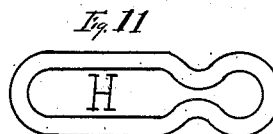
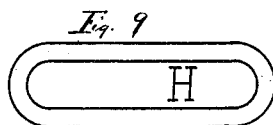
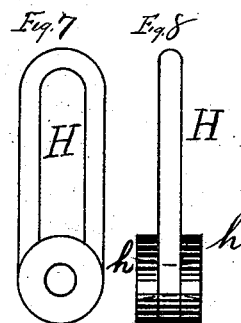
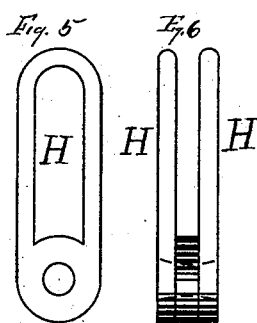
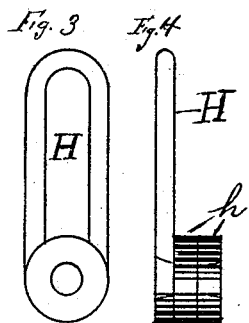
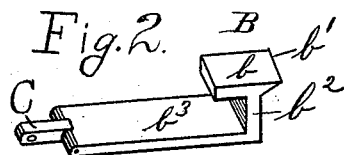
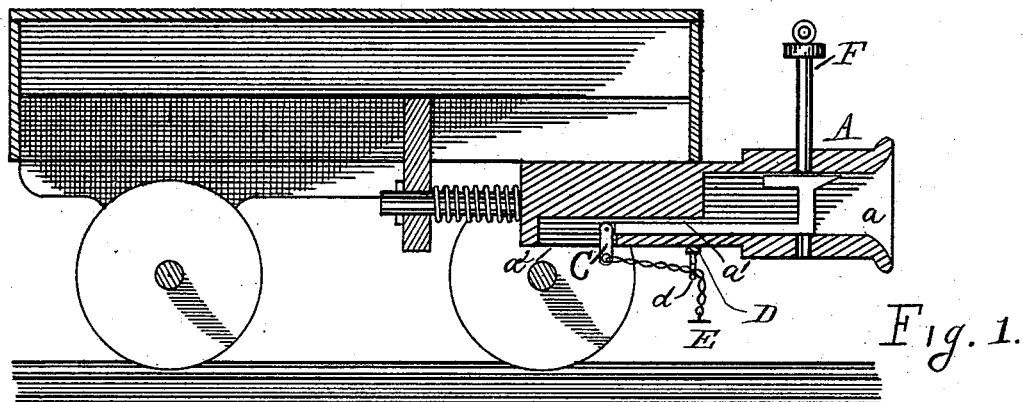


(No Model.)

J. W. WILKS & C. WHITUS.
CAR COUPLING.

No. 470,230.

Patented Mar. 8, 1892.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. WILKS, OF WILKSBURG, AND CHARLES WHITUS, OF CHESTER,
SOUTH CAROLINA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 470,230, dated March 8, 1892.

Application filed July 3, 1890. Renewed August 12, 1891. Serial No. 402,434. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. WILKS, of Wilksburg, and CHARLES WHITUS, of Chester, South Carolina, citizens of the United States, have invented certain new and useful Improvements on the invention of Charles Whitus, patented March 18, 1890, No. 423,463, for a Car-Coupler; and we do 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 the letters of reference marked thereon, which form a part of this specification.

Our invention has relation to car-couplers; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a sectional view showing the bumper and pin-rest attached to the car. Figs. 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 are detail views.

We make a bumper A, having the usual broad mouth a , extending back into a throat a' . The rear end of this throat terminates in an under slot a^2 . Said bumper is provided with the usual bumper-spring and attachments to secure it to said coach.

The pin-rest B is provided with a table b for holding up the pin. The front part or eave b' of said table projects forward from the perpendicular part or link-arrester b^2 and slopes upward to an edge. This eave has two purposes. It extends forward as much as or more than the thickness of the link, so that when the pin drops it cannot fall between the end of the link and the pin-arrester, but will drop down through the link, and said eave slopes upwardly, so that the said link will not catch against it, but will slip under it. Said pin-rest is also provided with a plate b^3 , which extends rearwardly from said link-arrester and works in the throat a' of the bulk-head. In the rear end of said plate is hinged an arm C. Said arm is so hinged that it will lie on a line with said plate or drop down and hang at an angle of ninety degrees to the face of said plate. Said pin-rest b is put in said bulk-head by straightening out the said arm C and thrusting it down the throat of the said bulk-head, table uppermost, and

when the said arm reaches the slot a^2 it drops down through said slot.

