Aug. 14, 1928. 1,680,582

W. I. ZIDELL

CHROMATIC SCALE KEYBOARD

Filed July 5, 1927

Fig. 1

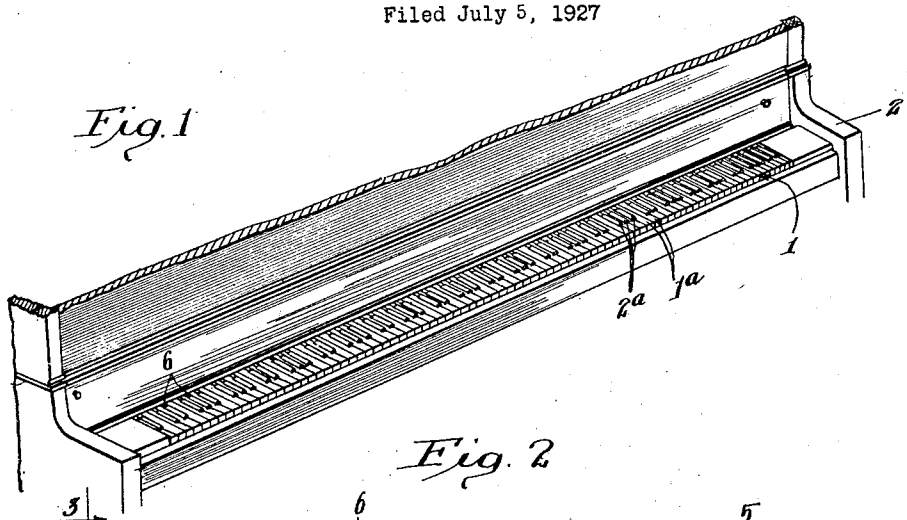


Fig. 2

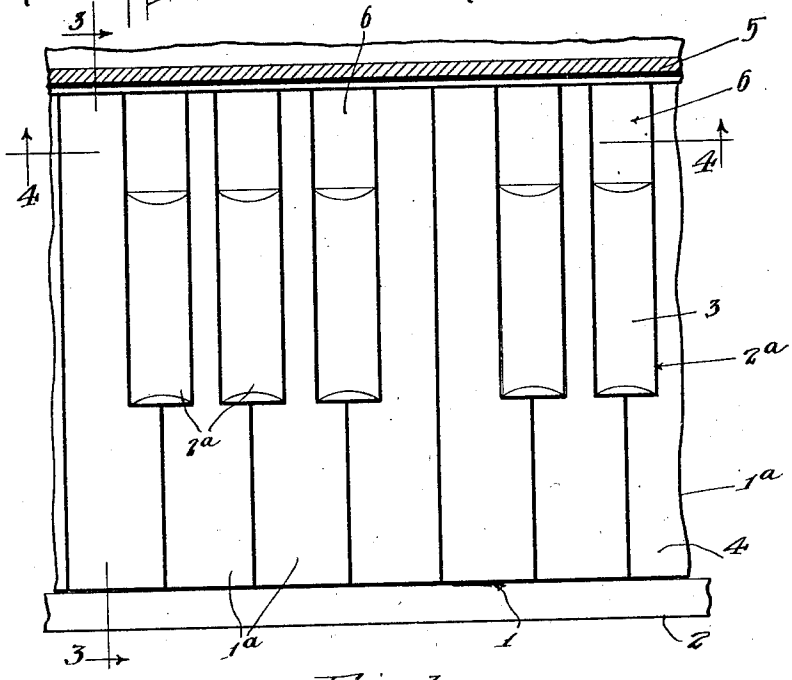


Fig. 3

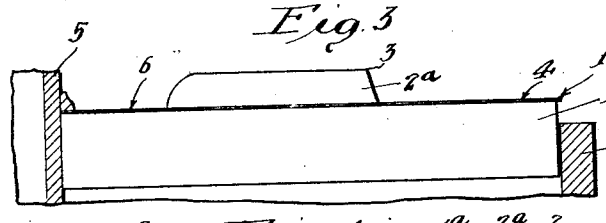
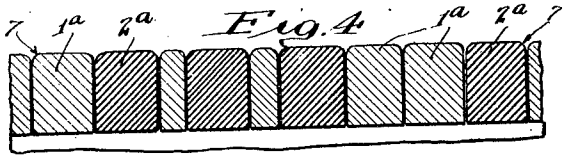


Fig. 4



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UNITED STATES PATENT OFFICE.

