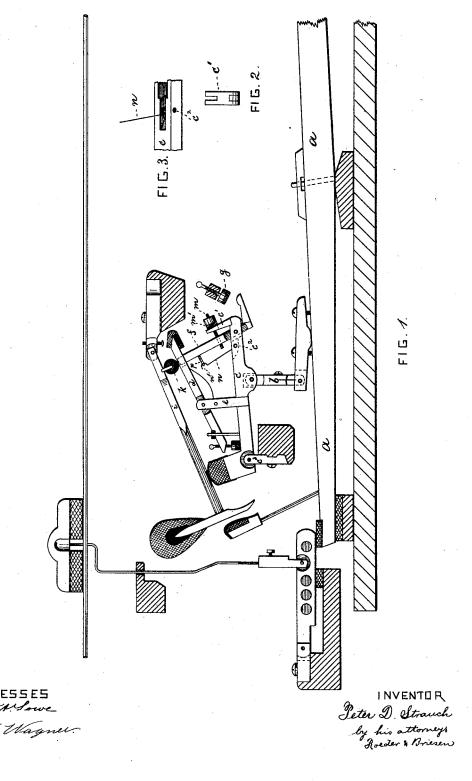
## P. D. STRAUCH. PIANO ACTION.

No. 418,769.

Patented Jan. 7, 1890.



## United States Patent Office.

PETER D. STRAUCH, OF NEW YORK, N. Y.

## PIANO-ACTION.

SPECIFICATION forming part of Letters Patent No. 418,769, dated January 7, 1890.

Application filed April 8, 1889. Serial No. 306,318. (No model.)

To all whom it may concern:

Be it known that I, PETER D. STRAUCH, of New York city, New York, have invented an Improved Piano-Action, of which the following is a specification.

This invention relates to an improved pianoaction, and more particularly to the jack or

fly and the jack-spring.

The object of the invention is to provide 10 means for readily adjusting the position of the jack in relation to the hammer-butt, and for readily adjusting the tension of the spring.

The invention consists in the various features of improvement more fully pointed out

15 in the claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a grand action provided with my improvement. Fig. 2 is a face view of fork c'. Fig. 3 is a perspective view

20 of part of support c.

The action, with the exception of the jack and jack-spring, is of the ordinary construction—that is to say, the key a is connected by the part b with the support c, pivoted to 25 flange  $c^3$ . To the support is secured the whipflange e, to which is pivoted the whip d. The whip is slotted for the admission of the jack f, pivoted to support c. The jack is acted upon by regulating-button g, and in turn acts 30 upon the butt k of the hammer i, beneath which it is placed. In order to change the inclination of the jack-or, in other words, to change the position of the jack in relation to the hammer-butt-I have devised the follow-

35 ing construction. The support c is provided at either side of the jack with an upwardly-extending projection c', slotted on top so as to form a fork,

Fig. 2. Through this fork passes a screw m, which is screwed into the jack f. The screw 40 m carries a button m', which rests against the face of fork c'. It will be seen that if the end of the screw m is grasped by a suitable key and is turned in either direction the jack will be thrown either backward or for- 45 ward. Thus the jack may be delicately adjusted.

n is the jack-spring, which I make of a piece of wire, placed directly back of the jack and substantially parallel thereto. The lower 50 end of the wire is coiled and encircles a pin  $c^2$ , that bridges a slot in support c, Fig. 3. The upper end of the wire is hook-shaped, as at n', and engages a loop p, secured to the jack f. This loop is preferably made from 55 silk braid.

It will be seen that the wire n is readily accessible to a screw-driver or other tool, by which it may be bent more or less. In this way the tension of the spring may be easily 60 changed.

What I claim is—

1. The combination of support c, having extension c', with the jack f and with the screw m and button m', substantially as speci- 65 fied.

2. The combination of slotted support cwith pin  $c^2$ , bridging the slot, and with jack f and loop p, secured thereto, and with the wire spring n, that encircles pin  $c^2$  with one 70 end and engages loop p with the other end, substantially as specified.

PETER D. STRAUCH.

Witnesses:

F. v. Briesen, WM. WAGNER.