

(No Model.)

J. P. WEBER.

CAR COUPLING.

No. 391,828.

Patented Oct. 30, 1888.

Fig. 1.

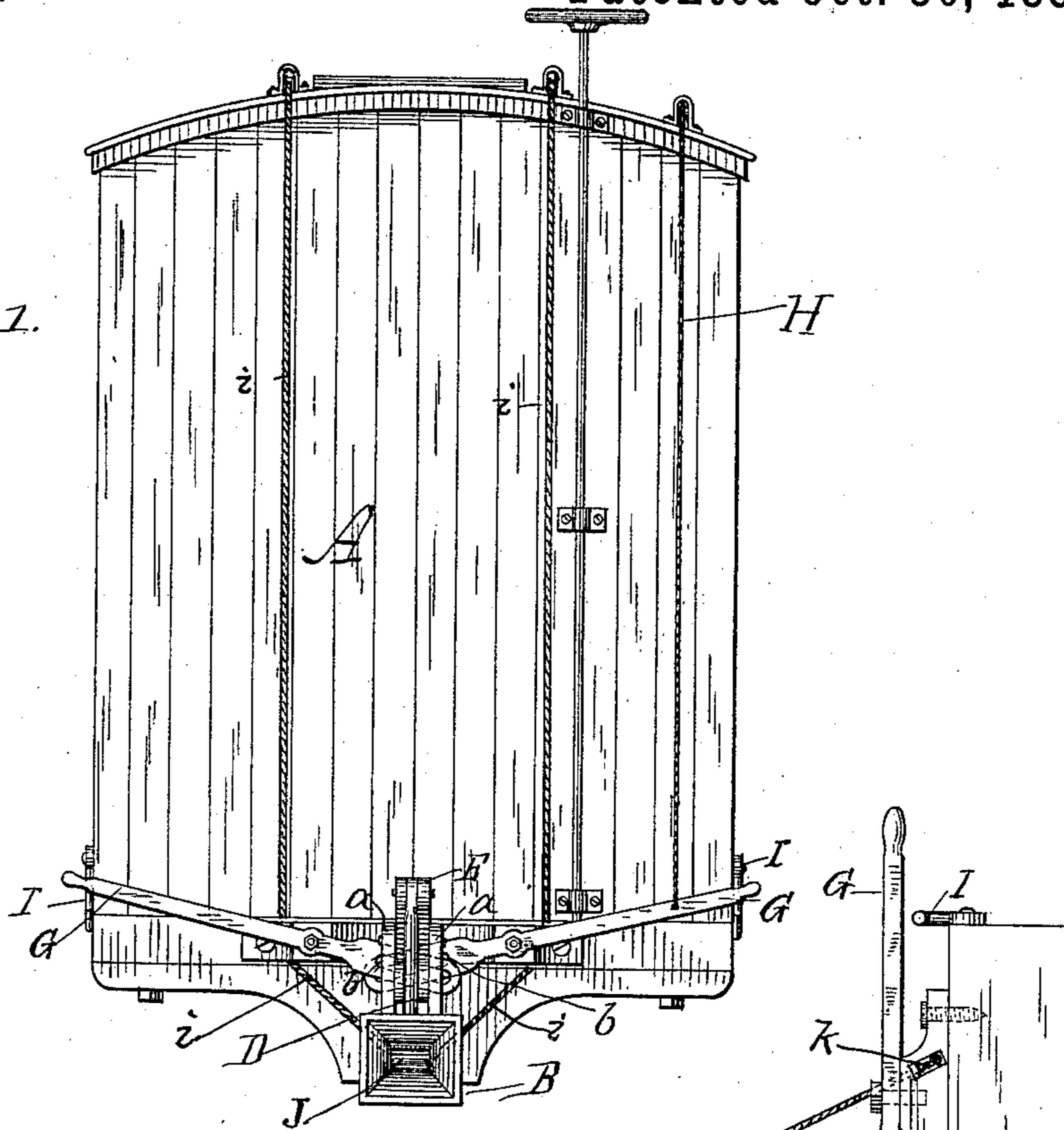


Fig. 2.

