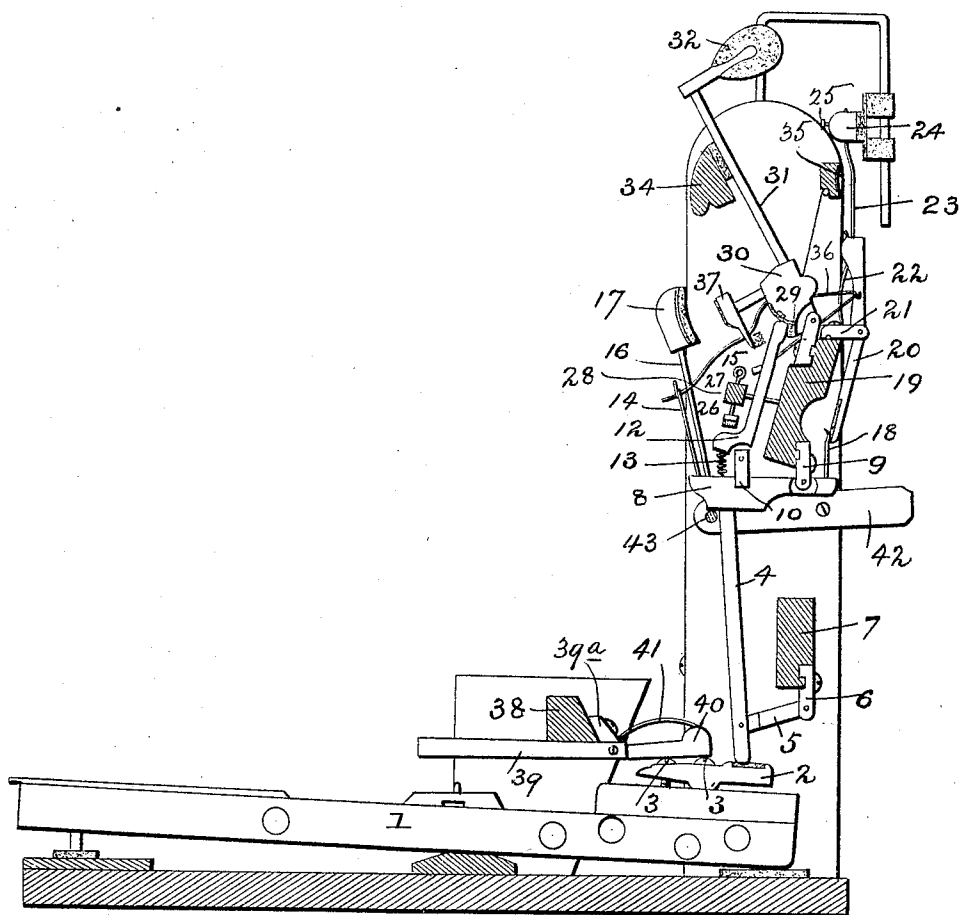


(No Model.)

O. LESTINA.
SOFT STOP ATTACHMENT FOR PIANOS.

No. 485,872.

Patented Nov. 8, 1892.



WITNESSES:
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UNITED STATES PATENT OFFICE.

OTTO LESTINA, OF CHICAGO, ILLINOIS.

SOFT-STOP ATTACHMENT FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 485,872, dated November 8, 1892.

Application filed February 20, 1892. Serial No. 422,248. (No model.)

To all whom it may concern:

Be it known that I, OTTO LESTINA, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Soft-Stop Attachments for Pianos; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in techniphone and soft-stop attachments for upright or grand pianofortes, by means of which the tone of the instrument may be softened or silenced altogether, if desired, as when practicing, whereby annoyance to others is obviated and the touch is made heavy or light, as desired.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawing the figure represents a side elevation of a pianoforte-action with my improvements applied thereto.

In the said drawing the reference-numeral 1 designates the key-lever; 2, the rocker; 3, the jack-screw; 4, the lifter; 5, the tongue; 6, the tongue-flange; 7, the lower rail; 8, the whip; 9, the whip-flange; 10, the fly-flange; 12, the fly or jack; 13, the jack-spring; 14, the bridle-wire; 15, the bridle-tape; 16, the back-check wire; 17, the back-check; 18, the crook; 19, main action-rail; 20, damper-lever; 21, damper-flange; 22, damper-spring; 23, damper-wire; 24, damper-block; 25, damper-block screw; 26, regulating-button; 27, regulating-screw; 28, regulating-rail; 29, butt-flange; 30, hammer-butt; 31, hammer-shank; 32, hammer; 34, hammer-rail; 35, spring-rail; 36, hammer-spring; 37, check for butt.

The above parts may be of any ordinary or suitable construction and form no part of the present invention.

The numeral 38 denotes a transverse rail pivoted to the piano-frame and located above the key-levers. This rail extends entirely across the instrument and is provided at one end with an arm 39, by which it may be os-

cillated. This arm may be placed at or near the center and connected with a pedal, if desired, so that it can be operated by the foot the same as the ordinary soft and loud pedals. The arm may also be provided with a set-screw or other fastening device, by which it may be held in any position desired for the purpose of making the touch heavy or light. Pivoted to a block 39^a, secured to rail 38, is a lever 40. Bearing upon the rear end of this lever is a spring 41, secured at one end to the block 39^a.

It is obvious that the lever 40 may be dispensed with and the spring be made to bear directly upon the rocker without affecting the character of the invention.

The numeral 42 designates a pivoted lever provided with a transverse rod 43 at its front end, which extends underneath all the whips. By actuating this lever all the hammers and their connections can be thrown up or nearer to the strings. A set-screw may be employed to hold this lever in position, or it may be connected with a pedal, as found most convenient or desirable.

The operation is as follows: When it is desired to soften the sound of the instrument, the hammers are thrown up two-thirds of their distance by means of lever 42, and the rail 38 and lever 40 thrown in place by the arm or pedal, with the free end of the lever resting upon the bolt of the rocker 2. If the key is now depressed, the blow struck by the hammer will not be so hard as when the attachment is not in use, whereby the volume of the tone is rendered very light. By means of the pivoted lever, however, there will be no change in the feeling of the action due to the throwing up of the hammers. When it is desired to silence the instrument altogether, the hammers are thrown up until they rest against the strings and the lever 40 actuated, so as to rest upon the rocker to compensate for the lost weight of the action.

From the above it will be seen that I provide a very simple and efficient device for softening the tone or silencing a piano, which will be found very useful in avoiding disturbance to persons in the vicinity during practice. It also lessens the wear and tear on the parts, rendering the instrument much more durable.

Having thus described my invention, what I claim is—

1. In a pianoforte, the combination, with the key-levers, of the transverse pivoted rail
5 located above said key-levers, the blocks secured to said rail, the spring-actuated levers pivoted to said blocks, the operating-arm, and the rockers on the key-levers, substantially as described.
- 10 2. In a pianoforte, the combination, with a piano-action, of the pivoted lever provided with a rod located underneath the whips, the

lifters, the rockers, the key-levers, and the pivoted block provided with springs adapted to bear upon the rockers, substantially as and 15 for the purpose described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

OTTO LESTINA.

Witnesses:

HARRY HUMPHREY,
HATTIE LUND.