J. YOUNGQUIST.

PHONOGRAPH.

APPLICATION FILED FEB. 3, 1921.

1,421,652.

Patented July 4, 1922.

2 SHEETS—SHEET 1.

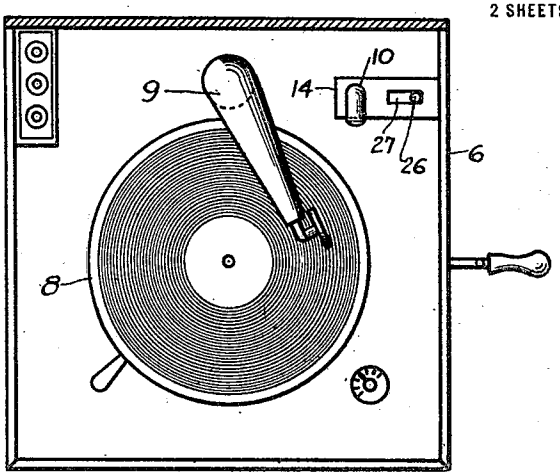


Fig. 1

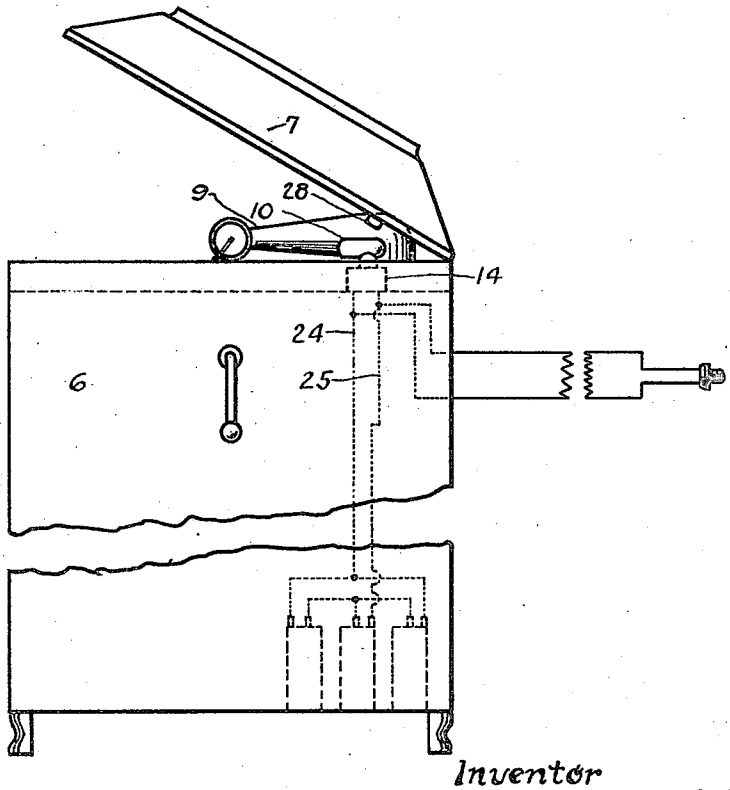


Fig. 2

Witnesses
Wm. Schnellbacht.
C. E. Brady

Inventor
John Youngquist
By Joshua Abbott
His Attorney

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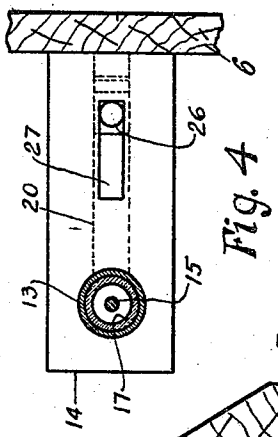


