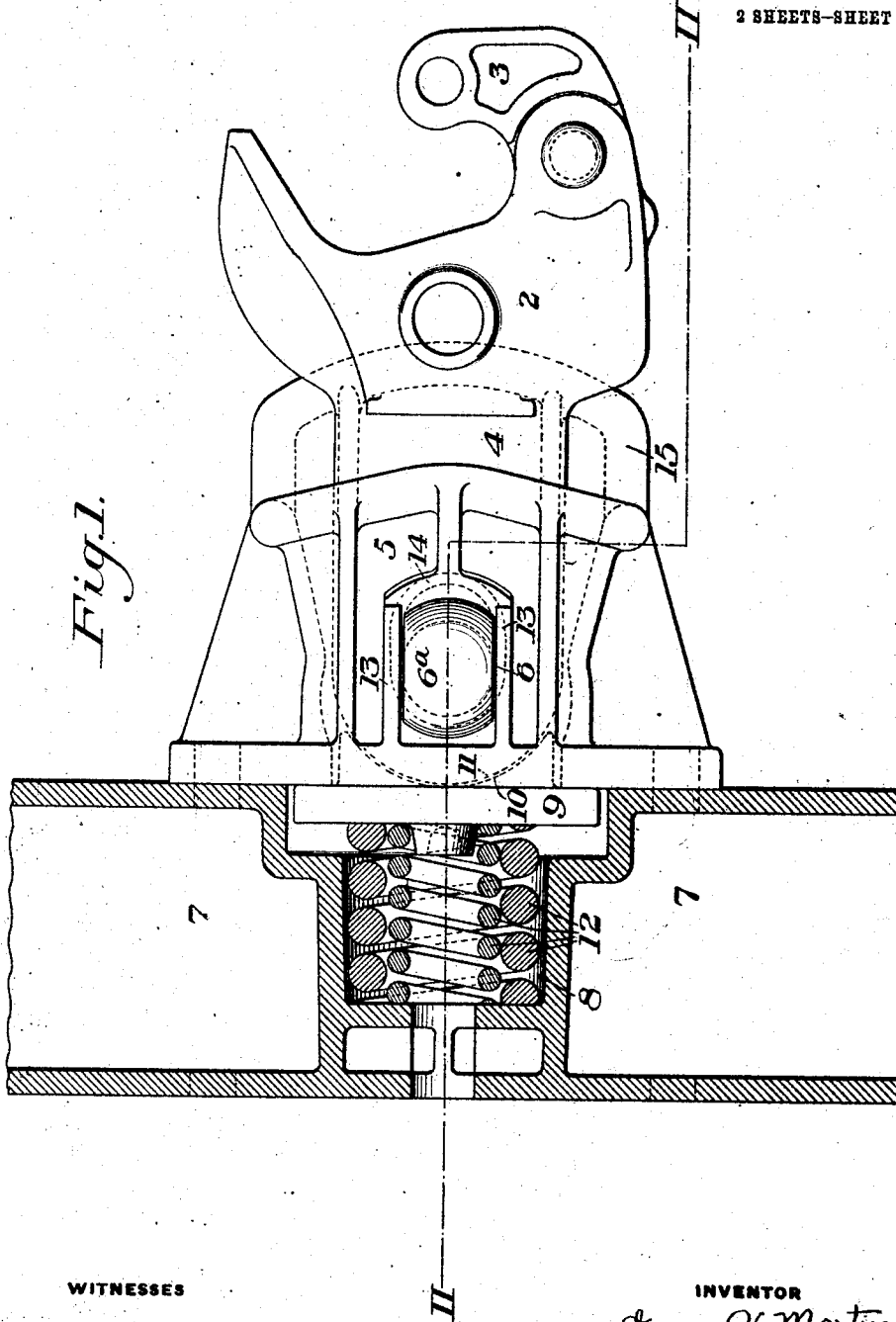


G. V. MARTIN.
PILOT COUPLING FOR LOCOMOTIVES.
APPLICATION FILED AUG. 16, 1910.

1,022,859.

Patented Apr. 9, 1912.

2 SHEETS-SHEET 1.



WITNESSES

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A. F. Tabbatta

INVENTOR

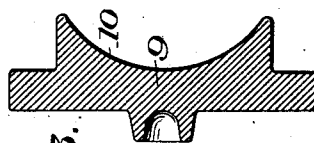
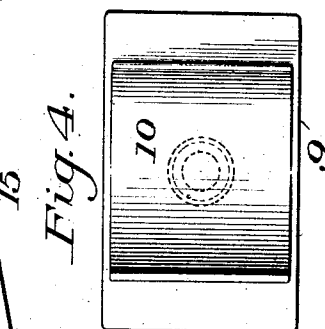
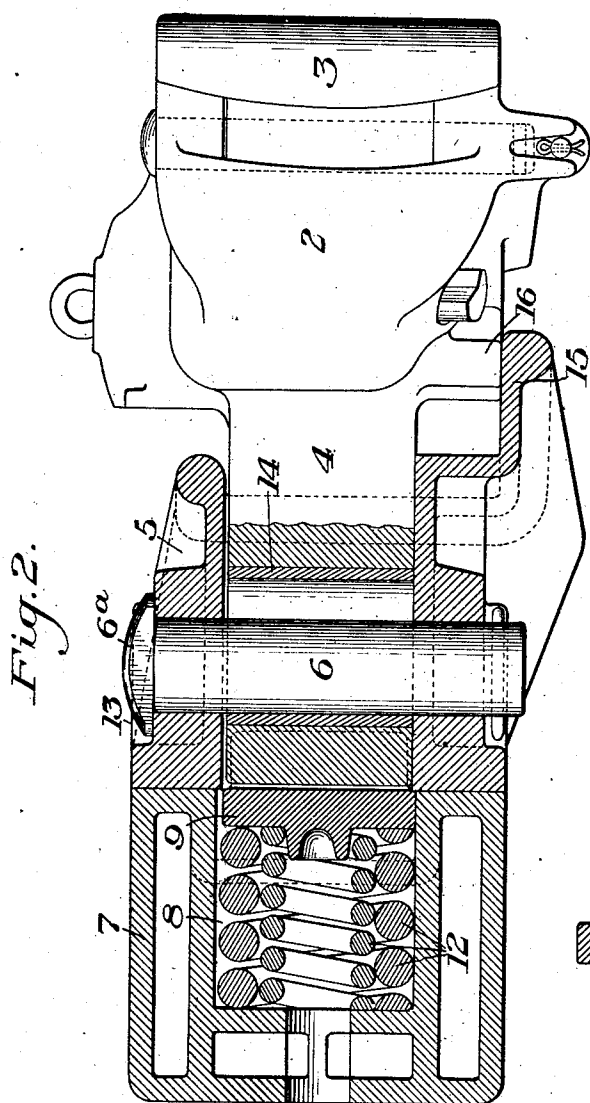
George V. Martin
by Bakewell, Byrnes & Carmichael
his Attorneys

