

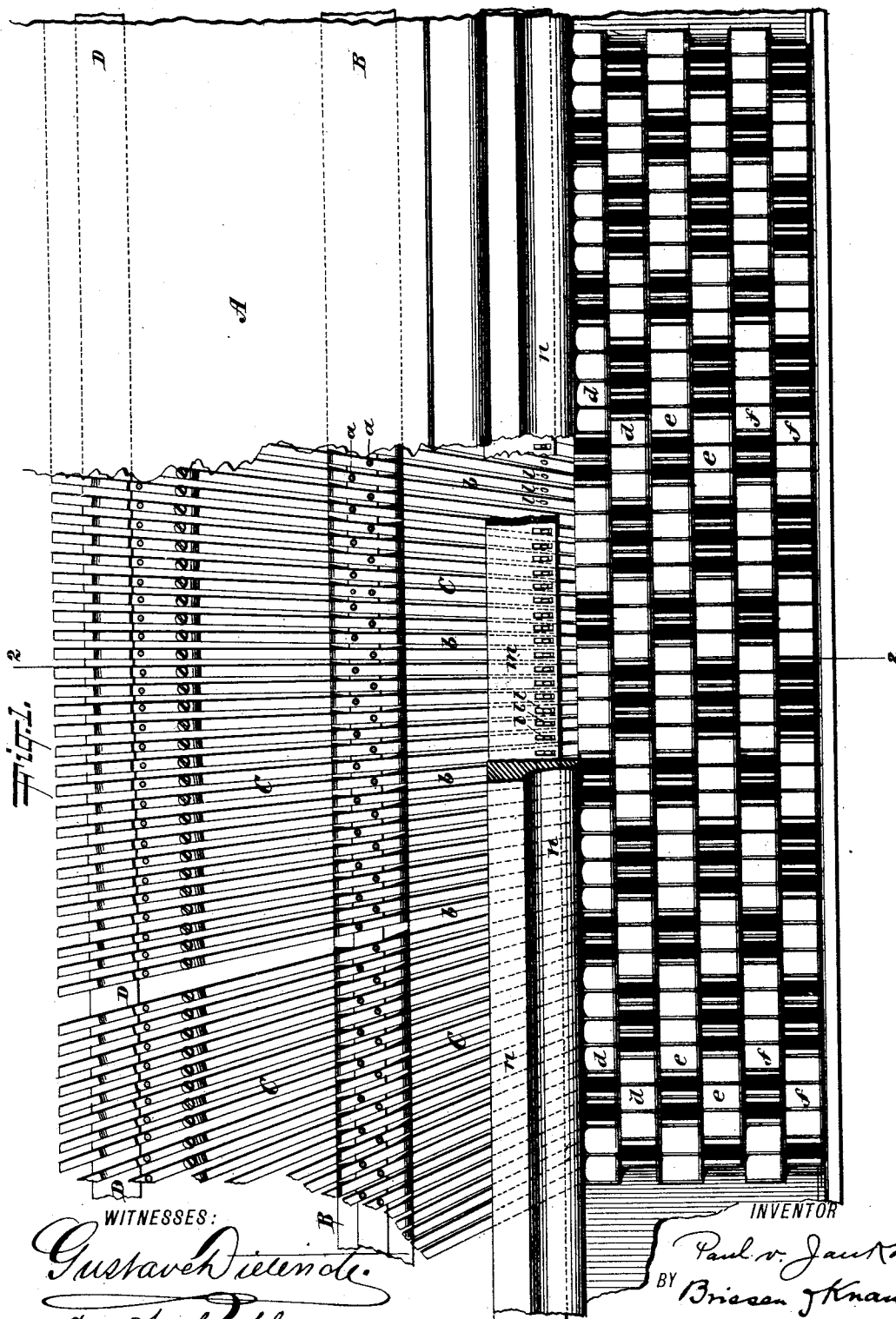
(No Model.)

3 Sheets—Sheet 1.

P. v. JANKÓ.
KEYBOARD FOR MUSICAL INSTRUMENTS.

No. 474,016.

Patented May 3, 1892.



(No Model.)

3 Sheets—Sheet 2.

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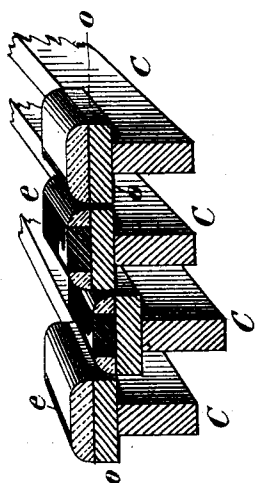


Fig. 3.

