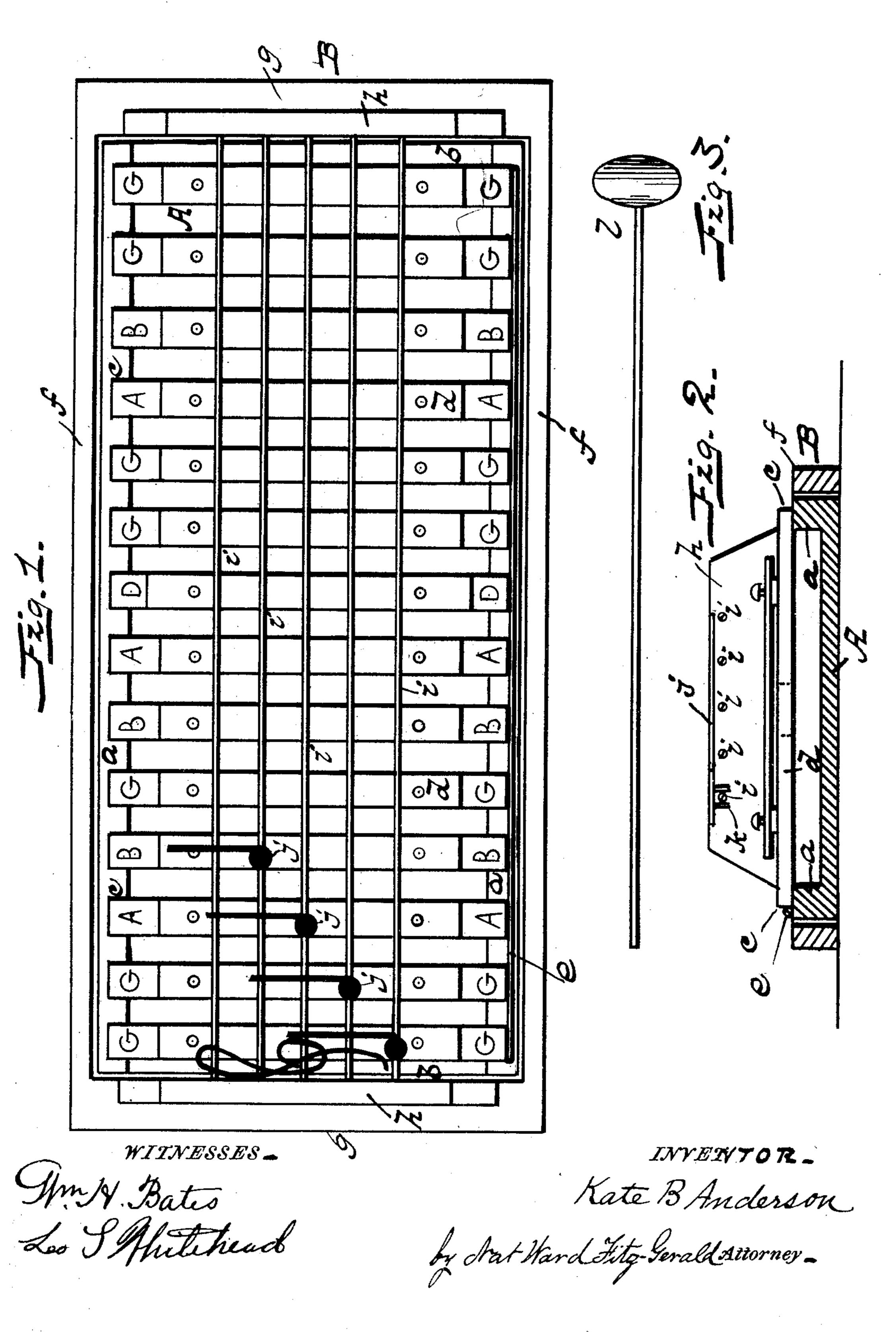
K. B. ANDERSON. MUSICAL INSTRUMENT.

(Application filed Feb. 21, 1899.)

(No Model.)



United States Patent Office.

KATE B. ANDERSON, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO MARY READY, OF SAME PLACE.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 636,232, dated November 7, 1899.

