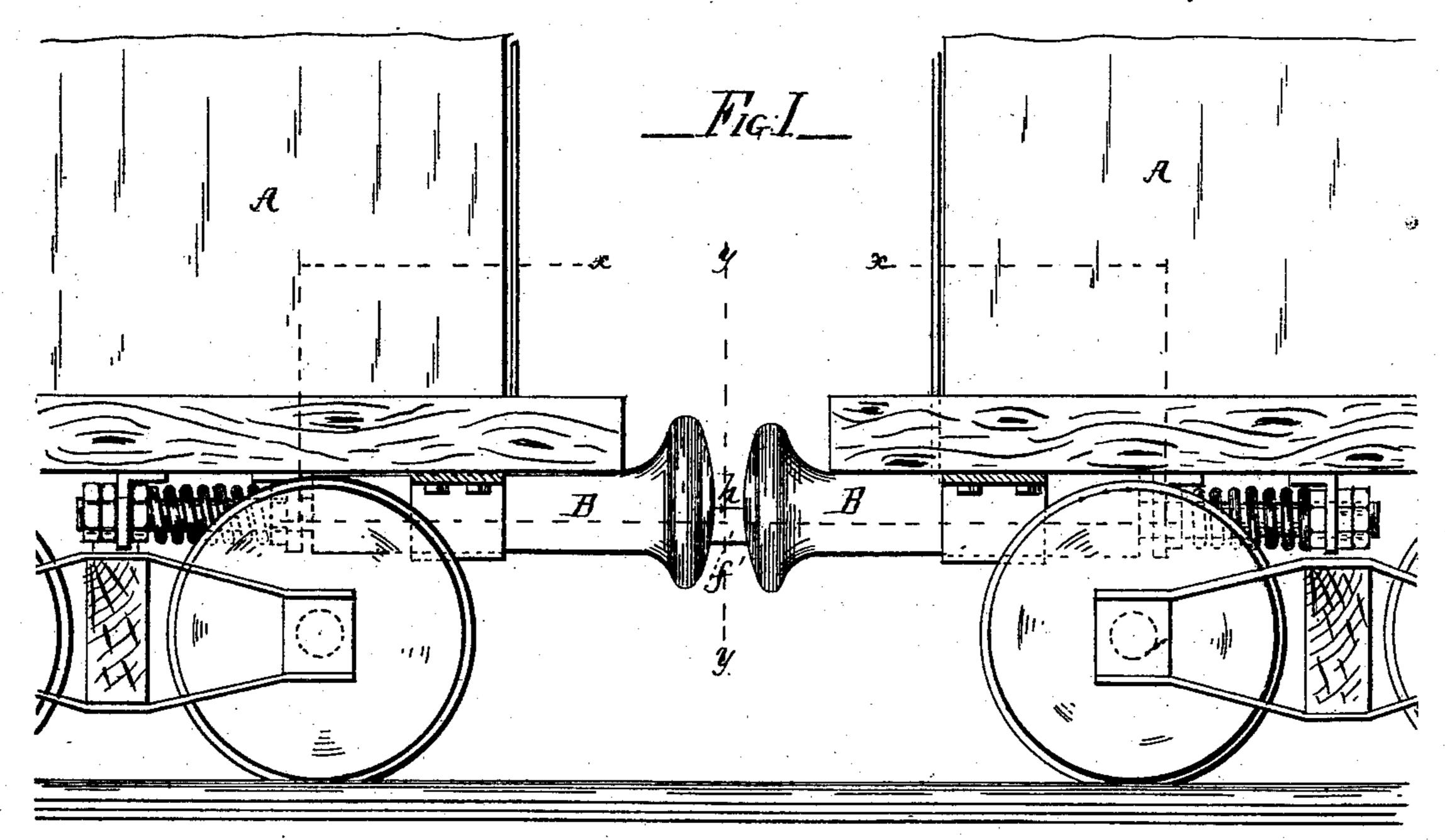
H. P. JONES.

