

No. 802,975.

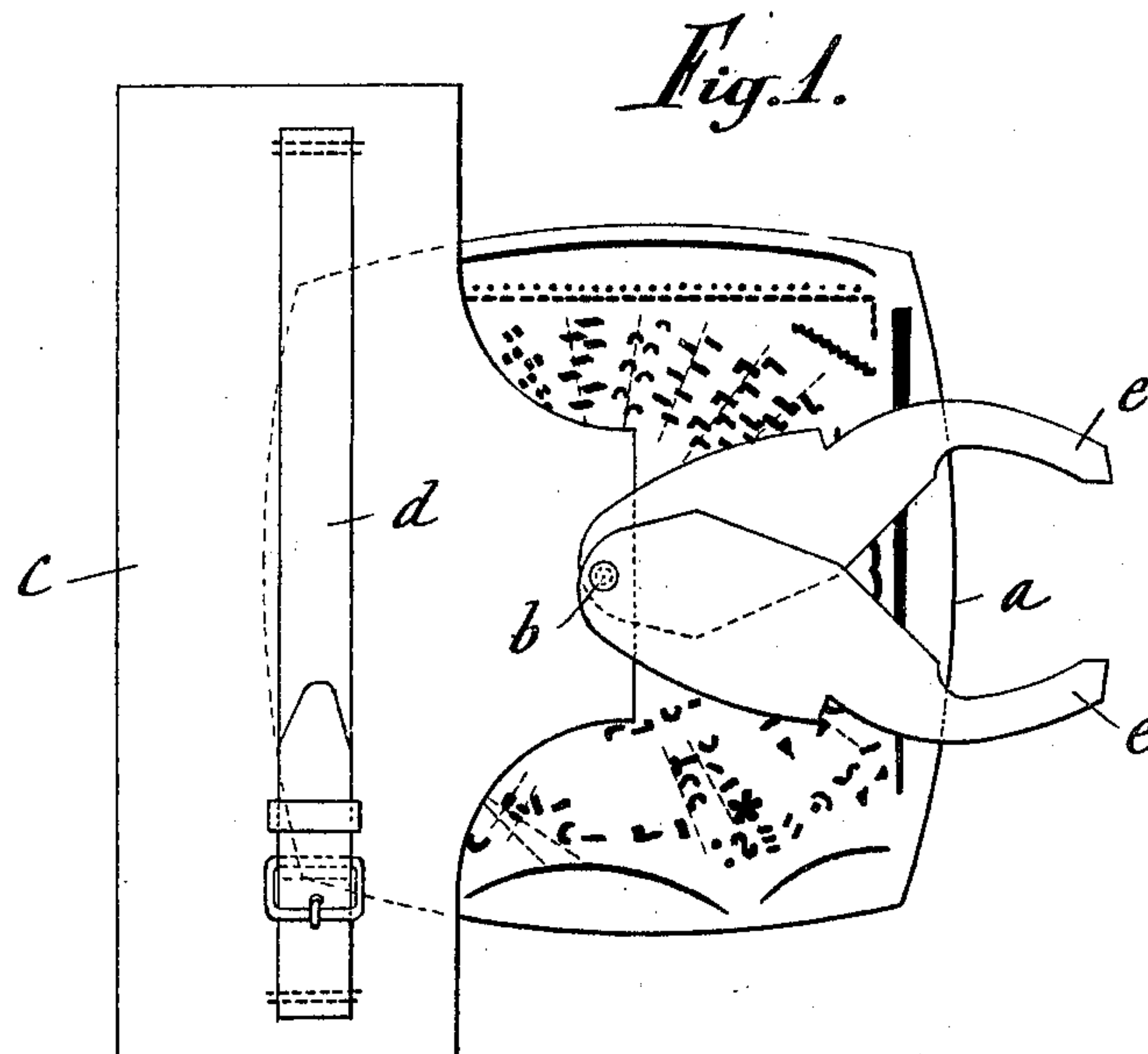
PATENTED OCT. 31, 1905.

E. CREMERS.

DEVICE FOR PRINTING MUSICAL AND LIKE SYMBOLS.

APPLICATION FILED JAN. 31, 1905.

