

1,322,261.

Patented Nov. 18, 1919.

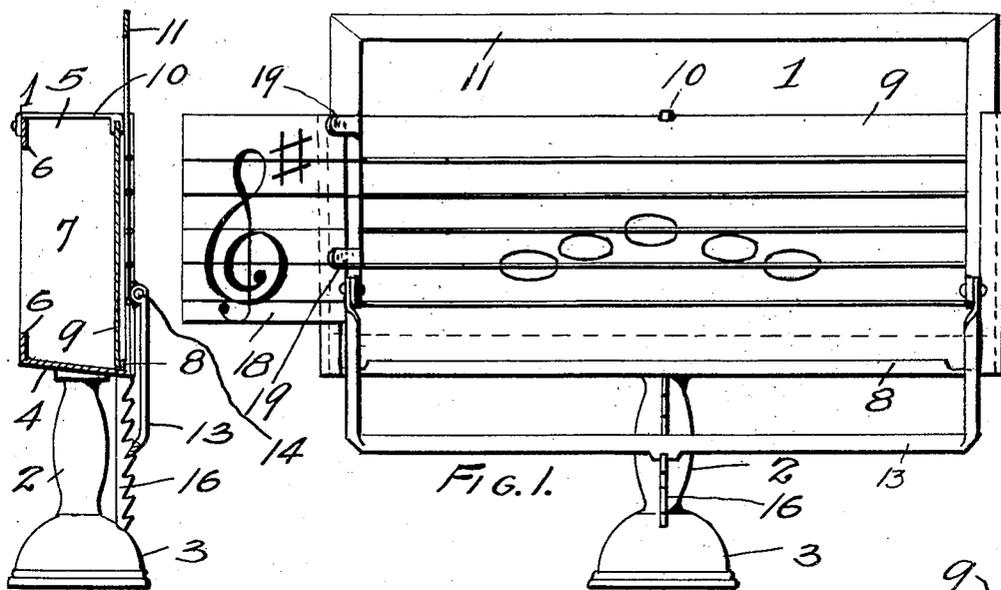


FIG. 3.

FIG. 1.

FIG. 5.

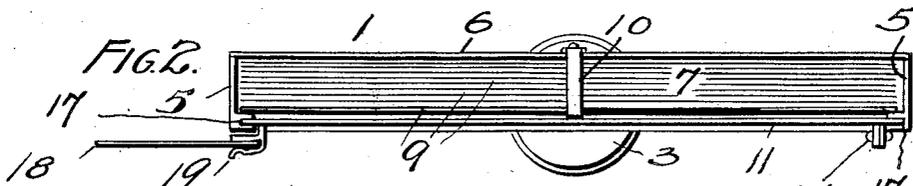
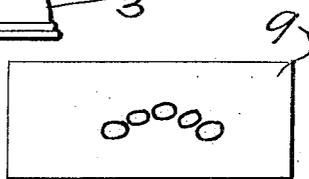


FIG. 2.

FIG. 6.

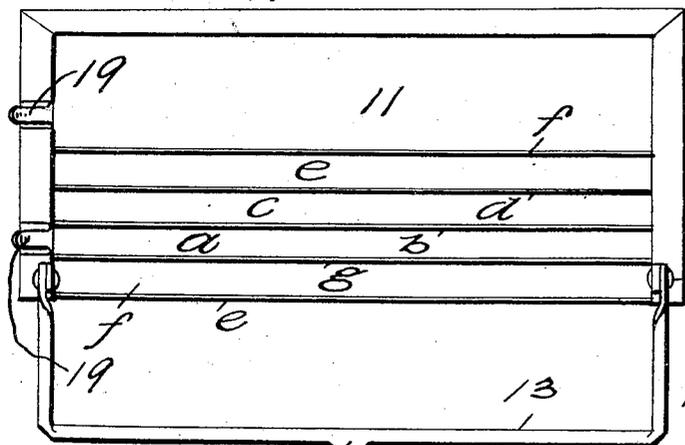
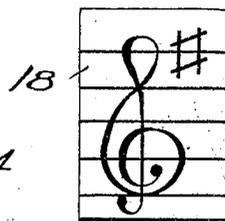


FIG. 4.



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EDUCATIONAL APPLIANCE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MARTHA OCHS, a citizen of the United States of America, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Educational Appliances, of which the following is a specification.

The present invention relates to educational appliances designed particularly for use in schools and classrooms in teaching the scholars to read music, by the employment of charts or drill cards having printed thereon groups of notes in ascending or descending scales, or with other arrangements of notes in groups. Any suitable number of these drill cards or charts may be employed, and preferably notations are printed on both sides of the card for economy in time and material. In connection with the cards or drill charts, a signature card is employed and both these types of cards are used on an adjustable staff, as will be hereinafter more specifically set forth and claimed.

In the accompanying drawings one complete example of the physical embodiment of the invention is illustrated according to the best mode so far devised for the practical application of the principles of the invention.

Figure 1 is a front elevation of the appliance illustrating the invention as used in the key of G.

Fig. 2 is a top plan view of the apparatus.

Fig. 3 is a transverse, vertical sectional view.

Fig. 4 is a front view of the adjustable staff detached.

Fig. 5 shows a drill chart or card.

Fig. 6 shows a signature card.