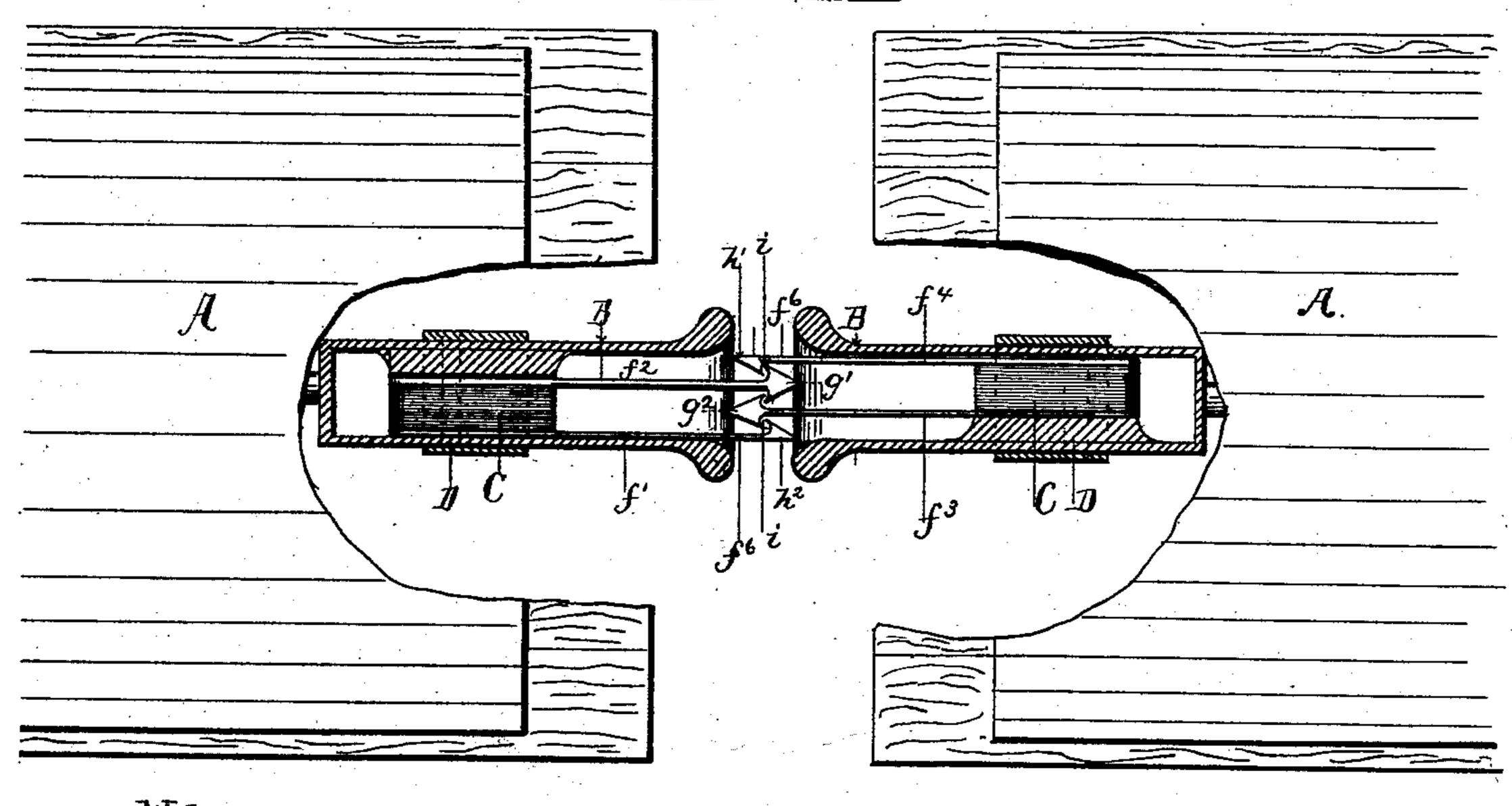
CAR COUPLING.

No. 372,268.

Patented Oct. 25, 1887.







