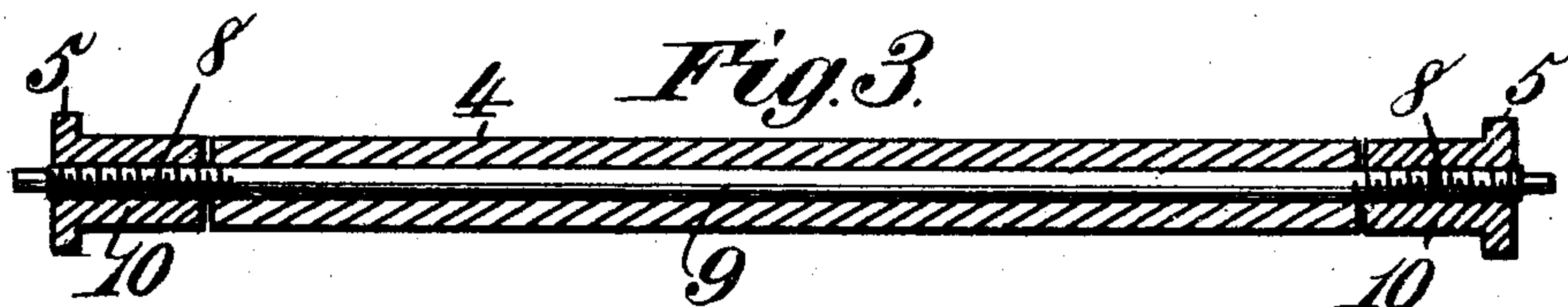
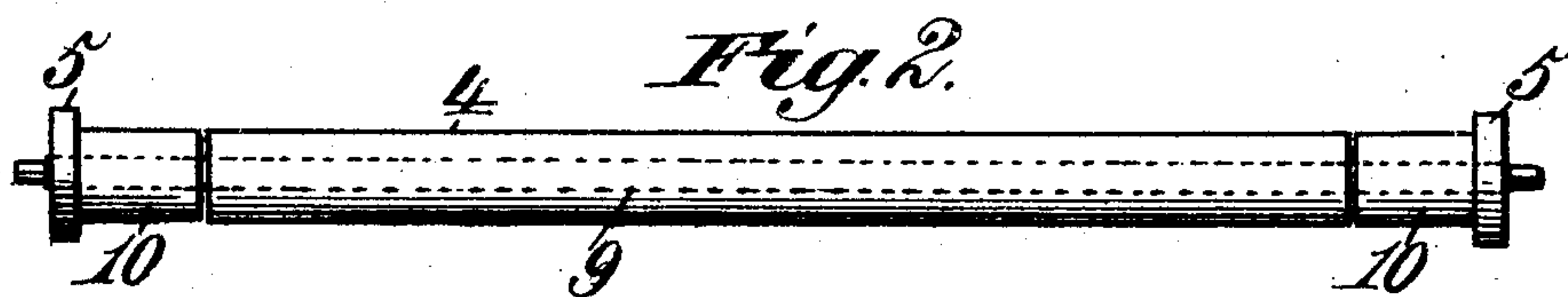
