

No. 844,401.

PATENTED FEB. 19, 1907.

J. RAMSPERGER.
KEY CHANGING DEVICE FOR KEYED INSTRUMENTS.
APPLICATION FILED DEC. 10, 1903.

Fig. 1

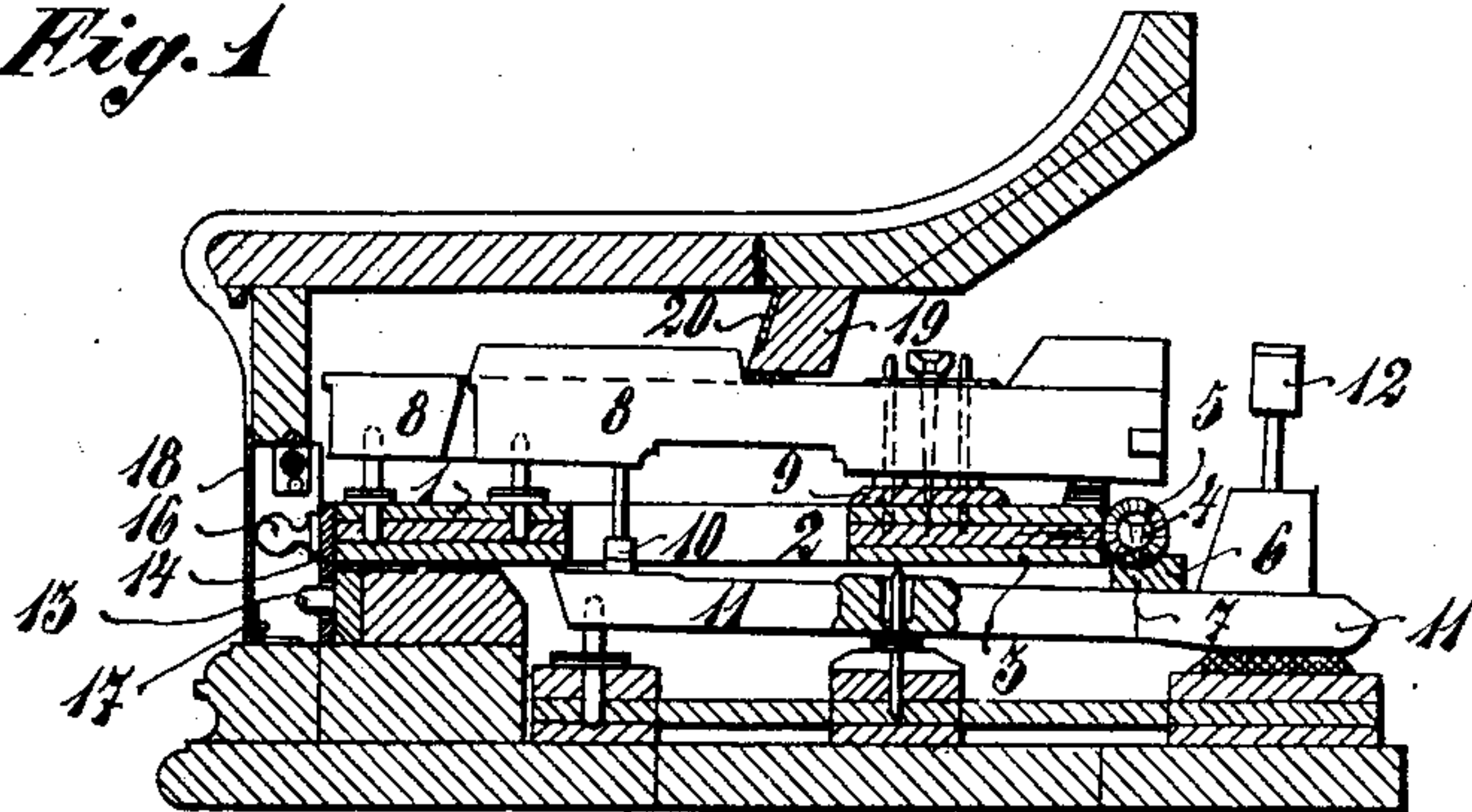


Fig. 3

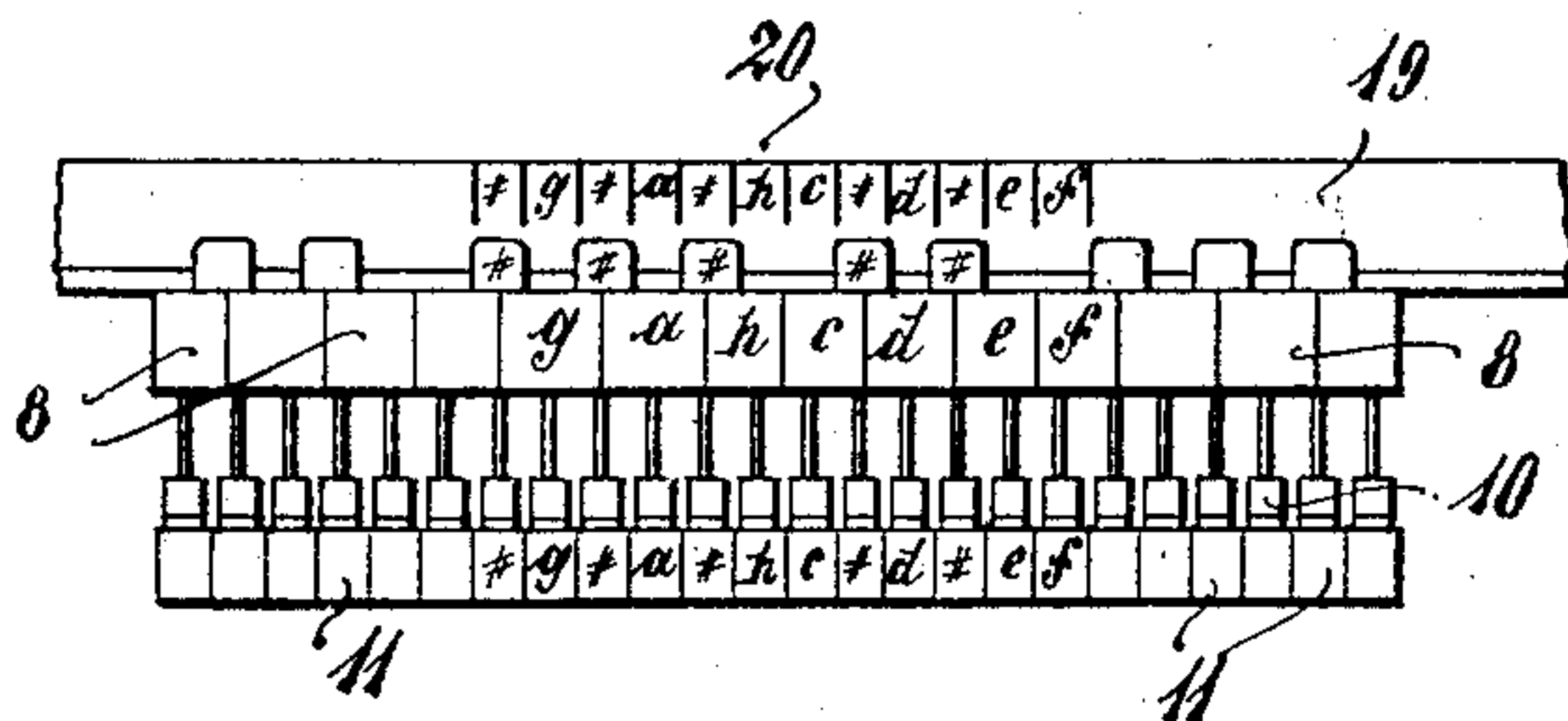


