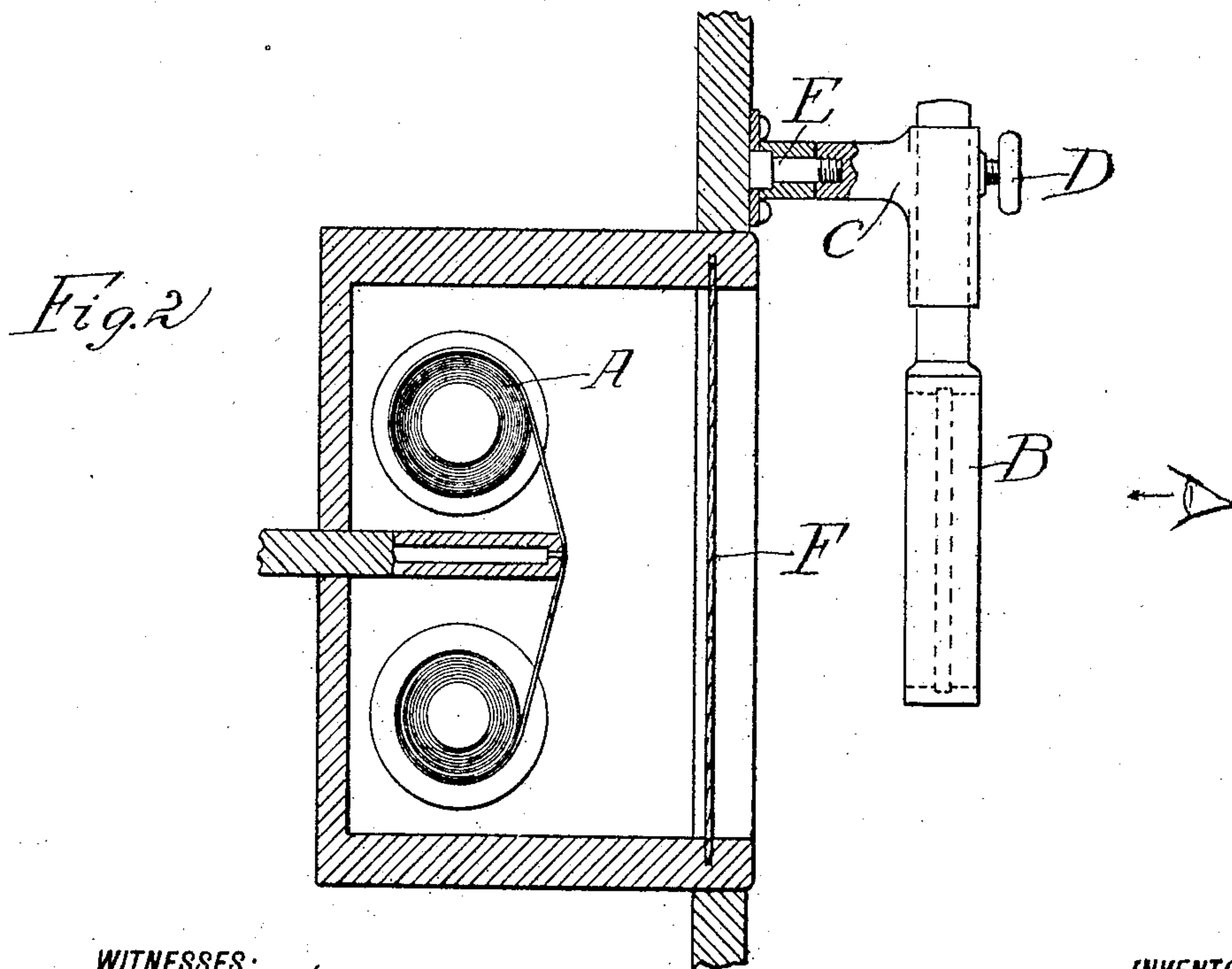
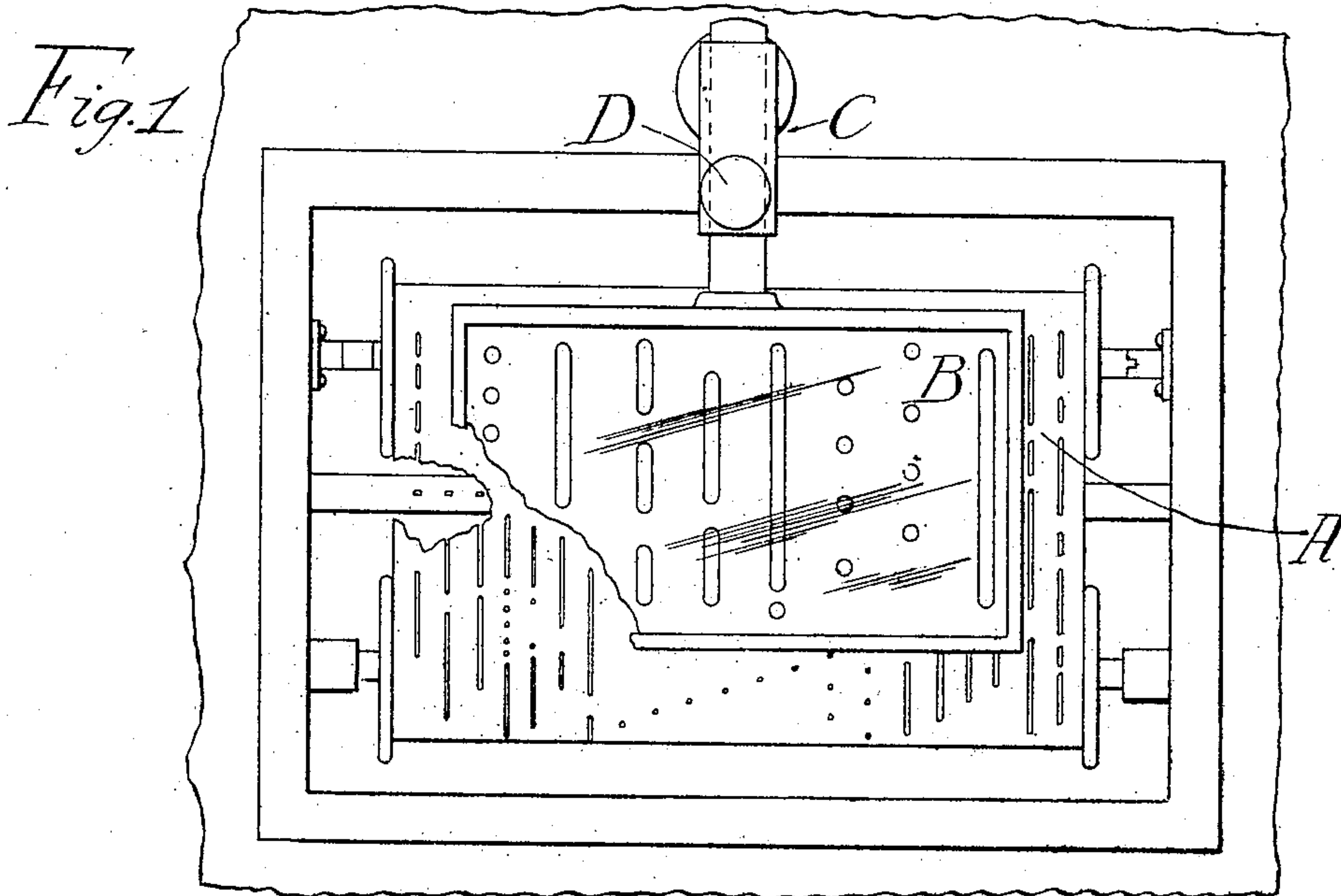


