

(No Model.)

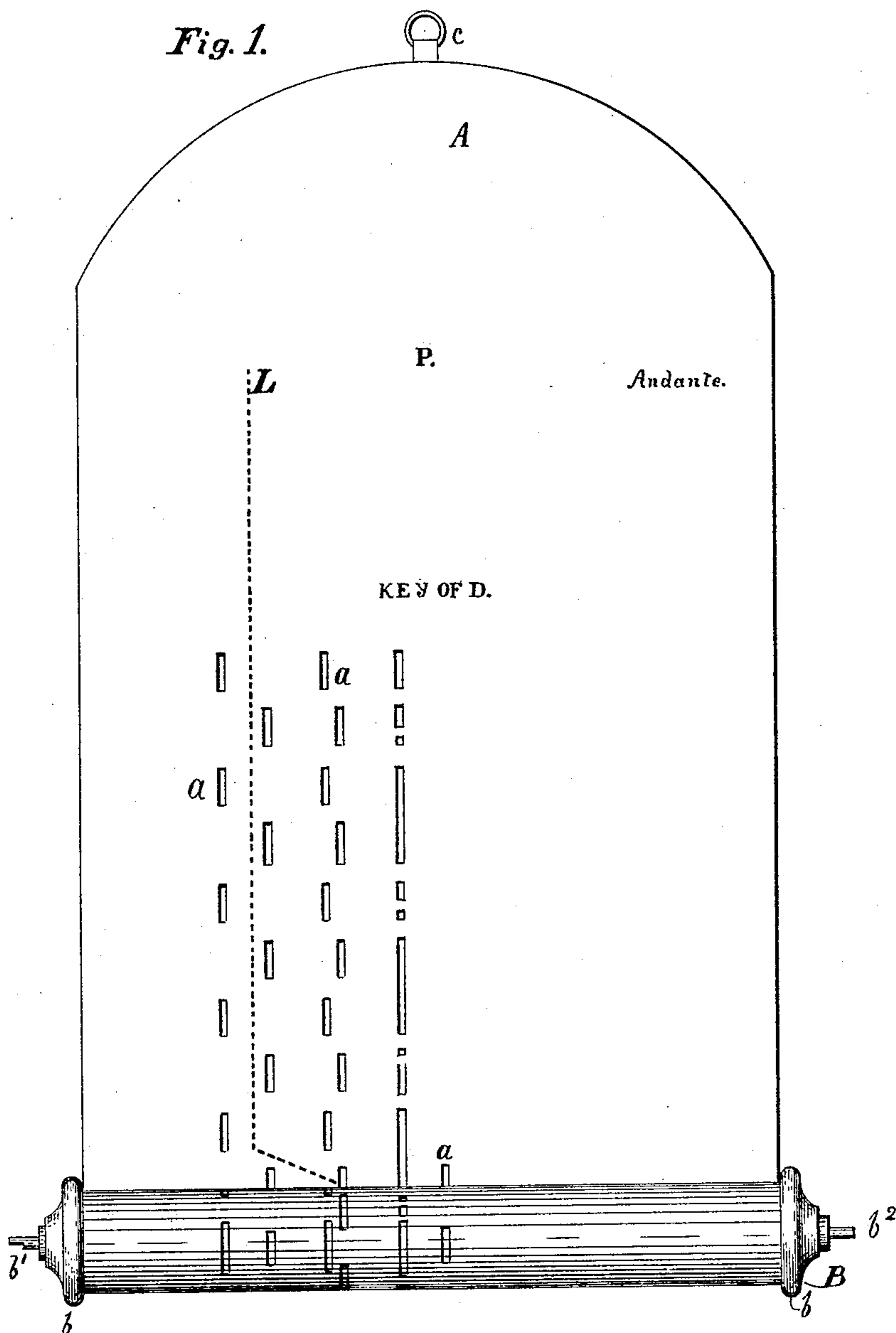
2 Sheets—Sheet 1.

W. A. WEBBER.

MUSIC SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

No. 452,203.

Patented May 12, 1891.



