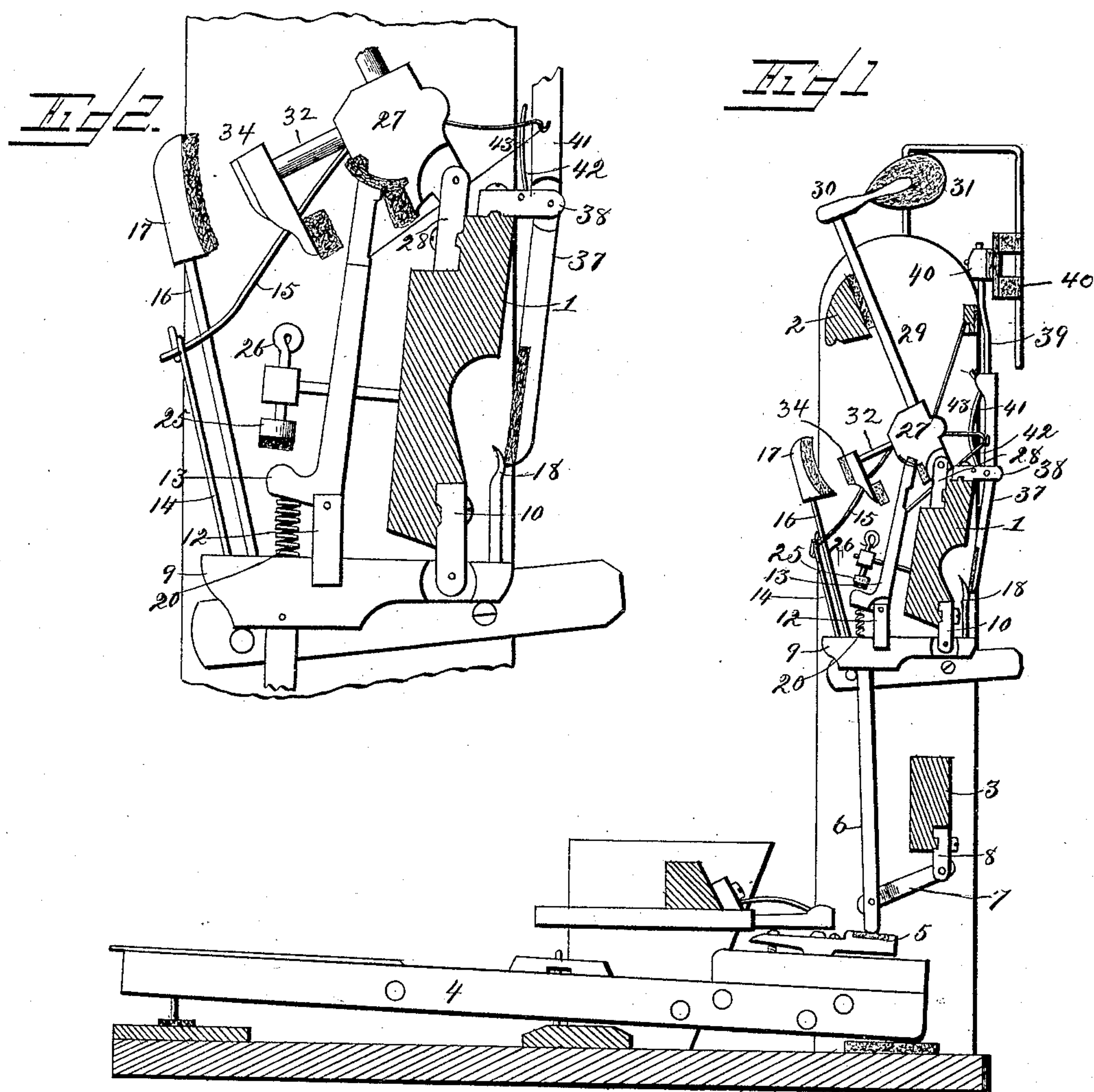


(No Model.)

O. LESTINA.
PIANO ACTION.

No. 485,873.

Patented Nov. 8, 1892.



WITNESSES:
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UNITED STATES PATENT OFFICE.

OTTO LESTINA, OF CHICAGO, ILLINOIS.

PIANO-ACTION.

SPECIFICATION forming part of Letters Patent No. 485,873, dated November 8, 1892.

Application filed February 20, 1892. Serial No. 422,249. (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 Piano-Actions; 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 upright pianoforte-actions, whereby the action of the hammers is rendered more uniform during the operation of playing.

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

In the accompanying drawings, Figure 1 represents a side elevation of a piano-action constructed in accordance with my invention. Fig. 2 is a similar view, on an enlarged scale, of the upper part of the action.

In the said drawings the reference-numeral 1 denotes the main action-rail, 2 the hammer-rail, and 3 the lower rail. The key-levers are designated by the numeral 4 and are provided with the usual rockers 5, with which contact the lower ends of the lifters 6.

The numeral 7 denotes the tongue, and 8 the tongue-flange secured to the lower rail. Connected with the upper end of the lifter is the whip 9, pivoted to whip-flange 10 and provided with fly-flange 12, to which the fly or jack 13 is pivoted.

The numeral 14 designates the bridle-wire; 15, the bridle-tape; 16, the back-check wire; 17, the back-check; 18, the crook secured to the whip 9.

20 is the jack-spring, 25 the regulating-button, and 26 the regulating-screw.

The hammer-butt 27 is pivoted to the butt-flange 28, secured to the main action-rail, and is provided with a rod 29 and hammer 30, provided with felt 31. The butt is also provided with a shank 32 and check 34, which contacts

with back-check 17, connected by means of wire 16 with the whip. 50

The numeral 37 denotes the damper-lever; 38, the damper-flange; 39, the damper-wire; 40, the damper-block, and 41 the damper-spring.

The above parts may be of any ordinary or suitable construction, and form no part of my present invention. 55

Connected with the upper end of the fly or jack is a waxed or silk cord or thread 42, which passes under the pivot of the hammer-butt and has its other end connected with the outer end of a spring-rod 43, secured to said butt. 60

By the above construction, in case of swelling of the felts or other parts of the action, the fly will always be kept in its proper place by means of the thread fastened to the same and to the butt. 65

In operation when the hammer strikes a key and begins its return movement the moment the butt is released from the back-check the thread will draw the fly into position under the butt, so that the hammer can repeat its action before returning to normal position, thereby saving the time required for such movement. The instant the rod begins to leave the butt the touch is lightened in proportion to the weight of the damper-lever, which begins to be felt the moment the fly leaves the butt, whereby the touch is rendered more uniform during the operation of playing. 70 75 80

Having thus described my invention, what I claim is—

In a pianoforte-action, the combination, with the fly or jack and the hammer-butt, of the spring-rod connected with the butt and the thread connected with said rod and the upper end of the fly or jack, substantially as and for the purpose set forth. 85

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses. 90

OTTO LESTINA.

Witnesses:

HARRY HUMPHREY,
HATTIE LUND.