2 SHEETS—SHEET 1.



Witnesses

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John A. Percival

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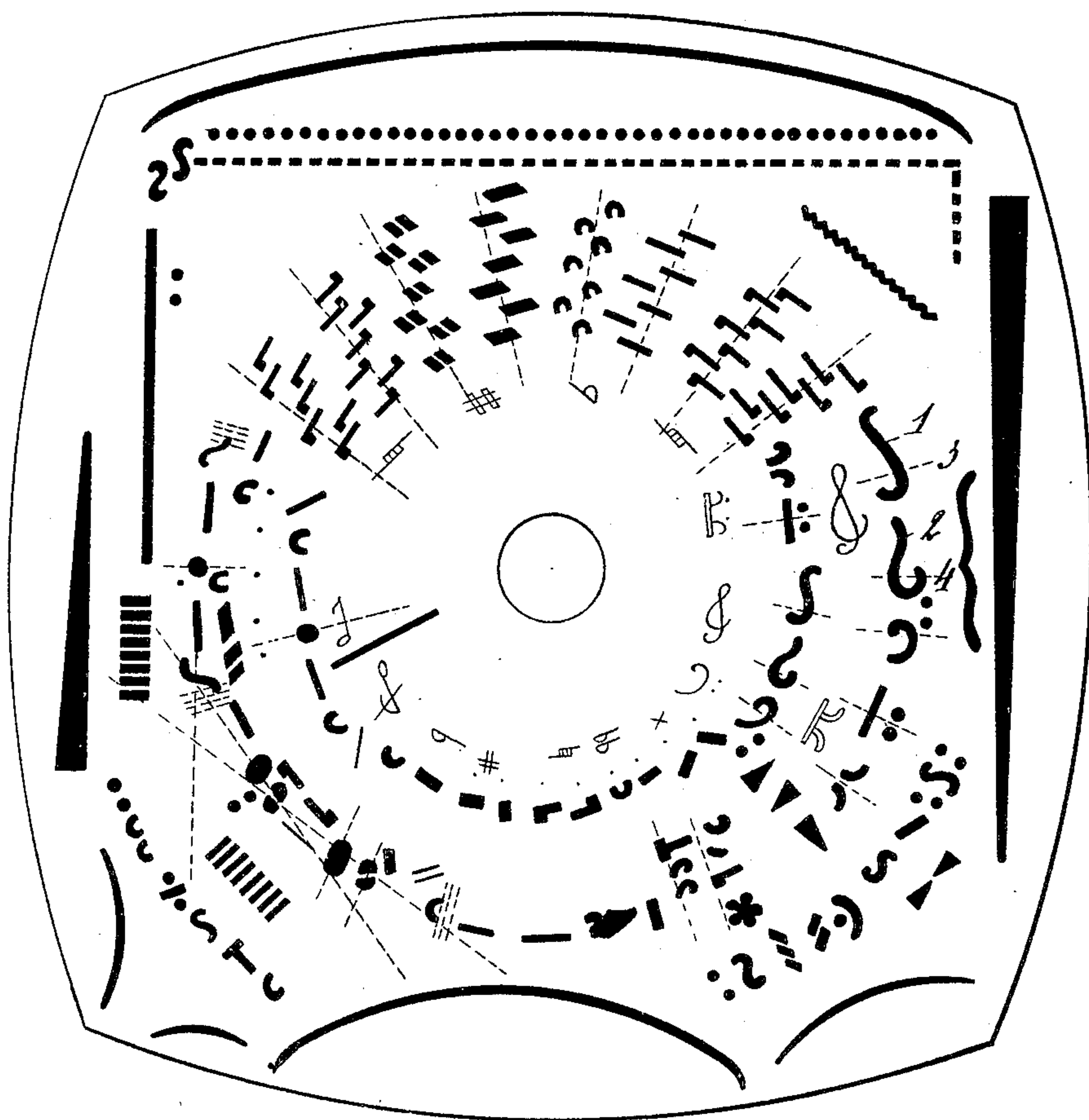
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2 SHEETS—SHEET 2.

Fig 2.



Witnesses

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UNITED STATES PATENT OFFICE.

EDOUARD CREMERS, OF BRUSSELS, BELGIUM.

DEVICE FOR PRINTING MUSICAL AND LIKE SYMBOLS.

No. 802,975.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed January 31, 1905. Serial No. 243,564.

To all whom it may concern:

Be it known that I, EDOUARD CREMERS, a subject of the King of Belgium, and a resident of 233 Rue du Trône, Brussels, Belgium, have
5 invented a certain new and useful Device for Printing Musical and Like Symbols, of which the following is a specification.

This invention relates to a new device for printing musical symbols and the like, which
10 is based upon the method of reproduction of writing and designs carried out by certain existing apparatus, such as Edison's mimeograph, the cyclostyle, the neostyle, and the like—that is to say, all apparatus in which on
15 a sheet of oiled or paraffined tissue-paper letters, symbols, designs, &c., are produced by small perforations effected closely together by a suitable small perforating instrument guided by the hand, which sheet of paper then
20 serves as a cliché or stencil plate for reproducing the perforated letters, symbols, or designs upon sheets of ordinary paper by passing an inking-roller over the same in the known manner.

25 The improved device for printing music can be used with the instruments such as above referred to in such manner as to enable the most complicated music-scores to be reproduced with facility and at a small cost.