Fig. 4

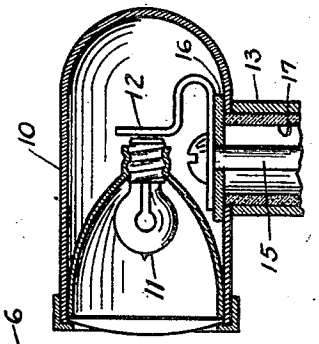


Fig. 5

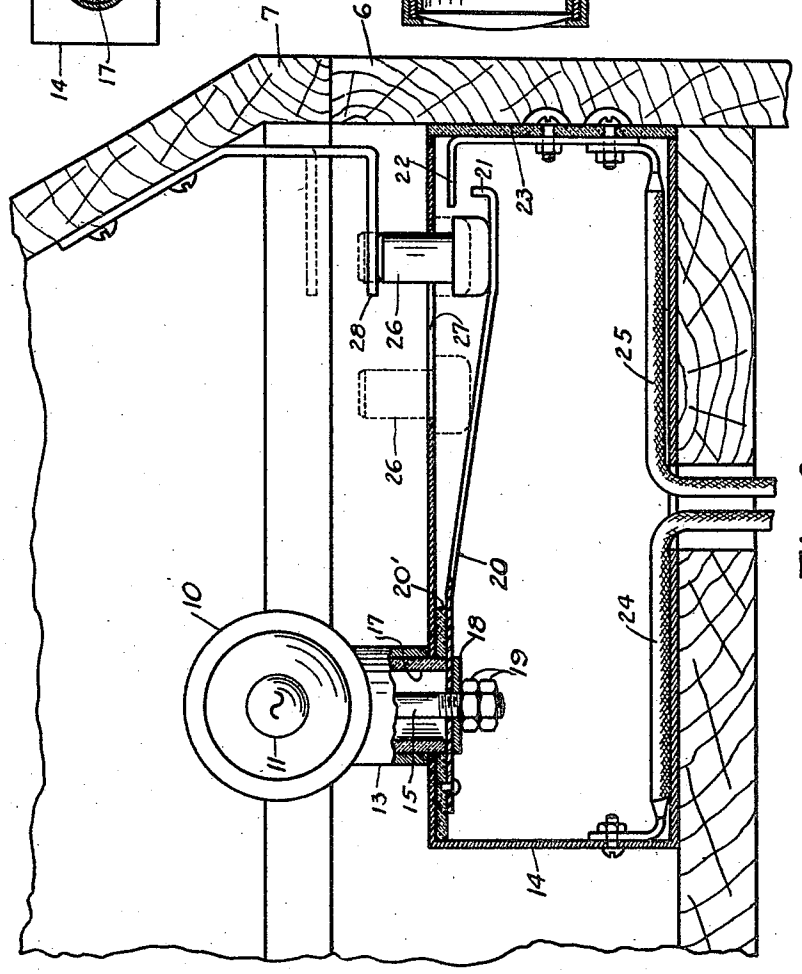


Fig. 3

Witnesses

W^m Schnellhardt

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UNITED STATES PATENT OFFICE.

JOHN YOUNGQUIST, OF CHICAGO, ILLINOIS.

PHONOGRAPH.

1,421,652. Specification of Letters Patent. Patented July 4, 1922.

Application filed February 3, 1921. Serial No. 442,249.

To all whom it may concern:

Be it known that I, JOHN YOUNGQUIST, a former subject of the King of Sweden (who has declared his intention of becoming a citizen of the United States and is not now a citizen of any country), and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Phonographs, of which the following is a specification.

My invention relates to improvements of phonographs and has for its object the provision of improved means for illuminating the record thereof thus facilitating a proper operation of the phonograph.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Fig. 1 is a top plan view of a phonograph cabinet with the cover thereof removed;

Fig. 2, a partial side view of the same;

Fig. 3, an enlarged detail section taken through a switch box employed in the construction;

Fig. 4, a detail view illustrating the top of said switch box;

Fig. 5, a vertical section taken through an electric light employed in the construction.

The preferred form of construction as illustrated in the drawings comprises an ordinary phonograph cabinet 6 having the usual upwardly swinging cover or lid 7 arranged to expose and conceal the ordinary turn table 8 and co-operating tone arm 9 of an ordinary phonograph.

An electric light 10 is pivotally mounted on said cabinet adjacent to said turn table, said light consisting of a metallic casing 10 having the usual bulb 11 therein, fitting a suitable socket and contacting with a spring contact 12 as indicated in Fig. 5.

