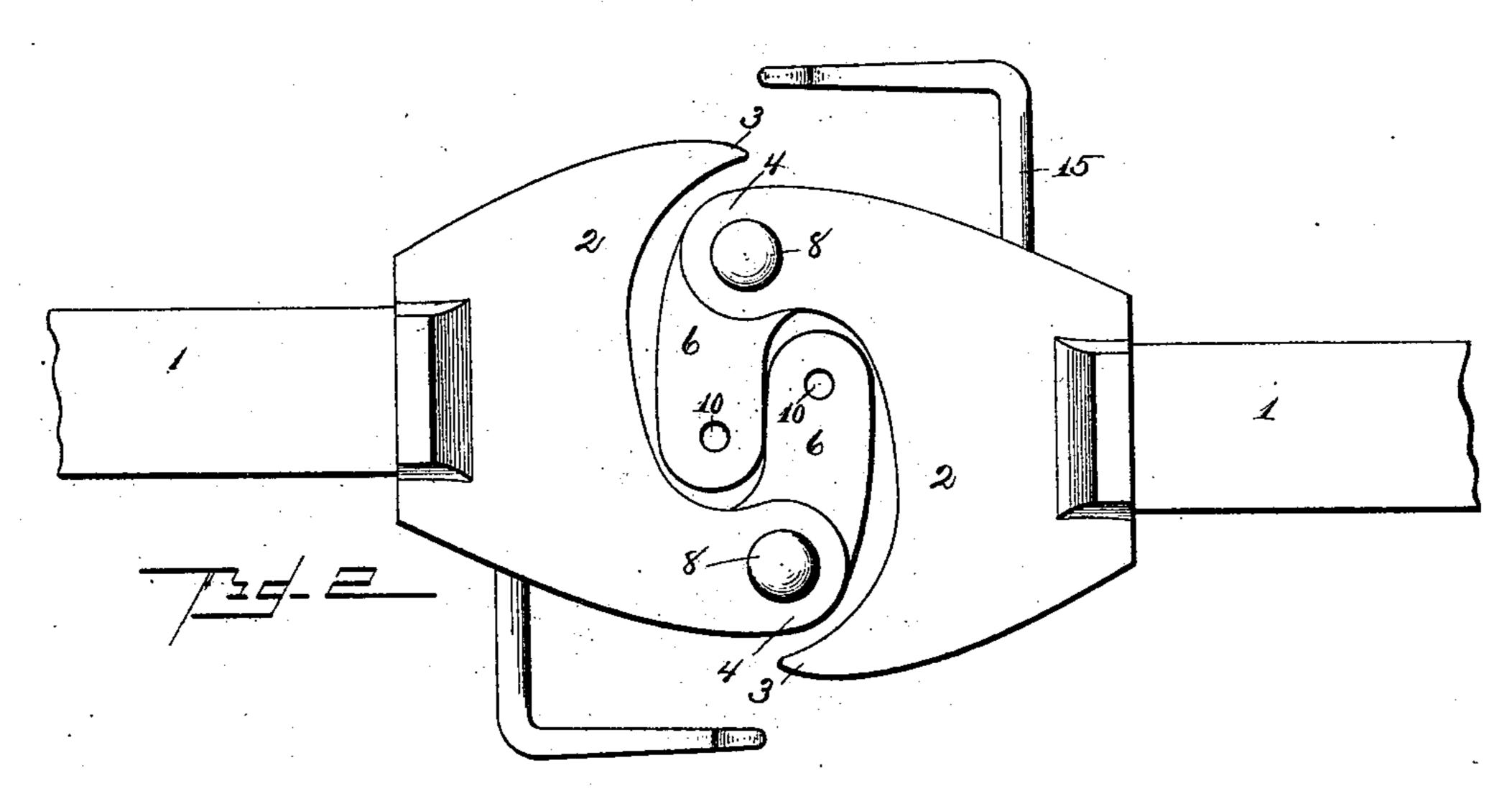
(No Model.)

