(Model.)

## P. EHRLICH.

MUSIC SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

No. 310,501. Patented Jan. 6, 1885.

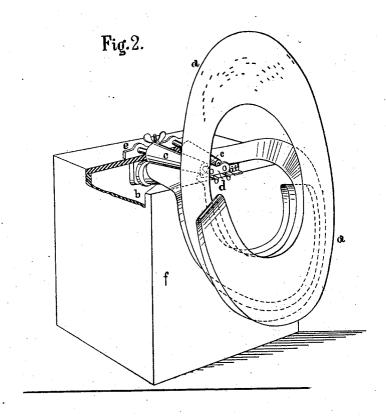
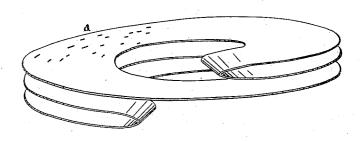


Fig.1.



Witnesses:
Ewellspid

I Waller Blandford

Inventor:
Vaul Ehrlich
by Marcellus Buley
his attorney

## UNITED STATES PATENT OFFICE.

PAUL EHRLICH, OF GOHLIS, NEAR LEIPSIC, SAXONY, GERMANY.

## MUSIC-SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 310,501, dated January 6, 1885.

Application filed May 21, 1884. (Model.)

To all whom it may concern:

Be it known that I, PAUL EHRLICH, residing at Gohlis, near Leipsic, Kingdom of Saxony, German Empire, have invented new and useful Improvements in Music-Sheets for Mechanical Musical Instruments, of which the

following is a specification.

In mechanical musical instruments in which the valves of the reeds are operated by a per-10 forated circular music - sheet—such as described in the specification of my United States Letters Patent No. 290,672—the length of the melody to be produced by such sheets is limited, inasmuch as the series of perfora-15 tions corresponding to the notes or chords of the melody must be contained within the area of a single circle.

The music-sheets constituting the subject of my present invention have the character 20 of circular sheets, and can therefore be used with instruments similar to those described in the said specification; but they are adapted to receive perforations for tunes of any length. For this purpose I compose the sheets of a 25 number of annular pieces of strong paper, card board, or other like material divided according to radial lines or obliquely, and united with their ends, so as to form a continuous or endless surface, which, when laid flat, 30 folds together in three or more layers, whereof at least one is a full circle. A sheet of this kind is represented by Figure 1 of the annexed drawings in a perspective front view, while Fig. 2 is a perspective diagonal view of 35 the box of a musical instrument with the sheet

applied thereto, the reeds, valves, and the

mechanism of the instrument not being shown.

as they do not form any part of the invention. In either figure a portion of the perforations only are represented. The sheet a may be 40 guided in the instrument by conical rolls, such as b and c, and preferably two pairs of rolls are employed. The upper roll or rolls are so arranged as that the sheet may easily be slipped under them. According to the draw- + ings, they are pivoted with their thin ends in a bearing, d, hinged to the box f, while the bearing e for the pivots at the opposite ends is secured to the box by a thumb screw, so that both rolls may be turned up together 50 with their bearings. The part of the sheet which is unsupported by the rolls and the box hangs at the side of the latter, about in the position shown in Fig. 2.

I do not claim a spiral-shaped music-sheet, 5.

broadly; but

I claim as my invention—

A music-sheet composed of a plurality of divided annular pieces of paper, card-board, or the like, united at their ends so as to form 60 a continuous surface, which, when laid flat, folds together in three or more layers, whereof at least one comprises a full circle, the said surface being provided with perforations corresponding to the notes to be produced, sub- 6 stantially as and for the purpose hereinbefore described.

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

PAUL EHRLICH.

Witnesses:

ERNST SCHMUNTZSCH. FRED P. WILKIE.