(No Model.)

J. E. CADY, Jr.

CAR COUPLING.

No. 557,525. Patented Mar. 31, 1896.

Fig. 1.

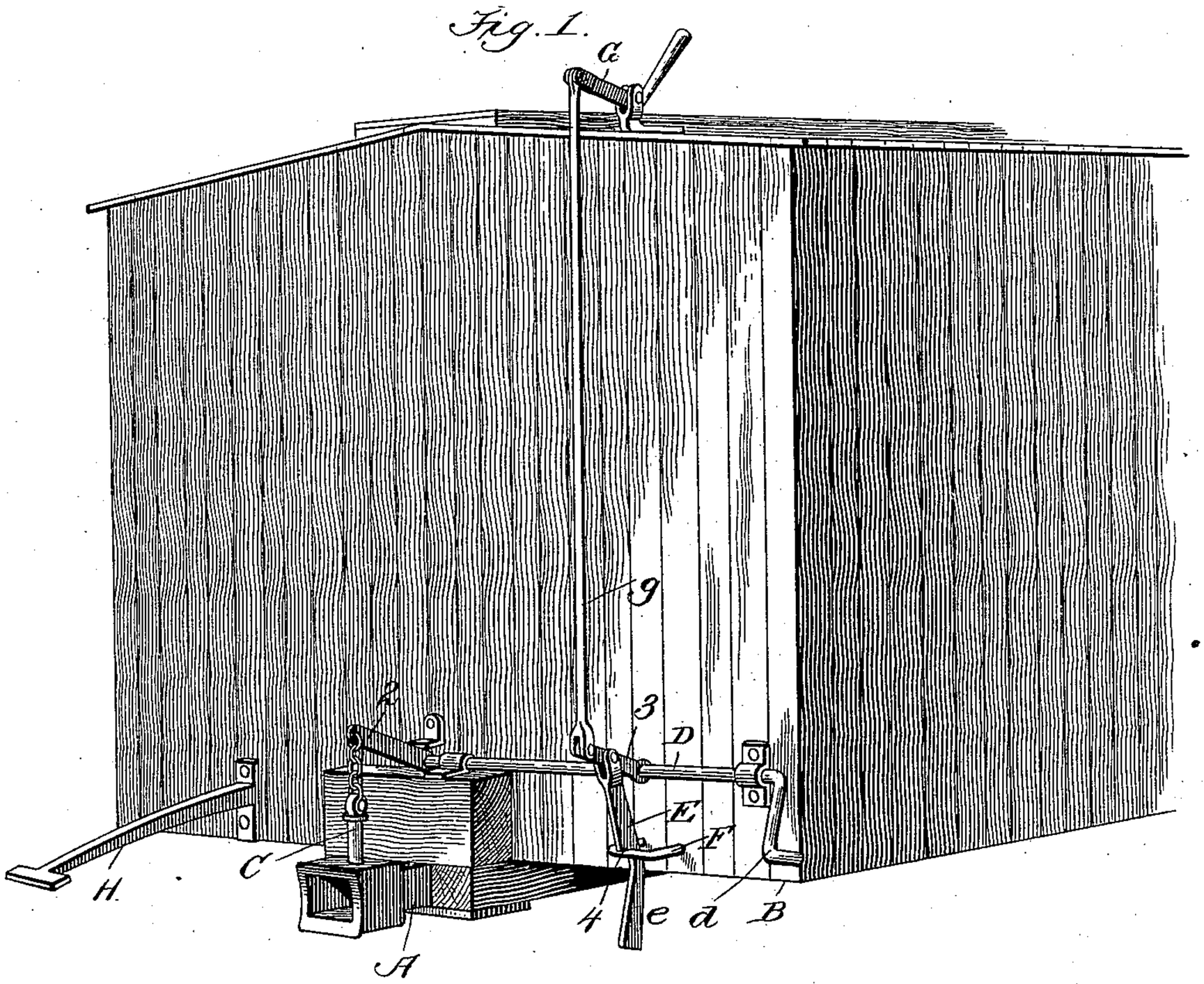


Fig. 2.

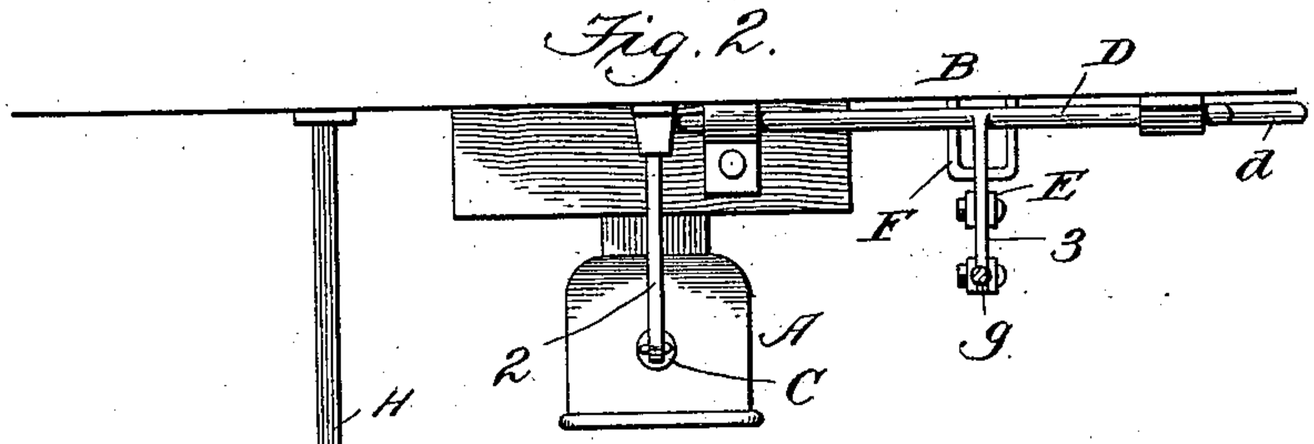
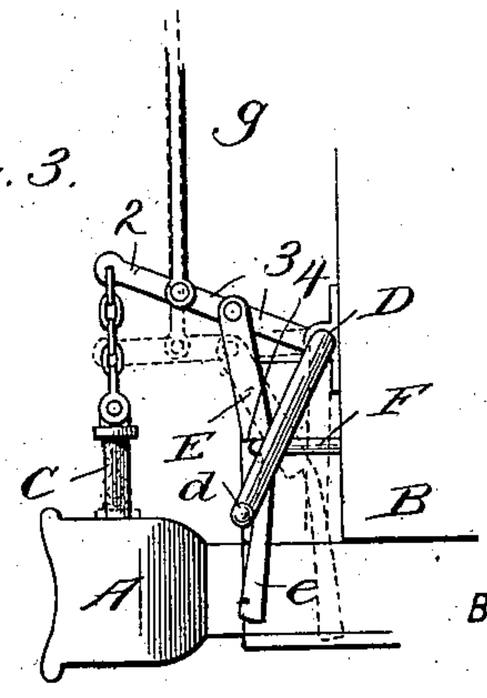


