

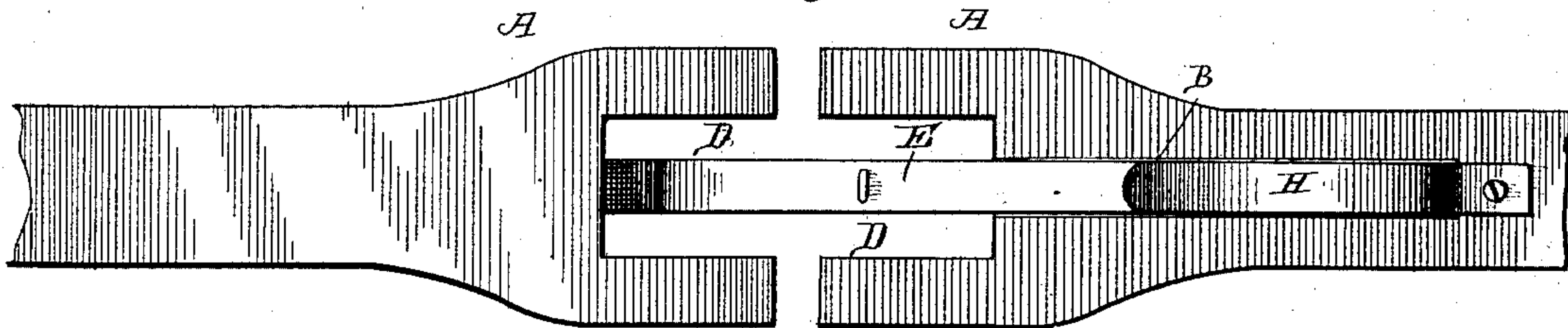
(No Model.)

J. D. KEITH.  
CAR COUPLING.

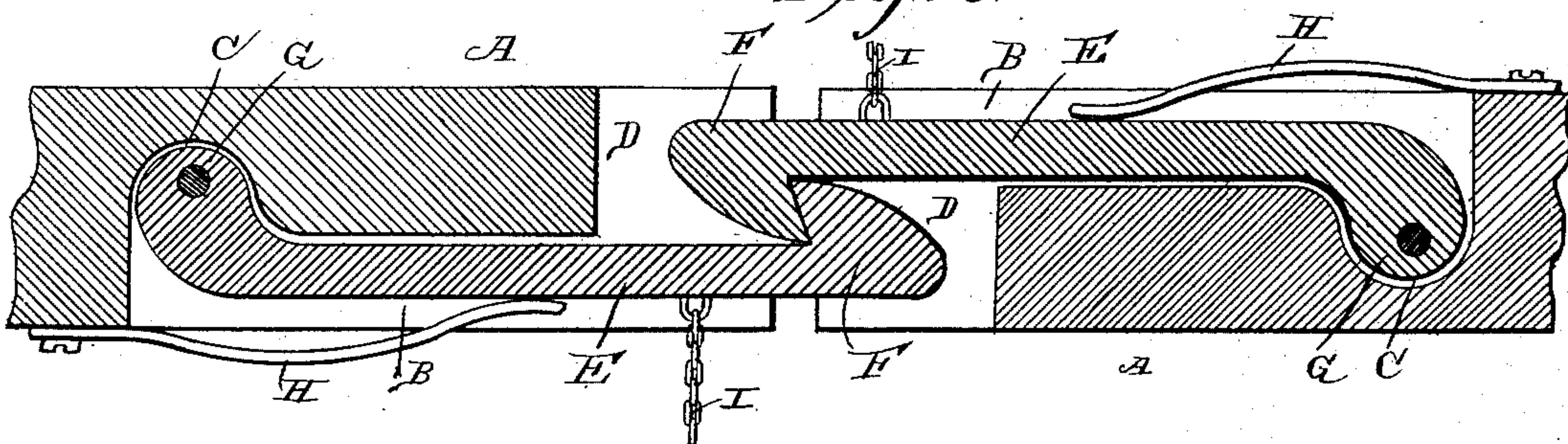
No. 374,257.

Patented Dec. 6, 1887.