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CHROMATIC-SCALE KEYBOARD.

Application filed July 5, 1927. Serial No. 203,359.

This invention relates to keyboards of musical instruments and, while features of the invention may be applied to a keyboard of any instrument, the invention is particularly applicable to the keyboard of pianos. As ordinarily constructed, the white keys of the board produce only natural notes on the instrument and the black keys which are located at intervals on the keyboard are disposed intermediately with respect to the white keys and these keys produce sharp and flat notes. In playing sometimes a musician desires to produce a run of notes on what is known as a chromatic scale. With the ordinary keyboard this cannot be readily done, because the black keys that produce the sharp and flat notes are located at a higher level than the white keys. The object of the present invention is to provide a keyboard for an instrument of this kind having a special construction which will enable a chromatic scale to be readily played on the instrument; also to accomplish this end without necessitating any change in the construction or arrangement of the keys which might interfere with playing the instrument in the normal way.

Further objects of the invention will appear hereinafter.

The invention consists in the novel parts and combination of parts to be described hereinafter, all of which contribute to produce an efficient chromatic scale keyboard.

In the drawing:

Figure 1 is a perspective showing the front portion of a piano and illustrating a keyboard embodying my invention.

Figure 2 is a plan of a portion of the keyboard upon an enlarged scale, the board at the back of the keyboard being shown in horizontal section.

Figure 3 is a vertical section taken about on the line 3—3 of Figure 2.

Figure 4 is a vertical section taken on the line 4—4 of Figure 2.

Referring to the drawings, 1 represents the keyboard of a piano 2 to which I have applied my invention. This keyboard comprises a series of white keys 1^a which are constructed and mounted in the usual way in the piano. These keys produce natural notes on the instrument. The keyboard includes a second series of keys, namely, black keys 2^a which are disposed in the usual manner intermediately between the keys 1^a, that is to say, these black keys are disposed in the usual alternating groups, each group having two or three keys.

As usual, the upper faces 3 of the black keys are located at a higher level than the upper faces 4 of the white keys (see Figure 3).

As usually constructed, the black keys 2^a of a keyboard extend back to the board 5 at the rear of the keyboard.

In applying my invention to such a keyboard, I construct the black keys 2^a so that at a certain point their upper faces are depressed to the level of the upper faces 4 of the white keys. I prefer to provide the depressed faces 6 of the black keys at their rear ends, that is, adjacent the board 5. In other words, at this point on the keyboard the upper faces of all the keys are on the same level (see Figure 4).

With this construction, it will be evident that the musician can play on the keyboard in the regular way, but when he desires to produce a run on the chromatic scale he can do so merely by pressing the keys in succession at their rear ends.

As indicated in Figure 4, the corners of all the keys at their depressed faces 6 are formed with rounded faces or fillets 7. These rounded corners facilitate the passing of the pianist's fingers from one key to the next when the "run" or chromatic scale is played.

What I claim is:

1. A keyboard for a musical instrument, having a series of keys adapted to produce natural notes on the instrument, said keys having their upper faces disposed at the same level, a second series of keys disposed intermediately between the first named keys adapted to produce flat and sharp notes, said second series of keys having their upper faces disposed at a higher level than the keys of the first series, and also having depressed faces on their upper sides at the same level as the upper faces of the first named series.

2. A keyboard for a musical instrument, having a series of keys adapted to produce natural notes on the instrument, said keys having their upper faces disposed at the same level, a second series of keys disposed intermediately between the first named keys adapted to produce flat and sharp notes, said second series of keys having their upper faces disposed at a higher level than the keys of the first series, said second series of keys having depressed faces at their rear ends

and on their upper sides located on the same level as the upper faces of the first named series.

3. A keyboard for a musical instrument, having a series of white keys adapted to produce natural notes on the instrument and having their upper faces disposed at the same level, and a second series of black keys disposed intermediately between the first named keys, adapted to produce flat and sharp notes, said black keys having their upper faces disposed at a higher level than the white keys, said black keys having depressed faces on their upper sides located at the same level as the upper faces of the white keys.

Signed at Los Angeles, California, this 30th day of June, 1927.

WILLIAM I. ZIDELL.