(No Model.) 2 Sheets—Sheet 1.

J. KITZ.

MACHINE FOR SMOOTHING PIANO KEYS.

No. 272,140. Patented Feb. 13, 1883.

Fig. I.

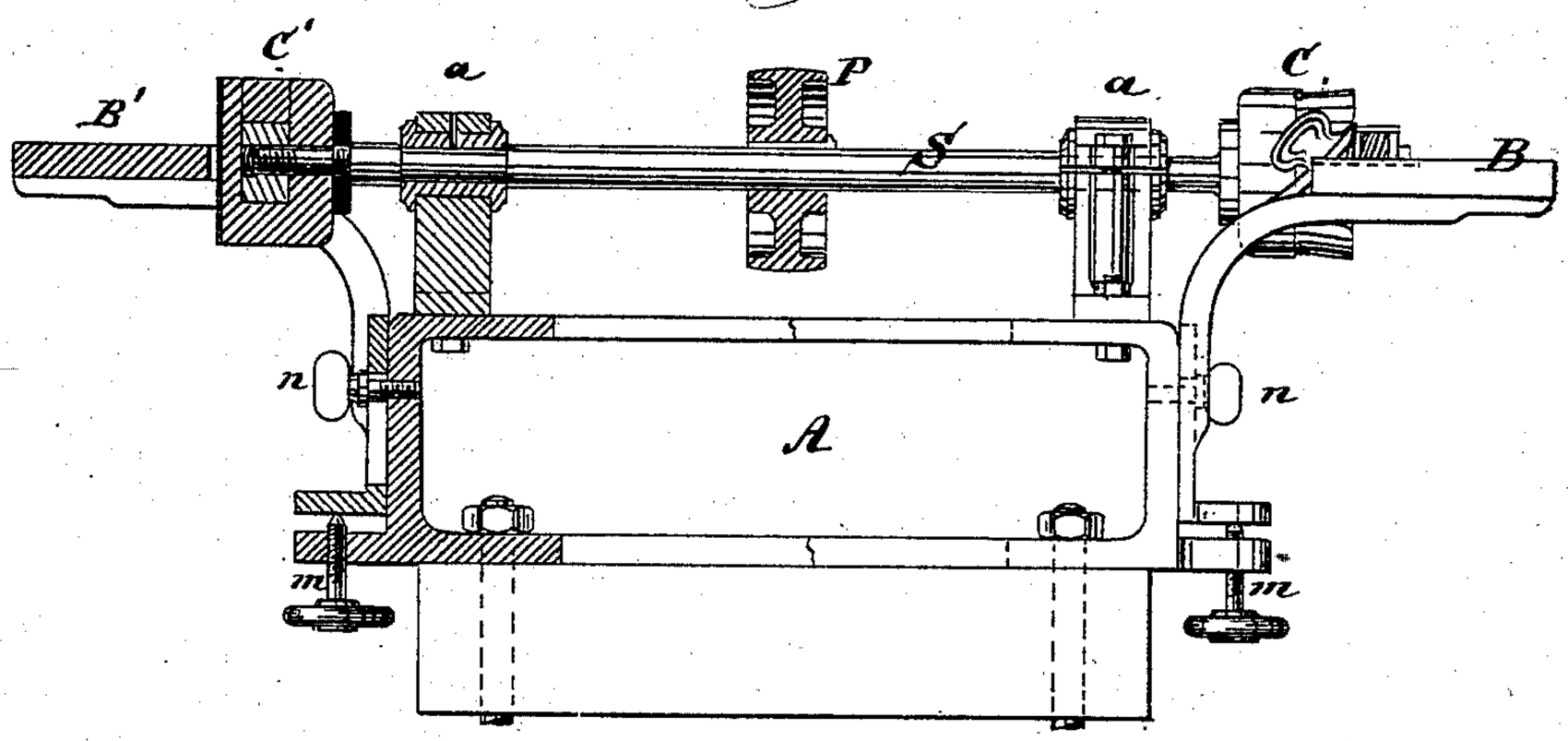
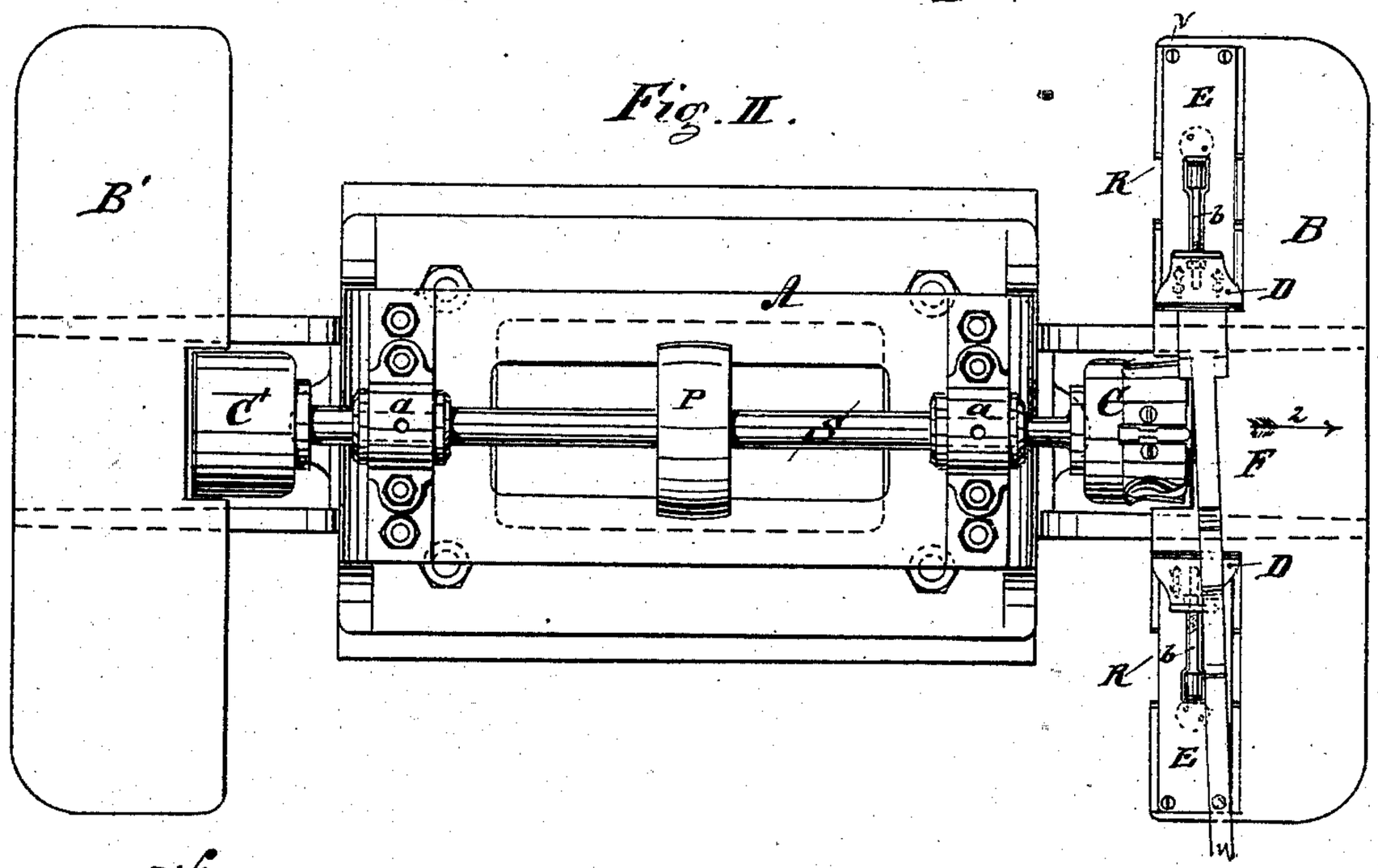


Fig. II.



