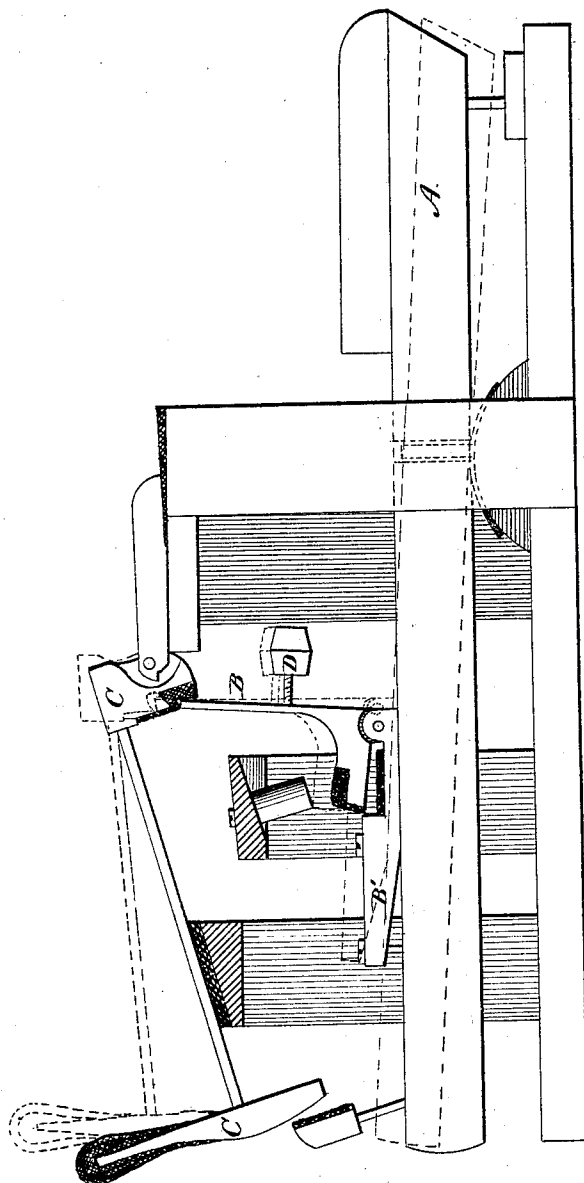


J. W. HOLMES.
PIANO ACTION.

No. 178,148.

Patented May 30, 1876.



Witnesses;
Harry C. Clark.
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Attys

UNITED STATES PATENT OFFICE.

JOHN W. HOLMES, OF DUBUQUE, IOWA.

IMPROVEMENT IN PIANO-ACTIONS.

Specification forming part of Letters Patent No. **178,148**, dated May 30, 1876; application filed March 25, 1876.

To all whom it may concern:

Be it known that I, JOHN WESLEY HOLMES, of the city and county of Dubuque and State of Iowa, have invented a new and useful Improvement in Piano-Fortes, of which the following is a specification:

The object of my invention is, by means of an adjustable weight instead of a spring applied to the jack in a piano, to more effectually bring it back to position after it has thrown the hammer.

The following is a description of my invention:

In the drawing, the figure represents a side view of a piano-forte key, jack, hammer, and weight.

A represents a key of a piano. B represents the upright part of a jack in a piano. B' represents the base of the jack fastened to the key. C C C represent the hammer in a piano, and D represents an adjustable weight attached to the jack B. This adjustable weight D (which may most conveniently be made of metal, and weigh from one-half ounce to one ounce) is attached to the upright part of the jack B on the front side, and adjusted, by means of a screw or otherwise, at such distance from the face of the jack, and from its base, as may be necessary to make the action of the key easy. This is for the purpose of

drawing the jack B back from its base, as may be necessary to make the action of the key easy. This is done for the purpose of drawing the jack B back to position after it has thrown the hammer, and saves the use of a spring at the base of the jack now used for that purpose, but more effective, as the spring easily breaks, and is not always of the same tension; but the weight always remains the same.

This invention operates in the following manner: When the key A is struck the jack B and B', resting thereon, is thrown upward and forward, which action causes the hammer C to strike the cord, and the weight D, adjusted as before described, draws the jack back to its position in a state of rest.

Having thus described my invention, what I claim as new, and for which I desire Letters Patent, is—

The adjustable weight D, applied to the jack of a piano-forte key for the purpose of drawing the jack back into position after throwing the hammer, substantially as described.

Signed this 16th day of March, A. D. 1876.

JOHN WESLEY HOLMES.

Witnesses:

MARRAE M. CADY,
WILLIAM GRAHAM.