

(No Model.)

L. HERMAN.

CAR COUPLING.

No. 285,813.

Patented Oct. 2, 1883.

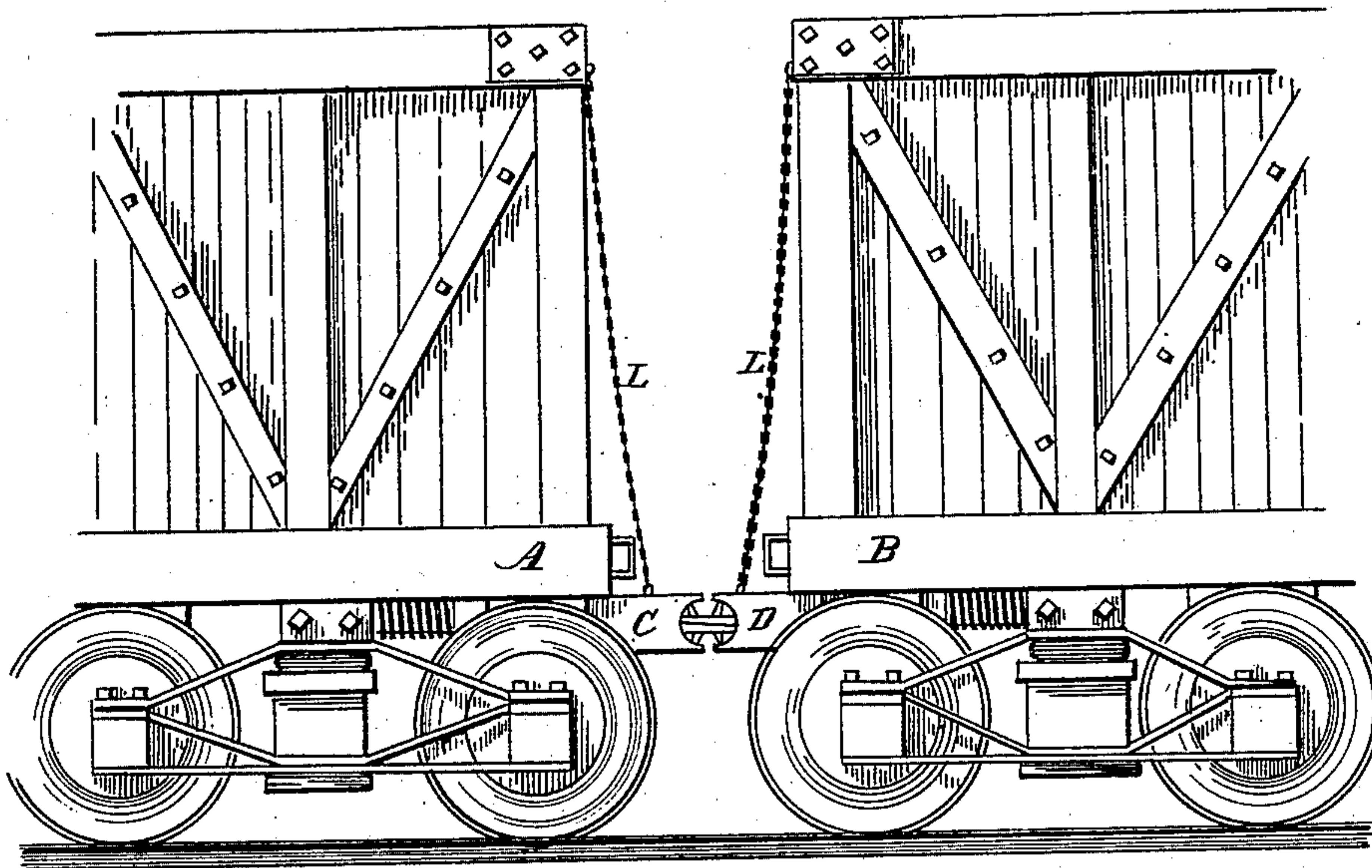


Fig.1.