Witnesses.
Richard F. Eagle
J. Lemmy Smith

Inventor
Jacob Kitz
per Henry E. Rowley
Attorney.

(No Model.)

2 Sheets—Sheet 2.

J. KITZ.

MACHINE FOR SMOOTHING PIANO KEYS.

No. 272,140. Patented Feb. 13, 1883.

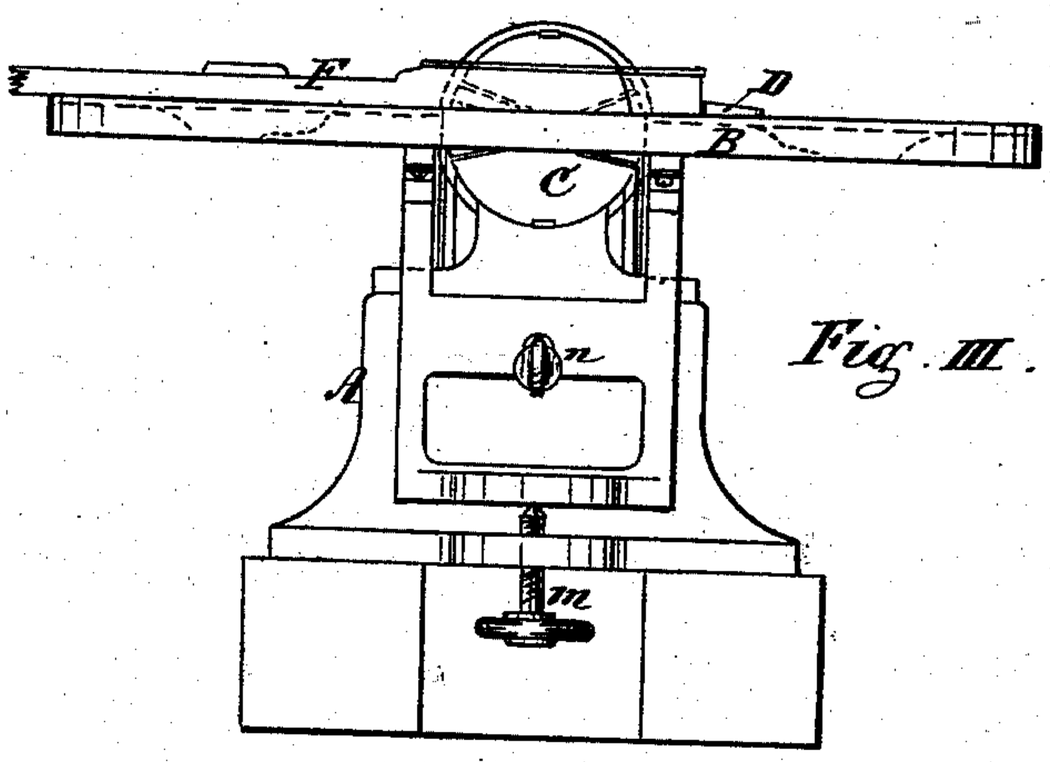


Fig. III.

Fig. II.

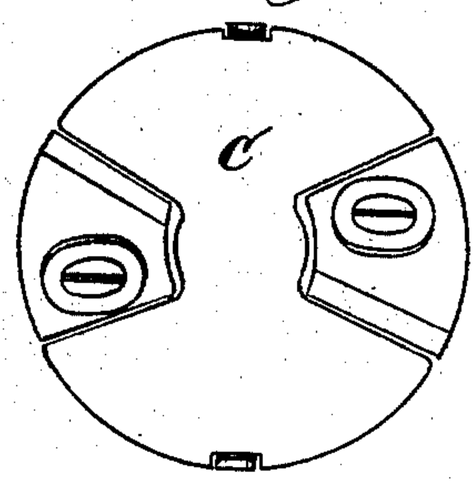


Fig. V.

