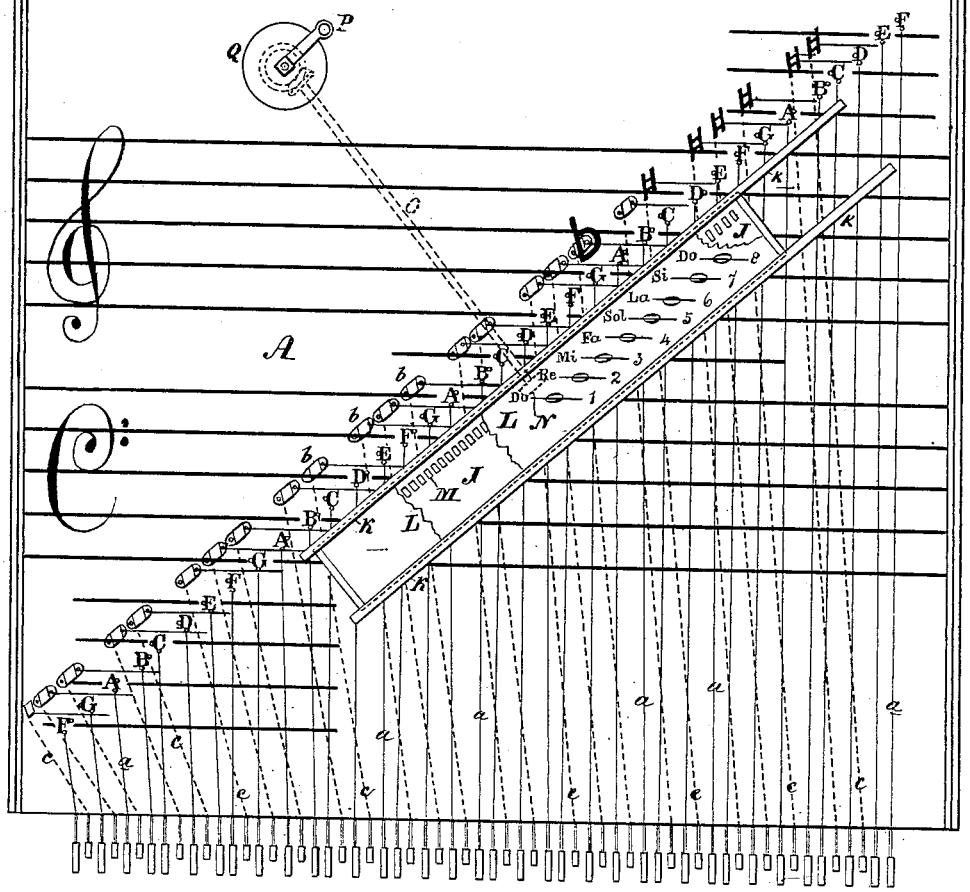
L. ANDERSON.

Musical Transposing-Board.

No. 204,876. Patented June 18, 1878.

Fig. 1.



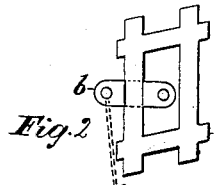
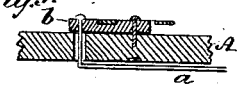


Fig. 2

Fig. 4.

Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

LAING ANDERSON, OF CORSELEY, ONTARIO, CANADA.

IMPROVEMENT IN MUSICAL TRANSPOSING-BOARDS.

Specification forming part of Letters Patent No. **204,876**, dated June 18, 1878; application filed May 4, 1878.

To all whom it may concern:

Be it known that I, LAING ANDERSON, of Corseley, in the county of Elgin, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Musical Transposing-Boards; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of this invention is to facilitate the study of music and aid the acquirement of a knowledge thereof. The means for accomplishing this result consists in constructing and arranging a transposing-board so that it shall be operated by the key-board of a musical instrument, so that on a note being struck on the instrument the name of such note and of its tone shall be correctly designated on the transposing-board.

The invention consists, essentially, first, of a board having staff-lines with letters of notation pivoted on wires operated by the keys of the corresponding notes on the key-board of an instrument, whereby the sound is marked coincidently with the movement of its character of notation; secondly, in combination with a board having staff-lines and notated characters operated by wires, a sliding operating scale-holder, for indicating the transposition of the note; thirdly, the combination of a board having a staff of notation, characters operated by wires, a mechanical slide-operating scale-holder, and a bell or gong operated by the movement of the slide mechanism, to sound by strokes the movement of the slide from note to note, ascending or descending.

Figure 1 of the drawing represents a front view of a transposing-board embodying my invention. Figs. 2, 3, 4 are detail views.

A is the board, inscribed with staff and leger lines, as in ordinary musical writings. The half-tones are indicated by short lines between the full tones. Each staff and leger line is notated with its musical character, A to G, by the letter being secured to the end of a wire, which is bent to pass through a vertical slot in the board at its proper line, as shown in the drawing. These wires *a* (shown by full lines) are secured slidingly to the back of the board by suitable staples, and extend below the bottom edge of the board, which is set in a vertical position above the key-board of an instrument, so that the ends of the wires bear on the keys when in a normal position, and when depressed the wire falls, shaking the letter attached to its upper end, thus indicating the tone and note.

The wires of the sharps and flats are shown by dotted lines *c*, and their upper terminations are provided with blocks *b*, to which the flat or sharp character is removably attached, as may be required in transposing.

J is a plate sliding in ways K, operated by the cogs of a wheel, N, engaging with slots M in the plate J, which carries an interchangeable transposing-scale, L.

The wheel N is keyed on one end of a shaft, O, which is operated by bevel-gear wheels and a crank-handle, P.

Q is a bell or gong, the hammer operated by the rotation of the shaft O, and is timed to strike as the scale-board L passes from line to line, whereby the fifths in ascending and the fourths in descending can be counted.

By means of this device, great assistance is rendered to persons studying the transposition of music. All the various tones, notes, &c., are marked on the board, and each note is connected to the upper end of a wire whose lower end rests upon the keys of the instrument.

When a key is depressed in playing, the lower end of the wire resting thereon falls and moves or shakes the letter attached to the upper end, thus attracting attention to and indicating the note played. On the return of the keys to their normal positions, the wires return to their normal or non-indicating positions.

The action of the wires and the consequent indication of the notes being automatic, the device provides a very simple and attractive means of teaching. It furnishes all the elements of efficient and successful teaching, and renders the study easy and pleasant.

I claim as my invention—

1. A musical transposing-board with staff-lines having letters or characters of notation

attached to the end of wires adapted to be operated by a key-board, as and for the purpose set forth.

2. In combination with a musical transposing-board having characters of notation operated by wires, a plate, J, and scale L, arranged to slide on said plate, as set forth, for transposing the musical composition.

3. The combination, with a musical transposing-board having characters of notation operated by wires, of a slide, J, for holding the transposing-scale L, and a bell or gong, Q, timed to operate as and for the purpose set forth.

LAING ANDERSON.

Witnesses:
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