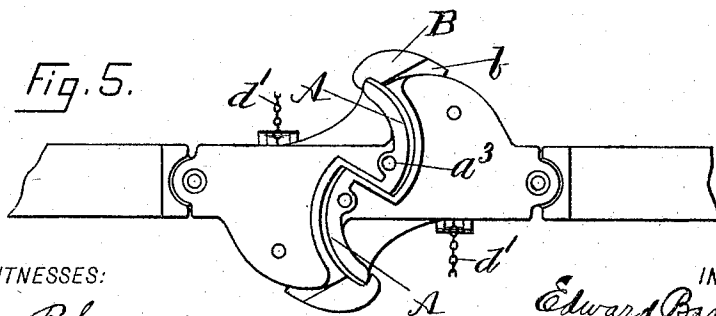
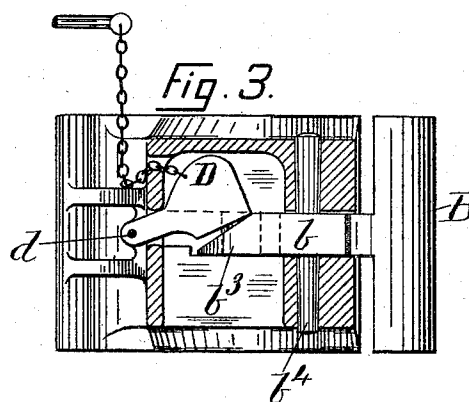
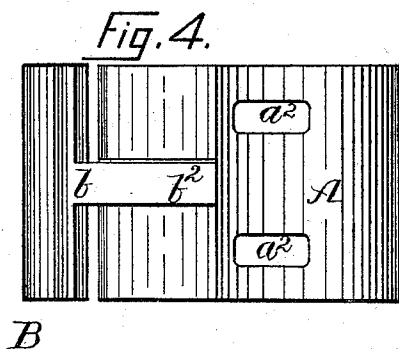
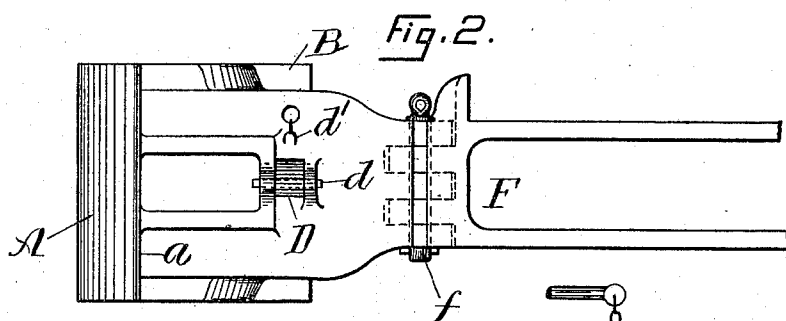
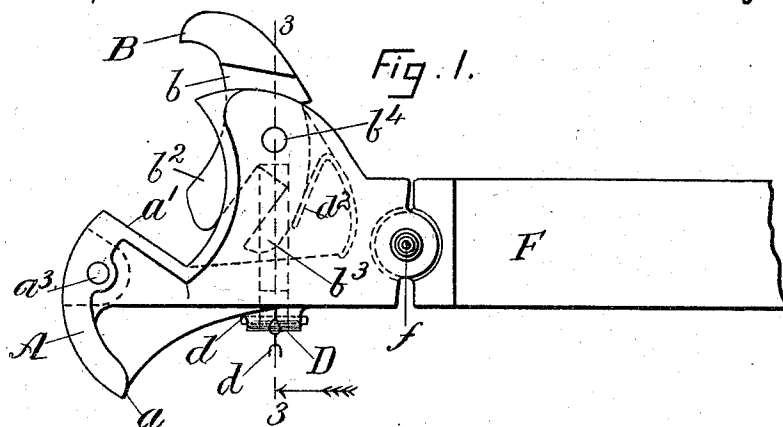


(No Model.)

E. B. GRIFFIN.
CAR COUPLING.

No. 541,968.

Patented July 2, 1895.



WITNESSES:

John R. Snow.

H P Guillo

INVENTOR

INVENTOR
Edward Bancroft Gifford

BY

87
J. E. Maynard
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWARD BANCROFT GRIFFIN, OF SOMERVILLE, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 541,968, dated July 2, 1895.

