M. W. HANCHETT.

Piano-Forte Damper-Attachment.

No. 168,484. Patented Oct. 5, 1875.

Fig 1

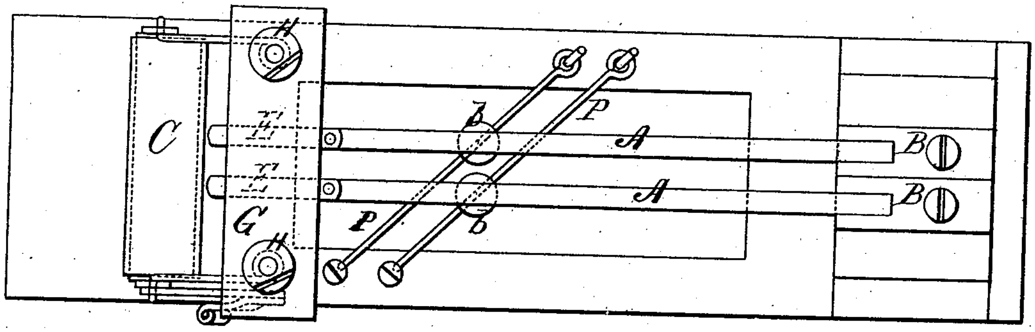


Fig 2

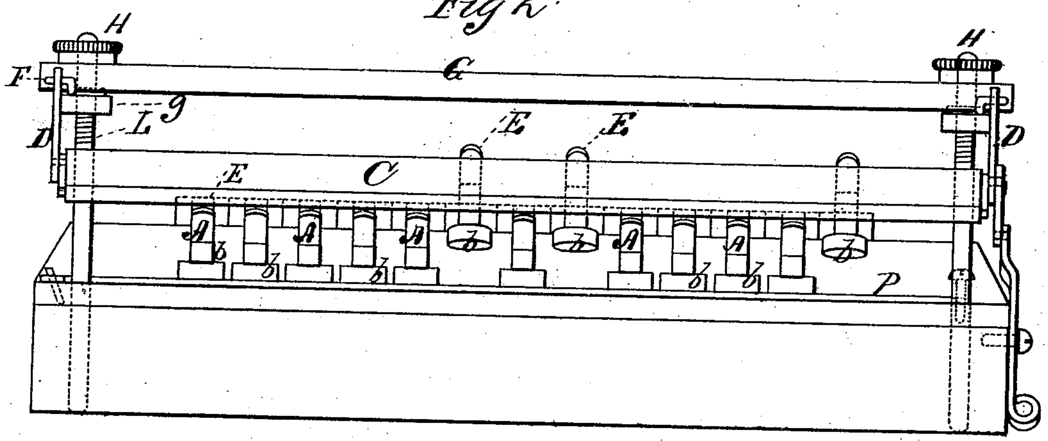
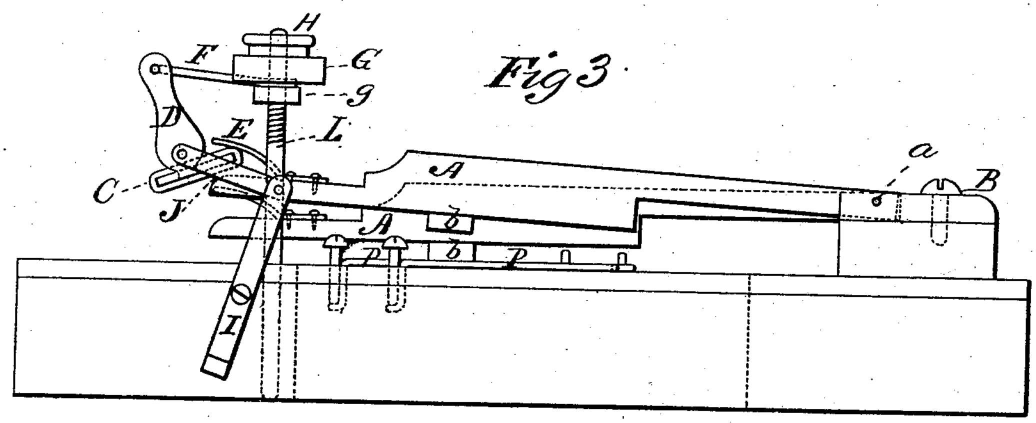


Fig 3



WITNESSES
Villette Anderson.
E. H. Bates

INVENTOR
M. Waldo Hanchett,
Chipman Hosmer & Co,
ATTORNEYS

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

M. WALDO HANCHETT, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN PIANO-FORTE-DAMPER ATTACHMENTS.

Specification forming part of Letters Patent No. **168,484**, dated October 5, 1875; application filed March 6, 1875.