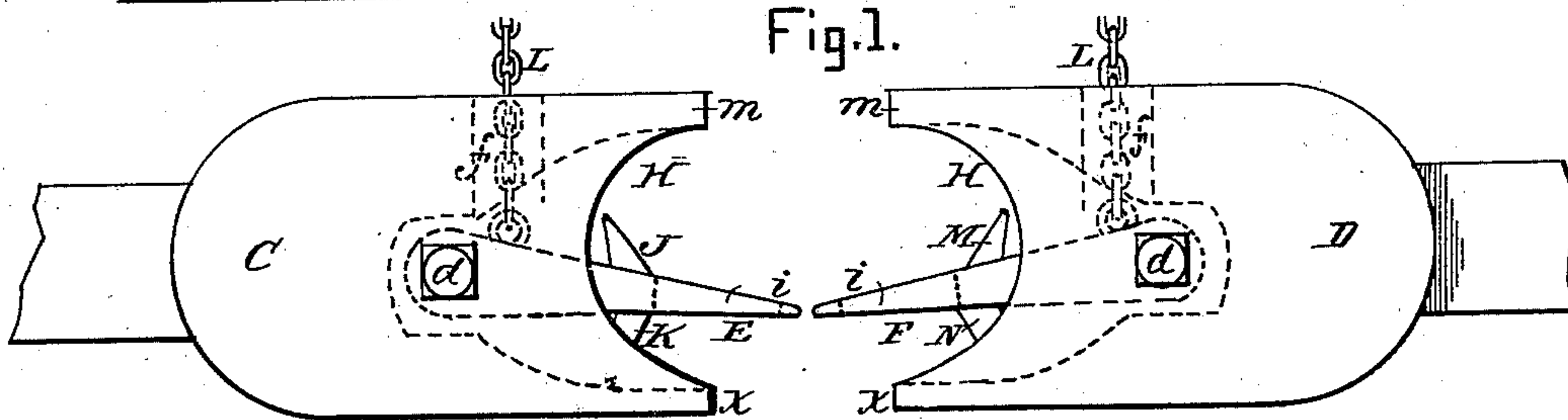


Fig. 2.

