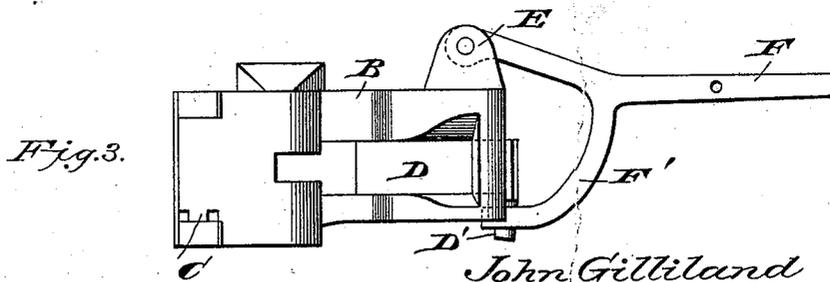
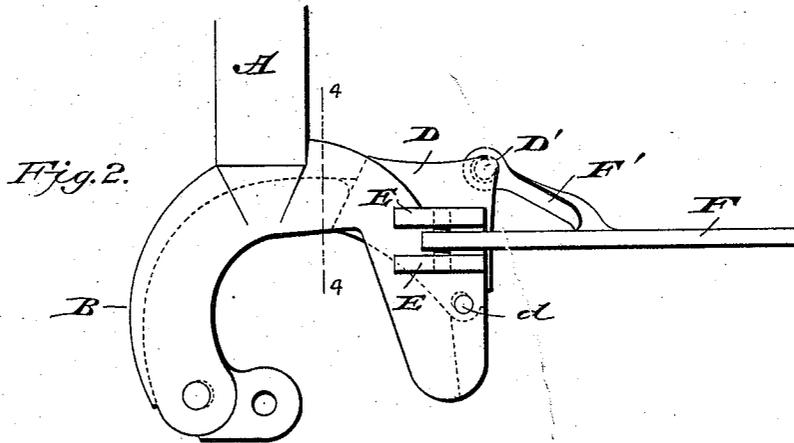
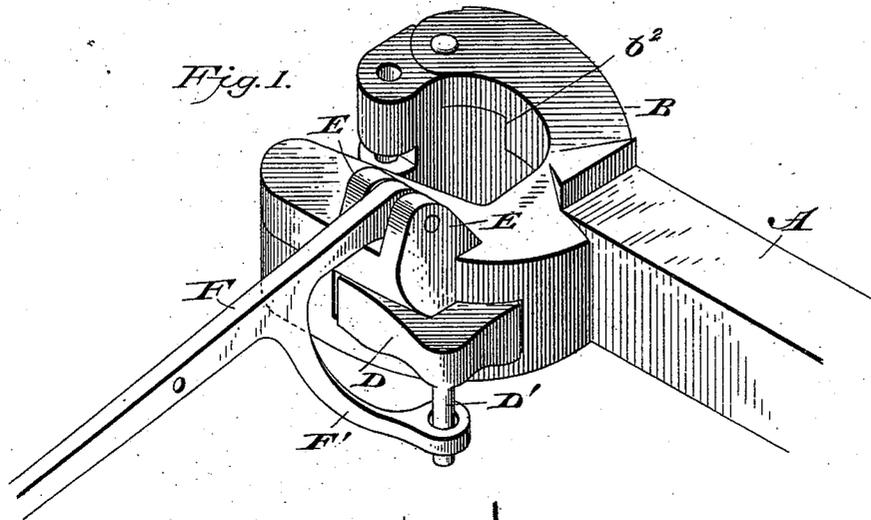


J. GILLILAND.
CAR COUPLING.

No. 534,217.

Patented Feb. 12, 1895.



