

A. J. BAZELEY.
 UNCOUPLING MECHANISM FOR CARS.
 APPLICATION FILED APR. 15, 1908.

947,747.

Patented Jan. 25, 1910.

3 SHEETS—SHEET 1.

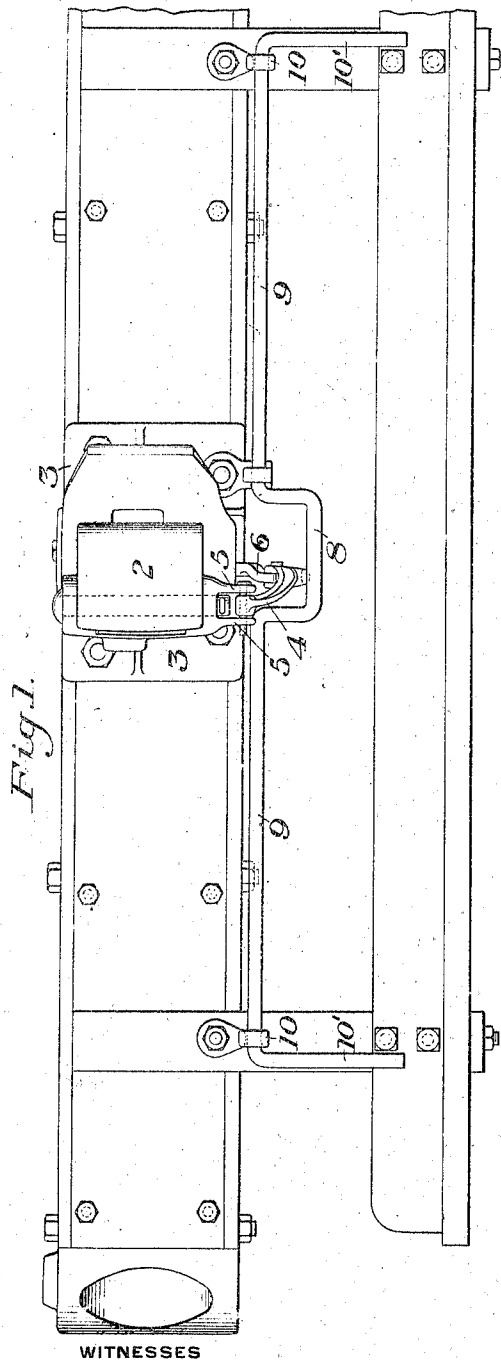


Fig. 1.

WITNESSES

R. H. Baldwin
G. L. Brindley

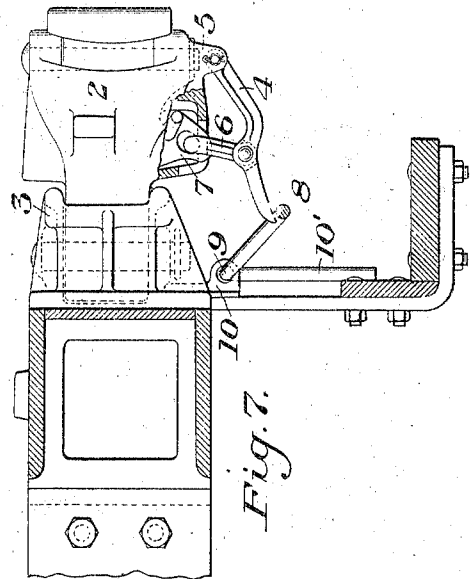


Fig. 7.

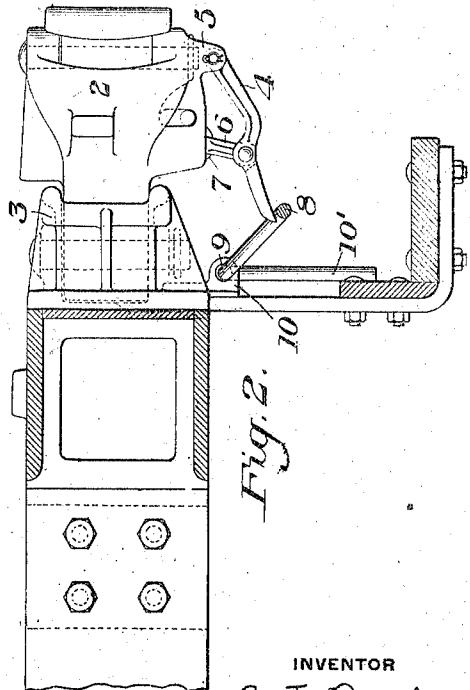


Fig. 2.

