(No Model.)

W. H. AUSTIN.

CAR COUPLING.

No. 260,731. Patented July 11, 1882.

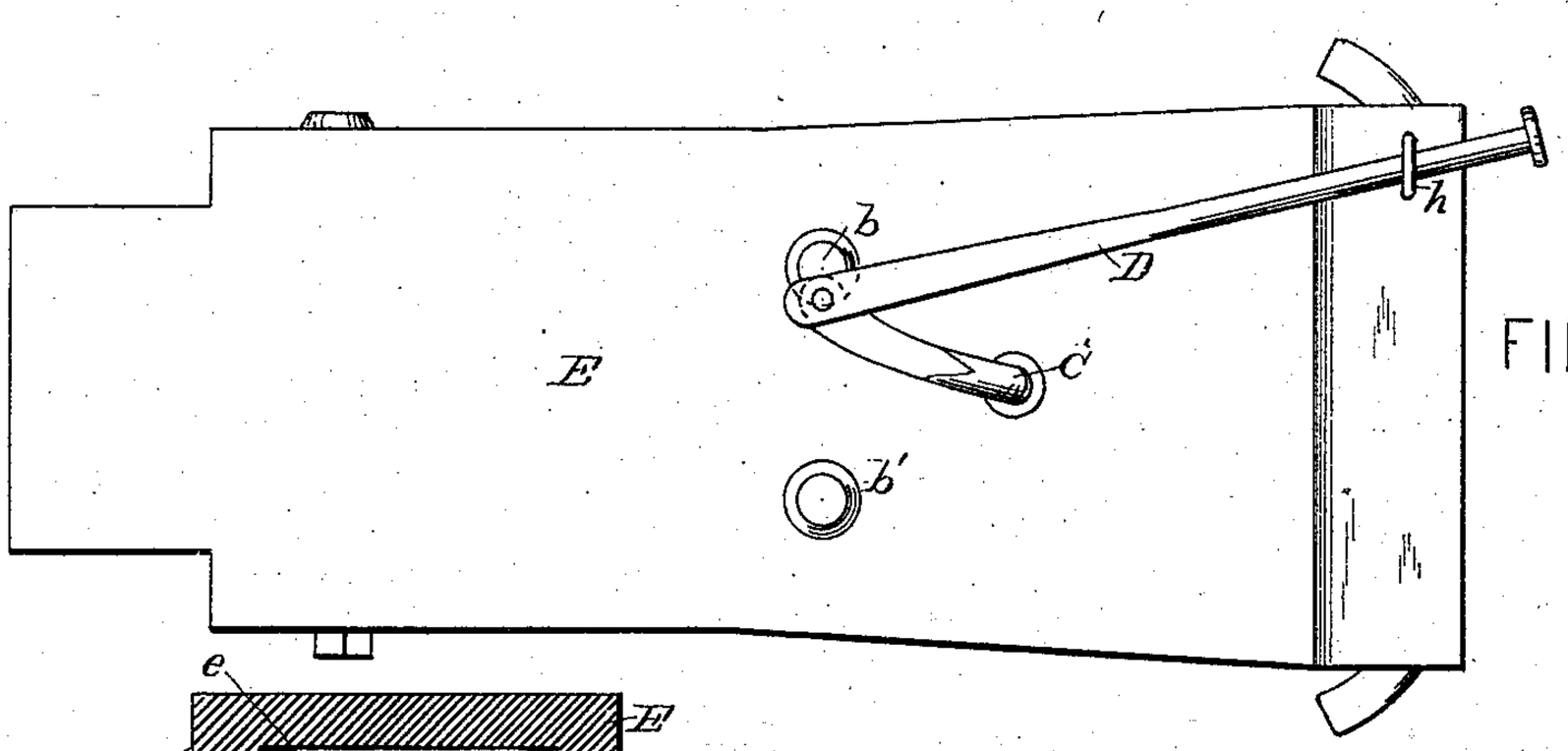

FIG. 1

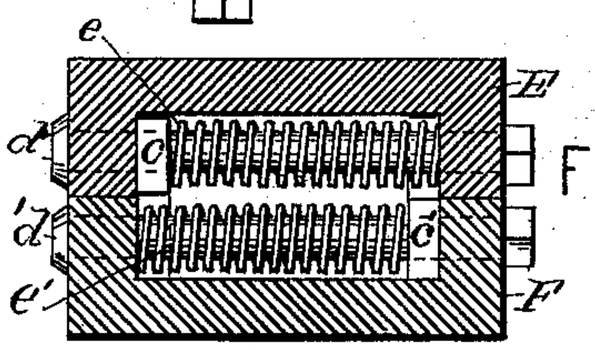

FIG. 4

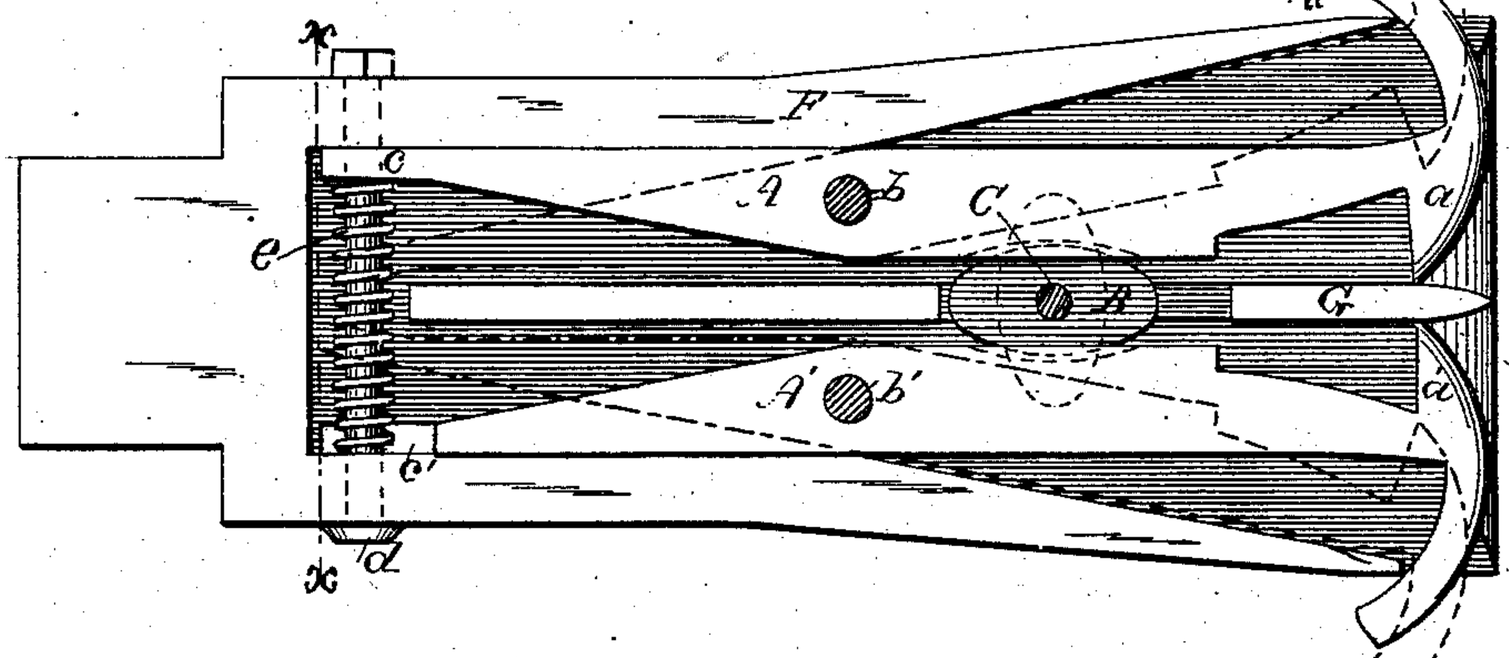

FIG. 2

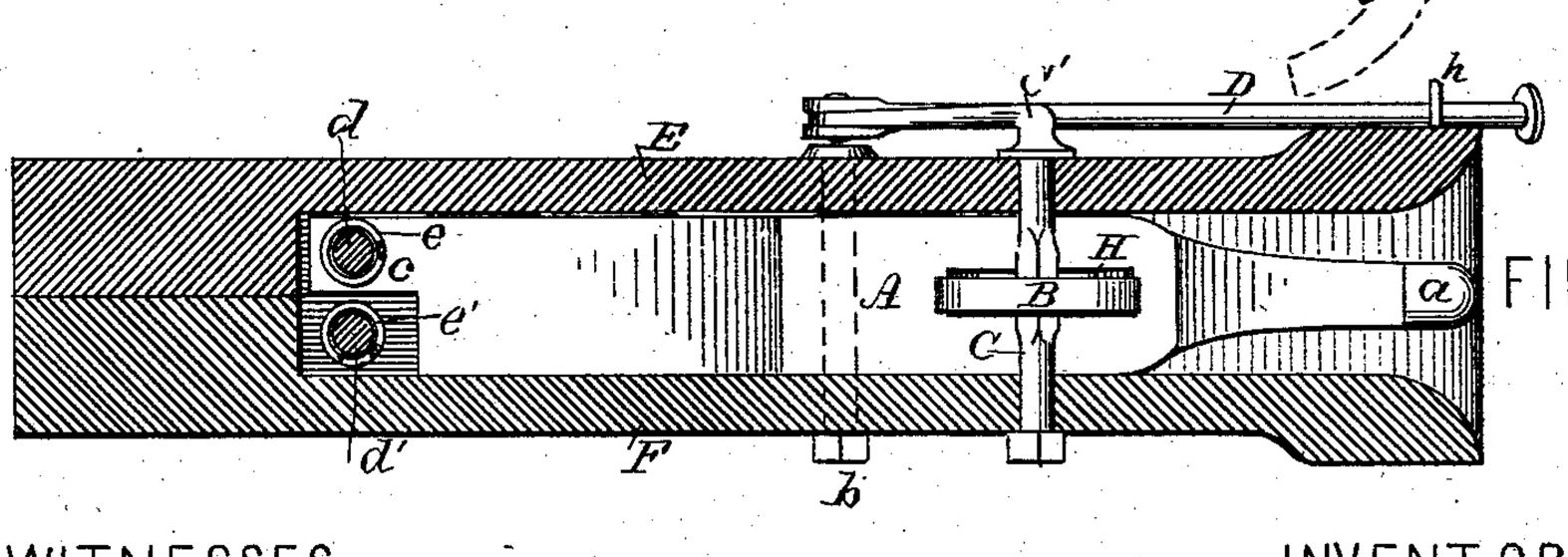

FIG. 3

WITNESSES

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 260,731, dated July 11, 1882.

Application filed April 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY AUSTIN, a citizen of the United States, residing at Jeffersonville, in the county of Clark and State of Indiana, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

My device relates to self-couplers for cars; and it consists in two pivoted levers with double-hooked ends and inclosed in the draw-heads, and actuated through the intervention of a suitable lever at the side of the draw-head.

It further consists in details of construction and arrangement of parts that will be more specifically set forth in the specification and claims and pointed out in the accompanying drawings, in which—

Figure 1 is a top plan view of my device; Fig. 2, a top view with the upper half of the casing removed; Fig. 3, a longitudinal vertical section of Fig. 1. Fig. 4 is a section taken on line *x x*, Fig. 2.

Referring more particularly to the drawings, A A′ represent two catch-levers, one above the other, and pivoted at *b b′* in the draw-head. Bolts *d d′*, having coiled springs thereon, pass through the draw-head and through the inside ends of levers A A′. The outer ends of each lever are formed with two hooks, *a a′*, as shown in Fig. 2. The hooks *a* serve to hold the coupling-links, while the hooks *a′* extend outward through recesses or slots in the sides of the draw-head, so that either lever may be drawn downward or actuated by simply catching hold of the outer projection, if it should be found necessary in case of accident to the lever D.