The casing of the light 10 is pivotally mounted on a metallic tube or sleeve 13 mounted to rotate on top of a metallic switch box 14, said light being held in place by means of a screw bolt 15. A washer 16 of insulating material is interposed between the spring contact 12 and the wall of the light casing as shown and the bolt 15 is surrounded by a tube 17 also of insulating material. Another washer 18 of insulating material is interposed between the nuts 19 of bolt 15 and the base of a switch member 20 in the form of a leaf spring screwed to a block 20′ interposed between said leaf spring and the top of the switch box 14. The leaf spring 20 is downwardly and outwardly inclined as shown and is provided at its free end with an upwardly turned contact leaf 21 adapted and arranged to engage the contact 22 screwed to a block of insulating material 23 at the end of switch casing 14. A current is supplied through wires 24 and 25 from a suitable set of batteries or other source of electric current. The wire 24 is directly connected with a metallic switch box 14 and thus through the tube 13 with the light casing 10 and one terminal of the light bulb 11. The other wire 25 is connected with the contact 23 and thus, when the switch 20 is closed, with the rays of the light bulb 11 completing the circuit through the light 11. This arrangement furnishes a pivotal mounting for light 10 so that said light may be readily adjusted to project the light over any portion of the turn table 8 desired.

A plunger 26 in the form of a headed stud of insulating material is loosely arranged in a slot 27 in the top of switch box 14 with its head resting upon the top of leaf spring 20 and whereby, when said plunger is disposed, the circuit will be broken as indicated in Fig. 3, or when said plunger is shifted laterally by means of the fingers as shown by dotted lines in Fig. 3, the circuit will be broken. The cover 7 carries a depending switch operating finger 28 arranged to contact with the plunger 26 when said cover is closed and whereby when the cover is closed the lighting circuit will be automatically broken.

By this arrangement whenever the cover 7 of the phonograph is raised it gives access to the same for the purpose of operating the same, the light 10 will be lighted and the turn table of the phonograph illuminated. By this means the proper position for placing the tone arm 9 on the record on the turn table 8 will be clearly indicated and the light 10 may be readily adjusted for thorough examination of the record and the discovery of the defects therein or for other purposes. When the cover is closed the lighting circuit will be automatically broken so as to prevent the waste of current when the phonograph is not in use. Also when desired the plunger 26 may be manually

shifted in slot 27 to break the lighting circuit when the light is not desired for any reason.

The specific form and arrangement of parts is a simple and effective one for the purpose.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of the construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. In an illuminating device for phonographs comprising a metallic supporting surface having an aperture therein; a metallic sleeve resting on said supporting surface over said aperture; an electric light casing rotatably supported on said sleeve; a switch member disposed across said aperture on the under side of said supporting surface and being insulated therefrom; and a bolt for rotatably retaining said casing on said sleeve and engaging said switch member for securing said sleeve on said supporting surface, said switch member and said bolt forming a conductor to said electric light, the circuit being completed through said sleeve and said supporting surface, substantially as described.

2. In an illuminating device for a phonograph comprising a support; a sleeve mounted on said support; a casing having an electric light therein rotatably supported on said sleeve; an insulating member in said casing extending through said sleeve into said support; a bolt extending through said insulating member to rotatably secure said casing on said sleeve and said sleeve to said support, said bolt forming a conductor; a resilient contact member mounted on the upper end of said bolt and engaging one pole of said electric light in said casing, the other pole of said light being grounded through said casing and said support.

3. In an illuminating device for a phonograph comprising a support; a sleeve mounted on said support; a casing having an electric light therein rotatably mounted on said sleeve; an insulating member in said casing extending through said sleeve into said support; a bolt extending through said insulating member to rotatably secure said casing on said sleeve and said sleeve to said support, and providing a conductor for said light; a resilient contact member mounted on the upper end of said bolt engaging one pole of said electric light in said casing, the other pole of said electric light being grounded through said casing and said support; and a switch in said support for operating the circuit thus formed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN YOUNGQUIST.

Witnesses:
JOSHUA R. H. POTTS,
FREDA C. APPLETON.