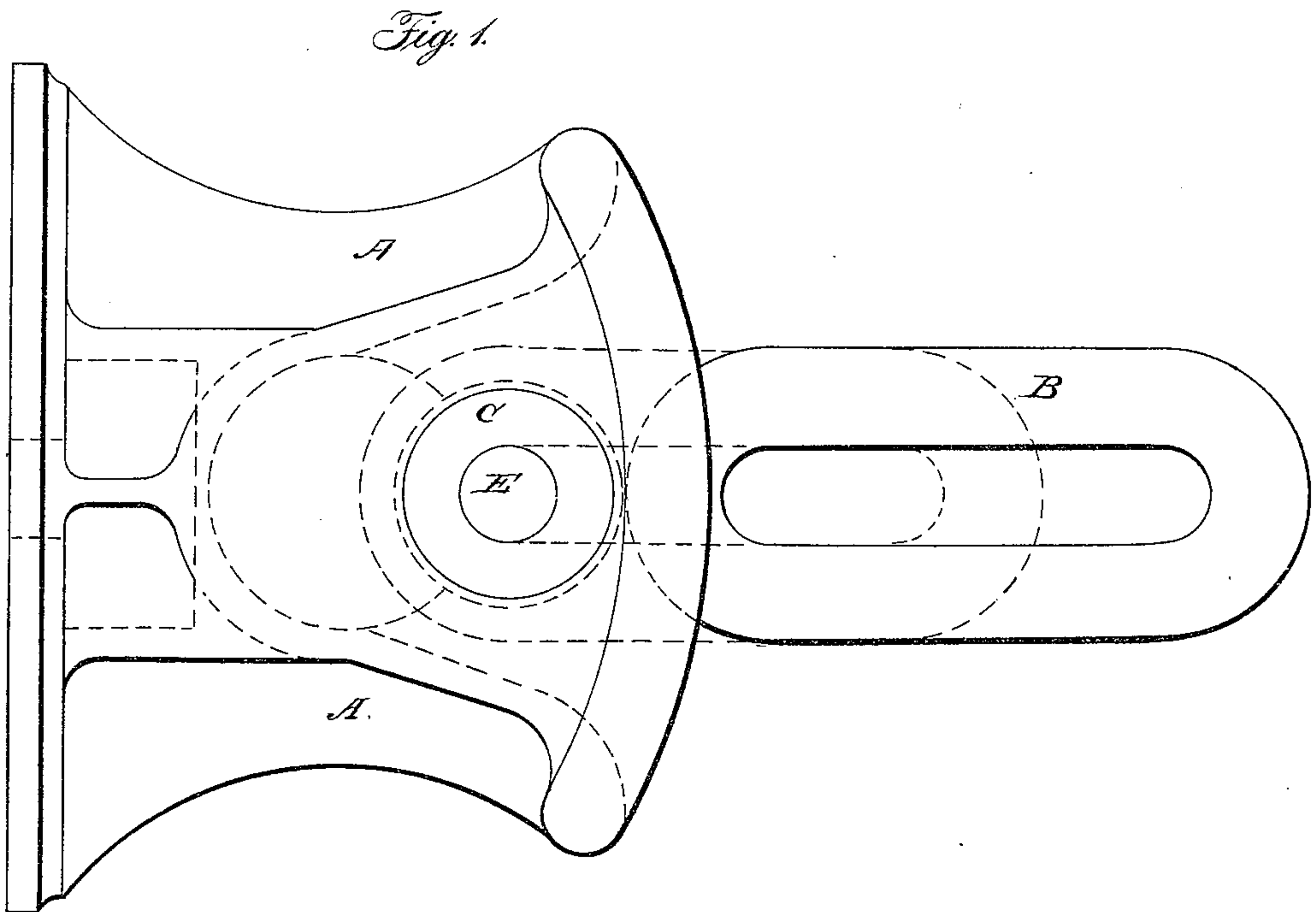
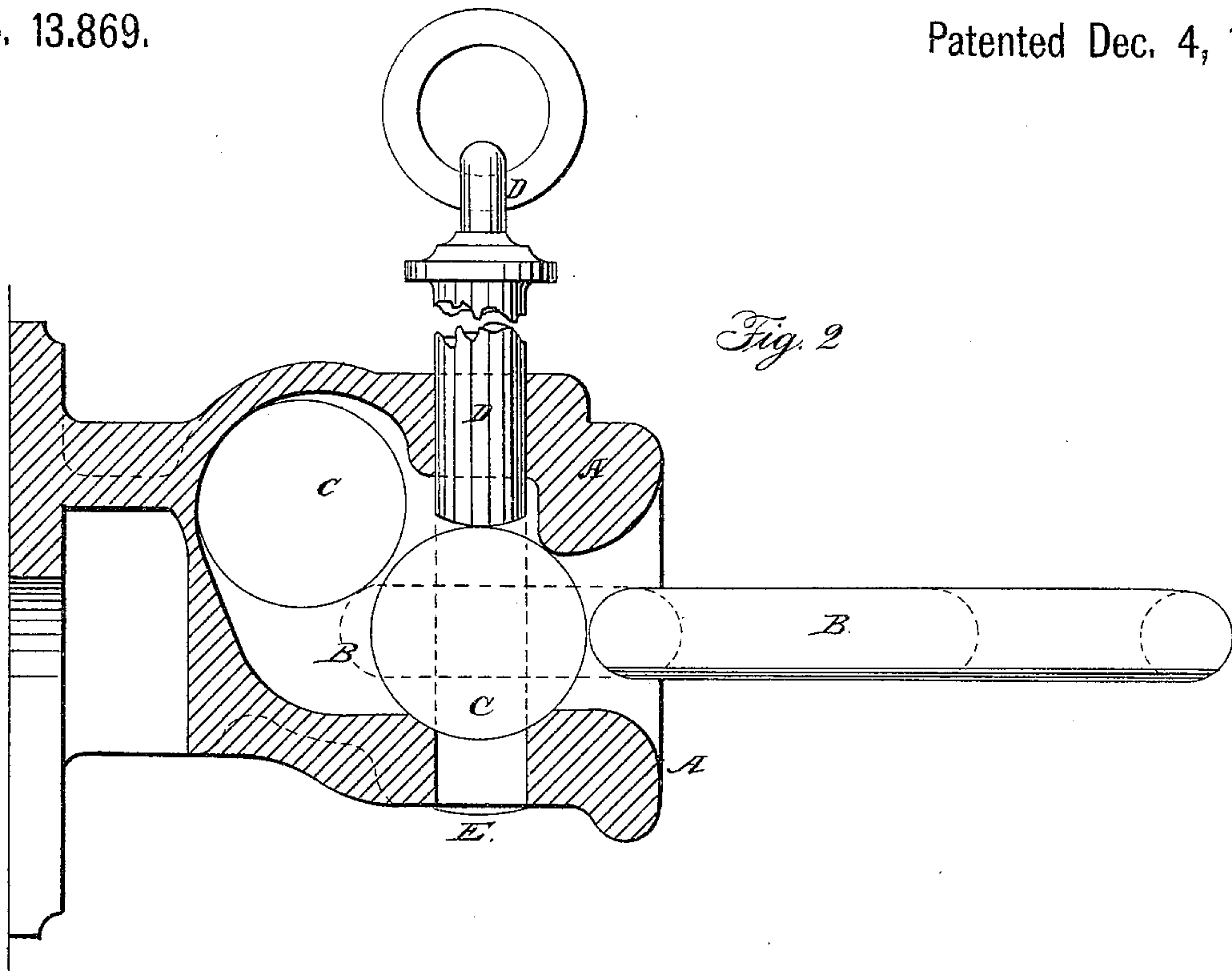


