

Feb. 10, 1953

J. ROBBINS
PIANO KEYBOARD

2,627,777

Filed Nov. 3, 1949

2 SHEETS—SHEET 1

Fig. 1.

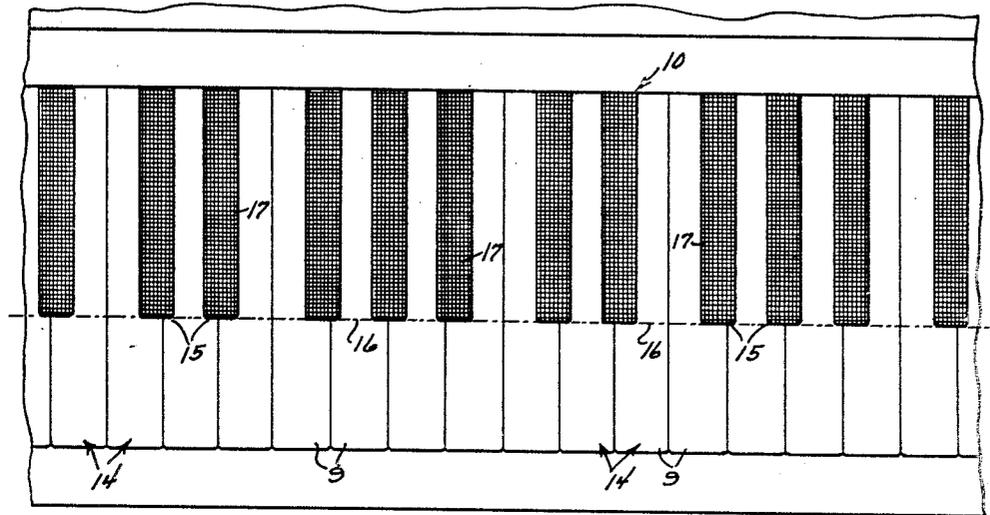
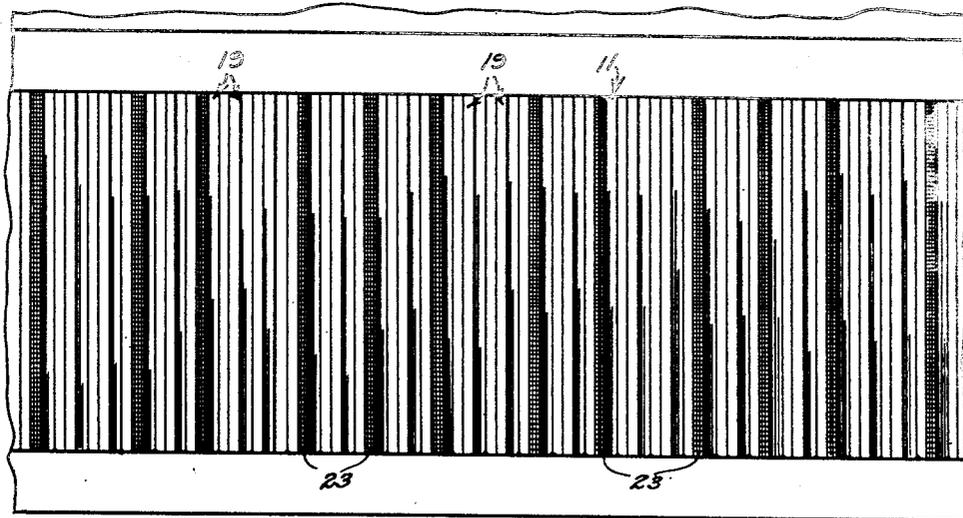


Fig. 2.



INVENTOR.
John Robbins
BY *Vietor J. Evans & Co.*
ATTORNEYS

Feb. 10, 1953

J. ROBBINS
PIANO KEYBOARD

2,627,777

Filed Nov. 3, 1949

2 SHEETS—SHEET 2

Fig. 3.

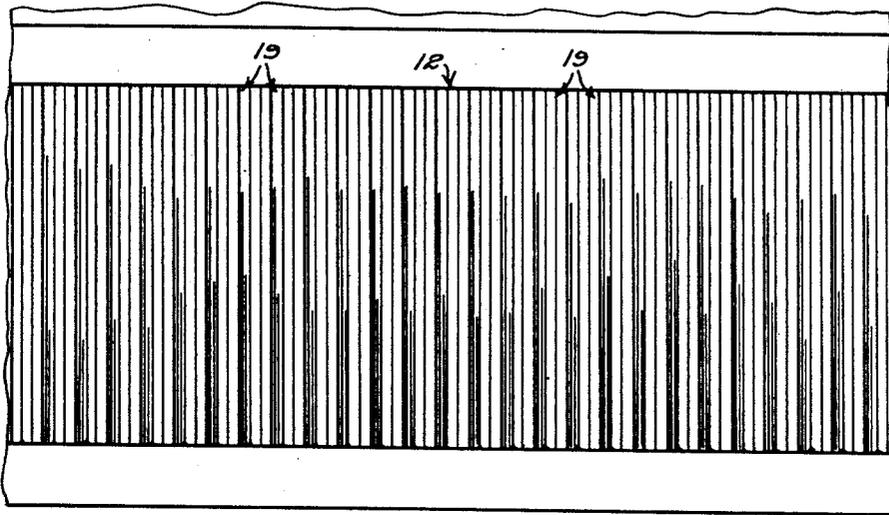


Fig. 4.

