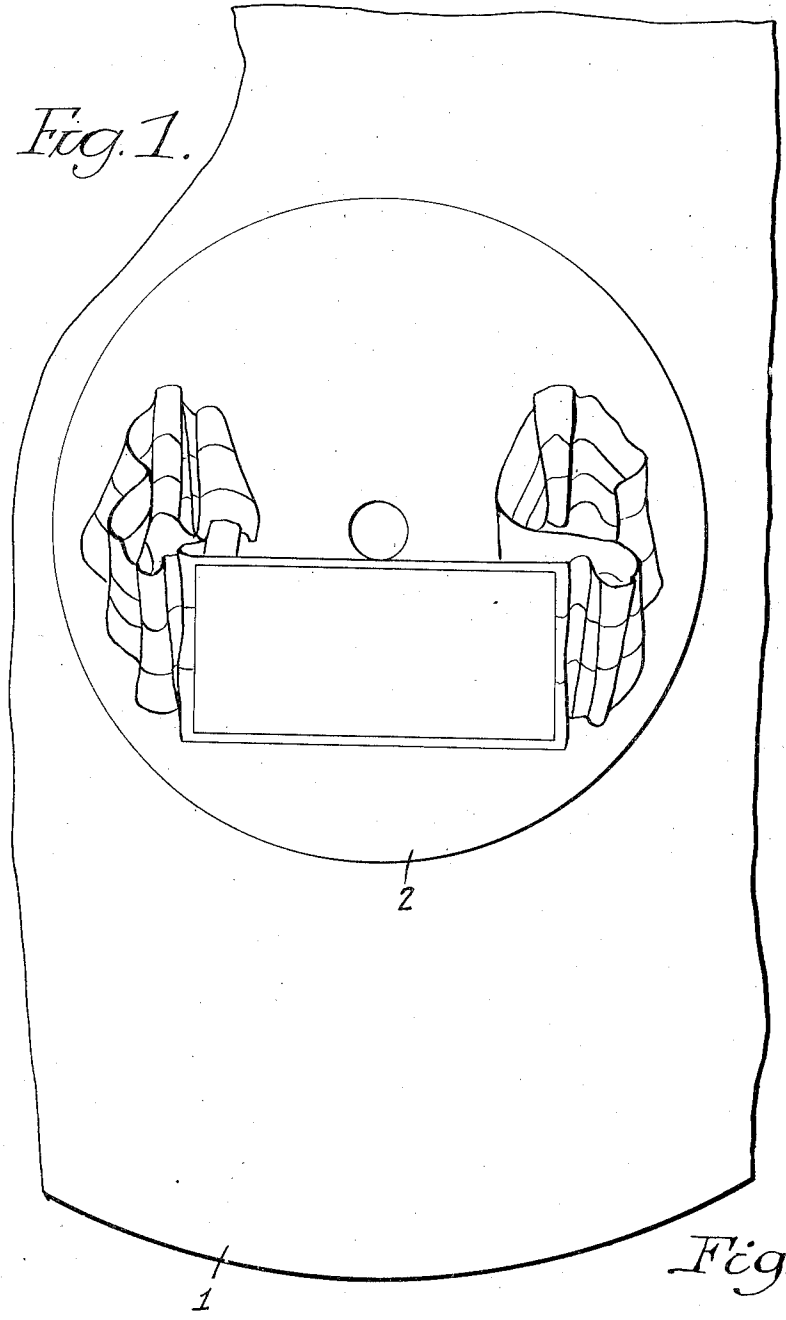
Sept. 15, 1925. 1,553,931

V. W. CHALLENGER

PHONOGRAPHIC RECORD

Original Filed Oct. 13, 1923

Fig. 1.



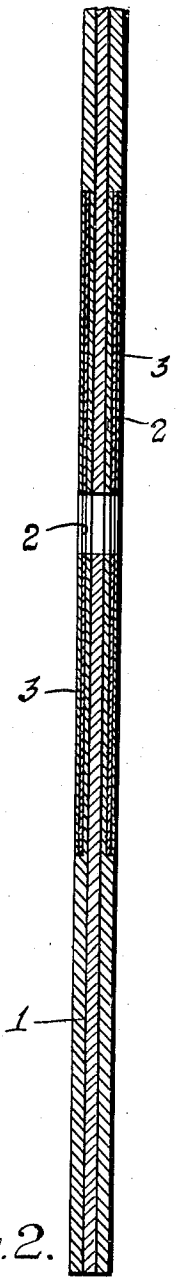


Fig. 2.

