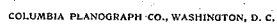


2 SHEETS—SHEET 1.

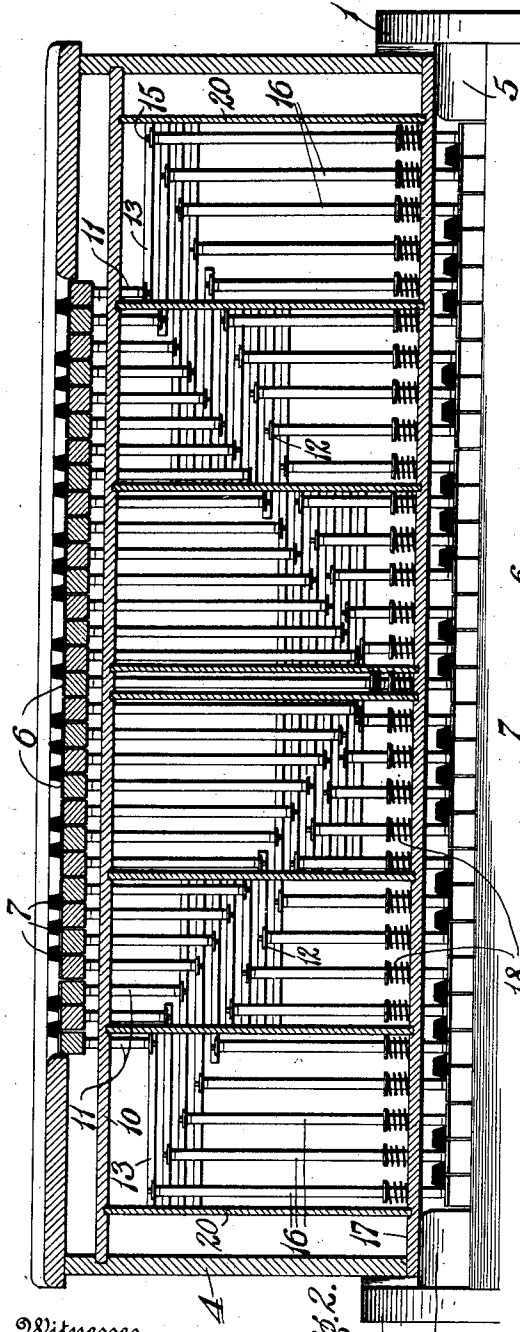


M. ROBINSON.
 AUXILIARY KEYBOARD FOR PIANOS.
 APPLICATION FILED JAN. 26, 1912.

1,092,291.

Patented Apr. 7, 1914.

2 SHEETS—SHEET 2.



Witnesses
 Chas. W. Stauffer
 Anna M. Dorr.

Fig. 2.

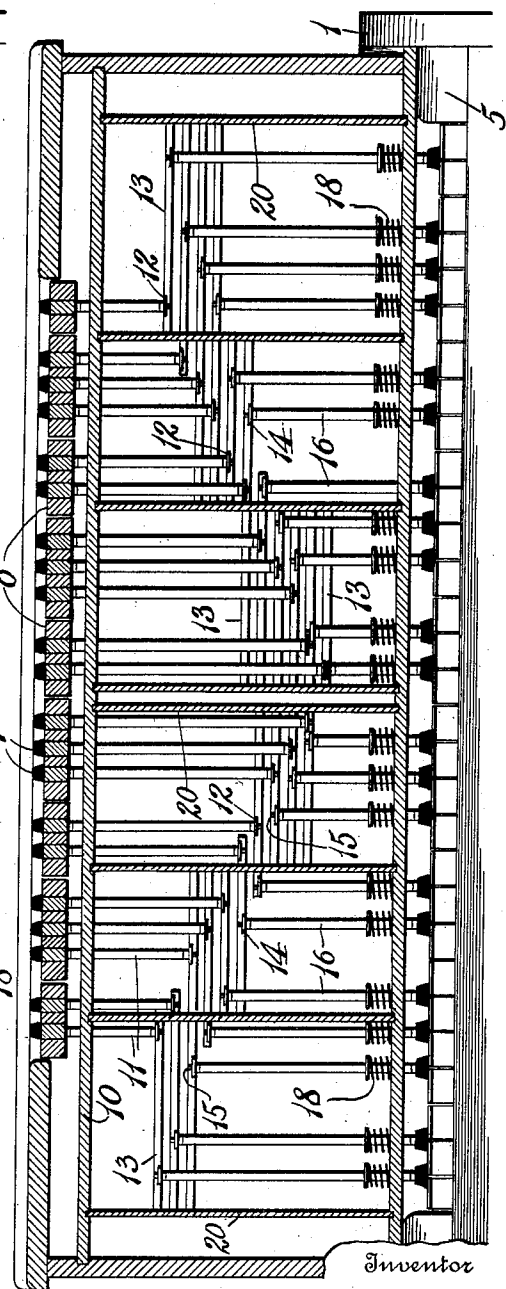


Fig. 3.

Mitchell Robinson,

[Signature]
 Attorneys.

UNITED STATES PATENT OFFICE.

MITCHELL ROBINSON, OF DETROIT, MICHIGAN.

AUXILIARY KEYBOARD FOR PIANOS.

1,092,291.

Specification of Letters Patent.

Patented Apr. 7, 1914.

Application filed January 26, 1912. Serial No. 673,545.

