

J. H. MOORE, SR.
 INSTRUCTIVE MUSICAL PUZZLE.
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1.191,135.

Patented July 11, 1916.

Fig. 1.

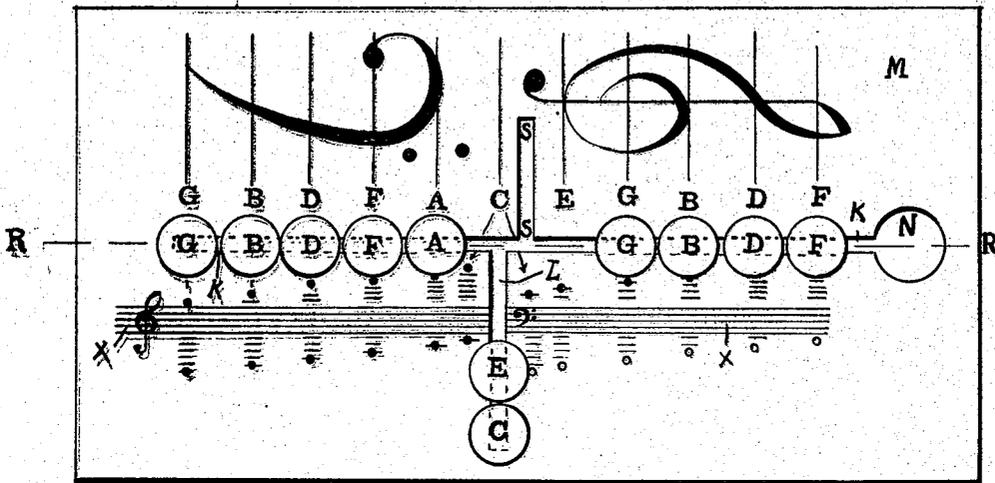


Fig. 2.

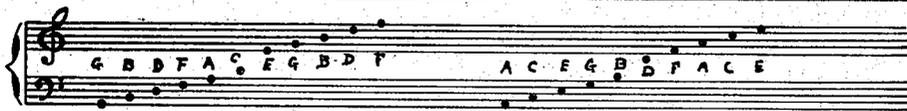
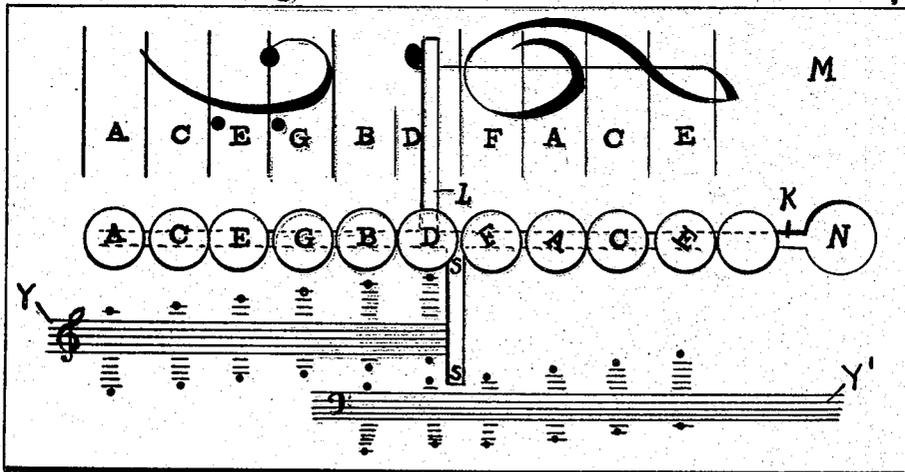
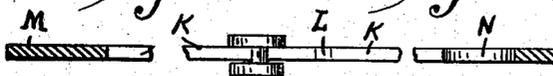


Fig. 4.

Fig. 3.

WITNESS:

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INSTRUCTIVE MUSICAL PUZZLE.

1,191,135.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH HENRY MOORE, Sr., residing at Sewickley, in the county of Allegheny and State of Pennsylvania, have invented a new and Instructive Musical Puzzle, of which the following is a specification.

My invention relates to instructive puzzles and aims to impress upon the mind the proper location of musical characters with relation to the staff, by means of an interesting and amusing pastime. I attain this object by the device shown in the accompanying drawing, in which—

Figure 1, is a front view of my device. Fig. 2, is a rear view of my device. Fig. 3, is a section along line R R of Fig. 1. Fig. 4 is an explanatory illustration showing the notes on the staff, with their notation by letter, both on the bass and treble clefs.

