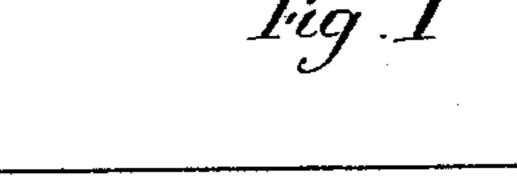
(No Model.)

R. H. COMSTOCK. HAMMER RAIL FOR PIANO ACTIONS.

No. 525,591.

Patented Sept. 4, 1894.



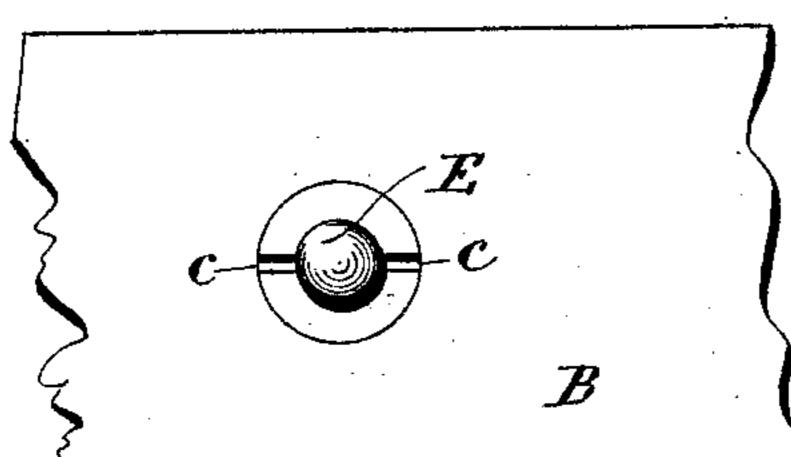


Fig 2

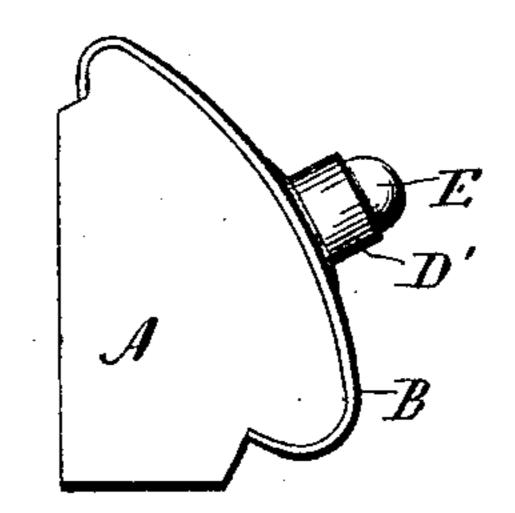
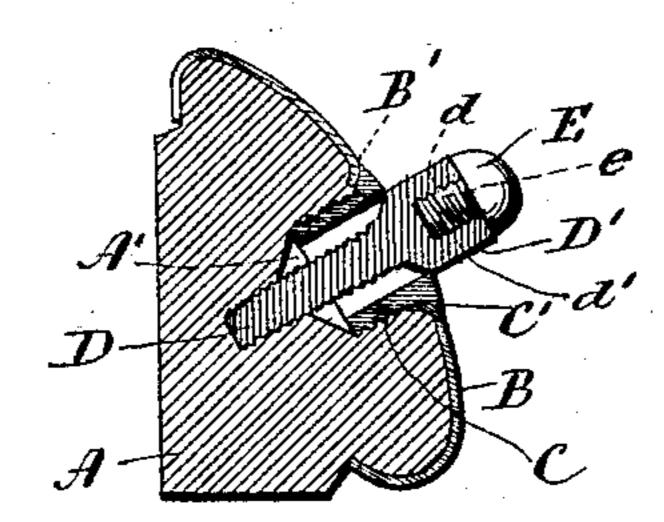


Fig. 3



Hetriesses Act Chumnay Gellian D. Helseff. Robert A Comstock Oy actys Earle Heymon

United States Patent Office.

