

(No Model.)

W. J. HADDEN.
CAR COUPLING.

No. 312,114.

Patented Feb. 10, 1885.

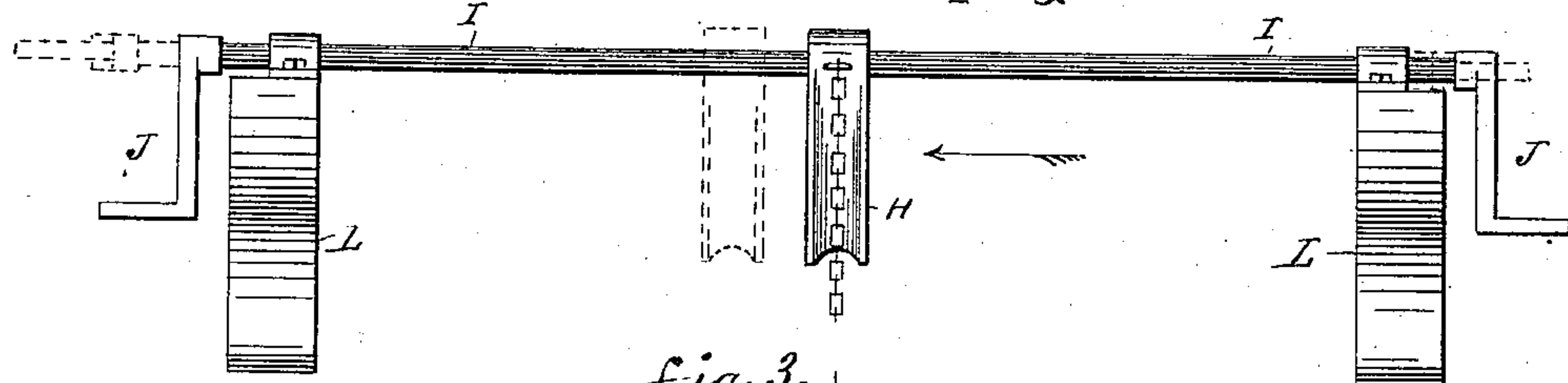
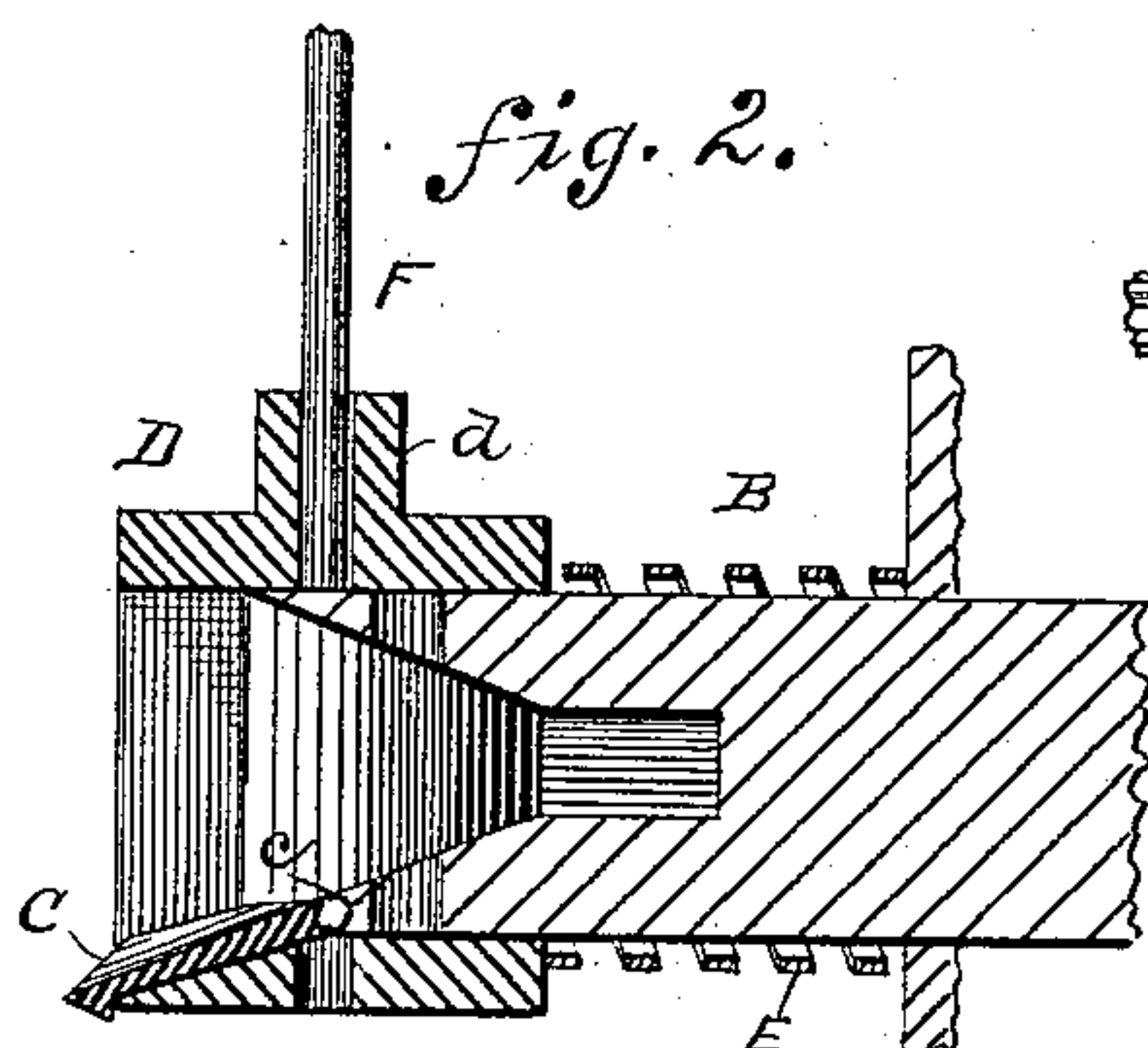
