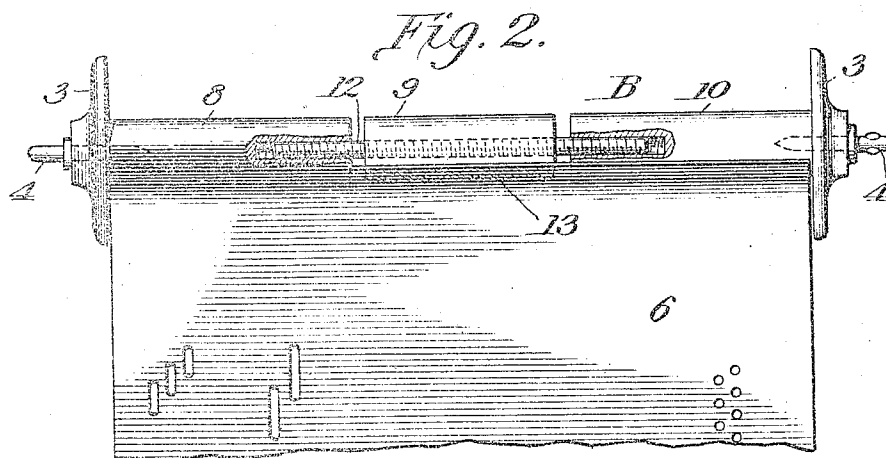
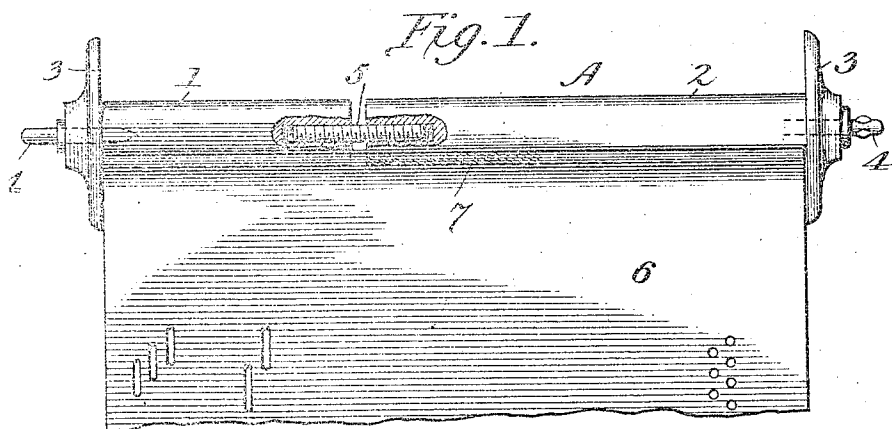


No. 860,965.

PATENTED JULY 23, 1907.

G. H. DAVIS.
SPOOL FOR MUSIC ROLLS.
APPLICATION FILED JAN. 19, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE HOWLETT DAVIS, OF WEST ORANGE, NEW JERSEY.

SPOOL FOR MUSIC-ROLLS.

No. 860,965.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed January 19, 1907. Serial No. 353,114.

To all whom it may concern:

Be it known that I, GEORGE HOWLETT DAVIS, a citizen of the United States, residing at West Orange, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Spools for Music-Rolls, of which the following is a specification.

The present invention relates to spools for music sheets or rolls such as are employed in connection with self playing musical instruments, and has to do more particularly with spools having an adjustable spindle to compensate for variations in the width of the music sheet due to atmospheric changes or other causes.

The prime object of the invention is to provide a music roll spool of simple and durable construction, the spindle of which may be made up of short sections of material, as distinguished from a single section, thereby greatly reducing the initial cost of production, and at the same time providing for proper lateral adjustment of the sections relatively to one another to compensate for variations in the width of the music sheets.

Briefly and generally stated the invention embodies a spool of the class described, comprising a sectional spindle having collars or flanges, end-bearings, and adjustable interconnecting means between the adjacent ends of the spindle sections, combined with a music-sheet, one end of which is attached to one section only of the spindle, whereby the said sections may be adjusted toward and from one another in order to bring the collars or flanges in close proximity to the edges of the sheet or roll, without in any manner buckling or twisting the sheet intermediate its edges.

