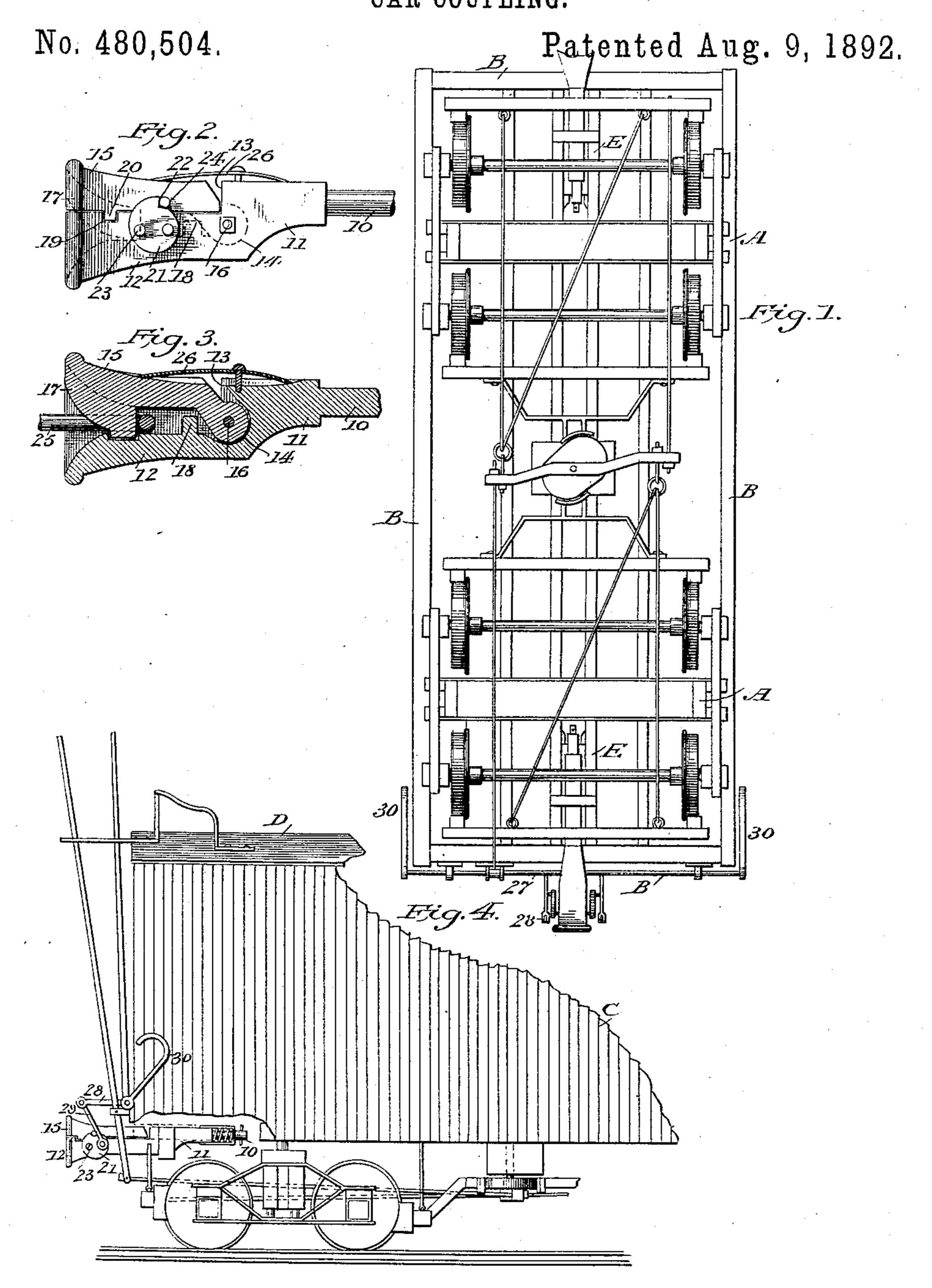
## J. B. MEADLEY. CAR COUPLING.



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## United States Patent Office.

JABEZ B. MEADLEY, OF DAVENPORT, IOWA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 480,504, dated August 9, 1892.

Application filed September 1, 1891. Serial No. 404,483. (No model.)