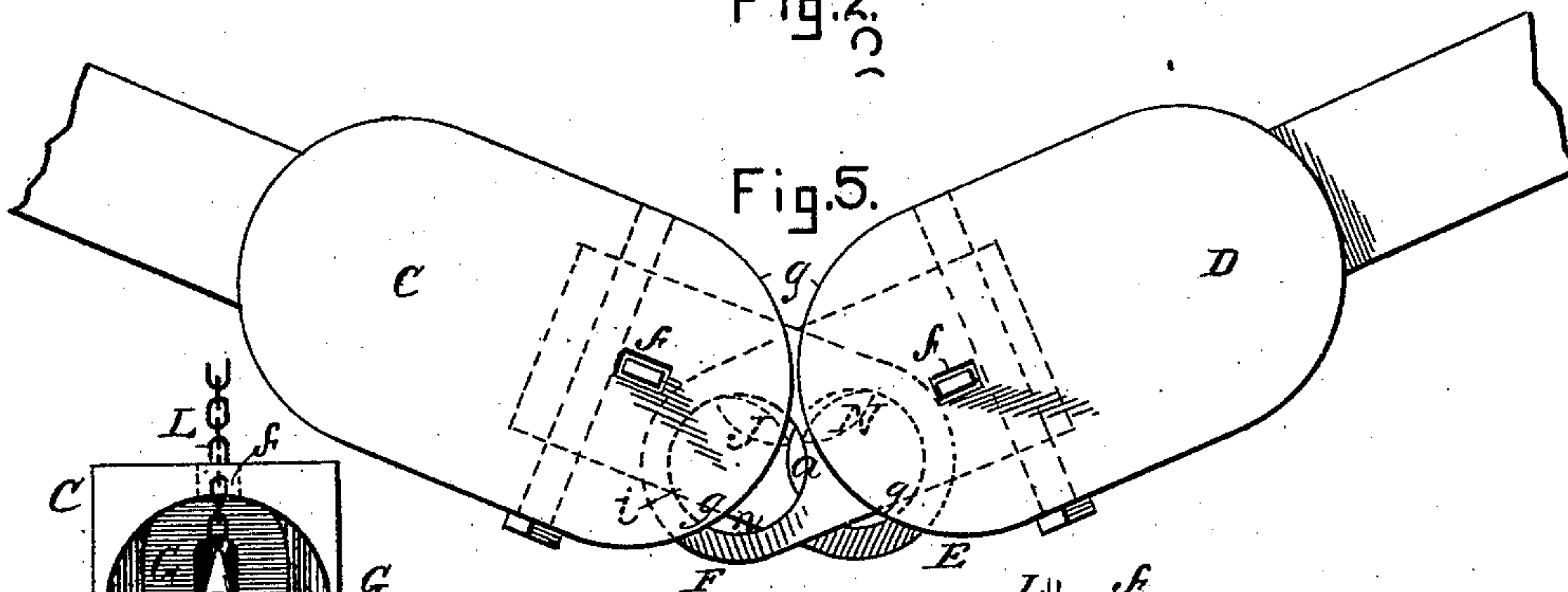


Fig.5.

