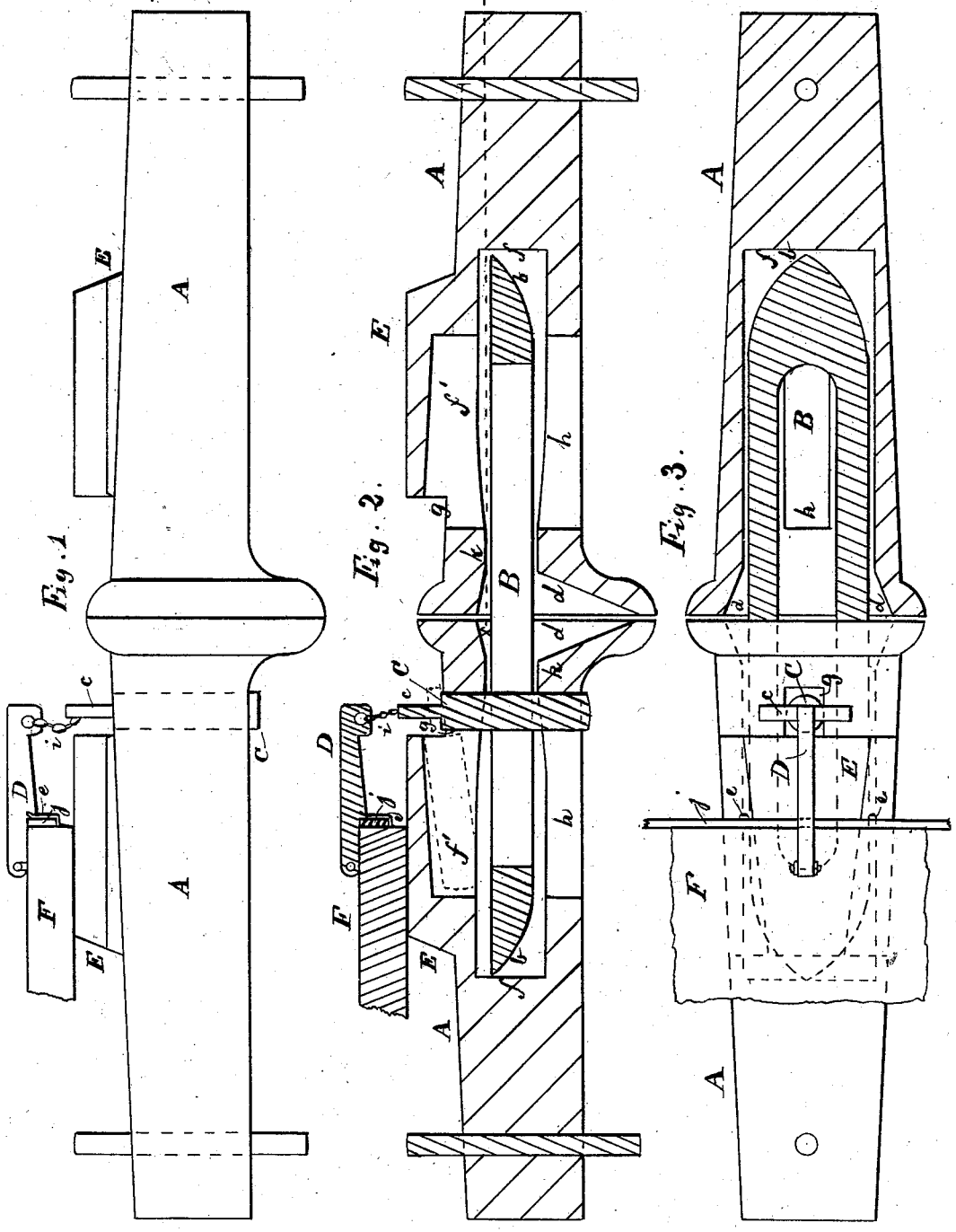
(No Model.)

J. BARRETT.

CAR COUPLING.

No. 259,792. Patented June 20, 1882.



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JAMES BARRETT, OF BEALLSVILLE, OHIO, ASSIGNOR OF ONE-THIRD TO BENJAMIN DENNIE, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 259,792, dated June 20, 1882.

