

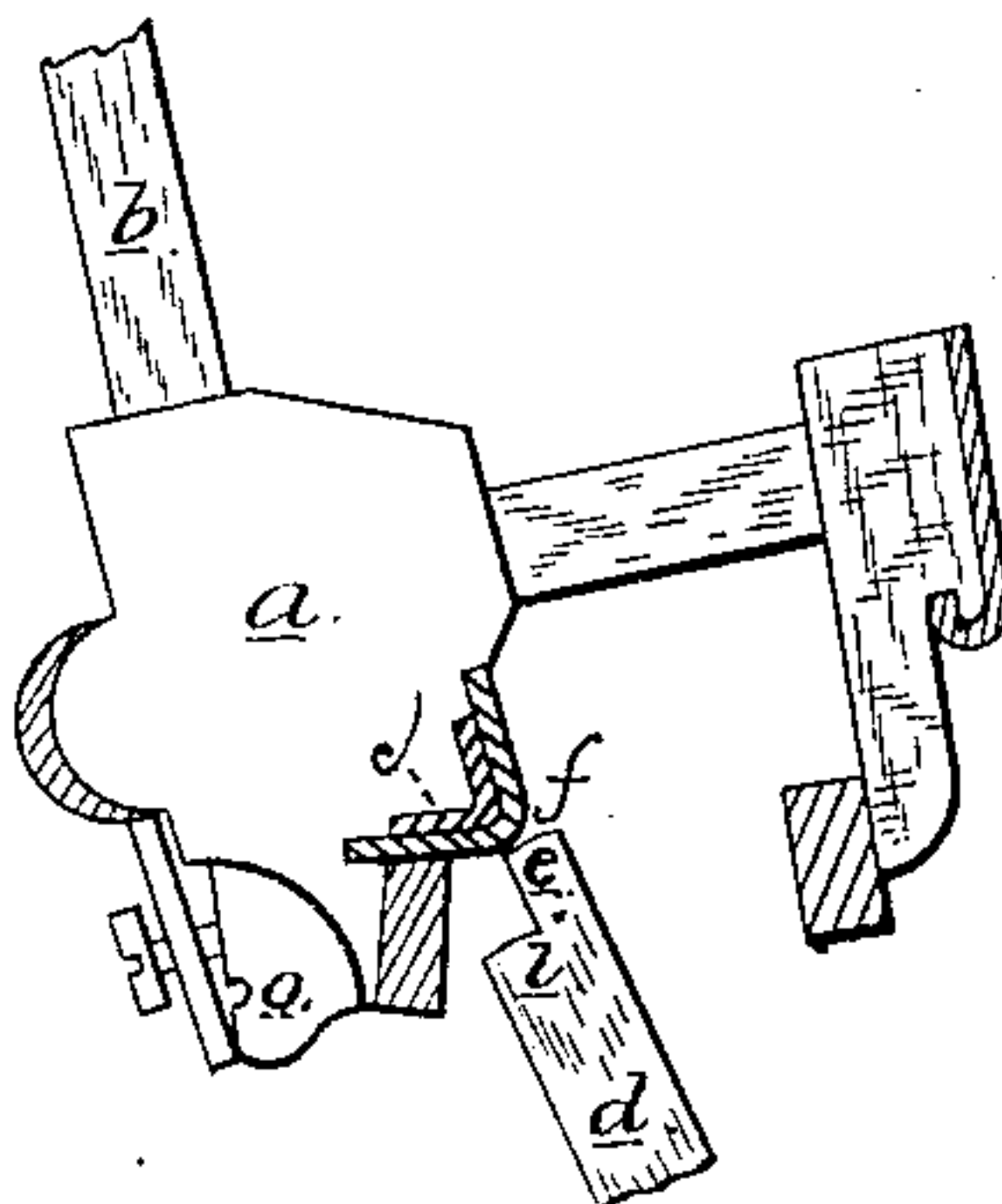
(No Model.)

J. HARDMAN.

REPETITION ACTION FOR PIANOS.

No. 258,751.

Patented May 30, 1882.



Witnesses
Chas. Haskell.
S. J. Mason.

Inventor
John Hardman
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UNITED STATES PATENT OFFICE.

JOHN HARDMAN, OF NEW YORK, N. Y., ASSIGNOR TO HARDMAN, DOWLING
& PECK, OF SAME PLACE.

REPETITION-ACTION FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 258,751, dated May 30, 1882.

Application filed February 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN HARDMAN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Hammer-Actions of Upright Piano-Fortes, of which the following is a specification, reference being had therein to the accompanying drawing, which is a representation of a hammer, butt, and jack of an upright-piano action constructed according to my invention.

My improvements in repetition-actions of piano-fortes consist in changing the forms of both the butt-block and the jack as follows: I construct the butt with a padded but single and projecting shoulder *f* at its rear base, and change the position of the softening-cushion *c* to insure proper extension of the shoulder and clearance of the jack *d* when giving the blow. I cut away in step form the inside end of the jack to form two striking-surfaces, one on the end at *e*, and the second slightly below the first at the shoulder *i*. Now, when the key is depressed, the jack will be projected upward, and the top *e* strike at *f*, rocking the butt forward on its pin *o*, and in its recoil will

be caught and held by the shoulder *i* against *f*, and there holding the butt and hammer until the key is released, when the parts will quickly return to their first position, and insure the most rapid notes and shakes desired, as also with uniform strength of tone and intervals of time without difficulty.

I am aware that repetition-actions for actuating rapid hammer-blow repeats of piano-forte actions are well known, and hence do not constitute my invention, which consists simply in the special device herein described to effect such action.

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

In a piano-forte action, the butt-block *a*, with its projecting shoulder *f*, in combination with the cut-away shouldered end of the jack *d*, as shown at *e i*, all constructed and operating substantially in the manner and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HARDMAN.

Witnesses:

J. B. HYDE,

THOS. A. DOWLING.