2 Sheets—Sheet 1.

W. MUTH.

PIANO-ATTACHMENT.

No. 182,032. Patented Sept. 12, 1876.

Fig. I.

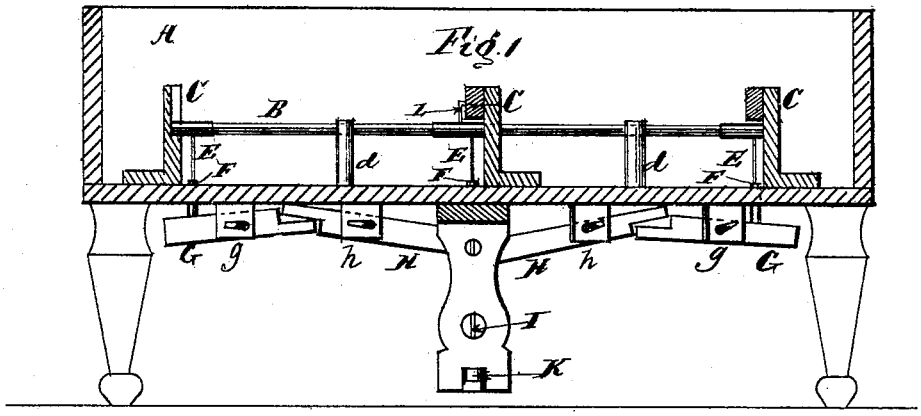
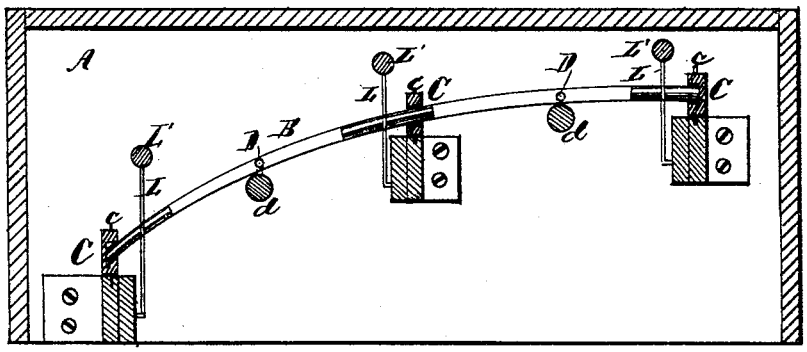


Fig. II.



Witnesses:

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Richard Gerner.

Inventor:

William Muth.

Per:

Henry Gerner,

his Atty.

2 Sheets—Sheet 2.

W. MUTH.

PIANO-ATTACHMENT.

No. 182,032. Patented Sept. 12. 1876.

Fig. III.

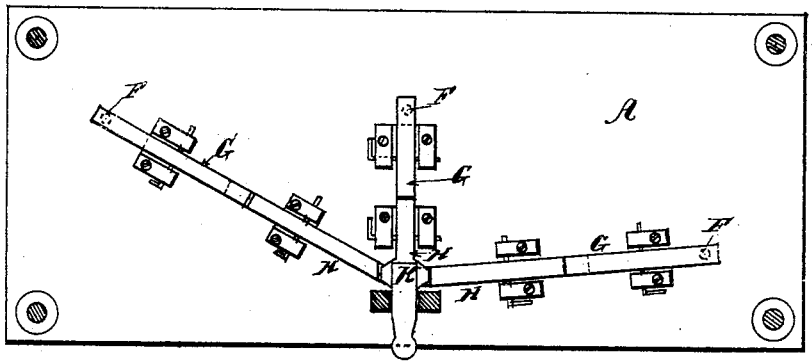
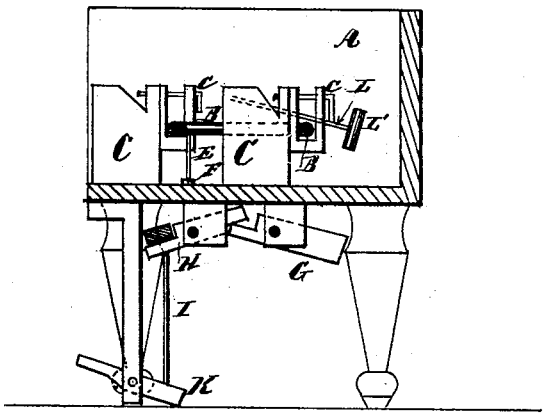


Fig. IV.



