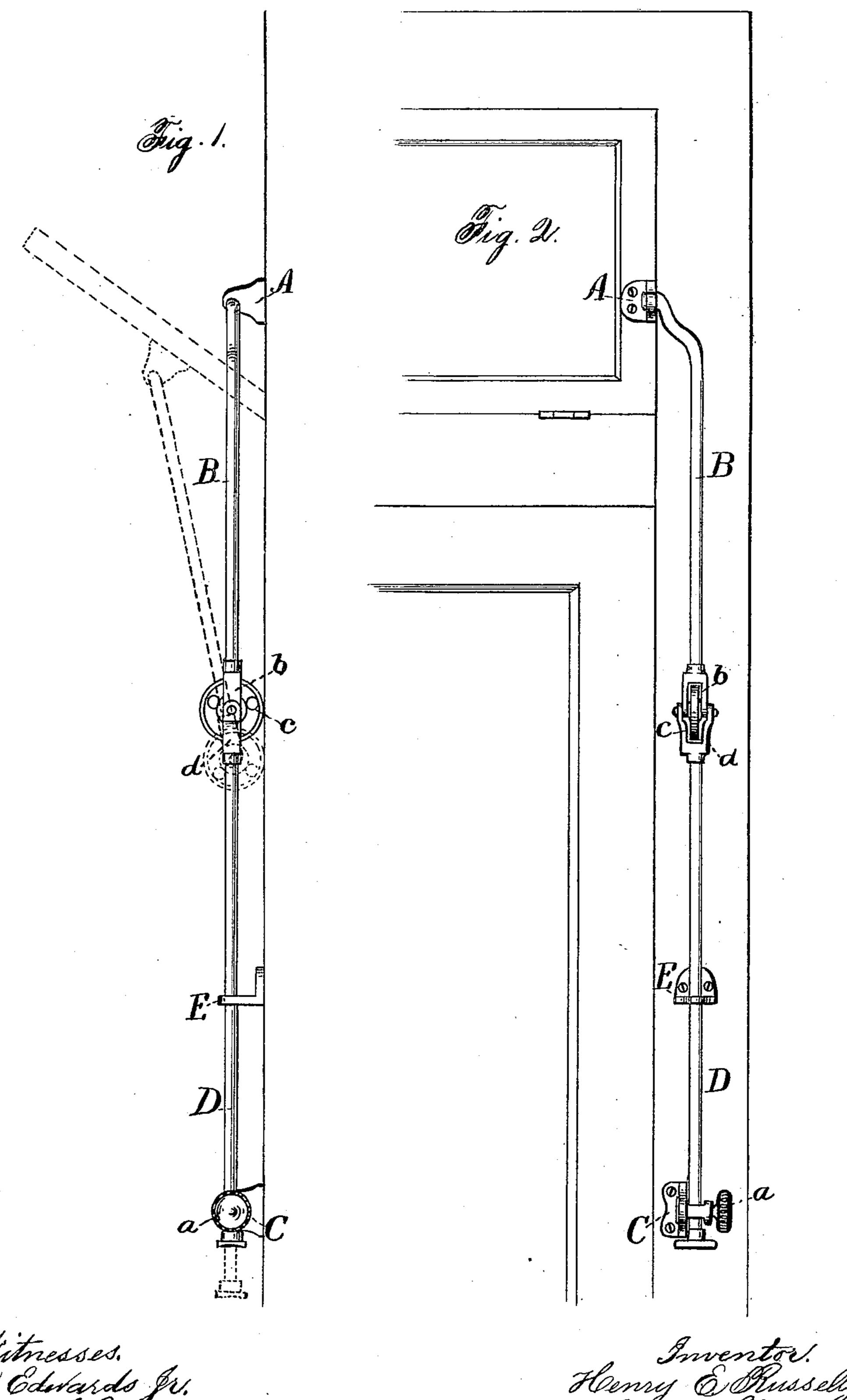
## H. E. RUSSELL, Jr.

TRANSOM LIFTER.

No. 246,639.

Patented Sept. 6, 1881.



Mitnesses. Solm Edwards fr. Lapman & Burn

Inventor! Henry & Russell & By James Shefrard.

## United States Patent Office.

HENRY E. RUSSELL, JR., OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE RUSSELL & ERWIN MANUFACTURING COMPANY, OF SAME PLACE.

## TRANSOM-LIFTER.

SPECIFICATION forming part of Letters Patent No. 246,639, dated September 6, 1881.

Application filed July 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. RUSSELL, Jr., of New Britain, in the county of Hartford and State of Connecticut, have invented cer-5 tain new and useful Improvements in Transom-Lifters, of which the following is a specification.

My invention relates to transom-lifters in which the rod is jointed and provided with a 10 roller at the joint; and the objects of my improvements are to keep the rod from bending and to make it work smooth and easy, with a rolling movement over the casing. I attain these objects by the mechanism illustrated in 15 the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a front elevation. The device is therein represented as applied to a transom which is hinged at the bottom, but it is applicable to transoms hinged 20 at the top or middle.

A designates a bracket or arm, designed to be secured to the transom, and to which arm the upper member, B, of the lifting - rod is pivoted.

C designates a socket, through which the lower member, D, of the lifting-rod passes, and in which it is fastened in any desired position by means of the set-screw a or other suitable fastener; and Ea guide for governing the lower 30 member, D, of the lifting-rod. The upper and lower members of the lifting-rod are pivoted together at their meeting ends, as shown. Transom-lifters consisting of the parts thus far specifically described are old and hereby 35 disclaimed. Upon the lower end of the upper member, B, I place a forked roller-frame, b, within which is the roller c, and upon the upper end of the lower member, D, there is a

forked frame, d, while the axle-pin, upon which the roller is mounted, passes through the meet- 40 ing ends of the frames b d, and forms the joint which connects the upper and lower members of the lifting-rod. The roller should be of such size that its periphery will bear against the casing when the lower member of the lifting- 45 rod is supported by the guide E and socket C, and said member is substantially parallel to the face of the casing, as shown in Fig. 1. When the transom is opened the upper member of the lifting-rod swings outward, as indicated by 50 broken lines in Fig. 1, and has a tendency to spring the upper end of the lower member inward toward the casing, so that when not supported by the roller c the rod bends inward and causes the parts to bind and not work 55 smoothly; but when the joint is supported by the roller c said roller travels up and down the casing, keeps the lower member of the rod. parallel to said casing, and causes the parts to work smooth and easy.

I claim as my invention—

1. In a transom-lifter, the combination of the upper and lower members of the jointed rod and the supporting-roller at the joint thereof, substantially as described, and for the pur- 65 pose specified.

2. In a transom-lifter, the combination of the upper and lower members of the liftingrod, the forked frames b d, and the roller c, connected together by an axle-pin common to 70 both frames and the roller, substantially as described, and for the purpose specified.

HENRY E. RUSSELL, JR.

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Witnesses:

T. F. BISHOP, M. S. WIARD.