D. WHOLEY. CAR COUPLING.

No. 513,961.

Patented Jan. 30, 1894.





Witnesses Stryers MW. Herow Dennis Wholey

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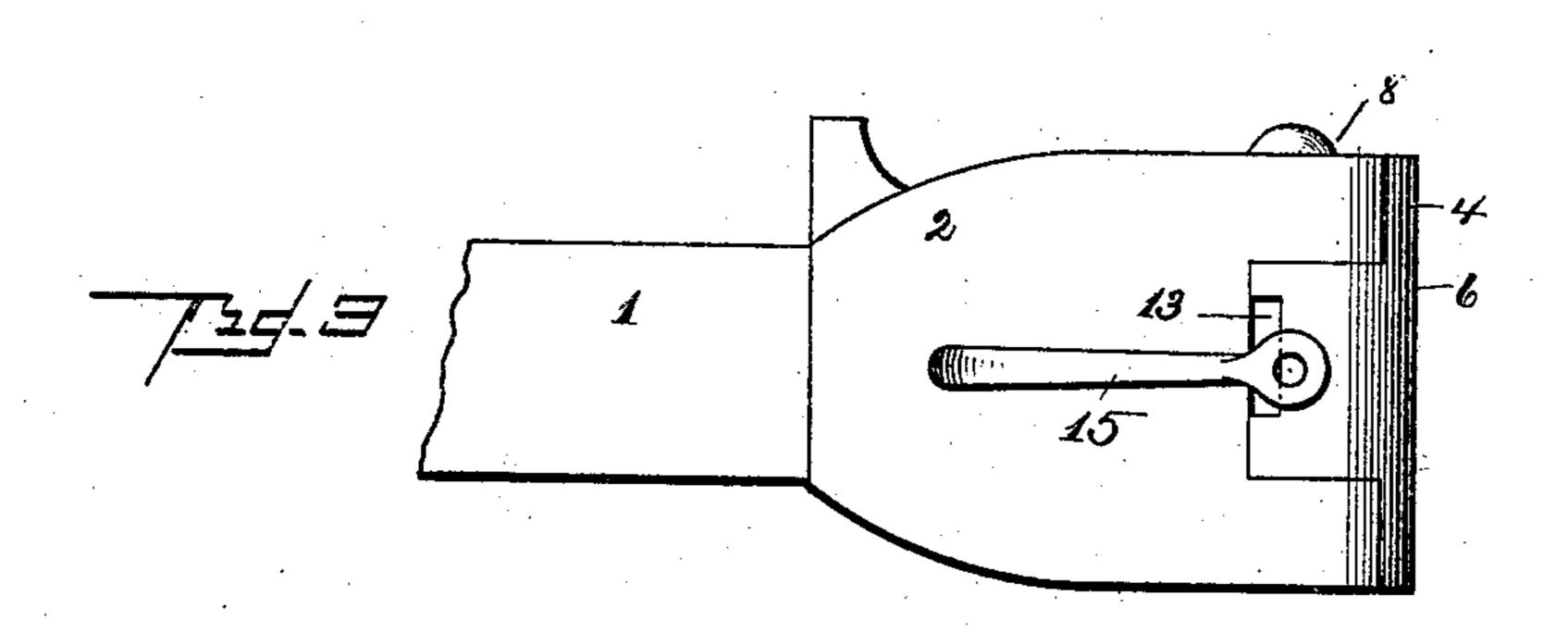