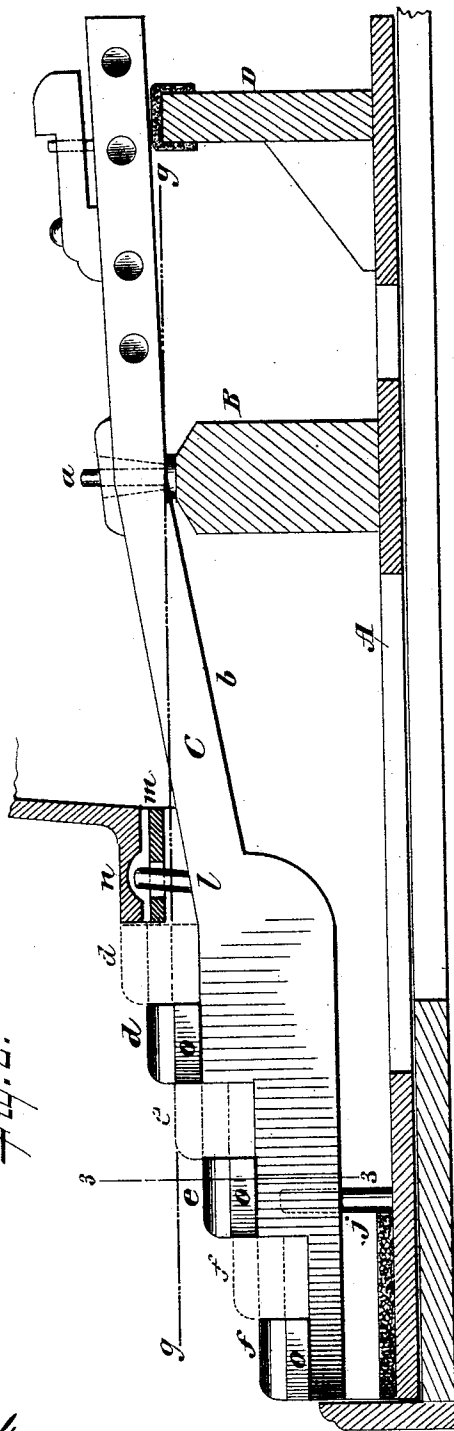


Fig. 2.

WITNESSES:

Gustav Wittmich
L. M. Wackschlager

INVENTOR

Paul v. Jankó
BY *Briener & Knaut*
his ATTORNEYS.

(No Model.)

