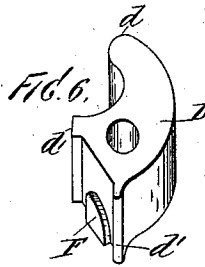
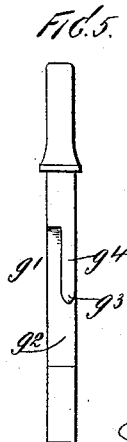
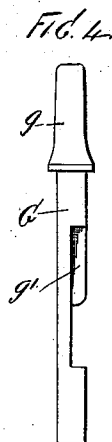
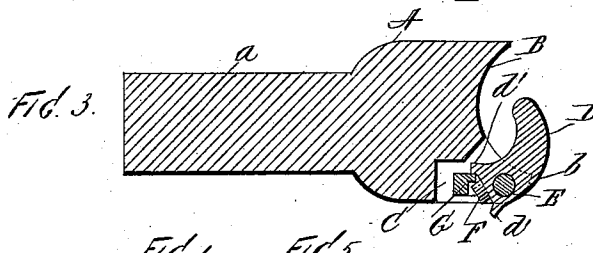
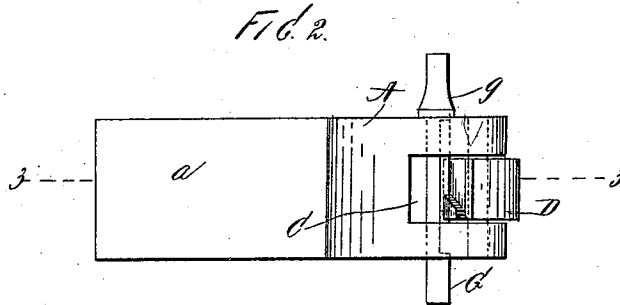
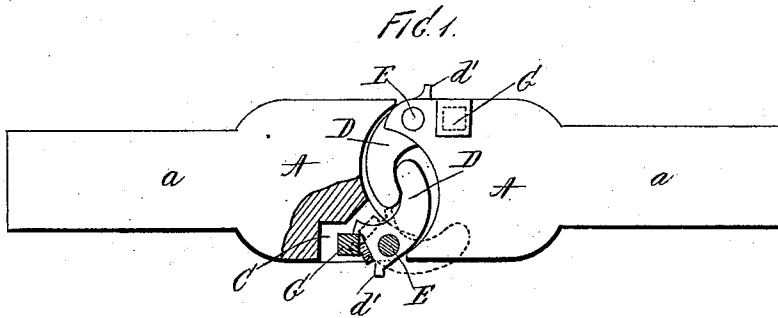


(No Model.)

J. S. BISHOP.
CAR COUPLING.

No. 552,230.

Patented Dec. 31, 1895.



WITNESSES:

John Buckler,
C. Gust.

INVENTOR

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UNITED STATES PATENT OFFICE.

JAMES S. BISHOP, OF RIVERHEAD, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 552,230, dated December 31, 1895.

Application filed September 5, 1895. Serial No. 561,516. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. BISHOP, a citizen of the United States, and a resident of Riverhead, in the county of Suffolk and State of New York, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to car-couplers, and the object thereof is to provide an effective automatic device of this class, by means of which cars may be readily, quickly, and automatically coupled, a further object being to provide a device of this class, which while being automatic is simple in construction and operation and not liable to get out of order or be broken.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a plan view of my improved coupling, a part thereof being broken away to better show the construction; Fig. 2, a side view of one of the parts thereof; Fig. 3, a longitudinal section of Fig. 2 on the line 3 3, and Figs. 4, 5, and 6 represent details of the construction.

In the practice of my invention I provide a coupler-head A, having a shank or extension a' , and which may be secured to a car in the usual or any desired manner. The head A is provided at its outer end with a circular cavity or recess B, one side of which projects slightly farther than the other, as shown at b , and the side b is provided with a longitudinal cavity or recess C. Within the cavity or recess C, and near the outer end thereof, is pivoted a jaw D, which is of the form shown in Fig. 6, said jaw being pivoted in said cavity or recess by means of a bolt E, which passes therethrough.

