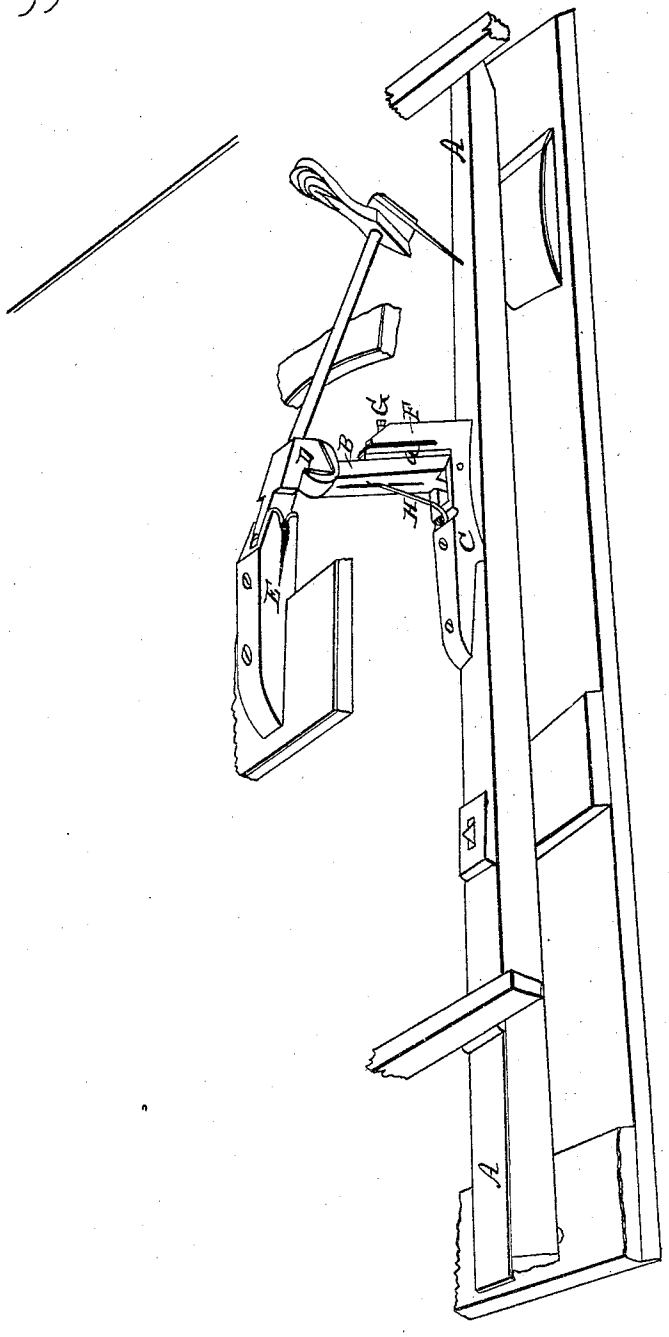
H. Herrick,

Piano Action.

No. 1,379. Patented Oct. 26, 1839.



AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

H. HERRICK, OF NEW YORK, N. Y.

PIANOFORTE.

Specification of Letters Patent No. 1,379, dated October 26, 1839.

To all whom it may concern:

Be it known that I, HIRAM HERRICK, of the city of New York, in the State of New York, have invented an Improvement in the Manner of Constructing the Action of Pianofortes, by means of which improvement the touch is rendered much more smooth and easy than upon any of the various plans heretofore adopted and the liability to get out of order is much diminished; and I hereby declare that the following is a full and exact description thereof.

The principal improvement in my pianoforte action consists in the manner in which I cause the jack, lever, or fly, to act upon the small, or hammer, butt; by which arrangement I am enabled to employ it without using either an under hammer, a regulating screw, or a wedge, one or other of which has been employed in all the actions hitherto in use. In all other actions also, the lever, or jack, as it acts upon the hammer butt, in causing the hammer to strike the string recedes from the center, or fulcrum, of the hinge butt upon which the hammer turns, and consequently acts upon its with a power which is constantly decreasing. In my action, on the contrary, the power of the lever, or jack, is continually increasing during the continuance of its action upon the hammer, as its motion is toward the fulcrum of the hammer, until it disengages itself from the hammer butt, by its own motion, occasioned by the depression of the key; the gain of power by this device amounts to, at least, one third, and the touch is consequently rendered much more easy and efficient than usual.

In the accompanying drawing, A, A, is one of the keys of a piano-forte.

B, is the lever, jack, or fly, and C, the lever bottom to which it is hinged.

D, is the hammer butt, and E, the hinge butt.

F, is a block attached to the lever bottom, which receives a screw G, by which the bearing of the thin side *a*, of the block G, against the jack, may be regulated, the block being split, or divided, for that purpose.

The regulating screw ordinarily used in pianoforte actions is dispensed with; that just described, and those in the lever bottom, being all that are required.

H, is a wire spring which bears against the front of the jack.

From the foregoing description, the characteristic difference between this and all other pianoforte actions will be manifest. By the depression of the key A, in the act of playing, the jack is brought forward toward the fulcrum of the hammer, and when it is relieved from the hammer butt, the jack is borne against the front corner of it by the spring H, and the too rapid fall of the hammer is prevented, to the extent of the strength of the spring. The height of the jack is regulated by the screws of the lever bottom, operating in the ordinary way.

What I claim as my invention, and desire to secure by Letters Patent, is—

The particular manner in which I have arranged the fly, or jack in reference to the hammer butt, so that by the depression of the key said fly or jack shall approach the forward end of the hammer butt, and finally escape in front of it.

HIRAM HERRICK.

Witnesses:

THOS. P. JONES,

GEORGE WEST.