G. M. COHEN & G. DIETZ.

Music-Leaf Turner.

No. 163,637. Patented May 25, 1875.

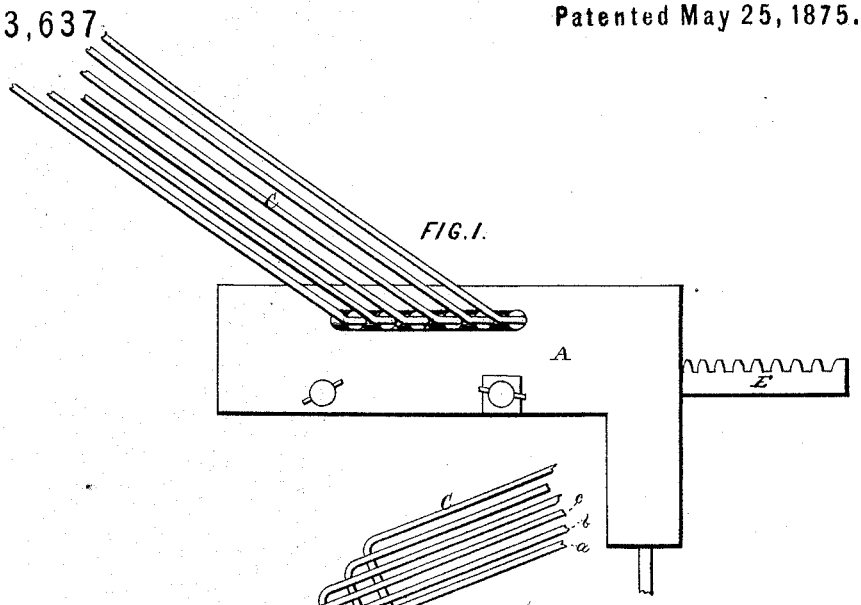

FIG. 1.

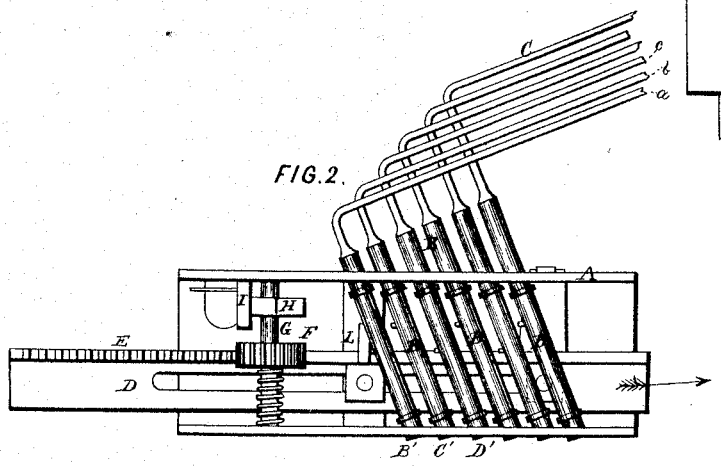

FIG. 2.

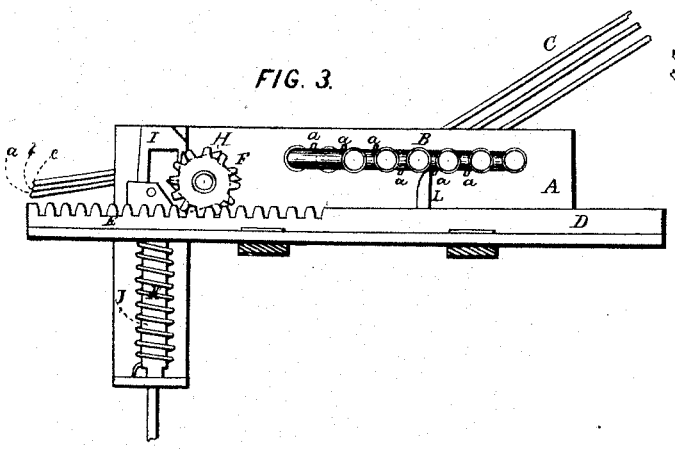

FIG. 3.

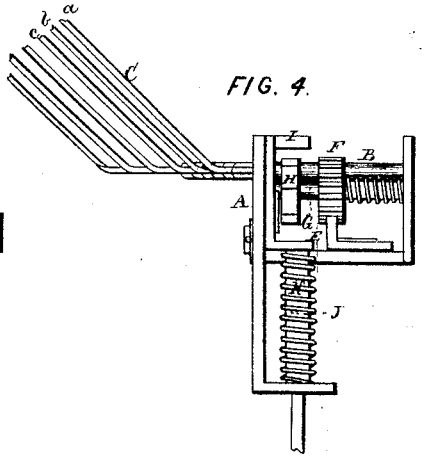

FIG. 4.

