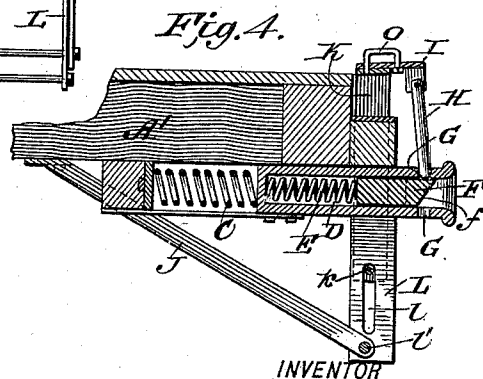
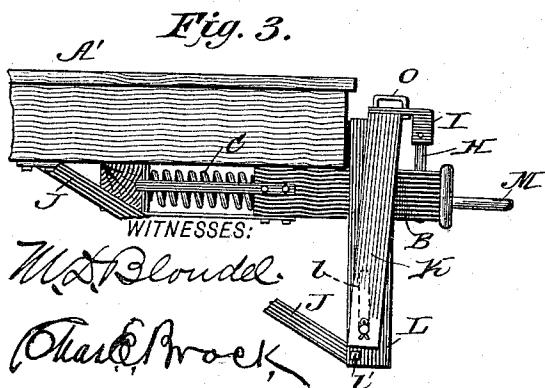
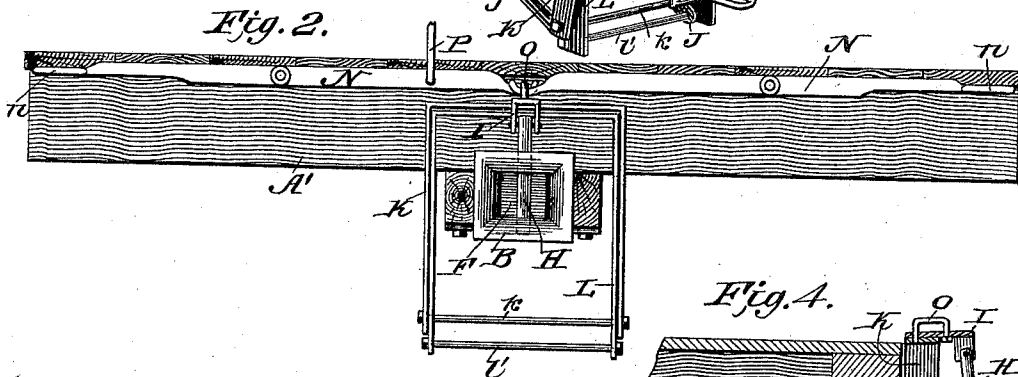
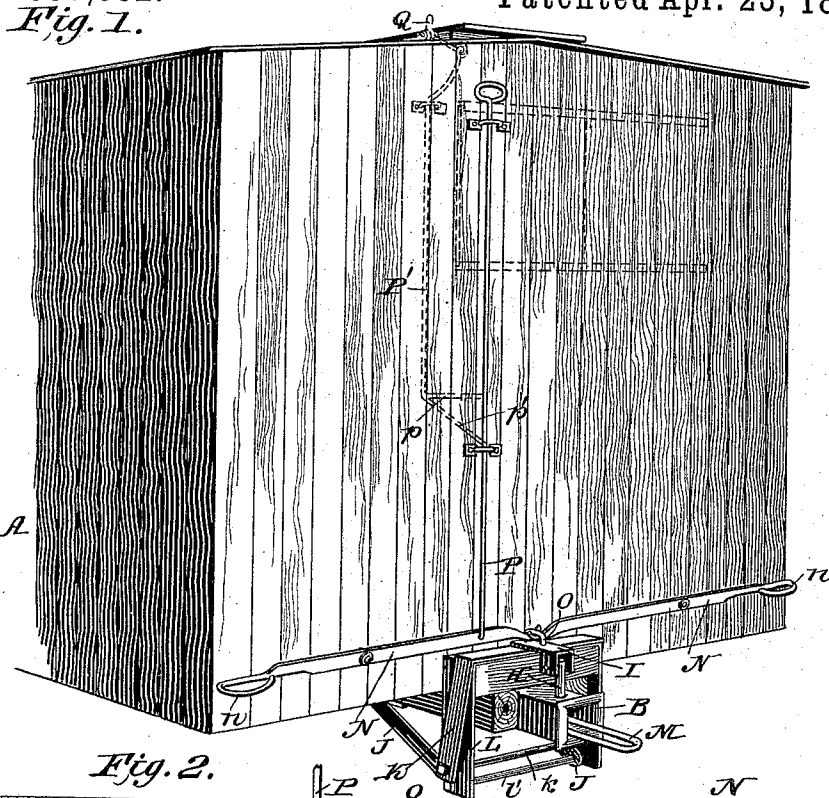


(No Model.)

