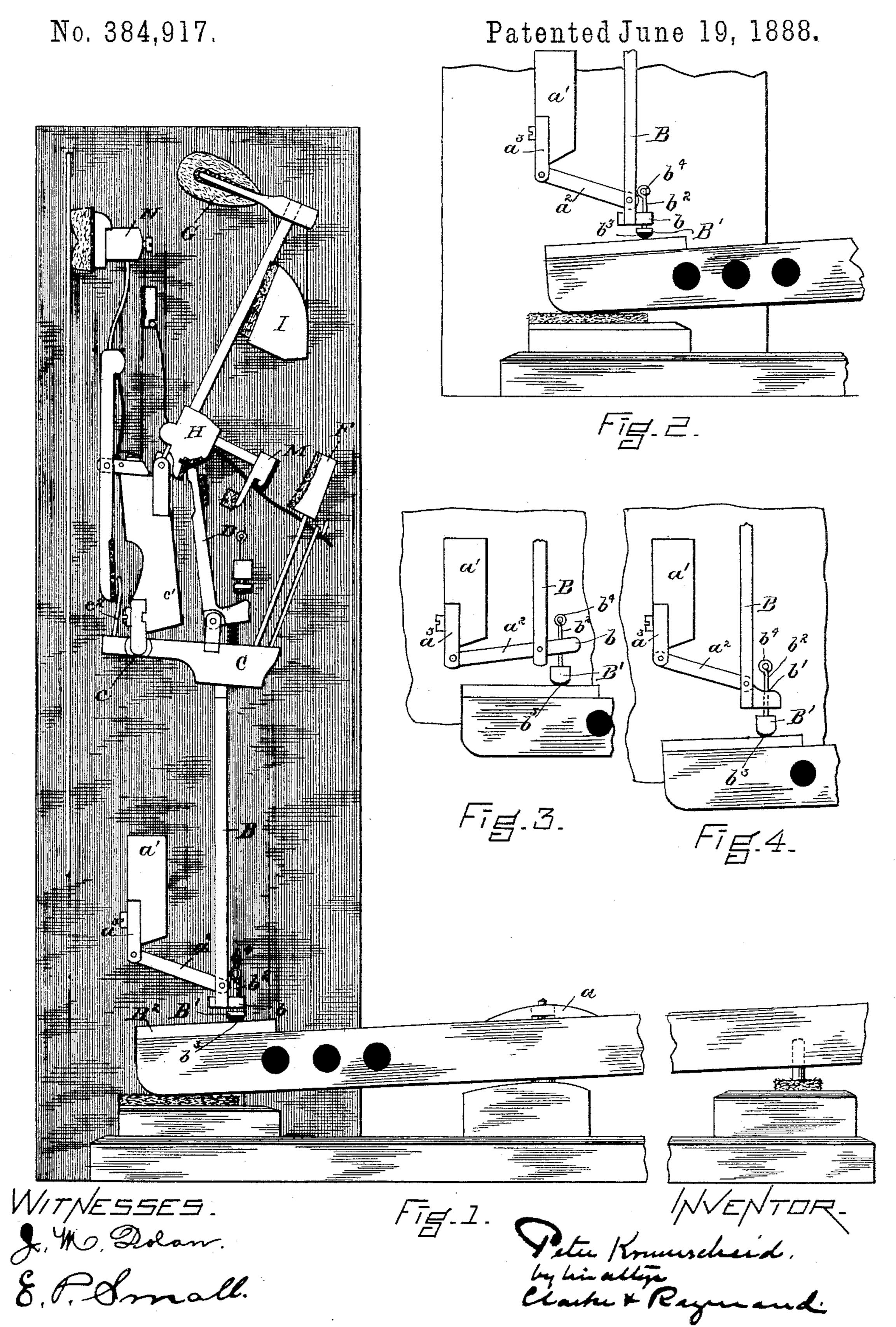
## P. KRUMSCHEID.

## ACTION FOR UPRIGHT PIANOS.



## United States Patent Office.

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## ACTION FOR UPRIGHT PIANOS.

SPECIFICATION forming part of Letters Patent No. 384,917, dated June 19, 1888.

Application filed December 22, 1887. Serial No. 258,640. (No model.)

To all whom it may concern:

Be it known that I, Peter Krumscheid, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Actions for Upright Pianos, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to an action for upright pianos having an adjustable button or bearing-piece attached to or supported by the perpendicular actuating arm or bar, called the "extension" and arranged to bear upon the upper surface of the inner end of the key, and to receive motion therefrom and communicate it to the extension, the object of the device being to provide the action with adjustment or take up for wear in relation to its actuating-key.

In the drawings, Figure 1 is a view in elevation of a piano-action having my invention. Figs. 2, 3, and 4 are detail views illustrating slight modifications.

The invention is represented as applied to an action known as a "repeating" action; but of course I do not confine myself to this particular kind of action.

Referring to the drawings, A represents the key, which is pivoted at a.

B is the vertical arm or bar, called the "extension." It is connected at its upper end to the rocker C and at its lower end to the rail a' by means of the link  $a^2$ , this link being pivoted at one end to a hanger,  $a^3$ , extending from the rail, and at its other end to the extension B. The rocker C is pivoted at c to the rail c', and it carries or supports the jack D, the back-40 check F, and the spoon  $c^2$ .

G is the hammer; H, its knuckle; I, the hammer-rest; M, the bumper, and N the damper.

Attached or secured to the lower end of the extension is a laterally-extending foot or piece, b. This may be formed separately and fast-

ened to the lower end of the extension, as represented in Fig. 2, or it may be formed by an extension of the link b, as represented in Fig. 3, or it may be integral with it. In it is 50 formed a vertical screw-hole, b', for the reception of the screw  $b^2$ . This screw extends through said hole, screws therein, and carries at its lower end a button, B', which preferably is circular in shape, and which is preferably 55 provided with a spherical end,  $b^3$ , of leather, felt, or other equivalent material. The screw also has at its upper end the eye  $b^4$ , or other head by which it may be turned. In the first setting or adjusting of the action, and in the 60 taking up of the action for wear after it has been used, it is very necessary that there should be a certain relation between the end of the extension and the upper surface, B2, of the key, and it will be seen that this relation can be 65 much more easily established and maintained by the button attached to the extension than by causing the end of the extension to be brought into contact with the upper surface of the key in the usual way or in any other manner.

It will be seen that the screw  $b^2$  extends through its holding-piece b, and that the button B' is secured to its lower end to turn with the screw, while the upper part of the screw is above its holding-piece and in a position 75 to be easily reached by a screw-driver or other device for turning it.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

In an action for upright pianos, the extension having the lateral piece b, provided with a hole, b', the screw  $b^2$ , which screws in said hole and has an eye or other head above said piece, and the button B', secured to said 85 screws below said piece b, as and for the purposes described.

PETER KRUMSCHEID.

In presence of—
JACOB KRUMSCHEID,
F. F. RAYMOND, 2d.