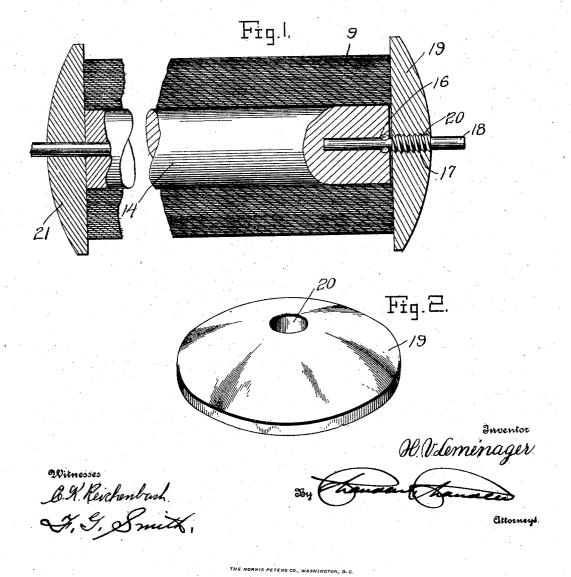
H. V. LEMÉNAGER. NOTE SHEET ROLL. APPLICATION FILED AUG. 6, 1906.



UNITED STATES PATENT OFFICE.

HENRI V. LEMÉNAGER, OF WASHINGTON, DISTRICT OF COLUMBIA.

NOTE-SHEET ROLL.

No. 859,391.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed August 6, 1906. Serial No. 329,409.

To all whom it may concern:

Be it known that I, Henri V. Leménager, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Improved Note-Sheet Rolls; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to devices for compensating for the expansion and contraction of perforated music sheets and the primary object of the invention is to provide a simple device which will enable the music sheets of the kind now in general use in the pianola and ange
15 lus and other similar instruments to be played with equal efficiency regardless of atmospheric condition.

It is a well known fact that when a spool of this character is employed having fixed flanges, the expansion of the sheet results in a buckling of the same and when 20 the sheet passes over the tracker-board, air is permitted to enter beneath the sheet resulting in the striking of more than the necessary number of notes and usually three or four successive notes which of course produce discord.

5 In carrying out my invention I employ a music roll which is provided at one of its ends with a fixed end flange and at its opposite end with a stud having cutting threads formed thereon and I also provide an end flange which is independent of the roll and which is provided 0 with a smooth centrally located bore, the said end flange being engageable upon the threaded stud and being adapted to have its bore threaded by the cutting threads upon the stud.

In the accompanying drawings:—Figure 1 is a detail 35 sectional view through a perforated sheet music roll embodied in my invention, and, Fig. 2 is a detail perspective view of the adjustable end flange for the same.

The numeral 14 denotes the music roll embodying my invention which is provided at one of its ends with 40 a stud 15 and at its opposite end with a stud 16, the latter being fixedly secured in the end of the roll. The stud 16 is provided beyond the said end of the roll with a threaded portion 17 and beyond the threaded portion with a reduced end portion 18 and an end flange 19 is 45 engaged upon the threaded portion 17 of the said stud 16 this engagement being had by forming in the end flange member 19, which member is in the form of a disk, a central opening 20 through which the reduced portion 18 of the stud 16 is engaged and the end flange 50 member then turned into place, the threads 17 serving to cut corresponding threads in the walls of the opening

20. From the foregoing it will be readily understood that by turning the end flange member 19, it may be adjusted to and from the respective end of the roll 14 and the purpose of this adjustment will be presently 55 fully explained.

The end flange member at the opposite end of the spool is indicated by the numeral 21 and is fixedly connected with the said end of the roll.

When the music sheet is wound upon the spool 14 the 60 end flange member 19 is turned upon the threaded stud 16 to slightly bear upon the corresponding end of the roll of perforated sheet music upon the spool and to force the said roll into tight contact with the fixed end flange 21 thereby squaring the edges of the sheet when 65 rolled up. When the roll is to be played, and before placing it in position in the casing 5, the end flange member 19 is again turned upon its threaded stud 16 to sufficiently loosen the roll of sheet music so that the edges of the same will not be injured when the roll is 70 being unwound. When the roll is removed from the instrument the adjustable end flange 19 is screwed upon its threaded stud until the perforated music sheet is pushed over to the fixed flange of the spool and brought into perfect alinement thus insuring its unrolling and 75 tracking in a perfectly continuous straight line when next put into use for playing.

Although in the disclosure of my invention I have shown a spool having a fixed end flange and an adjustable end flange, it will be, of course understood that if 80 found expedient the adjustable end flange may be adjusted at either or both ends of the spool without departing from the spirit of the invention or the scope of the claims.

It is to be understood that I do not desire to be lim- 85 ited to the exact details shown and described, for obvious modifications will occur to a person skilled in the art.

What is claimed as the invention, is:-

A spool for perforated music sheets comprising a roll, a fixed end flange located at one end of the roll, a hardened stud carried by the roll at its opposite end, said stud having cutting threads formed thereon, and a flange having a smooth bore formed therethrough, said flange being of softer material than the stud and being adapted to be engaged upon the stud and to have its bore threaded by the threads upon the stud.

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

HENRI V. LEMÉNAGER.

Witnesses:

F. G. SMITH, H. E. CHANDLEE.