

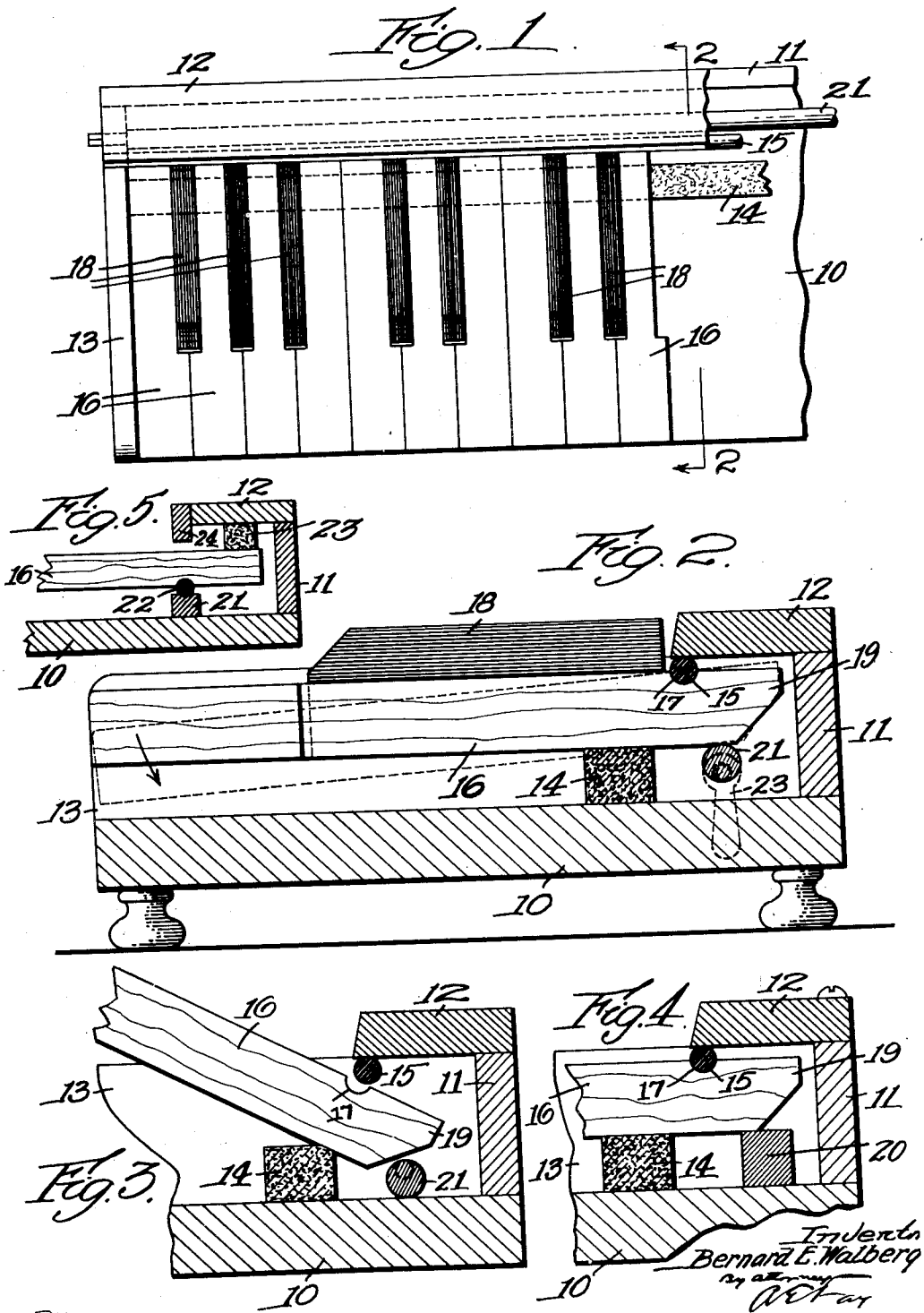
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KEY BOARD

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## UNITED STATES PATENT OFFICE

2,116,808

## KEY BOARD

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6 Claims. (Cl. 84-467)

The principal objects of this invention are to reduce materially the expense of manufacture of a set of finger practice keys; to provide all the features necessary for piano practice, and to provide a construction in which the black keys and also the white keys can be removed. It can be used for mute finger practice boards or for a piano key board.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a plan of a bank of keys set up in mute form for finger practice;

Fig. 2 is a sectional view on the line 2-2 of Fig. 1;

Fig. 3 is a view similar to Fig. 2 showing the removal of the white key;

Fig. 4 is a sectional view showing one of the white keys in elevation and illustrating another form in which the invention can be made, and Fig. 5 is a view similar to Fig. 2 showing a modification.

