

No. 758,894.

PATENTED MAY 3, 1904.

E. BORNHOEFT.

PIANISSIMO DEVICE FOR PIANO ACTIONS.

APPLICATION FILED MAR. 9, 1904.

NO MODEL.

Fig. 1.

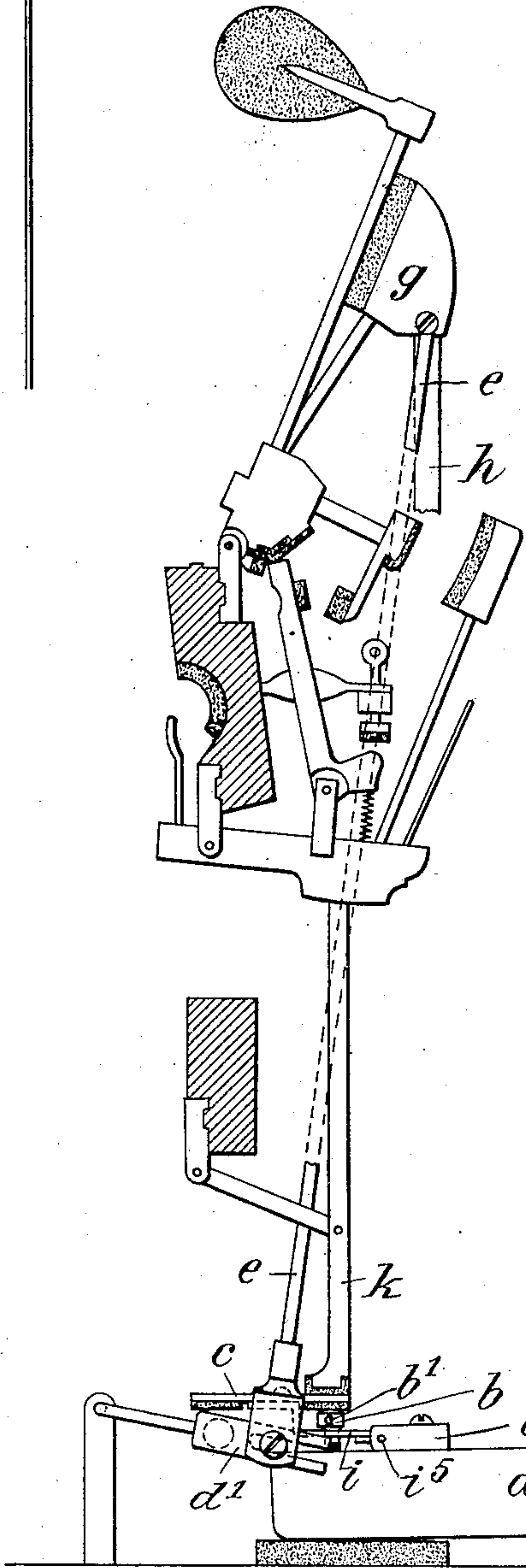


Fig. 2.

