

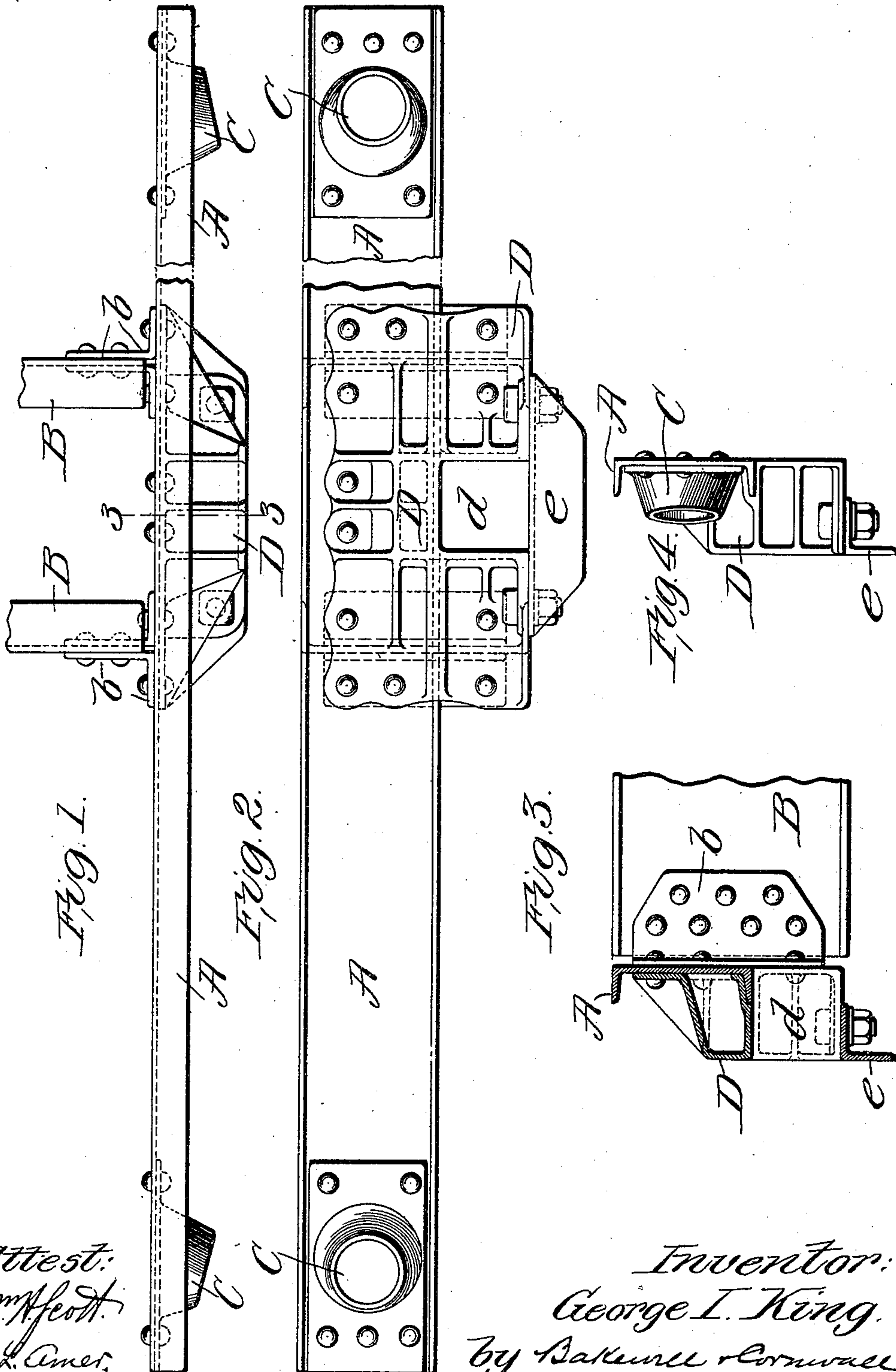
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Patented Mar. 5, 1901.

G. I. KING.
END SILL FOR RAILWAY CARS.

(Application filed Nov. 23, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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END SILL FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 669,307, dated March 5, 1901.

Application filed November 23, 1900. Serial No. 37,451. (No model.)