Application filed April 15, 1895. Serial No. 545,690. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BANCROFT GRIFFIN, of Somerville, in the county of Middlesex and State of Massachusetts, have invented an Improved Car-Coupler, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan of my coupler set ready to couple. Fig. 2 is an elevation of Fig. 1. Fig. 3 is a section on line 3—3 of Fig. 1, looking in direction of arrow. Fig. 4 is an end elevation of Fig. 1. Fig. 5 shows the draw-heads coupled.

My invention is a car coupler composed of a pair of drawheads each with a recess at one side formed by a rigid jaw and a movable jaw, the recess being larger at the bottom than at the mouth when the movable jaw is locked so that when the rigid jaw of one draw head is in the recess of the other and the movable jaw is locked the rigid jaw cannot be pulled out of the recess; and the result is a double security against the breaking apart of draw heads, for my draw heads remain in engagement so long as either of the movable jaws performs its function as one side wall of a dovetail recess. This double locking is a result wholly new with me and is the main feature of my invention.

A second feature of my invention is a draw head with a rigid jaw at one side having its inner face diagonal to the line of draft and a movable jaw at the other side, forming with the rigid jaw a recess for the companion rigid jaw, one side of which recess is diagonal to the line of draft; so that when the companion rigid jaw is in that recess it is held therein so long as the movable jaw is in position to form the other side of the recess.

In the drawings, A, is the rigid jaw, and a and a' the inwardly slanting slides.

B is the movable jaw and b the slotted knuckle to which it is fast. The knuckle, b , is pivoted upon b^4 . The inner end of knuckle b has two forks, $b^2 b^3$. A key D pivoted at d , drops when the movable jaw B is in position to hold the rigid jaw A' of the companion head, between the forks b^2 and b^3 , locking the knuckle b and thus retaining the movable jaw

B in this position until the key D is raised in any suitable way, as by a chain d' . A spring d^2 behind fork b^3 is compressed while knuckle b is in this locked position.

The rigid jaw A has recesses a^2 in its face and a pin hole a^3 passing through them, by means of which the draw head may be used with the ordinary link and pin when necessary.

The draw head is pivoted upon the end of the draw bar F by pin f , the front end of the draw bar and the rear end of the draw head being shaped to allow a limited swing to the draw head.

The operation is as follows: When key D is raised by means of chain d' , the knuckle b is thrown forward by spring d^2 , swinging movable jaw B open. The fork b^3 of knuckle b is beveled, as shown in Fig. 3, and passes under key D which is thus held up, but so that key D must always drop between b^2 and b^3 when b^3 is withdrawn from beneath key D. Both drawheads being set to operate by the raising of keys D of each draw head when the drawheads are brought together in coupling cars the rigid jaw of each drawhead enters the recess of the companion head and comes into contact with fork b^2 so that the forks, b^2, b^3 , are forced back against the force of spring d^2 and key D drops between the forks $b^2 b^3$; and the movable jaw B fast to knuckle b being swung forward by this forcing back of the forks $b^2 b^3$ of knuckle b engages the outside corner of the rigid jaw A' of the companion head, the inside of movable jaw B being shaped to engage with the inwardly slanting side a of jaw A'. It is obvious that so long as either of the movable jaws B is locked in position the draw heads cannot separate. To uncouple, the keys D of both drawheads must be raised, when the spring d^2 throws the knuckle b forward, opening the jaw B and setting the drawhead ready for the next coupling.

What I claim as my invention is—

1. The improved car coupler above described composed of two drawheads each having a dovetail jaw at one side, and a movable jaw at the other side; and means for locking the movable jaws; the inner face of each dovetail jaw and the movable jaw co-operating

with it forming a dovetail recess for the companion dovetail jaw, and producing double locking substantially as set forth.

2. In a car coupler a draw head having at
5 one side a dovetail jaw; a movable jaw at its other side; and means for locking the movable jaw whose inner face forms with the in-

ner face of the dovetail jaw a dovetail recess for the companion dovetail jaw, all organized and operating substantially as described.

EDWARD BANCROFT GRIFFIN.

Witnesses:

JOHN R. SNOW,

WM. MAYNADIER.