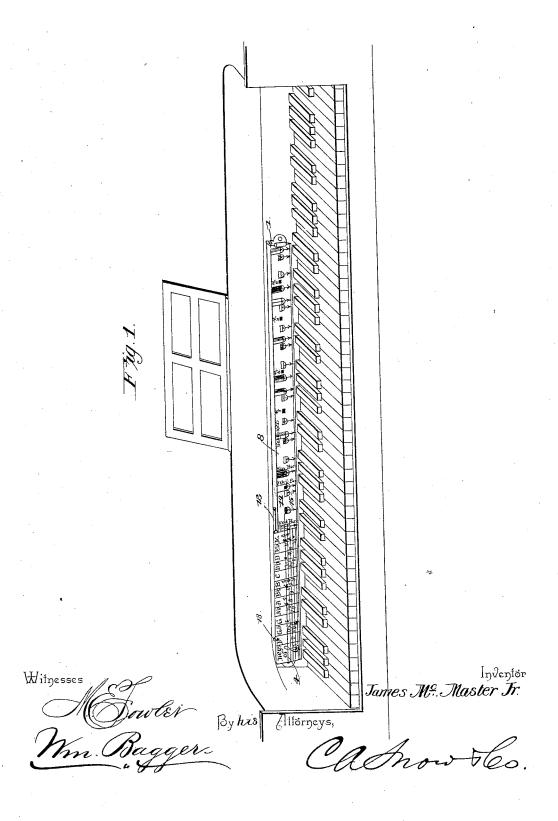
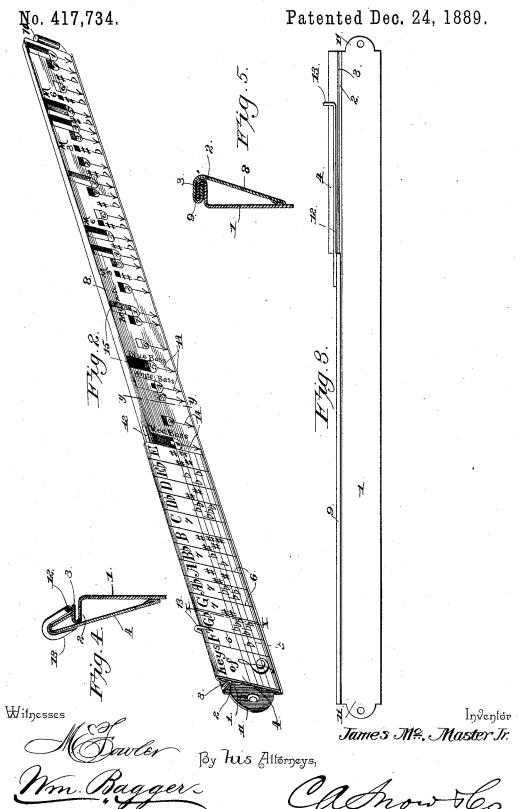
## J. MACMASTER, Jr. MUSIC INDICATOR FOR TEACHING.

No. 417,734.

Patented Dec. 24, 1889.



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## UNITED STATES PATENT OFFICE.

JAMES MACMASTER, JR., OF BELLEVILLE, KANSAS.

## MUSIC-INDICATOR FOR TEACHING.

SPECIFICATION forming part of Letters Patent No. 417,734, dated December 24, 1889.

Application filed July 16, 1889. Serial No. 317,686. (No model.)

To all whom it may concern:

Be it known that I, JAMES MACMASTER, Jr., a citizen of the United States, residing at Belleville, in the county of Republic and State of Kansas, have invented a new and useful Apparatus to Assist Students of Music in Learning Harmony, of which the following is

a specification.

This invention relates to an improved apparatus to assist students of music in learning harmony; and it consists of a device adapted to be attached to a piano or organ above the key-board, and comprising a plate having a key-table attached at one end and provided with a scale-slide having a pointer attached at one end in such a manner that when the said slide is moved laterally it shall move along the key-table and point to the key-signatures upon the said table, the said scale-slide being provided with marks adapted to point to the keys of the instrument and to indicate the key-note and its chord.

The construction of my improved apparatus will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of a piano having my improved apparatus attached thereto in position for operation. Fig. 2 is a perspective oview of my improved apparatus detached. Fig. 3 is a rear view of the same. Fig. 4 is a vertical transverse sectional view taken on the line x in Fig. 2. Fig. 5 is a vertical transverse sectional view taken on the line

35 y y in Fig. 2. Like numerals of reference indicate like

parts in all the figures.

