

(No Model.)

# J. S. COPSY. Car Coupling.

No. 243,108.

Patented June 21, 1881.

Fig. 1.

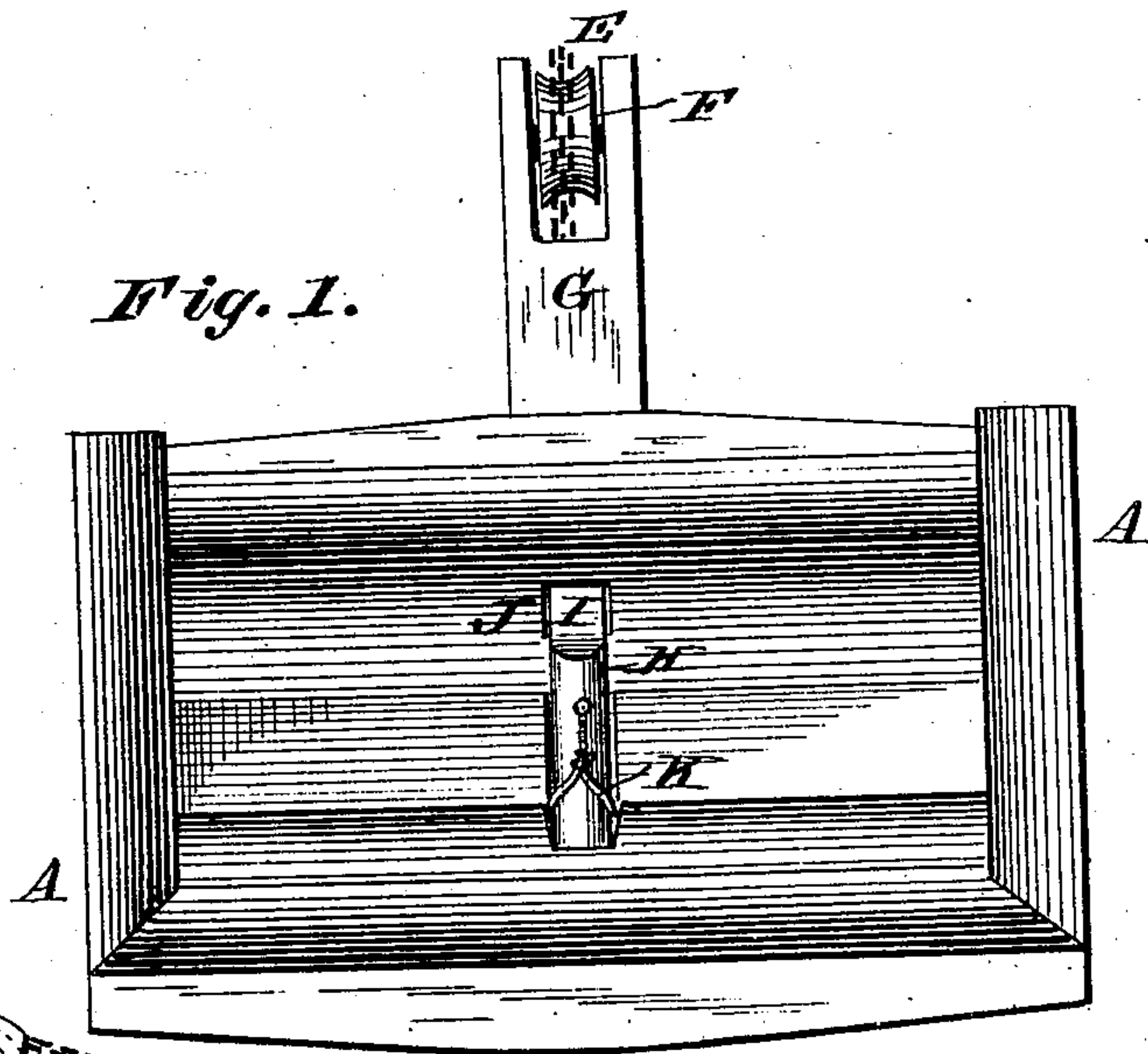


Fig. 2.