In order to accommodate the play of the levers in the draw-head, the sides are cut away at an incline or bevel, commencing at a point on the vertical axis through the pivots and extending to the recess in the outer end of the draw-head. The forward end of the draw-head is provided with arc-shaped recesses to permit free play to the curved ends of the hooked ends of the levers. The ends *a*, in their normal position, are in contact with a rib or partition, G, which is pointed at its outer ends, and serves to guide the coupling-link into position, and at the same time acts as a rest for the upper link. The inner ends of the levers are beveled or cut away, as shown in Fig. 2, so as to permit free play of the levers at those ends.

At a suitable point in the draw-head forward of the pivotal points of the lever is an arc-shaped cam, B, mounted on a shaft passing through the draw-head and swiveled to a hand-lever, D, secured to the outside of the draw-head.

The operation of the device is as follows: Suppose the levers A A′ and the cam B to be in their normal positions, as shown in full lines, Fig. 1. When a car, with its coupling-link attached, is moved back so as to come in contact with the bumper of the car next in rear, and which is to be coupled, the link pushes against one or the other of the curved ends *a* of levers. This action tends to force the curved end upward, as indicated in dotted lines, while the opposite end, *c*, which rests on the coiled spring *e*, is forced downward, and of course forces the spring down. As soon as the end of the link passes by the curved end *a* the action of the spring at once forces back the lever