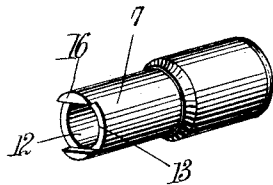
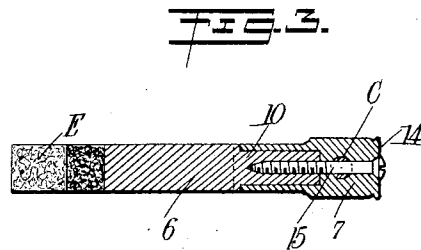
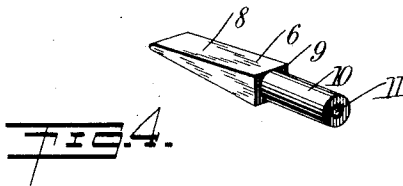
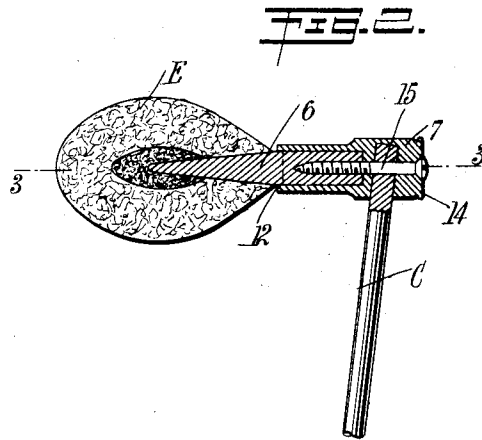
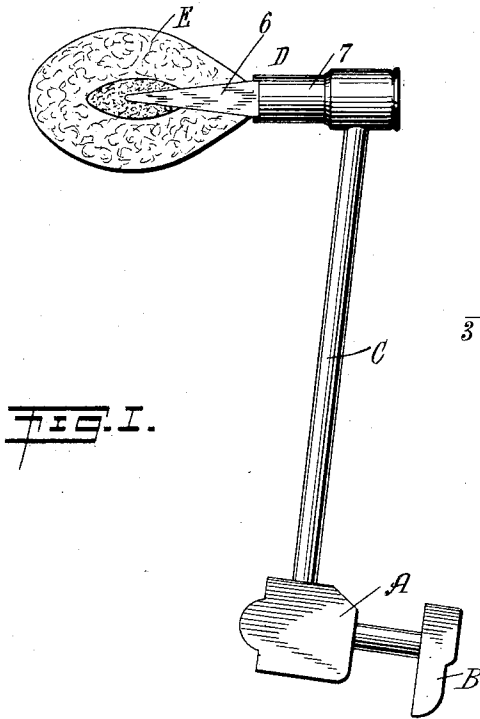


J. W. E. LAKER.
PIANO HAMMER.
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Patented Oct. 15, 1912.



WITNESSES
G. Robert Thomas
W. S. Oxtow.

INVENTOR
John W. E. Laker
BY *Mum Co*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN W. E. LAKER, OF VICTORIA, BRITISH COLUMBIA, CANADA.

PIANO-HAMMER.

1,041,490.

Specification of Letters Patent.

Patented Oct. 15, 1912.

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To all whom it may concern:

Be it known that I, JOHN W. E. LAKER, a subject of the King of Great Britain, and a resident of Victoria, in the Province of British Columbia, Dominion of Canada, have invented a new and Improved Piano-Hammer, of which the following is a full, clear, and exact description.

My invention relates to hammers for pianos or other stringed musical instruments, and more particularly relates to the socket or joint connecting the head with the shank of the hammer.

An object of the invention is to provide a novel joint or socket, whereby a new head may be readily applied to the shank of the hammer without in any way interfering with the rest of the mechanism.

A further object of the invention is to provide a hammer head, the attachment to the shank of which will be independent of any metallic action, and in which it will be impossible for the parts to become loose, due to the repeated percussions.

A still further object of the invention is to provide a hammer head which cannot rotate on its own axis, and in which the shock is taken up directly by the holding socket.

I attain the above-outlined objects by mounting the cushioned member on a shank, which shank is inserted in a recessed socket rigidly mounted on the stem of the hammer.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a side elevation of a preferred embodiment of my invention; Fig. 2 is a vertical transverse section taken through the head and part of the shank; Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2; Fig. 4 is a perspective view of a preferred form of shank; and Fig. 5 is a perspective view showing a preferred form of socket.

In Fig. 1, I have shown a piano hammer of the general construction, having the common form of block A and back stop B, extending from which block is the stem C carrying the head D,—the head and its connecting parts more particularly forming the subject-matter of this invention. The head comprises the removable cushioned member

E, which cushioned member is mounted upon my novel form of shank 6 carried by a socket 7, which socket is rigidly affixed to the stem C, as hereinafter described. The shank 6 is of a general rectangular wedge shape as shown at 8, extending from the broad rear end 9 of which is a cylindrical stem 10 having an axially disposed threaded bore 11 extending inwardly from its outer end. The stem 10 fits within the recess 12 in one end of the cylindrical socket 7. The sides of the socket, adjacent the recess 12, have countersunk portions 13, diametrically disposed, which countersunk portions are adapted to receive a portion of the inner end of the wedge-shaped member 8. By this construction, it will be seen that the shank 6 is prevented from rotating on its own axis. In the rear of the recess 12, the socket is enlarged, which enlarged portion is recessed from one side and at a slight angle to the diameter of the socket, into which recessed portion is extended the upper end of the stem C. Extending from the rear end 14 of the socket 7 and extending through the stem C, adjacent its upper end and into the threaded bore 11, is a screw 15, holding the several parts removably in position, but it will be noted that even though this screw becomes loose, it can in no way affect the action of the hammer on the piano spring, as the force of the percussion is taken up by the ends 16 of the socket 7.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a means for attaching the head of a piano hammer to the stem, a socket having a recess in one end, said socket having a pair of diametrically disposed countersunk portions in the end having the recess, a shank having a stem fitting within the recess and a wedge-shaped part extending from said stem fitting within the pair of countersunk portions, and means maintaining said shank in said socket.

2. A piano hammer comprising a socket having a recessed end and a recessed side, a shank disposed within said recessed end, a stem disposed in said recessed side, and a screw carried by said socket and passing through said stem and into said shank, to fasten together, said shank, socket and stem.

3. A piano hammer comprising a socket having a recess in one end, a cushion-carry-

ing shank mounted in said recess, the end of
said shank within said recess having a
screw-threaded bore therein, a screw pass-
ing through said socket and into said bore,
5 to maintain said shank in position in said
socket and means for preventing the rota-
tion of said shank in said recess.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN W. E. LAKER.

Witnesses:

F. M. MANNUL,
CHARLES ROWELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