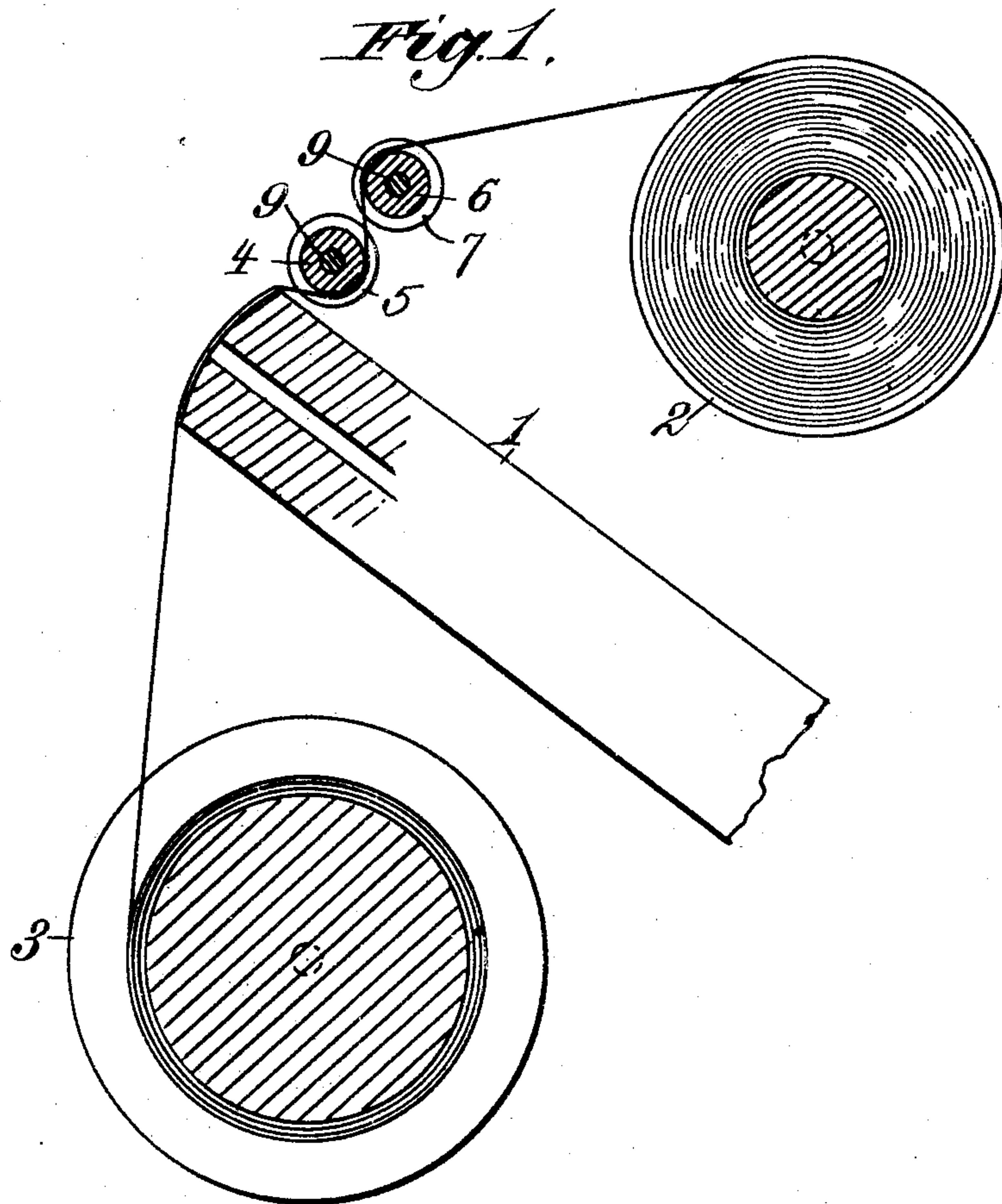