WITNESSES

G. S. Elliott,
W. Johnson

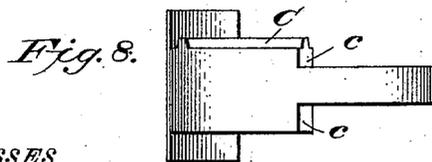
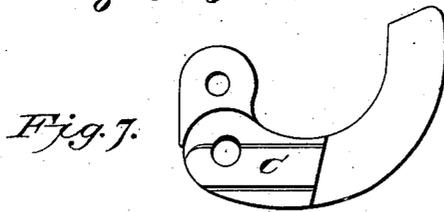
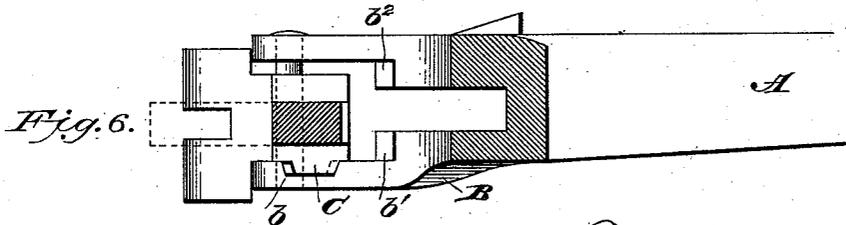
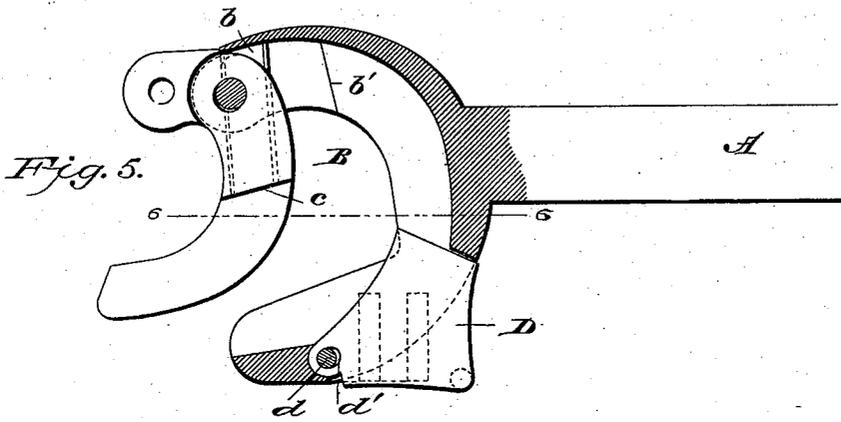
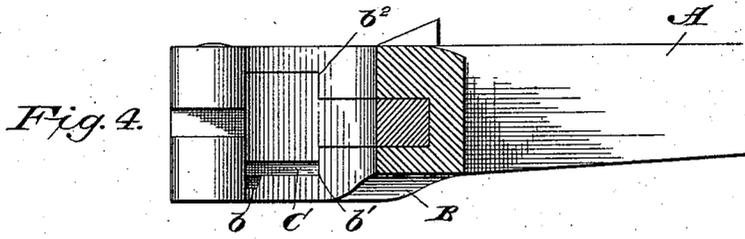
John Gilliland
INVENTOR

by *[Signature]*
Attorney

J. GILLILAND.
CAR COUPLING.

No. 534,217.

Patented Feb. 12, 1895.



WITNESSES
G. S. Elliott
W. M. Johnson

John Gilliland
 INVENTOR

— by *[Signature]*
 Attorney

UNITED STATES PATENT OFFICE.

JOHN GILLILAND, OF LINCOLN CITY, ASSIGNOR OF ONE-HALF TO JAMES W. LADD, WILLIAM H. WILLIAMS, WILLIAM W. GAINER, AND HENRY G. WHITTINGHILL, OF DALE, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 534,217, dated February 12, 1895.

Application filed October 18, 1894. Serial No. 526,282. (No model.)

To all whom it may concern:

Be it known that I, JOHN GILLILAND, a citizen of the United States of America, residing at Lincoln City, in the county of Spencer and State of Indiana, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car couplings, and is designed more especially as an improvement upon the car-couplings of the Janney type, the object being to provide a coupler of such type with improved means for operating the lock, said means consisting of a lever which is carried by the coupler-head and engages with a horizontally swinging lock so that the weight of the lever will exert a tendency to move the lock toward the coupling jaw to engage therewith, the lever being also adapted to actuate said swinging lock to throw it out of engagement with the coupling jaw when it is desired to uncouple the cars.

