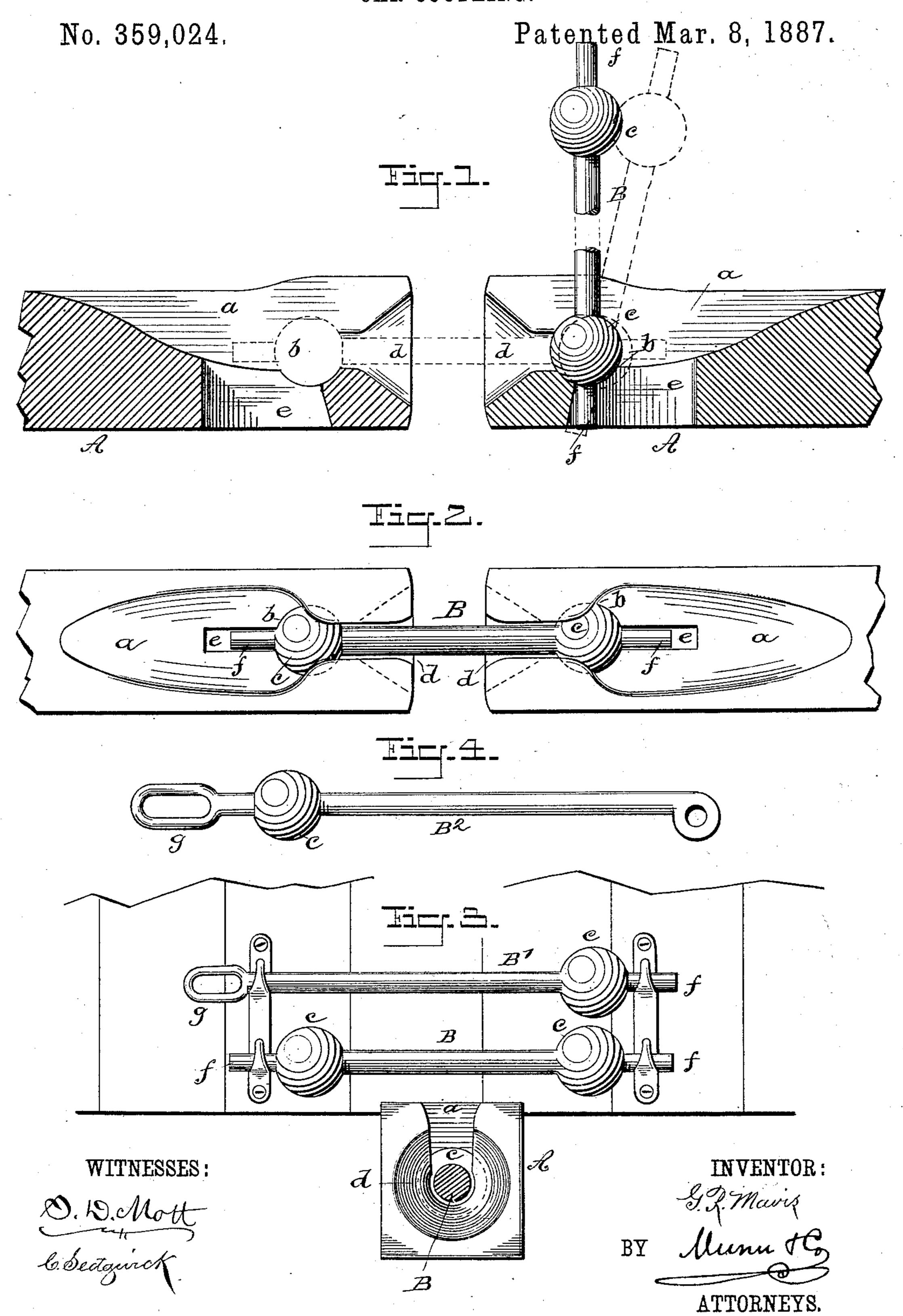
G. R. MAVIS.

CAR COUPLING.



United States Patent Office.

GEORGE ROBISON MAVIS, OF WYMORE, NEBRASKA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 359,024, dated March 8, 1887.

Application filed October 21, 1886. Serial No. 216,863. (No model.)

To all whom it may concern:

Be it known that I, George Robison Mavis, of Wymore, in the county of Gage and State of Nebraska, have invented a new and Improved Car-Coupling, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side sectional elevation of my improved car-coupling. Fig. 2 is a plan view, and Fig. 3 is an end elevation, of a portion of a car to which my improved coupling has been applied.

Similar letters of reference indicate corre-

15 sponding parts in all the views.

The object of my invention is to provide a simple and efficient device by means of which cars may be coupled without the employment of a coupling-pin.

My invention consists of the combinations of parts, including their construction, substantially as hereinafter fully set forth, and pointed out in the claim.

In the upper surface of each draw-bar A, near its outer end, is formed a concave recess, a, inclining downward toward the extremity of the draw-bar and terminating in a cavity, b, which is adapted to receive one of the balls c of the coupling-bar B. In the recess a and cavity b the draw-bar is slotted outwardly, and opposite the center of the cavity b a flaring recess, d, is formed in the end of the draw-bar. In the bottom of the recess a is formed a mortise, e, which extends downward through the draw-bar.

The coupling-bar B is formed of a straight bar of iron having its ends f reduced in diameter and the balls c attached to or formed upon the bar near opposite ends. The coupling of adjacent cars is effected by dropping the balls c of the coupling-bar B into the cavities b.

The coupling bar is held in position for coupling by standing it perpendicularly in the cavity b and recess a, and in most cases, 45 when the draw-bars A of two adjacent cars come together, the coupling-bar B will be sufficiently tilted to cause it to fall over into the position shown in dotted lines in Fig. 1 and engage the empty draw-bar; and when it is 50 desired to connect a draw-bar constructed according to my improvement with the ordinary draw-bar requiring a link and pin, I provide a bar, B', as shown in Fig. 3, having near one end a ball, c, and at the opposite end 55 an eye, g, for receiving the ordinary coupling-pin.

The coupling-bar B^2 (shown in Fig. 4) is designed to be attached to a locomotive, and is provided with the ball c and an eye, g, so 60 that it may be used either in connection with my improved draw-bar or with the ordinary draw-bar.

Having thus fully described my invention, I claim as new and desire to secure by Letters 65 Patent—

The coupling-bar having near each end a ball, and beyond said balls reduced ends, in combination with the draw-bar in the upper surface of which, near its outer end, is formed 70 a concaved recess inclining downward toward the extremity of the said draw-bar and terminating into a cavity adapted to receive a ball of said coupling-bar, said draw-bar in said recess and cavity being slotted outwardly, 75 while opposite the center of the said cavity it is formed in its end with a flaring recess, in the bottom of which concaved recess is formed a mortise extending through the draw-bar, substantially as and for the purpose set forth. 80 GEORGE ROBISON MAVIS.

Witnesses:

P. Z. Snook,

E. C. FLINT.