

H. McCREA.  
MUSICAL INSTRUMENT.

(Application filed Feb. 18, 1901.)

(No Model.)

Fig. 1.

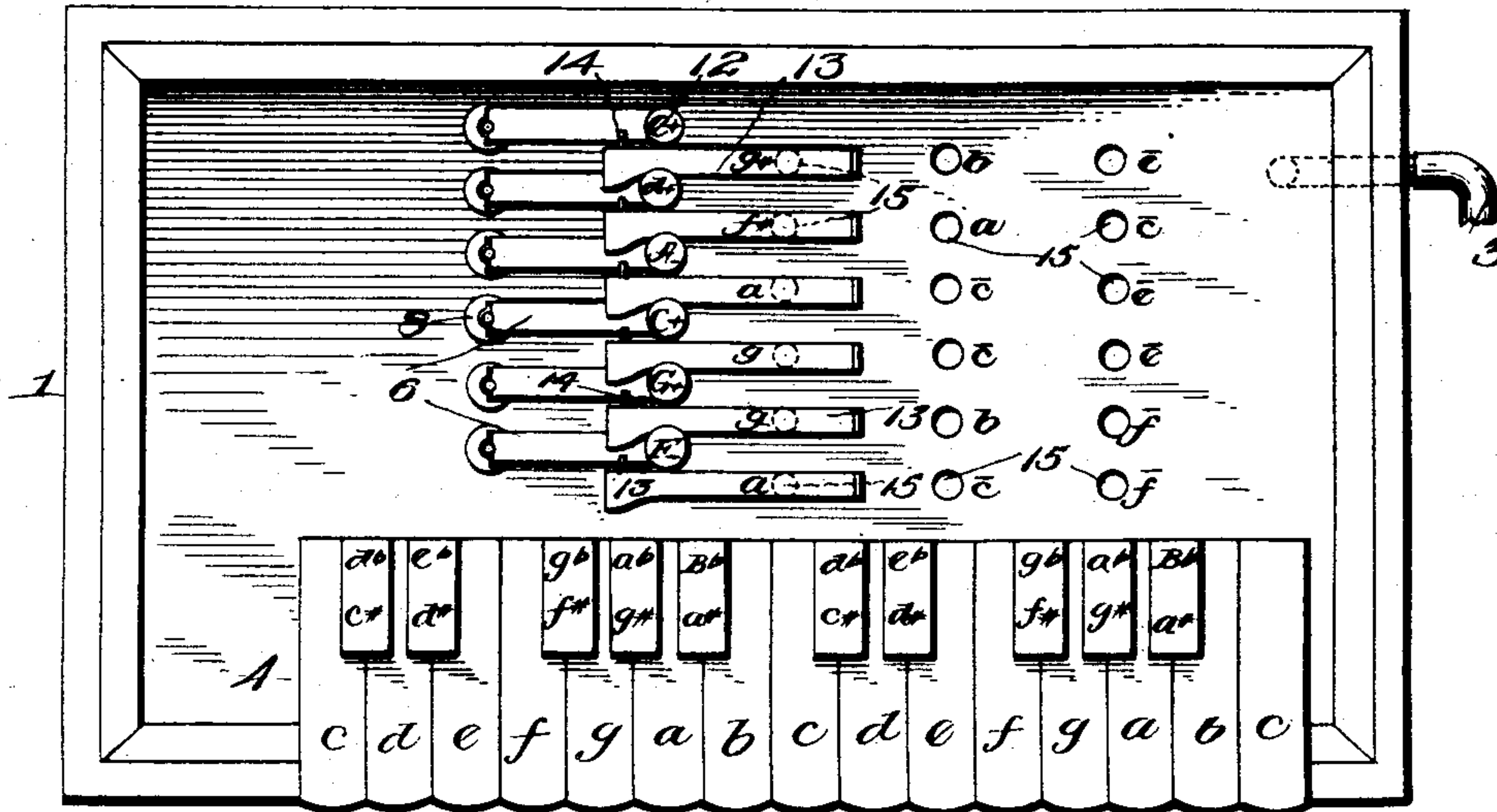


Fig. 2.