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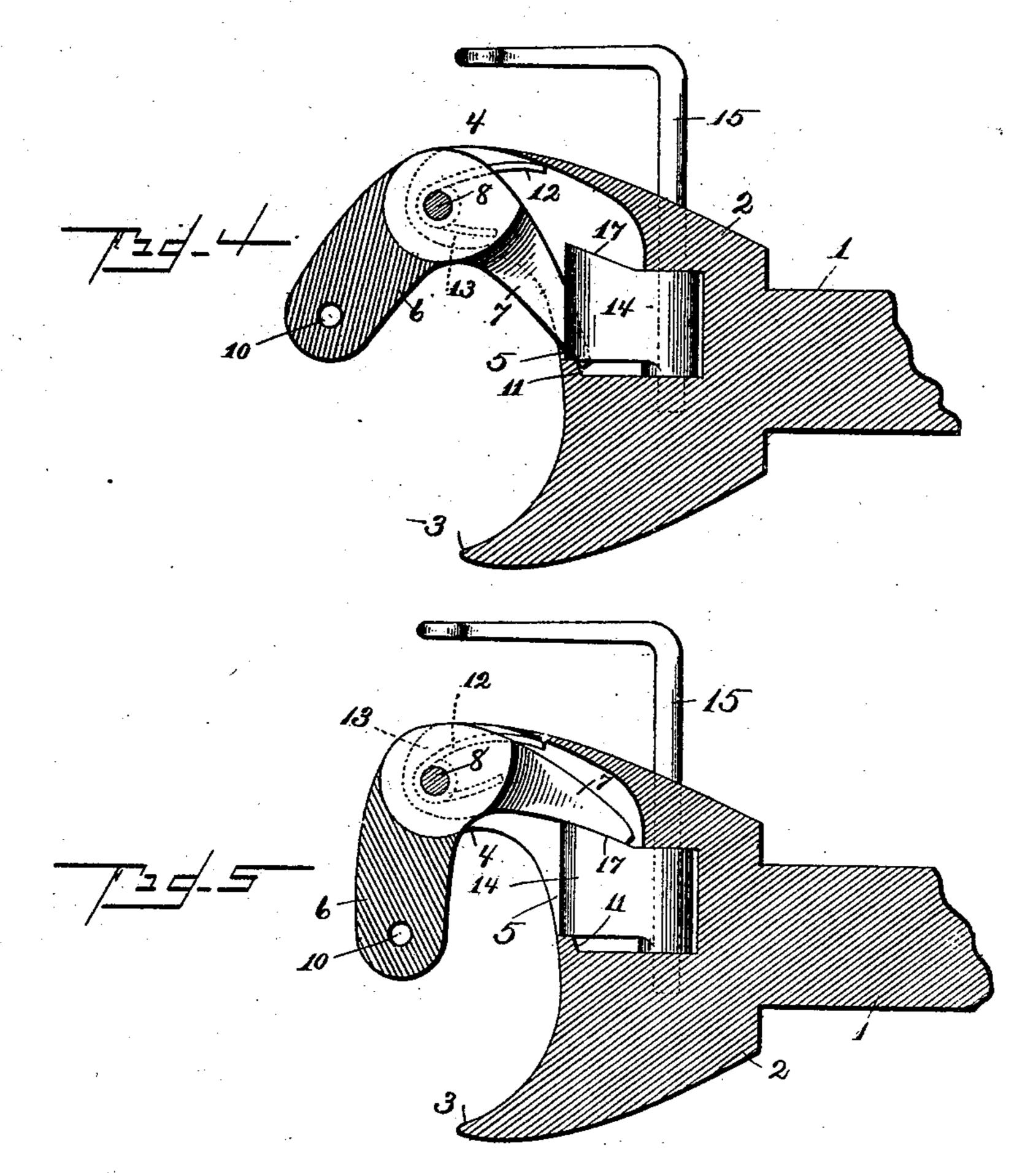
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Witnesses Mushwood. Dennis Wholey