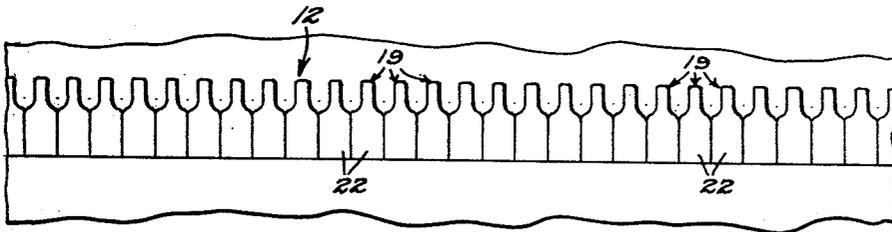


Fig. 5.

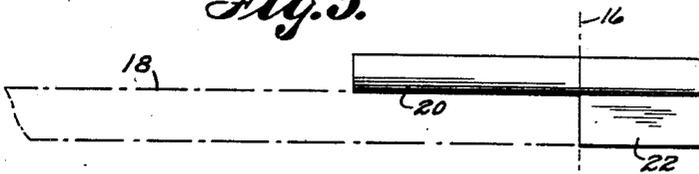


Fig. 6.

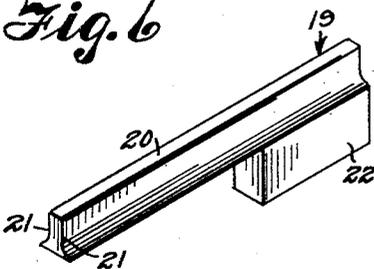
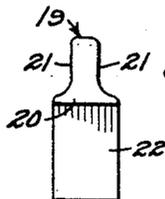


Fig. 7.



INVENTOR.

John Robbins
BY *Vieta J. Evans & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE

2,627,777

PIANO KEYBOARD

John Robbins, Honanau, Territory of Hawaii

Application November 3, 1949, Serial No. 125,273

3 Claims. (Cl. 84-423)

1

This invention relates to a piano, and more particularly to a novel keyboard for a piano.

The object of the invention is to provide a method of and apparatus for either converting a standard piano keyboard into an improved keyboard, or including the keyboard of the present invention in the piano when the piano is initially constructed.

Another object of the invention is to provide a piano keyboard which will enable the user to transpose with greater ease and with less confusion, and wherein the musician will be able to better control the power and volume of the piano, as well as permitting easier shifting of the fingers to improve the general performance of the instrument, the keyboard being simple and inexpensive to manufacture.

Still another object of the invention is to provide a keyboard which provides for key identification by position, spacing and relativity, and all scales, exercises and compositions may be executed in all twelve basic chromatic positions or pitches with the same flexibility.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a fragmentary top plan view of a standard or conventional keyboard, the broken lines showing where the white keys are cut;

Figure 2 is a fragmentary top plan view of the keyboard constructed according to the present invention;

Figure 3 is a view similar to Figure 2, but showing a modification wherein the keys are all of the same color;

Figure 4 is a fragmentary front elevational view of the piano keyboard according to the present invention;

Figure 5 is an enlarged side elevational view showing one of the body members of the present invention in position on a keyboard lever;

Figure 6 is a perspective view of one of the body members of the present invention;

Figure 7 is an end elevational view of one of the body members.

Referring in detail to the drawings, the numeral 10 designates a portion of a standard or conventional keyboard, Figure 1. By using the method and apparatus of the present invention, an improved keyboard is provided, such as the keyboard 11, shown in Figure 2, or the keyboard 12, shown in Figure 3.

2

The conventional keyboard 10 of Figure 1 includes a plurality of main keys 14 which are white or ivory colored, and the flat or sharp keys 15 are colored black. To convert the keyboard 10 into the keyboard 11 of Figure 2, the following steps are carried out:

First, the front portion 9 of each of the white keys 14 is cut off, the white keys 14 being cut along the broken line 16 shown in Figure 1. This results in the front ends of the white keys and the front ends of the black keys 15 now being arranged in alignment or in the same vertical plane.

Next, the black covers 17 are removed from each of the sharp or flat keys 15, and if desired, the ivory coating on the main keys 14 can be removed. Then, there is left a row or bank of levers which include a plurality of the levers, such as the lever 18, shown in broken lines in Figure 5. The levers 18 perform their usual function. Thus, when the levers 18 are depressed or pivoted during use, the sounding mechanism within the piano is actuated.