To all whom it may concern:

Be it known that I, M. WALDO HANCHETT, of Syracuse, in the county of Onondaga and State of New York, have invented a new and valuable Improvement in Piano-Forte Attachments; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my piano-forte attachment. Fig. 2 is an end view of the same, and Fig. 3 is a side view.

This invention has relation to improvements in that class of mechanical attachments for the piano-forte which are designed to enable a player upon the instrument to continue the sound of one or more strings or unisons after the finger has left the key or keys by which they were sounded; and the nature of the invention consists in the construction and arrangement of parts, as will be hereinafter more fully explained.

In the annexed drawing, A designates the well-known damper-levers as used in the square piano, pivoted at *a* in the customary manner to bifurcated hinge-plates B. These levers are each provided with a damper, *b*, adapted to bear lightly upon a string, P, also in the usual manner. These levers, being raised when the keys are depressed by the fingers of the performer, are ordinarily allowed to fall upon their respective strings the moment the said keys are released from the pressure of the musician's finger, thereby stopping the vibration of the strings, and consequently cutting short the sound. But with a view to allowing one or more strings or unisons to sound after their respective keys have been abandoned by the hand of the performer, I use the following simple and effective device, to wit: A bar, rod, or blade, C, of any suitable material, and to be made with a straight and thin edge, is suspended, by means of hangers D, in a piano-forte. When at rest, or not in use, it hangs in front of, and free from, the ends of the damper-levers, the latter being allowed to rise and fall freely without obstacle on the part of the said blade, but which is adapted to be swung inward and outward to and from the said damper-levers to an engagement with a tongue or catch, E, secured to the upper surface, and at or near the front ends of the same, as shown in Figs. 2 and 3. Blade C is rigidly secured to the lower ends of hangers D, so that when it is actuated, by means hereinafter to be explained, for the accomplishment of the purpose mentioned, its inner edge will be raised, not only holding the damper-levers to their engagement with it, but also effectually elevating them beyond possibility of their interference with and cutting off the sound of the strings. Blade C will catch and hold, as above described, any number of uplifted damper-rods at the same time, and it may extend entirely across the strings, but its effects are more desirable and brilliant when it is applied to the keys of the instrument below what is known as the "middle C." The said blade may also be used for sustaining the whole number of dampers when a long-continued forte sound is to be produced by operating the ordinary forte-pedal, and then thrusting blade C inward to an engagement with the catches E. The hangers D are pivoted to arms F, extending out horizontally from a stand, G, supported by screw-threaded rods L, and the blade C is made adjustable by means of thumb-nuts H, applied upon the upper ends of the said rods above stand G, the latter being supported upon the said rods by means of collars *g*, as shown in Figs. 2 and 3. These collars, or, rather, nuts, are capable of being depressed or raised on their respective rods, and are, preferably, made of rawhide, in order that performing the function of dampers they may arrest any tendency to vibration which the said rods might have. The vertically-vibrating lever I is pivotally attached to the said blade C by the connecting-rod J, which is also pivoted to lever I.

The lever I in practice may be connected with a supplementary pedal, arranged within the lyre under the piano, thus enabling it to be conveniently operated by the foot of the performer, or may be actuated by the knee-slide.

I am aware that it is not new to combine with a pedal and the dampers of a piano a movable bar, arranged to catch and hold off

and away from the strings at the will of the the performer any specific damper or number of dampers, and those only which may have been raised by the finger-key, so as to continue the sound of the strings corresponding to said dampers after the removal of the finger from said key or keys.

What I claim is—

The bar C, having straight edge, secured to hangers D, pivoted to arms F, attached to stand G, the screw-threaded rods L, thumb-nuts H, lever I, and connecting-rod J, and the damper-levers A, having upon their upper surfaces, and at or near the front ends thereof, the catches E, all said parts being constructed and arranged to operate substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

M. WALDO HANCHETT.

Witnesses:

R. A. BONTA,

WILL S. REED.