INVENTOR

A. J. Bazeley,
by Bakerwell, Baynes & Partners
his Attys.

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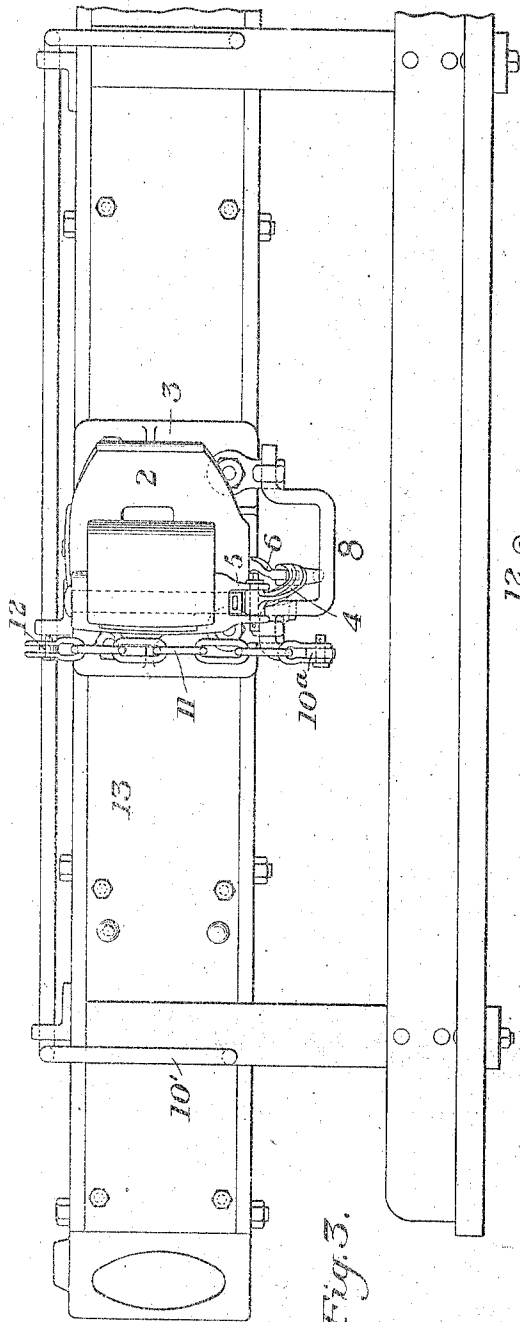


Fig. 3.

WITNESSES

R. H. Balderson
 W. W. Swartz

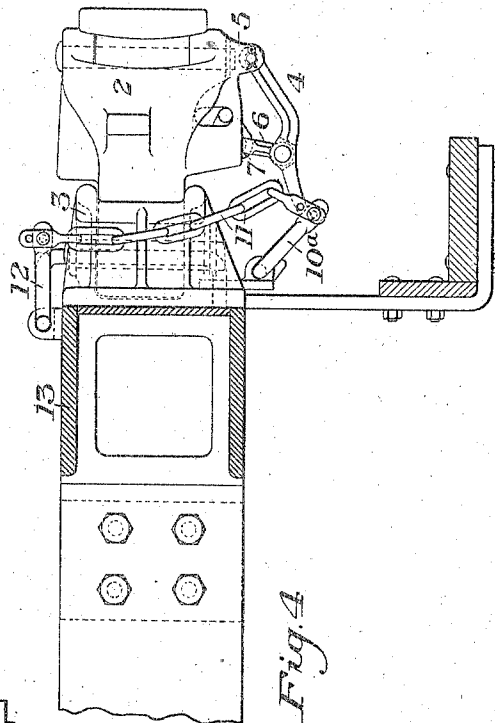


Fig. 4

INVENTOR

A. J. Bazeley
 by Pauline Brown & Pomeroy
 his attys

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3 SHEETS—SHEET 3.

