(No Model.)

J. H. CANADAY.

CAR COUPLING.

No. 558,037. Patented Apr. 14, 1896.

Fig. 1.

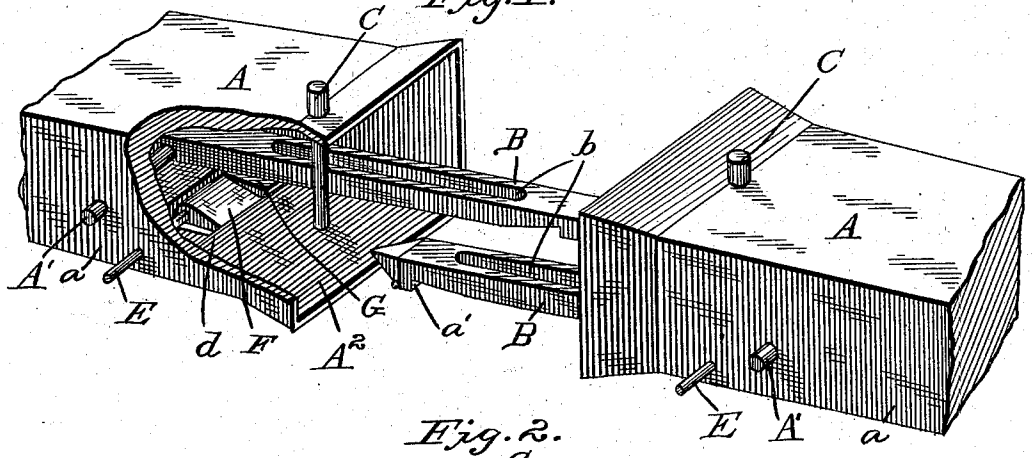

Fig. 2.

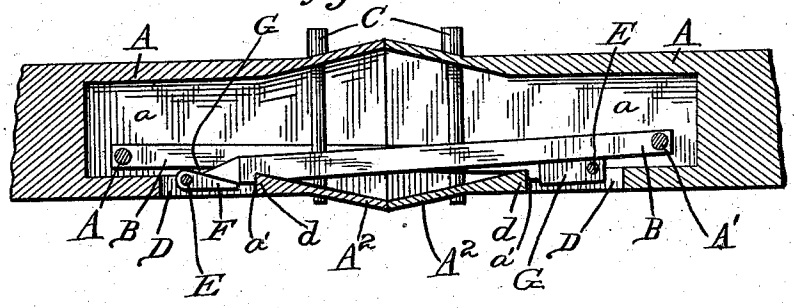

Fig. 3.

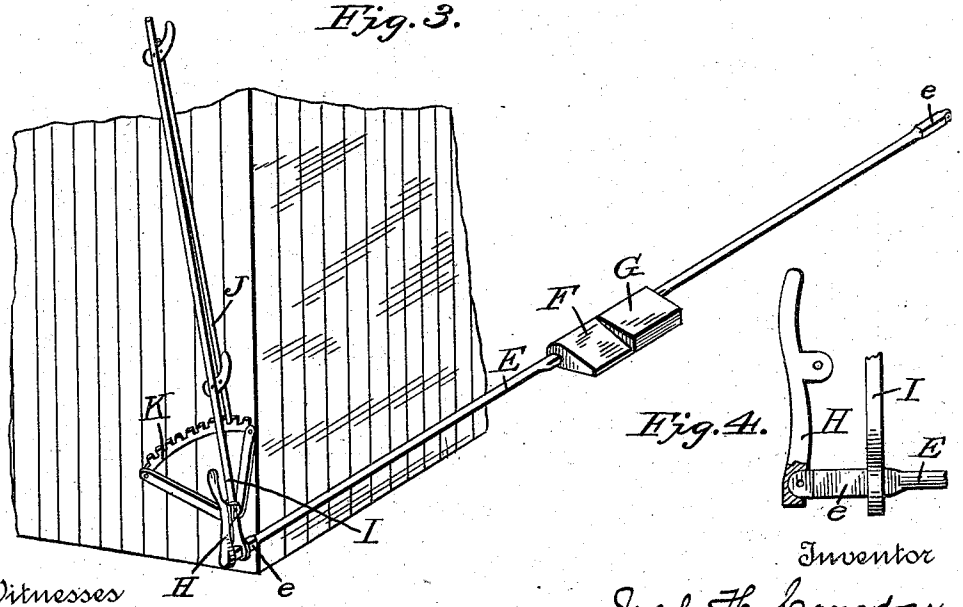

Fig. 4.