Fig. 4

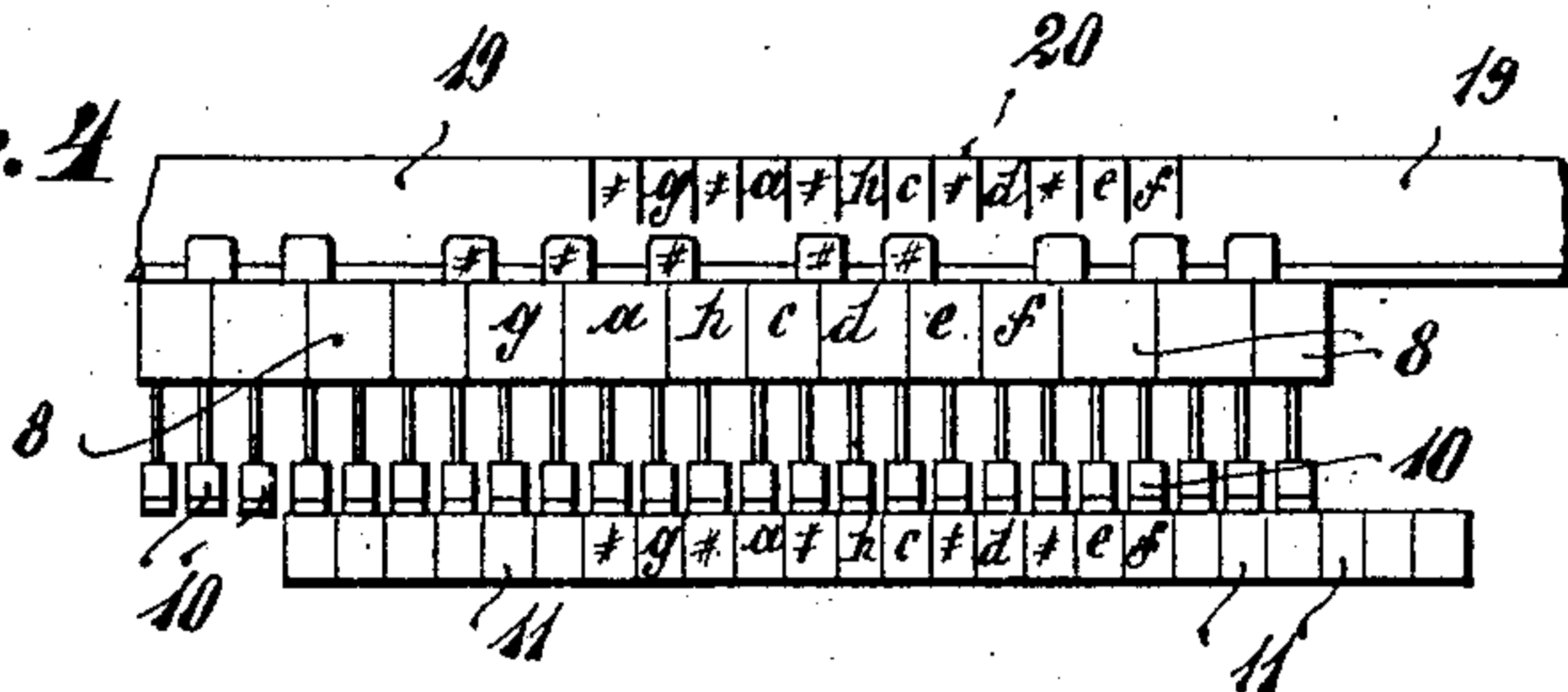
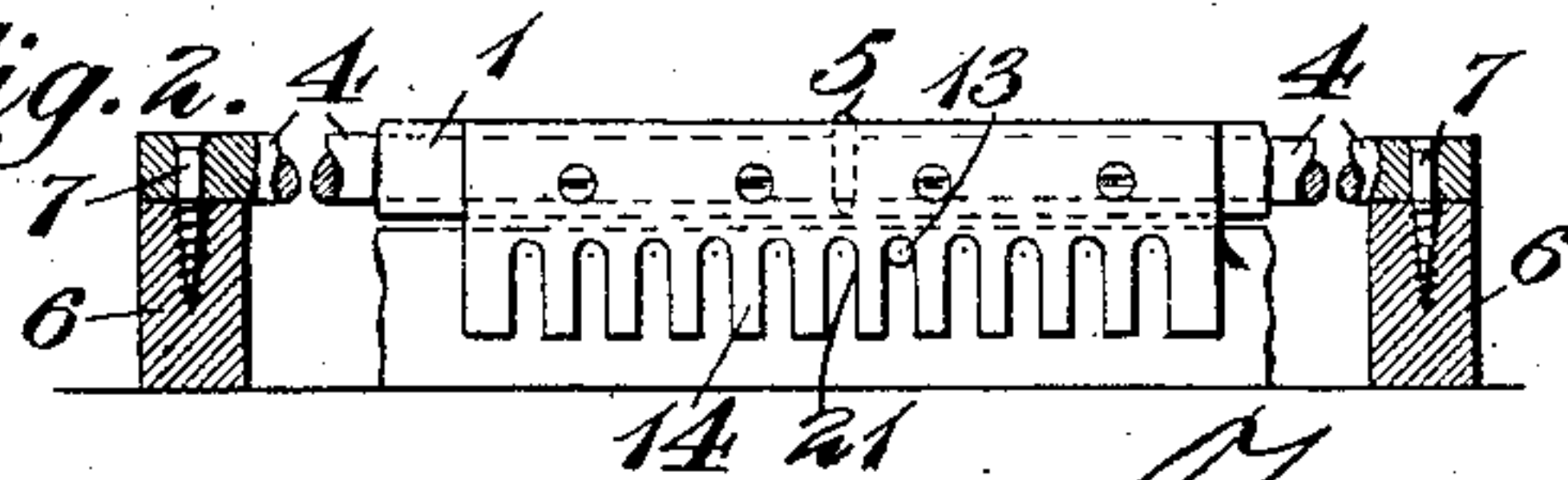