To all whom it may concern:

citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, 5 have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention relates to car-couplers attached to the draw-head of a car, such coupo lers being provided with a movable jaw for the reception of the coupling-link; and the objects of my invention are, first, to provide the movable jaw with a coupling pin or stud integral therewith, which drops into the eye 5 or opening of the link when such eye or opening has passed into the jaw of the coupler and to the rear of such pin or stud, and, second, to provide a pivoted cam on the exterior sides of the stationary part of the coupler o with means for moving the same against an obstruction on the exterior sides of the movable jaw of such coupler for the purpose of opening such jaw for the reception of a coup-5 mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the bottom of a car inverted, showing at one end my coupler attached to the draw-head. Fig. 2 is a side o view of the car-coupler detached from the car. Fig. 3 is a similar view of a longitudinal section, and Fig. 4 is a view partially of the side elevation of a car with my coupler attached thereto.

Similar letters and figures refer to similar parts throughout the several views.

A is the car-truck of an ordinary railwaycar; B, the sills of the car; C, the side of the car; D, its roof, and E the frame and drawo head of the coupler. The lower part of the coupler consists of the draw-stem 10, integral with the bumper 11, which terminates in the channeled jaw 12, integral therewith. A shoulder 13 is located at the junction of the 15 jaw 12 with the bumper 11, and below such shoulder, partially in the jaw 12 and bumper 11, is a cylindrical space 14 in cross-section for hinging the rear end of the movable jaw, as hereinafter explained. The movable jaw so consists of an inverted channeled piece 15,

upon the upper edges of the sides of the jaw Be it known that I, Jabez B. Meadley, a 112 and the rear end of which is hinged or pivoted in the cylindrical space or recess 14 by means of the horizontal pin 16, passing 55 through the sides of the bumper 11. Near the forward end of the movable jaw and integral therewith is a coupler pin or stud 17, which is preferably circular upon its front face. Forward of the point of hinging the 60 movable jaw 15 and at the rear of the jaw 12 and integral therewith is a vertical stud 18, located in the channeled portion of said jaw. Near the forward end of the jaw 12 in its sides are cut notches 19, and registering there- 65 with are pivots 20, attached to the movable jaw 15. The cams 21, each provided with the notch 22, are pivoted to the exterior sides of the jaw 12 by the pins 23. The sides of the jaw 15 are provided with pins or projections 70 24, against which the cams may be moved or rotated to swing or open the jaw 15 sufficiently for a coupling-link 25 to enter the recess between the jaws beneath the pin or stud ler-link. I accomplish these objects by the 17, and when such cams have passed, so that 75 the pins 24 may pass into the notches 22 of the cams, the weight of the jaw 15 causes it to drop or fall, thus throwing the pin or stud 17 within the opening of the link 25 and securing the same within the jaws.

To insure a more reliable action of the upper jaw 15 in dropping when not obstructed by the cam, I prefer to use a spring 26, secured to the upper part of the bumper 11, so that its free end exerts a force downward on 85 the forward end of the jaw 15.

Any suitable device may be used for rotating the cams in unison against the pins or obstructions upon the exterior sides of the movable jaw. One method may be used, as 90 follows: A rock-shaft 27 may be attached to the end of the car, with levers 28, arranged suitably to be connected with the cams by rods 29, and by rotating such rock-shaft by its handles 30 the cams, through such levers 95 and rods, may be rotated against the pins or obstructions 24 on the movable jaw to open the same, while its weight or spring auxiliary will close the same when not obstructed by the cams.

From the description here given persons the bottom edges of the sides of which rest I skilled in the art may understand the con-

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struction and operation of my device, and it may be further understood that modifications and changes may be made without departing

from the scope of my invention.

I am aware that it is old to construct couplers in two longitudinal parts hinged together at one end so as to form jaws, one of which jaws is provided with a pin or stud to be interposed within the space of a coupler-link, to together with means for automatically opening or closing such jaws, and I therefore do not claim such combination, broadly; but

What I claim as new, and desire to secure

by Letters Patent, is—

In a car-coupler provided with a movable 15 jaw for the reception of the coupling-link, and also provided with a pin for retaining the link within the jaw, the combination of the pivoted cams on the exterior sides of the stationary jaw, the pins or projections on the 20 exterior sides of the movable jaw, arranged to be operated against by the rotation of the cams, and mechanism for rotating such cams, substantially as described.

JABEZ B. MEADLEY.

Witnesses:

A. P. McGuirk, W. W. Humphrey.