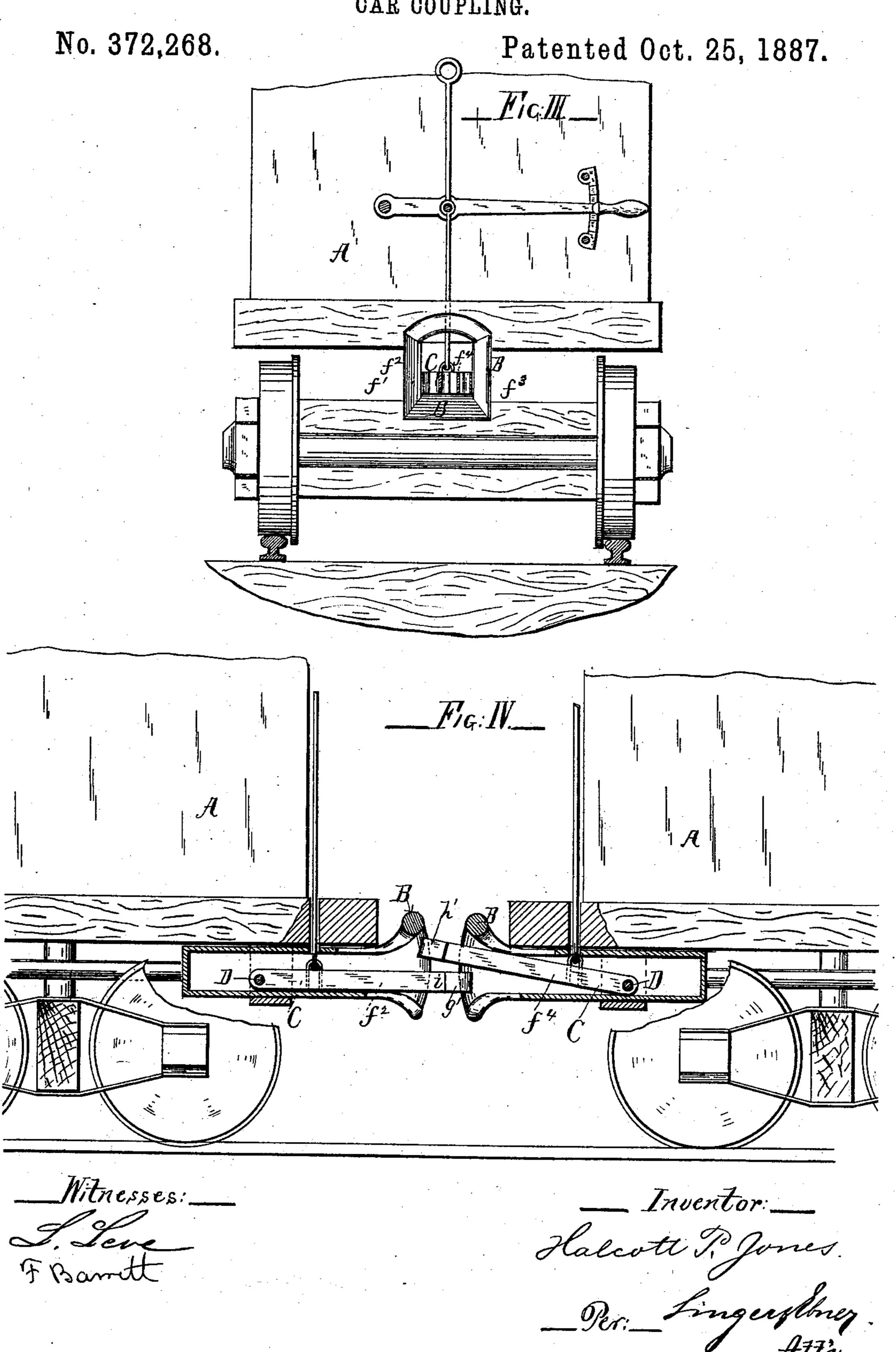
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## H. P. JONES. CAR COUPLING.



## United States Patent Office.

HALCOTT PRIDE JONES; OF HILLSBOROUGH, NORTH CAROLINA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 372,268, dated October 25, 1887.