To all whom it may concern:

Be it known that I, GEORGE I. KING, a citizen of the United States, residing at the city of Detroit, in the county of Wayne, State of Michigan, have invented a certain new and useful Improvement in End Sills for Railway-Cars, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved end sill, part of one side being broken away. Fig. 2 is a front elevational view of the same, part of one side being broken away. Fig. 3 is a sectional view on line 3 3, Fig. 1; and Fig. 4 is an end elevational view.

This invention relates to a new and useful improvement in end sills for railway-cars, the object being to construct an end sill in a simple and cheap manner, the sill proper being made up of a structural form, while the coupler-fixture and pole-pockets are preferably castings, firmly riveted in position on the main member.

My invention consists in the construction, arrangement, and combination of the several parts, all as will hereinafter be described and afterward pointed out in the claims.

In the drawings, A indicates the end sill proper, which is in the form of a channel, with its flanges presented outwardly. The center sills B may be secured thereto by the use of corner or angle connection-plates, as can also the side sills.

C indicates the pole-pockets, which are preferably in the form of malleable castings, the pocket having lateral flanges fitting between the flanges of the channel, while rivets pass through the pole-pocket flanges and the web of the channel to secure said pole-pocket in position.

D indicates a casting designated as a "coupler-fixture," said casting serving practically as a dead-wood, it being strengthened by ribs and flanges appropriately positioned and arranged to effect the desired result. The back face of this casting is recessed to receive the bottom flange of the channel, while a pocket *d* is provided for the passage of the coupler-

shank. It will be noticed that the bottom flange of the channel A forms part of the upper wall of this pocket, so that it is unnecessary to cut into the channel A for the passage of the coupler-shank, said channel being made deep enough to suit the standard height of the coupler. As the center sills, which are shown as being made of channels, are deeper than the end sills, it is desirable to provide connection plates or angles therefor, which are substantially coextensive in depth with said center sills. I therefore take advantage of casting D, which extends below the end sill and make the same flush with the back face of the end sill, as shown in Fig. 3. When the corner connection-plates *b* are used, they are riveted to the back of the end sill and to the back of the casting D below the end sill, the rivets first mentioned of course extending through the casting, as well as the end sill, and serving to secure the casting in position on the end sill.

The walls of the coupler-shank opening *d* are of considerable area and offer a strong support for the coupler, while a removable bar or angle *e* bridges the open end of the recess *d* and serves as a carry-arm for the coupler.

The end sill shown in the accompanying drawings is especially well adapted for use in connection with under framings for cars where the sill members are structural or rolled steel.

My improved end sill is simple in construction, cheap to manufacture, and easy to repair, there being so few parts employed that the liability of the construction becoming unserviceable, except under severe treatment, is very small.

I am aware that minor changes in the arrangement, construction, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. In an end sill, the combination with a flanged member, the flanges thereof presenting outwardly, of a casting D riveted thereto

and extending below said flanged member, the lower portion of said casting forming means of attachment for the center sills said center sills being deeper than the flanged end-sill member; substantially as described.

2. In an end sill, the combination with a channel member whose flanges are presented outwardly, pole-pockets riveted to each end thereof, and a casting D riveted to the center of said channel and extending below the same, said casting being ribbed and flanged to serve as a dead-wood, the lower portion of said casting terminating below the end sills to provide a recess or pocket for the reception of the coupler-shank, the bottom flange of said channel forming a portion of the top wall of said recess, and a removable bar or angle forming the bottom wall of said recess; substantially as described.

3. In an end sill, the combination with the member A, of a casting D recessed to receive the bottom flange of said member A, said casting extending below said member, said lower extension being flush with the back of member A, said lower portion of the casting being also provided with a coupler-recess, and a removable bar or angle forming the bottom wall of said recess; substantially as described.

4. The combination with a metallic end sill,

of a casting D secured to the front face thereof and extending therebelow, the lower portion of said casting being provided with a coupler-recess, metallic center sills, and connection plates or angles which are riveted to said center sills, and to the end sill, and to the lower portion of said casting; substantially as described.

5. The combination with a channel member A having its flanges presented outwardly, of a casting D suitably ribbed and flanged, said casting extending below said channel and provided with a coupler-recess, the depending portion of said casting being flush with the back face of the web of the channel, center sills of greater depth than said channel, and corner connection plates or angles riveted to the webs of said center sills, to the back face of the channel, and to the lower portion of the casting for securing said parts together; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 21st day of November, 1900.

GEORGE I. KING.

Witnesses:

WM. A. SCOTT,
H. L. AMER.