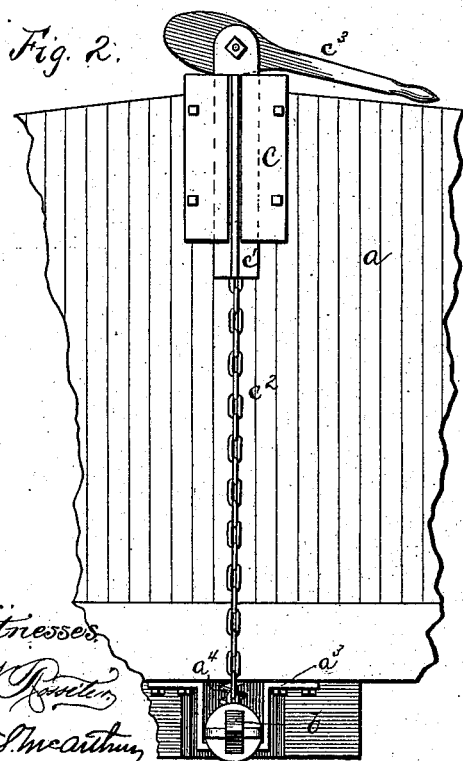
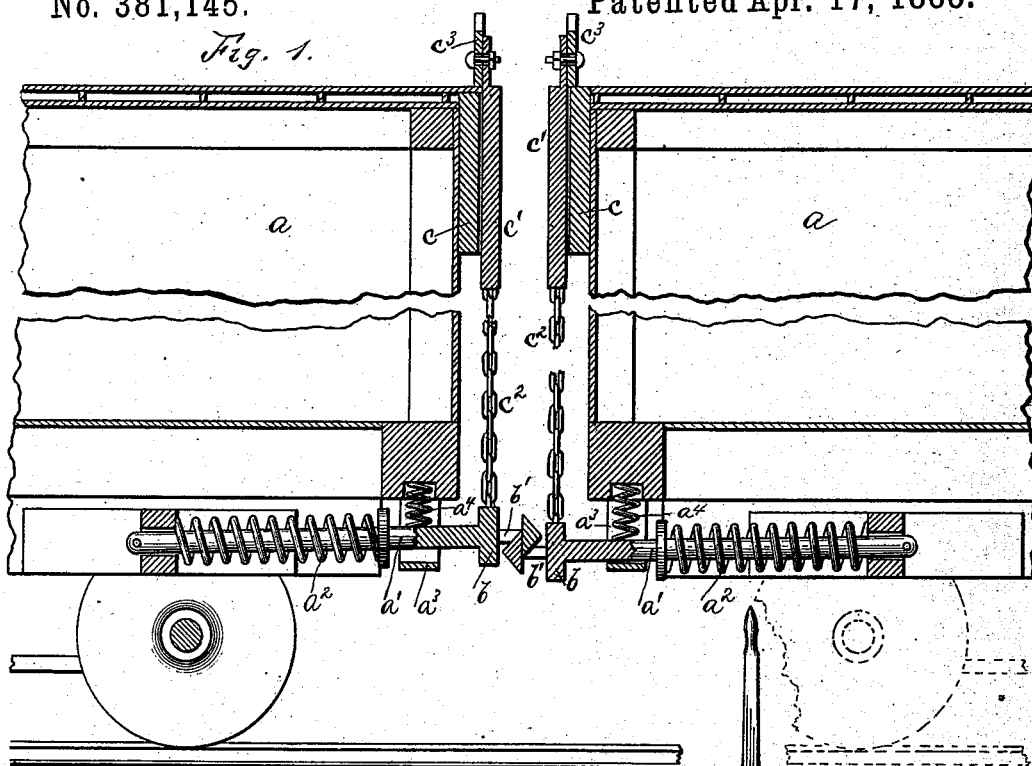


(No Model.)

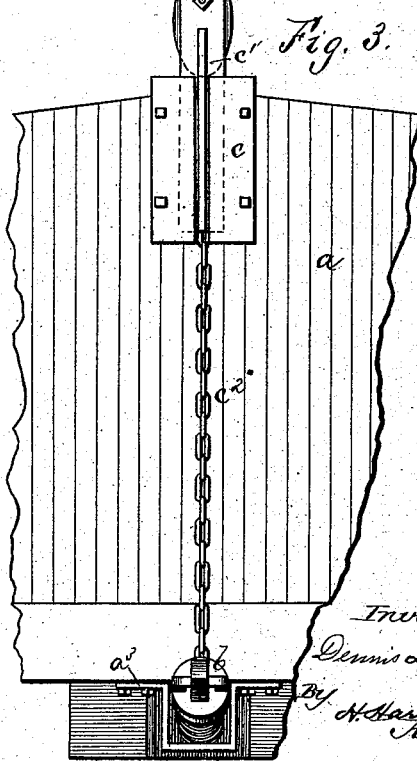
D. LADD.
CAR COUPLING.

No. 381,145.

Patented Apr. 17, 1888.



