

J. Greener.

Piano Attachment.

N^o 86,747.

Patented Feb. 9, 1869.

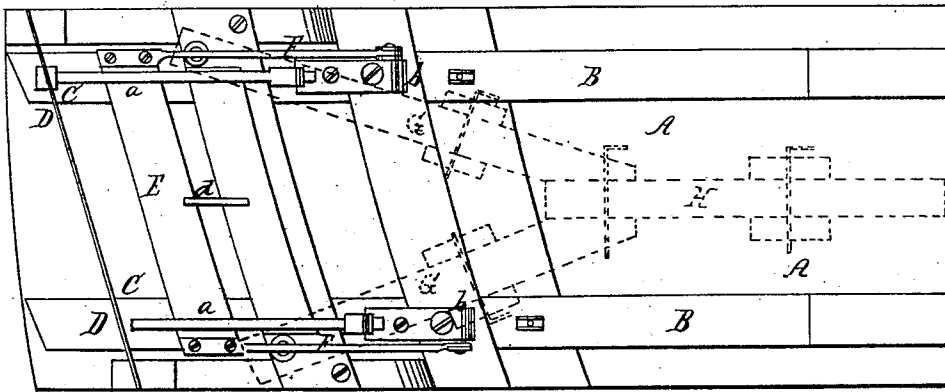


Fig. 1

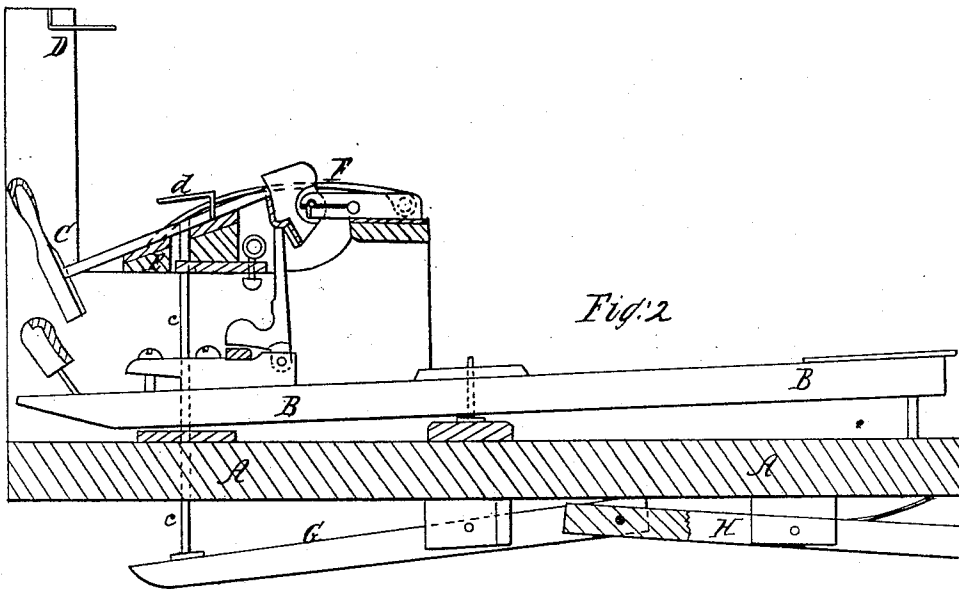


Fig. 2

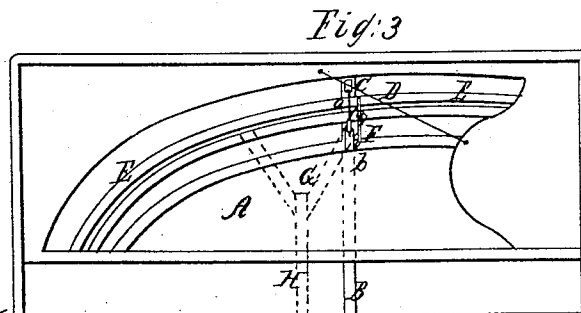


Fig. 3

Witnesses
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JACOB GREENER, OF ELMIRA, NEW YORK.

Letters Patent No. 86,747, dated February 9, 1869.

SOFT-PEDAL ATTACHMENT FOR PIANO-FORTES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, JACOB GREENER, of Elmira, in the county of Chemung, and State of New York, have invented a new and improved Soft-Pedal Attachment to Piano-Fortes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan or top view of my improved attachment to pianos.

Figure 2 is a vertical longitudinal section of the same.

Figure 3 is a plan view of a piano-forte frame, provided with my improved attachment.

Similar letters of reference indicate like parts.

The object of this invention is to do away with the pads which are now used on piano-fortes, to muffle the sound, said pads being introduced between the strings and hammers, by means of the pedal-action.

These pads did not only muffle the sound, but changed also the nature of the same, as they were foreign elements, whose vibrations, however slight, differed from those of the strings, so that sounds of another character were produced as by the strings alone.

My invention consists in the application of an up-and-down adjustable rail, which is connected with the pedal, and which, when raised, will raise the hammers in such manner that their strokes will be reduced, thereby causing a diminution of the vibrations of the strings.

The advantages of this arrangement are manifold.

By not interposing any foreign substance between the string and hammer, the character of the sound produced will always be the same, to whatever degree the vibration may be diminished.

The motion of the elevating-rail can be regulated at will, so that the strokes of the hammer may be shortened more or less, to produce just the required reduction of sound.

By not having the pedal-action above the strings, more room is obtained, allowing a better bracing of the sounding-board, and preventing any parts of the action from coming in contact with such sounding board.

A, in the drawing, represents the bottom board of a piano-forte frame.

B B are the keys.

C C, the hammers.

D D, the strings.

All these parts, as well as the action, bridging, and frame-work of the piano-forte, are of suitable construction, and do not form part of my invention.

E is a wooden or other bar, extending under all the shanks, *a*, of the hammers.

It is fastened to the ends of two or more bars, F F, which are pivoted to suitable lugs *b*, projecting from the frame.

From these bars F, or from the rail E, project, downward, rods *c c*, which rest with their lower ends on the ends of levers G, which are pivoted to the under side of the bottom, A, as is clearly shown in fig. 2.

These levers are connected to another pivoted lever, H, as shown by dotted lines in fig. 1, and also in fig 2, and the lever H is connected with the pedal in suitable manner.

The rail E may, however, be connected with the pedal in any other manner than that hereinbefore described.

When the pedal is moved, the rail E will be elevated so as to raise the hammers, and to bring them nearer to the strings. When the hammers are played, their strokes will be reduced, and they will consequently strike the strings with so much less force that the vibrations will be diminished, and, with them, the sound.

To prevent the bridge E from being raised too high, a stationary stop, *d*, is provided.

It will, from the foregoing, appear that the performer can, by a slight and almost imperceptible motion of the foot, operate the pedal, so as to increase or diminish the sound in such a graceful and harmonious manner as to produce the most perfect crescendo and diminuendo.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The up-and-down movable rail E, when connected with the pedal of a piano-forte, for the purpose of elevating the hammers, substantially as herein shown and described.

JACOB GREENER.

Witnesses:

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