No. 782,665.

PATENTED FEB. 14, 1905.

G. B. KELLY.
GUIDING MEANS FOR MUSIC SHEETS.
APPLICATION FILED AUG. 31, 1904.



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UNITED STATES PATENT OFFICE.

GEORGE B. KELLY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
AEOLIAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF CON-
NECTICUT.

GUIDING MEANS FOR MUSIC-SHEETS.

SPECIFICATION forming part of Letters Patent No. 782,665, dated February 14, 1905.

Application filed August 31, 1904. Serial No. 222,885.

To all whom it may concern:

Be it known that I, GEORGE B. KELLY, a citizen of the United States, residing at Jamaica Plains, Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Guiding Means for Music-Sheets, of which the following is a specification.

My invention relates to improvements in means for guiding a perforated music-sheet in its travel over a tracker-board of a mechanical musical instrument or instrument player to secure accuracy of register of the note-perforations of the sheet with the ducts in the tracker-board and while so guiding the perforated music-sheet impart tension thereto and hold the same in a smooth condition without wrinkles, so that the music-sheet in its passage over the tracker-board will sustain proper operative relation to the latter in all respects.

To the ends stated my invention consists in the means hereinafter described, reference being made to the accompanying drawings for purpose of illustration thereof.

That which I regard as new will be set forth in the appended clauses of claim.

The need of an accurate register of the note-perforations of a music-sheet with the ducts of a tracker-board is recognized, and various expedients have been adopted to accomplish this desired result. Generally this has been by providing brake or tension mechanism connected with the music-roll intended to maintain a taut condition of the perforated music-sheet in its passage over the tracker-board; but such means have not proven altogether satisfactory in that even though held in a taut condition the music-sheet in its passage over the tracker-board will deviate from the intended true line of movement. Furthermore, it is found in practice desirable that the music-roller shall be free and unimpeded in the delivery of the music-sheet therefrom—not encumbered by brake or tension mechanism.

By my invention I provide a means which serves to guide the music-sheet in its passage over the tracker-board with the note-perforations thereof in accurate register with the

ducts of the tracker-board and serving the supplemental function of creating a proper tension and smoothing-out office, so that the music-sheet will be maintained in a smooth taut condition while it passes over the tracker-board.

In the accompanying drawings, illustrating my invention, Figure 1 is a detail sectional view. Fig. 2 is a plan view, and Fig. 3 a sectional view of one of the guide-rollers.

In the said drawings the reference-numeral 1 designates the tracker-board, which may be of any ordinary or usual construction well known in the art and is therefore herein shown conventionally.

2 designates the music-roll—that is to say, the roll on which the music-paper is initially wound and supplied to the market and which is introduced into the musical instrument for delivery therefrom across the tracker of the perforated music-sheet.

3 designates the take-up roll upon which the music-sheet is wound after its passage across the tracker.

The said music-roll and take-up roll may be of any ordinary common known or suitable construction.

Interposed between the music-roll and the tracker-board and, as shown, in juxtaposition or close to the tracker-board is a means by which the perforated music-sheet is, just before it enters upon its passage over the tracker-board, guided and positioned with relation thereto so that the note-perforations in the sheet will register accurately with the ducts in the tracker-board and whereby also a tension is imparted to the paper as it passes over the tracker, so that the paper will in passing thereover have a proper close contact therewith and be held in a smooth unwrinkled condition. This means consists, as shown, of a plurality of tension-rollers 4 6, arranged tandem, each of which rollers is provided with guiding devices, consisting of collars or flanges 5 7, between which flanges the paper in its passage from the music-roll to the tracker-board passes and by which before it passes onto the tracker it is guided and positioned

with relation to the latter, so that the note-perforations will accurately register with the ducts in the tracker. The provision of the plurality of rollers arranged tandem and provided with guiding collars or flanges insures proper tension for the purpose hereinbefore set forth and facilitates the accuracy of the guiding function.

In order that the guiding means devised according to my invention may compensate for variations in the width of the music-sheet occasioned by the condition of the atmosphere, such sheets showing an increase in width in damp weather and contraction in dry weather, the guiding means are adjustable to and from each other, as shown. This adjustability is secured in the present instance by providing the guide and tension rollers with screw-threaded projections 8, formed on cores 9, passing through the rollers, upon which screw-threaded projections are mounted nuts 10, carrying the guide collars or flanges, in such a way that by rotation of said nuts the guide collars or flanges may be adjusted toward and from each other to compensate for variations in the width of the music-sheet.

Having thus described my invention, what I claim is—

1. The combination with a tracker-board, a

music-roll, and a take-up roll, of a plurality of rolls arranged tandem and interposed between the music-roll and tracker-board and provided with guide-flanges.

2. The combination with a tracker-board, a music-roll, and a take-up roll, of a plurality of rolls arranged tandem and interposed between the music-roll and the tracker-board and provided with adjustable guide-flanges.

3. The combination with a tracker-board, a music-roll and a take-up roll, of a plurality of rolls arranged tandem and interposed between the music-roll and tracker-board in juxtaposition to the latter and provided with guide collars or flanges.

4. The combination with a tracker-board, a music-roll and a take-up roll of a plurality of rolls arranged tandem and interposed between the music-roll and the tracker-board in juxtaposition to the latter and provided with adjustable guide collars or flanges.

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

GEORGE B. KELLY.

Witnesses:

D. C. HEINS,

W. C. MANSFIELD.