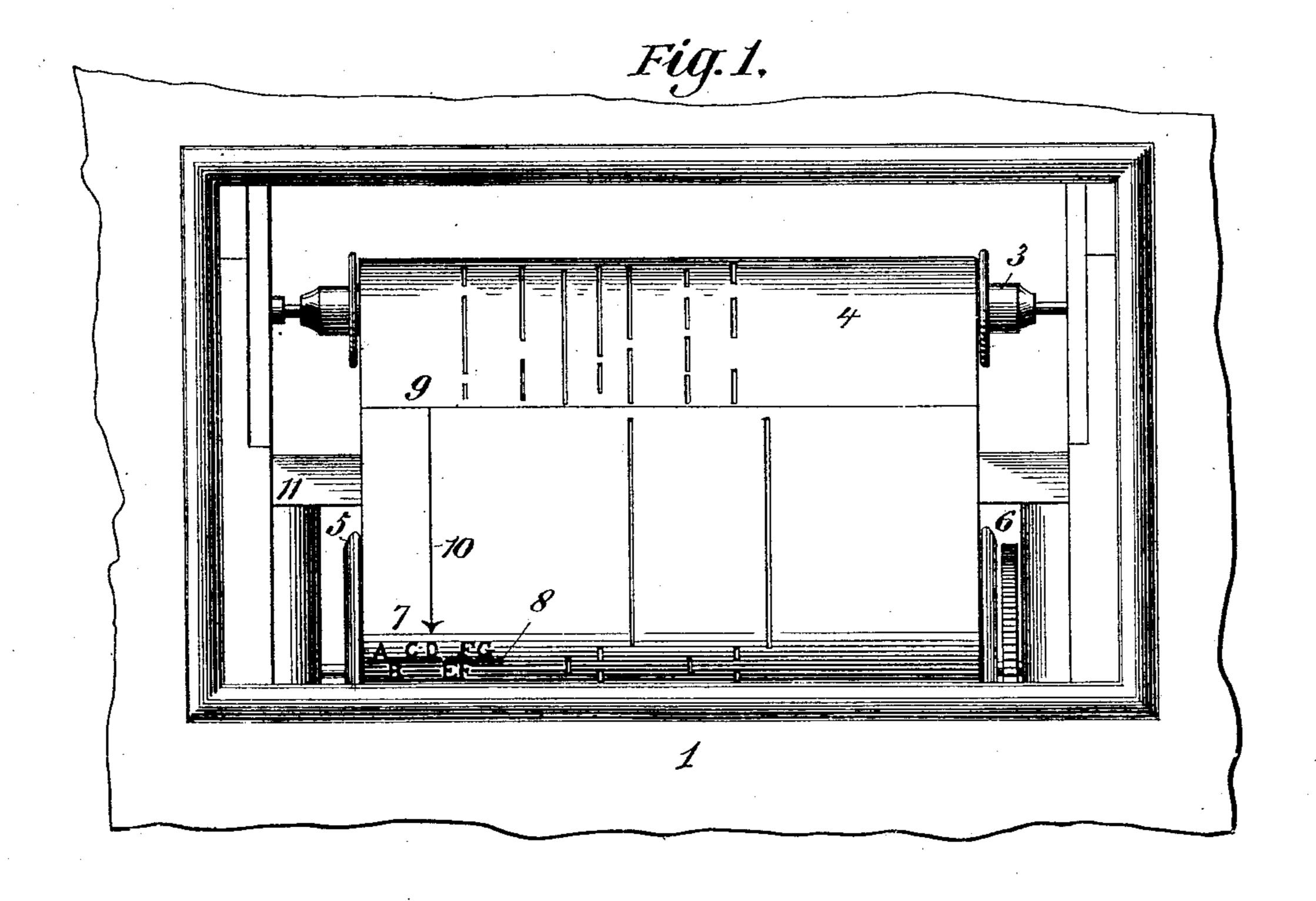
(No Model.)