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2 SHEETS-SHEET 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE V. MARTIN, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

PILOT-COUPLING FOR LOCOMOTIVES.

1,022,859.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed August 16, 1910. Serial No. 577,500.

To all whom it may concern:

Be it known that I, GEORGE V. MARTIN, a resident of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Improvement in Pilot-Couplers for Locomotives, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view, partially in section, of a pilot coupler embodying my invention. Fig. 2 is a sectional view on the line II—II of Fig. 1, and Figs. 3 and 4 are respectively sectional and front views of the follower.

My invention has relation to pilot couplers for locomotives, and is designed to provide a coupler of this type, having means of novel and efficient character for opposing a yielding resistance under buffing strains.

The nature of my invention will be best understood by reference to the accompanying drawings, in which I have shown the preferred embodiment thereof, and which will now be described, it being premised, however, that various changes may be made in the details of construction and arrangement of the several parts, without departing from the spirit and scope of my invention as defined in the appended claim.

In the drawings, 2 designates a coupler-head of well known automatic type, having a pivoted knuckle 3, and carried by a rearwardly extending shank 4. This shank extends backwardly into a pocket-casting 5, to which it is pivoted by means of the usual pin 6. The pocket casting 5 is secured by means of bolts or rivets to the pilot-beam 7 of a locomotive. This pilot-beam is cast with a pocket 8, the forward end of which is enlarged, and in which is seated a follower-member 9. The forward end of the follower-member is concave, as indicated at 10, and is adapted to receive the convex end 11 of the coupler shank.

12 are springs within the pocket 8, whose rear ends abut against the base portion of the pocket, and at the forward ends seat against the follower 9.

The upper end of the pin 6 has a head 6^a, which is flattened at opposite sides, and lies between lugs 13 on the pocket casting 5, and which prevent the pin from turning. The pin fits snugly in the apertures in the top and bottom wall of the opening in the

pocket casting, but the pin aperture in the coupler shank is elongated in a horizontal direction to permit the shank to move rearwardly without bringing strain upon the pin. When such rearward motion takes place, as in buffing strains, the rear end of the shank bears against the follower 9, which in turn bears against the buffing springs 12 which resist such rearward movement. When the stress is removed, these springs return the coupler to its normal relationship with the other parts, so that the rear wall of the aperture in the shank comes into engagement with the pin. In pulling, there is no yielding resistance offered, but the coupler shank bears directly against the pin which is rigidly secured within the pocket, as above described.

The pin may pass either directly through the elongated aperture in the coupler shank, or, as illustrated in the drawings, there may be a bushing 14 with a suitable elongated orifice inserted within the aperture within the shank before the pin is inserted.

The pocket casting 5 has a horizontally extending shelf 15 upon its under side for the purpose of giving additional support to the coupler head. This shelf is so designed that it does not prevent either longitudinal or lateral movement of the coupler, which is necessary. The bottom of the coupler head just in advance of its junction with the shank is extended downwardly as indicated at 16, and has a flat under surface adapted to engage the shelf.

When the parts are in normal position, the springs tend to force the follower and the coupler shank far enough forwardly so that the wall of the elongated aperture in the coupler shank comes into contact with the pin. In pulling, the rear wall of the aperture in the shank has a bearing against the pin, but in buffing the elongated slot in the shank through which the pin extends permits of rearward movement of the coupler shank to the extent allowed by the springs.

The device forms an exceedingly simple and efficient pilot coupler for locomotives, which is greatly superior to the usual form of these couplers for which there is no means for yieldingly resisting either buffing or pulling strains. The extending shelf for supporting the forward end of the coupler will greatly assist in keeping the coupler in

line with the follower, by preventing the forward end from sagging.

My invention is applicable not only to locomotives, but also to the end sills of tenders and also to the end sills of other cars, such as hot metal cars, etc.

I claim:

In a coupler of the character described, an end sill or beam having a pocket therein, a separate pocket member secured to the sill or beam and extending forwardly therefrom, the pocket in said member being open at its rear end in line with the pocket of the beam, a coupler shank extending rear-

wardly into the pocket of the member and pivoted thereto, said shank being arranged to move longitudinally within said pocket, and a follower in engagement with the rear end of said shank, together with springs seated behind the follower, substantially as described.

In testimony whereof, I have hereunto set my hand.

GEO. V. MARTIN.

Witnesses:

HARRY E. ORR,

CHESTER K. BROOKS.