

T. DANQUARD.
 INDICATOR FOR NOTE SHEETS.
 APPLICATION FILED AUG. 18, 1909.

1,058,041.

Patented Apr. 8, 1913.

Fig. 1.

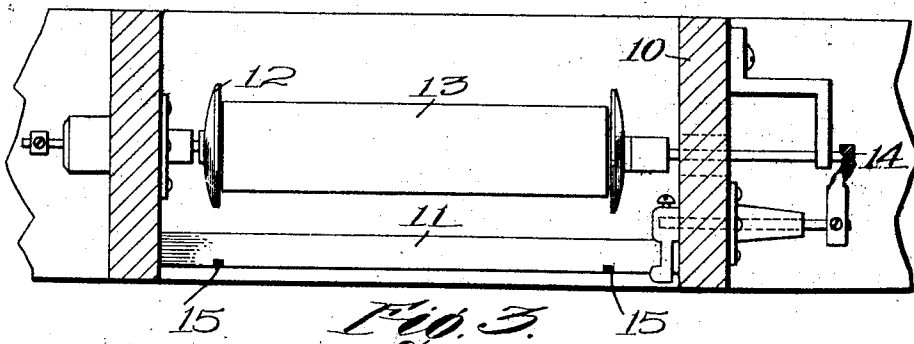
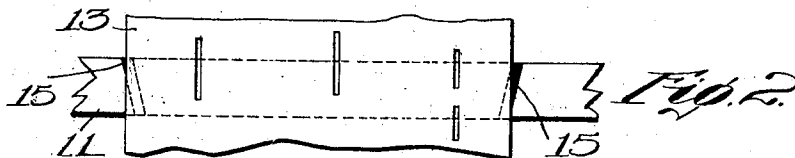
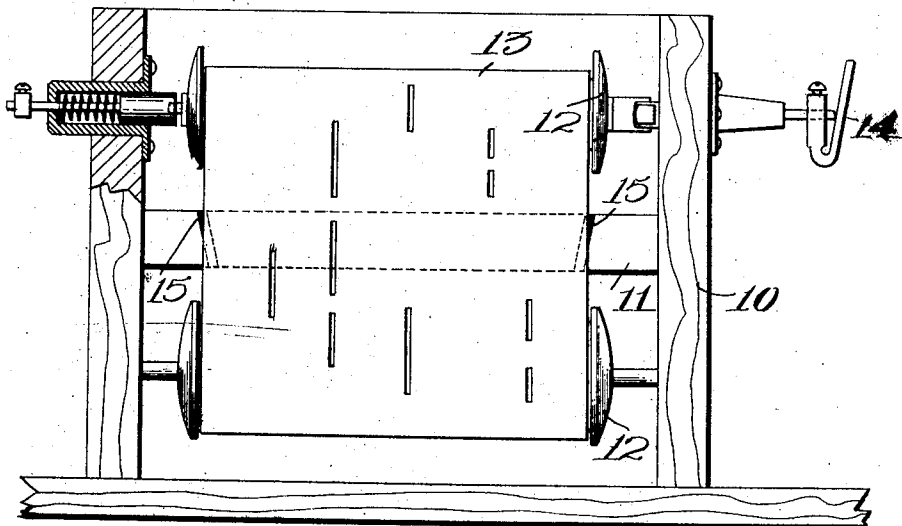
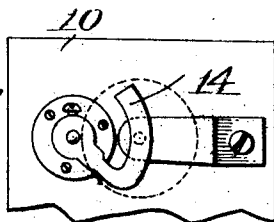


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS DANQUARD, OF NEW YORK, N. Y., ASSIGNOR TO AUTO PNEUMATIC ACTION CO., A CORPORATION OF NEW YORK.

INDICATOR FOR NOTE-SHEETS.

1,058,041.

Specification of Letters Patent.

Patented Apr. 8, 1913.

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To all whom it may concern:

Be it known that I, THOMAS DANQUARD, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Indicator for Note-Sheets, of which the following is a specification.

This invention relates to pneumatic musical instruments in which a note sheet travels over a tracker.

The principal object of the invention is to provide means whereby the deviation of the note sheet from its normal track will be indicated in an unmistakable manner and at the same time the direction of deviation will be shown.

In a player piano, particularly one using an eighty-eight note tracker with a hand adjusting device, the operator has to keep his attention constantly on the music sheet to note when it deviates from its proper path. This is very difficult and he often fails to note the deviation until his attention is called to it by the improper operation of the instrument. This is particularly the case where there is not very good light and it is extremely hard for the operator to tell when slight deviation has occurred or to tell to which side the paper moves. The latter, of course, is absolutely necessary to know how to operate the guiding device properly. By the use of this invention these difficulties are entirely avoided.