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH RAMSPERGER, OF STUTTGART, GERMANY.

KEY-CHANGING DEVICE FOR KEYED INSTRUMENTS.

No. 844,401.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed December 10, 1903. Serial No. 184,696.

To all whom it may concern:

Be it known that I, JOSEPH RAMSPERGER, manufacturer, residing at 4 Wächterstrasse, in the city of Stuttgart, in the Kingdom of Würtemberg, German Empire, have invented certain new and useful Improvements in Key-Changing Device for Keyed Instruments, of which the following is a specification.

The present invention relates to a key changing or transposing device for keyed instruments, especially for pianos of all kinds, whether strung vertically, obliquely, or across.

The novel effect of this invention is that the accompaniment may be made to suit the voice within the widest possible range, which will be recognized as a great advantage by singers and others. Both keyboards are so arranged that they can be readily applied to any existing keyed instruments.

In the accompanying drawings, illustrating the invention, Figure 1 is a sectional side elevation of the transposing device applied to a piano. Fig. 2 is a view, partly in section, of the device employed for adjusting the movable keyboard in its place. Fig. 3 shows both keyboards in normal position one under the other, and Fig. 4 shows the playing-keyboard set three semitones to the left, (toward the bass.)

The transposing device consists of a frame 1 2 3, pivotally and adjustably set upon the rod 4, by means of cushioned rings 5. The rod 4, which extends across the whole breadth of the piano, rests in front of the hammer mechanism upon supports 6 and is secured thereto by means of screws 7 or in any other suitable way.