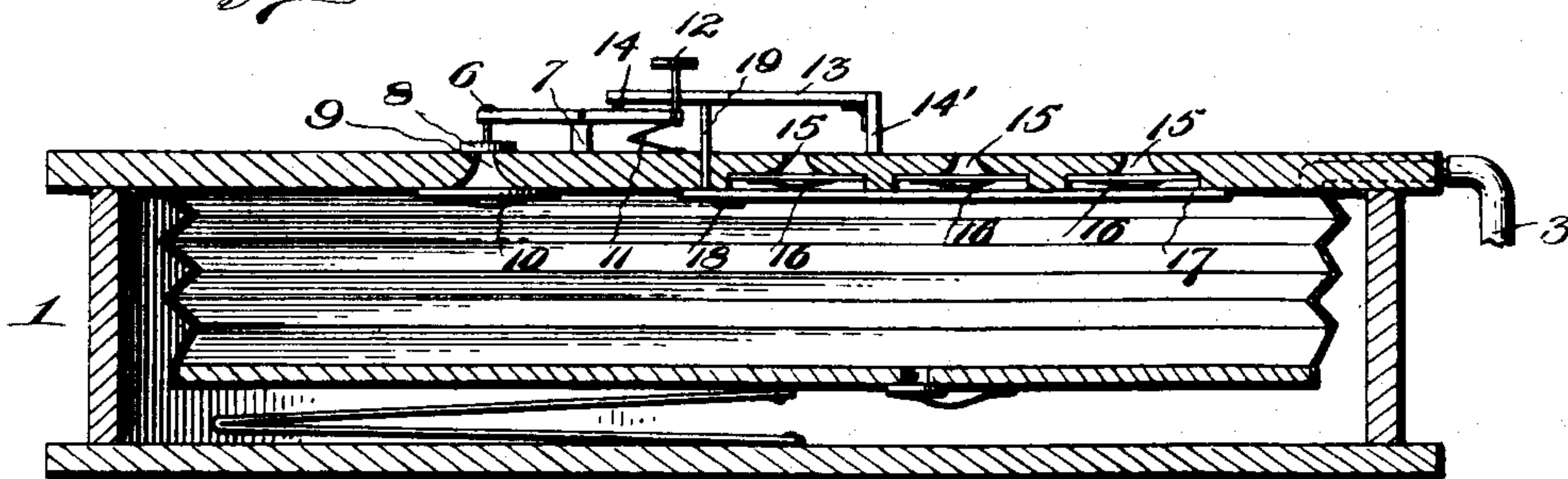
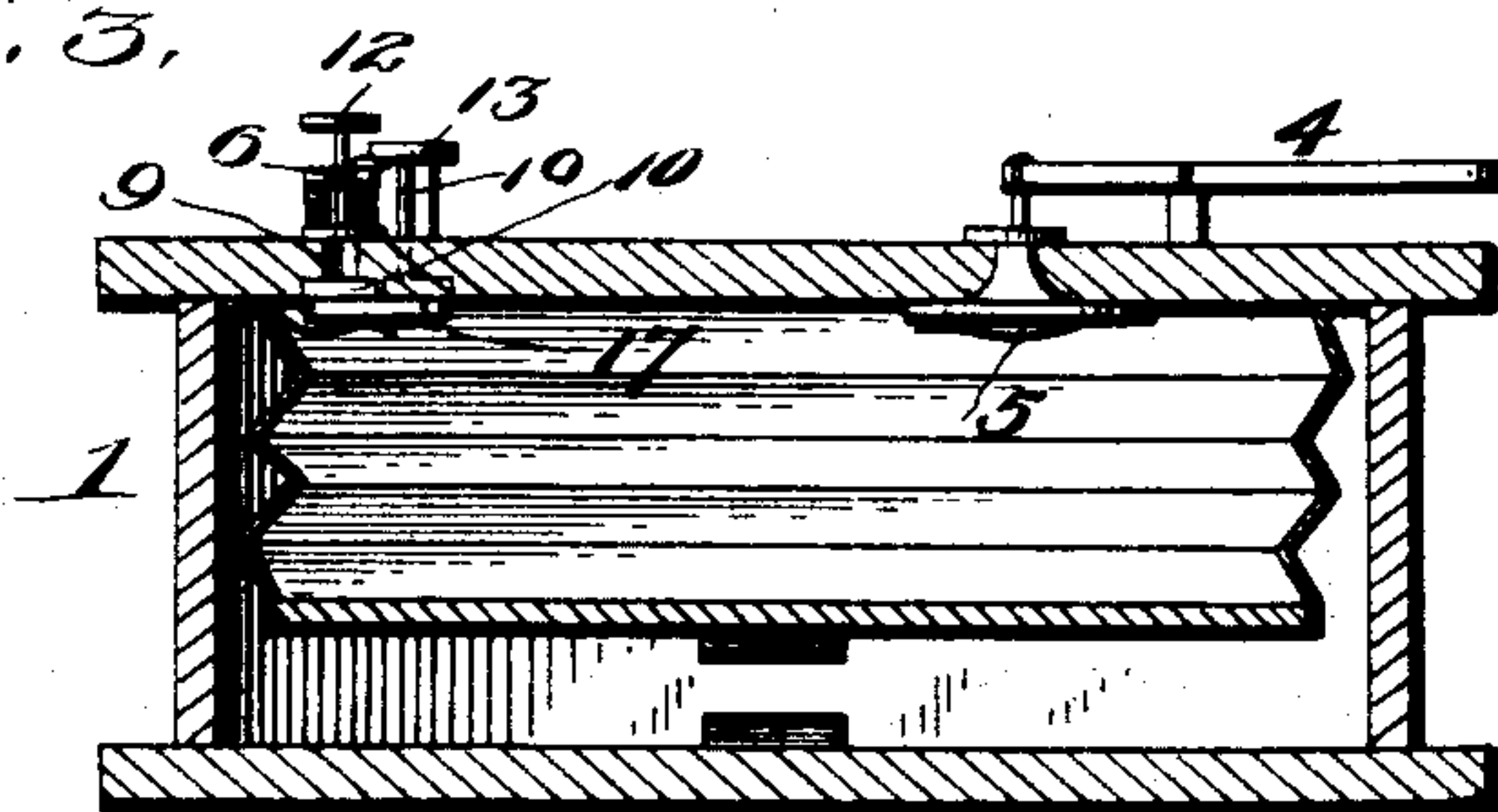


