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TUNE INDICATING DEVICE FOR MUSICAL INSTRUMENTS

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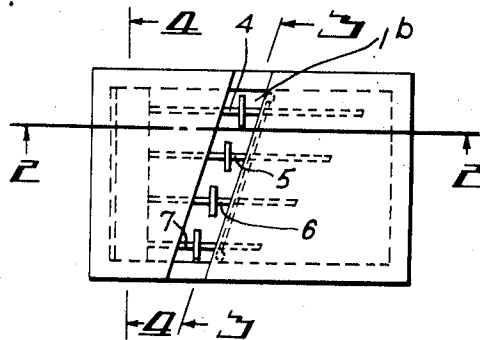


Fig. 1

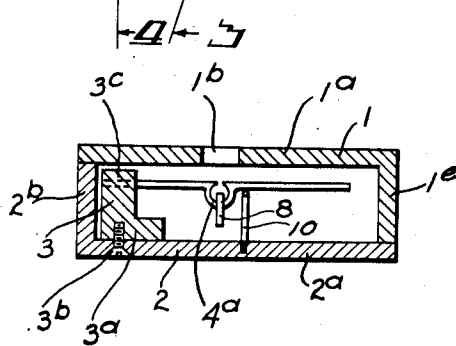


Fig. 2

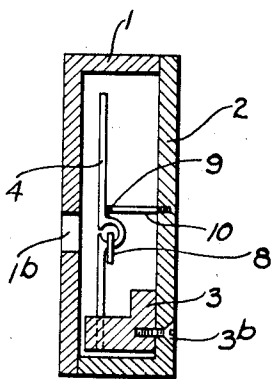


Fig. 3

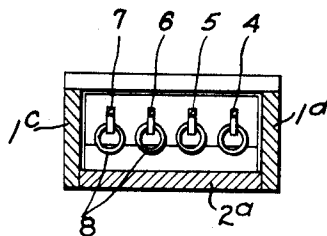


Fig. 4

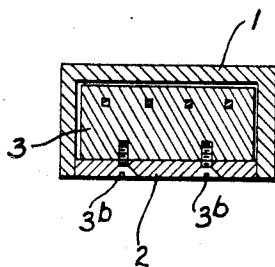


Fig. 5

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TUNE INDICATING DEVICE FOR MUSICAL INSTRUMENTS

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14 Claims. (Cl. 84-454)

My invention relates to a device for indicating whether or not musical instruments are properly tuned and the objects of my invention are:

First, to provide a device of this class that beginners and students may use for indicating whether or not musical instruments are properly tuned;

Second, to provide a device of this class which is always in operating shape and does not require adjustment;

Third, to provide a device of this class which may be entirely enclosed so that the working parts are inaccessible so that beginners, students and the like cannot get at the working parts and get the device out of operating condition;

Fourth, to provide a device of this class which may be positioned on its base or may be stood on end and will operate in either position;

Fifth, to provide a device of this class which provides both a visible and audible tune indicator;

Sixth, to provide a device of this class in which either the visible or audible tune indication may be utilized;

Seventh, to provide a device of this class which is very simple and economical of construction, easy to operate, efficient in its action and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of the novel construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawing and to the characters of reference thereon which form a part of this application in which:

Figure 1 is a top or plan view of my tune indicating device complete ready for use; Fig. 2 is a longitudinal sectional view taken from the line 2-2 of Fig. 1; Fig. 3 is a transverse sectional view taken from the line 3-3 of Fig. 1; Fig. 4 is another transverse sectional view taken from the line 4-4 of Fig. 1 and Fig. 5 is a longitudinal sectional view of the device taken from the line 2-2 of Fig. 1 and shown positioned on its end instead of upon its base and ready for operation.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawing:

The casing members 1 and 2, tuning wire support 3, tuning wires 4, 5, 6, and 7, dangler members 8, audible tune indicating wire 9 and audible tune indicating wire supports 10 constitute the

principal parts and portions of my tune indicating device for musical instruments.

The casing member 1 is provided with a top portion 1a which is provided with a diagonal slot 1b extending across the same. It is provided with side members 1c and 1d and with one end member 1e, the end member 1e being narrower than the side members 1c and 1d so that the end of the base member 2a at its end may extend under the member 1e as shown best in Fig. 2 of the drawing and this base member 2a is narrow enough to fit between the side members as shown best in Figs. 3 and 4 of the drawing and this base member 2a is provided with an end member 2b which is adapted to form the opposite end from the member 1e, thus providing a rectangularly shaped casing from the casing members 1 and 2, the members 2a and 2b fitting snugly the bottom and end of the casing member 1.

