

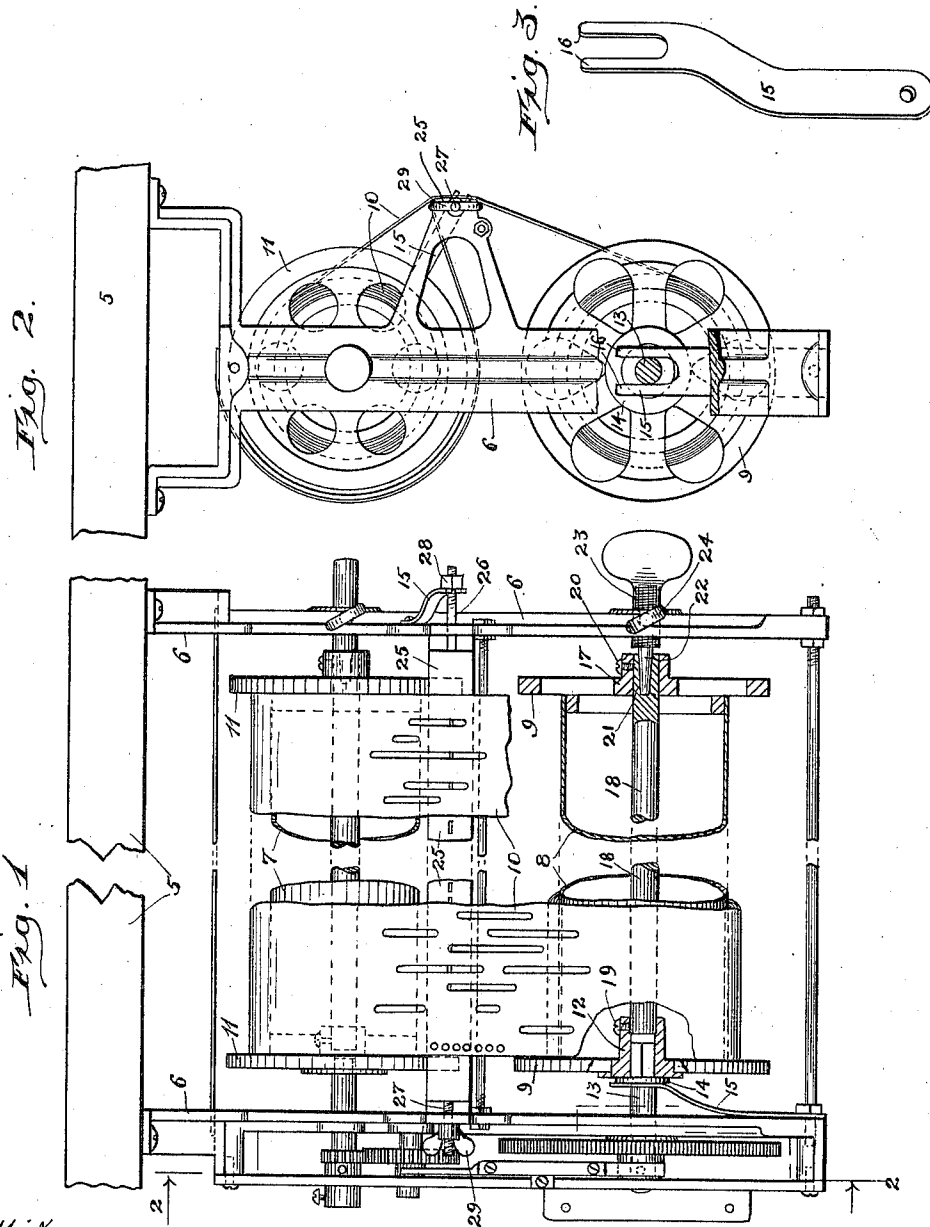
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ADJUSTING MECHANISM FOR ROLLS OR SPOOLS FOR PERFORATED MUSIC SHEETS.

APPLICATION FILED OCT. 4, 1911.

1,039,066.

Patented Sept. 17, 1912.



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UNITED STATES PATENT OFFICE.

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ADJUSTING MECHANISM FOR ROLLS OR SPOOLS FOR PERFORATED MUSIC-SHEETS.

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Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed October 4, 1911. Serial No. 652,738.

To all whom it may concern:

Be it known that I, OSCAR NELSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in an Adjusting Mechanism for Rolls or Spools for Perforated Music-Sheets, of which the following is a specification.

This invention relates to means or a mechanism employed for adjusting rolls, particularly the take-up rolls, and when desired the trackers of mechanical musical instruments, and it consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide simple, inexpensive, durable, and efficient means for longitudinally adjusting or moving one of the rolls, preferably the take-up roll, of the perforated music-sheet carrying apparatus of a mechanical musical instrument, so that its head flanges which guide the sheet will be brought into and maintained in true alignment with the flanges of the other roll, to the end, that the sheet will be accurately guided as it is wound on one of the rolls and unwound from the other roll.