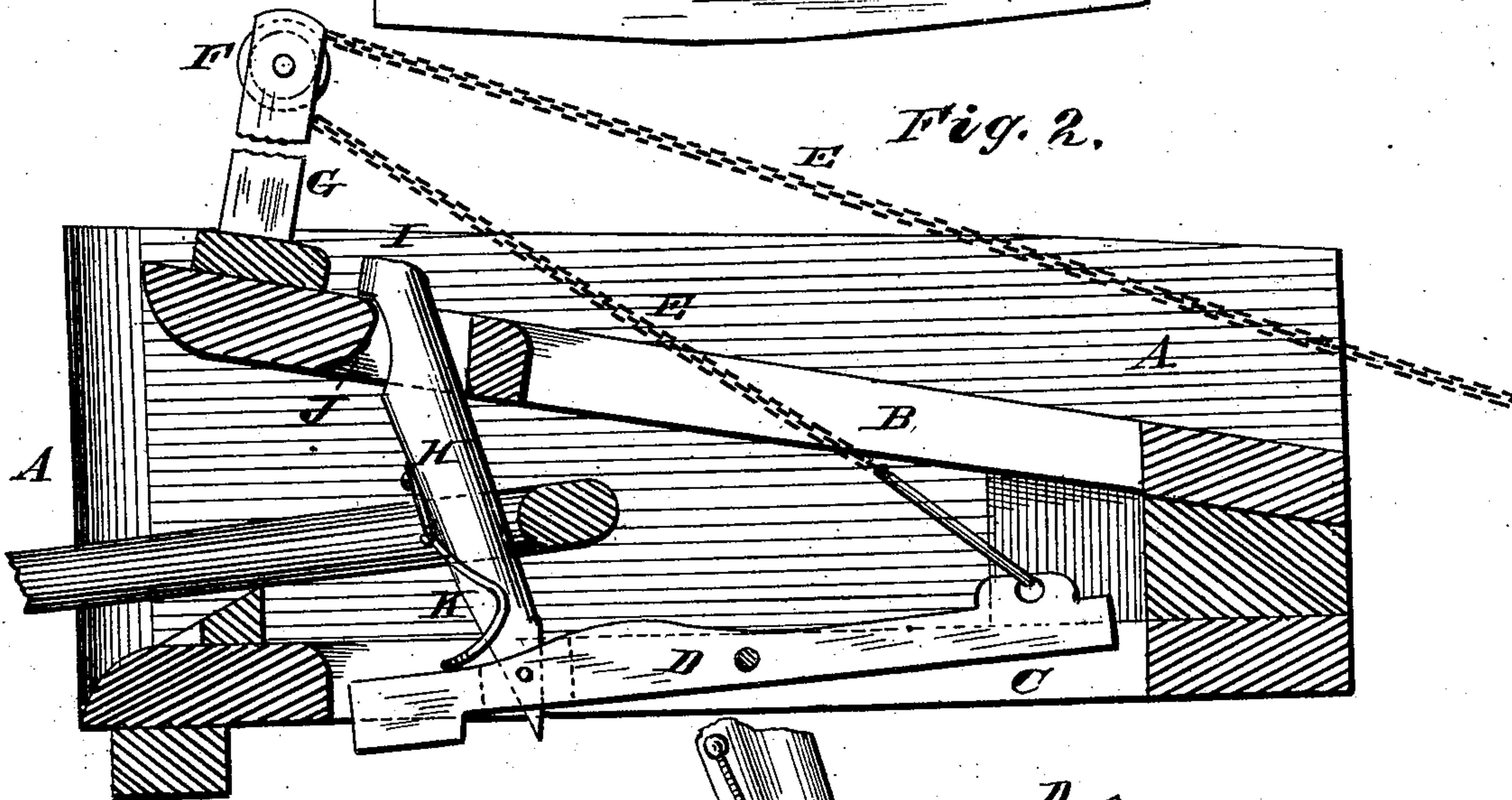
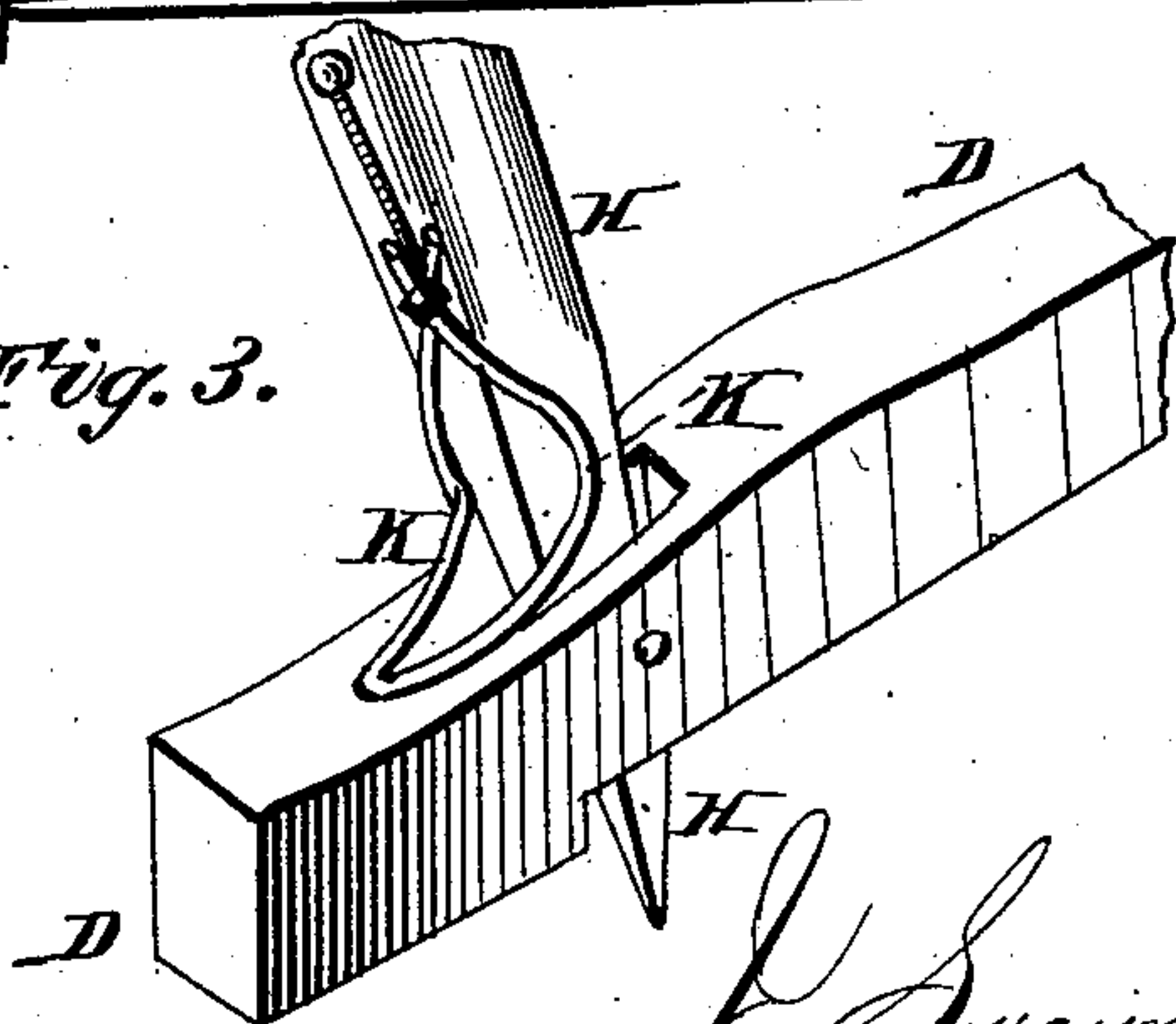