My improved apparatus is constructed, preferably, of sheet metal, although any other suitable material may be employed in its construction, and it is composed of a plate 1, of suitable length, provided at its upper edge with an outwardly-extending flange 2, the edge of which is turned so as to form a reargular wardly-extending bead 3. At one end of the plate 1, preferably at its left-hand end, as being the most convenient, is secured a stationary plate 4, upon the face of which the music-staff 5 is painted, printed, embossed, staff is divided by vertical lines 6 into spaces

7, one for each of the keys and semi-keys of an octave, the letters for which are inscribed at the heads of the respective spaces. The correct signature in each key is inscribed 55 upon the music-staff in the proper places.

8 designates a slide fitting against the front side of the plate 1 and flange 2 and having a beaded flange 9, adapted to engage the bead 3, whereby the slide 8 is connected to the 60 plate 1 in such a manner as to be capable of sliding laterally with relation thereto without coming in contact with any part of the piano or organ to which the apparatus is attached, and thus avoiding all possibility of marring 65 or injuring the instrument. One end of the slide 8 is provided with a handle 10, by means of which it may be conveniently manipulated.

The plate 1 is provided at its ends with outwardly-extending ears or lugs 11, through 70 which tacks or screws may be driven to secure it in proper position above the key-board of the instrument to which it is to be attached.

The slide 8 is provided at the end adjacent to the plate 4 with a laterally-extending arm 75 12, extending in rear of the upper edge of said plate, and provided at its outer extremity with a pointer 13, which, when the slide 8 is in contact with the plate 4, registers with the first key-space upon the said plate.

Upon the sliding plate 8 are inscribed a series of pointers 14, adapted to register with the keys of the key-board. One of said pointers, which is inscribed with the words "key-note," is so arranged as to indicate the 85 key-note of the scale indicated by the pointer 13 upon the key-table. Above the pointers 14 are a series of square or other suitablyshaped blocks 15, painted or printed in different colors, the corresponding colors serv- 90 ing to indicate the tones which constitute the cords in any key. It will thus be seen that when the slide 8 has been set so as to indicate the key-note the cords in that key may be found by selecting the keys indicated by 95 points 14, marked with colors which correspond to the color or colors of the key-note. The pointers 14 are likewise marked with numbers from 1-to 7 to correspond with the keys of the octave to assist in enabling the roo student to locate the correct keys upon the

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

1. In a device for teaching harmony, the 5 combination, with a plate adapted to be attached to a piano or organ above the keyboard and having a stationary key-table comprising the proper signatures arranged in spaces directly under the names of the corre-10 sponding keys and half-keys, of a slide having a pointer adapted to register with any one of the key-spaces upon the key-table, said slide being also provided with pointers adapted to register with the keys of the key-15 board of the instrument to which the device is attached, the pointers of the said slide being further provided with distinguishingmarks or colored blocks to indicate the chords in the several scales, substantially as set forth.

2. The combination, with the plate having laterally-extending lugs to receive fastening devices, by means of which the said plate may be attached to a piano or organ above the key-board, of the key-table permanently 25 secured at one end of said plate, and a sliding scale-indicator having a pointer adapted to register with the spaces of the key-table, substantially as set forth.

3. The combination, with the plate pro-30 vided at its upper edge with an outturned flange having a rearwardly-extending bead, of the key-table permanently secured at one end of said plate, and a slide having a beaded flange engaging the beaded flange of the plate, 35 the lower edge of said flange resting against the face of the said plate, substantially as set forth.

4. In a device for teaching harmony, the combination, with a plate adapted to be attached to a piano or organ above the key- 40 board and having a stationary key-table comprising the proper signatures arranged in spaces directly under the names of the corresponding keys and half-keys, of a slide having a pointer adapted to register with any 45 one of the key-spaces upon the key-table, said slide being also provided with pointers adapted to register with the keys of the keyboard of the instrument to which the device is attached, the pointers of the said slide be- 50 ing further provided with distinguishingmarks or colored blocks to indicate the chords of the several scales, and with numbers from one to seven to correspond with the keys of the octave, substantially as and for the pur- 55 pose set forth.

5. In a device for teaching harmony, the combination, with the plate adapted to be attached to a piano or organ above the keyboard and having a stationary key-table com- 60 prising the proper signatures arranged in spaces directly under the names of the corresponding keys and half-keys, of a slide having a pointer adapted to register with any one of the key-spaces upon the key-table, 65

substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES MACMASTER, JR.

Witnesses: EDGAR F. CLARK, CHARLES ROBINSON.