

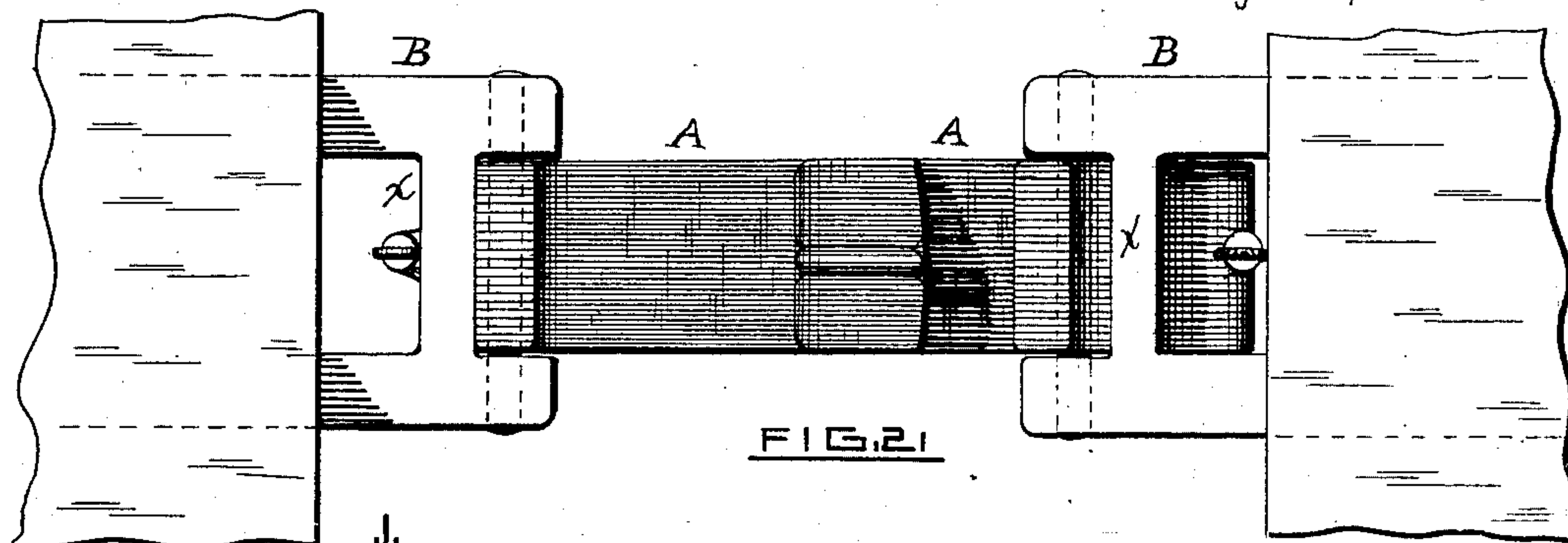
(No Model.)

N. J. CHEENEY.

## CAR COUPLING.

No. 281,974.