30 Although having mainly for its object the reproduction of music, the device may also be applied for printing all symbols of any kind, such as decorative letters, figures, designs, &c.—that is to say, all that can be printed
35 by means of apparatus such as Edison's mimeograph and the like.

For the sake of clearness the invention will only be considered hereinafter as applied to the printing of music.

40 The novelty of the invention consists mainly in the use, besides the usual cutting, punching, or writing instrument, of plates which are preferably made of a transparent material and having a series of suitably-grouped slots or
45 openings whereby all the different musical symbols may be perfectly printed upon the cliché-sheet. All the slots thus grouped, preferably on a single plate, are each forming a portion of a symbol, said portions being com-
50 bined in groups of two, three, or even more such portions and forming all the complete musical symbols when they are made to juxtaposit or to intersect.

Of course though the invention is especially
55 intended for the reproduction of music by means of apparatus such as Edison's mimeo-

graph the slotted plate is also adapted for preparing all kinds of clichés or stencils for the mechanical reproduction of musical or like symbols by means of any suitable kind of
60 apparatus or instrument.

The annexed drawings show by way of example one form of the device.

Figure 1 is a plan view of the apparatus, and Fig. 2 shows the slotted plate with its
65 true size.

The apparatus involves a single slotted plate *a* of suitable size and shape to admit of the whole of the elements necessary for forming all the musical symbols. The plate *a*
70 turns on an axis *b*, fixed in a rigid plate *c*. The latter is sufficiently large to serve as a support for the hand of the operator. For the sake of easiness in the manipulation said plate *c* has a strap *d* attached to it and under-
75 neath which the hand may be passed. The slotted plate *a* is preferably made of a transparent and tough material, such as celluloid, so as to allow the lines of the staves, as well as the symbols already drawn, to be constantly
80 seen from above the transparent slotted plate. The plate *a* rotates under the supporting-plate *c* and slides between said plate *c* and a lining of board or other thin material, which is consequently put upon the cliché-sheet and is at-
85 tached along its edges to the plate *c*. Two tongues *e*, rotating about the axis *b*, can be moved more or less toward each other, like the branches of a compass. They serve as stops for the perforating instrument and for
90 determining at will the length of some lines, such as the curved ties, for instance, which are cut near the edges of the plate *a*.

Fig. 2 shows the details of the slotted plate or, more exactly, the details of the slots, which
95 are illustrated by heavy black lines. The slotted plate has also printed on it the several symbols, which are indicated with thin lines opposite the corresponding groups of slots. Finally, the slotted plate has guiding-lines,
100 (illustrated in dotted lines.) The operation of the device will be easily understood after examination of the drawings. Thus a large and a small treble clef may be seen on the right-hand part of the plate *a* and opposite
105 said symbols the corresponding slots—that is to say, for each clef two curves—which are adapted to give the complete clef when juxtaposed. For marking said clef on the cliché-sheet, one of the curves 1 is first drawn
110 by placing the guiding-line 3 upon the corresponding staff-line, the slot 1 serving as a

guide for the operating instrument, (punch, style, pen, &c.) The plate *a* is then made to rotate until the guiding-line 4 takes the place first occupied by the line 3, when the curve 2
 5 may be drawn, said curve occupying its exact position with regard to the curve 1 in order to constitute the complete clef. In the same manner the examination of the plate *a* from the right to the left will show the bass clef
 10 and its corresponding slots, the natural, the flat, the sharp, and the corresponding slots in suitable number, according to the requirements, and so on. It is undoubtedly useless to multiply the examples. The only point to
 15 be insisted upon is that the plate *a* is provided with all the necessary slots for constituting all the notes, (rounds, minims, quavers, semiquavers, tying-curves, &c.) As above described, the length of the ties is determined
 20 by means of the adjustable tongues *e*.

Of course the slotted plate may be mounted in any other manner so as not to rotate about an axis; but such an arrangement would be evidently less practical, as the rotation has
 25 precisely for its object to allow of the exact juxtaposition or intersection of the several portions of symbols to be effected and to pro-

vide for the convenient position thereof on the cliché-sheet.

Having now described my invention and in 30 what manner the same is to be performed, what I claim as new, and desire to secure by Letters Patent, is—

A device for producing cliché-sheets for the mechanical reproduction of musical and like 35 symbols, consisting essentially of a single rotating stencil-plate provided with slots corresponding to complete symbols, notes, ties, &c., and also to portions of symbols, when the latter are formed with closed curves or acute 40 angles, said portions of symbols being grouped, arranged and provided with guiding-lines, so that by successively giving a partial rotation to the plate and drawing each time a portion of the symbol, the latter may be completely 45 drawn in the form of an uninterrupted line, substantially as described.

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

EDOUARD CREMERS.

Witnesses:

GREGORY PHELAN,
 ED. CHIRIONET.