

(No Model.)

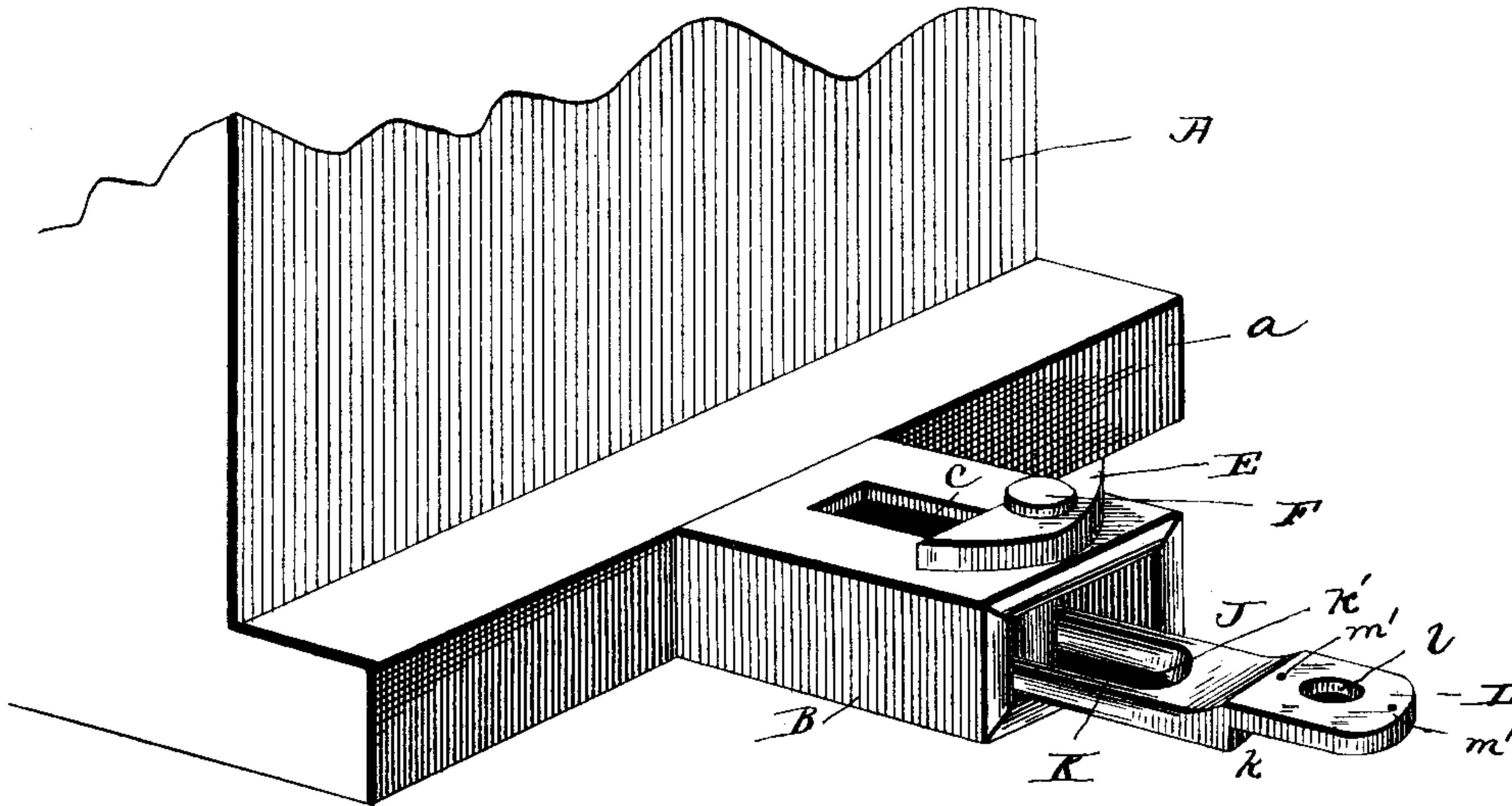
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CAR COUPLING.