Application filed March 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES BARRETT, of Beallsville, in the county of Monroe and State of Ohio, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

My invention relates to that class of car-couplings in which the coupling-pin swings in the throat or recess of the draw-head; and my invention consists in the special construction of the draw-head, connecting-link, and coupling-pin, and in the means for raising the coupling-pin for uncoupling the cars, whereby the coupling is made entirely automatic and more efficient in use than heretofore.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improved car-coupling. Fig. 2 is a central longitudinal sectional elevation of the same, and Fig. 3 is a partly sectional plan taken on the line *x x* of Fig. 2.

A represents the draw-heads; B, the connecting-link. C represents the coupling-pin, and D the pivoted arm or lever for raising the coupling-pin.

The meeting ends or faces of the draw-heads are made bell-mouthed, as shown at *d d* in Figs. 2 and 3, for guiding the link B into the recess or throats *f f* of the draw-heads as the cars approach each other for coupling. Upon the upper side the draw-heads are formed with the enlargements or projections E, which are recessed, as shown at *f' f'*, which recesses communicate their entire length with the throats of the draw-heads, as shown, and in front of the enlargements E the draw-heads are formed with the passage *g*, in which the coupling-pin is placed, the lower end of the pin reaching down through the slot *h* in the bottom wall of the draw-head, the coupling-pin being formed with the flattened and laterally extended head *c* to rest upon the top of the draw-head, and which may rest against the face of projection E to prevent the pin from turning.

The connecting-link B is by preference made flat, and is pointed and beveled upward at its ends, as clearly shown at *b b* in Figs. 2 and 3, for facilitating its entrance to the recesses of the draw-head for coupling the cars.

The lever D for uncoupling the cars is connected to the coupling-pin by means of the chain *i*, and the end of the said lever reaches over and near to the upper end of the pin, as shown in the drawings, and prevents all danger of the pin being jarred out of place.

To the under side of the lever D is secured the cross-piece *j*, which rests in the staples *e e*, secured in the front edge of the block or board F upon which the lever is pivoted, and this cross-piece *j* reaches to either side of the car for raising the lever D and pin C for uncoupling the cars.

In case the car has no platform, and it is desired to uncouple from the top as well as the sides of the car, a suitable small chain or rod or other connecting means will be attached to the lever D and carried to the top of the car, where it will be held in convenient position for operating the lever and coupling-pin.

The throat or recess *f* of the draw-heads is only a very little more than one-half the length of the connecting-link, and is made narrow vertically, as shown at *k* in the drawings, for holding the link in nearly horizontal position when the cars are uncoupled, so that when the cars approach each other for coupling there will be no danger but that the link will strike at some point of the flaring face of the draw-head, and will thus be guided into the throat of the draw-head, and will be retained by the swinging pin falling into it. Besides this advantage of holding the connecting-link in horizontal position, the narrow entrance to the recess or throat of the draw-head serves to support the coupling-pin near the point of greatest strain, and thus prevents the pin from bending or breaking. When the connecting-link B enters the recess or throat of the draw-head its contact with the swing connecting-pin C will cause the pin to swing back into the recess *f'*, as shown in dotted lines in Fig. 2, and will hold it in that position until the slot in the link reaches the end of the pin, when the pin will drop by its own gravity through the link and retain it in coupled position, as will be clearly understood.

The head *c* of the pin is made flat, as shown, so that it will not interfere with the pin being swung back entirely within the recess *f'*, as will be clearly understood from Fig. 2.

The throat or recess *f* in the draw-head is enlarged back of the entrance, as shown clearly in Fig. 2, so that the link at each end will be free to move up or down in coupling when draw-heads are not level.

I do not confine myself to the use of any particular kind of connecting-link; but I prefer the flat form of link, as shown; and in case the cars are of unequal height a bent link may be used.

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

1. In a car-coupling, the combination with the draw-head A, provided with the tapering recess *f*, the recess *f'*, the slot *h*, and the passage *g*, of the coupling-pin C, the hinged lever D, the connecting-chain *i*, and the cross-bar *j*, substantially as and for the purpose set forth.

2. In a car-coupling, the combination with the draw-head A, provided with the recess *f*, the recess *f'*, the slot *h*, and the passage *g*, the lever D, and connecting-chain *i*, of the coupling-pin C, having the flattened and extended head *c*, substantially as and for the purpose set forth.

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Witnesses:
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