Our said invention is provided with a strap D, which passes under the said bulk-head and has each end securely fastened to the bottom of the car. This is to hold the bulk-head in place. Said strap D has securely fixed to it immediately under said bulk-head and in line with the under slot a^2 an eye d . The lower end of said arm C is perforated, in which is secured one end of a chain E, the other end running forward and passing through the eye d and having on its pendent end a cross or other enlargement to keep it from slipping back through the said eye.

We may use any ordinarily constructed coupling-pin; but we prefer to use the coupling-pin F, (shown in Fig. 1,) with an eye or equivalent device on the head of the same, so that the cars may be uncoupled by any of the ordinary means known for lifting the pin without going between the cars.

Fig. 3 is a face view of an ordinary link H, to which is secured or made integral with the same washers h .

Fig. 4 is an edge view of Fig. 3, and Fig. 5 is a face view of our double self-holding link, which consists of two ordinary links HH, one secured on each side of a washer h . Said links and said washer may be all made in one piece, or it may be composed of two links, one being placed on either face of a washer.

Fig. 7 is a face view of our center link.

Fig. 8 is an edge view of said center link, which consists of an ordinary link H, having a washer h on each side. These links may be straight, as shown in Fig. 9, or may be swaged at one end, as shown in Fig. 11. As we have said, said links and washers may be made solid, or they may be made separately, and a sufficient number of them carried in a box or other convenient receptacle attached to the end of the car near the bumper.

Our invention is operated as follows: We set the pin F by hand, or raise it by any of the above-mentioned appliances. We then take hold of the chain E and pull the pin-rest forward until its table is under the pin-hole, and then let the pin down. The pin is thus set. We then put one of the links above described in the mouth of the next bulk-head

and step out of the way and signal the engineer to back up. This sends the link into the bulk-head, in which we have just set the pin, and drives the pin-rest B back, and the
5 pin falls through the link, and the cars are coupled.

With our compound links above described we are able to couple to a car five inches higher or lower than its neighbor. If we
10 wish to couple to a low car, we use the link shown in Fig. 3, link down and washers up. If we wish to couple to a high car, we use the same link, link up and washers down. If
15 the cars are of the same height and the train is long and heavy, we use the links and washers shown in Figs. 5 and 6, one link up and one down and a washer between the two. If
20 the train is light and there be no danger of the pin breaking under its draft, we use the link and washers shown in Figs. 7 and 8, one washer up and one down and a link between
25 the two. These links and washers are made just thick enough to nearly fill the mouth of the bulk-head, and when used in connection
with each other the link stands straight out to the front, without anything else to support it.

Having described our invention, what we claim as new, and desire to secure by Letters
30 Patent, is—

1. The combination of the bulk-head A, having the wide mouth *a*, throat *a'*, and under slot *a*², pin-rest B, having the table *b*, sloped eaves *b'*, link-arrester *b*², rear plate *b*³, and
35 arm C, hinged to said plate and adapted to hang down through the under slot *a*², substantially as shown and described.

2. The combination of the bulk-head A, hav-

ing the wide mouth *a*, throat *a'*, and under slot *a*², pin-rest B, having the table *b*, sloped eaves *b'*, link-arrester *b*², rear plate *b*³, and
40 arm C, hinged to said plate and adapted to hang down through the under slot *a*², strap D, passing under said bulk-head and having the eye *d* secured thereto, and chain E, one
45 end secured to the free end of arm C and the other passing through the eye *d*, substantially as shown and described, and for the purposes set forth.

3. The combination of the bulk-head A, having the wide mouth *a*, throat *a'*, and under slot *a*², pin-rest B, having the table *b*, sloped eaves *b'*, link-arrester *b*², rear plate *b*³, and
50 arm C, hinged to said plate and adapted to hang down through the under slot *a*², links H and washers *h*, and pin F, adapted to drop through said links and washers, substantially
55 as shown and described, and for the purposes set forth.

4. In a car-coupler, substantially as described, the pin-rest B, having the table *b'*, link-arrester *b*², rear plate *b*³, and arm C, hinged in the rear end of said plate, substantially
60 as shown and described, and for the purposes set forth.

In testimony whereof we affix our signatures in presence of witnesses.

JOHN W. WILKS.
CHARLES WHITUS.

Witnesses to signature of John W. Wilks:

JOHN T. ELLIOTT,
JOHN C. MCFEDDER.

Witnesses to signature of Charles Whitus:

A. E. GLASCOCK,
GRAHAM L. GORDON.