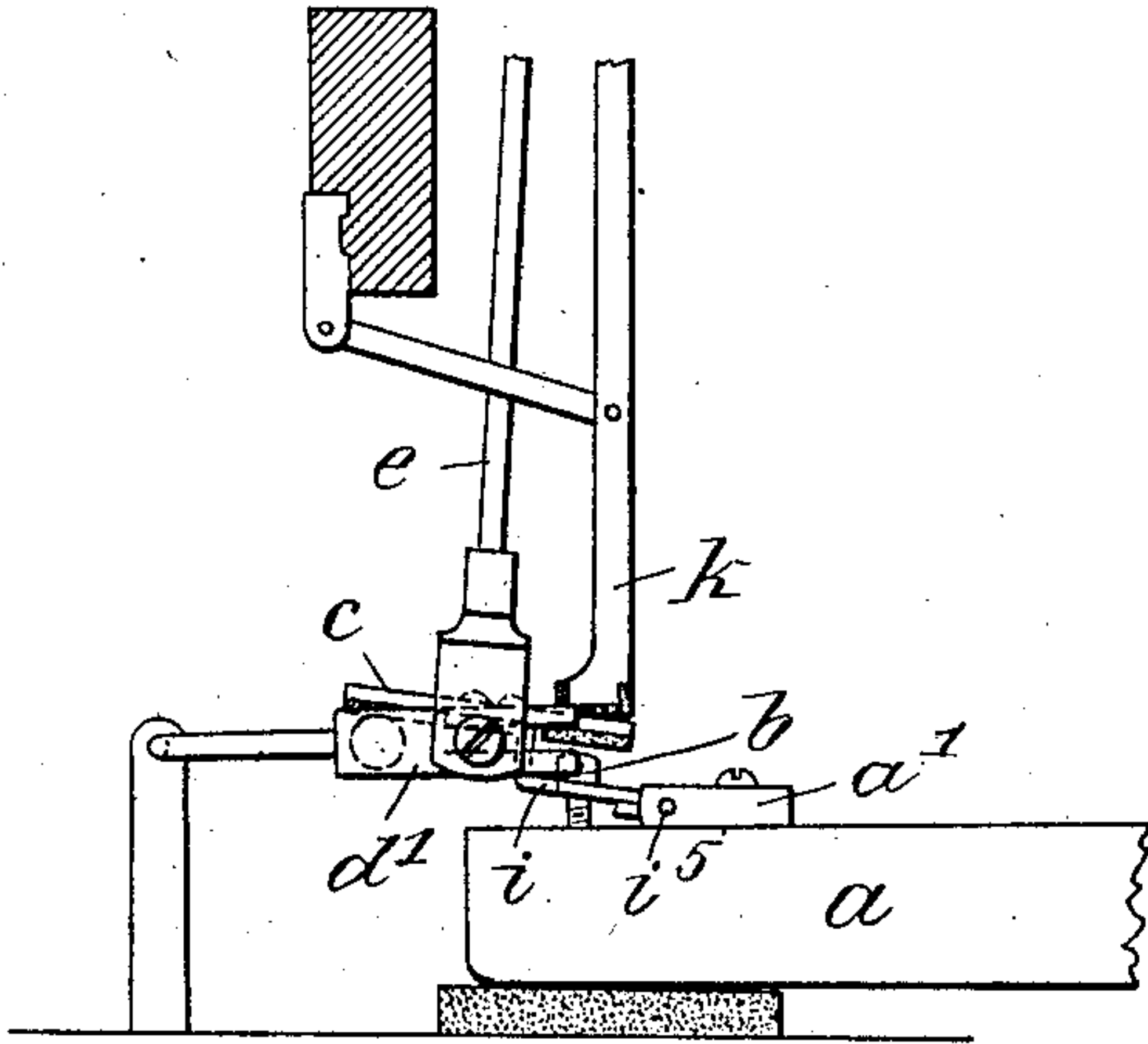


Fig. 3.

