

L. C. KEEN & J. M. KLEVAN.
PHONOGRAPH NEEDLE.
APPLICATION FILED OCT. 3, 1917.

1,270,526.

Patented June 25, 1918.

Fig. 1

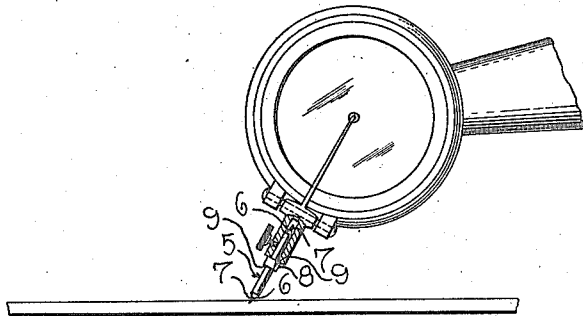
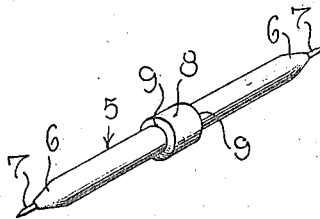


Fig. 2



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PHONOGRAPH-NEEDLE.

1,270,526.

Specification of Letters Patent. Patented June 25, 1918.

Application filed October 3, 1917. Serial No. 194,541.

To all whom it may concern:

Be it known that LEWIS C. KEEN and JOHN M. KLEVAN, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Phonograph-Needles, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved phonograph needle, and has for its primary object to provide a double pointed needle, which is of such construction that the harsh, discordant scratching noise or sound incident to the operation of the phonograph with the ordinary commercial needle now in general use will be eliminated.

And it is another object of our invention to provide a double pointed needle of great wear resisting quality, having a central cylindrical enlargement constituting a stop to limit the movement of either end of the needle into the holder on the sound box, and thus prevent possible blunting or other injury to the needle point.

It is a further general object of the invention to provide an article of the above character which will be very serviceable and efficient in practical use, requires no alterations in the construction of the ordinary needle holder, and can be manufactured in large quantities at relatively small cost.

With the above and other objects in view, our invention consists in the novel features of construction, combination and arrangement of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which:

Figure 1 is a sectional view through the needle holder of a sound box having one of our improved needles secured therein; and

Fig. 2 is a perspective view of the needle.

Referring in detail to the drawing, 5 designates the shank or body of the needle, preferably of cylindrical form and having conical or tapered ends 6, from the apex of which the needle point 7 projects, said point being adapted for engagement in the base of the record groove.

The needle shank is centrally formed with a cylindrical enlargement affording spaced annular shoulders 9. As clearly seen in Fig. 1 of the drawing, when one end of the needle is inserted into the bore of the needle holder,

one of the shoulders 9 abuts against the end of the holder and limits such movement of the lever so that the point 7 within the lever cannot strike the base of the bore and become blunted whereby it would be rendered un-serviceable. The needle is preferably constructed of silver and nickel or some other relatively light metal offering great resistance to frictional wear. Each of the needle points 7 may be used for the playing of a number of records.

From the foregoing description taken in connection with the accompanying drawing, the construction, manner of use and several advantages of our improved needle will be clearly understood. By the provision of a double pointed needle having the stop shoulders 9, the utility of phonograph needles will be appreciably increased, without increasing the manufacturing cost or the retail selling price of the needles to any material extent. Preferably, the distance from each of the shoulders 9 to the respective needle points is $\frac{1}{8}$ " , but it will be understood that this is not obligatory and our invention is not to be so limited, as the needle holders on various types of phonographs may differ in construction. Therefore, while we have herein shown and described the preferred form and construction of the several features of our improved needle, the device is nevertheless susceptible of considerable modification and we, therefore, reserve the privilege of adopting all such legitimate changes as may be fairly embodied within the spirit and scope of the invention as claimed.

Having thus fully described our invention, what we claim is:—

As an improved article of manufacture, a double pointed sound reproducing needle or stylus formed with a cylindrical enlargement intermediate of its ends, said enlargement presenting spaced annular shoulders affording stops to limit the movement of either end of the needle into a holder.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

LEWIS C. KEEN.
JOHN M. KLEVAN.

Witnesses:

JAMES A. REILLY,
WILLIAM H. WHITCOMB.