Patented July 24, 1883



**FIG. 21**

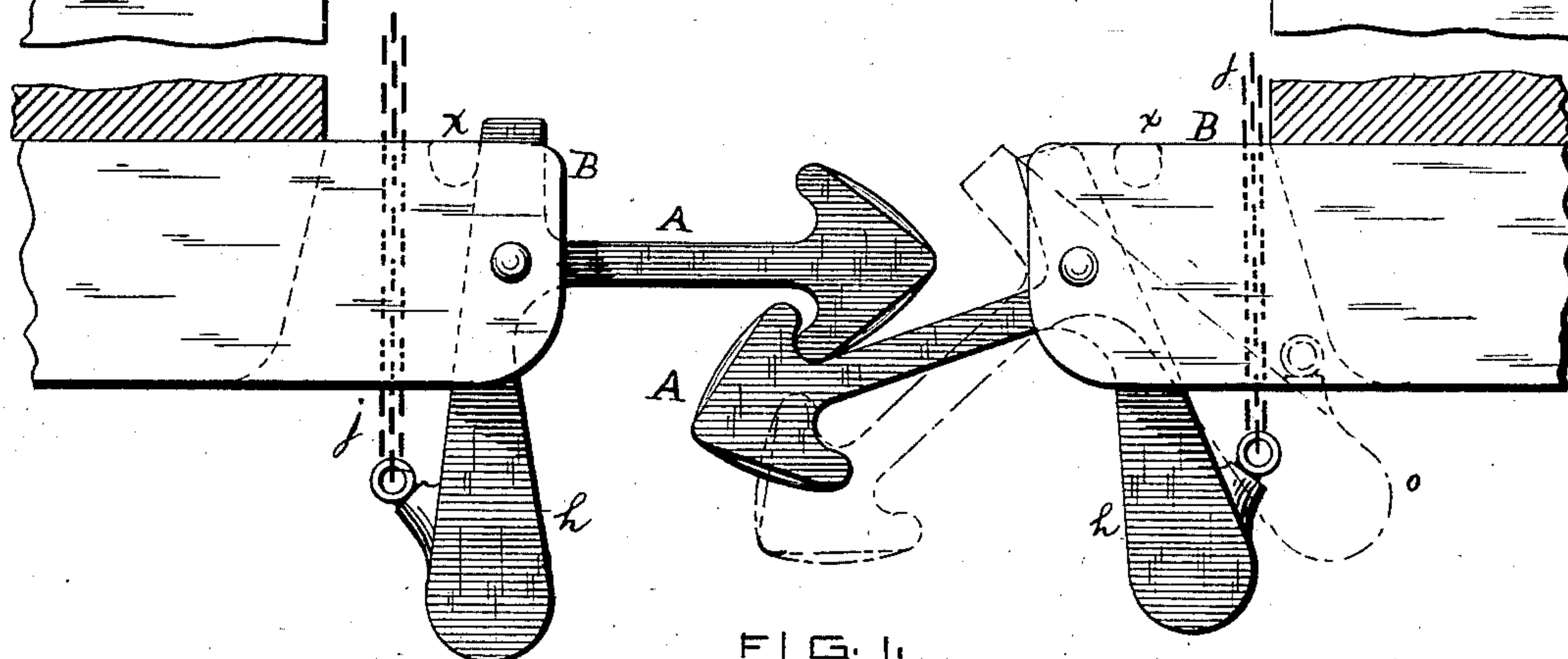


FIG. 1.