A. F. KUHLMANN.
CAR COUPLING.

No. 537,832.

Patented Apr. 23, 1895.



INVENTOR
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UNITED STATES PATENT OFFICE.

ADOLPH FRIEDERICK KUHLMANN, OF LA CROSSE, WISCONSIN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 537,832, dated April 23, 1895.

Application filed February 16, 1895. Serial No. 538,711. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH FRIEDERICK KUHLMANN, a citizen of the United States, residing at La Crosse, in the county of La Crosse, State of Wisconsin, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates generally to car couplers.

The objects of this invention, are, first, to provide a coupler and operating mechanism which can be applied to flat or box cars; secondly, to provide a peculiar form of operating mechanism which is applicable to box cars either with or without end windows; thirdly, to provide a novel form of drawhead containing mechanism for supporting the pin and holding the link in horizontal position.

Another object is to provide such means for lifting the pin as will enable said pin to always drop easily into the hole and prevent all binding.

With these various objects in view, my invention consists in the peculiar construction of the various parts, and the novel combination and arrangement of said parts, all of which will be fully described and then pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of the end of a box car with my improved coupler applied thereto. Fig. 2 is an end view of a flat car, with coupler attached. Fig. 3 is a side view of the coupler; and Fig. 4 is a central longitudinal section.

Referring now to the drawings, A indicates a box car, A' a flat car, and B the drawhead having a spring buffer C, arranged at the rear of the same. This drawhead is in the form of a long box providing a chamber D, in which is arranged a coiled spring E, carrying a plunger and pin supporting block F, at its forward end, the forward end of said block being under cut or beveled, as shown at f, the purpose of which will appear farther on. The drawhead is provided with the usual pin holes G, G, to receive the pin H, pivoted loosely in a bracket I, attached to the top member of a

rectangular frame K, which slides vertically upon a frame L, rigidly secured to the end of the car, and surrounding the drawhead. The vertical members of the frame L, are slotted longitudinally as shown at l, and working in said slots, is the bottom bar k, of the frame K, said slot and bar guiding and limiting the movement of the frame K, upon the frame L, and the connection is such that the frame K, can rock slightly back and forth, and as the pin is loosely pivoted in the bracket its upper end can swing back and forth, and still keep the lower end centered in the pin hole.

The frame L, has the rear brace rods J, J, to hold it in a vertical position, and it also has a bottom brace bar l', to hold the side members steady.

The link M, is constructed the same as usual. When a link is held in one coupler, the plunger or block F, holds said link tightly against the pin and the under cut edge serves to hold said link in a horizontal position. The moment the pin is raised, the spring will project said link out of the drawhead and force the block beneath the pin hole and thus support the pin. In order to raise the pin, I provide levers N, N, pivoted to the sill of car, and having handles n, at their outer ends; and at their inner ends, said levers rest beneath an elongated staple O, attached to the top of the bracket I, the object of said elongated staple being to permit the pin and bracket to swing back and forth upon the ends of said levers, so that no binding will occur.

By means of levers N, one can operate the coupler from the side of the car, and in order to operate the coupler from the top of car, I connect a rod P, to one of the levers and extend the same to near the top of car, and by drawing said rod up the coupler is uncoupled, the same as by operating one of the levers N.

The rod P, is made straight when the end of car has no window, but when a window is in use as shown in dotted lines in Fig. 1, I then use a rod P', having an offset part p, braced by an arm p'. The upper end of said rod is curved outward, and connects with an elbow lever Q, mounted upon the top of car, and to effect the uncoupling of the cars, the handle of this lever is drawn back or depressed, lifting the rod P'.

The coupling operation is automatic, as the

pin drops through the link the moment the block F, is pushed back, and by bringing two cars together, the link of one coupler held in a horizontal position will enter the opposite
5 coupler, force back the block, and the pin dropping through will effect the coupling.

It will thus be seen that I provide a simple and efficient coupler, one that can be used on box or flat cars, and also on box cars with or
10 without end windows.

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

1. In a car coupler, the combination with a
15 drawhead, of a rigid frame surrounding the same, a sliding frame mounted upon and sliding on the rigid one, the pin operated by said sliding frame and means for operating said frame, substantially as shown and described.

20 2. In a car coupler, the combination with a

drawhead, of the rigid frame having slotted sides, of the sliding frame, the bracket carried by said frame, the pin carried by the bracket, the elongated staple, and the operating levers, all arranged substantially as shown and de- 25 scribed.

3. In a car coupler, the combination with a drawhead, of the spring actuated plunger and block, the rigid frame and brace pieces, the movable frame and bracket and pin, the elong- 30 gated staple, the operating levers the lifting rod having offset and brace portion, and the elbow lever all arranged substantially as shown and described.

In testimony whereof I affix my signature 35 in presence of two witnesses.

ADOLPH FRIEDERICK KUHLMANN.

Witnesses:

JOHN J. ESCH,

FRANK WINTER.