Mounted on the base member 2 near the member 2b is the tuning wire support 3 which is provided with a relatively wide base portion 3a which rests on the top surface of the member 2a which is secured thereto by means of screws 3b. This member 3 is provided with an upwardly extending upright portion 3c in which are secured the tuning wires 4 to 7 inclusive. They are preferably made of piano or music wire and the longest one 4 extends to near the end of the casing formed by the members 1 and 2 and the others are gradually diminished in length to the wire 7 which is considerably shorter and provides for different tunes by reason of their varying lengths. Each of these wires 4 to 7 inclusive is provided with a loop portion 4a which is substantially closed and in each one of these loop portions 4a is mounted a dangler member 8 which is adapted to jump about and swing on the loop portion of the members 4 to 7 and are readily observed through the slot 1b and are still inaccessible for inexperienced tuners.

Positioned in the base member 2a at each side for approximately equal distance from the ends of the varying length tuning wires is an audible indicating wire 9 which is stretched on and supported by means of posts 10 at opposite sides and preferably integral therewith, which is adapted to provide audible sound by portions of the vibrating members 4 to 7 engaging said wire.

The operation of my tune indicating device for musical instruments is substantially as follows: The casing, consisting of the casing members 1 and 2, is placed on any suitable part of a musical instrument with the base side 2a down as shown in Fig. 2 or with the end side 2b down as shown in Fig. 5 of the drawing, the wires 4 to 7 being in

proper tune for the strings or other members of the instrument or the casing may be placed in close proximity to the musical instrument. The person who is tuning will observe the particular tuning wires of the device through the opening 1b while playing the strings or other parts of the musical instrument until said strings or other parts are perfectly tuned. This is done by the jumping and swinging of the dangler members 8 in the loops 4a on the particular tuning wires and is also done by observing and by listening to the audible sound produced by the vibration of portions of the tuning wire on the audible wire 9. The operator may use either the visible dangler members or hear the sound of the members on the wire or both as desired.

Though I have shown and described a particular construction, combination and arrangement of parts and portions, I do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

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

1. In a tune indicating device for musical instruments, a casing and a plurality of tuning members each supported entirely at one end of each member, each provided with a loop extending from one side thereof, and a dangler member mounted in each of said loops.

2. In a tune indicating device for musical instruments, a casing, a plurality of tuning members each supported entirely at one end of each member, each provided with a loop extending from one side thereof, a dangler member mounted in each of said loops, said tuning members being of different lengths.

3. In a tune indicating device for musical instruments, a casing, a plurality of tuning members each supported entirely at one end of each member, each provided with a loop extending from one side thereof, a dangler member mounted in each of said loops, said loops being positioned at different distances from the ends of said tuning members.

4. In a tune indicating device for musical instruments, a casing, a plurality of tuning members each supported entirely at one end of each member, each provided with a loop extending from one side thereof, a dangler member mounted in each of said loops, and an audible indicating member positioned adjacent the tuning members.

5. In a tune indicating device for musical instruments, a support, a tuning member secured at one end in said support and supported entirely at said one end, a loop extending from one side of said tuning member, and a dangler member freely mounted in said loop.

6. In a tune indicating device for musical instruments, a support, a tuning member secured at one end in said support and supported entirely at said one end, a loop extending from one side of said tuning member, a dangler member freely mounted in said loop, and an audible indicating

member positioned adjacent said tuning member.

7. In a tune indicating device for musical instruments, a support, a plurality of varying length tuning members each supported entirely at one end on said support, each provided with a loop extending from one side intermediate its ends, and a dangler member freely mounted in each loop.

8. In a tune indicating device for musical instruments, a support, a plurality of varying length tuning members each supported entirely at one end on said support, each provided with a loop extending from one side intermediate its ends, a dangler member freely mounted in each loop, and an audible indicating member positioned adjacent each of said tuning members.

9. In a tune indicating device for musical instruments, a support, a plurality of varying length tuning members each supported entirely at one end on said support, each provided with a loop extending from one side intermediate its ends, a dangler member freely mounted in each loop, an audible indicating member positioned adjacent each of said tuning members, and a casing for supporting and engaging said support, tuning members, indicating members and dangler members.

10. In a tune indicating device for musical instruments, a casing and a plurality of tuning members each supported entirely at one end of each member, each provided with a restriction portion in said tuning member intermediate its ends and a dangler member mounted in each restriction portion.

11. In a tune indicating device for musical instruments, a casing and a plurality of tuning members each supported entirely at one end of each member, each provided with a restriction portion in said tuning member intermediate its ends, a dangler member mounted in each restriction portion, said tuning members being of different lengths.

12. In a tune indicating device for musical instruments, a casing, a plurality of tuning members each supported entirely at its one end on each member, each provided with a restriction portion in said tuning member intermediate its ends, a dangler member mounted in each of said restriction portions, said restriction portions being positioned at different distances from the ends of said tuning members.

13. In a tune indicating device for musical instruments, a support, a tuning member secured at one end in said support and supported entirely at said one end and provided with a restriction portion in said tuning member intermediate its ends and a dangler member freely mounted in said restriction portion.

14. In a tune indicating device for musical instruments, a support, a tuning member secured at one end in said support and supported entirely at said one end and provided with a restriction portion in said tuning member intermediate its ends, a dangler member freely mounted in said restriction portion, and an audible indicating member positioned adjacent said tuning member.

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