

(No Model.)

S. F. McALLISTER.

## CAR COUPLING.

No. 332,544.

Patented Dec. 15, 1885.

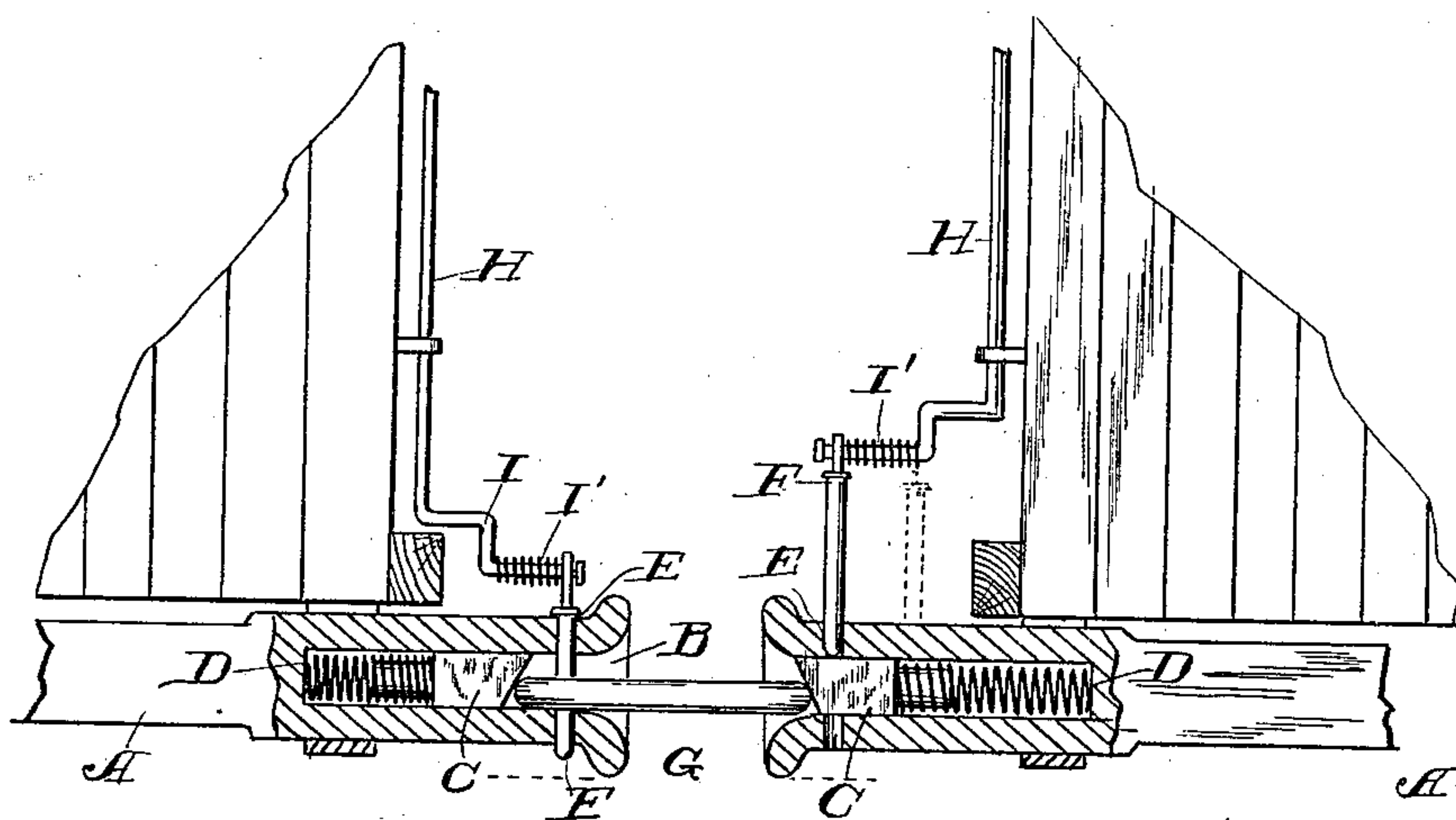
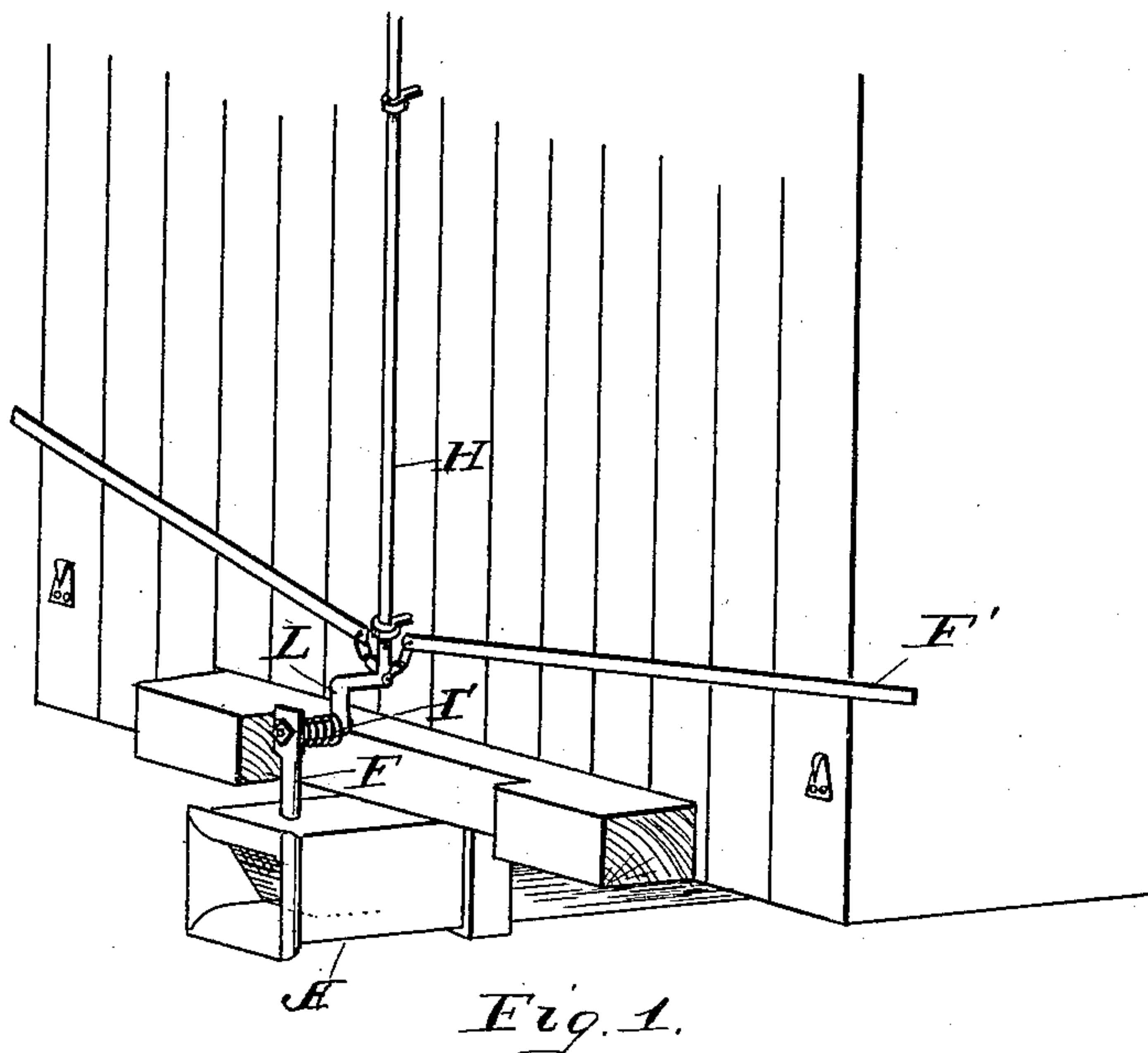


Fig. 2.