Reference is to be had to the accompanying drawings in which,

Figure 1 is a front elevation of a tracker box and connected parts showing a preferred embodiment of the invention applied thereto with the note sheet in its proper position. Fig. 2 is a fragmentary view of the tracker thereof showing how the device indicates the deviation of the sheet. Fig. 3 is a horizontal sectional view of the tracker box taken just above the tracker, and Fig. 4 is an end view of a portion thereof.

The invention is illustrated as applied to an instrument, either a player or automatic piano, which is provided with a tracker box 10, tracker 11, music spools 12 for carrying the music sheet 13, and a hand-adjusting device 14 by which the music sheet can be brought into proper registration with the tracker when it deviates. It will be understood of course that the invention is equally applicable to that class of instruments in

which the tracker is moved instead of the sheet to cause registration.

In order to provide for indicating the direction and extent of deviation of the music sheet, means is provided in the tracker box and adjacent to one or both edges of the music sheet, by which the position of the edge will be readily apparent to the eye. This means, in the form illustrated in the drawings, consists of an indicator 15 mounted adjacent to the tracker and in fact preferably directly on the front or working face thereof. This indicator preferably is made of a color or appearance contrasting with that of the tracker so that it can readily be observed. It may be in the form of a continuous or interrupted mark, line, or set of characters on the tracker, but it preferably consists of a piece of material inserted into the tracker, as is most clearly shown in Fig. 3. If the tracker is made of metal, yellow or white, it is preferred to use a black material for the indicators, as for example, hard rubber, or a dark metal, so as to give a high contrast in colors.

This indicator can be located on both sides of the music sheet and near the opposite ends of the tracker, as shown.

Although different forms and positions of the indicators are permissible, it is preferred to make them rhomboidal and of equal size and to place them in oppositely angular positions both making the same angle with the longitudinal axis of the tracker so that the deviation of the sheet will be more clearly indicated by the relative sizes of the triangles which appear at the two sides of the sheet. This is clearly indicated in Fig. 2.

It will be observed that particularly with the preferred form of the invention the device is of such a character that it will not readily be obliterated by the use of the instrument and that when the paper is in normal position the two triangles of contrasting material will appear of equal size on both sides, but as soon as the paper travels out of its normal path, the difference in size of the triangles will readily be noticed even in a poorly lighted room or at considerable distance, without subjecting the eye to any particular strain. On account of the fact that a triangle shows on each side any deviation will not only vary the width of the visible portion, but also its length, and when the length becomes constant the

shape will be varied, that is, the figure will change from a triangle to a trapezoid. With this arrangement, the operator can see at a glance, without much special attention, when the paper travels out of its proper path and in which direction it deviates so that he can work the shifting device accurately. In this way the operator can detect any deviation without being obliged to watch closely the perforations in the paper and the openings of the tracker.

I am aware that many modifications can be made in the form of the invention shown without departing from the scope of the same as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction shown and described, but

What I do claim is:—

1. As an article of manufacture, a tracker box having a tracker, a music sheet, and two narrow indicators on the working face of the tracker under the edges of the music sheet of a color contrasting with that of the working face of the tracker and having their outer edges converging toward one side of the tracker and making the same angle with the longitudinal axis of the tracker on opposite sides thereof.

2. As an article of manufacture a tracker box for a pneumatic musical instrument having a tracker over which a music sheet is adapted to pass, and two narrow indi-

cators located in the plane of the working face of the tracker, one at each end thereof, each inclined at substantially the same angle to the longitudinal axis of the tracker and in the path of the edges of the sheet, and so located as to be partially and equally covered by the sheet when in normal or tracking position to expose triangular portions of the indicators, said indicators being rhomboidal in form, of equal size, and of a color contrasting with that of the working face of the tracker.

3. As an article of manufacture a tracker for a music sheet having in the plane of the face thereof in position to come under the edges of the music sheet when in normal or tracking position, a pair of narrow equal and rhomboidal indicators contrasting in color from that of the working face of the tracker and having their sides inclined at substantially the same angle to the longitudinal axis of the tracker, whereby triangular portions of said indicators will be exposed when the sheet is in normal position.

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

THOMAS DANQUARD.

Witnesses:

C. M. JOHNSTON,

W. E. RAMMELKAMP.