

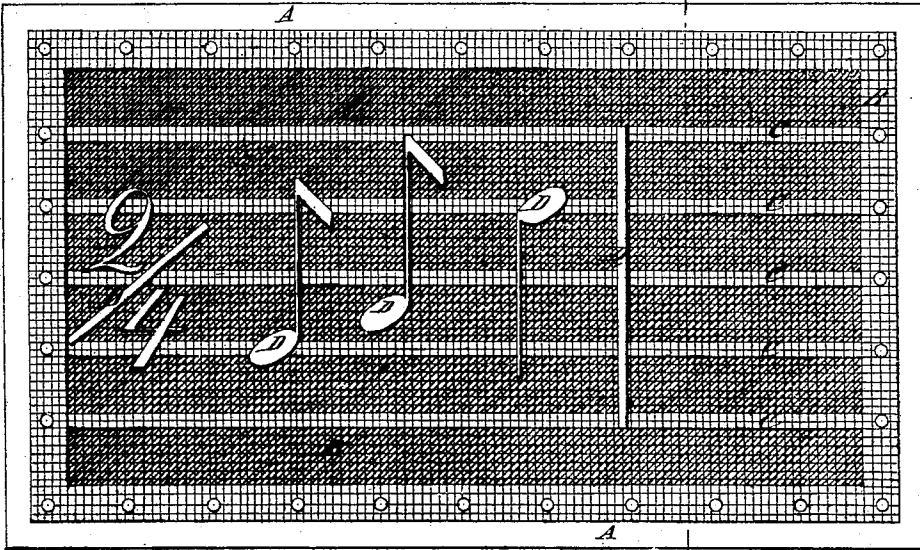
R. S. HILL.

DEVICE FOR MUSICAL INSTRUCTION.

No. 185,532.

Patented Dec. 19, 1876.

*Fig. 1*



*Fig. 2.*



**WITNESSES:**                     

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# UNITED STATES PATENT OFFICE

RUSSELL S. HILL, OF INDUSTRY, ILLINOIS.

## IMPROVEMENT IN DEVICES FOR MUSICAL INSTRUCTION.

Specification forming part of Letters Patent No. **185,532**, dated December 19, 1876; application filed May 22, 1876.

*To all whom it may concern:*

Be it known that I, RUSSELL S. HILL, of Industry, in the county of McDonough and State of Illinois, have invented a new and Improved Musical Scale, of which the following is a specification:

My invention consists of a board frame or other device with a strip of woven wire, or other equivalent substance of dark color, nailed on a little in advance of light lines, representing the lines of the staff, together with movable notes and other characters to be used in teaching the principles of vocal music. It contains all the advantages of the blackboard, while it is more speedy, accurate, attractive, and easily handled than the crayon and blackboard, and can be used by persons not accustomed to drawing.

Figure 1 is a front elevation of my improved scale, and Fig. 2 is a section on line *x x*.

Similar letters of reference indicate corresponding parts.

A is a frame of any approved kind, or it may be a board with the middle portion recessed a little, on which is a strip, B, of woven reticulated fabric, mounted in front of the strips C, and on the fabric B the notes D and other characters are hung by a hook, pin, or other device adapted to readily attach the said objects, so that they may be readily moved about on the scale.

With this device the note must remain wherever placed, and will not require adjusting even to the one-hundredth part of an inch. The surface presented on my frame being perforated, there is a place always ready for the pin or hook, so that no pressure is required to cause the notes to stick; hence a person can manipulate them with great rapidity.

By this contrivance the note can be moved up and down as a sound will rise and fall.

The teacher can direct the attention to one of these notes, and sing a tone that it is supposed to represent, at the same time changing the tone either up or down, and changing the note to correspond.

The teacher can also build the scale as he sings, placing each note as it is sounded, making the spaces wide or narrow, according to the major or minor intervals between the tones.

The apparatus is also to be used in the transposition of the scale for the representing to the eye the transposition of the tone by the voice. In the diatonic scale the interval between the tones is greater in some places than others, and the intervals between the absolute tones of the staff (named by letters) come in the same way, and vary with different letters on which the scale starts, requiring corresponding modification of the scale, which can be readily accomplished by this device. Without this representation to the eye of the movable note, representing the sharpening or flattening of tones, affecting the intervals in the transposition of the scale, it is very hard for young minds to grasp the principles at all.

A whole apparatus can be made in that way, letting the wires cross the staff perpendicularly, with the notes placed on them above and below, to be moved onto any line or space desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The frame A, having reticulated strips B C, in combination with suspended notes D, substantially as and for the purpose specified.

RUSSELL STONE HILL.

Witnesses:

I. H. WILLIS,  
H. L. SPERRY.