The invention further embodies the special construction of the coupler-head and coupling jaw whereby when the coupling jaw is opened it will be retained in said position by gravity and will not be returned to its normal position within the drawhead until sufficient force is exerted to raise the same; and the invention further consists in the construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a car-coupling constructed in accordance with my invention. Fig. 2 is a plan view; Fig. 3, a front elevation; Fig. 4, a sectional view on the line 4—4 of Fig. 2; Fig. 5, a plan view partly in section, showing the coupling jaw projected from the coupler-head.

Fig. 6 is a sectional view on the line 6—6 of Fig. 5, and Figs. 7 and 8 are detail views of the coupling jaw detached.

A designates the draw-bar upon which the coupler-head B is formed in the usual manner, said coupler-head being provided with members which are adapted to receive the coupling jaw and swinging lock, both of the latter moving upon their respective pivots horizontally. The member of the coupler-head to which the coupling jaw is pivoted is substantially of the ordinary type, with the exception that it is provided with a transverse recess *b* the side walls of which are slightly inclined, the recess being intersected by the pin upon which the coupling jaw swings. This member is further recessed to provide shoulders *b'* and *b''* against which the shoulders *c c* of the coupling jaw will abut when swung inwardly. It may be here noted that the coupling jaw when swung in its recess in the coupler-head lies snugly in said recess, and when swung outwardly, as shown in Fig. 5, a projecting portion C formed on the under side of the same is moved in line with the recess *b* in the coupler-head, and in order to close the coupling jaw it will be necessary to exert thereon sufficient force to lift the same, which lifting is occasioned by the inclined sides of the recess and projecting portion. This simple means of construction provides for holding the coupling jaw open after having been set in such position either by the uncoupling of the cars or by hand.

D designates the swinging lock which is pivoted in a recess in the opposite member of the coupler-head from the coupling jaw upon a pin *d* which passes through an aperture *d'* in the swinging lock, and said swinging lock is adapted to be limited in its inward movement by a shoulder formed on the under side of the same and by one end abutting against one of the walls of the coupler-head. The swinging lock abuts against the end of the coupling jaw in the usual manner, and the face of said lock being inclined the coupling jaw will swing the same outwardly so that it can pass the said lock and engage therewith.

It will be particularly observed that the swinging lock is mounted on a vertical pivot and swings horizontally, and to provide for the automatic operation of the same, as well as to provide means whereby it can be operated either from the side or top of the car I secure to the coupler-head at a point above the swinging lock a lever having a member which engages with a depending pin carried by the said lock, so that the weight of the lever will cause an automatic return of the horizontally moving lock, and to this end I provide the coupler-head with ears E E between which is pivoted the end of a lever F, said lever having a depending member F' with an eye which engages with a pin D' depending from the swinging lock D. The lever may extend to one side of the car and means may be connected to said lever for elevating the free end of the same from the top of the car. In carrying out this construction the lever is so pivoted between the ears E E that it may have a suitable lateral motion, and the eye through which passes the pin D' may be of such a size that ample play may be provided for therein. By means of this construction I obviate entirely the use of springs

and sliding locks which depend upon their own specific gravity for effective operation.

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

1. In combination with a car-coupling having a horizontally swinging coupling jaw, a horizontally swinging lock pivoted to the coupler-head and engaged by a member which depends from a lever which is pivotally supported by the coupler-head, substantially as shown.

2. The combination in a car-coupling of the type shown, of a coupler-head having ears E E between which is pivoted a lever having a member F' with an eye in its lower end as shown, of a swinging lock D having a depending portion or pin D' with which the eye in the lower end of the member F' engages, for the purpose set forth.

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

JOHN GILLILAND.

Witnesses:

W. C. STOEKHOWE,
RILEY HUFF.