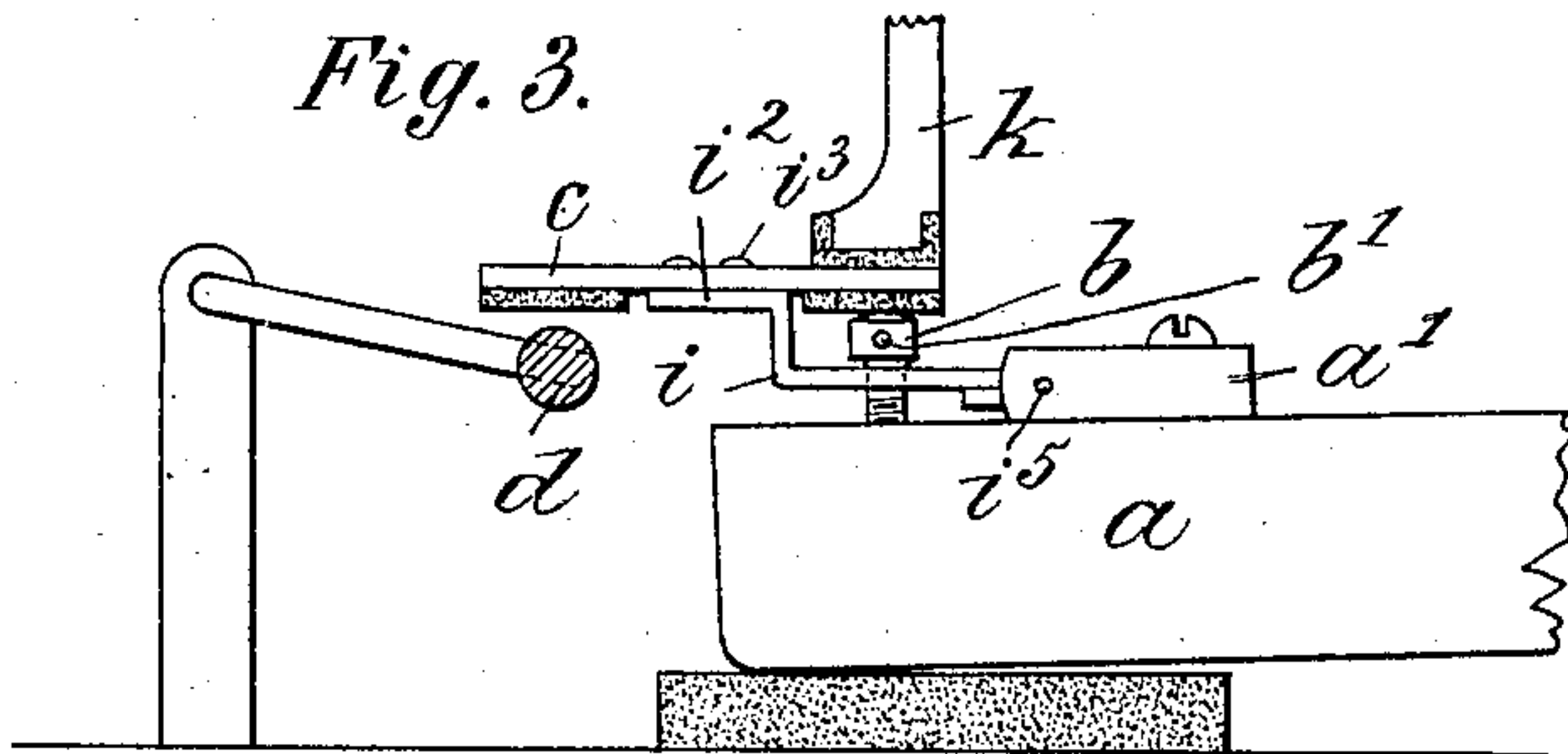


Fig. 4.