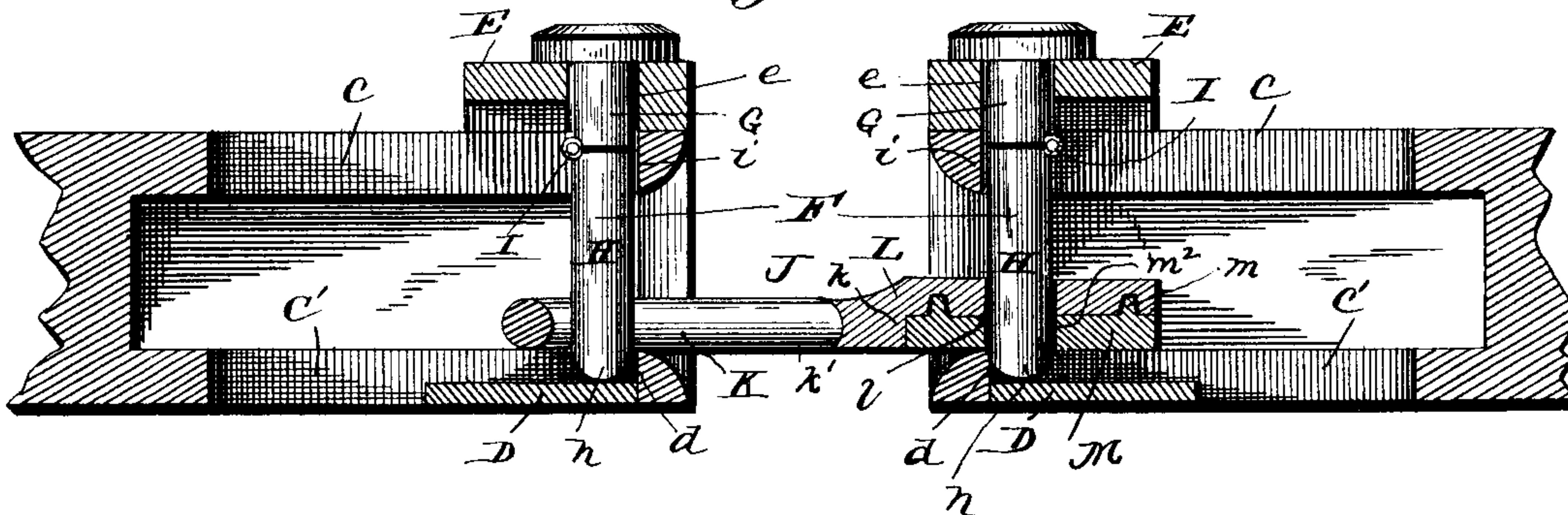
No. 391,140.

Patented Oct. 16, 1888.

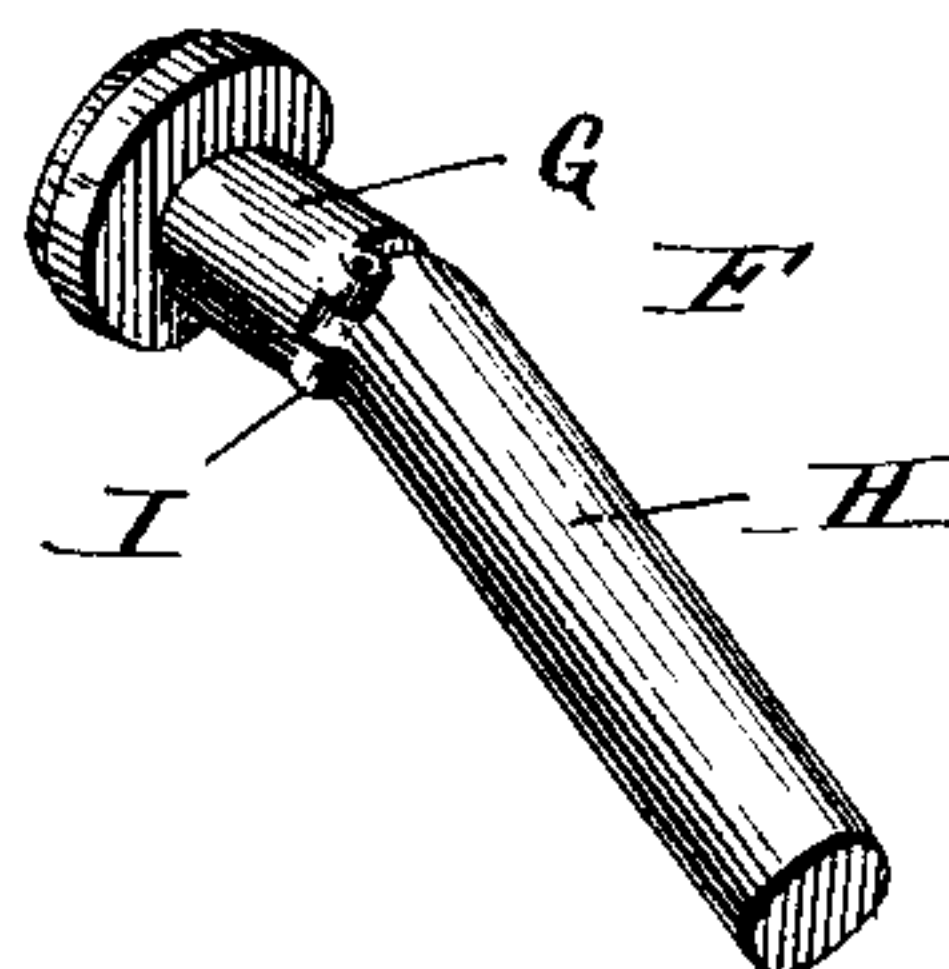
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses,

