J. PETERSON

COMBINED TABLE AND PHONOGRAPH CABINET

Original Filed Feb. 20, 1922

Fig. 1

Fig. 2

Fig. 3

Inventor
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ATTORNEYS
TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN PETERSON, a citizen of the United States, resident of Faribault, county of Rice, State of Minnesota, have invented certain new and useful Improvements in Combined Table and Phonograph Cabinets, of which the following is a specification.

The object of my invention is to provide a drawer for a library or living room table or desk adapted to contain the tone arm and disk support of a phonograph, together with the operating motor of the turn-table, so that when the drawer is pulled out, the phonograph apparatus will be exposed and may be used, and when the drawer is pushed in, the phonograph will be entirely concealed and the table will have the appearance of an ordinary library or living room table.

A further object is to provide a drawer having compartments in which records may be kept for convenient use when the drawer is pulled out.

Other objects of the invention will appear from the following detailed description.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification,

Figure 1 is a perspective view of a table having a drawer embodying my invention,

Figure 2 is a plan view of the drawer removed from the table,

Figure 3 is a sectional view, showing the manner of mounting the tone arm in the drawer and adjusting it therein for different conditions of use.

In the drawing, 2 represents a library or living room table, having suitable supporting legs 3 and a drawer 4 that is supported under the table top in the usual way. Within this drawer 1 I arrange partitions 5 and 6 forming compartments 7, 8 and 9. In one end of the compartment 7, preferably the inner end, the turn-table or disk support 10 is arranged. Operated by the usual motor mechanism, supported beneath the drawer where it is accessible for winding purposes with the crank 11.

In the forward portion of the compartment 7 is an oscillating tone arm 12 and beneath the support of this arm is the sound-amplifier 13. An opening 14 is provided in the bottom of the drawer leading to the amplifier 13 and a diaphragm 15 is provided beneath this opening for producing a soft, mellow tone when the phonograph is operated. The head 16 of the tone arm is mounted over the opening 14, being supported by suitable means, such as a base 17 beneath which I prefer to place a diaphragm 15 with a dead air space between it and the diaphragm 15.

It is sometimes desirable to increase the volume of sound and I therefore provide a base 18 for the tone arm, mounted on the bottom of the drawer over an opening 18 and between openings 18, which communicate with the sound amplifier beneath. A vertical partition 18 is provided in the sound amplifier and curved faces 18 are formed in the angles between the bottom of the sound amplifier and the vertical partition and one of the side walls of the sound amplifier. These curved surfaces will have the effect of deflecting the sound waves outwardly and increasing the volume.

Beneath the opening 18 I provide a cone-shaped member 19 having surfaces which merge into the surface on the bottom of the sound amplifier, the apex of said member projecting upwardly to a point near the bottom of the drawer and on each side thereof curved wings 20 depend into the sound amplifier and have surfaces which operate to deflect the sound waves downwardly and outwardly to the curved surfaces 18, from whence these sound waves pass upwardly through the openings 18. The tone arm is mounted on the base 18 in substantially the same manner as described with reference to the other mounting over the diaphragms and can be easily and quickly transferred from one support to the other, according to the nature or character of the tone desired. When low, soft tones are desired, the tone arm will be mounted on the base 17 and when louder tones, with more volume, are needed, the arm will be mounted over the sound amplifier having the concave deflecting surface and the drawer opened. By closing the drawer and operating the phonograph a modified effect is obtained. The compartments 8 and 9 are used for records and provision is also made at 21 for keeping a supply of used and unused needles.
graph apparatus will be entirely hidden, but whenever desired, the drawer may be pulled out and the musical apparatus exposed to view, where it can be easily and conveniently operated.

I have shown this invention applied to the drawer of a flat top table of the library or living room type, but it will be understood that the drawer of a desk or other article of furniture may be utilized for this purpose, if desired.

I claim as my invention:

1. A drawer support and a drawer adapted for movement to an open or closed position, a phonograph turn-table and tone arm therefor mounted within said drawer, a sound amplifier with its mouth opening inside of said drawer that is opened to the outside when the drawer is opened and closed to the outside when the drawer is closed to modify the volume of the sound emitted.

2. The combination with a table and a drawer therefor arranged to move in and out transversely of the table, of a phonograph turn-table mounted in said drawer, a tone arm also mounted in said drawer for movement with respect to said turn-table, said drawer having a sound amplifier communicating with the sound wave discharge opening of said tone arm and also provided with a sound wave discharge opening, said tone arm, said amplifier, and sound wave discharge opening being opened to the outside when the drawer is pulled out, and closed to the outside when the drawer is pushed in to modify the volume of the sound emitted.

3. A phonograph comprising a record support and a tone arm, a sound amplifier mounted adjacent said tone arm, a partition dividing said sound amplifier into a plurality of compartments, one compartment being open and the other closed, said tone arm having a plurality of mountings on said amplifier, one for each compartment whereby a soft tone may be produced when the tone arm is mounted on the closed compartment and the volume of the sound increased when the tone arm is mounted on the open compartment.

4. A phonograph comprising a support, a drawer, a record support accessible in said drawer, a tone arm, a sound amplifier opening into said drawer adjacent said tone arm, a wave deflecting member within said sound amplifier and deflecting wings cooperating with said deflecting member to direct the sound waves to the opening in said sound amplifier, whereby when the drawer is opened the volume of the sound emitted will be amplified and when closed it will be modified.

5. A phonograph comprising a support, a drawer slidable therein, a record support in the drawer, a sound amplifier in the bottom of said drawer, a partition dividing said sound amplifier into two compartments, one opened and the other closed, a diaphragm closing one compartment and wave deflecting means in said open compartment and a tone arm mounted for movement from one compartment to the other to produce a soft tone or increase the volume thereof.

In witness whereof, I have hereunto set my hand this 13th day of February, 1922.

JOHN PETERSON.