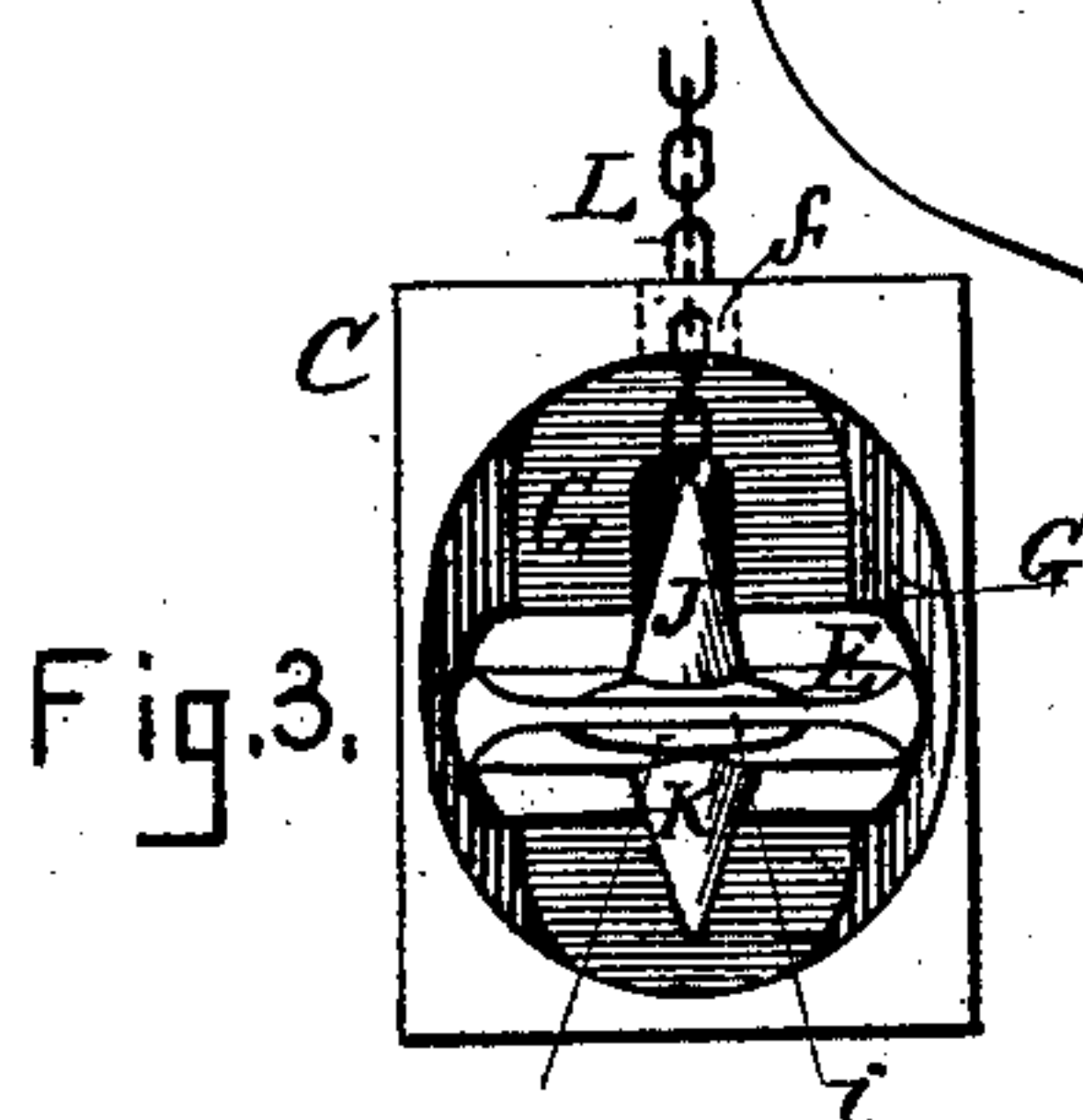


Fig.3.

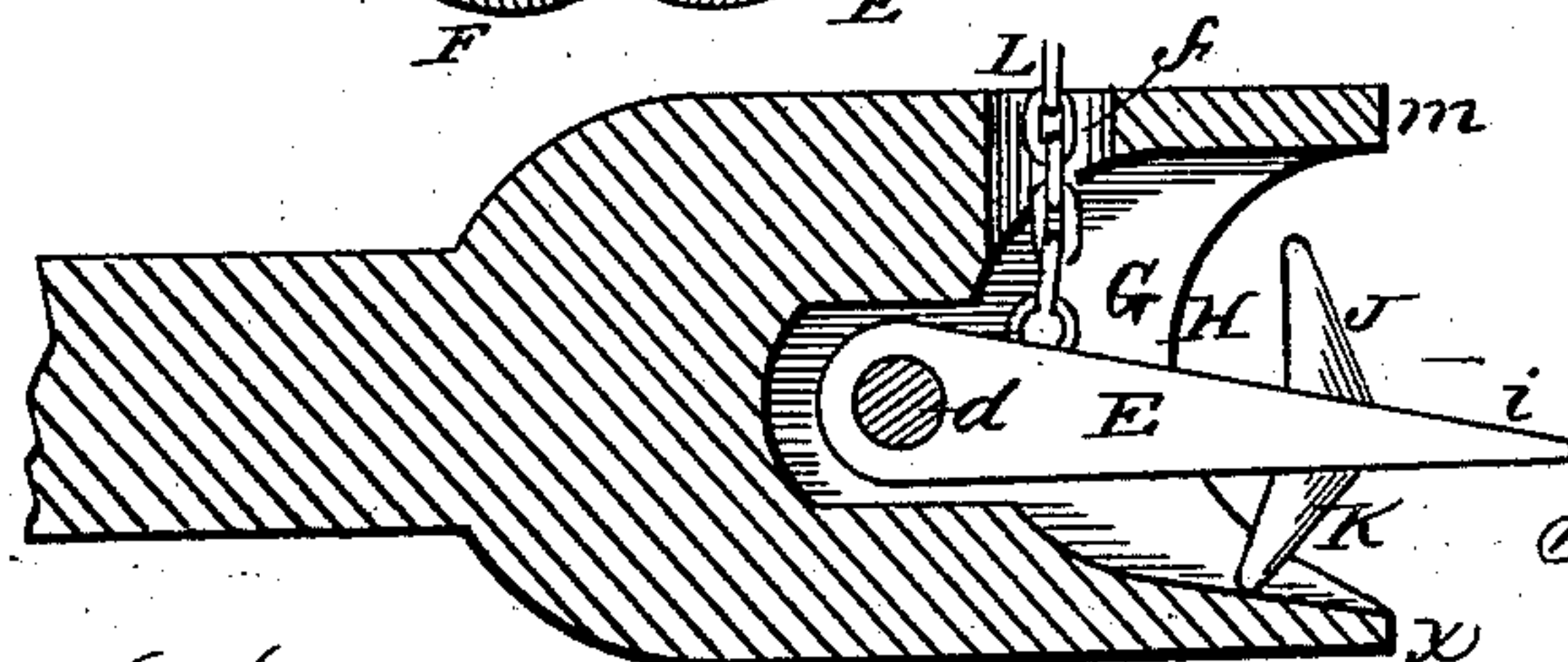


Fig.4.