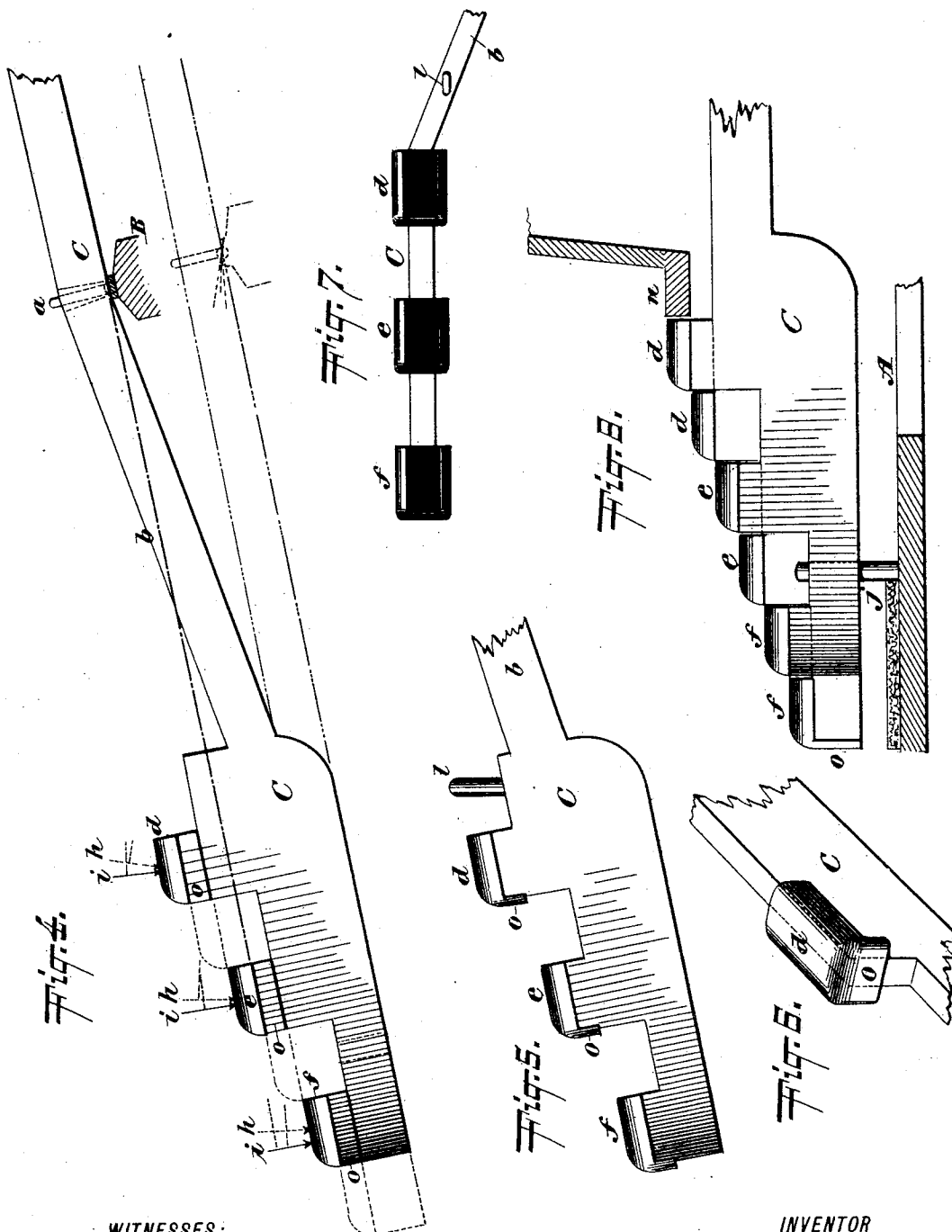
3 Sheets—Sheet 3.

P. V. JANKÓ.

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WITNESSES:

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Gustave Dietrich.
L. M. Hachschlager.

INVENTOR

Paul v. Jankó
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UNITED STATES PATENT OFFICE.

PAUL V. JANKÓ, OF BUDA-PESTH, AUSTRIA-HUNGARY.

KEYBOARD FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 474,016, dated May 3, 1892.

Application filed May 18, 1891. Serial No. 393,086. (No model.)

To all whom it may concern:

Be it known that I, PAUL VON JANKÓ, a resident of Buda-Pesth, Austria-Hungary, have invented an Improved Keyboard for Musical Instruments, of which the following is a specification.

This invention relates to improvements on the keyboard which is described in my patent, No. 360,255, of March 29, 1887; and it consists of the various novel details and arrangements of parts that are hereinafter more fully specified and claimed.

Reference is made to the accompanying drawings, in which--

Figure 1 represents a plan or top view of my improved keyboard, parts of which are broken away. Fig. 2 is a cross-section of the keyboard on the line 2 2, Fig. 1. Fig. 3 is a longitudinal section on the line 3 3, Fig. 2. Figs. 4 and 5 represent side views of modified forms of the key-lever. Fig. 6 is a perspective view of a portion of the key-lever, showing one of the touch-plates. Fig. 7 is a top view of the outer end of the key-lever. Fig. 8 is a side view of a key-lever, the adjoining parts being represented in section.

The letter A represents the main frame, in which my improved keyboard is supported. The same is by preference made in the form of a drawer, which may be withdrawn from the instrument, together with all the keys, so that it could be substituted for or by a keyboard of other construction. This drawer or frame A carries a bridge B, on which the key-levers C are pivotally supported, preferably by means of upwardly-projecting pins *a*, which project from the bridge B through apertures in the key-levers. The drawer or frame A also supports a rest D, on which the weighted inner ends of the key-levers are supported in their normal position. The shanks of the key-levers C in the preferred form extend downwardly from the pivotal support on the bridge B toward the front. This is clearly indicated by the portion *b* of the key-lever which is represented in Fig. 2. The outer end of the key-lever is step-shaped or otherwise constructed to support the three touch-plates *d e f* at varying heights. It will be seen by reference to the line *g g* in Fig. 2, which is drawn on the plane of the pivotal support on the key-lever, that said pivotal support is at a height above the plane

of the lower touch-plate *f*. I find this location of the pivotal support to be an important advantage, because it enables the player to move the key-lever downward by a substantially vertical stroke. Fig. 4 illustrates in principle what I here mean to express. It shows in dotted lines a lower pivotal support such as my former patent would lead to and in full lines the elevated pivotal support, and it shows by the dotted arrows *h* that the player would have to draw his fingers downward and forward in playing the instrument with the lowered pivotal support, while the arrows *i* in the same figure indicate that with the elevated pivotal support he can move the fingers in a substantially vertical line while playing.