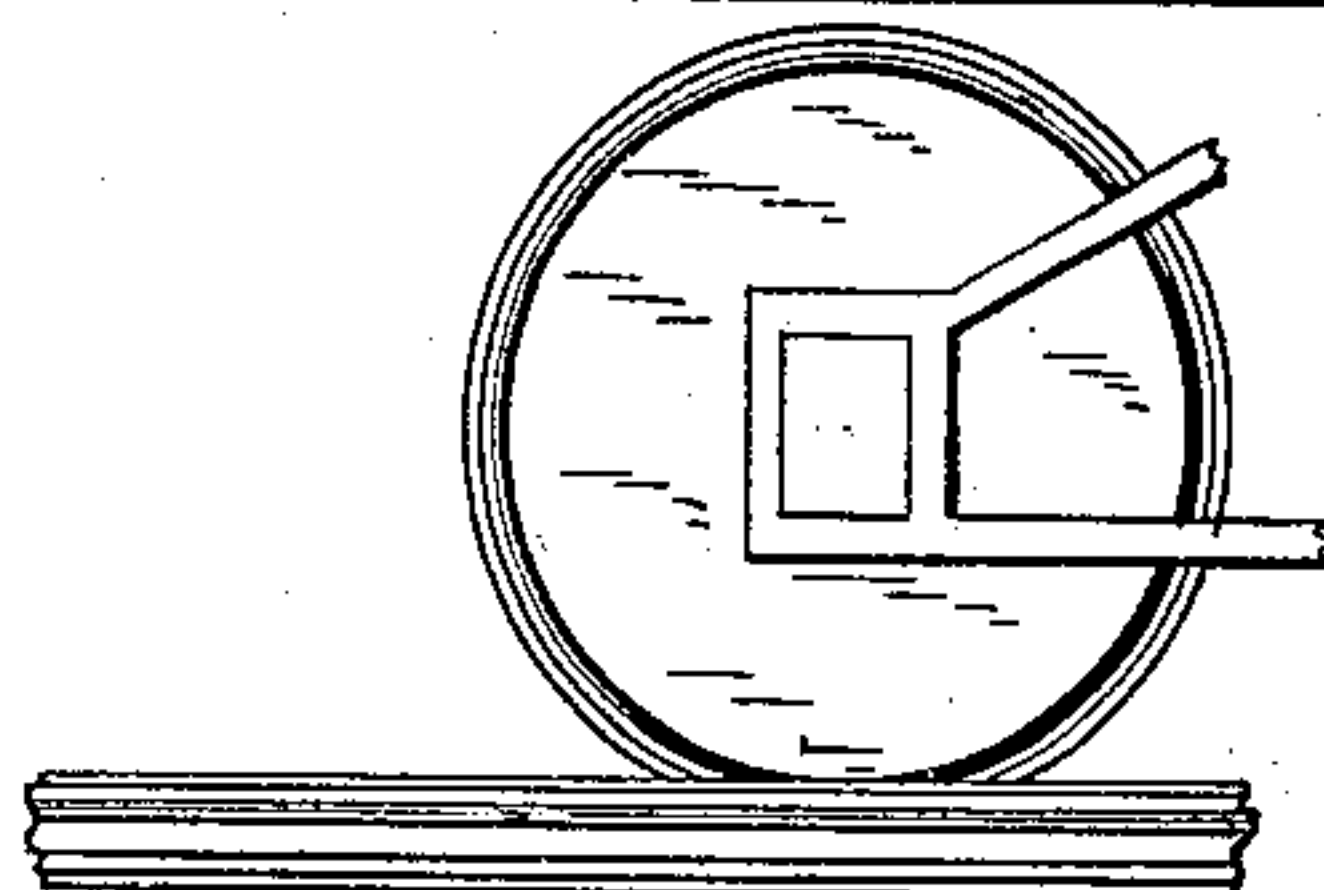