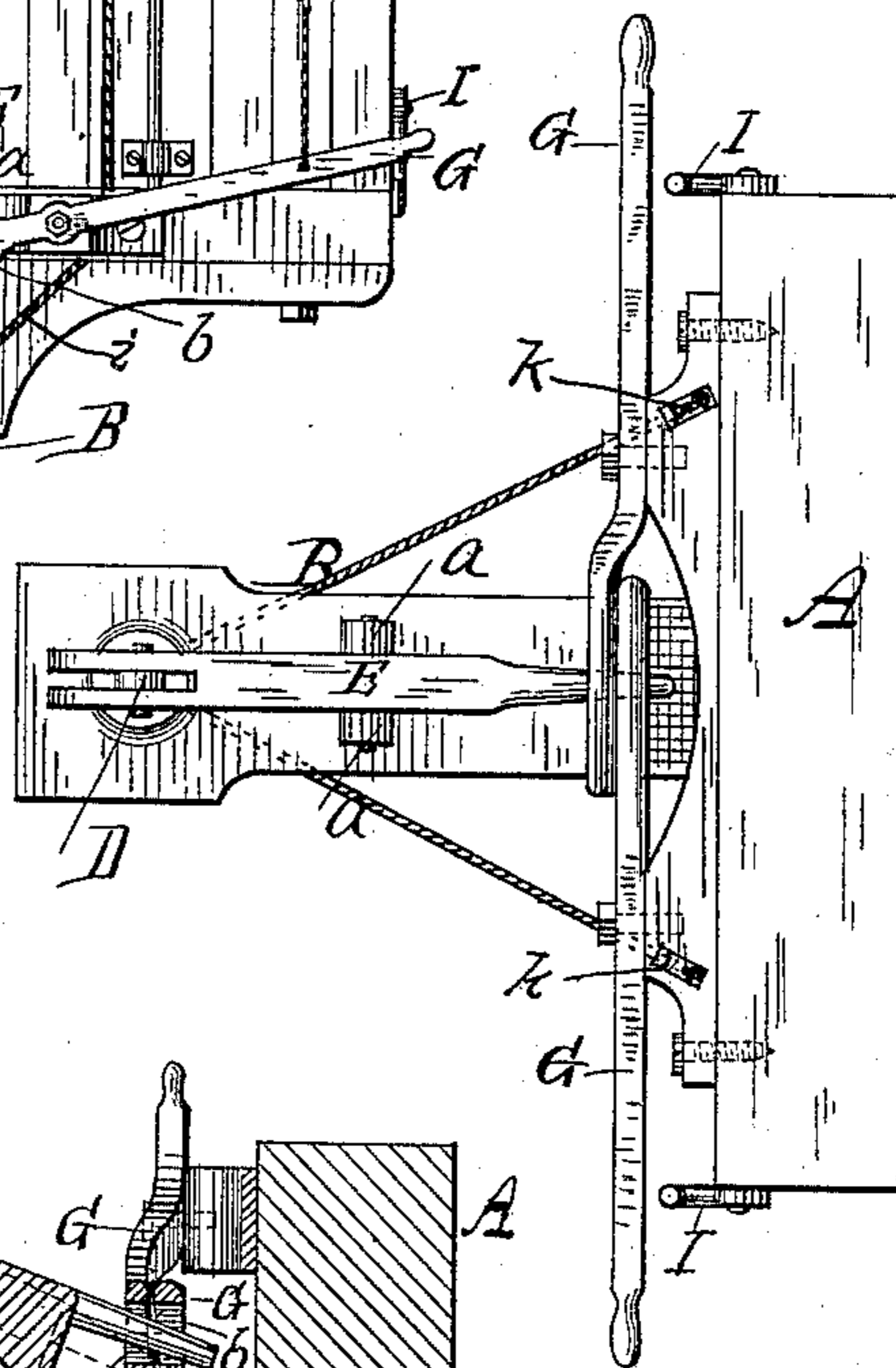