E. W. BATTEN.
 AUTOMATIC PNEUMATIC MUSICAL INSTRUMENT.
 APPLICATION FILED MAR. 27, 1909.

963,981.

Patented July 12, 1910.



WITNESSES:
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UNITED STATES PATENT OFFICE.

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AUTOMATIC PNEUMATIC MUSICAL INSTRUMENT.

963,981.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed March 27, 1909. Serial No. 436,080.

To all whom it may concern:

Be it known that I, ERNEST WILLIAM BATTEN, a subject of the King of Great Britain, and residing at Herne Hill, London, S. E., England, have invented certain new and useful Improvements in Automatic Pneumatic Musical Instruments, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to what are known as automatic musical instruments which employ a perforated roll or sheet of music, and the invention consists of the employment of a magnifying glass or lens, placed in such position that the player by its assistance can more easily read or follow the course of the music-roll, while the music is being rendered.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a front elevation of an instrument involving my invention, and Fig. 2 a sectional side elevation of that portion of the instrument to which my improvement is applied.

In Fig. 1, A indicates the roll of music; B, the magnifying glass contained in a frame (preferably of metal); C, the metal arm-piece or bracket, holding glass in position; D, a screw, by means of which the position of the glass can be varied.

In Fig. 2, A indicates the roll of music; B, the magnifying glass, contained in a frame, (preferably of metal); C, the metal arm-piece or bracket holding glass in position; D, a small screw by means of which the position of glass can be varied. The bracket is rotatably supported at E thus enabling it to be swung aside when music-roll is either placed in or taken from instrument. F indicates a sliding glass panel, used in some instruments (imperatively those worked by "pressure" pneumatics) and drawn across front of music-recess after music-roll is in position. Its purpose has no interest or bearing upon the device herein described. By means of this construc-

tion the glass holder may be swung freely in a plane parallel of and in front of the rotary support for the roll or sheet of music and said frame may also be adjusted in said plane, this last operation being accomplished by means of the set screw D.

Irrelevant details have purposely been omitted, and only enough shown in drawing, to illustrate this specification.

Any suitable and convenient method of mounting or placing the glass in its position, may be adapted and each instrument must be so dealt with in this respect as to secure the greatest convenience and efficiency; no claim whatever being made in this direction.

The invention is useful where any class of roll is used, but especially is its value apparent when, in some of the later instruments, rolls of music are employed containing very small markings and perforations. Moreover, as the correct "tracking" or passage of the roll in some instruments, is under the control of the player, the skilful manipulation of which is imperative to the correct rendering of the selection being played, the value of a means of doing this easily, it at once apparent.

A glass of any power may be employed, but experience points to the advisability of using one of moderate strength; as any distortion that otherwise may possibly arise, is thus entirely overcome.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. An attachment for an automatic musical instrument having a rotary support for a perforated roll of sheet music, comprising a holder adapted to be secured above said support, a bracket rotatably connected with said holder and a frame connected with said bracket and provided with a magnifying glass or lens, said frame, when said attachment is in position, being vertically adjustable and adapted to swing in a plane parallel with said support.

2. The combination with an automatic musical instrument having a rotary support for a perforated roll of sheet music, of an attachment comprising a holder secured above said support, a bracket rotatably con-

connected with said holder and a frame connected with said bracket and provided with a magnifying glass or lens, said frame being vertically adjustable and adapted to swing
5 in a plane parallel with said support.

In testimony that I claim the foregoing as my invention I have signed my name in

presence of the subscribing witnesses this 15th day of March 1909.

ERNEST WILLIAM BATTEN.

Witnesses:

FREDERICK KINCHIN,
LILIAN MAY LOUISA RANIER.