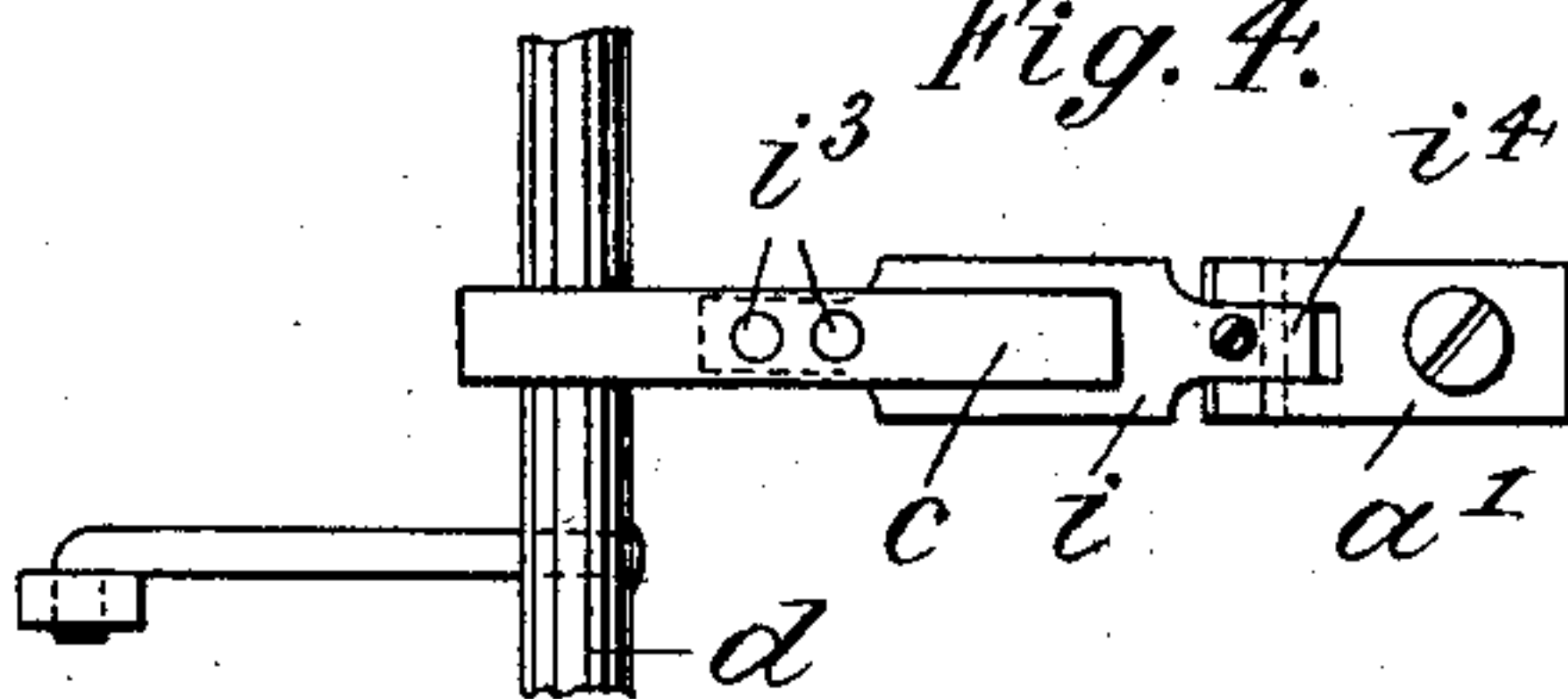
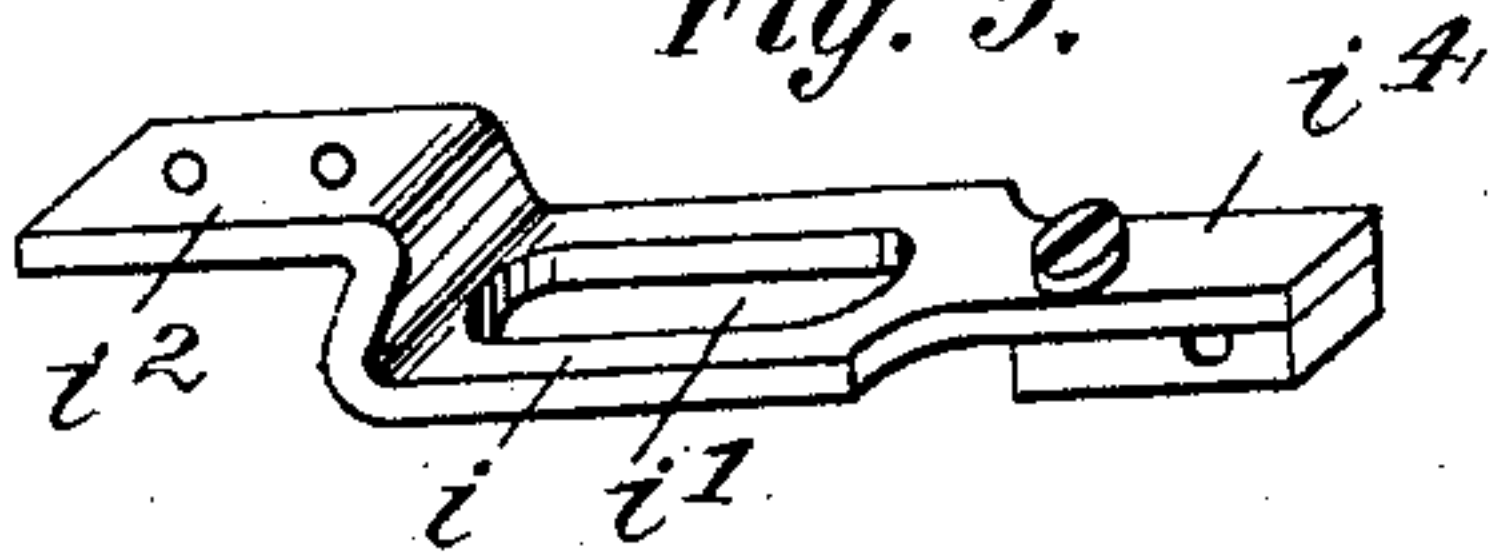


