

(No Model.)

J. McMURTRY.
RAILROAD RAIL CHAIR.

No. 285,642.

Patented Sept. 25, 1883.

Fig. 1.

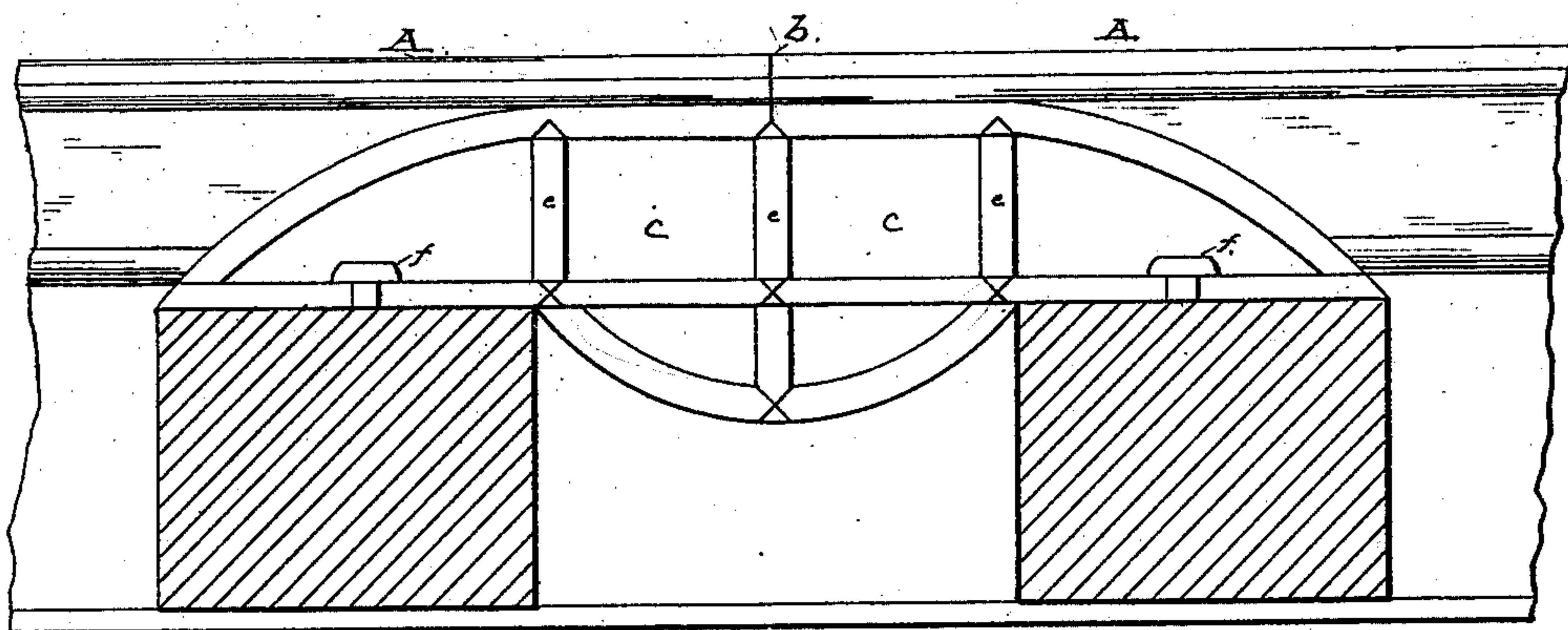
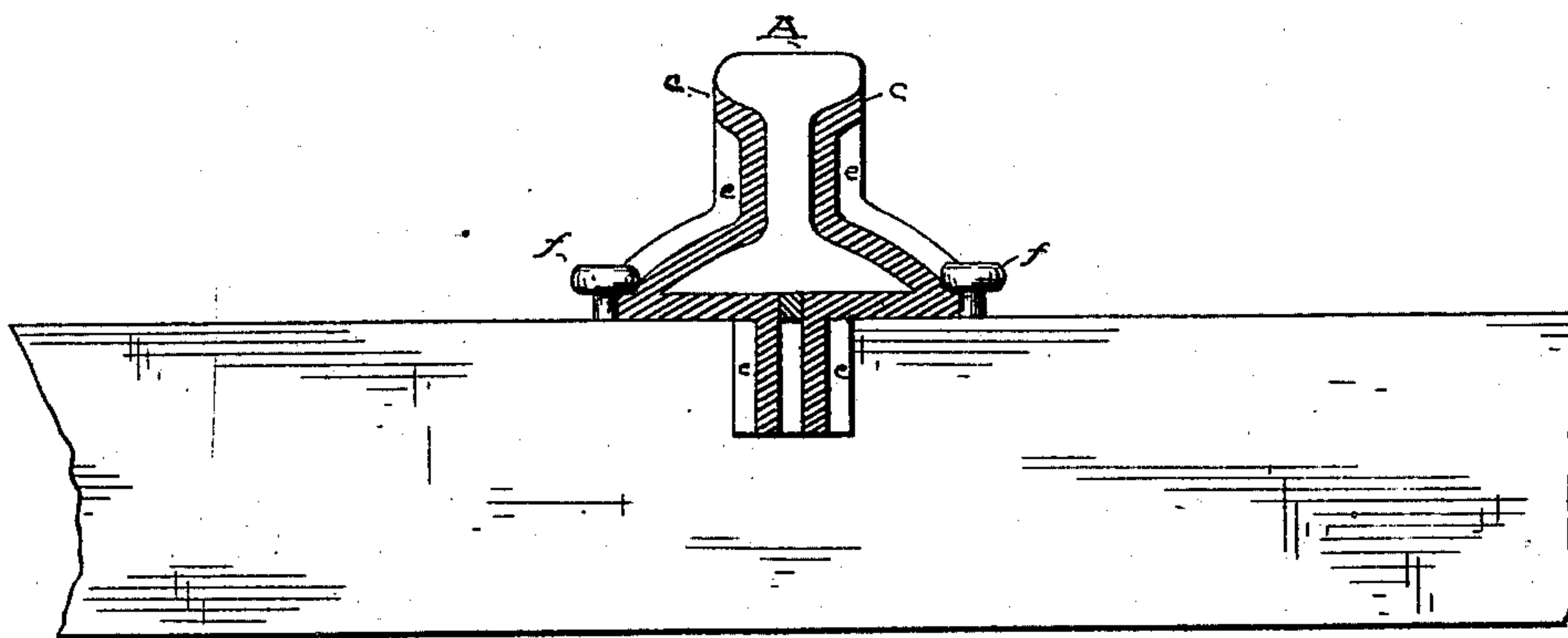