Witnesses,

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Leins Hermann  
per C. A. Schaefer  
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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,813, dated October 2, 1883.

Application filed July 2, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS HERRMAN, of Boston, in the county of Suffolk, State Massachusetts, have invented a certain new and useful Improvement in Car-Couplers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation representing my improved car-coupler in use; Fig. 2, a side elevation representing the draw-bar heads detached; Fig. 3, an end view of the draw-bar head and tongue; Fig. 4, a vertical longitudinal section of the draw-bar head, showing a side elevation of the tongue; and Fig. 5, a top plan view of the coupled draw-bar heads detached.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of car-couplers which are automatic or self-coupling; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a more effective device of this character is produced than is now in ordinary use.

In the drawings, A B represent the cars; C D, their respective draw-bar heads, and E F the tongues. Each of the draw-bar heads is elongated on its upper and lower sides, as shown at *m x*, to form buffers for preventing the cars from coming together.

A curved opening or mouth, H, is formed in each of the draw-bar heads, extending laterally across the same its entire width at its outer end, and extending inwardly from these curves there are chambers G, in which the coupling-tongues E F are respectively pivoted at their rear ends in such a manner as to have a vertical, but not a lateral, motion. The tongue E is wedge shape in form and arranged on its side, being pivoted in the chamber G of the draw-bar head C, as shown at *d* in Fig. 4, and provided, near its outer end, with a large circular opening, *a*, as shown in Fig. 5. Pro-

jecting from the upper side of the tongue, near said opening and between the same and the pivot *d*, there is a stud, J, inclined inwardly or toward the draw-bar head, and projecting downwardly. Immediately under said stud there is a like stud, K, as best seen in Fig. 4. The tongue F is constructed precisely like the tongue E, being provided, near its outer end, with a large circular opening, *n*, and with an upwardly-projecting inclined stud, M, between said opening and the pivotal support of the tongue, and with a downwardly-projecting stud, N. A mortise, *f*, is formed in each of the draw-bar heads, opening downwardly through the top of the same into the chambers G. A chain, L, is attached to the upper side of the tongue E, near the pivot *d*, and passes upwardly through the mortise *f* to the top of the car A, a like chain being connected with the tongue F, and passing upwardly to the top of the car B.

In the use of my improvement the cars are pushed or run together in the usual manner, one of the tongues overriding the other and becoming interlocked or engaged by means of the studs J K M N and holes *a n* in the following manner: When the tongue F overrides the tongue E, the stud J on the upper side of the tongue E will enter the hole *n* in the tongue F, and the stud N on the lower side of the tongue F will enter the hole in the tongue E, and vice versa, thereby coupling the cars in a manner which will be readily obvious without a more explicit description.

The outer ends of the draw-bar heads are curved or rounded, as shown at *g*, this formation, in connection with the curved mouths H and enlarged holes *n a*, permitting the cars to pass readily around a sharp curve in the road when the draw-bar heads are in contact, or nearly so, as shown in Fig. 5.

The object of the chains L is to afford a means of raising the tongues and disconnecting the same from the top of the cars, or for uncoupling them without going between them. This may also be accomplished by means of levers and rods attached to the ends of the cars, and connected to said chains in the usual manner, if desired; but as such appliances are

not new I do not deem it essential to show the the same.

Having thus explained my invention, what I claim is—

- 5 1. In a car-coupling, the combination of a chambered draw-head having a horizontally curved or rounded end, and a wedge-shaped tongue pivoted within said head, and provided with inclined studs on its upper and lower  
10 face, and with a slot in front of said studs, substantially as described.

2. The combination of two chambered draw-

heads, the meeting ends of which are curved horizontally, whereby they are adapted to turn on each other while in contact, said heads being provided with wedge-shaped tongues having inclined studs on their upper and lower faces, and slots in front of said studs, substantially as described. 15

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Witnesses:

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