

No. 685,924.

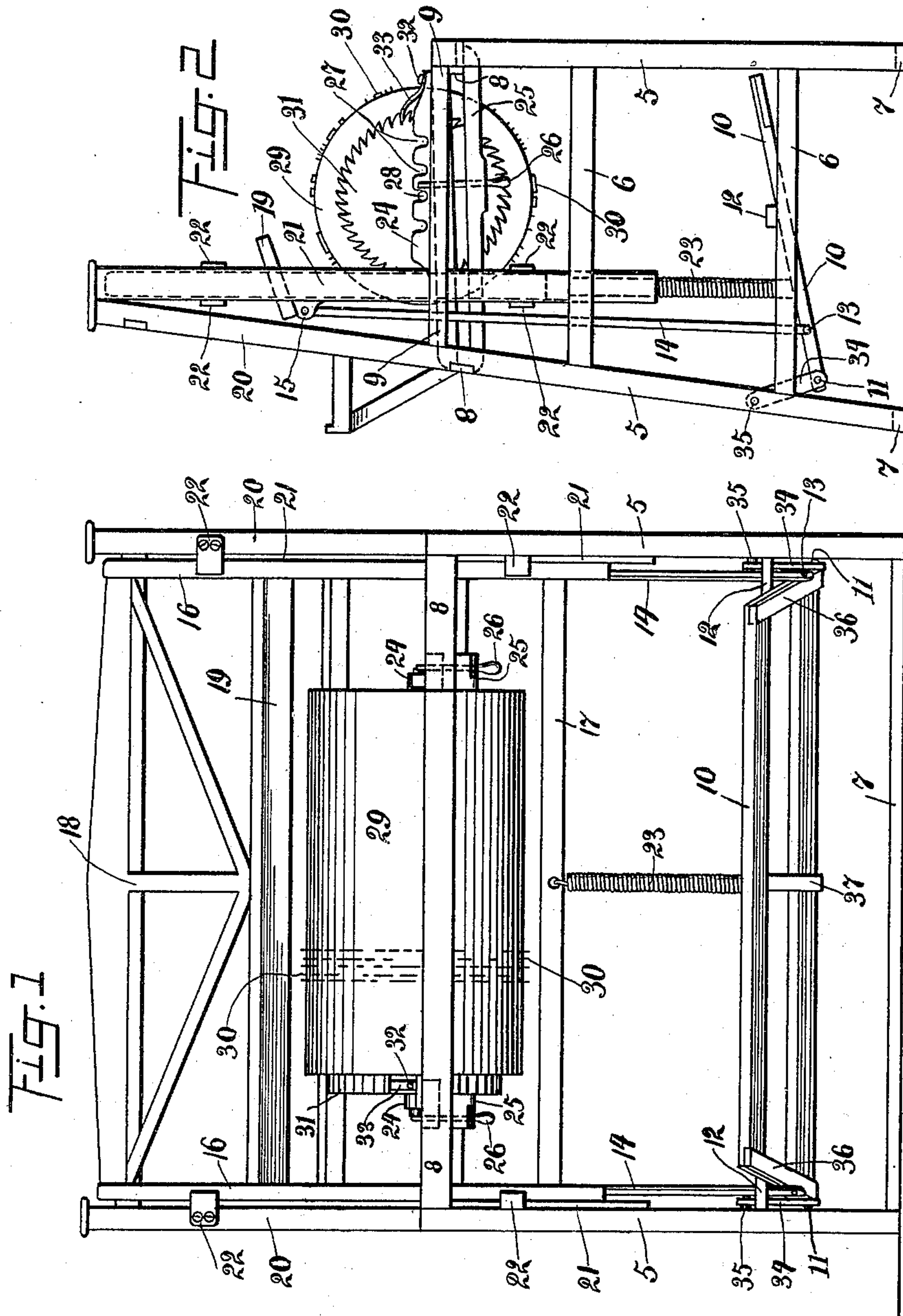
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J. H. MOLINARI.

MACHINE FOR MAKING RECORD ROLLERS FOR AUTOMATIC PIANOS.

(Application filed Feb. 12, 1901.)

(No Model.)



WITNESSES

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JOHN H. MOLINARI, OF NEW YORK, N. Y.

MACHINE FOR MAKING RECORD-ROLLERS FOR AUTOMATIC PIANOS.

SPECIFICATION forming part of Letters Patent No. 685,924, dated November 5, 1901.

Application filed February 12, 1901. Serial No. 46,961. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. MOLINARI, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Machines for Making Record-Rollers for Automatic Pianos, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to automatic pianos, organs, and other musical instruments of this class, and particularly to what are known as the "record-cylinders" of such instruments; and the object of the invention is to provide improved means for securing the note-teeth in said cylinders.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same reference characters in each of the views, and in which—

Figure 1 is a front view of a machine or apparatus involving my invention, and Fig. 2 a side view thereof.

In the practice of my invention, as shown in the drawings, I provide a machine or apparatus of the class specified, which comprises a rigid upright main frame comprising corner-posts 5, horizontal end bars 6, and horizontal front and back bars 7 and 8, the bars 8 being at the top of the main frame and the bars 7 at the bottom, and the ends of the frame are also provided with top bars 9.