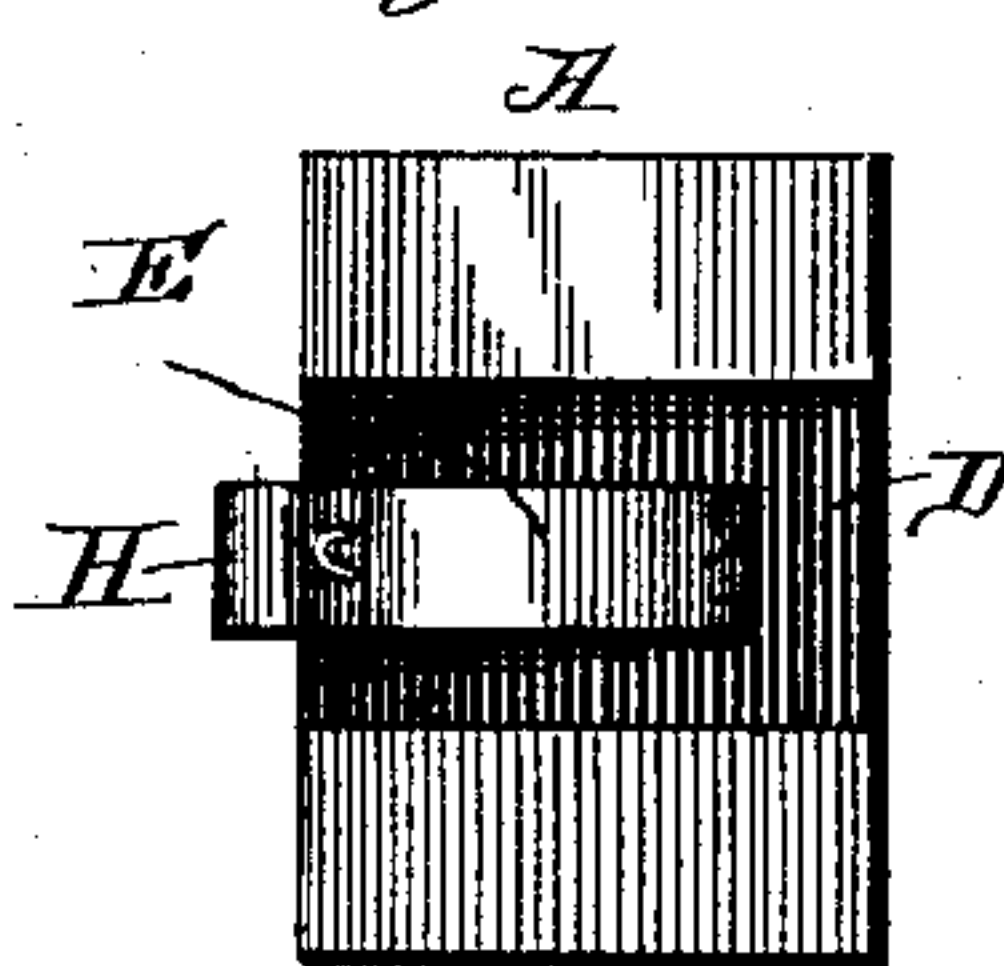
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN DAVID KEITH, OF KEITH, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 374,257, dated December 6, 1887.

Application filed September 3, 1887. Serial No. 248,725. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DAVID KEITH, a citizen of the United States, residing at Keith, in the county of Grimes and State of Texas, have  
5 invented new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to improvements in car-couplings; and it consists in certain novel  
10 features hereinafter described and claimed.

In the annexed drawings, Figure 1 is a side elevation of two draw-heads coupled together and embodying my improvements. Fig. 2 is a horizontal section of the same, and Fig. 3 is a  
15 front view.

Referring to the drawings by letter, A designates my improved draw-head, which is adapted to be secured to the bottom of the car in any desired manner. In one side of the  
20 draw-head I form the longitudinal slot or groove B, which extends nearly the entire length of the draw-head and at its rear end communicates with a small transverse recess or slot, C. The front end of the groove B  
25 opens into an enlarged space, D, formed in the front end of the draw-head, as shown. The coupling-bar E is pivotally secured in the recess C, and extends forward in the groove B and past the enlarged space D, its front end  
30 being provided with a hook, F, which projects rearward toward the space D. The rear end of the coupling-bar is provided with the laterally-projecting lug G, which fits in the recess C, as shown in Fig. 2, and through which  
35 the pivot-pin is inserted.

H designates a spring secured to the side of the draw-head and bearing on the outer side of the coupling-bar, and I designates a chain secured to the coupling-bar and extending  
40 to the top or side of the car, so that uncoupling may be effected without going between the cars.

The operation of my improved coupling will be readily understood. When two draw-heads  
45 are brought together, the coupling-bars slip past each other and the hooks F are thrown into engagement by the springs I. It will be observed that the pivot of the coupling-bar is on the medial line of the draw-head, so that

there is no side draft on the car, thus lessening the danger of the cars being derailed and diminishing the wear and tear on the rails and car-wheels.

The coupling-bar is thoroughly protected by the draw-head, and the open space at the  
55 front end of the same allows sufficient play to enable the cars to easily round curves, and also permit the coupling of cars of different heights.

I am aware of Patent No. 39,436, in which  
60 is shown a car-coupling consisting of a draw-head having a recess in one side, in which a coupling-bar is pivoted. A spring, also, is secured in the recess and bears against the inner side of the rear end of the coupling-bar. This  
65 construction I disclaim. In this device the pressure of the spring can be more easily overcome than in my device, as, should the coupling-bar be drawn outward in said patented device, there will be greater leverage exerted  
70 upon the spring than is the case with my device. Injuries to my spring can be easily repaired, as it is arranged entirely on the outside of the draw-head. My spring also applies its pressure to the coupling-bar very near the coupling-point of the same, thus rendering the operation of the device more effectual.

I am also aware of Patent No. 246,078, in which is shown a coupling-bar pivoted to the side of the draw-head. In this device, how-  
80 ever, the spring is a continuation of the coupling-bar, and has its end fitted to and sliding in a groove in the side of the draw-head. The coupling-bar in this device is provided with a cam, which forces the coupling-bar outward  
85 by being pressed against the side of the draw-head. I make no claim to anything shown in this device.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 90 is—

In a car-coupling, the combination of the draw-head having the open space D at its front end, the longitudinal groove B in its side, extending rearward from said space, and the trans-  
95 verse recess C at the rear end of said groove, the coupling-bar resting in the groove B and having a lug, G, at its rear end, pivoted in the

recess C, and the hook F, at its front end, arranged within the open space D, and the spring H, having its rear end secured to the side of the draw-head in rear of the recess C, and its  
5 front end bearing against the side of the coupling-bar in advance of the lug G, substantially as specified.

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

JOHN DAVID KEITH.

Witnesses:

D. R. GILMORE,  
H. G. STEDMAN.