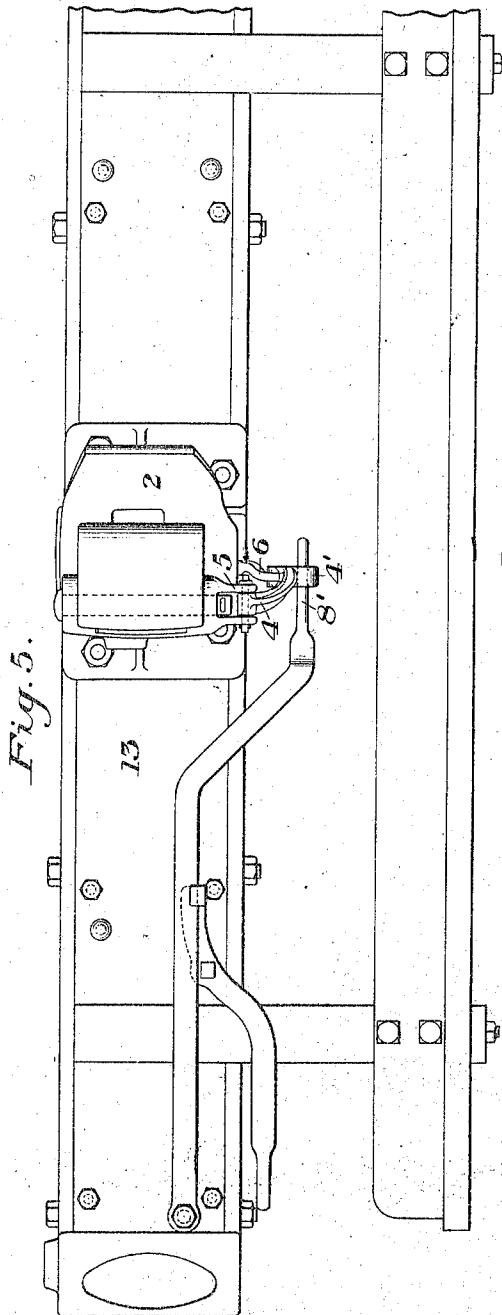


Fig. 5.

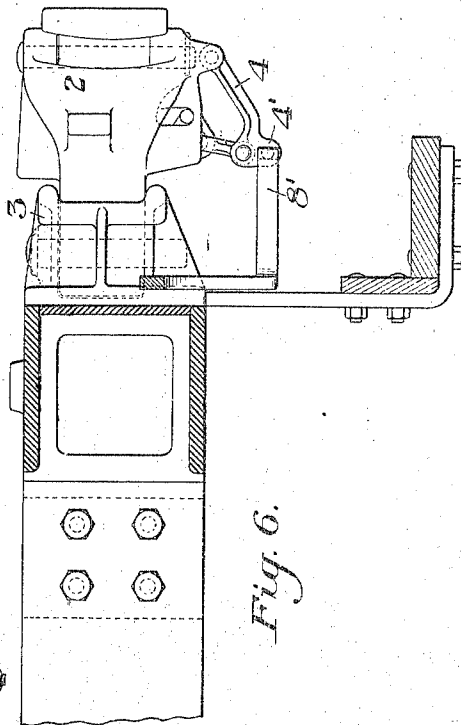


Fig. 6.

WITNESSES

R. A. Balderson
W. U. Swartz

INVENTOR

A. J. Bazeley
 by *Dalmon, Byrnes & Parson*
 his attys.

UNITED STATES PATENT OFFICE.

ARTHUR J. BAZELEY, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

UNCOUPLING MECHANISM FOR CARS.

947,747.

Specification of Letters Patent. Patented Jan. 25, 1910.