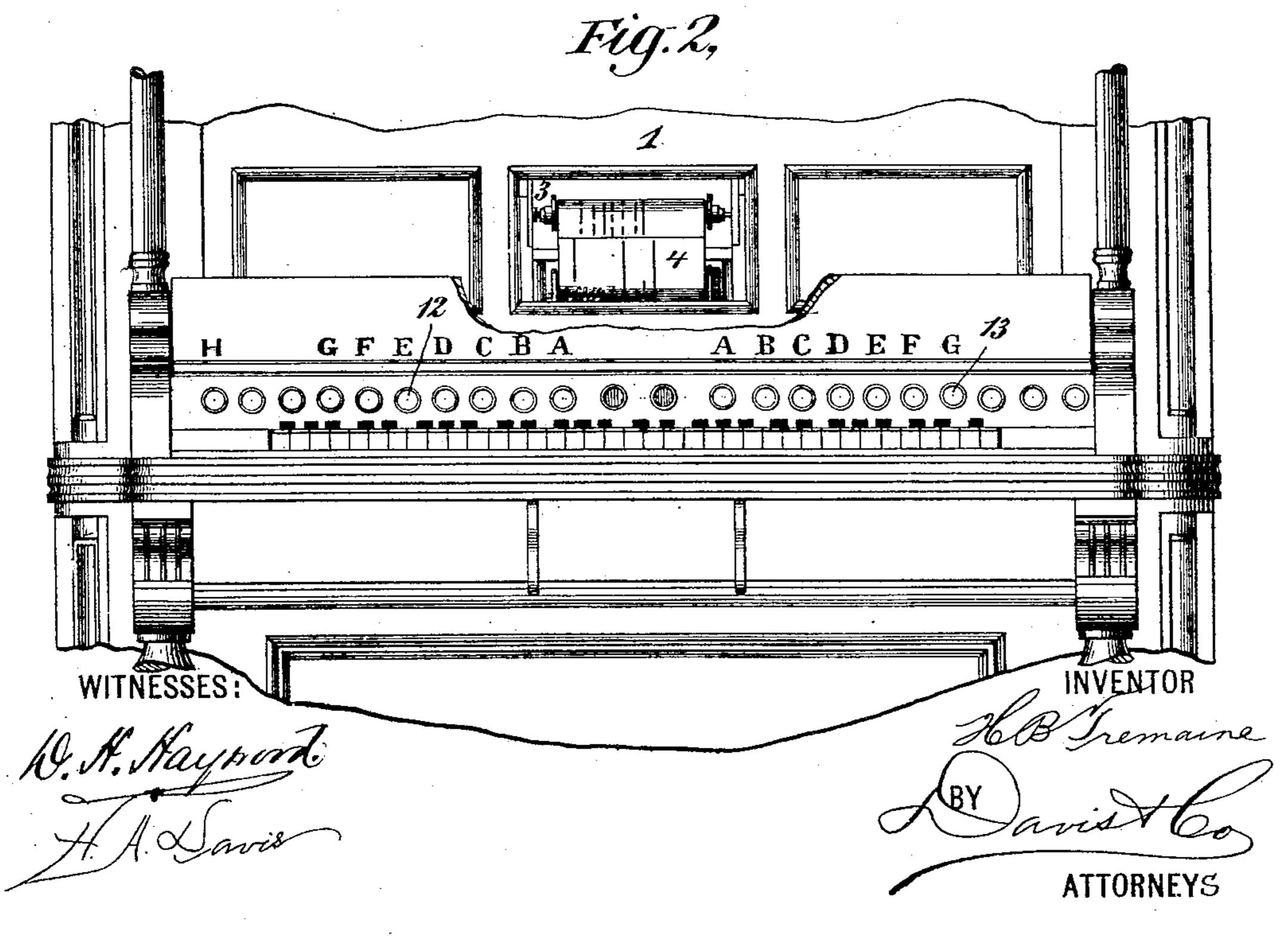
## H. B. TREMAINE.

STOP INDICATOR FOR MUSICAL INSTRUMENTS.

No. 572,666.

Patented Dec. 8, 1896.





## United States Patent Office.

HARRY B. TREMAINE, OF NEW YORK, N. Y., ASSIGNOR TO THE ÆOLIAN COMPANY, OF SAME PLACE.

## STOP-INDICATOR FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 572,666, dated December 8, 1896.

Application filed May 15, 1896. Serial No. 591,686. (No model.)

To all whom it may concern:

Be it known that I, HARRY B. TREMAINE, a citizen of the United States, residing at New York, in the county of New York and 5 State of New York, have invented a certain new, useful, and valuable Improvement in a Stop-Indicator for Musical Instruments, of which the following is a full, clear, and exact description.

