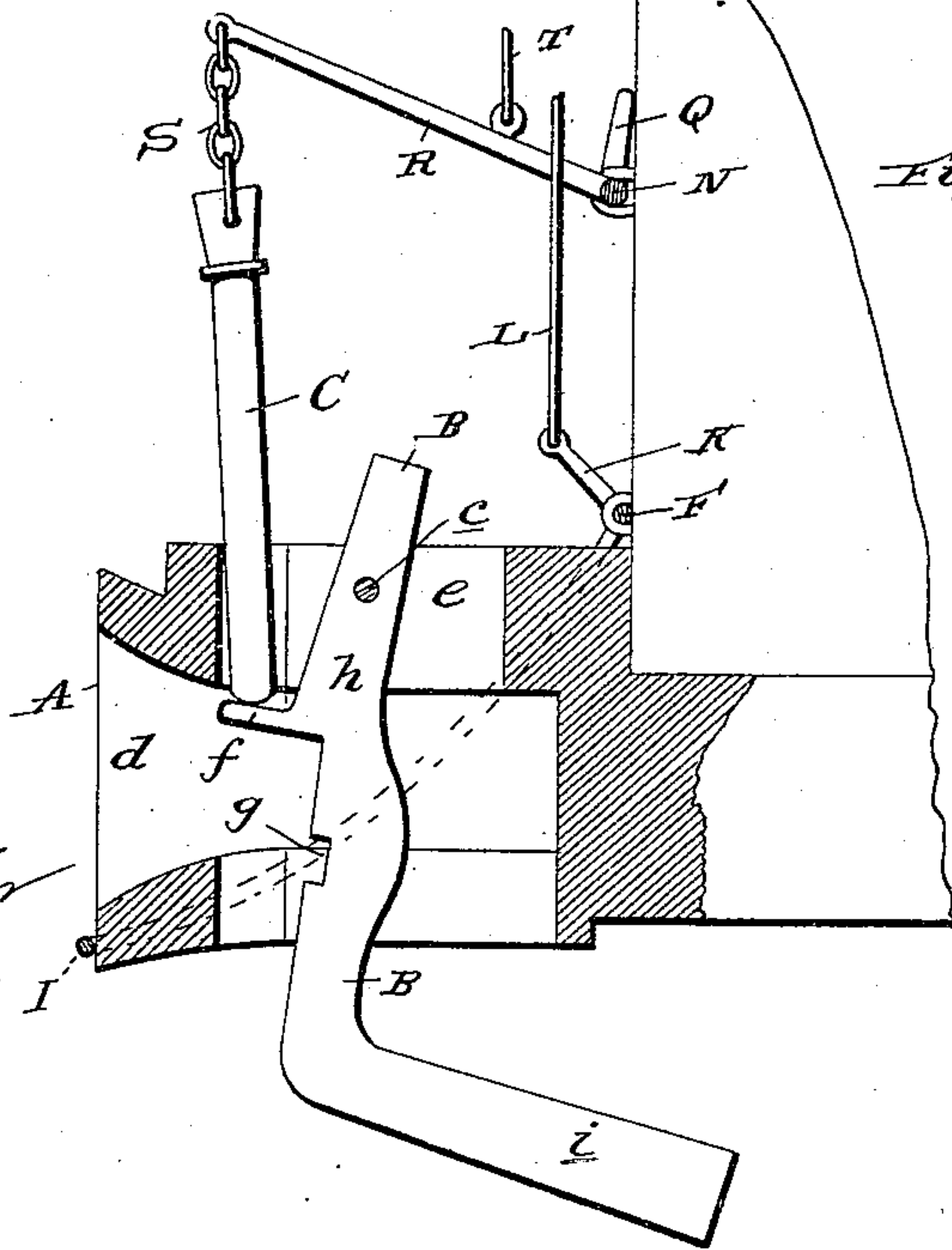