WITNESSES.

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UNITED STATES PATENT OFFICE.

GUSTAVUS M. COHEN AND GREGOR DIETZ, OF CLEVELAND, OHIO.

IMPROVEMENT IN MUSIC-LEAF TURNERS.

Specification forming part of Letters Patent No. **163,637**, dated May 25, 1875; application filed April 14, 1875.

To all whom it may concern:

Be it known that we, GUSTAVUS M. COHEN and GREGOR DIETZ, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Music-Leaf Turner, of which the following is a full, clear, and complete description, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a side view of the apparatus. Fig. 2 is a plan view. Fig. 3 is a longitudinal section. Fig. 4 is an end view.

Like letters of reference refer to like parts in the several views.

This invention is a device operated by the foot for turning the leaves of a music-book as it lies open before the performer, thereby avoiding the necessity of using the hand for that purpose, and an interruption of the musical performance, this invention being an improvement on a similar device for which a patent was granted to us September 15, 1874.

Of the construction and operation of this our new apparatus the following is a particular and full description.

In the frame A is arranged a series of shafts, B, which have their bearings in the sides of the frame, as shown in Fig. 2. From the ends of each of the shafts projects a finger or rod, C, at right angles therewith, as will be seen in the drawings. Also, from one side of each of the shafts projects a pin, *a*, the purpose of which will presently be shown. In the frame is arranged a slide, D, Fig. 2, on one edge of which is a rack, E, engaging a pinion, F, secured to a shaft, G. On said shaft is also secured a ratchet-wheel, H, rotated by a sliding catch, I, for operating the pinion for moving the slide D referred to. From the lower end of the catch depends a stem, J, around which is coiled a spring, K, by the resiliency of which the catch is forced upward above the wheel H after being pulled down for operating the same.

The practical operation of the above-described device is substantially as follows:

The apparatus is secured to the music rack or stand, and in such relation to the music-book thereon that the fingers or rods C can be placed between the leaves of the book to be turned over. The position of the apparatus, when thus properly arranged with respect to the book, is such as shown in Fig. 2, in which it will be seen that the slide D is drawn out to the left so far as to bring the lug or arm L, connected to the slide, from under the shafts B, and directly facing the pins *a* referred to. In this position of the slide the sliding catch I will engage the wheel H, as shown in Fig. 2, and which is operated by the foot through the intervention of a treadle, connected therewith by any appropriate means.

During the execution of the music, when it becomes necessary to turn over a leaf of the music-book, it may be done by the foot or by the knee of the performer, by operating the treadle, thereby drawing down the slide or catch I, which will rotate the wheel H one tooth. This will turn the pinion F, causing a movement of the slide D in direction of the arrow, thereby pushing the lug L against the pin *a* referred to, projecting from the shaft B—the first one of the series. This will cause the shaft to rotate, thereby turning the finger or rod C from the position shown in Fig. 2 to that shown at *a*, Fig. 3. This turning of the rod carries with it the leaf of the music-book, thereby bringing the next page to the eye of the performer. On releasing the pressure of the foot from the treadle the catch I will slide upward by the reaction of the spring K, which again, at the proper time, will rotate the wheel H by means of the foot, and thereby push along the slide D to the next shaft B, so that the lug L will, as before, push against the pin *a*, and rotate the shaft and turn the finger or rod *b* from its position shown in Fig. 2 to that shown in Fig. 3. This turning of the rod carries with it the leaf of the book under which it lay, thus bringing the next page into view, as before, and so on for the third shaft B. The slide is moved forward by the action of the ratchet-wheel and pinion, thereby turning the rod C from its position in Fig. 2 to that shown in Fig. 3. In this way all the fingers or rods may be turned, be they more or less in number, and with the respective leaves of the book under which they have been adjusted.

It will be obvious that by this apparatus the leaves of a music-book can be readily and easily turned by the performer without using the hands for that purpose, but which may be

continued fingering the instrument, and thus cause no interruption in the course of the music.

What we claim as our invention, and desire to secure by Letters Patent, is—

The sliding catch I, ratchet-wheel H, pinion F, and shaft G, in combination with the slide D, lug L, and frame A, substantially in the manner as described, and for the purpose set forth.

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