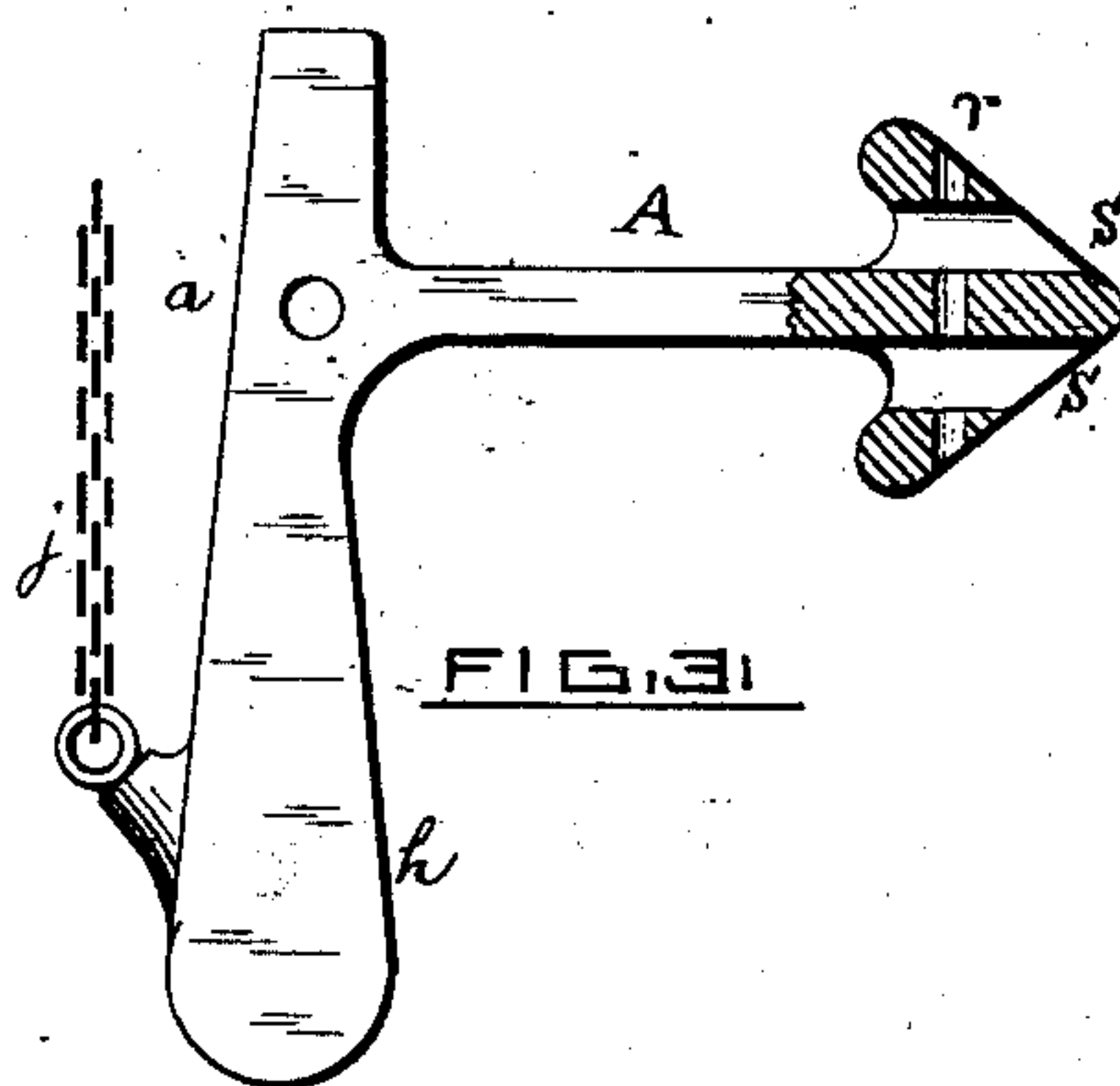


FIG. 31

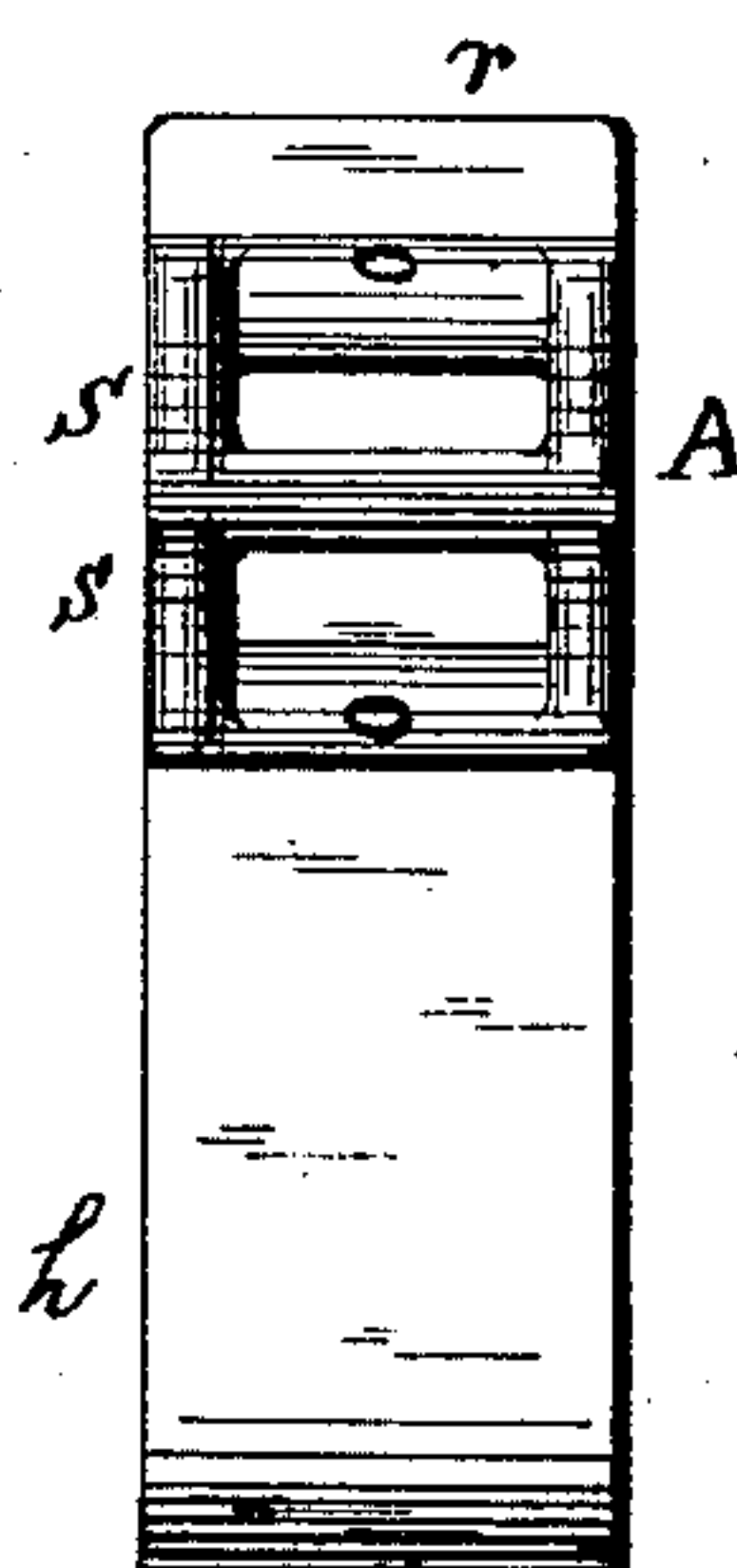


FIG. 4.

WITNESSES.

INVENTOR,

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NATHANIEL J. CHEENEY, OF EAST GREENWICH, RHODE ISLAND.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 281,974, dated July 24, 1883.

Application filed November 2, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, NATHANIEL J. CHEENEY, of East Greenwich, in the county of Kent and State of Rhode Island, have invented certain new and useful Improvements in Railway Car-Couplings, of which the following is a full and correct description, reference being had to the accompanying drawings, forming a part of this specification.

10 This invention consists in making an automatic car-coupling of a knee-shape, pivoted in the draw-head with a pin through the angle, which allows it to move in a vertical plane. The connecting part of the knee is 15 in a horizontal position, and the angle formed by the horizontal arm and the upper extension of the vertical part of the knee A receives the head of the other coupling when the cars come together and prevents any damage from the couplings overriding each other, 20 and is made at its outer end in an obtuse arrow-head shape, so that when two heads come together one of them shall slide under the other and catch into it; also in making recesses in the head to receive a link and in attaching 25 a chain to the lower part of the knee whereby it may be uncoupled from the top or side of the car.

30 In the drawings, Figure 1 is a side elevation of the coupling in the drawhead. Fig. 2 is a top view of the same. Fig. 3 is a side view of the coupling, the head being shown in section. Fig. 4 is an end view of the same.

35 The coupling is made in the shape of a knee, A, Fig. 3, with a hole, *a*, at the angle through which the pin *b* is passed horizontally, by which it is held in the draw-head B. The connecting end of the knee is made in the shape of an obtuse arrow-head, of whatever breadth horizontally may be necessary 40 for strength. The vertical leg of the knee is weighted or made heavy enough to hold the other part up on a level, and is extended up beyond the angle far enough to come in contact with the brace *x* in the draw-head to prevent the level part from rising above that position. A chain, *j*, is attached to the lower 45 part of the coupling, by which it can be raised and the head thereby depressed sufficiently to disconnect it from the other head. This chain can be operated from the top or one side