This invention relates to stop-indicators for musical instruments, and has for its object to provide the combination and arrangement of parts, such as will be hereinafter fully de-

scribed.

In the accompanying drawings, forming a part of this specification, Figure 1 is an enlarged detail view of the music-holder of a musical instrument, showing a musical sheet in operative position having my stop-indications marked thereon; and Fig. 2 shows the same, together with the coöperating parts of the musical instrument, including the stops.

Like numerals of reference indicate corresponding parts occurring in the two views.

The object of this invention is to produce an improved music-sheet such as is ordinarily employed in operating such well-known musical instruments as the "æolian."

It is the purpose of my invention to im-30 prove that class of music-sheets which are provided with means for indicating to the operator what particular stops to draw at certain times so as to produce the proper effects or best combination of tones at the right time.

With these ends in view the invention consists in making a music-sheet with suitable stop-indicating characters which correspond with the characters ordinarily employed to designate the various stops of the instrument, such characters being arranged at various points along the sheet, and in an indicating or notification mark or marks arranged upon the sheet in rear of the indicating-characters, so that said marks will come to view as the music-sheet advances and thereby notify the operator in advance that the indicating-characters will next appear.

Proceeding with a detailed description of the drawings, 1 is the front board of an auto-50 matic musical instrument, such as the æolian, having the centrally-located music-holder,

comprising the delivery-spools 3, to which one end of the music-sheet 4 is permanently secured and its other end being detachably secured to the take-up roller 5, which is given 55 motion through its gear 6, and thereby winds upon itself at a variable but generally slow speed the said music-sheet 4, upon which I imprint in any suitable manner, such as with a rubber stamp or stencil, a series of characters 60 7, preferably above and below a horizontal line 8, those below the line indicating the bass stops 12 to be drawn and those above the line the treble stops 13, said bass and treble stops being correspondingly lettered 65 upon the instrument, and in order to allow the player time to draw the indicated stops at the exact and proper point on the musicsheet I prefer to arrange the series of indicating-letters 7 considerably in advance of 70 the actual point of changing the stops, which I prefer to indicate by a line 9, extended entirely across the sheet and immediately in front of the note or series of notes at which the change of stops is to be effected, connect- 75 ing the said line and series of indicating-letters by a vertical line 10, and this vertical line I prefer to make proportionately longer than even that shown in the drawings, so as to allow the performer ample time to draw the 80 stops after the series of indicating-letters come in sight over the delivery-spool 3 until the line 9 reaches the center of the trackerboard 11, at which point the sounding of the notes occurs.

I may substitute numerals or other forms of index-characters for the letters herein shown. I may arrange the series of index-characters 7 at either side of a vertical line or in other relative positions to indicate the 90 bass or treble stops, and in fact many minor modifications may be made without effecting the spirit of my invention, as

What I claim, broadly, is—

1. As a new article of manufacture, a per- 95 forated music-sheet for self-playing musical instruments having stop-indicating characters at desired points thereon, said characters being arranged on opposite sides of a dividing-line, those on one side of said line indi- 100 cating one class of stops and those on the opposite side of the line indicating stops of an-

other class, and an indicating or notification mark or marks arranged upon the sheet said indicating-characters being placed in advance of the notification mark or marks, substan-

5 tially as described.

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2. As a new article of manufacture, a perforated music-sheet for self-playing musical instruments having stop-indicating characters at desired points thereon which characters correspond to the various stops on the musical instrument, and an indicating mark or marks arranged upon the sheet, said indicating-characters being located in advance of the indicating mark or marks, substantially as described.

3. In an automatic musical instrument, the combination with the stops thereof bearing suitable index-characters, of a music-sheet for controlling said instrument, a series of

similar indicating-characters arranged at various points on the music-sheet, said characters being arranged on opposite sides of a dividing-line, those on one side of said line indicating one class of stops, and those on the opposite side of said line indicating another 25 class of stops, a notification line or mark extending transversely across the music-sheet in rear of each set of indicating-characters, and a line or mark running parallel with the sides of the music-sheet between the characters and notification-mark, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY B. TREMAINE.

Witnesses:

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G. HOWLETT DAVIS, OWEN WARD.