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOEL E. CADY, JR., OF NATOMA, KANSAS, ASSIGNOR OF ONE-HALF TO L. E. EDSON, OF PAW PAW, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 557,525, dated March 31, 1896.

Application filed February 5, 1895. Serial No. 537,364. (No model.)

To all whom it may concern:

Be it known that I, JOEL E. CADY, Jr., a citizen of the United States of America, residing at Natoma, in the county of Osborne and State of Kansas, have invented certain new and useful Improvements in Automatic Devices for Coupling and Uncoupling Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to car-couplings which are automatic in their action, coupling when the cars are run together, and which can be uncoupled without the brakeman or other person going between the cars, thereby resulting in a saving of life and limb, as the necessity of going between the cars for the purpose of coupling or uncoupling is wholly obviated.

The improvement is designed to be applied to any kind of draw-head, whether of the Janney type or the ordinary pin and link or any form of the draw-head now in use or which may be adopted.

The improvement relates more particularly to the means for supporting the pin and holding it in position and readiness to be dropped to effect the coupling the instant the cars are run together, and in the device for tripping the pin-supporting mechanism at or the moment the cars to be coupled bump, so as to release the pin and permit the coupling of the cars coming together.

The improvement also consists of the novel features and the peculiar construction and combination of the parts, which hereinafter will be more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of the end of a car equipped with my improved coupling. Fig. 2 is a top plan view of the invention. Fig. 3 is a side elevation showing by full lines the relative position of the parts prior to the coupling and by the dotted lines the position of the parts after the coupling is effected.

The draw-head A may be of any form or pattern and is attached to the body of the car B in any of the usual ways.

C is the coupling-pin, which when dropped completes the coupling in the manner peculiar to the style of the desired and preferred form of coupling adopted.

D is a shaft journaled horizontally to the end of the car, one end being formed into a handle *d*, which is within convenient reach from the side of the car to facilitate the uncoupling.

An arm 2 projects forward from the end of the shaft and at right angles thereto is connected with the pin C. A second arm 3, similar to the arm 2, projects from the shaft D and has a pin-supporting arm E pivoted thereto. This pin-supporting arm E has its lower end *e* curved forward and is formed with a shoulder 4 to engage with a bracket F, whereby the shaft D and its arm 2 are held in such relation that the pin C is held raised and in position to be dropped to effect the coupling the instant the arm E is disengaged from its supporting-bracket F.

For box and other cars, where it is desirable to effect the uncoupling from the top of the said cars, an operating-lever G is provided and located on the top of the car and is connected by the rod *g* with an arm, preferably the arm 3 of the shaft D. This lever G may be actuated either by hand or foot, or both, as found most convenient.

A trip H is pivoted on the end of the car to strike the arm E on the end of the opposing car and release said arm from its support F when the cars are run together. It will be observed that the trip H and the pin-supporting arm E are located on opposite sides of the car equidistant from the draw-head and in such relation that the trip H on the end of one car comes directly opposite and in line with the pin-supporting arm on the end of the car to be coupled.

The operation of the invention is as follows: The cars to be coupled have the pins C raised. This is accomplished by operating the lever G or the handle *d*. The arm E when sufficiently elevated will swing forward at its lower end, due to gravity, and engage with the bracket F and hold the pin raised. On running the cars together the trip on the end of one car will impact against the pin-supporting arm E of the other car and disengage it from its support F, and the pin *c*, dropping, will complete the coupling. In pin-and-link coupling the link will enter the draw-bar just prior to the release of the pin-supporting arm.

The same is true of the other forms of couplings, the parts being arranged so that the pin *c* will drop the instant the operating parts of the coupling are engaged or come together.

From the foregoing it will be seen that the parts are simple, durable, free from any springs, and easily operated, and are capable of being applied to any form of coupling now in use. Hence the invention partakes of the nature of an attachment because of its ready adaptability to forms of couplings in daily use without requiring reorganization or any reconstruction of parts.

I claim—

In a car-coupling, the combination of a shaft having two arms, a coupling-pin suspended from one arm, a pin-supporting arm pivotally attached to the other arm and adapted to be engaged with a support and sustain the coupling in a raised position, and a trip to strike the pivoted pin-supporting arm, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOEL E. CADY, JR.

Witnesses:

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