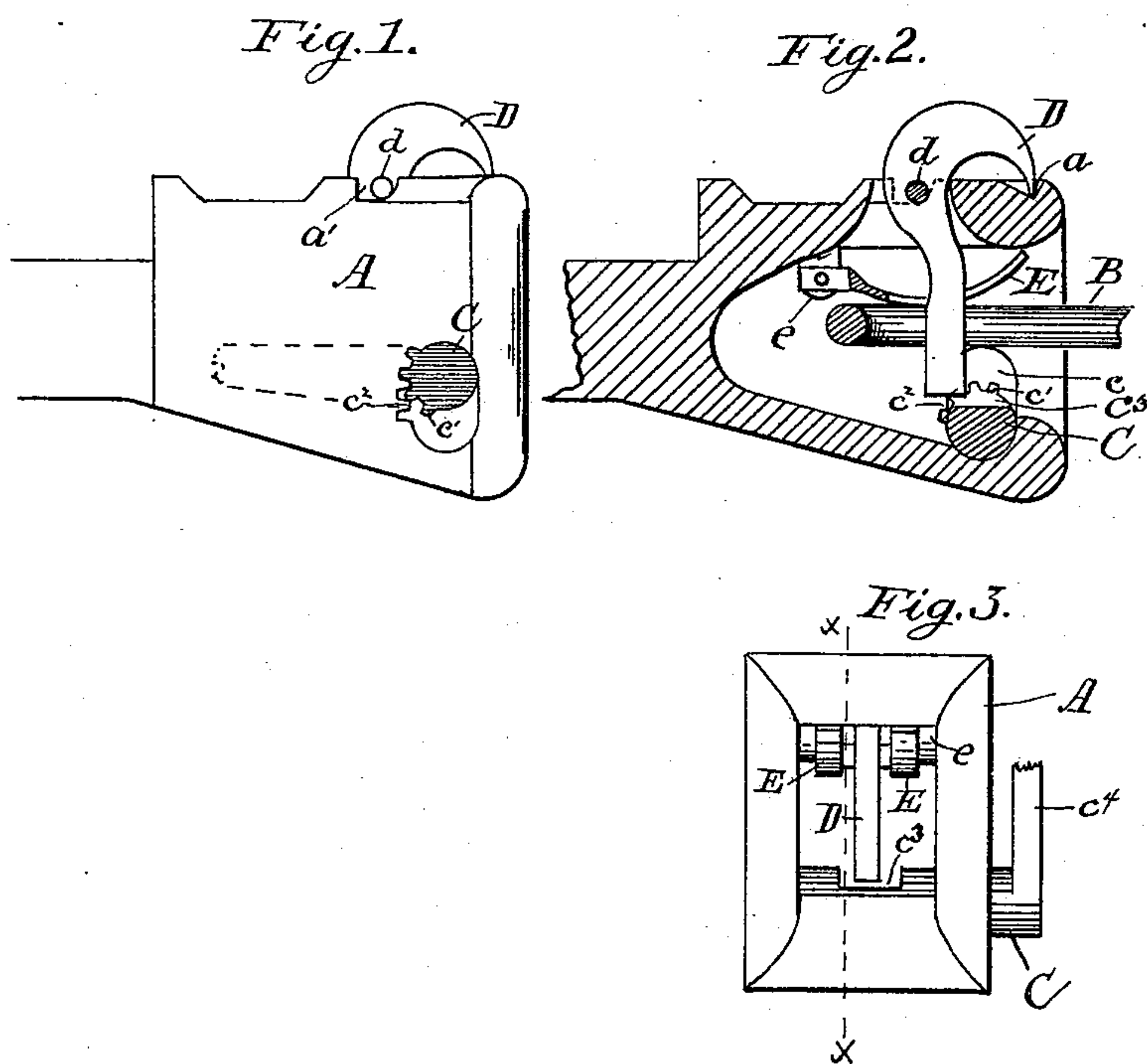


(No Model.)

C. DEMAUREZ.
CAR COUPLING.

No. 486,826.

Patented Nov. 22, 1892.



Witnesses:

Fred K. Hilly
Chas. L. Marston

Inventor:

Charles Demaree
by *S. M. Bates*
his atty.

UNITED STATES PATENT OFFICE.

CHARLES DEMAUREZ, OF PORTLAND, MAINE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 486,826, dated November 22, 1892.

Application filed April 9, 1892. Serial No. 428,436. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DEMAUREZ, a citizen of Germany, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Car-Couplings; 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.

My invention relates to car-couplers, and particularly to an improvement which I have made in the car-coupler patented to me January 5, 1892, by Letters Patent No. 466,713.