*Fig. 3.*

WITNESSES:

Robert Kirk  
Jacob Forlow

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 $By$ 

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# UNITED STATES PATENT OFFICE.

SANDERS F. McALLISTER, OF SAN MARCOS, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 332,544, dated December 15, 1885.

Application filed July 27, 1885. Serial No. 172,716. (No model.)

*To all whom it may concern:*

Be it known that I, SANDERS F. McALLISTER, of San Marcos, in the county of Hays and State of Texas, have invented a new and useful Improvement in Car-Couplers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of an ordinary freight-car with my improved car-coupler, and Figs. 2 and 3 central sectional views of a pair of couplers.

This invention relates to an improvement in the class of articles known as "car-couplers," wherein I form the central opening of the draw-bar with a tup-bar having rearwardly a spiral spring. The forward end of this tup-bar is inclined forwardly somewhat at an angle at the top, so that when the said bar is pushed forward by the spiral spring at its rear end, the coupling-pin will rest upon this forwardly-projecting end of the bar, while the link will rest beneath, so that in dropping the pin will rest within the link, and not on the outside, which would be the case if this bar were square. The coupling-pin is manipulated by a series of bars and levers usual in this class of invention, all of which will now be fully set forth.

In the accompanying drawings, A represents an ordinary draw-bar, wherein the usual opening, B, centrally is somewhat elongated preferably within the said draw-bar. Within this opening B, I provide a tup bar or bolt, C, of such a size as to operate freely backward and forward therein. Between this tup-bar C and the rearwardly-vertical end of the opening B, I provide a spiral spring, D, which is designed to force the said tup-bar C forward past the opening E, having therein the usual coupling-pin, F.

The tup-bar C is designed to project forwardly, by the action of the spring D, far enough so that when the link G is not in the draw-bar, as shown in Fig. 3, the pin F may be raised by means of a system of levers, F', connecting with a vertical bar, H, having at its lower end a right-angled projecting part, I, provided thereon with a spiral spring, I'.

The upper end of the coupling-pin is designed to be secured to the forward end of the angled projection of the vertical bar, and held in place by the spiral spring I' pressing against the nut at the end of the angled portion, so that no strain may be produced on the vertical bar when the draw-bar is drawn either backward or forward.

The forward end of the tup-bar C is designed to be at such an angle that when the link is coupled, as shown in Fig. 2, the tup-bar C is pushed rearwardly far enough to permit of the pin F dropping down forward of the said bar and securing the link in position.

The operation of the device is very simple, consisting in connecting one end of the link with a draw-bar, as shown in Fig. 2. The pin, in connection with the tup-bar C, holds the link G horizontally. Then the pin F of the opposite draw-bar is raised, permitting the tup-bar C to move forward by the action of the spring D, which holds the said pin in position above the draw-bar. The contact of the link G in coupling forces the tup-bar C, as shown in Fig. 3, rearwardly a sufficient distance to allow of the pin F dropping down within the link G.

What I claim as new is—

1. The combination of the draw-head having therein a tup-bar and rearwardly a spiral spring, the said tup-bar C so disposed as to be projected forward by the action of the said spring sufficiently to hold the pin out of the draw-bar, with the said pin and link, and the spring I', substantially as herein set forth.

2. The combination of the draw-bar A, the opening B, the tup-bar C, the spiral spring D, the pin F, and the system of levers F', to operate the pin and spring I', the whole arranged as and for the purposes substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 10th day of July, 1885, in the presence of witnesses.

SANDERS F. McALLISTER.

Witnesses:

C. STERLING FISHER,  
R. J. SMITH.