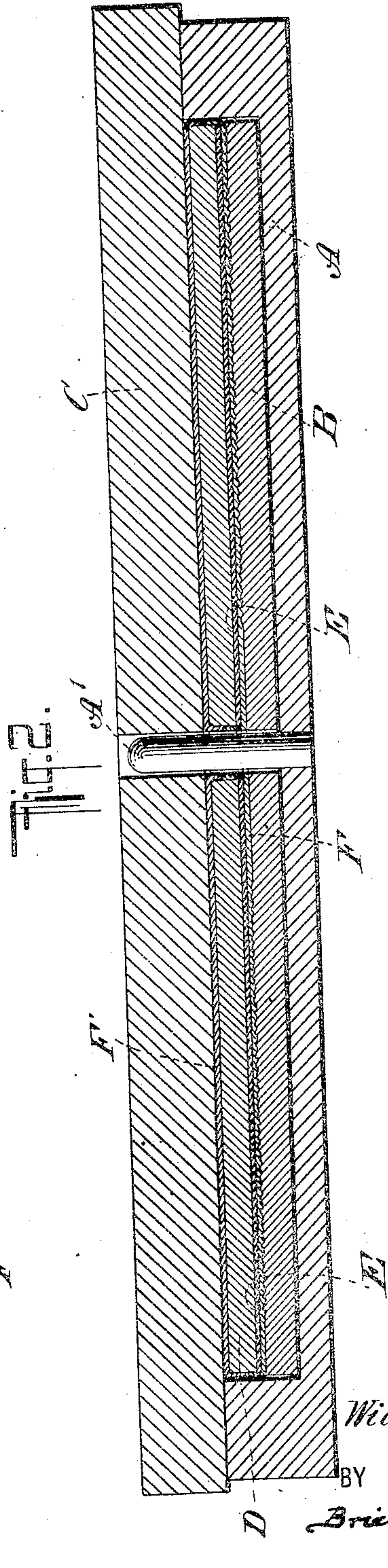
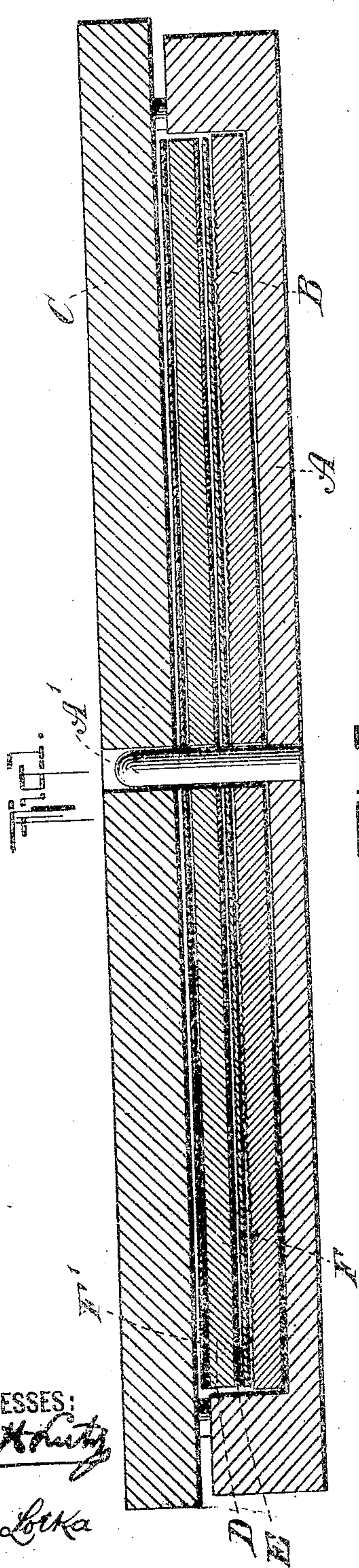


No. 897,254.

PATENTED AUG. 25, 1908.