The front or outer portions of the key-levers are in their movements guided on the usual guide-pins *j*; but with an instrument having several touch-plates to each lever I find it necessary to supply further guidance to prevent wobbling of the keys. To this end I place upon the upper edge of each key-lever another guide-pin *l*, which passes through apertures in a perforated stationary board *m*, (see also Fig. 1) and which greatly assists in furnishing proper guidance to the key-levers and in avoiding lateral play thereof. This perforated board *m* should, as Fig. 2 indicates, be covered by a fixed rail *n*. Now this fixed rail *n* is substantially horizontal, as indicated in Fig. 2, (it is also represented in Fig. 8,) and its upper face is on a substantial level with the upper faces of the uppermost touch-plates *d* of the key board. This is a great advantage over a rail which extends vertically against the rear faces of the uppermost touch-plates and which therefore would be liable to cramp the finger ends of the player and to be struck by them, causing more or less pain and inconvenience; but by placing the rail *n* on a level substantially with the level of the upper touch-plates all inconvenience of that character is avoided. I also find that a key-lever having the general step-shaped form and the series of touch-plates placed alongside of another key-lever having the touch-plates breaking joints with those of the first is liable to hurt and pinch the fingers, as the depressed touch-plate entering below the level of the undepressed touch-plate above it will in raising catch the finger below the undepressed touch-

plate. To avoid this, I have provided the touch-plates with downwardly-projecting aprons or shields *o*, which have the full width of the touch-plates and which extend downwardly so far that the touch-plates beneath and in front of them in their downward motion will never get below these aprons or shields *o*. Fig. 6 most clearly indicates this arrangement of shields or aprons; but in lieu of these shields or aprons hanging only over the front of the step of the key-lever they may be extended back, as in Figs. 2 and 3, so as to reach wholly under the respective touch-plates.

Having now described my invention, what I claim is—

1. The key-lever *C*, having series of touch-plates *d e f* at different heights, combined with a pivotal support *B*, all arranged so that the pivotal support of the key-lever shall be lower than the plane of the upper touch-plate of said key-lever, substantially as herein shown and described.

2. The frame or drawer *A*, having the bridge *B*, combined with key-levers *C C*, said key-levers having touch-plates *d e f* at different elevations, the top of the bridge *B* being higher than the plane of the lower touch-plate *f* and lower than the plane of the upper touch-plate *d*, substantially as and for the purpose herein shown and described.

3. The key-lever *C*, having step-shaped front or outer portion and series of touch-plates *d e f* at varying elevations, and provided with the rearwardly and upwardly in-

clining shank *b*, so arranged that the pivot of said key-lever may be higher than the plane of the lower touch-plate *f*, substantially as and for the purpose specified.

4. The key-lever *C*, having series of touch-plates *d e f* at varying elevations and pivoted to a fixed support, all arranged so that each touch-plate will have its front portion above the plane of the pivotal support, substantially as herein shown and described.

5. The key-lever *C*, having series of touch-plates *d e f* at varying elevations, each touch-plate having a downwardly-extending apron or shield *o*, substantially as and for the purpose specified.

6. The key-lever *C*, having touch-plates *d e f* at varying degrees of elevation, and combined with the fixed guide-pin *j*, and with the movable guide-pin *l* and guide-board *m*, substantially as and for the purpose specified.

7. In a keyboard having series of key-levers *C* and step-shaped touch-plates *d e f*, arranged substantially as described, the combination of said key-levers with the rear rail *n*, whose upper surface is substantially on a level with the uppermost row of touch-plates *d*, substantially as and for the purpose herein shown and described.

The foregoing specification of my improved keyboard signed by me this 1st day of May, 1891.

PAUL v. JANKÓ.

Witnesses:

WINTHORNE SCRUPLIUS,
EMIL K. WINKLER.