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 683,320, dated September 24, 1901.

Application filed February 18, 1901. Serial No. 47,799. (No model.)

*To all whom it may concern:*

Be it known that I, HIRAM McCREA, a citizen of the United States, residing at New Richmond, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Musical Instruments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to musical instruments of the reed type.

The object of the invention is to provide a musical instrument of this character with an auxiliary separate and distinct keyboard to be operated with one hand while the other hand is used for operating the common keyboard, whereby chords of a pitch different from those of the ordinary or common keyboard may be produced, these chords being graduated in pitch, the construction being such that if but a single note be desired to be produced on the auxiliary keyboard this may be accomplished without producing a chord, and if the complete chord be desired to be produced this also may be effected by pressing but one key.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a plan view of my improved instrument, illustrating the keys composing two octaves of the usual keyboard and keys composing the supplemental keyboard by which lower bass notes are produced than can be produced on the ordinary keyboard and by means of which when desired octaves of a lower pitch may be produced than on the ordinary keyboard. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a cross-sectional view.

In the drawings, 1 denotes the frame of the musical instrument, which consists of an inclosing casing provided with bellows to which is supplied, through a pipe 3, air under pressure. 4 denotes the ordinary or usual keys composing two octaves of the instrument, the different notes of which are indicated there-

on, and 5 the reeds of these keys. As these features of the instrument in themselves form no part of the present invention a further description of the same is not thought to be necessary.

6 denotes the keys of the lower bass notes, which are pivoted intermediate their ends to posts 7 and are provided at one end with pads 8, that cover sound-emitting openings 9 in the casing, which openings are provided with reeds 10. Said keys have arranged under their opposite ends springs 11, which exert their energy to hold the pads in a position to close the openings 9, and are also provided with finger-pieces 12, upon which I have indicated the different bass notes. The keys 6 are adapted to be operated by the fingers of the left hand. Arranged alternately with these keys and to the right of the same are a series of keys 13, having indicated thereon their respective notes. These keys 13 are each provided with a laterally-projecting stud or equivalent device 14, which when one of the keys 12 is depressed will cause its companion key 6 to be also depressed. Each key 13 is pivoted to a post 14.

15 denotes a series of sets of sound-emitting apertures, each set being on a line with each key 13 and provided with reeds 16. The notes of each set of reeds 16 are shown in Fig. 1. 17 denotes shutters for said openings 15. Each shutter is hinged at its rear edge to the under side of the top of the casing, and a spring 18, the end of which is shown in Fig. 2, is located under the shutter to normally hold the same in a position to close the apertures 15.

19 denotes a rod which projects downwardly from the key 13, so that when said key is depressed the apertures 9 and one set of apertures 15 will be uncovered, thus producing a chord. If, however, simply a low bass note is desired to be produced, one of the keys 6 is depressed and the sound-emitting aperture 9 which is controlled thereby is uncovered.

As before stated, the keys 6 are adapted to be operated by the fingers of the left hand, while the keys 13 are adapted to be operated by the thumb of the same hand, and the keys 4 are adapted to be operated by both the thumb and the fingers of the right hand.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

15 In a musical instrument of the character described, the combination with an inclosing casing, of a wind instrument, an ordinary keyboard mounted thereon and correspond-

ing note-producing devices, of an auxiliary keyboard above the ordinary keyboard and 20 consisting of a row of keys, graduated bass notes, producing devices controlled thereby, keys alternating with the bass-note keys and graduated higher-note producers controlled 25 thereby, said latter keys being provided with means whereby when each is actuated, one of the bass-note keys will also be simultaneously actuated to produce a chord, substantially as set forth.

In testimony whereof I have hereunto set 30 my hand in presence of two subscribing witnesses.

HIRAM McCREA.

Witnesses:

JOHN McCREA,

GEORGE C. TRIBBY.