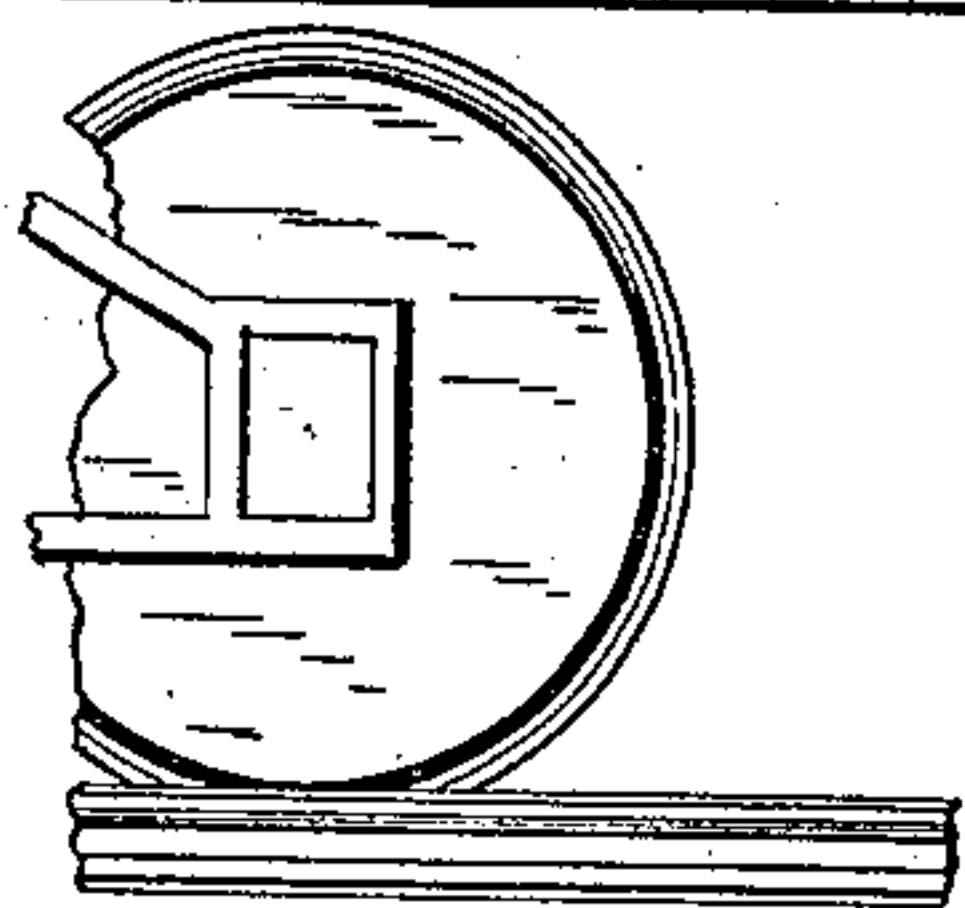
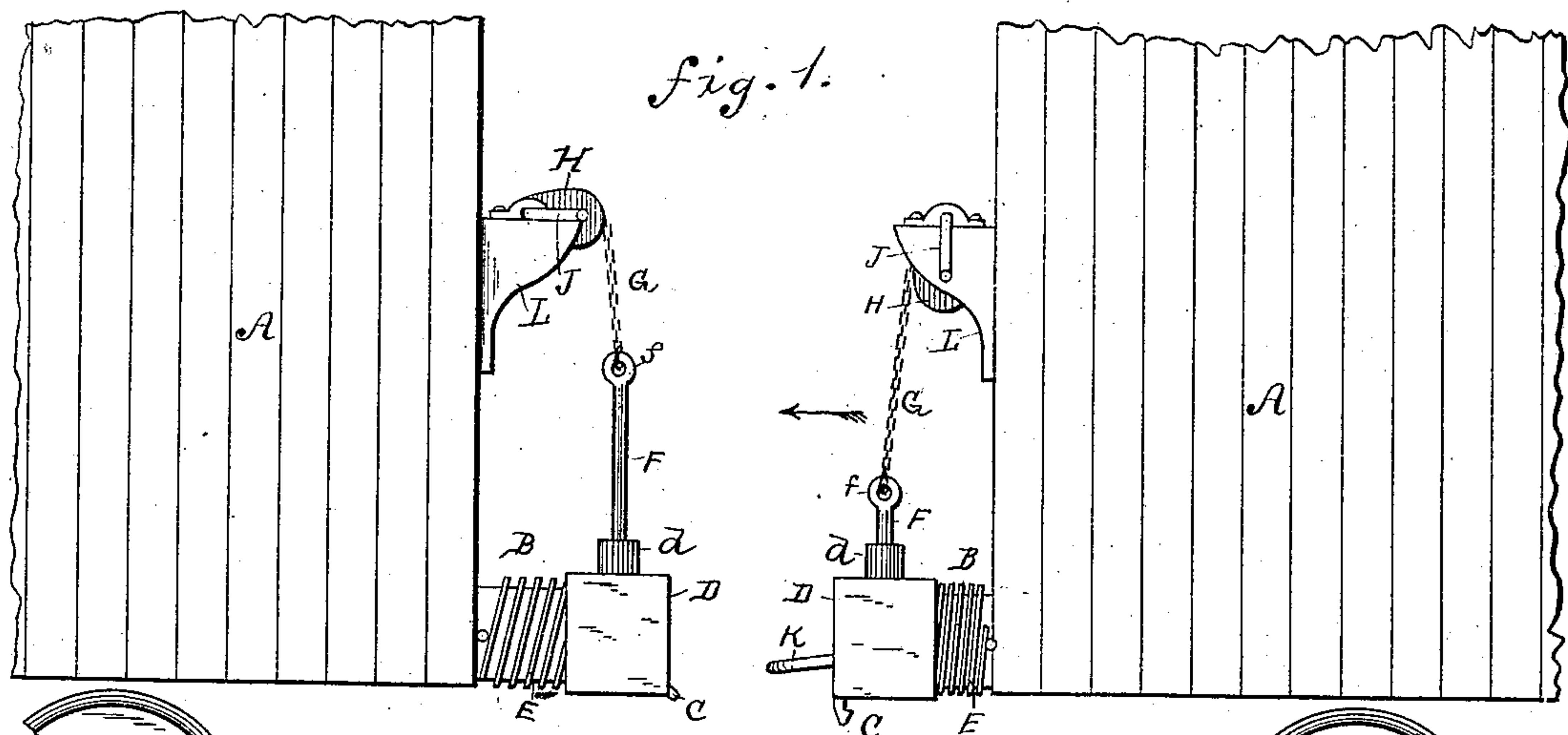


