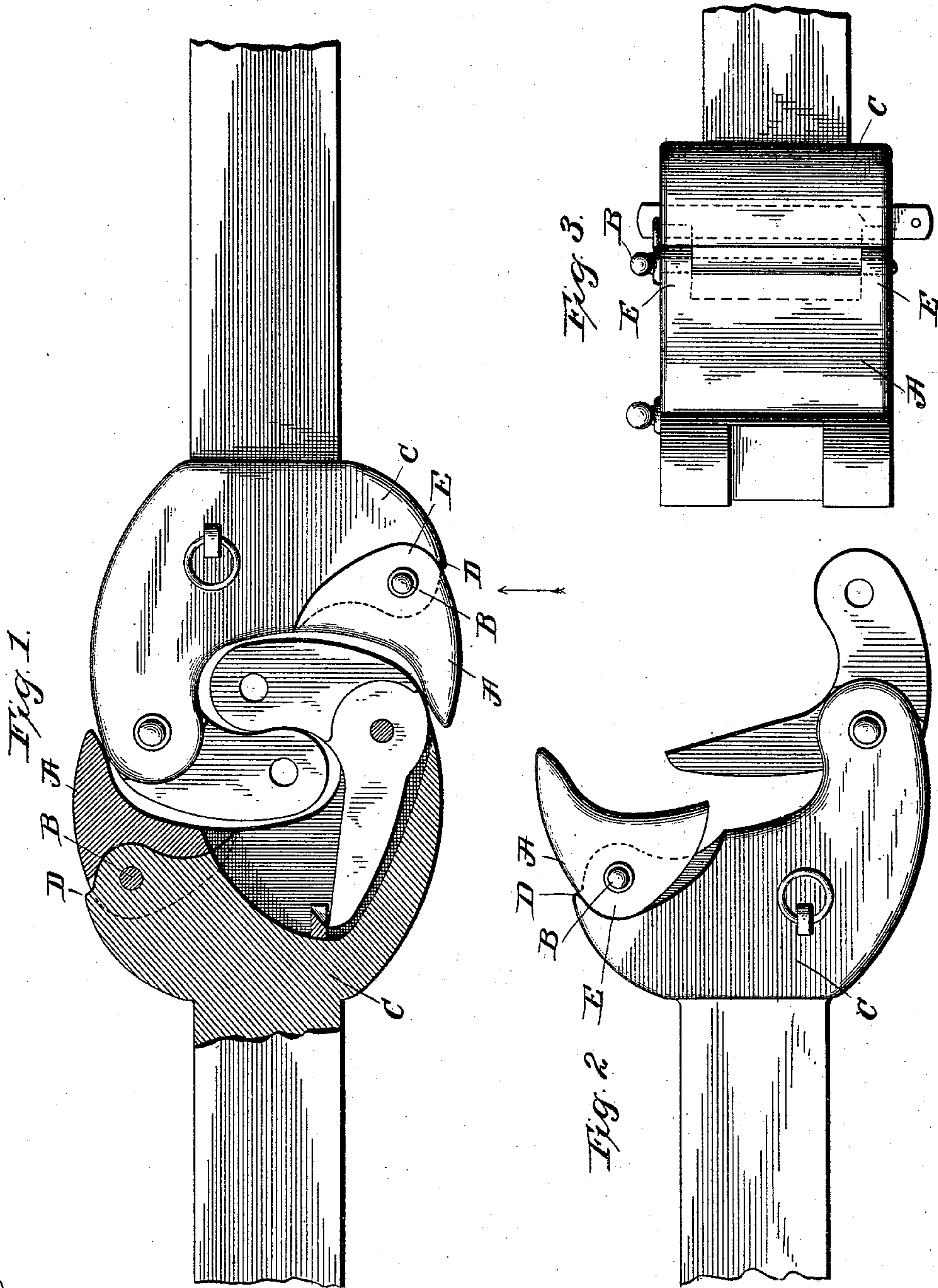


(No Model.)

N. W. AIGLER.
CAR COUPLING.

No. 572,395.

Patented Dec. 1, 1896.



Witnesses

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UNITED STATES PATENT OFFICE.

NOAH W. AIGLER, OF BEAVERTOWN, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 572,395, dated December 1, 1896.

Application filed March 31, 1896. Serial No. 585,556. (No model.)

To all whom it may concern:

Be it known that I, NOAH W. AIGLER, a citizen of the United States, residing at Beavertown, in the county of Snyder and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

My invention relates to a new and useful improvement in car-couplers, and has for its object to provide the well-known form of automatic coupler with a pivoted guard-arm, so that when two couplers are hooked together a sufficient amount of play is permitted to allow a train to turn a sharp curve without the knuckles binding, and also to increase the range in which two couplers may be brought together and automatically coupled, and, further, to render the repair of a coupler, when injured from the usual causes, less difficult.

With these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by number to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a plan view of two couplers hooked together, one being partially broken away, so as to illustrate its construction; Fig. 2, a plan view of a coupler, showing the knuckle and guard-arm distended for the purpose of receiving the knuckle of a similar coupler; and Fig. 3, a side elevation of Fig. 1, looking in the direction of the arrow.

Similar letters denote like parts in the several views of the drawings.

The several parts of this coupler, such as the shank, draw-head, knuckle, and coupling-pin, form no part of my present invention, and I therefore will not enter into a detailed description thereof.

The feature of my invention is the swinging guard-arm A, which is pivoted by the pin B to the draw-head C in such manner as to swing outward to the position shown in Fig. 2, and it will be prevented from a further outward movement by coming in contact with the shoulder D.

I prefer to fit the guard-arm to the draw-head by reducing the thickness of a portion of the latter and forming ears E upon the

former, adapted to embrace this reduced portion, as clearly shown in Fig. 3. This arrangement is such that should a fracture of a guard-arm from any cause occur the coupler may readily be repaired by removing the guard-arm and substituting a new one therefor, and this could be accomplished in a short time, thus preventing serious delays which might otherwise occur.

A further advantage over the rigid guard-arm, which when coupled on a short curve, where cars approach each other obliquely, made it impossible for the approaching coupler to enter its fellow, is that this guard-arm may be swung outward, thus increasing the range in which its fellow will be caused to properly enter. It will also be noticed that the peculiar construction of this swinging guard-arm is such that when the draw-head is disconnected from its fellow it is left free to open or close, having no locking device of its own, but closes immediately as the outer or free end of the knuckle of the opposing coupler passes into its proper place to effect the coupling and is kept closed as long as said knuckle remains locked; and, further, should the knuckle of the opposing coupler strike the swinging guard-arm directly on its free end, the latter would swing open and thus escape the full force of the blow which a rigid guard-arm would receive.

Having thus fully described my invention, what I claim as new and useful is—

In a device of the character described a coupler-head having a hinged knuckle-hook on one side, a lug formed on the other side by cutting away a portion of the top and bottom thereof, a right-angular cam-shaped guard, ears formed thereon and adapted to fit in the cut-away portions of the head and a removable pivotal pin securing the lug to the ears, said guard being independent of the knuckle-hook and of such a shape as to guide the knuckle-hook of another coupler to its home, and be closed and held in its closed position by the other coupler as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

NOAH W. AIGLER.

Witnesses:

S. S. WILLIAMSON,
A. W. BEAVER.