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UNITED STATES PATENT OFFICE.

WILLIAM MUTH, OF MONTREAL, QUEBEC, CANADA.

IMPROVEMENT IN PIANO ATTACHMENTS.

Specification forming part of Letters Patent No. **182,032**, dated September 12, 1876; application filed July 8, 1876.

To all whom it may concern:

Be it known that I, WILLIAM MUTH, of the city of Montreal, in the Dominion of Canada, have made a new and useful Improvement in a Tune-Diminishing Pedal for Square and Grand Pianos, of which the following is a full and clear description.

This invention relates to a sliding rest for regulating the length of stroke of the hammers of a piano, so as to reduce the force of the blow struck by the hammers, and consequently the tone, to one-half, or even less, of the volume given by the full stroke of the hammers, without in the least impairing the quality of the tone emitted.

The invention will be readily understood by reference to the accompanying drawings, of which—

Figure 1 is a longitudinal sectional elevation of a square piano, with the improved attachment. The most of the interior works of the piano are removed in the drawing shown, so as to more fully illustrate the invention. Fig. 2 is a sectional plan of the parts shown in Fig. 1. Fig. 3 is a bottom plan of the same. Fig. 4 is a central transverse section.

The case A is of ordinary construction, and consequently need not be described. The rest B is a curved bar or rod, preferably covered with red felt. This curved bar or rest is supported by three or more slotted posts, C, which are fixed to the bottom of the case of the piano, the curved bar resting in the slots in the top ends of said posts, so as to be free to rise or fall therein. There are two or more vertical rods, D, which form ways on which the bar B is moved up or down, and which serve to keep the bar in its true level or horizontal position. These rods preferably pass through holes or mortises in the rod B, but any other suitable kind of rest will answer as well.

The rods D are to be fixed to short posts *d*, that are supported by the bottom of the piano-case, or the said rods themselves may be fixed to the bottom of the piano-case.

Pins *c*, through the tops of the slotted posts C, serve as stops, to limit the upward motion of the bar B. There are three, more or less, rods, E, which are fixed to the bottom side of the bar B, and which pass down to within, say, one-sixteenth of an inch of the top of the bottom of the piano. Directly below the bottom ends of these rods E are placed wooden dowels or followers F, that pass through suitable apertures made in the bottom of the piano. The bottom ends of these pieces F rest upon the padded ends of levers G. The other ends of the levers G are engaged by the padded ends of the levers H, and the other ends of the said levers H are all coupled to and moved by the pedal-rod I, which is operated by the pedal K in the usual manner. The construction of these parts is clearly shown in Fig. 3.

The levers G and H are respectively fulcrumed to the bottom of the piano by suitable bearings *g* and *h*.

When the pedal K is pressed down with the foot in the usual manner, motion will be transmitted through the rod I and the levers G H, to the dowels or followers F, which will be raised thereby, and, in rising, the top ends of the said followers F will press against the bottom ends of the rods E, and these in turn will raise the rod or bar B as required.

The levers L, to which the hammers L′ are attached, rest upon the top edge or side of the bar B, and as the said bar B is raised or lowered the hammers are permitted to strike only a short or long blow, as the case may be, and the volume of sound can thus be regulated at will, without deteriorating or changing the quality of the sound of the instrument.

I am aware that patents have been granted to D. B. Newhall, of November 3, 1841, and to J. Greener, of February 9, 1869, for piano attachments, and therefore do not broadly claim movable rests.

Having described my invention, I claim—

Posts C, rods D and E, followers F, levers G and H, pedal-rod I, and pedal K, in combination with the bar B and case A, substantially as and for the purpose set forth.

WM. MUTH.

Witnesses:

MAX EICHHORN,

GEORGE SEEBOLD.