Now, a body member 19 is attached to the upper surface of each of the levers 18, the body members being fabricated of a suitable material, such as plastic. Thus, all of the levers for the main keys and sharp and flat keys have a body member attached thereto. One of the body members is shown in detail in Figures 5, 6 and 7, and each body member 19 includes an elongated arm 20 that is adapted to be attached to the upper surface of the lever 18 by glue, cement or other adhesive. The arm 20 has its sides tapered longitudinally, as at 21. Secured to the lower front end of the arm 20 or formed integrally therewith is a block 22 which abuts the front ends of the levers 18.

To provide the keyboard 11, as shown in Figure 2, certain of the body members 19 may be painted or otherwise colored black, as indicated at 23, while the remaining body members may be painted or colored white, that is, those body members which have been used to replace the covers 17 on the sharp and flat keys 15 are preferably painted black. However, if desired, the body members may all be painted the same color, as for example, white, and such a keyboard having keys or body members all of the same color is indicated by the numeral 12 in Figure 3.

It is to be understood that the keyboard 11 or the keyboard 12 can be installed in a piano during the initial building or construction of the piano. That is, although the aforementioned description has been directed to an apparatus and

method for converting a conventional keyboard into the improved keyboard of the present invention, it is apparent that the body members 19 can be installed on the levers 18 during the fabrication or assembly of the piano. By using the keyboard of the present invention, the musician will be able to transpose with greater ease and with less confusion, and easier shifting of the fingers will be permitted and the general performance of the instrument will be improved. By tapering the sides of the arms 20 and 21, an increased amount of finger clearance is provided between the keys, so that shifting of the fingers during playing will be facilitated. Further, since each of the levers 18 has a body member 19 attached thereto, and since each of the body members 19 has a portion projecting beyond the front end of the lever 18, all of the keys on the keyboard of the present invention will be full length, so that greater expression and control of the tones is permitted. By using the keyboard of the present invention, the artist is able to play the chromatic scale in several ways with ease and with little practice, whereby a flowing scale of perfect continuity is produced, but this is very difficult with the standard keyboard.

In Figure 2, there is shown a keyboard 11 which includes black-colored keys 23 that are in contrast to the adjacent main white keys. This color assembly enables the artist that is used to the standard keyboard to master the new technique of the new keyboard with greater ease. In Fig. 3, there is shown a keyboard wherein all of the keys are of the same color, whereby the artist or student will perform entirely by position and spacing.

From the foregoing it is apparent that a keyboard has been provided wherein all of the keys are full length and are identical in width, length, height, size and spacing, so as to present a single row of keys in true chromatic succession on a roomy, wide, long, level and uniform keyboard for efficient musical interpretation. Each key on the keyboard of the present invention has a position of equal accessibility and at no time is it necessary to stretch a thumb or finger from front to rear, from one elevation to another, and from a key of one shape to a key of another shape. This completely uniform keyboard is provided because the chromatic scale is a completely uniform scale and it has been found that all forms of musical interpretation are performed easier, smoother and more rapidly on this uniform keyboard. The chromatic scale may be brushed with both hands ascending or descending simultaneously to produce chromatic effects never before

heard from a piano and not possible on the standard piano keyboard of today. The length of the keys on the keyboard of the present invention has been held to a maximum, whereby the performer is able to regulate his expression and volume by free movement of the fingers from front to rear of the keys which changes the ratio of leverages of the keys to the ear mechanism of the piano. Preferably, the musician should begin with the keyboard 11, shown in Figure 2, wherein there are black and white keys which correspond with the black and white keys of the standard keyboard 10, so that the new and simplified technique can be mastered with less effort and in less time. After the technique has been mastered, the keyboard 12 can be used, wherein rapid transposition by position, spacing, touch and the like can be accomplished without any confusion or difficulty.

What is claimed is:

1. A body member adapted to be attached to a piano key lever and comprising an elongated arm having its sides tapered, and a block arranged on the lower front end of said arm adapted to abut the front of the lever.

2. In a piano keyboard, the combination with a plurality of levers arranged in parallel relation with respect to each other, said levers having their front ends arranged in alignment with each other, of a body member attached to each of said levers, each of said body members comprising an elongated arm having its sides tapered, and a block arranged on the lower front end of said arm and abutting the front ends of said levers.

3. The apparatus as described in claim 2, and wherein the sharps and flats are colored black, and the remaining keys are colored white.

JOHN ROBBINS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,478,474	Felder	Aug. 9, 1949
2,530,832	Martin	Nov. 21, 1950

FOREIGN PATENTS

Number	Country	Date
250,641	Germany	Sept. 17, 1912
352,395	Germany	Apr. 26, 1922
451,142	Germany	Oct. 21, 1927
10,851	Great Britain	May 12, 1902
190,182	Switzerland	June 16, 1937
315,880	Italy	Mar. 10, 1934