Another object of the invention is to provide means whereby the roll may be longitudinally adjusted, so that the perforations in the music-sheet may be caused to accurately register with the ducts in the tracker, or if desired the tracker may be longitudinally adjusted, so that the ducts therein may be caused to accurately register with the perforations in the music-sheet.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which the invention pertains, to make and use the same I will now proceed to describe it referring to the accompanying drawing in which—

Figure 1, is a view partly in elevation and partly in section of a portion of the key board of a mechanical instrument showing a perforated music-sheet carrying apparatus depending therefrom, and illustrating the improved adjusting or alining mechanism applied to the take-up roll and tracker

thereof. Fig. 2, is a side view partly in section and partly in elevation taken on line 2—2, of Fig. 1, looking in the direction indicated by the arrows, and Fig. 3, is a detached perspective view of one of the springs used for actuating the roll or tracker bar in one direction.

Like numerals of reference refer to corresponding parts throughout the different views of the drawing.

The reference numeral 5, designates a portion of the key board of a mechanical musical instrument, to the lower surface of which is secured at proper distances apart side pieces 6, which constitute a depending frame or hanger on which the rolls 7, and 8, of the perforated music-sheet carrying apparatus are journaled, and which rolls may be driven in the ordinary or any preferred manner.

As the invention relates solely to the means for longitudinally adjusting or moving one of the rolls, or the tracker bar, it is not deemed necessary to herein describe in detail, the arrangement and operation of the gears or the means for driving the rolls, and as either of the rolls may be equipped with the improved adjusting mechanism, it is obvious that it is necessary to explain the construction and application of the device in relation to one of said rolls only, which in the present instance is shown as the take-up roll 8, which may be made of any suitable size and material, but preferably hollow and provided at its ends with annular flanges 9, which act as guides for the perforated music-sheet which passes around the roll 7, and is guided thereon by means of flanges 11, which are also annular or circular in shape. One of the flanges 9, of the roll 8, is provided centrally with a hollow hub 12, which extends a slight distance within the roll 8, and is adapted to receive at its outer portion the inner end of a shaft 13, on which said hub may be slid, yet fixed so as to cause the roll 8, to turn therewith. Located around the outer end of the hub 12, is a washer 14, against which a spring 15 rests, which is secured at one of its ends to one of the sides 6, of the supporting frame and is provided at its other or free end with prongs 16, to strike the shaft 13, and to rest against the washer 14, so as to exert pressure on said washer and the hub 12, in the direction of the other side

of the supporting frame. The other flange 9, of the roll 8, is also provided with a hub 17, in which is located one end of a rod 18, which rod is extended into the inner end of the hub 12, and may be fixed therein by means of a set screw 19, seated in said hub. That end of the rod 18, located in the hub 17, may be fixed therein by means of a set screw 20, which is seated in the last named hub. As is clearly shown in Fig. 1, of the drawing, that end of the rod 18, which is located in the hub 17, is provided with a tapered socket 21 to receive a tapered portion 22, of a screw 23, which is extended through a suitable opening in the side piece 6, of the supporting frame at a point directly opposite the socketed end of said rod. The screw 23, may be held in a fixed position by means of a set screw 24, extended through a suitable opening in the side piece 6, of the supporting frame, which opening is located at a right angle to the screw 23, which is used for forcing the roll 8, in one direction.

The tracker 25, is horizontally mounted between the side pieces 6, of the supporting frame and between the rolls 7, and 8, and has at each of its ends screw threaded rods 26, and 27, which rods are extended through suitable openings in the said side pieces. The rod 26, has mounted thereon a nut 28, against the inner surface of which a spring 15, of the same construction as shown in Fig. 3, of the drawing, and above described, will rest at its free or forked end, the other end of which spring is secured to the side of the supporting frame. The rod 27, on the tracker, has mounted thereon outwardly of the side 6, of the supporting frame through which said rod is extended, a wing-nut 29, by turning which in the proper direction, the tracker 25, will be moved toward said nut, when by loosening the latter it is apparent that the spring 15, on the tracker rod

26, will cause the tracker to move in the opposite direction or toward said spring, by reason of the pressure exerted by the same.

From the foregoing and by reference to the drawing, it will be readily understood and clearly seen, that by loosening the screw 24, the screw 23, will be liberated, when by turning the same in the proper direction, the roll 8, will be forced from said screw against the spring 15, at the opposite end of said roll, thus enabling the flanges 9, thereof, to be alined with the flanges 11, of the other roll, and also permitting the perforations in the sheet 10, to be accurately registered with the ducts in the tracker. If it is desired, it is apparent that the tracker may be adjusted back and forth as above described so that its ducts will register with the perforations of the music-sheet.

Having thus fully described my invention what I claim as new and desire to secure by Letters-Patent is—

In a device of the character described, the combination with a supporting frame having upright side pieces, of a stub-shaft journaled in one of said side pieces, a roll slidably mounted at one of its ends on said shaft but rotatable therewith, another shaft extended centrally through the other end of said roll and having at its outer end a tapered socket, means on the end of the roll near said tapered socket to rotatably secure it to the last named shaft, a screw having a tapered end to fit in said socket and extended through the other side piece of the supporting frame, means in the last named side piece to fix said screw, a spring secured at one of its ends to the stub-shaft supporting side piece and disposed to exert pressure on that end of the roll opposite said screw.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."