The instrument can be made long enough for any number of octaves, as may be desired. A case is shown having a base 10, a back 11, a top 12 and ends 13, all these parts being fixed together. Along the top of the base extends a spring 14 which preferably is continuous from end to end and yields vertically at any point on which pressure is applied. This is shown as made of a single piece of sponge rubber of rectangular shape.

Through the case, from end to end, just under the top 12 extends a cylindrical metal rod 15. This is located back of the sponge rubber spring and constitutes a pivot for all of the keys. The white keys 16 are all formed with a semi-circular notch 17 fitting the bottom of the rod 15 so that the rod constitutes the pivot for these keys. The black keys 18 are also provided with similar semi-circular notches and both sets of keys have projecting ends 19 and are flat on the bottom.

In the case of the white keys shown in the modification of Fig. 4 a solid piece of wood 20 is placed under the ends of the white keys at a point back of the pivot point. This key rests, therefore, on the spring 14 and can be depressed about its pivot without disturbing anything, but it cannot be removed from the instrument without drawing out the rod 15.

In the preferred construction a rest 21 for a similar purpose as the rest 20 extends across the whole bank of keys and is eccentric. This eccentric can be turned by a handle 23 so as to lower the eccentric and allow the keys to be removed,

as shown in Fig. 3. During the entire operation and at all times, when it is desired to practice, this eccentric is up, as shown in Fig. 2, and performs the same function as the rest 20. The black keys are shaped in the same way and come into position to engage the eccentric 21. Therefore, they can be turned up as shown in Fig. 3 and removed very easily.

The advantage of this form of mute practice board is the fact that there are no metallic springs and a minimum of construction so that the expense of manufacture and installation is very much reduced.

In the form shown in Fig. 5 the casing is shown as having the parts 10, 11, 12 and 13 as before. On the base 10 is a rigid strip 21 carrying a cylindrical pivot rod 22 which extends from end to end. The black and white keys are pivoted on this, having notches in their bottoms for that purpose. The spring is in the form of a sponge rubber strip 23 located on the bottom of the top 12 back of the rod 22. The top 12 has a downwardly extending flange 24 so that the keys cannot be detached accidentally, but they are removable, of course.

The removable key feature is one of the principal points of the keyboard. The keys are to be assembled by the child as an aid in visualizing the piano key board. There will be a chart to guide him and as he assembles the keys he learns what the keys are called. Notation is pictured on the chart so that he learns notation through association. This key board used in connection with the piano (with tone) will be the principal instrument as this enables the child to produce tones after the keys have been installed. Therefore, the invention can be applied to a piano to be used for practice.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. As an article of manufacture, a piano finger practice board comprising black and white keys, a continuous spring yielding downwardly on which said keys rest, and means for pivotally holding the keys at the top thereof.

2. As an article of manufacture, a mute practice board for piano finger practice comprising a casing, black and white keys thereon and a yieldable spring extending under all the keys and on which all the keys rest, a pivot rod engaging all the keys at the top, said keys having notches in their upper surfaces for receiving said rod and restricting the keys to a pivotal motion.

3. As an article of manufacture, a mute prac-

tice board for piano finger practice comprising the usual white keys and black keys, a continuous spring throughout the length of the board on the top of which each one of the said keys bears and which spring is yieldable downwardly, and a rod  
5 extending along the board to serve as a pivot for the keys, each key having a semi-circular notch in the top fitting said rod.

4. As an article of manufacture, a key board comprising a casing having a top board at the rear extending only a slight distance forward, a  
10 cylindrical rod extending throughout the length of said board, a sponge rubber spring extending throughout the length of the board, and forward of said rod, each key having a semi-circular  
15 notch in the edge to form a pivot therefor.

5. As an article of manufacture, a piano practice board comprising a casing having a top board at the rear extending only a slight distance forward, a cylindrical rod extending throughout the  
20 length of said board under the front thereof, a

sponge rubber spring extending throughout the length of the board at the bottom thereof, and forward of said rod, on which the keys rest, each key having a semi-circular notch in the top to form a pivot therefor, and means in the rear of  
5 the board for engaging the bottom of said keys to hold the keys in place.

6. As an article of manufacture, a key board comprising a casing having a top board at the rear extending only a slight distance forward, a  
10 cylindrical pivot rod extending throughout the length of the board at the bottom thereof, forward of said rod, on which the keys rest, each key having a semi-circular notch in the top to form a pivot therefor about the rod, means in  
15 the rear of the board for engaging the bottom of said keys to hold the keys in place, said means consisting of an eccentric rest, and a handle connected with the rest for turning it to release the  
20 keys and allow them to be removed.

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