The musical notes are arranged in groups on the charts, an exercise on each side of the chart, and the students are thus taught to recognize and sing groups of musical notes in the same manner that they recognize and read groups of letters that are made up into words, or sentences.

In the utilization of the appliance, a cabinet 1 is employed which is preferably of metal and of suitable size with a rectangular shape to receive and hold a number of drill charts, while only one of these charts is in actual use. The cabinet is supported upon a post or pedestal 2 having a base 3 and these parts, in actual use, are made

in attractive manner and properly ornamented. The cabinet has a bottom or base plate 4, the two ends 5 and upper and lower back plates 6, forming a space 7 for the accommodation of the drill charts, a flange or guide rib 8 being provided at the front of the base plate to retain the front card 9. There are, as now used in connection with the appliance, twenty-five of these cards or exhibitors each containing two charts or exercises, one on each side of the card, and inasmuch as each exercise can be sung in at least nine different keys and in at least seven positions in each key, it will readily be seen that by using the fifty exercises on the cards and moving the appliance as will be described, a thousand or more lessons may be taught from the twenty-five cards or exhibitors.

A spring tongue 10 may be used if desired to hold the front card in position, at the upper end, the tongue being attached at the back of the cabinet, and the lower flange or rib 8 holds the card at the lower end, the card thus being held in rigid position in the cabinet. The card illustrated has thereon five whole notes, arranged in group, ascending and descending, and of course the notes are positioned so that they will register with the lines and spaces of the adjustable staff indicated as a whole by the numeral 11.

The adjustable staff comprises an inverted U-shape frame, preferably of metal, open at the bottom, and across this frame extend the longitudinal bars *e, g, b, d,* and *f*, to correspond with the lines of a musical staff, and of course these bars form the musical spaces *f, a, c, e,* as indicated. The bars are rigidly attached to the frame, and they correspond, as do also the spaces between the bars, with the groups of notes on the drill charts 9.

At the lower end of the U-shape frame, a bail 13 is pivoted at 14, and at 15 a central blade or tooth is provided to engage one of the seven teeth or notches in the rack bar 16 that is rigidly attached to the cabinet and extends vertically therebelow in position so that the swinging bail may engage one of the notches and support the staff. The frame of the staff is slidable, vertically in the opposed grooves 17 of the cabinet frame bars, and it will readily be seen that the altitude of the adjustable staff may be altered by sliding the frame in the grooves, and

when the bail is swung inwardly so that the bail will engage the rack bar, the adjustable staff will be supported in adjusted position. The seven notches are spaced to correspond with the lines and spaces of the staff so that, while the lines *g* and *b* of the adjustable staff in Fig. 1 register with the first third and fifth, notes, by moving the staff upwardly one notch or downwardly one notch, the position of the lines and spaces of the adjustable staff will be changed with relation to the group of notes on the drill chart.

In connection with the drill cards or charts, there are employed signature cards, as 18, preferably nine in number, and each card has a clef and staff printed thereon, the lines and spaces of the staff registering with the lines and spaces of the adjustable staff and the drill chart used therewith. In the drawings the signature card for the key of G is shown with one sharp, and the other eight signature cards, not shown, will represent the keys of C, D, A, E, F, B-flat, E-flat, A-flat. These signature cards are detachably used in connection with the adjustable staff, and for this purpose the spring clamps 19 are employed to retain the card as shown in Fig. 1. Thus with the signature card in proper position, the lines and spaces of the clef extend across the signature card, the frame of the adjustable staff, and also across the drill chart. A different signature card is used for each key, and such card may readily be inserted in the spring clamps, or with equal facility be detached therefrom.

The adjustable staff and its accessories may be used to great advantage in the elementary grades in schools, especially in the first and second grades where representation is begun, and in higher grades to familiarize the scholars with the keys, and the letter names of the lines and spaces, etc., of the musical staff. In actual use the drill charts are first exhibited to the scholars in-

dependent of the adjustable chart or staff and the children learn by rote the scale and parts of scales, which are afterward shown on the cards. The same group of notes will suggest a variety of scale progressions, depending entirely on the name and pitch of the first note. The groups are not sung as so many separate tones, but as groups, and made up of tones that are associated together, just as are the letters associated together to form a word. After the scholars learn the cards by rote they are placed in the adjustable staff, and the signature card is also attached so that the group of notes may be sung in the key of the signature card.

It will readily be seen that the teacher with the class before her may adapt the device for use in hundreds of ways, making the lesson both instructive and entertaining to the scholars.

What I claim is:—

1. The combination with a cabinet adapted to retain a chart card, of a slidable frame having bars forming a musical staff, a rack bar on the cabinet and a bail on the frame to engage the rack bar for holding the frame in adjusted position.

2. The combination with the supporting structure and a chart card, of a slidable frame in the structure having bars forming a musical staff, a rack on the structure, and a U-shape bail pivoted on the frame for engaging the rack bar to hold the frame in adjusted position with relation to the card.

3. The combination with the grooved cabinet, and a chart card held in the cabinet, of an inverted U-shape frame slidable in the grooved cabinet and provided with longitudinal staff bars, a rack bar on the cabinet and a bail on the frame to engage the rack bar for holding the frame in adjusted position.

In testimony whereof I affix my signature.

MARTHA OCHS.