Inventor.—
Voorhees Winfield Challenger.
by his Attorneys.—
Howson & Howson

Patented Sept. 15, 1925. 1,553,931

UNITED STATES PATENT OFFICE.

VOORHEES WINFIELD CHALLENGER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO N. W. AYER & SON, A COPARTNERSHIP OF PHILADELPHIA, PENNSYLVANIA, CONSISTING OF WILFRED W. FRY, JARVIS A. WOOD, WILLIAM M. ARMISTEAD, ADAM KESSLER, JR., JAMES M. MATHES, AND GEORGE H. THORNLEY.

PHONOGRAPHIC RECORD.

Original application filed October 13, 1923, Serial No. 668,359. Divided and this application filed May 13, 1924. Serial No. 713,028.

To all whom it may concern:

Be it known that I, VOORHEES WINFIELD CHALLENGER, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Phonographic Records, of which the following is a specification.

The invention relates to phonographic records having improved labels adhering thereto. The present application constitutes a division to my copending application for process of applying labels to phonographic records and other articles, Ser. No. 668,359, filed October 13, 1923, upon which has now been issued Patent 1,499,151, dated June 24, 1924.

One object of the invention is to provide an improved phonographic record in which the label adheres to the record directly without the use of separate adhesive and in which the ink of the label is protected not only from action of heat during the process of application, but also from subsequent mechanical injury when the record is in use. Further objects of the invention will be apparent from the specification in claims.

In the accompanying drawing:

Fig. 1 is a fragmentary plan view of a label and a phonographic record illustrating my invention; and

Fig. 2 is a side view of the label and record, the latter being partly in section.

Referring to the drawing, 1 represents the body of the record, the record being of the disc type and being formed of any usual or suitable material. 2 represents the label and when desired there may be two labels, one on each side. In accordance with the method set forth in my patent aforesaid, the labels are caused to adhere directly to the record by the application of heat and pressure, no separate adhesive being used.

The body of the label 2 is made of paper, or other suitable material. The label is printed so as to produce a background, as well as the design and lettering. The printing ink is composed of a pigment and a given amount of varnish. In the present instance, the paper used is white, but colors may be employed, if desired.

Heretofore, when a label of this character was applied to a phonographic record, for instance, during the process of manufacture, the heat of the dies would expand the varnish in the ink and blisters would form on the label, rendering it worthless. This objection is overcome by providing the printed surface of each label with a coating 3 of casein so that, when a label is subjected to heat and pressure, on being applied to a phonographic record, the casein hardens and prevents the varnish expanding and blistering the paper.

Furthermore, the casein forms a hard coating on the surface of a label, when it is applied to an article, which resembles the gloss on the finished record. This surface resists scratching under ordinary use and gives a finish to the label.

Heretofore, in the manufacture of phonographic labels it was necessary to use tinted papers. By my invention, the body of a label can be white and different body colors can be printed on the label in the ordinary manner, so that the designs are not limited.

This invention is especially adapted for use in labeling phonographic records. The label can be applied to different devices without departing from the essential features of the invention.

I claim:

1. A phonographic record of the disc type comprising in combination a body, a label adhering to the body by reason of the adhesive action of the material of which the body is formed, ink impressions on the label, and a coating of casein on the label covering and protecting the ink and also providing a polished surface.

2. A phonographic record of the disc type comprising in combination a body, a label adhering to the body by reason of the adhesive action of the material of which the body is formed; ink impressions including

varnish on the label, and a coating of hardened casein on the label covering and protecting the ink and also providing a polished surface.

3. A phonographic record of the disc type comprising in combination a body, a label adhering directly to the material of the body as the result of the application of pressure and heat, ink impressions including varnish on the label, and a coating of heat hardened casein on the label covering and protecting the ink and also providing a polished surface.

VOORHEES WINFIELD CHALLENGER.