

No. 778,976.

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E. R. JOHNSON.
METHOD OF AFFIXING TABLETS TO SOUND RECORDS.
APPLICATION FILED OCT. 22, 1903.

Fig. 1.

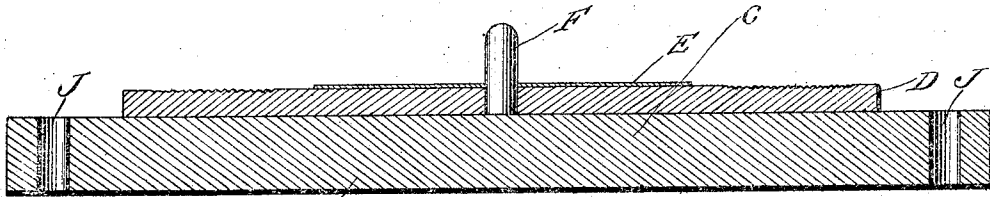
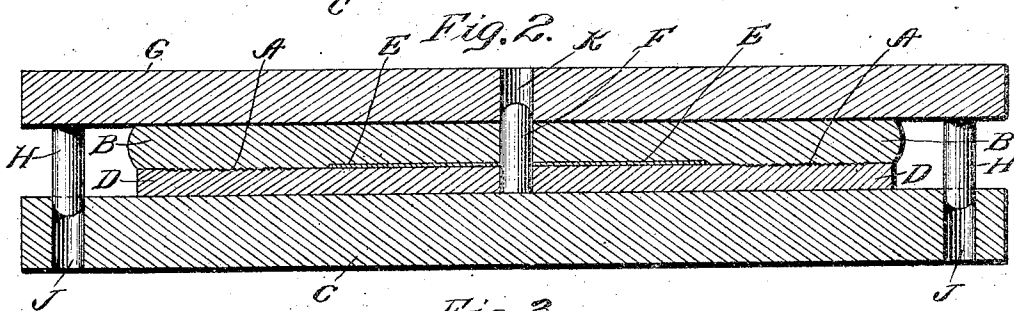
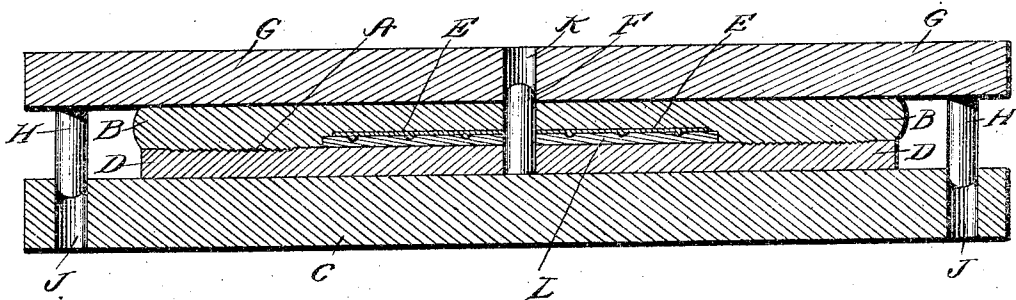


Fig. 3.



Fig. 4.



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METHOD OF AFFIXING TABLETS TO SOUND-RECORDS.

SPECIFICATION forming part of Letters Patent No. 778,976, dated January 3, 1905.

Application filed October 22, 1903. Serial No. 177,988.

To all whom it may concern:

Be it known that I, ELDRIDGE R. JOHNSON, a citizen of the United States, and a resident of the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Methods of Affixing Tablets to Sound-Records, and particularly to Flat Disk Records, of which the following is a full, clear, and complete disclosure.

The object of my invention is to provide a method by which these tablets can be affixed to sound-records in an inexpensive and convenient manner and which when so affixed will not project beyond the surface thereof and will afford means for carrying identifying marks or characters contrasting in such a manner with the sound-record as to be easily and readily legible.

In United States Letters Patent No. 739,318, granted September 22, 1903, for sound-record upon an application made by myself is shown a sound-record and affixed tablet made by the method forming the subject of this application.

In the accompanying drawings I have shown one form of apparatus by means of which my method can be practiced, although it is to be understood that other apparatus may be employed, since this apparatus is selected as a good example for the purpose of illustrating my novel method.

In said drawings, Figure 1 is a view in perspective, showing the manner in which the lower die-plate, matrix, and tablet are assembled. Fig. 2 is a sectional view of the various parts assembled between the upper and lower die-plate in affixing the tablet according to my method. Fig. 3 is a central sectional elevation of the record with the tablet applied thereto. Fig. 4 is a central sectional elevation of the various parts assembled as in Fig. 2 when a tablet-plate is employed.