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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 391,140, dated October 16, 1888.

Application filed June 21, 1888. Serial No. 277,527. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM GIBBONEY, JR., a citizen of the United States, residing at Belle Hampton, in the county of Pulaski and State of Virginia, have invented new and useful Improvements in Self Car-Couplers, of which the following is a specification.

The invention relates to improvements in car-couplers, the main object being to provide an automatic coupler by means of which the draw-heads of cars of different heights may be engaged; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the end of a car having a coupler embodying the device attached. Fig. 2 is a central vertical longitudinal section of one of the draw-heads of said coupler. Fig. 3 is a perspective view of one of the coupling-pins disconnected from the corresponding draw-head.

Referring to the drawings by letter, A designates the end of a car having the draw-bar *a*, to which the draw-head B is secured in any suitable manner. The said draw-head is recessed and provided with the registering slots C C' in its roof and floor, respectively, and within the front part of the lower slot, C', is inserted the block D, thinner than the floor of the draw-head and forming the shoulder *d* with the front or outer end of the slot C'.

E is a bearing block secured upon the top of the corresponding draw-head and provided with a vertical coupling-pin opening, *e*, that descends into the front portion of the slot C. The said opening *e* is oval or elliptic in cross-section, and within it is inserted the coupling-pin F, that is also elliptic in cross section, and which, while fitting loosely in said opening, cannot turn therein. The said pin is composed of the upper section, G, which extends into the slot C, and the lower section, H, hinged to the upper section and with its lower end, *h*, resting upon the block D and in position to engage against the shoulder *d*. The hinge-joint I between the sections permits the lower section, H, to swing freely rearward; but the upper end of the said lower section bears against the shoulder *i* at the front end of the slot C, and the said section forms a stiff bar

between the shoulders *d* and *i*, against which bar the link J engages when the latter has entered the draw-head. The said link has the parallel end portions, K L, and the bend *k* therebetween, by means of which the said end portions are located at different levels. The end portion K is provided with the longitudinal slot *k'* and the end portion L is provided with the pin-opening *l* and has both sides flat.

M is a flat block that may be attached to either side of the end portion L by means of the pins *m*, which extend from one side of said block and are adapted to enter perforations *m'* in said end portion, so that the link may be reversed to enter a higher or lower draw-head than that to which it is attached. The block M is provided with a coupling-pin opening, *m*<sup>2</sup>, that registers with that in the end portion L of the link, whichever side of said portion the block may be attached to.

When the link enters the opposing draw-head, it swings the lower section, H, of the coupling-pin therein inward, slightly raising the pin, and when the end of the link has passed the pin and the latter swings downward the bend of the link draws or pulls on the lower section, H, of the pin, which is supported by the shoulders *d* and *i*.

Having described my invention, I claim—

1. In a car-coupler, the combination, with the draw-head and coupling-pins, of a link having the parallel end portions, K L, at different levels and connected by the transverse bend *k*, and the block M, provided with the pins *m*, by means of which and the perforations *m'* in the end portion L the said block may be attached to said end portion, substantially as specified.

2. In a car coupler, the combination of the recessed draw-head provided with the slots C C', the block D, and the shoulders *d* and *i* of the link, and the coupling pin consisting of the hinged sections G and H, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WM. GIBBONEY, JR.

Witnesses:

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