WITNESSES:

C. R. Ferguson
Wm. M. Cliff

INVENTOR

William A. Webber

BY

Gifford & Brown

HIS ATTORNEYS

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

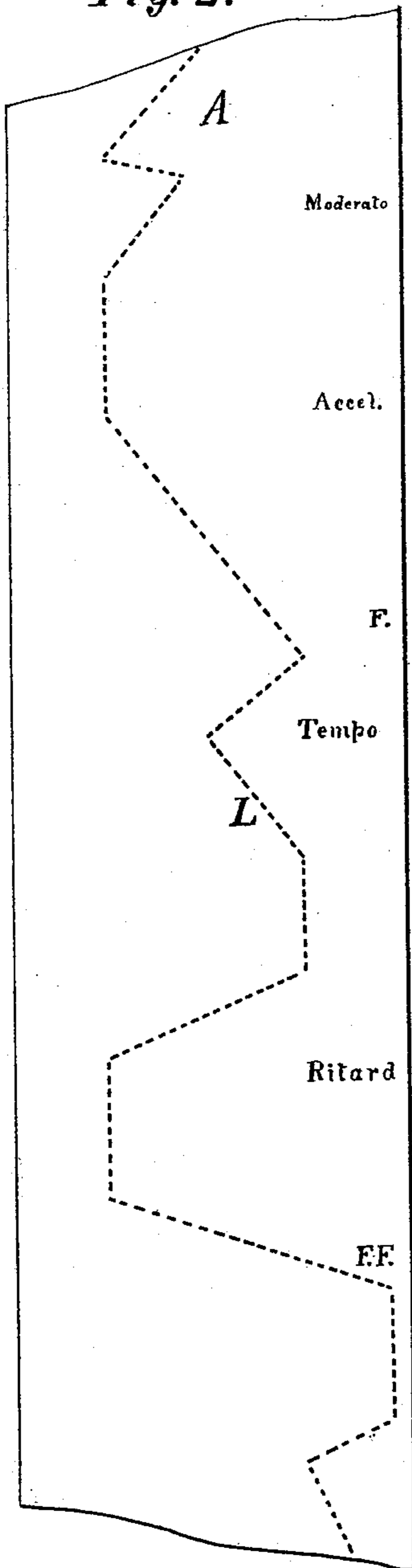
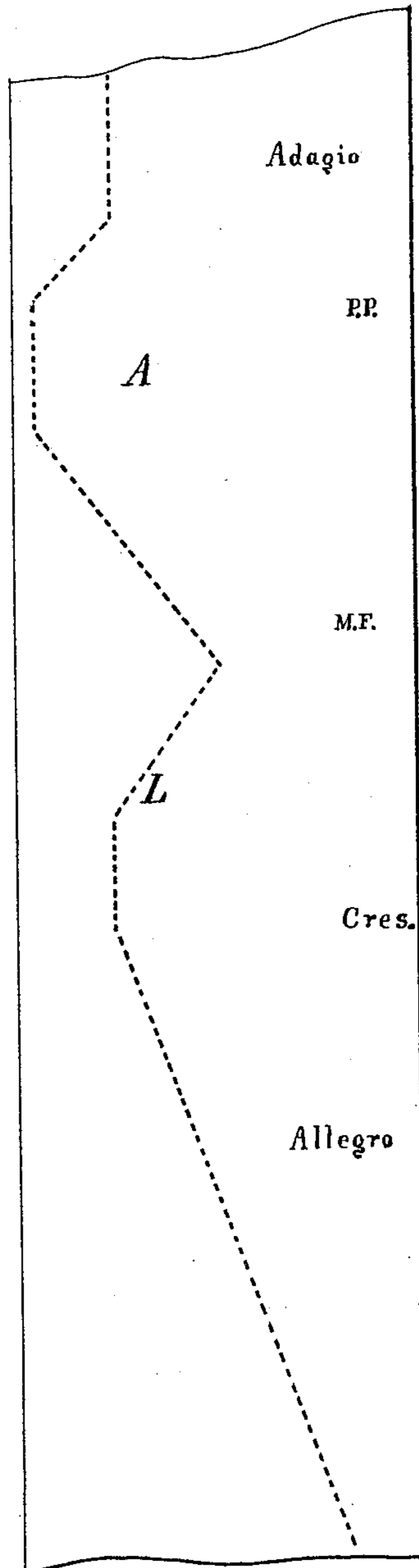


Fig. 3.



WITNESSES:

C. R. Ferguson
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UNITED STATES PATENT OFFICE.

WILLIAM A. WEBBER, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE
AEOLIAN ORGAN AND MUSIC COMPANY, OF NEW YORK, N. Y.

MUSIC-SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 452,203, dated May 12, 1891.

Application filed January 29, 1891. Serial No. 379,596. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. WEBBER, of Meriden, in the county of New Haven and State of Connecticut, have invented a certain
5 new and useful Improvement in Music-Sheets for Mechanical or Automatic Musical Instruments, of which the following is a specification.