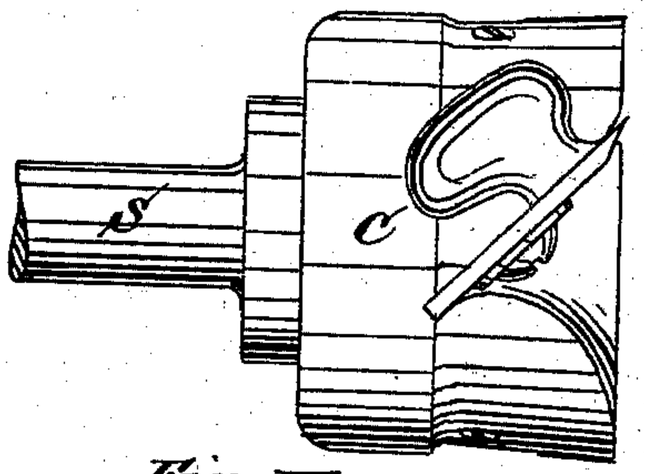
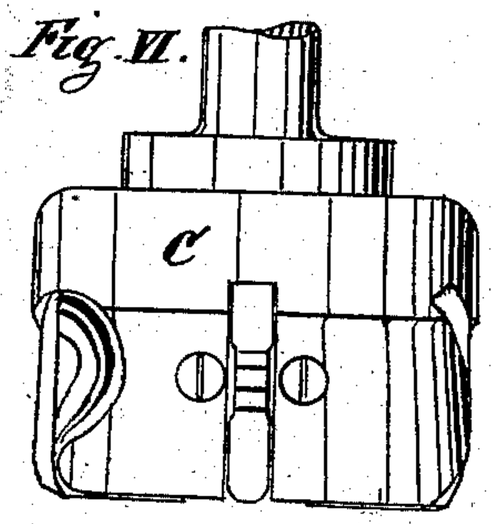


Fig. VII.

Fig. VI.



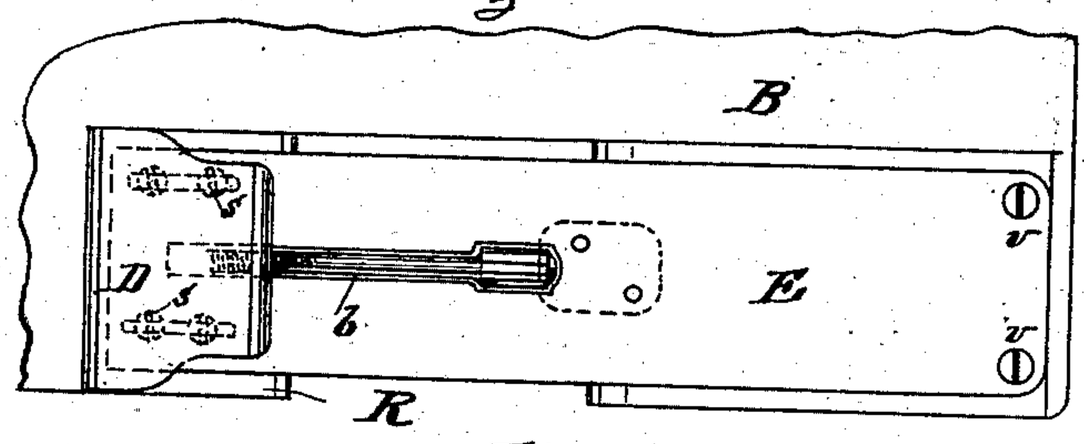
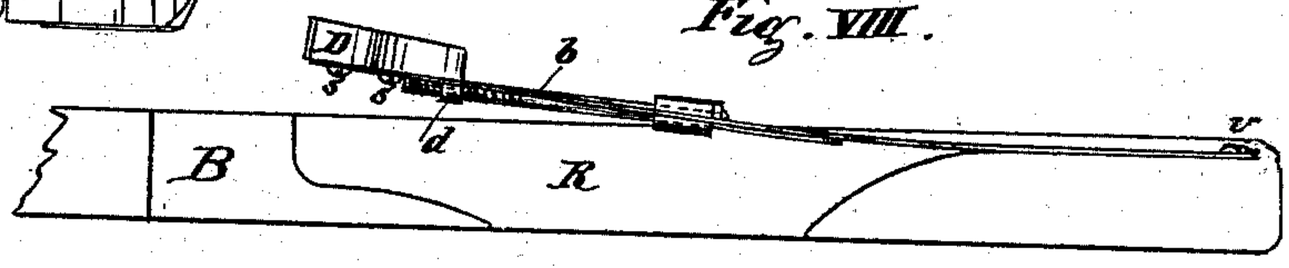