A pedal-frame 10 is pivotally supported at 11 and at the lower rear portion of the main frame, and a horizontal supplemental bar 12 is secured in the bottom of the main frame and pivotally connected with the rear portion of the pedal-frame 10 at 13, and at the opposite sides thereof are rods 14, the upper ends of which are pivotally connected at 15 with a vertically-movable supplemental frame comprising side members 16, a horizontal bottom member 17, and a top truss-frame 18, below which is secured a horizontal plate 19.

The main frame is provided at the back thereof with an upwardly-directed extension comprising separate side members 20, and vertical guide-plates 21 are secured in the

main frame and extend to the top of the extension thereof and between which the supplemental frame moves, and said supplemental frame is held in position by keepers 22, secured to the main frame and to the upwardly-directed extension thereof, and a contractile spring 23 is connected centrally with the bottom of the supplemental frame and with the pedal-frame 10 forwardly of the connection with said pedal-frame of the rods 14.

Connected with the top horizontal bars 8 of the main frame and adjustable longitudinally of said bars are two supports, each of which consists of a top member 24 and a bottom member 25, and said top and bottom members of said supports are connected by a screw-bolt 26 or in any other desired manner, and the top members 24 of the said adjustable supports are provided with notches or recesses 27, adapted to receive the shaft or bearing 28 of the record-roller 29.

The record-roller 29 is of a well-known construction and similar to rollers of this class used in automatic pianos, organs, and similar instruments, and this roller is in practice provided with note-teeth 30, which are secured therein over its entire surface, only a portion of said note-teeth being shown in Fig. 1, and the object of this invention, as hereinbefore described, is to provide improved means for driving said note-teeth into said cylinder, and for this purpose the plate 19 operates as a hammer in the operation of the machine, as hereinbefore described.

The plate 19 is held at right angles to the radius of the cylinder 29, and in practice the note-teeth 30 are held by a pair of pliers or other suitable instrument, and in the operation of securing said teeth in said cylinder the points of the teeth are held at the desired point of the cylinder, in a direct line between the center of said cylinder and the plate 19. The pedal-frame 10 is then depressed and the plate 19 descends and forces the teeth into the cylinder. The cylinder 29 may be provided with small holes into which the teeth are set, and said teeth may be set into said holes by hand, and the supplemental frame, with the plate 19, may then be operated to drive said teeth into said cylinder, so that they will remain therein.

The object of providing a plurality of the

notches or recesses 27 in the adjustable supports of the cylinder 29 is to accommodate the apparatus to cylinders of different diameters, and the object of providing the adjustable supports at the opposite ends of said cylinder is to accommodate the apparatus to cylinders of different lengths. The cylinder 29 is also provided at one end with the usual ratchet-disk 31, and pivoted to one of the supports at the end of said cylinder, as shown at 32, are two spring-catches 33, one of which is shorter than the other, and the object of these spring-catches is to provide means for adjusting and holding the cylinder in any desired position as it is turned on its pivotal end supports.

The bar 12 in the bottom of the main frame limits the upward movement of the pedal-frame 10, and the spring 23 operates to raise the supplemental frame in which the plate 19 is secured after said frame has been depressed by the pedal-frame 10.

The pedal-frame 10 is pivotally connected at 11 with side links 34, which are pivotally supported at 35, and the pedal-frame is provided with transverse end bars 36 and a transverse central bar 37, with the latter of which the spring 23 is connected, and the method of supporting the pedal-frame at the rear edge thereof by means of the links 34 and the connection of said spring with said frame between said links and the transverse bar 12 enables the spring to raise the supplemental frame, as hereinbefore described.

This apparatus is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended and is also comparatively inexpensive, and changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

1. An apparatus of the class described, comprising a main frame having an upwardly-directed back extension, transverse supports mounted in the main frame and adjustable longitudinally thereof and adapted to support a cylinder, means for adjusting said cylinder longitudinally of the main frame and forwardly and backwardly, vertically-arranged guides at the ends of the main frame, a supplemental frame mounted in the main frame and vertically movable and provided above the cylinder-supports with a horizontal plate, and means for depressing said supplemental frame, consisting of a pedal-frame in the bottom of the main frame, a rod pivotally connected therewith, and the vertically-movable supplemental frame, and a spring also connected with the pedal-frame and the supplemental vertically-movable frame, substantially as shown and described.

2. An apparatus of the class described, comprising a main frame having an upwardly-directed back extension, transverse supports mounted in the main frame and adjustable longitudinally thereof and adapted to support a cylinder, means for adjusting said cylinder longitudinally of the main frame and forwardly and backwardly, vertically-arranged guides at the ends of the main frame and extending above the same at the back thereof, a supplemental frame mounted in the main frame and in said guides and vertically movable and provided above the cylinder-supports with a horizontal plate, and means for depressing and raising said supplemental frame, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 11th day of February, 1901.

JOHN H. MOLINARI.

Witnesses:

F. A. STEWART,
L. BAYER.