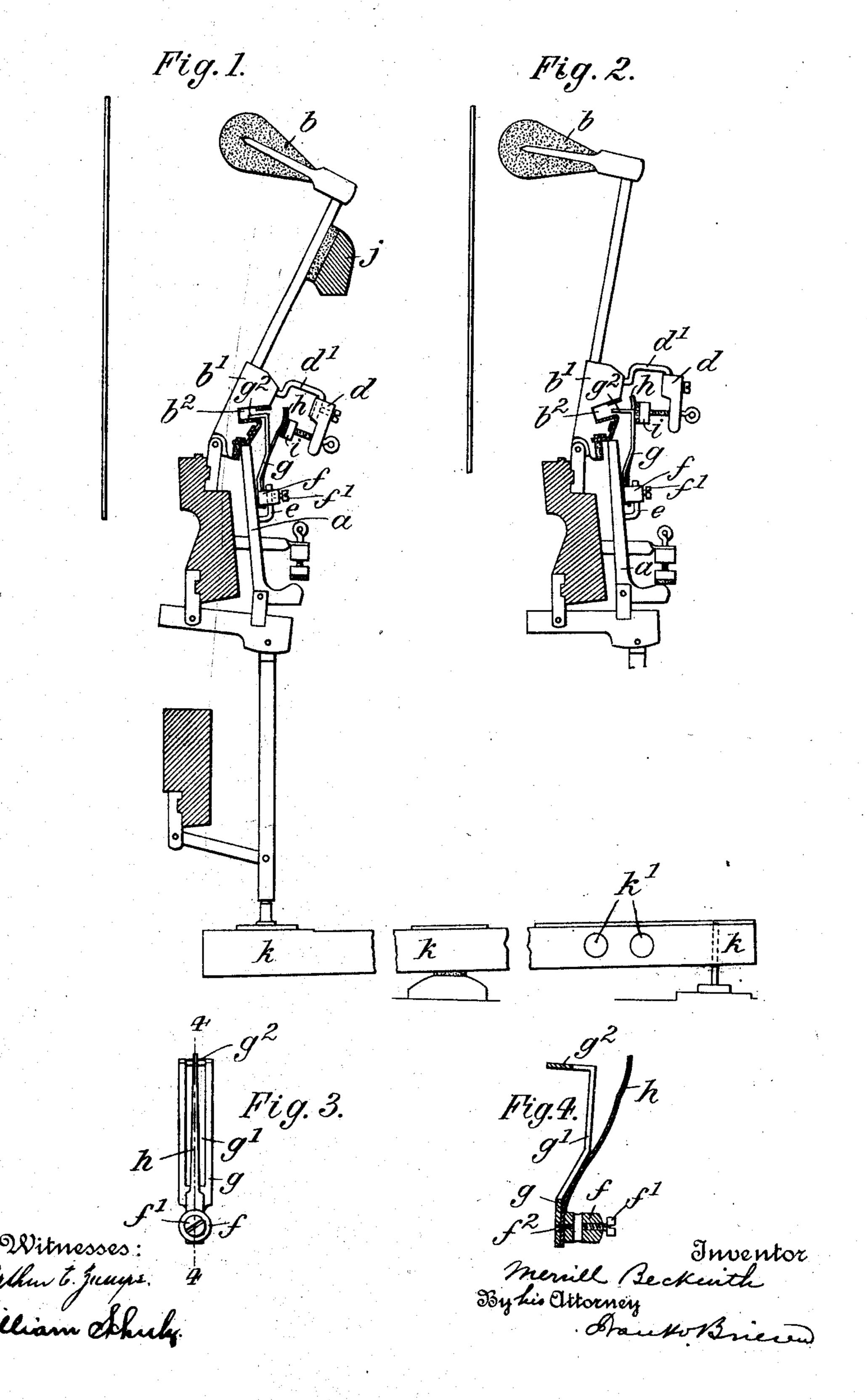
## M. BECKWITH. UPRIGHT PIANO ACTION. APPLICATION FILED JULY 23, 1907.



## UNITED STATES PATENT OFFICE.

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## UPRIGHT-PIANO ACTION.

No. 886,341.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed July 23, 1907. Serial No. 385,194.

To all whom it may concern:

Be it known that I, Merrill Beckwith, a citizen of the United States, residing at New York city, Manhattan, county and State of New York, have invented new and useful Improvements in Upright-Piano Actions, of which the following is a specification.

This invention relates to an upright piano action which insures a quick repeating effect and maintains the hammer butt and jack in their proper relative position, upon a depres-

sion of the soft pedal.

In the accompanying drawing: Figure 1 is a side view of my improved action, showing the normal position of the parts; Fig. 2 is a similar view, of portion of the action, showing the parts after the key has been depressed; Fig. 3 a front view of the hook and spring, and Fig. 4 a section on line 4—4, Fig. 3.

The letter a, represents the jack of an upright piano action; b, is the hammer and b', the hammer-butt, to which is secured the

bumper d, by arm d'.

The jack a, carries a bent pin or post e, embraced by a vertically adjustable sleeve f, which is clamped to the post by set screw f'. To the sleeve f, is attached by screw f<sup>2</sup>, a hook g, and a spring h, in front of the hook. The hook g, is slotted longitudinally as at g', and its beak g<sup>2</sup>, is bent backwards, to be received within an inclined front notch b<sup>2</sup>, of butt b'. The spring h, is placed opposite slot g', so that it may enter the same. The upper free end of the spring extends forward to normally diverge from the hook g, (Fig. 1), and to engage a regulating button i, of bumper d.

Upon a depression of the key k, the hook g, is thrown forward to clear butt b', while the spring h, is compressed, (Fig. 2). When the key is now partly or completely released, the spring h, will throw the jack back into reengagement with the butt, which is meanwhile held up by the spring. At the same time the hook g, will be carried backwards to

reënter slot  $b^2$ , and then the hook by exerting a downward pressure upon the butt, will swing the hammer forward, i.e., towards or against the hammer rail j. In this way a superior repeating effect is obtained. It will 50 be observed that if the hammer is raised by the pianissimo pedal, (not shown), its butt will by the hook g, pull the jack and lower part of action up with it, while the key k, weighted as at k', will follow the movement 55 of the action. Thus the relative position of all the parts will be maintained. By means of the sleeve f, the distance to which the hook projects above the jack, may be readily adjusted.

Ï claim:

1. An upright piano action provided with a jack, a hook and spring, means for securing the hook and spring to the jack, a hammer-butt engaged by the hook, and a bumper engaged by the spring, substantially as specified.

2. An upright piano action provided with a jack, a slotted hook, a spring adapted to play in the hook-slot, means for securing the 70 hook and spring to the jack a hammer-butt engaged by the hook, and a bumper engaged by the spring, substantially as specified.

3. An upright piano action provided with a jack, a pin secured thereto, a sleeve adjust- 75 ably mounted upon the pin, and a hook and spring secured to the sleeve, substantially as

specified.

4. An upright piano action provided with a jack, a hook and spring, means for securing 80 the hook and spring to the jack, a notched hammer-buttengaged by the hook, a bumper, and a regulating button on the bumper engaged by the spring, substantially as specified.

Signed by me at New York city, (Man- 85 hattan,) N. Y., this 22nd day of July, 1907.

Witnesses:

GEO. W. McCarthy, L. K. Weiss.