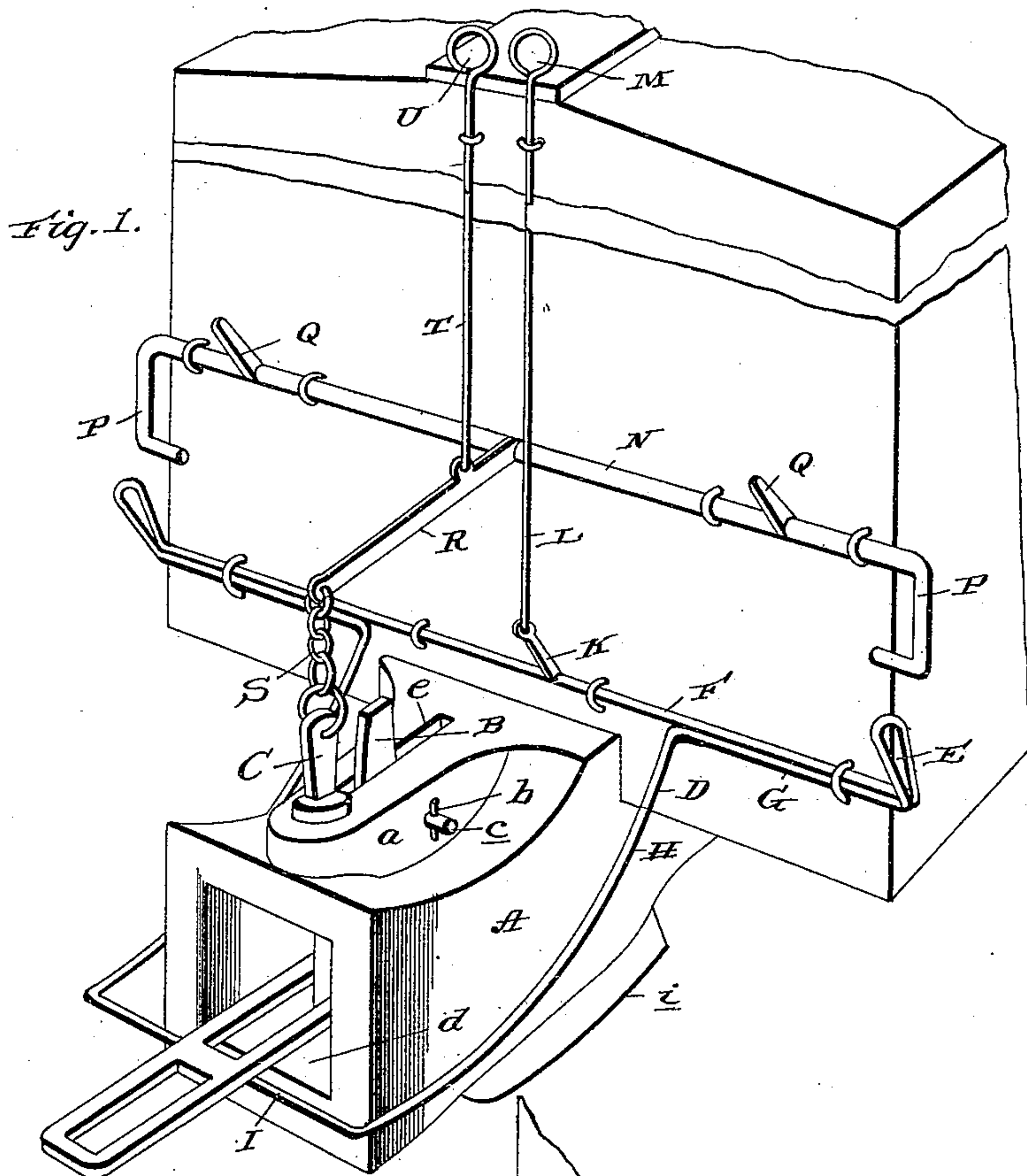