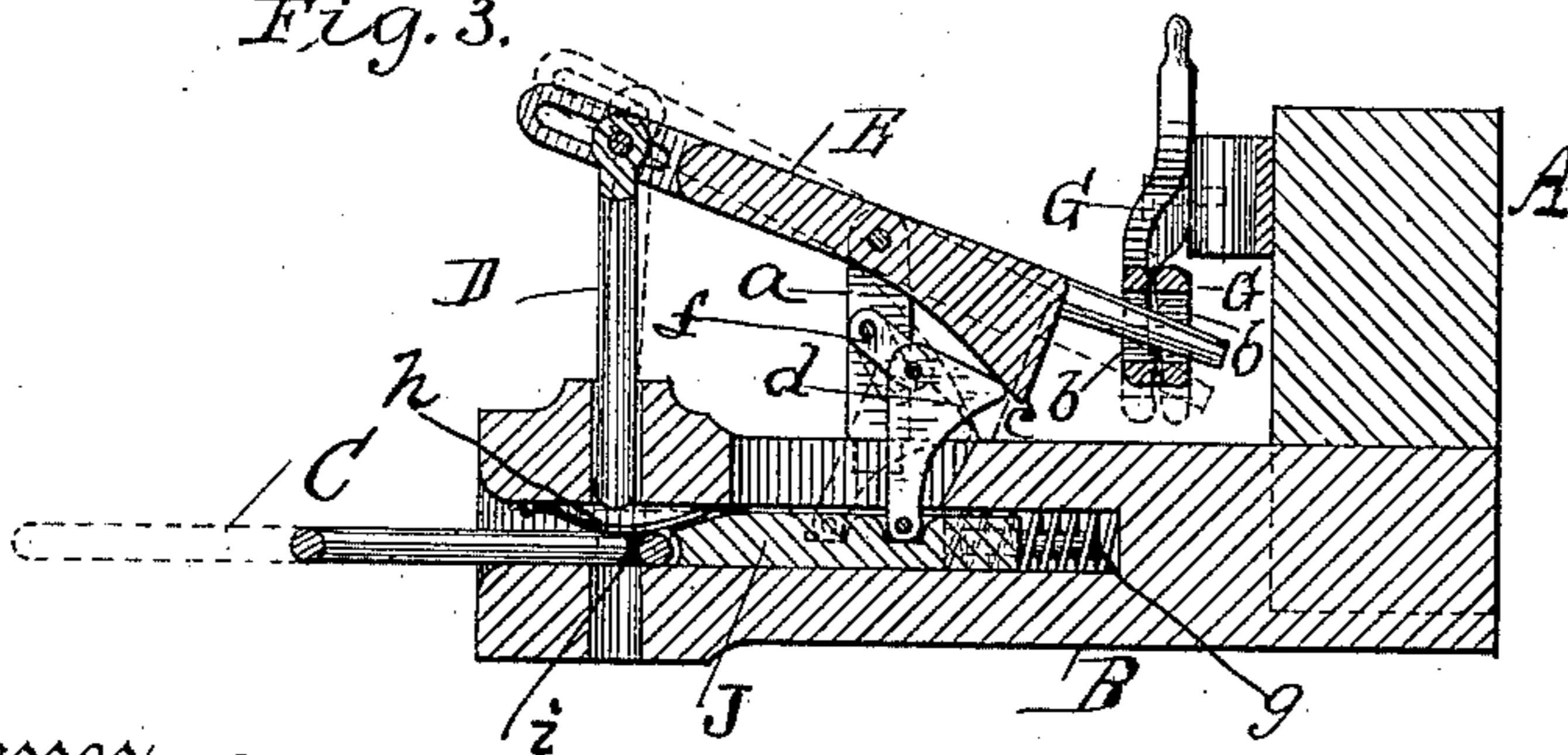


Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

JOSEPH PETER WEBER, OF WAHPETON, DAKOTA TERRITORY.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 391,828, dated October 30, 1888.

Application filed February 24, 1888. Serial No. 265,169. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH PETER WEBER, a citizen of the United States, residing at Wahpeton, in the county of Richland, in the Territory of Dakota, have invented an Improved Automatic Car-Coupling; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

This invention is a self-coupling car-coupler, and is especially intended to render it unnecessary for a brakeman or other person to go between the cars for coupling them and to allow him to stand at either side or on top of a car for uncoupling the same.

My improvements will herein be fully set forth in the following specification, and defined in the claims.

In the accompanying drawings, Figure 1 represents a front view of a car and my improved coupling applied thereto; Fig. 2, a top view of the same; Fig. 3, a longitudinal central vertical section through the same and the draw-head of the car.

Like letters designate corresponding parts in all of the figures.

In the drawings, A represents the body of a car, only the end of which is shown; B, the draw-head, and C a coupling-link of ordinary construction. The coupling-pin D, which couples the link in the draw-head, is suspended at its upper end to a lever, E, and pivoted thereto at the point of suspension. This lever extends from the coupling-pin toward the body of the car, and is pivoted near its middle between bearings *a a*, supported by the draw-head or car-platform. The rear or inner end of the lever is coupled to two other levers, G G, which are pivoted to the end of the car and extended outwardly, respectively, to the two sides of the car. A simple way of connecting the hand-levers G G with the coupling-pin lever E is, as shown, by having slots *b b* in the ends of the hand-levers, through which the inner end of the coupling-pin lever passes. With this construction, when the outer end of either hand-lever is lifted by a person, its inner end is depressed, thereby depressing the inner end of the coupling-pin lever and raising the outer end of the same and lifting the coupling-pin in

the draw-head until the coupling-link is set free and the car is uncoupled.

For freight-cars I also provide a means for uncoupling the car from the top, and this I easily accomplish by having a chain, cord, or rod, H, Fig. 1, reaching from the outer end of one or each of the hand-levers upward to the top of the car, where it can be readily reached, and by drawing up on the same the outer ends of the hand-levers are lifted and the car uncoupled in the same way thereby as above described. Instead of connecting from the top of the car with the outer ends of the hand-levers, the same connection might be made with the outer end of the coupling-pin lever with the same operation on the coupling-pin; or the connection may be made with the inner end of either hand-lever or of the coupling-pin lever from the top of the car, using a push rod or bar, however, so that the inner ends of the said levers may be depressed thereby for effecting the uncoupling of the car.

The outer ends of the hand-levers are or may be supported by hooks I I on the end of the car when they are raised and the car is uncoupled, thereby holding the coupling-pin up in the draw-head ready for the insertion of a coupling-link for the next coupling. This means of holding up the coupling-pin is based on the arrangement which I have adopted of having the outer ends of the levers, together with the weight of the coupling-pin, outweigh the inner ends of the levers, whereby the coupling-pin is self-coupling when free to descend, and this arrangement can be made in any case by a spring or counter-weight even when the levers are not so constructed.

An additional feature of my invention consists in combining with the coupling-pin and its suspending-lever a sliding block, J, in the draw-head, which block is pushed forward automatically under the lower end of the coupling-pin as soon as the latter is raised high enough to set free the coupling-link. This sliding block is pushed forward by the coupling-pin lever E as its inner end is depressed by any suitable connection between the two. I have shown a cam or tappet, *c*, on the inner end of the lever, which tappet is arranged to strike a projection, *d*, extended upward from the sliding block as soon as the coupling is set

free, and in the further descent of the lever the block is pushed forward thereby under the coupling-pin, and consequently holds it out of action. The projection *d* is shown as an arm 5 pivoted to the sliding block and having a shackle-connection, *f*, with the standards or bearings *aa* of the lever. Any equivalent connection between the lever and sliding block may be used. The coupling-link, when it is 10 driven into the draw-head in coupling, first strikes the forward end of the block and pushes it back from under the coupling-pin, and then the coupling-pin drops automatically into the link and completes the coupling. A spring, 15 *g*, is preferably placed at the rear of the sliding block in the cavity of the draw-head to press the sliding block forward to the link when the car is coupled. The spring also assists in holding the block securely under the 20 coupling-pin when the car is uncoupled. Another spring, *h*, is located in the draw-head and presses down upon the link when it is coupled, as shown in Fig. 3, and thereby holds the link in a horizontal position. This spring does not 25 interfere with the insertion or withdrawal of the link in the draw-head. A cord, *i*, is fastened to the link and extends backward and outward therefrom through an opening in one or each side of the draw-head, and thence 30 around a pulley, *k*, located in a suitable position on the front of the car on each side, as shown, and the cord extends upward to the top

of a freight-car, where it can be readily reached by an attendant for the purpose of drawing the link into the draw-head when it is uncoupled. 35 Any equivalent means of the cord and pulleys may be employed.

I claim as my invention—

1. The combination of the coupling-pin D, coupling-pin lever E, provided with a tappet, 40 *c*, the coupling-link C, and the sliding block J, located behind the coupling-link and provided with an upward projection or arm, *d*, substantially as and for the purpose herein specified.

2. The combination of the coupling-pin D, coupling-pin lever E, provided with the downwardly-projecting tappet *c*, sliding block J, situated directly to the rear of the coupling-link and having an upward projection or arm, 50 *d*, and the slotted levers G G, adapted to engage with the rear end of the lever E, substantially as and for the purpose herein specified.

3. The combination, with the draw-head B and coupling-link C, of the cord *i*, for drawing 55 the link into the draw-head, substantially as herein specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH PETER WEBER.

Witnesses:

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LOUIS FEESER, Jr.