Witnesses
Edwin G. Lee
A. E. Hall

Inventor
Joel H. Canaday
By John Widderburn
Attorney

UNITED STATES PATENT OFFICE.

JOEL H. CANADAY, OF ELSMORE, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 558,037, dated April 14, 1896.

Application filed October 2, 1894. Serial No. 524,769. (No model.)

To all whom it may concern:

Be it known that I, JOEL H. CANADAY, a citizen of the United States, residing at Elsmore, in the county of Allen and State of Kansas, have invented a new and useful Automatic Car-Coupling, of which the following is a specification.

This invention relates to certain new and useful improvements in automatic car-couplings of that class in which are provided oppositely-disposed hooks or levers and means for automatically coupling and also for uncoupling from either side of the car.

The present invention has for its objects, among others, to provide a simple and cheap construction which shall be positive in its action, durable, and not liable to get out of order, and composed of few parts and those readily assembled.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claim.

The invention in this instance resides in the peculiar construction, arrangement, and adaptation of parts, all as more fully described and shown in the drawings, and then particularly pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view with portions broken away showing two draw-heads equipped with my improved coupling. Fig. 2 is a substantially central vertical longitudinal section through two draw-heads, showing the same joined by my coupling. Fig. 3 is a perspective detail in elevation showing the uncoupling means. Fig. 4 is a detail in front elevation, with a portion broken away, of the means at one side of the car for effecting the uncoupling.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the draw-head having a chamber *a*, within which is pivoted one end of the coupling-arm B upon a transverse pivot or pin A', held in the walls of the draw-head, and the opposite or free end of said coupling-lever is pointed, as seen best in Fig. 1, and provided with a hook or a vertical shoulder *a'*. In each draw-head there is pivoted one of these hooks or levers, and they are so disposed with relation to the central longitudinal line through the same as to pass each other without engaging as the two draw-heads come together. These arms or levers are provided with longitudinal slots *b*, into which may be inserted an ordinary removable coupling-pin C when it is desired to couple in such manner. These pins pass through vertically-disposed openings in the upper and lower walls of the draw-head, as shown. The mouths of the draw-heads are flared outwardly, as seen in Figs. 1 and 2, and upon the lower upwardly-inclined face A^2 thereof the free ends of the coupling levers or hooks are designed to ride. Back of these inclines the bottom wall of the draw-head is provided with an opening D, forming the vertical walls or shoulders *d*, as seen best in Fig. 2, with which the hooks or shoulders of the coupling-levers are designed to engage to hold the cars in their coupled position, as seen in Fig. 2.

E is a transverse shaft, there being one mounted in each draw-head in the walls thereof, opposite the openings D in the bottom wall of the draw-head, and which has just been described, this shaft extending from side to side of the car, and its ends are squared or made diagonal, as seen at *e* in Fig. 3, and upon this shaft, within the opening D, is fast a tapered block F, which is in such position as to lie beneath the free end of the coupling-lever, as seen in Fig. 2. On the same shaft, adjacent to the tapered block F, is a block G in such position as to lie under the other coupling-lever, as seen in Fig. 1, and also so arranged that the turning of the shaft E on either draw-head will serve to uncouple both of the coupling-levers, as will be readily understood, the tapered block F engaging the hooked end of the one lever and the block G engaging the under side of the other lever near its pivot. In order to operate this shaft to uncouple from either side of the car or from the top, I provide the lever H, which is mounted on the end of the shaft to be operated from the ground, and on the end of the same shaft I arrange a lever I, extending upward to within convenient reach from the top of the car, and this lever I carries a pawl J, adapted to engage

in the teeth of the notched segment K, so as to hold the shaft in position when the same has been turned to effect the uncoupling.

The operation will be readily understood from the foregoing description, especially when taken in connection with the annexed drawings, and a further detailed description is not deemed necessary.

What I claim as new is—

The combination with a draw-head having a chamber, the mouth of which is flared outwardly, and the lower wall inclined from the front inwardly and upwardly, with an opening back of such incline forming the vertical wall or shoulder *d*, of a coupling-arm pivoted within such chamber upon a transverse pivot held in the walls of the draw-head with the free end of said lever pointed and provided with a hook and vertical shoulder, and the body portion provided with a longitudinal slot, a transverse shaft mounted in the walls of the draw-head opposite the opening in the bottom thereof, a tapered block mounted on said shaft, and an independent block also mounted on said shaft by the side of the tapered block, said blocks being designed to serve one with the lever carried by the draw-head in which said blocks are mounted, and the other with the coupling-lever of the opposing car, all substantially as and for the purpose specified.

JOEL H. CANADAY.

Witnesses:
J. A. RUNDQUIST,
J. P. DECKER.