To all whom it may concern:

Be it known that I, MITCHELL ROBINSON, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Auxiliary Keyboards for Pianos, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a key-board attachment for pianos whereby an auxiliary key-board may be quickly adjusted on a piano for the use of children, the keys of the attachment being narrower than the regulation keys to accommodate the hands of the learner.

One object of the invention is the arrangement of the device whereby it may be quickly secured in place and is quickly removed without special tools or the like.

Another object of the device is an arrangement of the mechanism whereby each key of the attachment exerts the same force upon the regular key regardless of its position in the keyboard.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in transverse section through a regulation key-board and adjacent portions of a piano case fitted with an attachment that embodies features of the invention; Fig. 2 is a view in longitudinal section taken on or about line 11—11 of Fig. 1; Fig. 3 is a view in section taken on or about line 111—111 of Fig. 1; Fig. 4 is a view on reduced scale showing means for holding the attachment in register with the regulation key-board; and Fig. 5 is a view in detail of one form of mechanism for transmitting the movement of the attachment keys to the regulation keys.

Referring to the drawings and pieces 1 on the sides of a regulation key-board 2 of a piano of conventional type have guides 3 of suitable form for centering a casing 4 of an attachment over the key-board, the casing resting upon the key-board blocks 5 at each end of the key-board. A key-board of reduced proportions is mounted in the upper part of the casing. In preferred form this consists merely of the usual white keys 6 and black keys 7 pivoted at their inner ends on a suitable pin 8 and disposed and arranged to constitute a replica, reduced in size of a regulation key-board. The down-

ward movement of each white key is arrested by a stop 9 on a horizontal plate 10 in the casing. Each key rests on a post 11 whose lower end is stepped on a rock arm 12 of a horizontally disposed rock shaft 13. A second rock arm or striking finger 14 on each shaft 13 has an outer slotted end overlying and loosely engaging a pintle 15 of an upright striker post 16. The latter passes through a guide opening in the base plate 17 of the casing to bear downwardly against the key of the regular key-board corresponding to the companion key of the attachment. A spring 18 in compression between the base of the casing and a stop collar 19 on the striker post yieldingly supports the latter. The horizontal rock shafts 13 are disposed in sets and are journaled at each end in upright bearing plates 20 which constitute in effect division walls of the casing. The mechanisms operatively connecting the black keys of the attachment and of the piano key-board are disposed in one bank while those of the white keys are arranged in another bank and the rock arms are disposed symmetrically in sets between the division or bearing plates. By proportioning the relative lengths of the rock arms 12 and fingers 14 properly, any blow struck upon the key of the attachment may be transmitted with increased or diminished effect to the companion key of the piano-forte.

While the mechanism for transmission of motion from the keys of the attachment to the piano key-board as herein shown is preferable, any desired transmission means may be used.

The main feature of the invention is the disposition of the parts in the case whereby the attachment may be instantly applied to a piano without the use of tools and whereby when so applied the parts are in proper register. Conversely the attachment can be removed at will without the use of tools thus leaving the piano free for use by an adult player. The device is compact and does not present an unsightly appearance when applied to an ordinary key board.

Obviously changes in the details of construction may be made without departing from the spirit of the invention and I do not care to limit myself to any particular form or arrangement of parts.

I claim:

1. The combination with a pianoforte cas-

ing, keyboard and keyboard blocks, of a case adapted to be supported on the blocks over the key-board, an auxiliary key-board in the case, a rock shaft for each key of the auxiliary board journaled in the casing, a rock arm on each shaft, a post resting on the rock arm and supporting the key, a striking finger on each rock shaft, striker posts in the casing each adapted to be operated by a striking finger with the lower end in operative relation to a key of the piano corresponding to a key of the auxiliary board, and guiding means detachably holding the case on the blocks above the key-board with the striker posts in register with the keys of the piano key-board.

2. The combination with a pianoforte casing, keyboard and keyboard blocks, of a case adapted to rest on the blocks over the key-board, a plurality of transverse bearing plates in the casing, a plurality of rock shafts journaled in the bearing plates parallel to the plane of the pianoforte key-board, an upright striker post longitudinally movable in the case over each key of the pianoforte key-board, means yieldingly supporting the hammer posts over the keys, a striking finger on each rock shaft adapted to depress a striker post, a rock arm on each rock shaft, a key post adapted to move each rock arm, an auxiliary key-board mounted in the case whose several members are each adapted to depress the post of a rock arm and

operate a key of the key-board, and means detachably securing the pianoforte casing and attachment case for holding the striker posts in register with the piano keys.

3. The combination with a pianoforte casing, key-board and key board blocks, of a case adapted to be supported over the key-board by the key-board blocks, bearing members in the casing, oscillatory shafts journaled in the bearing members in substantially parallel relation to the plane of the pianoforte key-board, longitudinally movable upright striking posts in the casing each over a key of the pianoforte keyboard, yielding means normally supporting the striker posts above the keys, striking members on each shaft adapted to depress a striking post, a rock arm on each shaft, a key-post for operating said rockarm, an auxiliary key-board in the case whose several members are each located to press the post of a rock-arm and thereby operate a key of the key-board, and means detachably securing the case and pianoforte casing in alinement, holding the striking post in register with the piano key.

In testimony whereof I affix my signature in presence of two witnesses.

MITCHELL ROBINSON.

Witnesses:

C. R. STICKNEY,
A. M. SHANNON.