In both Fig. 1 and Fig. 2, M is a plate of resisting material such as smooth cardboard, celluloid, or metal, provided with a longitudinal slot K K and with a transverse slot L L, or with two transverse slots L L and S S. The choice between one or two transverse slots is dictated by mechanical reasons only. Slot L L may easily be made long enough to accommodate a sufficient number of button-sliders to mix the rest of them in any desired manner, but a slot of this length may lead to an inconvenient shape of the plate. An additional transverse slot S S may therefore be used. The number of slots does not affect the spirit of my invention. In these slots I arrange a number of button shaped sliders, overlapping the slot on both sides of the plate, so that they can be slid along in the slots, but cannot be removed from the plate. These sliders are marked G, B, D, F, A, C, E, G, B, D, F in Fig. 1, and A, C, E, G, B, D, F, A, C, E, blank, in Fig. 2. I do not wish to limit myself to the mechanical construction of these sliders. Each of them may be in two parts, the front head having a projection screwing into the rear head, or, they may be integral, being inserted from one side, and the projecting part may be riveted over, to form the other head, or the two heads may be fastened together by cement or glue. Finally, they may be inserted through a large opening N which is later on closed up. Each slider represents a musical note, whose proper location relative to the staff is indicated in Fig. 4, both

by the staff with the clef and by the corresponding letter of the alphabet. The longitudinal slot and the transverse slot or slots, are of such length compared to the size of the sliders, that the sliders may be pushed around and may be thoroughly mixed up. The musical characters might all be represented on one side of the plate, but the large number then required would make a very long and unhandy plate. For that reason I prefer to use both sides of the plate and to let each slider represent two different notes. In assigning two notes to each slider different selections may be made. One side may represent the notes of the bass clef and the other side may represent notes of the treble clef, or else, one side may represent the notes on the lines and the other side may represent the notes in the spaces between the lines. I prefer this latter arrangement because it enables me to use the position of the sliders after solution of the puzzle for conveying additional information as specified below. In the preferred form I use eleven sliders, marked respectively G, B, D, F, A, C, E, G, B, D, F on the front side of the plate, Fig. 1, and A, C, E, G, B, D, F, A, C, E, and blank, on the rear side of the plate, Fig. 2. On each side I mark the lines of the staff both for the bass and treble clefs as indicated in Fig. 1 and Fig. 2. By comparison it is seen that the letters of the lines and spaces coincide with those shown in the explanatory illustration, Fig. 4. The sliders may be shoved around, and the puzzle consists in placing them in the position marked for them. Their proper location is also used by me to impress upon the mind the notation of the musical characters above and below the regular staff in both clefs, on what is known as the leger lines and spaces. In order to obtain this end, I use the fact that the letters repeat themselves in the same rotation in both clefs, and both above and below the staves. Proper places for the sliders might be provided outside of the staff lines in the regular slot, but such an arrangement would be too clumsy. For this reason I prefer to mark the regular notation of the musical characters on the plate, as shown at X X and Y Y', Figs. 1 and 2, and to co-ordinate the location of these characters with the letters by printing them in line, as shown, so that each musical character stands directly in line with the fixed letters, such as, G, B,

D, F, A, C, E, G, B, D, F on one side of the plate, Fig. 1, and A, C, E, G, B, D, F, A, C, E on the other side of the plate, Fig. 2.

I claim as new and I desire Letters Patent for—

1. A plate of resisting material on which are marked the lines of the musical staff; letters to denote the characters on the lines and in the spaces, and sliders with the same letters, movable in a slot and in a transverse slot.

2. A plate showing on each side the five lines of the staff at least twice, once for the treble clef and once for the bass clef, and fixed letters denoting on one side the characters on the lines of the staff, and on the other side the characters in the spaces between the lines, said letters in the position belonging to the musical characters which they denote.

3. A plate with the five lines of the musical staff marked twice in one direction on each side of the plate, and twice in a direction normal to the first direction, also on each side of the plate; musical characters on the second set of lines, and fixed letters denoting these musical characters as well as the musical characters belonging to the first set of staff lines.

4. A plate, showing on each side the five lines of the musical staff twice in one direction, a longitudinal slot in said plate, button like sliders in said slot and guided by said slot, said sliders adapted to register with the lines of the staff, fixed letters on the lines on one side of the plate, and between the lines on the other side of the plate, said letters denoting the musical character of the lines and spaces in the location of the letters, and letters on the button like sliders corresponding with the fixed letters.

5. A plate, showing on each side the five lines of the musical staff twice in one direction, a longitudinal slot in said plate, button like sliders in said slot and guided by

said slot, said sliders adapted to register with the lines of the staff, fixed letters on the lines on one side of the plate, and between the lines on the other side of the plate, said letters denoting the musical characters of the lines and spaces in the location of the letters, and letters on the button like sliders corresponding with the fixed letters, additional staff lines in a direction normal to that of the first mentioned staff lines, and musical characters above and below the second set of staff lines corresponding with the fixed letters.

6. A plate with a longitudinal slot, and a transverse slot, button like sliders, marked with the letters of musical characters or notes and letters on the plate denoting these same musical characters in the correct position relative to the musical staff, substantially as described.

7. A plate with a longitudinal slot, and with a plurality of transverse slots, button like sliders, marked with the letters of musical characters or notes and letters on the plate denoting these same musical characters in the correct position relative to the musical staff, substantially as described.

8. A plate with a longitudinal slot, and a transverse slot, button like sliders in said slots, said sliders carrying letters denoting one set of musical characters on one side, and letters denoting another set of musical characters on the other side.

9. A plate with a longitudinal slot, and with a plurality of transverse slots, button like sliders in said slots, said sliders carrying letters denoting one set of musical characters on one side, and letters denoting another set of musical characters on the other side.

JOSEPH HENRY MOORE, Sr.

Witnesses:

WILLIBALD TRINKS,
JULIA C. ARNOLD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."