Fig. VIII.



Witnesses.
Richard F. Eagle.
J. Pennybacker.

Inventor.
Jacob Kitz
per Henry E. Crowder
Attorney

UNITED STATES PATENT OFFICE.

JACOB KITZ, OF NEUSCHLEUSSIG, NEAR LEIPSIC, GERMANY.

MACHINE FOR SMOOTHING PIANO-KEYS.

SPECIFICATION forming part of Letters Patent No. 272,140, dated February 13, 1883.

Application filed July 1, 1882. (No model.) Patented in Germany October 20, 1880, No. 13,748.

To all whom it may concern:

Be it known that I, JACOB KITZ, a citizen of the United States, at present residing at Neuschleussig, near Leipsic, Germany, have invented a new and Improved Machine for Smoothing Piano-Keys, of which the following is a specification.

The nature of my invention consists in the arrangement of a machine for shaping and smoothing piano-keys.

In the accompanying drawings, Figure I represents an elevation of the machine, partly in section. Fig. II is a top view of the same. Fig. III is an end view. The other views are details at an enlarged scale, referred to in the specification.

The machine consists of a suitable frame, A, having pillow-blocks *a a*, supporting the shaft S, which is provided with a suitable pulley, P, to give motion to said shaft S. At the ends of the shaft S the heads C C′, for the cutting or shaping tools and for the polishing-tools, are attached. At each end of the frame A tables B and B′ are attached, fastened by means of the screws *n n*, and capable of being regulated by means of the screws *m m* at any desired height in relation with the tools. The table B′, at the side of the head C′, is straight, as on that side the piano-keys are only polished. The table B, at the side of the cutting and shaping tool head C, is provided with rest-pieces D, against which the end of the piano-key is placed during the operation for the purpose of guiding the same and insuring an equality of work. These rest-pieces D, which are on each side of the head C to enable the shaping of the keys on both sides, are attached to elastic plate E, the extreme end of which is attached through screws *v* to the table B. The rest D is attached to this elastic plate E by means of a central screw-bolt, *b*, working in the projecting heel *d* of the rest D, and by screw-bolts *s s*, working through suitable slots, by which arrangement a horizontal and vertical regulation of the rest D is obtained. (See Figs. VII and VIII.) The table B has suitable recesses, R, into which the plate E and rest D can be depressed vertically. The surface of the table B has in the direction of the arrow 2, Fig. II, a slight inclination downward for the purpose of shaping the piano-key slightly "conish."

In Fig. II, F represents the piano-key resting against one of the rests D and depressing the other rest. When the other side of the key is to be shaped the key rests and is guided by the now depressed rest, while the other rest will be depressed.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with table B, having recesses R, the elastic plates E, each being secured to said table at one end, and the rest-pieces D, attached to the free ends of said plates and arranged on opposite sides of the cutter-head above said recesses, substantially as and for the purpose set forth.

2. In combination with table B, having recesses R, the elastic plates E, each being secured to said table at one end, the rest-pieces D, attached to the free ends of said plates and having screw-tapped hubs in their outer sides, and the horizontal adjusting-screws *b*, engaging with said hubs, for the purpose set forth.

JACOB KITZ.

Witnesses:
FREIL BOSSENER,
HERM. LEITERT.