By Vafe/air Viftkins

Attorney

United States Patent Office.

DENNIS WHOLEY, OF LOWELL, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 513,961, dated January 30, 1894.

Application filed March 23, 1893. Serial No. 467, 347. (No model.)

To all whom it may concern:

Be it known that I, Dennis Wholey, of Lowell, in the county of Middlesex, State of Massachusetts, have invented certain new 5 and useful Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce 10 an improved coupler which automatically couples by meeting a corresponding coupling, and which may be readily uncoupled by an operator from a distance.

My invention is designed to obviate the 15 dangers to which operators are now exposed

in coupling and uncoupling cars.

In the accompanying drawings: Figure 1 is a front elevation of a box car with one of my couplings attached. Fig. 2 is a top plan view 20 of the coupling detached. Fig. 3 is a side elevation thereof looking toward the uncoupling crank. Fig. 4 is a horizontal longitudinal section, showing the operating mechanism of the coupling when the jaw is open. 25 Fig. 5 is a similar view, showing the mechanism when the jaw is closed.

Referring to the figures on the drawings: 1 indicates a draw-head and 2 a coupler head preferably cast of solid metal, as illustrated.

30 3 indicates a retaining or guiding lip on one side of the coupler head and 4 a knuckle

on the opposite side thereof.

5 indicates a recess formed in the front and one side of the coupler head and in the 35 knuckle. This recess is designed to accommodate a jaw 6. The jaw is provided with a curved tapered tongue 7, through which a pintle 8, passing through the knuckle, is inserted and by which the jaw is pivotally se-40 cured upon the coupler head. The jaw is preferably provided in its forward end with a link recess 9 and pin holes 10, by which, if required, my coupler may be united to the ordinary link coupling. The extreme end of 45 the tongue, when the jaw is tilted outwardly, strikes in a recess 11 in the wall of the coupler head and limits the degree of rotation of the jaw upon its pintle. The jaw is normally held in the open position by suitable 50 means, preferably by a double coiled spring

12 seated in the recess 13. One of the ends of the spring bears against the side of the recess and the others, projecting outwardly, bear against the outer wall of the coupler head and operate as required. The pintle 55 preferably passes through the coil of the spring and holds it securely in place.

For holding the jaw in the closed or coupling position, I employ a dog 14, fixed on a rock shaft 15 in the recess. The shaft is 60 preferably provided with a crank end 16 for operating it. The dog is, in practice, of sufficient weight to allow it to fall between the wall of the recess 5, and the end of the tongue whenever the jaw is turned toward the coup- 65 ler head sufficiently to allow space for the admission of the dog. The side of the dog against the tongue is beveled, as shown at 17, whereby the broad bearing face of a solid piece of metal is opposed against the tongue, 70 and danger of breakage or crushing of the

parts is completely obviated.

In operation, suppose the jaw to be in its normal position, as shown in Fig. 4 of the drawings. If a twin coupler is forced against 75 it, the jaw will be turned upon its pivot until brought nearly at right angles to the general direction of the knuckle, when the dog, of its own weight, will drop in place behind the tongue and securely fasten the jaw in 80 this position, thereby coupling the parts together. Upon lifting the crank 16 the tongue will be relieved from the operation of the dog and the jaw, actuated by its spring, will fly open and uncouple the parts. The crank 85 may be operated either from the side of the car or from its top, as by a crank shaft 18 and chain 19, or by a vertical chain 20, communicating with the crank 16, from the top of the car.

What I claim is—

1. In a coupler, the combination with the coupling head, knuckle and recess, of a spring actuated jaw pivoted in the knuckle, a tongue on the inner end of the jaw, a pivoted grav- 95 ity dog adapted to be interposed between the end of the tongue and the wall of the recess, one side of the dog being beveled to conform to the inclination of the tongue, and the flange upon the head adapted to limit the movement 100 of the tongue under the impulse of the spring when the gravity dog is lifted, substantially

as specified.

2. In a coupler, the combination with the coupling head, knuckle and recess, of a jaw pivoted in the knuckle, a tongue on the inner end of the jaw, a pivoted dog adapted to be interposed between the end of the tongue and the wall of the recess, one side of the dog being beveled to conform to the inclination of the tongue, substantially as specified.

3. The combination with the coupler head 2 provided with the recess 5 and flange 11, of the jaw 6, coil spring 12 adapted to actuate the jaw, tapered dog 14 and shaft 15, sub- 15 stantially as specified.

In testimony of all which I have hereunto

subscribed my name.

DENNIS WHOLEY.

Witnesses:

Joseph L. Atkins, Louis G. Julihn.