In my former patent I made use of an open-ended draw-bar having a cross-bar journaled in the lower portion thereof in such a manner as to have a vertical motion as it turned in its bearings. A coupling-pin was pivoted in a recess in the upper portion of the inside of said draw-bar, the lower end of said coupling-pin engaging said cross-bar when the latter was in its highest position and swinging freely to admit and release the link when the cross-bar was at its lower position. This coupling-pin being pivoted within the body of the draw-bar it could not be readily removed, and as it was liable to become clogged with ice and snow, so that it would not swing freely, this was an important point to be remedied. I overcome this difficulty, according to my present invention, by extending the coupling-pin shown in my former patent up through the top of the draw-bar and providing a pivot-bearing for it on top of the draw-bar. By this construction I am enabled to remove the pin readily for the reason that it is independent of the draw-bar and not pivoted within it. By having the coupling-pin removable I am enabled to keep the draw-bar clear of ice and snow, and I get rid of a complicated construction and gain in simplicity, which is essential in a car-coupling. In my present invention I also make use of a tongue secured within the draw-bar at its rear and extending upward and forward to furnish a guide and rest for the inner end of the link when it is resting over the cross-bar.

I illustrate my invention in the accompanying drawings, in which—

Figure 1 is a side view of my improved

coupling. Fig. 2 is a section on the line $x x$ of Fig. 3, and Fig. 3 is an end or front view.

A represents the draw-bar, which has an open end like the ordinary draw-bar. Extending across the lower portion of the draw-bar and journaled in openings c in the sides is the cross-bar C. The openings c are oval or oblong vertically and have gear-teeth c^2 on their sides, and the cross-bar is provided with gear-teeth c' , which engage the teeth in the opening. c^4 is a lever, by which the cross-bar is rolled or partially rotated, and when this takes place it is lifted bodily. The cross-bar has a recess c^3 cut away in its center to allow the lower end of the pin to swing outward.

D is the coupling-pin, the lower end of which swings freely when the cross-bar C is down, but engages said cross-bar when the latter is up. The pin extends up through an opening in the top of the draw-bar and its upper end is formed into a dog or pointed projection, which extends forward and downward and rests, as here shown, in a recess a , formed in the top of the draw-bar. It may, however, rest on the top without a recess. A pivot-bearing is provided immediately above the opening, through which the pin extends. I prefer to use a pivot d , which extends through the draw-bar and rests on top of it above said opening.

The operation is the same as in my former patent. The cross-bar being raised the link is thrust in and catches behind the pin, the lower end of which is held by the cross-bar. I find that when the link strikes the lower end of the pin it swings backward and upward on the point of the dog as a center without the use of a slot to guide the pivot, as shown in my former patent. It will be seen, as already stated, that the coupling-pin as I now construct it is entirely independent of the draw-bar and may be quickly removed by pulling it up through the opening in the top of the draw-bar. I provide a rest or support for the inner end of the link to keep the outer end raised sufficiently to enter the opposite draw-bar. This consists of a bifurcated tongue E, secured to lugs $e e$ within and near the top of the draw-bar and in rear of the coupling-pin. This tongue extends forward

and upward, forming an inclined surface, against which the link strikes on entering and by which it is guided, forming, also, a bearing for the inner end of the link to elevate the outer end.

I claim—

1. In a car-coupling, the combination of an open-ended draw-bar, a cross-bar journaled in the lower portion of said draw-bar, a coupling-pin extending up through an opening in the top of said draw-bar and being provided with a pivot-bearing on the top of said draw-bar, the said cross-bar being adapted to engage the lower end of said coupling-pin, substantially as described.

2. In a car-coupling, the combination of an open-ended draw-bar, a cross-bar journaled in the lower portion of said draw-bar, and a coupling-pin extending up through an opening in the top of said draw-bar and having a dog or point projecting forward and resting on the top of said draw-bar and having a pivot-

bearing immediately above said opening on top of said draw-bar, said cross-bar being adapted to engage the lower end of said pin, substantially as described.

3. In a car-coupling, the combination of an open-ended draw-bar, a cross-bar journaled in the lower portion of said draw-bar, and a coupling-pin pivoted at the top of said draw-bar, a link adapted to enter said draw-bar, and a bifurcated tongue for supporting the inner end of said link, said tongue being secured within the upper portion of said draw-bar in rear of said coupling-pin, its forward end being near the top of the mouth of said draw-bar, substantially as described.

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

CHARLES DEMAUREZ.

Witnesses:

S. W. BATES,

D. W. SCHWARZ.