No. 708,828.

Patented Sept. 9, 1902.

A. N. PETIT.

SOUND RECORD OF CELLULOID.

(Application filed July 30, 1900.)

(No Model.)

Inventor

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## United States Patent Office.

ADEMOR N. PETIT, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE INTERNATIONAL PHONOGRAPH AND INDESTRUCTIBLE RECORD COMPANY, LIMITED, OF LIVERPOOL, ENGLAND.

## SOUND-RECORD OF CELLULOID.

SPECIFICATION forming part of Letters Patent No. 708,828, dated September 9, 1902.

Application filed July 30, 1900. Serial No. 25,300. (Nc model.)

To all whom it may concern:

Be it known that I, ADEMOR N. PETIT, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented a new and useful Sound-Record of Celluloid, of which the following is a specification.

My invention relates to a sound-record of celluloid, the record being produced by engraving or, in other words, cutting into the

surface of the celluloid.

Heretofore efforts have been made to record sound upon celluloid by impressing the record into the celluloid; but these have been attended with indifferent results. In an effort to produce sound-records in celluloid it is quite essential either that the surface of the celluloid be treated and prepared in order that it may be engraved or cut into in recording the sound or that the celluloid in its manufacture be so produced that the same cutting is equally possible.

My present invention is a new article of manufacture; and it consists of an engraved sound-record of celluloid. The sound-record of celluloid may be a disk or tablet of celluloid, a strip of celluloid, or a cylinder, it being possible with a suitable device to produce a sound-record on celluloid in any of these

30 forms.

In Letters Patent granted to me December 4, 1900, No. 662,961, I have described and claimed certain materials adapted for treating celluloid so as to prepare the surface for the engraving or cutting therein of sound-records, and in an application of like date herewith I have described and claimed the method of treating celluloid for the production of sound-records.

In the drawing I have represented my improvement by a longitudinal section of a celluloid cylinder with a record cut upon a portion of the same.

I prefer in forming the engraved sound-

records of celluloid to treat the surface of the 45 celluloid with materials adapted to sink into and be absorbed or taken up by the celluloid, so that the molecular structure of the celluloid surface is rendered comparatively soft and plastic for a period if the air is keptaway. 50 The materials set forth in my aforesaid application are capable of rendering the surface thus comparatively soft and plastic, but not sticky or gummy. These materials change the character of the celluloid tissue, of the sur- 55 face filling the cells, and, in fact, rearranging the molecular structure, so that the surface is simply plastic for a period and sufficiently so to render the operation of engraving and cutting and so recording sound a comparatively 60 simple and easy operation. The celluloid of which such record is made after treatment hardens considerably, and while it may not become fully as hard as originally, yet the surface is comparatively hard and the record 65 is much more lasting and serviceable for repeated use than any composition records heretofore produced. It makes no difference with reference to my invention whether the surface of the celluloid is dull or highly-polished 7° or whether the same is plain or colored.

I claim as my invention—

1. As a new article of manufacture, a cylinder of celluloid having thereon an engraved sound-record.

2. As a new article of manufacture, a cylinder of celluloid having a prepared surface and a sound-record engraved thereon.

3. As a new article of manufacture, a celluloid tablet having engraved thereon a record 80 of sound.

Signed by me this 18th day of July, A. D. 1900.

ADEMOR N. PETIT.

Witnesses:

MARY J. G. CONNINGTON,
BERTHA M. ALLEN.