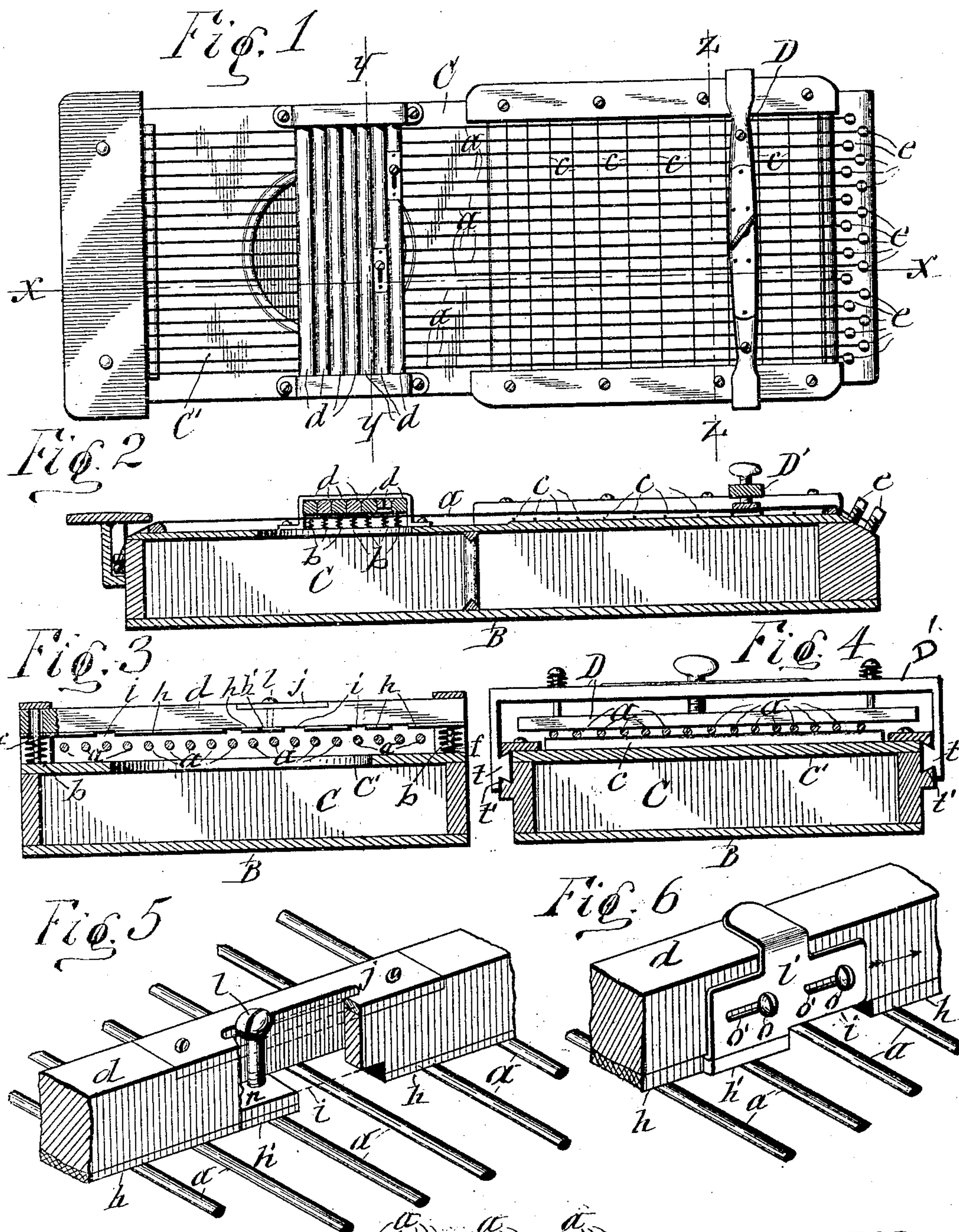


(No Model.)

J. BRAND.
MUSICAL INSTRUMENT.

No. 551,254.

Patented Dec. 10, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JACOB BRAND, OF SYRACUSE, NEW YORK.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 551,254, dated December 10, 1895.

Application filed January 12, 1895. Serial No. 534,612. (No model.)

To all whom it may concern:

Be it known that I, JACOB BRAND, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful
5 Improvements in Musical Instruments, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of musical instruments which have a series of musical strings stretched over a sounding-board and movable dampers over said strings to muffle one or more of them while the remainder of the strings are played by the hand of
15 the performer.

The object of the invention is to obtain a greater range of musical chords from the instrument; and to that end the invention consists of a case formed with parallel sides and
20 provided with longitudinal guides on said sides and with frets across one end of the sounding-board, a yoke sliding in said guides, a capo tasto attached to said yoke, and damper-bars and adjustable dampers connected
25 to said bars, all as hereinafter more fully described, and specifically set forth in the claim.