ROBERT H. COMSTOCK, OF IVORYTON, CONNECTICUT, ASSIGNOR TO THE COMSTOCK, CHENEY & COMPANY, OF SAME PLACE.

HAMMER-RAIL FOR PIANO-ACTIONS.

SPECIFICATION forming part of Letters Patent No. 525,591, dated September 4, 1894.

Application filed June 18, 1894. Serial No. 514,933. (No model.)

To all whom it may concern:

Be it known that I, ROBERT H. COMSTOCK, of Ivoryton, in the county of Middlesex and State of Connecticut, have invented a new 5 Improvement in Hammer-Rails for Piano-Actions; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact 10 description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a broken plan view of a piano. hammer-rail constructed in accordance with 15 my invention; Fig. 2, a view thereof in end elevation; Fig. 3, a sectional view thereof.

My invention relates to an improvement in piano-actions, and more particularly to the hammer-rails thereof, the object being to pro-20 vide simple, cheap and effective means for securing the sheet-metal shells of such rails to them, so as to prevent the shells from rattling in case the rails shrink.

With these ends in view, my invention con-25 sists in certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

As herein shown, the hammer-rail A, which is made of wood, is provided with an orna-30 mental sheet-metal shell or binding B, the edges of which are clasped over the edges of the rail. The said shell is firmly secured to the face of the rail against rattling, in case the rail shrinks, by means of externally threaded 35 annular bushings C, one of which is shown. Said bushings are constructed at their outer ends with overhanging flanges C', which engage with the outer face of the shell at points around the circular opening B' formed there-40 in to permit the bushing to be entered into the circular chamber A' formed to receive it in the rail. The external thread of the bushing, it will be understood, takes into the wood, so that by turning the bushing inward by 45 means of a screw-driver fitted into the slots cc in its outer end, the shell may be drawn tightly down upon the face of the rail. In case the wood shrinks enough to loosen the with a circular head adapted in external di-

shell, the same may be tightened again by further turning in the bushing. A buffer-screw 50 D passed through the bushing and into the rail, is constructed at its outer end with a circular head D', corresponding in external diameter to the internal diameter of the bushing, which forms a bearing for it. The said 55 head is faced, as at d for the application of a key for turning it. A threaded counterbore d' formed in the said head, receives the stem e of a rubber buffer E, which is held in place in the head by the biting into its stem 60 of the threads of the said counter-bore. The buffer coacts, in the ordinary manner, with the action-bracket of the piano to deaden the sound of contact with the bracket.

By means of my invention I am enabled to 65 readily overcome the rattling of the metal shell of the hammer-rail, and to compensate for any shrinkage of the same.

It is apparent that I am not limited in carrying out my invention to the exact construc- 70 tion herein shown and described. Thus, the flange of the bushing might have a square instead of a beveled inner face. I have shown only one bushing and buffer-screw, but it will be understood that any number of them may 75 be used as required.

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

1. The combination with a piano hammer- 80 rail, of a sheet-metal shell applied thereto, an annular bushing entering the rail through the shell and engaging with the same so as to hold it firmly against the rail, a buffer-screw inserted into the rail through the said bush- 85 ing, and a rubber buffer mounted in the outer end of the said screw, substantially as described.

2. The combination with a piano hammerrail, of a sheet-metal shell applied thereto, an 90 annular, externally threaded bushing introduced into the rail through the shell with which it engages to hold the shell against the rail, a buffer-screw passing through the said bushing, and constructed at its outer end 95 •

.

ameter to fit into the internal diameter of the bushing, and having its said head constructed with a threaded socket or opening, and a rubber buffer having a stem adapted to fit into the said threaded socket or opening, substantially as set forth.

In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

ROBT. H. COMSTOCK.

Witnesses:
LILLIAN D. KELSEY,
GEO. D. SEYMOUR.