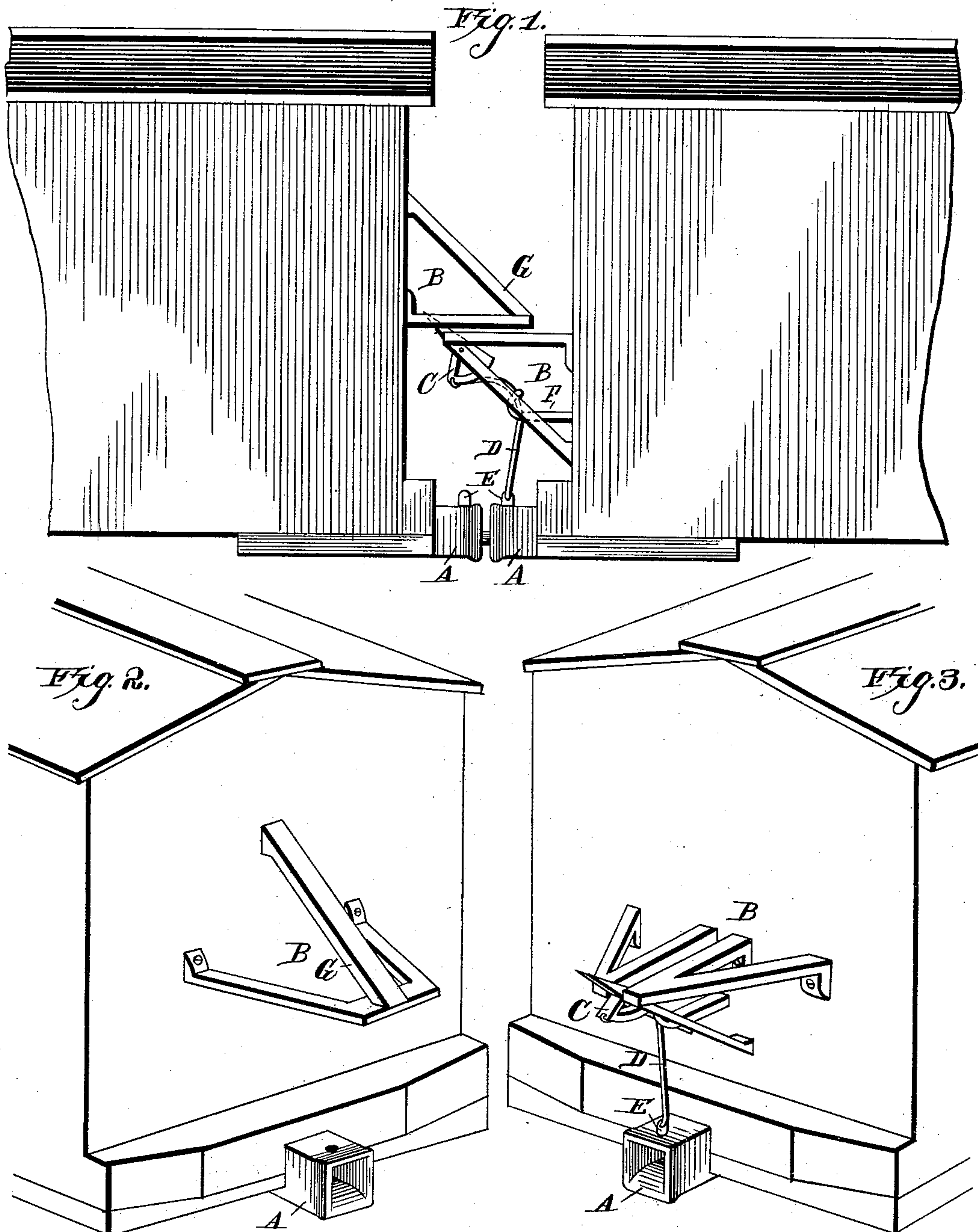


(No Model.)

F. E. WILLIAMSON.  
CAR COUPLING.

No. 407,712.

Patented July 23, 1889.



Witnesses

*Henry G. Dieterich*

By his Attorneys,

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# UNITED STATES PATENT OFFICE.

FRANK ELLSWORTH WILLIAMSON, OF SMITH CENTRE, KANSAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 407,712, dated July 23, 1889.

Application filed June 8, 1889. Serial No. 313,594. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK ELLSWORTH WILLIAMSON, a citizen of the United States, residing at Smith Centre, in the county of Smith and State of Kansas, have invented a new and useful Car-Coupling, of which the following is a specification.

My invention relates to car-couplings; and it consists in certain novel features, herein-  
after described and claimed.

In the accompanying drawings, Fig. 1 is a side view showing two cars coupled together by my improved device, and Figs. 2 and 3 are perspective views of the ends of the cars.

Referring to the drawings, A A designate the draw-heads, which are secured to the bottom of the cars, at the ends of the same, in the usual or any preferred manner. To the end of one car I secure the forwardly-projecting brackets B B, between the ends of which I pivot the lever C, which is provided with a curved lower end and has its upper end extending above the brackets, as clearly shown. To the curved end of the lever I secure one end of a cable D, which passes from the said lever to the coupling-pin E and is secured to the upper end of the same. Between the lever and the coupling-pin the cable passes through an arm F, projecting horizontally from the end of the car and serving as a stop to prevent the pin being lifted so far as to be drawn from the draw-head. To the end of the other car I secure a bracket or arm G, which projects from the car and is adapted to strike against the upper projecting end of the lever C when the cars are brought together, and the said arm has a rather broad lower surface so as to hold the lever depressed for a proper period.

In practice the link is secured in one draw-head and the cars then brought together. As the cars approach, the bracket G will strike

against the upper end of the lever C, thereby depressing the same and raising the lower end of the lever, so as to lift the coupling-pin from the draw-head. The lever will be held depressed until the coupling-link has entered the draw-head and passed beyond the plane of the coupling-pin, when the bracket G will clear the lever and allow the same to return to its normal position and permit the coupling-pin to engage the link. When it is desired to uncouple the cars, the lever will be operated by hand to disengage the pin from the coupling-link, as will be readily understood.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided a car-coupling which is composed of few parts, is simple in its construction, and is automatic in its operation.

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

1. The combination of the brackets secured to the ends of the cars, and the lever connected with the coupling-pin and supported by the bracket on the end of one car, and adapted to be acted upon by the bracket on the other car, as set forth.

2. The combination of the brackets B, the arm F, the lever supported by the brackets B, and the cable secured to the lever passing through the arm F and secured to the coupling-pin, as set forth.

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

FRANK ELLSWORTH WILLIAMSON.

Witnesses:

M. A. LIVERMORE,  
V. M. NOBLE.