fig. 3.

WITNESSES:

H. B. Brown
W. X. Stevens.

INVENTOR:

W. J. Hadden
BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM JASPER HADDEN, OF DANVILLE, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 312,114, dated February 10, 1885.

Application filed June 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JASPER HADDEN, a citizen of the United States, residing at Danville, in the county of Vermillion and State of Illinois, have invented certain new and useful Improvements in Car-Couplings, of which the following is a description.

This invention relates to that class of devices which are designed to couple cars automatically; and its object is to hold the pin set ready to drop, to guide the link into the draw-head, to drop the pin through the link when two draw-heads bump together, and to raise the pin when desired, all to be done mechanically.

To this end my invention consists in the construction and combination of parts forming a car-coupling, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of two draw-heads, showing a coupling according to my invention, and a portion of two cars. Fig. 2 is a longitudinal vertical section of one draw-head and adjacent parts, and Fig. 3 is an end elevation of the same.

A represents a portion of a car to which a draw-head, B, is attached, as usual. This draw-head is bell-mouthed, as usual, to receive the link; but I provide a scoop-shaped guide, C, to raise the end of the incoming link, in case it is considerably lower than the mouth of this draw-head, by allowing the end of the link to slide up the guide. The guide C is pivoted in the draw-head at *c* to hang down to an angle of about forty-five degrees when ready for use—that is, when it is held up by the supporter D. This supporter D consists of a sleeve fitted about the draw-head to slide longitudinally thereon, and it is pressed forward continually by a spring, E, to project beyond the draw-head.

F is the shackle-pin, which may be of the usual form, having an eye, *f'*, to receive the hook of a chain, G, which is wound upon an eccentric or cam-shaped roller, H, mounted on a shaft, I, which is journaled upon the body of the car, and provided with a crank, J, at each end. The supporter or sleeve D is provided with a perforated boss, *d*, to receive the pin F, the boss being high enough to hold the pin in a standing position. Through the hole

in the boss fits the pin loosely. The pin-hole *b* through the upper portion of the draw-head is elongated longitudinally to the head to give the pin more freedom to drop into it. When the sleeve P is in its forward or normal position, its pin-hole is forward of the pin-hole *b*, so that a pin in the sleeve will stand upon the draw-head in front of the hole. When two draw-heads are to be engaged, a link, K, should be arranged in the opposite draw-head, to enter the draw-head with the pin set as described. Then the two sleeves meeting will crowd each other back, moving the pin to enter and drop into the hole *b* through the link. When the sleeves thus recede, the guides C will swing down a little within the draw-head, so as to be protected from the force of a concussion. The bearings for the shaft I are brackets L, each shaped to receive one of the cranks J when the shaft is slid endwise in its bearings, so that the pin may be raised and the crank slid onto the bracket to hold the pin raised when it is not desired to couple two cars when they come together.

By the use of this coupling the cars will couple automatically when they come together, and they may be set ready to do so from either side of the car without danger to the operator.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a car draw-head, of the scoop-shaped guide C, hung within the mouth of the draw-head, and pivoted therein at *c*, the sleeve D, fitted around the draw-head and around the guide C, to raise the latter by forward movement, and the spring E, actuating the sleeve to such forward movement, substantially as described.

2. The combination, with a car draw-head, of the shackle-pin raiser consisting of the roller H, the shaft I, carrying the same, adapted to slide endwise, and provided with cranks J, the brackets L, supporting shaft I, and adapted to support the cranks J, to prevent the shaft from turning when slid endwise, as described, and the connecting-chains G, substantially as described.

WILLIAM JASPER HADDEN.

Witnesses:

E. M. ARNOLD,
R. W. BAKER.