J. T. ENGLAND.

Car Coupling.

No. 13.869.

Patented Dec. 4, 1855.



# UNITED STATES PATENT OFFICE.

JOSEPH T. ENGLAND, OF BALTIMORE, MARYLAND.

## RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 13,869, dated December 4, 1855.

*To all whom it may concern:*

Be it known that I, JOSEPH T. ENGLAND, of Baltimore city and county, in the State of Maryland, have invented certain new and  
5 useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying  
10 drawings and to the letters of reference marked thereon, forming a part of this specification, of which—

Figure 1 is a top view, exhibiting the link in its act of displacing the ball and also in dotted line exhibiting the link in position;  
15 Fig. 2, a similar view with the ball sustaining the coupling link, in dotted line exhibiting the link in its position and the ball displaced.

The nature of my improvement consists  
20 in supporting the lower end of a coupling bolt of the ordinary construction by means of a spherical ball on which it rests, and by the tripping thereof by the entering link or coupler said bolt drops into its place and  
25 unites the couplers to the bolsters and effects the coupling of the cars without the danger of accident now existing to the hand or arm of an attendant. This object of self coupling cars has been sought by various con-  
30 trivances in which springs, bolts and other devices are used, all of which under even ordinary circumstances may be inoperative and none of which have to any extent been practically adopted by railroad companies,  
35 as the failure of a spring, the rusting of a pivot or bolt, renders them inoperative.

The simplicity of my invention stands prominently forward in its recommendation, while its cost is the merest trifle over  
40 that of the most ordinary bumper in use. The advantages are the certainty of a free rolling ball, always finding its place in the slight recess formed by the lower pin hole in the floor of the bumper, the facility by  
45 which any number of cars may be coupled without an attendant, simply by the backing of the locomotive. All that is necessary is to draw up the coupling bolt, when the

ball seeks its place under it, and thus sustains it until tripped by the links displacing 50 the ball as before observed.

Most if not all the self couplers require the cars to be in line in the act of coupling, whereas mine under all circumstances will operate, as coupling from a switch or at 55 an angle or curve such as are allowable in railroads. Another advantage is that the weight of the ball and the position it assumes is sufficient to retain the link B in a horizontal position suitable for the proper 60 coupling thereof; and the ball, moreover sustains it in an angular position so as to admit of side coupling.

The description is as follows A, A, is the bumper in its general outline conforming 65 with the figures of the drawing.

B is an open link, for which may be substituted the wooden coupler. Both are of the ordinary construction now in use.

C, is a metal ball (which for convenience 70 of construction of the bumper is introduced in the sand core, forming the hollow of the bumper, thus preventing its falling out of it).

D: is the ordinary coupling pin or bolt; 75 E, the bolt hole in the top and floor of the bumper, for its reception. In the upper side of the bumper may be noticed a circular recess for the reception of the displaced ball. 80

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

The above described coupling consisting of a ball so arranged in the buffer head as to 85 support at its lowest position the pin, and to be pushed away and allow the pin to fall on the introduction of the link as herein set forth.

In testimony whereof I have hereunto 90 signed my name before two subscribing witnesses.

J. T. ENGLAND.

Witnesses:

JOHN F. CLARK,

OWEN T. HUMPHREYS.