In the annexed drawings, Figure 1 is a plan view of a musical instrument embodying my
30 invention. Fig. 2 is a longitudinal section on line X X in Fig. 1. Figs. 3 and 4 are transverse sections respectively on lines Y Y and Z Z in Fig. 1. Figs. 5 and 6 are enlarged detail views of the adjustable damper sections or bearings, and Fig. 7 is a diagrammatic
35 plan view of the dampers.

Similar letters of reference indicate corresponding parts.

The instrument is more especially designed
40 to be placed upon a table or analogous support during the performance of the music, and for this reason the resonant-case C of the instrument is formed with a flat back B and with a corresponding flat sounding-board C'.

45 *a a a* represent the musical strings which are parallel side by side and stretched lengthwise over the sounding-board C' and secured to opposite ends of the case. Said strings are attached at one end to the usual tuning-pins
50 *e e* and preferably tuned to the chromatic scale.

d d d represent a plurality of independ-

ently-operating damper-bars which extend across the series of strings *a a* and are sustained normally out of contact with the
55 strings by means of springs *b b*, interposed between the ends of the bars and subjacent portions of the case C, as shown in Figs. 2 and 3 of the drawings. By means of pins *f f*, projecting vertically from the case and into holes
60 in the bars, the latter are guided in their movements to and from the strings. Each of said damper-bars is provided on its under side with cushions or pads *h h*, constituting the dampers proper, between which dampers
65 are blank spaces *i*, which are so arranged that when the damper-bar is depressed to bring the dampers to bear on the strings the said blank spaces will release a set of strings, the
70 tones of which form a musical chord.

The dampers on each bar are arranged in different relative position from those on the other bar, as illustrated in Fig. 7 of the drawings, so that by depressing the different bars
75 different sets of strings are released, the tones of each of which sets form a different chord.

In playing the instrument, the performer depresses one of the damper-bars *d* and sweeps
80 with his thumb or one of his fingers or a suitable instrument across the series of strings, the dampers *h h* of said bar allowing only the released strings under the blank spaces *i i* to
85 sound and produce the desired musical chord.

By means of the seven damper-bars seven
85 different chords in different keys can be produced, including major, dominant, submajor, subdominant, and minor.

To further increase the range of music capable of being played on the instrument, I provide preferably all of the bars *d* with adjustable dampers *h'*, which are connected to slides
90 movable lengthwise of the bars, so as to allow the dampers *h'* to be shifted from the subjacent string to the next, and thus change the chord either from major to minor or from
95 dominant to major, as may be desired.

The adjustable connection of the slide to the bar *d* can be made in various ways, two of which are illustrated in Figs. 5 and 6 of the drawings. In Fig. 5 the said slide consists
100 of a screw *l*, passing through a longitudinal slot in the bar *d* and through a corresponding slot in a metal plate *j*, fastened to the top of the bar *d*, upon which plate the head of the

screw rests. On the lower end of said screw is a nut *n*, to the under side of which is cemented or otherwise fastened the pad *h'*, which constitutes the adjustable damper.

5 In Fig. 6 the slide consists of a metal plate *l'*, sustained on the side of the bar *d* by screws *o o*, passing through horizontal slots *o' o'* in said plate and into the bar. The top of the plate is provided with a handle *l''*, by which
10 to shift the plate. The bottom of the plate is formed with a horizontal flange extending under the bar *d* and having secured to it the pad *h'*.

c c c denote frets distributed from one end
15 of the sounding-board, partway the length thereof, in the usual manner, so that by depressing a string between two frets the tone of said string is changed, and thus the instrument may be played similar to a zither or guitar. The damper-bars *d d* in that case are
20 left undisturbed unless a special chord is to be struck during the performance of the music, said chord being then produced by depressing the required bar *d* and sweeping the thumb of the operator across the strings.
25 Said frets, however, are more particularly designed to be used in connection with the damper-bars *d d d* and the capo tasto *D*, which latter extends across the series of strings and

is connected to the case *C* by the yoke *D'* of 30 the capo tasto having on its ends the blocks or bearings *t t*, by which it slides in longitudinal guides *t' t'* on the sides of the case. By shifting said capo tasto so as to allow it to be brought to bear on the strings between two 35 frets at the desired position the tones of the strings are changed in the usual manner to a different pitch and the chords produced by the employment of the damper-bars in the manner before described are changed to dif- 40 ferent keys.

Having described my invention, what I claim is—

The improved musical instrument consisting of the case —*C*— formed with parallel 45 sides and provided with longitudinal guides —*t'—t'*— on said sides and with frets —*c—c*—, the yoke —*D'*— sliding in said guides, the capo tasto attached to said yoke, and the damper-bars —*d—d—* and adjustable dampers *h'* 50 connected to said bars, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 28th day of December, 1894.

JACOB BRAND. [L. s.]

Witnesses:

JOHN J. LAASS,
C. L. BENDIXON.