The invention is illustrated in the accompanying drawing, wherein:

Figure 1 represents in plan view, one form of the invention; and Fig. 2 is a similar view illustrating another embodiment.

Referring to Fig. 1, the letter A, designates the spindle which, in the instance shown, is made up of two sections 1 and 2, preferably of wood, the outer end of each of which is provided with the usual flange or collar 3, and end-bearings 4, one of which bearings is winged as is common in music spools. The adjacent ends of the sections 1 and 2, are provided with screw-threaded openings in which is tightly fitted a threaded rod or screw 5, the arrangement being such that the sections may be adjusted toward and from each other by turning one relatively to the other, whereby to lengthen or shorten the spindle and cause the collars or flanges 3, to more or less closely hug or approach the music sheet or roll. The combined length of the screw-threaded openings in the two sections 1 and 2, is at least as long as or preferably longer than the length of the screw-threaded rod 5, in order that the adjacent ends of the sections may be brought close together and in contact if necessary.

The reference numeral 6 designates the perforated

music sheet, one end of which, as shown at 7, in the drawing, is attached to one section only of the spindle A, the attachment being preferably made of a suitable adhesive, although any other suitable attaching means may be employed. By preference the music sheet 6, is attached to the said spindle section throughout only a portion of its length, the remaining portion of the sheet being left free or unattached, whereby to prevent undue buckling or creasing of the attached portion of the sheet incident to occurring variations in its width due to atmospheric changes.

It will be apparent from the foregoing construction of sectional spool and manner of attaching the music sheet to one section only thereof, that the said spool may, by rotation of one section, relatively to the other, be lengthened or shortened without buckling or creasing the music sheet.

In the construction illustrated in Fig. 2, the spindle indicated generally by the reference letter B, is made up of three sections 8, 9, 10, the end flanges and bearings being carried by the two outer sections 8 and 10. The central section 9, carries a screw 12, which passes entirely therethrough and projects at opposite ends thereof and the adjacent ends of the sections 8 and 10 are provided with threaded openings in which the said projecting ends of the screw 12, have tight threaded engagement so that a rotation of either one of said sections 8 or 10 relatively to the other or to the section 9, will cause the said rotated section or sections to travel on the screw either toward or from the section 9, and thus lengthen or shorten the spindle.

In the form of invention illustrated in Fig. 2, the end of the music sheet 6, is attached to the middle section 9, only of the spindle as indicated at 13, the remaining portion of the end of the sheet being free or unattached. By this construction it will be apparent that either one of the outer sections can be adjusted independently of the other or both may be adjusted, and this without buckling the music sheet.

By making the spindle of two or more sections in the manner described all short sections of stock of any length may be utilized, thus greatly reducing the initial cost of manufacture of the spools and this is an item of no small importance in constructions of this nature.

What I claim is:

1. A music spool composed of adjustably connected sections, and a music sheet attached at one end to only one of said sections.
2. A music spool having a sectional spindle, a flange or collar at each end of said spindle, a threaded connection between the said spindle sections, and a music sheet attached to only one of said sections.
3. A music spool having a sectional spindle, a flange or collar and an end bearing secured to each end of said spindle, a threaded rod entering threaded bores in the adjacent ends of the spindle sections, and a music sheet attached to only one of said sections.

4. A music spool having a spindle composed of three sections, a flange or collar at each end of the spindle, an adjustable connection between the spindle sections, and a music sheet attached to the middle section only of the spindle.

5. A music spool having a spindle composed of three sections, a flange or collar and an end bearing attached to each end of the spindle, a threaded rod carried by the middle spindle section and having projecting ends which enter

threaded holes in the ends of the adjacent sections, and a music sheet attached to the middle section only of the spindle.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

G. HOWLETT DAVIS.

Witnesses:

M. E. PRUMPHREY,

H. A. DAVIS.