Application filed April 15, 1908. Serial No. 427,263.

To all whom it may concern:

Be it known that I, ARTHUR J. BAZELEY, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Uncoupling Mechanism for Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation showing my coupler unlocking device applied to a locomotive engine; Fig. 2 is a side elevation thereof partly in vertical section; Fig. 3 is a front elevation of a modified form of my invention; Fig. 4 is a side elevation of the device shown in Fig. 3; and Figs. 5 and 6 are views similar to Figs. 1 and 2, illustrating a modification. Fig. 7 is a side elevation partly in section showing the connection of the link 6 of Fig. 1 to the coupler locking mechanism and to the lever 4.

The purpose of my invention is to provide efficient and simple mechanism for operating the lock of bottom opening couplers.

My invention is especially adapted to afford means by which the vertically movable device within the coupler head, whether it be the lock alone or an opening device which cooperates with the lock, is guided properly during its vertical motion, so that it can not be displaced within the coupler head.

As shown in Figs. 1 and 2 of the drawings, 2 is a coupler head, the shank of which is pivoted to the car frame in a pocket or suitable receiving device 3. 4 is the lever which operates the mechanism of the coupler. It is pivoted to the bottom of the coupler head at one of the ears thereof, between projecting lugs 5, and extends rearwardly therefrom beneath the coupler. At an intermediate point it is connected flexibly by a link 6 with the lock-operating piece of the coupler which is marked 7 and which projects downwardly through an opening in the floor of the coupler. I illustrate this more fully in Fig. 7. From the link 6 the lever 4 extends rearwardly into engagement with an operating crank 8, which is preferably formed by a U-shape

portion of a shaft 9 journaled in bearings 10 on the car frame, and extending to the sides of the car structure where it is provided with operating handles 10'. By lifting the operating handle 10' the crank 8 is raised, thereby lifting the lever 4 on its pivotal fulcrum between the lugs 5 and raising the operating link 6, thus actuating the lock, the lever 4 being pivoted directly to the coupler head and extending beneath the coupler head where it is not apt to be injured and where it does not interfere with the other parts of the car. This is especially important when the coupler is applied to locomotive engines, for when such engines are coupled to passenger cars, the buffers of such cars are apt to extend over the head of the coupler and to engage and damage any opening mechanism which is located at that place. By flexibly connecting the lever 4 to the coupler locking mechanism with the link 6, the lever 4 can be pivoted to the coupler head at a fixed point and supported at its rear end from the lock, without depending upon the operating shaft 9 for its support. This is a matter of importance.

In the construction shown in Figs. 3 and 4, the lever 4 and its link 6 are constructed similarly to the construction shown in Figs. 1 and 2, but the operating mechanism for the crank 8 consists of a chain 11 which extends from an arm 10^a of the crank upwardly to a lifting lever 12, pivoted on the top of the end sill 13. Instead of using the crank 8, the lever 4 may be moved vertically by other mechanism such as a lever extending transversely to the length of the car. Thus in Figs. 5 and 6, I show views in which the lever 4^a is provided with an eye 4' in which is fitted the end of an operating lever 8' pivoted at its outer end at 8^a to the end sill and operated by a hand lever 8^b which engages the lever 8' and is pivoted at 8^c.

This device is useful in cases where the coupler head is connected to a spring rigging or is otherwise adapted to longitudinal motion on the car frame.

Other modifications of my invention will suggest themselves to those skilled in the art.

without departing from the spirit and scope of my invention as pointed out in the appended claim.

What I claim is:—

5. A coupler having a locking mechanism, an operating lever pivoted to the under side of the coupler head and extending rearwardly from its pivot, a link connecting said operating lever to the locking mechanism of
10 the coupling head and arranged to enter

through the floor of the coupler head, and a lever arm mounted on the car and directly and loosely engaging the said operating lever: substantially as described.

In testimony whereof, I have hereunto set my hand.

ARTHUR J. BAZELEY.

Witnesses:

HENRY F. POPE,
HARRY E. ORR.