into its normal position and the link is held against the inside face of hook *a*. Thus it will be seen the act of coupling is automatic. Now, suppose the cars to be coupled and it is desired to uncouple them. The hand-lever D is pushed back. This turns the shaft C and the cam, which forces back the levers A A′, as before described, and frees the link from contact with the hook *a*. As soon as this is done release lever D, and the action of the springs forces back the cam and levers, as before described. The object of making the two hooks as shown is for the purpose of providing for the coupling up of cars of different heights.

The draw-head may be made in the form of a casing suitably joined to the draw-bar; or there may be one side only of the draw-head made detachable. This form of construction is comparatively inexpensive and very efficient for the purpose. The danger attending the coupling of cars is avoided, and the cars can be uncoupled without stepping in between them.

Having thus described my invention, what I claim is—

1. In a car-coupler, the combination of the

catch-levers A A′, pivoted in the draw-head, the inner ends of said levers being perforated for the passage of a bolt extending through the lever, and a separate coiled spring, one for each lever, said levers being centrally cut away for the reception of a cam for actuating the levers, substantially as set forth.

2. In a car-coupling device, the combination of one or more pivoted catch-levers, A A′, having the hooks *a a′*, the ends *c*, passing over the bolts *d* and resting on springs *e*, the rib G, and cam B, actuated by levers C D, substantially as set forth.

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

WILLIAM HENRY AUSTIN.

Witnesses:
MERRITT N. HALL,
HERMAN PRUFER.