Upon the frame 1 2 3 lies the playing-keyboard 8. This is not, as is generally the case, connected directly with the hammer mechanism by means of the strikers, but is rested and guided in known manner on the bridge 9 of the frame 1 2 3 independently of the hammer mechanism. Each key of the keyboard is, moreover, provided with a felt-topped striker 10, which rests upon one of the keys of the auxiliary keyboard lying thereunder. The keys of the latter are all of the same height and breadth and are in immediate connection with the hammer mechanism through the strikers 12. The actuating and guiding of the keys of the auxiliary

keyboard takes place in known manner through striking the playing-keyboard.

While the auxiliary keyboard remains stationary, the playing-keyboard, as described above, can be moved at will toward the bass or treble. In order that the position for the playing-keyboard may be precisely ascertained, the bar below the frame is provided with a tooth 13, which takes into recesses 21 of a bar 14, attached to the frame 1. In this way the frame 1 2 3 may be turned on the rod 4, so as to disengage the pin 13 from any one of the recesses 21. The number of recesses corresponds to the number of semitones to which the playing-keyboard may be displaced. For displacing the playing-keyboard 8 two knobs 16 are provided on the frame 1. These are as a rule covered by the shutters 18, pivotally arranged on the bottom standard 17.

For the purpose of making the positioning of the playing-keyboard more simple a bar 19 is provided immediately above the latter, carrying a scale 20, upon which the semitones are indicated.

In the normal position (see Fig. 3) the key *c* of the playing-keyboard corresponds to the key *c* of the auxiliary keyboard. Now if a piece of music written, say, in C major is to be played three semitones lower—*i. e.*, in A major—the frame 1 2 3 is raised and set in recess *a* of the bar 14. The correctness of the position may be easily controlled by the scale 20. (See Fig. 3.)

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A transposing device for keyed instruments, comprising an auxiliary keyboard lying below the playing-keyboard and connected directly with the hammer mechanism, a rod extending across the instrument, a frame carrying said playing-keyboard adjustably pivoted on said rod, said frame being adapted to move laterally with regard to the instrument, suitable strikers upon the keys of said playing-keyboard adapted to actuate the keys of the auxiliary keyboard, a pin 13 on the frame of the instrument, a bar on the frame carrying the playing-keyboard provided with recesses 21 with which said pin 13 is adapted to engage to hold the playing-keyboard in the desired position, the knobs 16, and the pivoted shutter 18 cover-

ing said knobs, substantially as described and shown and for the purpose set forth.

2. A transposing device for keyed instruments, comprising an auxiliary keyboard
5 lying below the playing-keyboard and connected directly with the hammer mechanism, a rod extending across the instrument, a frame carrying said playing-keyboard adjustably pivoted on said rod, said frame being
10 adapted to move laterally with regard to the instrument, suitable strikers upon the keys of said playing-keyboard adapted to actuate the keys of the auxiliary keyboard, a pin 13 on the frame of the instrument, a
15 bar on the frame carrying the playing-keyboard provided with recesses 21 with which said pin 13 is adapted to engage to hold the playing-keyboard in the desired position, the knobs 16, and the pivoted shutter 18 covering
20 ing said knobs, the bar 19 and the scale 20.

3. A transposing device for keyed instruments, comprising an auxiliary keyboard lying below the playing-keyboard and con-

nected directly with the hammer mechanism, a rod 4 extending across the instru- 25
ment, supports 6 for said rod, the cushioned rings 5, the frame 1, 2, 3 carrying said playing-keyboard, adjustably mounted on said rod, said frame being adapted to move later-
ally with regard to the instrument, strikers 30
upon the keys of said playing-keyboard, adapted to actuate the keys of the auxiliary keyboard, a pin 13 on the frame of the instru-
ment, a bar on the frame carrying the play- 35
ing-keyboard provided with recesses 21 with which said pin 13 is adapted to engage to hold the playing-keyboard in the desired po-
sition, the knobs 16, the pivoted shutter 18
covering said knobs, the bar 19 and the scale 40
20, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

JOSEPH RAMSPERGER.

Witnesses:

OTTO RAMSPERGER,
ERNST ENTENMAN.