W. H. HOYT.  
METHOD OF MAKING SOUND RECORDS.  
APPLICATION FILED MAY 4, 1904.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. HOYT, OF WYOMING, NEW JERSEY.

## METHOD OF MAKING SOUND-RECORDS.

No. 897,254.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed May 4, 1904. Serial No. 206,273.

*To all whom it may concern:*

Be it known that I, WILLIAM H. HOYT, a citizen of the United States, and a resident of Wyoming, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Methods of Making Sound-Records, of which the following is a specification.

My invention relates to methods of making sound records, particularly of the flat or disk type, and has for its object to provide a method for producing a light, strong and durable record of this character which will be practically unbreakable and which will not be affected by changes of temperature or moisture. To this end I make the record of a suitable body, such as cardboard, and provide it with a facing of celluloid or like material, which is connected with the cardboard by means of an intermediate layer or a binder, such as shellac, which also prevents warping of the record.

An apparatus of any suitable construction may be employed in carrying out my method for forming or molding the records, the accompanying drawing illustrating an ordinary form of such apparatus.

Figure 1 shows the parts in position before molding, and Fig. 2 represents them in the position they occupy during molding.

A is the base of the mold, having a central pin A' projected upwardly therefrom and adapted to hold the matrix B, upon the upper surface of which are formed the grooves which produce the record.

C is the follower or presser-plate for effecting the molding.

According to my invention the record is made of a body of cardboard, pasteboard, papier mâché, or other non-plastic substance, indicated in the drawing by the letter D. This body should preferably be somewhat porous or absorbent. I then apply a thin coating of a binder such as shellac or a shellac compound to the body D, at least on one side thereof, but sometimes on both sides. This coating is indicated at E. Upon the upper surface of the matrix B I then place a sheet or disk of suitable plastic material, capable of combining with the shellac or like coating E under the application of pressure and heat. This sheet F may consist of celluloid or shellac composition or like gramophone material. The cardboard or other body D,

coated as above described on at least one of its surfaces, is then placed on top of the sheet F, so that the coating E will engage said sheet. If desired, another sheet F' may be placed on the top of the body D, in which case said body should preferably be coated on both surfaces; but if desired, one of the coatings and the upper sheet F' may be omitted.

It will be understood that the unfinished record, that is, the record before molding, consists of at least two separate parts or disks, one of them being the body D having a coating E and the other being the sheet F adjacent to said coating. In those cases in which the sheet F' is used, the record would consist of three pieces before molding.

The molding is accomplished in the usual way by forcing the plate C toward the matrix, as by hydraulic pressure and under the application of heat. This causes the irregularities of the matrix surface to impress themselves into the celluloid or other sheet F, and at the same time the disk F (and also the disk F', when such is used), are caused to unite with the coating E. The celluloid or other sheet will also be forced over the edge of the body D, so as to protect such edge. This is especially the case when two sheets of celluloid, F, F', are used, in which case the body D will be entirely covered by the celluloid, and will thus be efficiently protected against moisture.

The record, made by my improved method, is exceedingly strong and durable. It may be bent without cracking or breaking, the impression of the record lines is very accurate, moreover, the record can be made of great thinness and therefore extremely light.

I claim as my invention, and desire to secure by Letters Patent:

1. The herein described method of making sound records, which consists in applying a binder to a non-plastic body, interposing a sheet of plastic material between said non-plastic body on the side to which the binder is applied and a matrix, and forcing the body and sheet toward the matrix under the application of heat, to cause the binder and plastic sheet to unite, and the latter to take an impression from the matrix.

2. The herein described method of making sound records, which consists in applying a binder to a porous body, interposing a sheet

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of plastic material between said body on the side to which the binder is applied and a matrix, and forcing the body and sheet toward the matrix under the application of heat, to cause the binder and plastic sheet to unite, and the latter to take an impression from the matrix.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. HOYT.

Witnesses:

DANIEL TURNEY,  
WM. O. LAUGHINO.