This improvement relates to perforated
10 music-sheets which are employed in connection with mechanical or automatic musical instruments. These music-sheets act as valves controlling the admission of air either to the sounding devices directly or to pneu-
15 matic motors employed to effect the operation of the sound-producing devices.

The object of the present improvement is to enable a person operating a mechanical or automatic musical instrument comprising one
20 of these music-sheets to graduate the playing of the music, as this should be done, so that from time to time the playing may be done louder or softer, slower or faster.

The improvement consists of a music-sheet
25 forming a new article of manufacture and provided with a line extending longitudinally but deviating in a zigzag or sinuous manner laterally from side to side for the purpose of indicating how loud or how soft the playing
30 should be at different intervals. In addition to this there will preferably be marked upon the paper words indicative of the loudness or softness with which the playing should be done, and also words or characters indicative
35 of the speed at which the playing from time to time should be done.

In the accompanying drawings, Figure 1 is a plan of a portion of a music-sheet embodying the improvement. Fig. 2 is a similar plan
40 of another portion of the music-sheet, but here the perforations are omitted. Fig. 3 is a plan like Fig. 2, but illustrating a different portion in the length of the music-sheet.

Similar letters of reference designate corresponding parts in all the figures.

A designates the music-sheet. It has formed in it a number of perforations *a*, corresponding with the notes of a tune to be played and serving to admit to the mechanical or auto-
50 matic musical instrument with which it is de-

signed to be used the air necessary for producing the notes of the tune. The sheet may advantageously be secured at one end to a roller B, having at its ends flanges *b* and beyond the flanges journals *b'* *b''*. This roller
55 is commonly known as a "music-roller," because the music-sheet is normally wound upon it. Its journal *b''* is shown as constructed to interlock with the driving-shaft, it being in the present instance notched for that purpose. 60
The end of the music-sheet which is unattached to the roller B is shown as provided with a ring C. This is to enable it to be engaged with a roller comprised in the musical instrument and commonly known as a "take- 65
up roller," because it draws forward and takes up the music-sheet during the playing of the instrument. It will be observed that the music-sheet has a line L running along it. This may be delineated in ink. As shown, it 70
is a dotted line. It will be observed that it has a general trend or extension in the direction of the length of the music-sheet, but that it deviates to the right and left, and therefore is zigzag or sinuous. This line is intended to 75
indicate to the person using the musical instrument how loud or soft the playing should be from time to time, so that he may operate the swell in accordance with the views of the composer of the tune. When the dotted line 80
extends to the extreme left of the music-sheet, the instrument should be played very softly, and when it extends to the extreme right of the sheet it should be played very loud. Its extension to the left or the right at different 85
degrees is indicative of different degrees of softness or loudness in the playing. Preferably there will be marked upon the music-sheet in addition to the line L words or characters indicative of what ought to be done— 90
as, for instance, P P to indicate "very softly," P to indicate "softly," MF to indicate "medium loud," F to indicate "loud," FF to indicate "very loud," Cres. to indicate "gradually louder," Adagio to indicate "very slowly," Andante to 95
indicate "slow," Moderato to indicate "moderately," and Allegro to indicate "fast." Besides these words and characters the following indicative of the speed of the playing can advantageously be marked upon the sheet— 100

namely, Accel. to indicate "faster," Ritard to indicate "slower," and Tempo to indicate "in time."

5 With a music-sheet made as described, the user of a mechanical or automatic musical instrument may render a tune with the light and shade that the composer intended.

What I claim as my invention, and desire to secure by Letters Patent, is—

10 1. As a new article of manufacture, a music-sheet provided with a line extending longitudinally, but deviating in a zigzag or sinuous manner laterally from side to side for the purpose of indicating how loud or soft the
15 playing should be at different intervals, substantially as specified.

2. As a new article of manufacture, a music-sheet provided with a line extending longitudinally, but deviating in a zigzag or sinu-

ous manner laterally from side to side for the purpose of indicating how loud or soft the playing should be at different intervals, and provided with words or characters also indicative of the loudness or softness of the playing, substantially as specified. 25

3. As a new article of manufacture, a music-sheet provided with a line extending longitudinally, but deviating in a zigzag or sinuous manner laterally from side to side for the purpose of indicating how loud or soft the playing should be at different intervals, and provided with words or characters indicative of the speed at which the playing should be done, substantially as specified. 30

WILLIAM A. WEBBER.

Witnesses:

WILBUR H. SQUIRE,
JOHN E. DURAND.