The material of which a sound-record is made, as is well known, softens under the application of heat, and in this method I make use of this property of the material—that is to say, I soften a sound-record by the application of heat—and while the same is in a semi-

plastic or gelatinous state I impress into the surface thereof a tablet, so that when the record hardens after the withdrawal of the heat said tablet is wholly within the confines of the record, or, in other words, is flush with or below the surface of the record, and as a further step of my method, although my invention is not limited thereto, I make use of the adhesive character of the material composing the sound-record when the same is softened by the application of heat, so that by impressing the tablet into the surface thereof and into intimate contact with the plastic or gelatinous record it adheres thereto without the employment of other adhesive means.

It is well known that the record-grooves A of the sound-record disk B, Fig. 3, are made by assembling the material forming the record, which has been previously heated and rendered plastic, with a matrix and subjecting the same to pressure, and my method can be carried out at the same time. For instance, in Fig. 1 I show a lower die-plate C and a matrix D thereon, while upon the central portion of the matrix is the tablet E, which it is desired to affix to the sound-record by my method, the centering-pin F, rising from the lower die-plate C, passing through the matrix D and tablet E.

A layer of material of which the record is formed having been heated and rendered plastic is placed upon the matrix and tablet, as shown at B in Fig. 2, and then the upper die-plate G is placed upon the plastic material, being held in place by the dowel-pins H entering sockets J in the lower die-plate C, the centering-pin F passing into an opening K in the upper die-plate G. When thus assembled, these parts are subjected to pressure in a suitable press, and after being removed therefrom and separated the record-grooves are impressed into the sound-record. The tablet E is also impressed into the surface of said sound-record and is permanently affixed thereto, either flush or below the surface thereof.

In practicing the method as above described the face of the tablet is practically flush with

the face of the record; but I also in some cases depress the tablet-surface below that of the record, as illustrated in Fig. 4. In this case in assembling the parts a tablet-plate L, having a central opening for the centering-pin, is placed upon the matrix, and the tablet-plate E upon said plate L, with the face of the latter next to the tablet either plain, embossed, or engraved, as shown in Fig. 4, in which latter case the tablet so depressed would likewise be engraved or embossed. When the parts thus assembled are subjected to pressure, the tablet-plate L depresses the tablet E below the surface of the record B, whereby in use the tablet is protected.

It is obvious that the shape of the tablet is immaterial and that it may be made of various materials—for instance, paper or any other suitable material—and that the identifying-marks can be applied thereto in any manner desired.

Having thus described my invention, what I claim, and desire to protect by Letters Patent of the United States, is—

1. The herein-described method of affixing a tablet to a sound-record, composed of a material, which softens under the application of heat, which consists in softening the record by the application of heat, and impressing a tablet into the surface thereof.

2. The herein-described method of affixing a tablet to a sound-record composed of a material which softens and becomes adhesive under the application of heat, which consists in softening and making the record adhesive by the application of heat, and impressing a tablet into the surface thereof.

3. The herein-described method of affixing a tablet to a sound-record composed of a material, which is gelatinous when heated and hardens when cold, which consists in heating the said disk and impressing a tablet into the

surface thereof to be held therein solely by the adhesion of such material.

4. The hereinbefore-described method of affixing tablets to record-disks, which comprises the following steps: first, interposing a tablet between the matrix and the plastic material from which the record is to be formed; second, forcing the material into intimate contact with the matrix and tablet by subjecting the same to pressure.

5. The hereinbefore-described method of affixing tablets to record-disks, which comprises the following steps: first, interposing a tablet and a tablet-plate between the matrix and the plastic material from which the record is to be formed; second, forcing the material into intimate contact with the matrix and tablet by subjecting the same to pressure.

6. The hereinbefore-described method of affixing tablets to record-disks, which comprises the following steps: first, interposing a tablet and an engraved tablet-plate between the matrix and the plastic material from which the record is to be formed; second, forcing the material into intimate contact with the matrix and tablet by subjecting the same to pressure.

7. The hereinbefore-described method of labeling sound-record disks, which comprises the following steps: first, interposing a tablet-plate between the matrix and the plastic material from which the record is to be formed; second, forcing the material into intimate contact with the matrix and the tablet-plate by subjecting the same to pressure.

In witness whereof I have hereunto set my hand this 6th day of October, A. D. 1903.

ELDRIDGE R. JOHNSON.

Witnesses:

LEWIS H. VAN DUSEN,
CHAS. K. BENNETT.