Fig. 5.



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UNITED STATES PATENT OFFICE.

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PIANISSIMO DEVICE FOR PIANO-ACTIONS.

SPECIFICATION forming part of Letters Patent No. 758,894, dated May 3, 1904.

Application filed March 9, 1904. Serial No. 197,253. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BORNHOEFT, a citizen of the United States, residing at New York city, (Bronx,) county and State of New York, have invented new and useful Improvements in Pianissimo Devices for Piano - Actions, of which the following is a specification.

This invention relates to a pianissimo device for piano-actions which is so constructed that the capstan is fully exposed and may be readily adjusted from the front of the action.

In the accompanying drawings, Figure 1 is a side view of an upright-piano action embodying my invention and showing the parts in their normal position. Fig. 2 is a side view of the lower portion of the action, showing the position of the parts when the soft pedal is depressed; Fig. 3, a side view of the lower portion of the action, showing the parts in their normal position and with some of the elements omitted. Fig. 4 is a plan of the frame and plate, and Fig. 5 an enlarged perspective view of the frame.

The letter *a* represents the key of a piano-action, and *b* is the capstan having spanner-holes *b'*. Upon the capstan *b* rests the forward end of a plate *c*, the rear end of which is adapted to be engaged by a transverse rod *d*. The rod *d* has an arm *d'*, which by bar *e* is connected to the hammer-rail *g*. This rail is operated from the soft pedal (not shown) by a lifter *h*.

In order to pivotally connect the plate *c* to the key *a*, I provide a frame *i*, which has a longitudinal slot *i'*, adapted to embrace the capstan *b*. At its rear end the frame *i* is turned first upward and then backward to form a lug *i''*, which is riveted to plate *c* back of capstan *b*, as at *i'''*. At its front end the frame *i* is not turned up, but provided with a hori-

zontal extension *i''*, which is pivoted to a block *a'* of key *a* at *i'''*. It will be seen that by the frame *i* the plate *c* is pivotally connected to the key *a* in such a manner that the head of the capstan *b* is fully exposed at the front of the action. Thus the capstan may be readily adjusted by means of a suitable tool introduced between plate *c* and frame *i* without removing the action from the case.

The operation is as follows: Normally the plate *c* rests upon the capstan *b* and motion is transmitted from plate *c* directly to the abstract *k*. Upon a depression of the soft pedal the hammer-rail *g* is swung backward to tilt the hammer toward the string and to simultaneously raise the transverse rod *d* by bar *e*, Fig. 2. The rod *d* will thus tilt plate *c* and will consequently raise abstract *k* so that the lower portion of the action is elevated to accord to the new position of the hammer-butt.

The invention is applicable to grand as well as to upright actions.

What I claim is—

1. A pianissimo device for piano-actions, composed of a key, a capstan, a plate supported thereon, and a bent slotted frame which embraces the capstan and pivotally connects the plate to the key, substantially as specified.

2. In a pianissimo device for piano-actions, a key, a capstan, and a plate supported thereon, combined with a slotted frame pivoted at its front end to the key and having an upwardly-bent rear end which is secured to the plate back of the capstan, substantially as specified.

Signed by me at New York city, (Manhattan,) New York, this 8th day of March, 1904.

EDWARD BORNHOEFT.

Witnesses:

DAVID H. SCHMIDT,
WILLIAM SCHULZ.