

No. 725,358.

PATENTED APR. 14, 1903.

R. W. PAIN.

MUSIC SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

APPLICATION FILED MAR. 5, 1902.

NO MODEL.

Fig. 1.

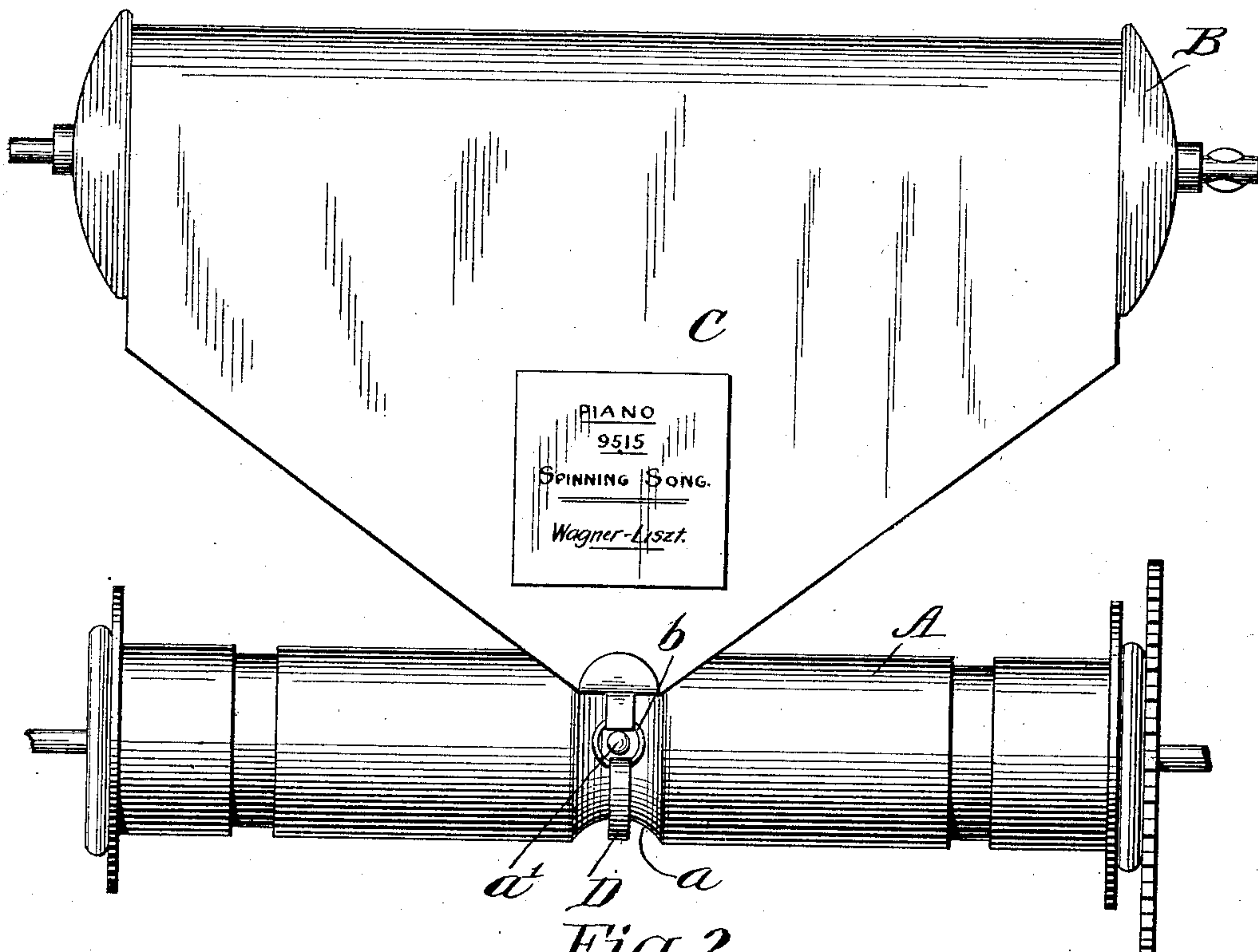


Fig. 2.