Witnesses:
W. D. Dutton
W. S. McArthur



Inventor:
Dennis Ladd.
By *H. H. H. H.*

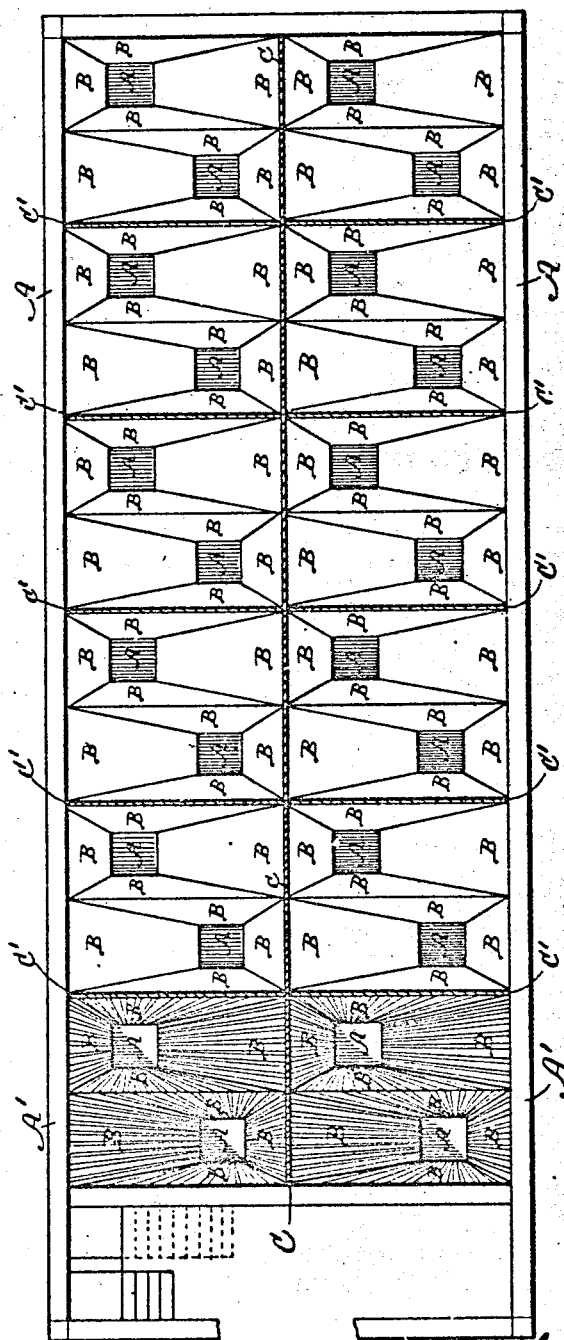
J. A. R. WYMAN.

WOOD DRYING KILN.

No. 379,145.

Patented Mar. 6, 1888.

Fig. 1.



Witnesses.

Thos. Houghton.
N. J. Litchey.

Inventor.
Joseph A. R. Wyman.
By his Attorneys
Singleton and Piper.

UNITED STATES PATENT OFFICE.

DENNIS LADD, OF MADISON, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 381,145, dated April 17, 1888.

Application filed September 8, 1887. Serial No. 249,123. (No model.)

To all whom it may concern:

Be it known that I, DENNIS LADD, a citizen of the United States, residing at Madison, in the county of Jefferson and State of Indiana, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, to wit:

This invention relates to an improvement in car-couplers; and it consists in certain peculiarities of the construction and arrangement of the same, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of two freight-cars with my coupler in use, and Figs. 2 and 3 are end elevations of one of these cars, showing the coupler in two different positions.

a represents the body of a car, made in any suitable and usual way, and a' is the draw-bar provided with the usual spring, a^2 . This draw-bar is at its forward end confined in a vertical frame, a^3 , so as to be capable of a slight vertical play, and a spring, a^4 , is placed over it to hold it down to the proper position.

Upon the forward end of the bar a' is formed a nose, b , which is allowed to project both above and below the bar, and is beveled off on its forward end in both directions, as shown. Just in rear of this nose each draw-bar is formed with a hole or opening, b' , and by reference to Fig. 1 it will be noted that as two cars are brought together the beveled noses of the opposing draw-heads cause them to pass over each other and drop together, as shown, interlocking with the projecting portion of each, engaged with the opening of the other.

Upon the end of each car, near its roof, is secured a guide, c , in which is a slide, c' , connected by a chain or similar device, c^2 , with the draw-head, and to the top of each slide is pivoted an eccentric-lever, c^3 , which bears upon the edge of the guide c . When the cars are to be uncoupled, the lever is thrown over, and at once lifts its connected draw-head till it is fully disengaged from the other one, and as the lever is an eccentric it may be left in this position when desired, and so hold the coupling that it will not operate, which is often a great convenience in a freight-yard.

This coupling is perfectly automatic in its action as the cars are pushed together, and is uncoupled from the roof of the car, so that there is never any need of the attendant exposing himself to danger by going between the cars.

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

1. The combination, with the car-body and its coupler having a vertical play at its forward end, of a slide secured upon the face of the car end and connected to the coupler, and an eccentric-lever on said slide to operate it, substantially as and for the purpose set forth.

2. The combination, with the car a and its hooked coupler a' , of the guide c , slide c' , chain c^2 , and eccentric-lever c^3 , all constructed and arranged to operate substantially as and for the purpose set forth.

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

DENNIS LADD.

Witnesses:

EDWIN G. LELAND,
W. A. VAWTER.