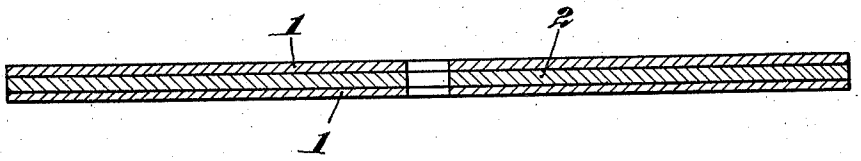
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SOUND RECORD DISK

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SOUND RECORD DISK

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1 Claim. (Cl. 274—42)

This invention relates to improvements in sound records.

When cutting sound record disks or the like the correct adjustment of the pressure of the style or cutting tool causes very considerable trouble, because it is necessary that the sound groove cut should be of exactly the same depth throughout. A groove which is not deep enough results during the reproduction in the needle jumping out of the sound groove, while a sound groove which is too deep prevents the recording of the fine overtones and is the cause of distorted tones.

The present invention has for its object to insure correct adjustment of the most satisfactory depth of the sound groove and its essential feature resides in that the record disk consists of a base or foundation having thereon one or more layers different in colour from that of the base, the thickness of the layer or layers being equal to the required depth of the sound groove, and the base as well as the layer being of materials adapted to be grooved by a cutting tool.

The improved process for cutting sound grooves in sound record disks or the like consists in regulating the pressure of the style or cutting tool in such degree that the latter cuts into the layer, differing in colour from the base, to such a depth only that in the groove the colour of the base material becomes just visible without any material of the base being cut away. To a foundation base for example of red colour there are applied one or more delimited or merging, differently coloured layers. Assuming the proper thickness of the cutting to be for example just down to the beginning of the red colour, the bottom of the groove cut by the cutting tool should always be of this colour. If the red colour is not visible on the ground of the cut groove, it is a sign that the groove is too shallow, while if the chips cut from the record disk contain any red parts, it is a sign that the groove is too deep. The cutting tool has penetrated to the correct depth, if the chips cut from the record disk do not contain any red parts although the colour of the base is visible on the ground of the sound groove. The load on the cutting tool must then be altered or the turn-plate set to run accurately in one horizontal plane in order to obtain proper depth of cut. In any case the user can at once ascertain whether the conditions are right for obtaining satisfactory recording.

A sectional view of a record disk comprising three layers of different colours is shown by way of example in the accompanying drawing, in which 1 indicates the outer layers into which the sound grooves are cut, while 2 denotes the foundation or base of different colour than said layers.

What I claim is—

A disk for phonographic recording comprising at least two superposed layers of different coloured materials adapted to be grooved by a cutting tool, one of said layers constituting a base layer and the other layer being disposed above the base layer, the total thickness of the record disk above said base layer corresponding exactly to the correct depth of the sound groove to be cut therein.

OTTO ZECHA.