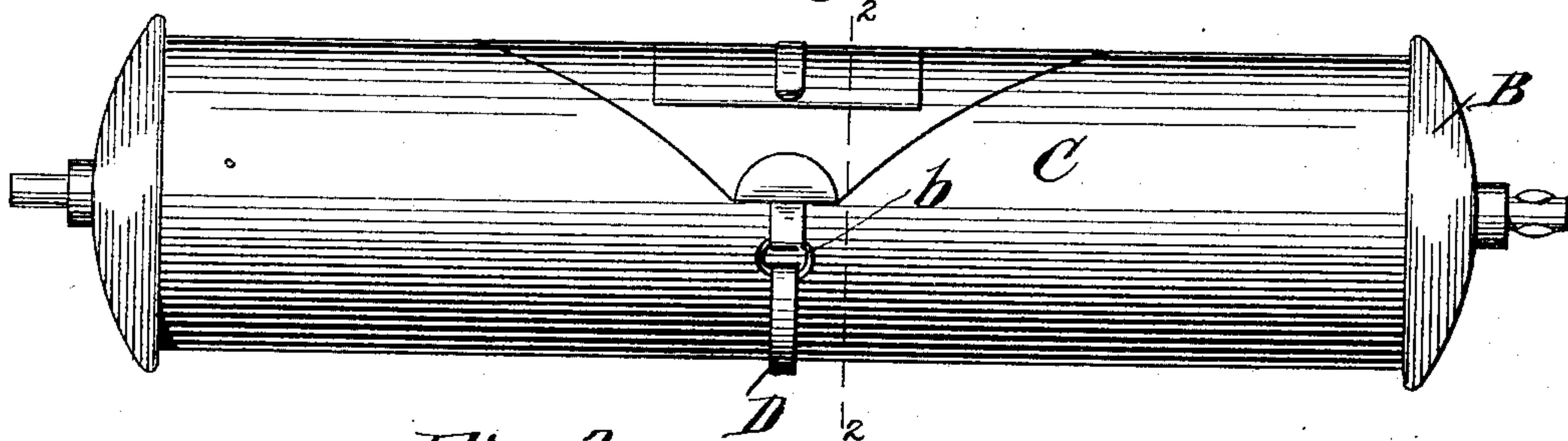
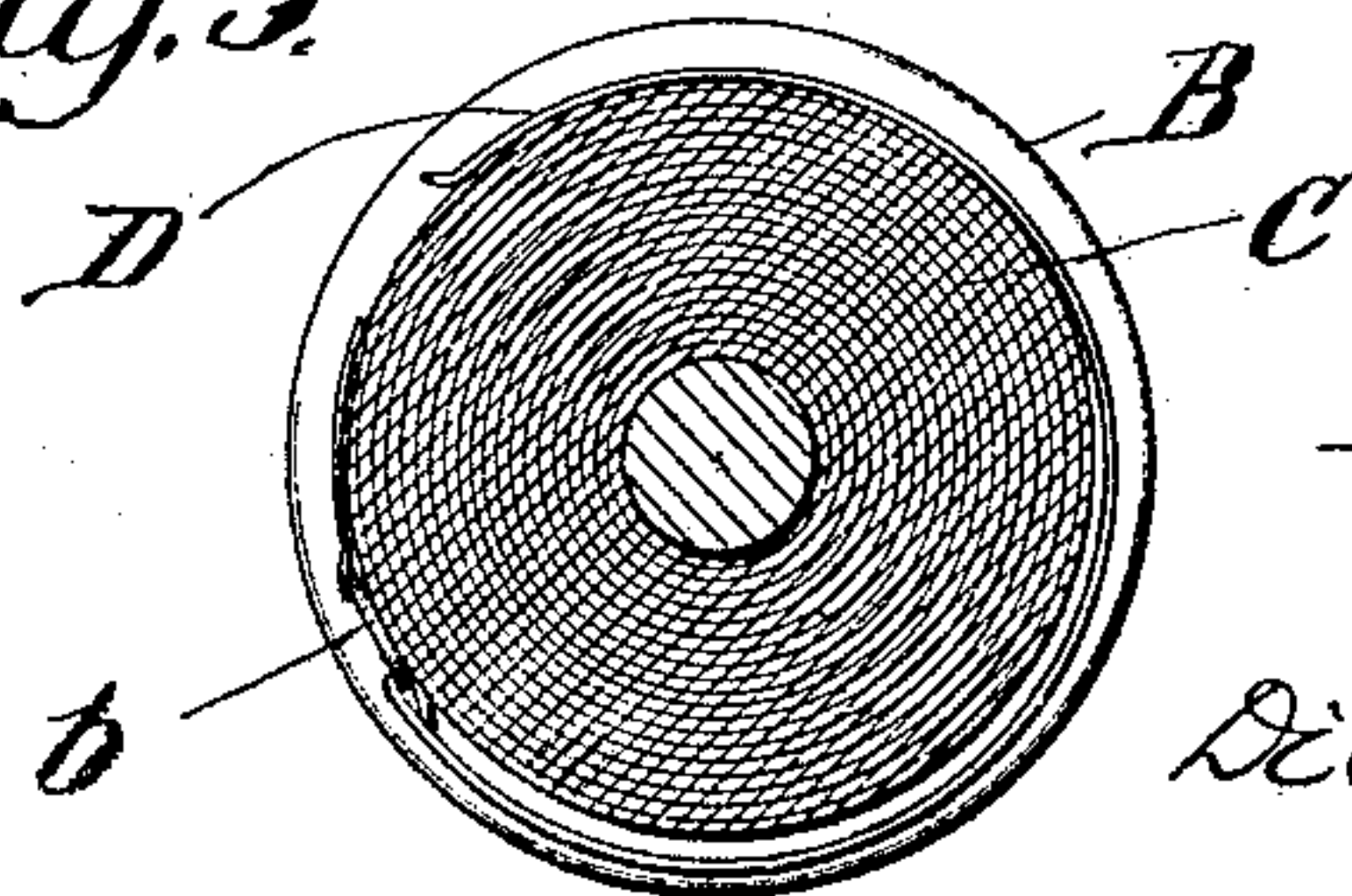


Fig. 3.