Fig. 2.



— Witnesses. —

Louis F. Cardner
J. W. Garner

— Inventor —

Jno. McMurtry
per
F. A. Lehmann, atty.

UNITED STATES PATENT OFFICE.

JOHN McMURTRY, OF LEXINGTON, KENTUCKY.

RAILROAD-RAIL CHAIR.

SPECIFICATION forming part of Letters Patent No. 285,642, dated September 25, 1883.

Application filed July 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN McMURTRY, a citizen of the United States, residing at Lexington, in the county of Fayette and State of Kentucky, have invented a new and useful Improvement in Chairs for Supporting the Joints of Rails on Railroads, of which the following is a specification.

My invention relates to supporting the joints of rails on railroads in such a manner as to give the rails the same or greater vertical and lateral stiffness at the joints than at any other point, and at the same time to dispense entirely with the usual bolts now used on the present inefficient fish-bars, and thus avoid not only the expense of bolts, but also the onerous labor and expense of keeping said bolts screwed up, as now done, my improved chair requiring only to be spiked down on each side and under the joints of the rails, without the complication and expense of bolts in such cases when the action or weight of the train-wheels passing over the same, pressing the rails down on the web or bottom flanges of the chair, causes the upright flanges of said chair to automatically clutch each side of the rails at the joint with a force proportioned to the weight of the train, on the same principle as the greater the weight on arches the greater will be the grip on the keystone of said arch.

Reference being had to the accompanying drawings, Figure 1 is a sectional view of the rail of railroads with my improved chair, in section, about midway of its length. Fig. 2 is a side elevation of said rail with my improved chair in position on same. Figs. 1 and 2 show the manner of constructing my improved chair.

Letters in the several figures represent like parts.

A represents the railroad-rails. *b* represents the joint of rails. *c* represents the vertical side of my chair. *d* represents the strengthening-segment of said chair between the ties. *ee* represent the strengthening-ribs on the several parts of said chair, as shown. It will be observed that said chair receives and supports the rail, and the vertical sides fit the outside of the rail, and the top edges rest against the under side of the head of the rail, and the lower segment, *d*, between the ties, supports and stiffens the insides of the bottom flanges, *c*, and the ribs *ee* greatly stiffen the several parts of said chair, with a great economy of metal.

I make the chair large enough so as to have no difficulty in taking in the various inequalities in the rails, and, if desired, I insert one or more thicknesses of paper, made impervious to decay by saturation in tar or any suitable substance for said purpose. The employment of said paper is for the object of not only causing a close fit of the inequalities of said chair and rail, but to lessen the jar consequent on heavy trains passing over.

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

A railroad-rail chair composed of the two pieces *c*, having the pendent flanges *d*, the ends of the two parts being secured upon the tops of the ties by the spikes *f* alone; and so applied to the rails that the pressure of the trains will cause the two parts to clamp the rail tightly, substantially as shown and described.

JOHN McMURTRY.

Witnesses:

JOHN T. GUNN,
W. G. BOYD.