of the car, as may be preferred. Two recesses, *s s*, are made in or through the head of the coupling, one recess above the center-plate and the other below, and of proper size to receive 55 the ordinary coupling-link, for the purpose of coupling a car having the improved coupling with one having the usual link, as is sometimes necessary. The two recesses will accommodate cars of different heights, and the 60 motion of the head up and down allows the link to draw properly at any of the usual heights. A hole, *r*, is made vertically through the head of the coupling to receive the pin that holds the link. 65

The operation of the coupling is automatic. When two heads come together one of them is depressed and slides under the other, which, continuing on, brings up against the projection above the pivot, and this, with the weighted 70 lower end of the coupling, brings the lower head up so as to catch in the upper one. This prevents the necessity for the dangerous operation of going between the cars for the purpose of coupling them. To uncouple the cars, 75 the weighted end of the knee is raised by means of the chain *j* from the top of the car or from one side to the position shown by the dotted lines, as in Fig. 1, when the heads will clear each other; and another advantage derived 80 from this improvement is that in case of the derailment of a car the lateral movement of one part of the coupling is very sure to disconnect it from the other head, and thus prevent the next car from being dragged off of 85 the track.

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

The knee A, having an arrow-shaped head, made with recesses *s s*, and the vertical part 90 of the knee weighted at the bottom, and the upper end extended far enough above the pivot on which it swings to serve as a stop to the head of the other coupling, and, in combination with the brace *x*, to prevent the horizontal part of the knee from rising above that position. 95

NATHANIEL J. CHEENEY.

Witnesses:

NATHANIEL G. CARPENTER,  
EDWARD STANHOPE.