(No Model.)

J. J. WISDA.
CAR COUPLING.

No. 481,991.

Patented Sept. 6, 1892.



Witnesses:

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JOSEPH J. WISDA, OF DEFIANCE, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 481,991, dated September 6, 1892.

Application filed March 19, 1892. Serial No. 425,627. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. WISDA, a citizen of the United States, residing at Defiance, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I 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.

This invention relates to an improvement in devices for coupling cars, and is designed more particularly as an improvement upon the devices shown and described in the Letters Patent granted to me November 10, 1891, No. 462,832.

The objects and advantages of the invention and improvements will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of a draw-head and one end of a box-car partly broken away with my improvements applied and a coupling-link in position. Fig. 2 is a longitudinal vertical sectional view of a portion of a draw-head attached to a portion of a car with my improvements in position.

Referring by letter to said drawings, A indicates the draw-head having an elongated portion *a* on its upper side, which is perforated at *b* to receive a transverse pivot-pin *c* of an angular lever B. The draw-head has a mouth *d* and is slotted longitudinally and vertically at *e*. The lever B, which is formed as shown, has a shoulder or rest *f*, designed to support the coupling-pin C, and beneath this rest or shoulder is a notch *g*, designed to receive one end of a coupling-link, so as to hold the opposite end of said link in an elevated position, thereby rendering it unnecessary to go between the cars while in the act of coupling. This lever B has its vertical branch *h* pivoted at a short distance from its upper end and above the mouth of the draw-head in the slot *e* by means of a pin *c*. The lower depending branch of said lever, which extends rearwardly at an angle to the vertical branch, as shown at *i*, should be weighted or of a sufficient length to keep the notch portion normally advanced in the draw-head.

The devices thus far described are of a con-

struction and the same relative arrangement as similar parts in my Letters Patent above referred to, and it is obvious from the arrangement of such parts that when two cars are brought together and the link of one car strikes the angular lever of the other the coupling-pin will be dropped from the shoulder or rest of said lever, thereby effecting an automatic coupling. When it is desirable to couple, the objectionable necessity of going between the cars may be avoided by simply inserting one end of the coupling-link into the notch *g* of the angular lever. This will hold the opposite or free end of said link at a certain height or altitude, and it is the object of my improvements to provide means whereby the altitude of the link may be varied so as to absolutely provide for coupling cars of any height, the angular lever, however, serving as an important element in connection with my improvements.

A further object of my improvements is to provide at a minimum expense a device which may be manipulated from the top of a car or from either side while standing upon the ground and without the necessity of going between the cars.

D indicates the link-manipulating device. This device may be cheaply manufactured by employing stout wire, although it is obvious that it may be made of other suitable material.

In forming the device I take a single piece of material and bend the same at a corresponding distance from each end into short loops, which form handles E, arranged at each end of the transverse straight portion F, and these handles are designed to extend to opposite sides of the car, as better shown in Fig. 1 of the drawings. The wire is then bent parallel to the outer ends of the straight portion F, as shown at G, after which branches H are formed, which have a downward and forward curve, passing on opposite sides of the draw-head and are connected at their forward ends by a transverse portion I, which assumes a position across the front of the draw-head and at a point below the flaring mouth, so as to offer no obstruction to the entrance or withdrawal of the coupling-link. The straight portion F of this manipulating device is furthermore provided with an angular arm K, arranged about midway of its

length and has connected to one end a vertical rod L, which is suitably guided and passes through the top of the car, where it terminates in a handle M. By this construction it
 5 will be seen that the link-manipulating device may be operated from either side of the car while standing upon the ground and without going between the cars, and by the employment of the rod L the manipulation may
 10 be effected from the top of the car without the necessity descending while coupling.

N indicates a transverse shaft or rod which is journaled in suitable bearings on each end of a box-car, although it is obvious that it
 15 may be arranged on other cars. This shaft or rod terminates at opposite ends in angular branches P, which are designed to serve as handles, and they also serve as stops for the downward-rocking movement of said shaft
 20 or rod by striking the front wall of the car, as shown, and said shaft or rod is provided at a suitable angle to the handle P with stops Q, which are designed to strike the front wall of the car and limit the rocking of said shaft or
 25 rod in an opposite direction, and consequently limit the rising movement of the coupling-pin C, so that the same may not be entirely drawn out of the draw-head. This shaft or
 30 rod N has fixed to it or formed on it a forwardly-directed arm R, which is connected at its outer end with the coupling-pin by means of a chain S, and the arm R is in turn connected at a suitable point with a vertical rod
 35 T, which also extends to the top of the car and terminates in a handle U, whereby the un-

coupling may be effected by an attendant from the top of the car, the handles P permitting a ready uncoupling from either side of the car while standing upon the ground.

Having described my invention, what I claim is—

1. The combination, with a draw-head, of the link-manipulating device formed from a single piece of material and having the straight portion adapted to be journaled on a
 45 car and having the loops at opposite ends of said straight portion forming handles and also having the forwardly and downwardly curved branches on opposite sides of the draw-head, and the transverse connecting portion adapted
 50 to assume a position in front of the draw-head and below the flaring mouth thereof, substantially as specified.

2. The combination, with a draw-head, of the link-manipulating device constructed as
 55 described and journaled in the front wall of the car, the vertical rod connected with said device for manipulating the same from the top of a car, the shaft journaled in the front
 60 of the car and having the arms P and the stops Q and also having the arm R, the vertical rod leading from said arm, and the coupling-pin connected with the outer end of said arm, substantially as specified.

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

JOSEPH J. WISDA.

Witnesses:

R. H. GLEASON,

PETER V. ZIEGLER.