Application filed February 21, 1899. Serial No. 706, 412. (No model.)

To all whom it may concern:

Be it known that I, KATE B. ANDERSON, a citizen of the United States, residing at Chicago, (Englewood,) in the county of Cook and 5 State of Illinois, have invented certain new and useful Improvements in Musical Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to improvements in educational appliances; and it consists in the novel construction, combination, and arrangement of parts of which it is composed, as will be hereinafter fully explained, and particularly pointed out in the appended claims.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a plan or top view of my device. Fig. 2 is a vertical transverse sectional view of the same. Fig. 3 is a face view of the hammer used in connection with my device.

Referring by letter to the accompanying drawings, A designates the floor of the instrument, which is provided with two parallel strips a a at each side thereof, leaving each end b open. These side strips are somewhat raised from the floor and form supports for each end c c of the series of tubes or sounders d d, which are arranged transversely upon their support. A rod e is secured to the upper face of one of the strips a, whereby said sounders are brought in line with one another when the sounders are being put in place.

B designates a frame comprising the side parallel bars ff and end pieces gg, having raised supports hh, between which is aranged wires iiii, said wires being elevated and supported by the pieces hh, as shown in Fig. 2. These wires are designed to support the notes j and other characters in music, which are independent of said wires, and are provided with clamps k, by which the notes are held to said wires. This frame carrying the parallel wires having attached thereto the music or notes is in all respects independent from the base or floor portion and is constructed in skeleton to allow the same to surround the base and bring the wires directly

above the tubes or sounders; but, if desired, after the sounders and notes are arranged to correspond with one another the detachable frame may be removed and set up in front of 55 the player, who uses the hammer l in sounding the tubes.

ing the tubes.

It will be seen that the instrument is provided with an elevated staff of wires, and any number of sections may be employed and 60 hinged together for folding in storing the device, and on this staff are placed, as required, the treble, bass, &c., and beneath the staff are the tubes giving the sounds represented by the notes set up on the staff. These tubes 65 are perfectly tuned and give forth beautiful tones when struck by the hammer, and the tubes are lettered, as shown in Fig. 1, to facilitate their selection. This is adjustable material for real objective teaching of music. 70 The sounders are handled. It is designed for pupils of all ages and may be adapted to the kindergarten. With these notes and tubes the child immediately connects in his mind the signs (notes) of sounds with the 75 sounds themselves, and the notes come to mean the real thing to him from the first, and it is constructive work, and the pupil learns the formation of scales, chords, and melodies by actually making them himself and not by 80 studying forms already constructed for him by some other mind. Neither the sounds nor the notes appear to him in a fixed form—as, for instance, the keys of a piano or printed music—and by my device it will enable the 85 pupil to "think sounds," and he will not forget what he has made and becomes a sight reader, for he will instantly recognize his own forms when seen reproduced on written or printed pages, and, furthermore, the work as 90 here presented trains the ear, for each note must be sounded and may be sung, and the whole exercise or tune after being constructed on the staff is to be played on the tubes with the hammer or mallet. (Shown in Fig. 3 of 95 the drawings.);

The notaphone may be used to teach music to the blind by having the letters on the tubes raised, and the method of teaching encourages originality, as the pupil will soon invent new roo forms, and the tubes or sounders may be colored to represent relationship.

ored to represent relationship.

It will be further seen that the tubes are interchangeable, as well as the notes upon the staff, and that the pupil may play any desired piece by simply manipulating the tubes and notes to correspond therewith.

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

ent, is—

1. In an educational appliance the combination with the floor portion having the parallel side pieces and the tubes of the independent frame, having the end pieces and the wires secured to said pieces whereby said wires are elevated above the frame, substantially as described.

2. In an educational appliance the combination of the floor portion, the tubes, inde-

pendent frame provided with the elevated wires, and the notes for said wires having the clamps, all substantially as described.

3. An educational appliance comprising notes which may be adjusted and interchangeable for producing the desired music, combined with the tubes or sounders said sounders being independent of the framework and 25 adapted to be arranged and adjusted and set to correspond with said notes, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

KATE B. ANDERSON.

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Witnesses:

MARY E. READY, M. S. VAN BOSKERCK.