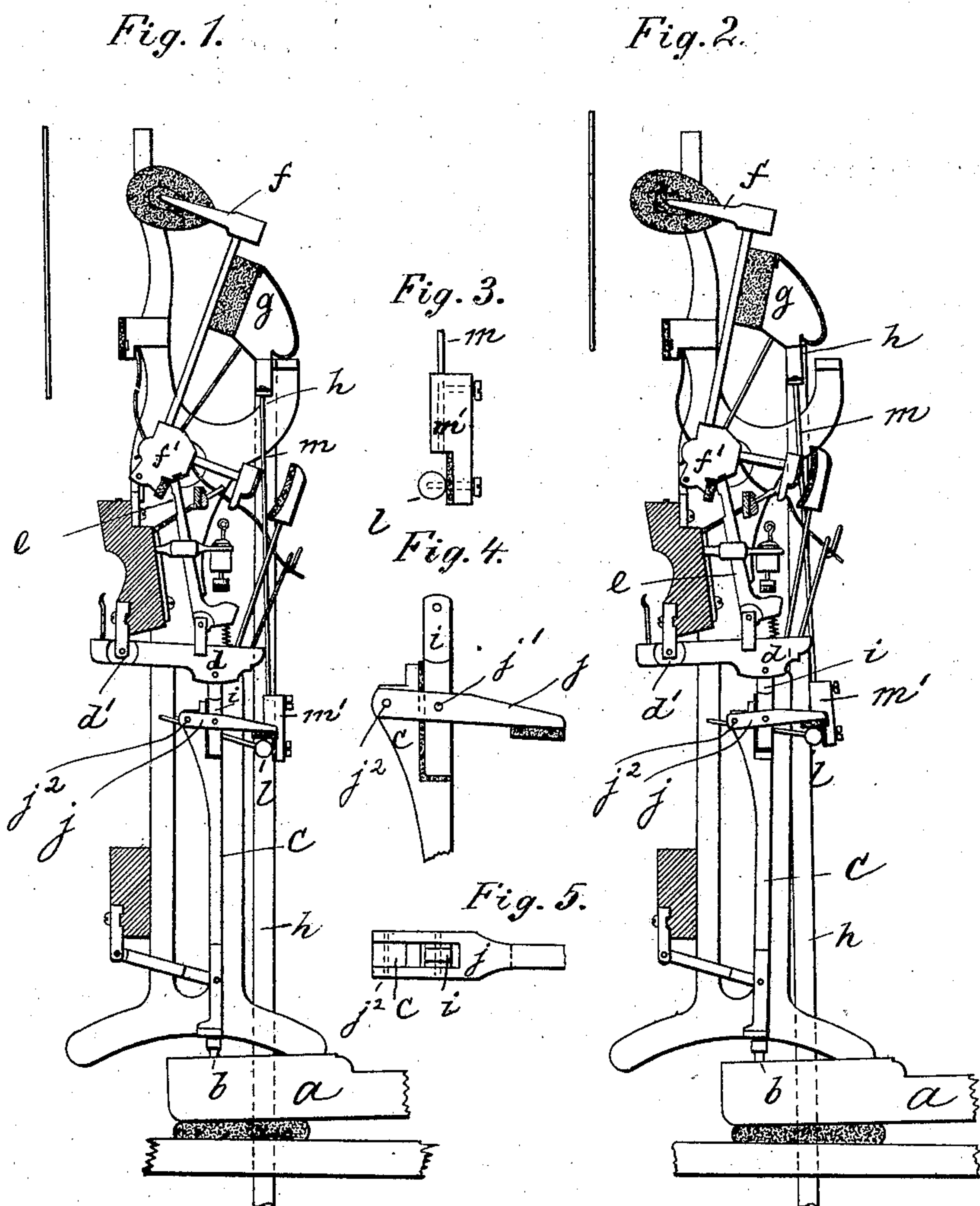


P. D. STRAUCH.
UPRIGHT PIANO ACTION.
(Application filed Dec. 30, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

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

UPRIGHT-PIANO ACTION.

SPECIFICATION forming part of Letters Patent No. 694,118, dated February 25, 1902.

Application filed December 30, 1901. Serial No. 87,662. (No model.)

To all whom it may concern:

Be it known that I, PETER D. STRAUCH, a citizen of the United States, and a resident of New York city, county and State of New York, have invented certain new and useful Improvements in Upright-Piano Actions, of which the following is a specification.

This invention relates to improved means for increasing the reach of an upright-piano action upon the depression of the soft pedal to avoid the objectionable gap between the jack and the hammer-butt.

In the accompanying drawings, Figure 1 is a side view of an upright-piano action embodying my invention and showing the normal position of the parts. Fig. 2 is a similar view showing the position of the parts with the soft pedal depressed. Fig. 3 is a detail of the clamp *m'*; Fig. 4, a detail of the upper part of the abstract, and Fig. 5 a top view of Fig. 4.

The letter *a* represents the key of an upright-piano action. *b* is the capstan, *c* the abstract, *d* the wippen, *e* the jack, and *f* the hammer, all as usual.

When the hammer-rail *g* is raised by means of lifter *h* upon the depression of the soft pedal, the hammer-butt *f'* is correspondingly raised, and therefore unless the reach of the action is increased an objectionable gap is formed between the jack and the hammer-butt. In order to extend the reach of the action, I interpose between the upper end of the abstract *c* and the wippen *d* a vertically-movable slide *i*, that projects above the abstract. This slide is free to move in a corresponding slot or mortise at the upper end of the abstract and is suitably cushioned on its side and bottom. At its top the slide is pivoted to the wippen *d*, so that upon being raised it will swing the wippen upon its fulcrum *d'*, and thus raise the jack. The slide *i* is connected by pivot *j'* to a lever *j*, pivoted at its rear end

to a reinforcement of abstract *c* at *j*². The forward ends of the several levers *j* are arranged above a horizontal rod *l*, extending across the action and connected to the hammer-rail *g* by means of the hanger *m* and clamp *m'*. When the soft pedal is depressed, the rod *l* is swung up, together with the action-rail *g*, to tilt all the levers *j*, and thereby raise the slides *i* in exact proportion to the raising of the hammers. Thus the reach of the action is extended in the manner desired.

It will be observed that the slide *i* is free at one end only, while its other end is pivoted to the wippen. This avoids the necessity for cushioning the upper end of the slide and insures a noiseless operation of the parts.

What I claim is—

1. In an upright-piano action, the combination of an abstract and a wippen, with a slide interposed between the same, and with means for raising the slide upon the depression of the soft pedal, substantially as specified.

2. In an upright-piano action, the combination of an abstract and a wippen, with a slide interposed between the same and pivoted to the wippen, and with means for raising the slide upon the depression of the soft pedal, substantially as specified.

3. In an upright-piano action, the combination of an abstract notched at its upper end, with an upwardly-movable slide engaging the notched end of the abstract, a wippen pivoted to the slide, and means for raising the slide upon the depression of the soft pedal, substantially as specified.

Signed by me at New York city, county and State of New York, this 28th day of December, 1901.

PETER D. STRAUCH.

Witnesses:

WILLIAM SCHULZ,
F. V. BRIESEN.