Application filed February 17, 1887. Serial No. 227,947. (No model.)

To all whom it may concern:

Be it known that I, HALCOTT PRIDE JONES, a citizen of the United States, residing at Hillsborough, Orange county, North Carolina, 5 have invented a new and useful Improvement in Car-Couplings, of which the following is a clear and exact description.

My invention relates to car couplings; and the object of my improvement is to produce a 10 coupling for freight and passenger cars, which is simple in construction, easily operated and applied, and not liable to get out of order from constant usage. I attain these objects by the mechanism illustrated in the accompa-15 nying drawings, in which—

Figure I is a side view of two cars embodying my improved coupling. Fig. II is a plan sectional view of the same, taken on line x x, Fig. I. Fig. III is a cross sectional view taken 20 on line y y, Fig. I. Fig. IV is a longitudinal

section showing how the cars are uncoupled. A A represent two cars; B B, the buffers

attached thereto. C C are the coupling-bars, pivoted on pins 25 D D, secured to the buffer-heads B B. These bars are pivoted within the buffers, as shown in Figs. II and III. The outer ends of these bars C C are provided with two spring arms,  $f'f^2f^3f^4$ . The arms  $f^2$  and  $f^3$  are provided 30 with double arrow-heads  $g' g^2$ , and arms  $f' f^4$ are provided with single or half arrow-heads h'  $h^2$ . The arms are so arranged that the smooth or plain surface  $f^6$  thereof will always be on the outside. (See Fig. 2.) In 35 order to do this, the arms with the double arrow-heads, (designated  $f^2f^3$ ,) must be so placed onto the coupling-bar as to always pass in between themselves and the arms with single or halfarrow-heads. The arrow-heads should be 40 so constructed as to offer as little resistance to the spreading apart of the arms as possible.

length to give as much or as little slack motion as may be required. allow the bars and arms to rest on the buffers, as shown in Figs. III and IV. When the cars come together, the double arrow-head g'of arm  $f^2$  will pass in between the arrow-head

The arms  $f'f^2f^3f^4$  are to be made of sufficient

50  $g^2$  and single or half arrow-head h', and at the same time the said head  $g^2$  will pass in between the said head g' and single or half head  $h^2$ . As soon as the arrow-heads have passed each other, they will automatically spring be-

hind one another and effectually lock or couple 55 the cars together. (See Fig. II.) Parts i of the heads are curved inward, so as to form a surer and better grip, and at the same time permit the cars to move around curves and to play up and down without uncoupling.

To uncouple the cars, raise the bar C, as shown in Fig. IV. Either one of the bars can be raised and produce the same result. Different modes can be devised for raising the bars C C. The device shown is applicable to 65 freight-cars. On passenger-cars a different device can be used. As this does not relate to nor affect the principle of my invention, I do not go into a lengthy description of any particular device for accomplishing the same. 70 The depth of the coupling bars, with their spring-arms, should be sufficient to permit the coupling of a loaded or unloaded car or cars of different heights.

It will be observed that when the cars come 75 together after being coupled the buffers take up the concussion and not the coupling bars.

The buffers should be constructed high enough to allow the coupling-bars to be lifted in order to uncouple. Likewise, the lower 80 front ends of the buffers are opened to allow the heads to pass in when the cars are of unequal height.

The coupling-bars are made of metal and the arms thereof steel. The same result can 85 be accomplished by making the arms of any other metal and giving them elasticity by means of a spiral or other spring placed between them.

The buffers can be cast or otherwise con- 90 structed.

Having thus described my invention, I desire to claim—

In a car-coupling, the hollow or tubular draw-bar and draw-head, in combination with 95. the bars C C, having barbs ii, and suitable operating-levers, the bars being horizontally pivoted within the draw-head, and thereby pro-To couple cars with my invention, simply | tected from buffing strains and secured against accidental uncoupling, as set forth and de- 100 scribed.

> In witness whereof I hereunto set my hand in presence of two witnesses.

## • HALCOTT PRIDE JONES.

Witnesses:

F. BARRETT,

G. T. Cook,