Fig. 3.



WITNESSES

*And. G. Dietrich*  
*P. C. Dietrich*

INVENTOR

By his Attorneys

*J. Swayne Copsy*  
*Ch. Snow & Co.*



# UNITED STATES PATENT OFFICE.

JOSHUA SWAYNE COPSY, OF SPRING VALLEY, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 243,108, dated June 21, 1881.

Application filed May 5, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, J. SWAYNE COPSY, of Spring Valley, in the county of Greene and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a front view of my improved car-coupling. Fig. 2 is a longitudinal vertical sectional view; and Fig. 3 is a detail view of the lower end of the coupling pin and lever.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to car-couplings; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the draw-head of a car to which my invention is applied. Said draw-head is provided in its top and bottom with slots B C, in the lower one of which, C, is pivoted a lever, D. To the upper end of said lever is attached a chain or cord, E, passed over a pulley, F, journaled in an upright, G, secured upon the front end of the draw-head, and having its other end attached to some suitable point at the top of the car, if used for freight-cars, or upon the platform, if used for passenger-cars.

Pivoted to the lower end of the lever D is the coupling-pin H, which is provided at its upper end with a hook, I, to engage a notch or slot, J, in the upper side of the draw-head.

K is a double V-shaped spring secured upon the coupling-pin, near its lower end, so as to bear upon the lever D, as distinctly shown in Fig. 3 of the drawings, thus serving to retain the parts in proper position in relation to each other.

When, in operation, the link which has been

previously adjusted in the draw-head of one car enters the draw-head of the adjoining car it strikes the upper end of the lever D, forcing it downward, thus raising the lower end of said lever and the coupling-pin until the upper hooked end of the latter enters the slot or notch J in the top of the draw-head, where it is retained by the tension of the spring K.

The device may be uncoupled by pulling the chain or cord E. The upper end of the lever D is thus drawn forward until the hooked upper end of the coupling-pin is released from the slot J and the said pin is lowered, thus permitting the link to escape from the draw-head.

This device is simple, inexpensive, easily and safely operated, and may be readily applied to cars of any ordinary construction.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a car-coupling, the combination, with the draw-head A, having slots B, C, and J, of the lever D, having pivoted hooked coupling-pin H, and suitable operating mechanism, as herein described, for the purpose set forth.

2. The combination, with the lever D, arranged as herein described, of the coupling-pin H, pivoted to the lower end of said lever, and the double V-shaped spring K, secured to the coupling-pin and bearing against the lever, as described, for the purpose set forth.

3. As an improvement in car-couplings, the combination of the draw-head A, having slots B C J and upright G, provided with pulley F, the lever D, having pivoted hooked coupling-pin H, provided with spring K, and the operating-chain E, all arranged and operating substantially as herein described, for the purpose set forth.

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

JOSHUA SWAYNE COPSY.

Witnesses:

S. A. SMITH,  
J. G. GEST.