The base of the jaw B is wider than the projecting portion thereof, and said jaw is also segmental in form, the outer portion being inwardly curved, as shown at d . Formed at each side of the base of the jaw D are vertical flanges or ribs d' , and between said vertical flanges or ribs at the bottom of the jaw is formed a cam F.

Passing vertically through the longitudinal

cavity or recess C, rearwardly of the jaw D and adjacent thereto, is a bolt G, which is square in cross-section and provided with a head g , and the middle portion of this bolt is cut away at one side thereof, so as to form a longitudinal groove g' , at the bottom of which is formed a transverse slot or passage g^2 , above which is a beveled or rounded end g^3 of the downwardly-projecting flange g^4 , which forms the back of the longitudinal groove g' and in the normal position of the parts, when the jaw D is not in operation, the cam F rests in the transverse slot or passage g^2 in the bolt G. If the outer or projecting end d of the jaw D be pressed inwardly the bolt G will be raised by the cam F acting on the lower end g^3 of the flange g^4 , and as soon as said cam passes through the slot or passage g^2 in the bolt G said bolt will drop into the position shown in Fig. 2, and the flange g^4 will securely hold the jaw in the position shown in Fig. 3, said flange resting adjacent to the inner straight side of the cam. It will be understood, of course, that one of these devices is connected with each end of a car, and the operation will also be understood from the foregoing description when taken in connection with the accompanying drawings. Normally the jaws D are extended and the cams F raised in the slots g^2 , as hereinbefore described. When the cars are brought together in the operation of coupling, the projecting ends d pass each other, and the outer curved surfaces thereof striking the inner curved ends of the heads A are driven inwardly, as shown in Fig. 1, and at the same time the bolts G are raised by the cams F, and after the lower end g^3 of the flange g^4 passes over the cam F said bolts drop into the position shown in Figs. 2 and 3 and securely lock the jaws in the position shown in Fig. 1, and when it is desired to uncouple the cars it is only necessary to raise the bolts G, when the cars may be pulled apart, as will be readily understood.

It will thus be seen that my improvement constitutes a simple and effective device and one which is well adapted to accomplish the result for which it is intended.

My invention is not limited to the exact form, construction, and arrangement of parts herein shown and described, and I therefore reserve the right to make all such alterations

therein and modifications thereof as fairly come within the scope of the invention.

Having fully described my invention, I claim and desire to secure by Letters Patent—

5 1. In a car coupler, a coupling head, the outer end of which is provided with a segmental or inwardly curved cavity or recess, at one side of which is formed a longitudinal
10 cavity or recess, in which is pivoted a curved or segmental jaw, the base of which is directed inwardly, said jaw being adapted to be held in the desired position, by means of a square bolt, which passes through the longitudinal
15 cavity or recess, and is provided with a transverse slot or passage, and a longitudinal groove or recess at the back of which is formed a downwardly directed or extending flange, said flange being adapted to operate in con-
20 nection with a cam formed on the pivoted jaw, the base of said jaw being also provided at each side of said cam with vertical ribs or flanges, by means of which the movement of the jaw is limited substantially as shown and
25 described.

2. A car coupler composed of two similar devices, one of which is adapted to be secured to each of the cars to be coupled, said devices each comprising coupler heads adapted to be

secured to a car in the usual manner, said 30 heads being each provided at their outer end with transverse segmental cavities or recesses, and with pivoted jaws, at the opposite sides thereof, said jaws being pivoted in longitudinal slots or recesses, formed in the heads, and 35 said jaws being provided at their bases or pivoted ends with cams and vertically arranged ribs or flanges, and vertically movable square bolts, which pass through said longitudinal cavities or recesses, adjacent to said 40 jaws, said bolts being provided with transverse slots or passages, and vertical grooves, and also with vertical flanges or projections at the back of said grooves, the arrangement being such, that when the jaws are operated 45 or thrown inward, the vertically movable bolts are raised by the cams thereon, after which said bolts drop into position and lock the jaws, substantially as shown and described. 50

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 3d day of September, 1895.

JAMES S. BISHOP.

Witnesses:

C. GERST,

M. A. KNOWLES.