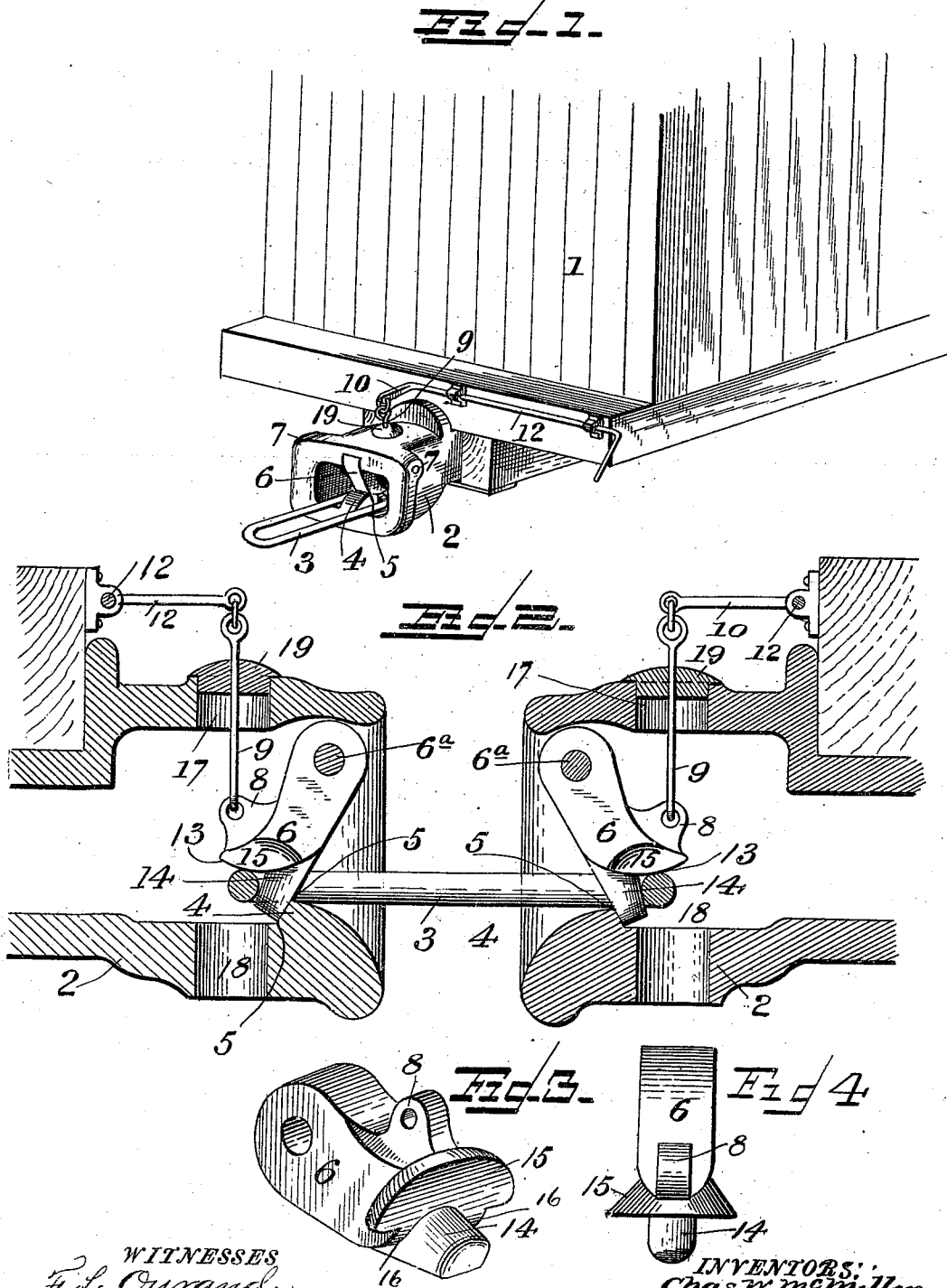


(No Model.)

C. W. & H. F. McMILLEN.
CAR COUPLING.

No. 502,631.

Patented Aug. 1, 1893.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES W. McMILLEN AND HOWARD F. McMILLEN, OF NEW CASTLE,
PENNSYLVANIA, ASSIGNORS OF ONE-HALF TO CHARLES S. WALLACE,
OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 502,631, dated August 1, 1893.

Application filed March 30, 1893. Serial No. 468,342. (No model.)

To all whom it may concern:

Be it known that we, CHARLES W. McMILLEN and HOWARD F. McMILLEN, both residents of New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to that class of railroad car-couplers, known as automatic couplers, in which the cars are coupled when they come together without the necessity of a brakeman or other person going between the same.

The object of the invention is to provide a novel coupler of the above description which shall possess superior advantages with respect to simplicity and efficiency in use.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of a railroad car with our improved coupler applied thereto. Fig. 2 is a central longitudinal section of two couplers constructed in accordance with our invention, coupled or connected together. Fig. 3 is a perspective view of the pivoted coupling arm detached; and Fig. 4 a plan view of the same.

In the said drawings the reference numeral 1 designates a portion of an ordinary freight car, and 2 the drawhead connected with an ordinary draw bar, (not shown.) This drawhead is formed with the ordinary flaring mouth to receive the usual coupling link 3, and at its front end is provided or formed with a central beveled or curved lug 4, against which the link strikes as it enters the drawhead, having a shoulder 5 at its rear end with which the coupling arm 6 engages. This coupling arm consists of a metal bar, pivoted on a rod 6^a, extending transversely through lugs

7, formed on the upper front end of the drawhead, and is formed on the upper side of its free end with a lug 8, with which is connected a vertical rod 9, connected with a crank 10, on a shaft 12, journaled in the end of the car. The lower end of the coupling arm on each side is cut away on a curved line 13, forming a lug 14, and just above this lug is formed with a rearwardly extending flange 15, and two outwardly extending flanges 16.

It will be noted that the top and bottom of the drawhead is completely closed with the exception of two aligned holes or apertures 17 and 18. In the lower hole 18, the free end of the coupling arm rests when depressed, while the connecting rod 9, passes through the upper hole. Loosely mounted on this rod is a disk or annular plate 19, the object of which is to fit over the hole 17, and prevent snow, rain and dirt from entering the drawhead. This disk, as before stated, is loose on the rod, so that it will not move therewith, but always seat itself by gravity on the drawhead.

The operation is as follows: When the cars come together, the link of one car will enter the drawhead of the other car, striking the beveled or curved lug 4, and riding over the same. As the link passes over this lug it will strike and turn the coupling arm and when it has passed the same, said arm will fall by gravity and engage with the shoulder on the rear of said lug. The link will now engage between the upper side of the lug 14 and the flanges 15 and 16, and the cars be thus coupled together, the lug 4, holding the coupling arm in place.

To uncouple the cars the coupling arm is elevated by means of the shaft 12 and its connections.

Having thus described our invention, what we claim is—

In a car coupler the combination with the drawhead formed with a central beveled or curved lug in its front end, and with aligned apertures in the top and bottom, of the pivoted gravity coupling arm, cut away on each side on a curved line at its free end, formed

with rearwardly and outwardly extending flanges between which the coupling link is adapted to engage, and also formed with a lug, the vertical connecting rod connected
5 with said lug and passing through the upper aperture in the drawhead, the disk loosely mounted on said rod, and the opening shaft connected with said rod, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

CHARLES W. McMILLEN.
HOWARD F. McMILLEN.

Witnesses:

J. A. ADDIS,
JOHN S. TAGGART.