WITNESSES:

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ROBERT WILLIARD PAIN, OF NEW YORK, N. Y., ASSIGNOR TO THE AEOLIAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF CONNECTICUT.

MUSIC-SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 725,358, dated April 14, 1903.

Application filed March 5, 1902. Serial No. 96,729. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WILLIARD PAIN, of the borough of Manhattan, city, county, and State of New York, have invented a new and useful improvement in music-rolls for controlling mechanism for playing musical instruments and means for securing music-sheets in coiled condition upon the rolls, of which the following is a specification.

My improvement relates to music-sheets such as are used for controlling automatic musical instruments. Such music-sheets are commonly kept rolled about a roll which is called a "music-roll" and when in use are detachably connected at one end to another roll, called a "take-up" roll, which is a fixture in a musical instrument, and wound from the first roll onto the second, to be rewound onto the first after playing.

The object of the improvement is to provide a simple and convenient means for holding the music-sheets when rolled up.

Further objects of my invention will hereinafter appear; and to these ends my invention consists of a music-sheet for carrying out the above objects constructed and arranged substantially as hereinafter fully described, and shown in this specification and accompanying drawings.

In the accompanying drawings, Figure 1 is a top view of music and take-up rolls of an automatic musical instrument and a music-sheet embodying my improvement. Fig. 2 is a view of the music-roll detached with the music-sheet wound upon it. Fig. 3 is a transverse section taken at the plane of the line 2 in Fig. 2.

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

A designates a take-up roll in an automatic musical instrument. It may be of any suitable form and supported in bearings in the usual manner to be rotated by the ordinary driving mechanism. As shown, its body has a circumferential groove *a* about midway between the ends and a hook or engaging device *a'*.

B designates a music-roll of any suitable construction, and C designates a music-sheet permanently attached to and wound around

the body of the music-roll. This roll may be journaled in any suitable bearings and rotated by any appropriate driving mechanism. As shown, the music-sheet has on its outer end a ring *b*, adapted to engage with the hook *a'* upon the take-up roll. This ring may be made of metal wire and is shown as attached to the end of the music-sheet by means of a piece of cloth passed through the ring and doubled, so as to embrace the end of the music-sheet. Any suitable adhesive substance may be employed to fasten it to the end of the music-sheet. In addition to the ring or other engaging device there is a spring-clasp D for holding the music-sheet in a rolled condition about the music-roll. This, as shown, consists of a strip of metal curved to conform closely to the music-sheet in a rolled condition. Preferably it will be made of slightly-smaller dimensions, so that it will have to be stretched or sprung open more or less to fit the music-sheet in a rolled condition in order that it shall hug the same tightly and keep the outer layer close around the inner. When the music-sheet is to be used, the free end of the spring-clasp is caught by the finger and pulled off. After unwinding a sufficient portion of the music-sheet the spring-clasp is slipped into the groove *a* of the take-up roll A and the ring *b* of the music-sheet is engaged with the hook *a'* of the take-up roll. When the ring *b* is disengaged from the hook *a'*, a pull upon the music-sheet will cause the disengagement of the spring-clasp from the take-up roll. It will thus be seen that according to my invention the music-sheet is provided at one end with an attachment in the form of a flexible clasp adapted to be sprung over the sheet in a rolled condition and prevent it from unrolling. It will also be seen that the music-sheet is provided at one end with means for attaching the sheet to a take-up roll, in combination with means for preventing the music from unrolling when in a rolled condition upon the music-roll. In order that the music-sheet may be attached to the take-up roll, cooperating devices on the sheet and the roll, respectively, are provided, comprising a pin or hook and an eye, and in this in-

stance a flexible clasp is conveniently attached to the eye, which is placed on the music-sheet.

Obviously my invention may be embodied
5 in varying forms, and some features of my invention may be used without others.

Therefore, without limiting myself to the construction shown and described, I claim, and desire to obtain by Letters Patent, the
10 following:

A music-sheet provided at one end with an attachment comprising a ring flexibly connected to the sheet and a longitudinally-

resilient strip of metal connected to said ring and bent to semicircular form, said strip
15 adapted to embrace said music-sheet when rolled up, and said ring adapted to engage a pin or hook on a take-up roll when the sheet is to be unwound, substantially as set forth.

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

ROBERT WILLIARD PAIN.

Witnesses:

EDW. F. COYLE,
GEO. E. CRUSE.