

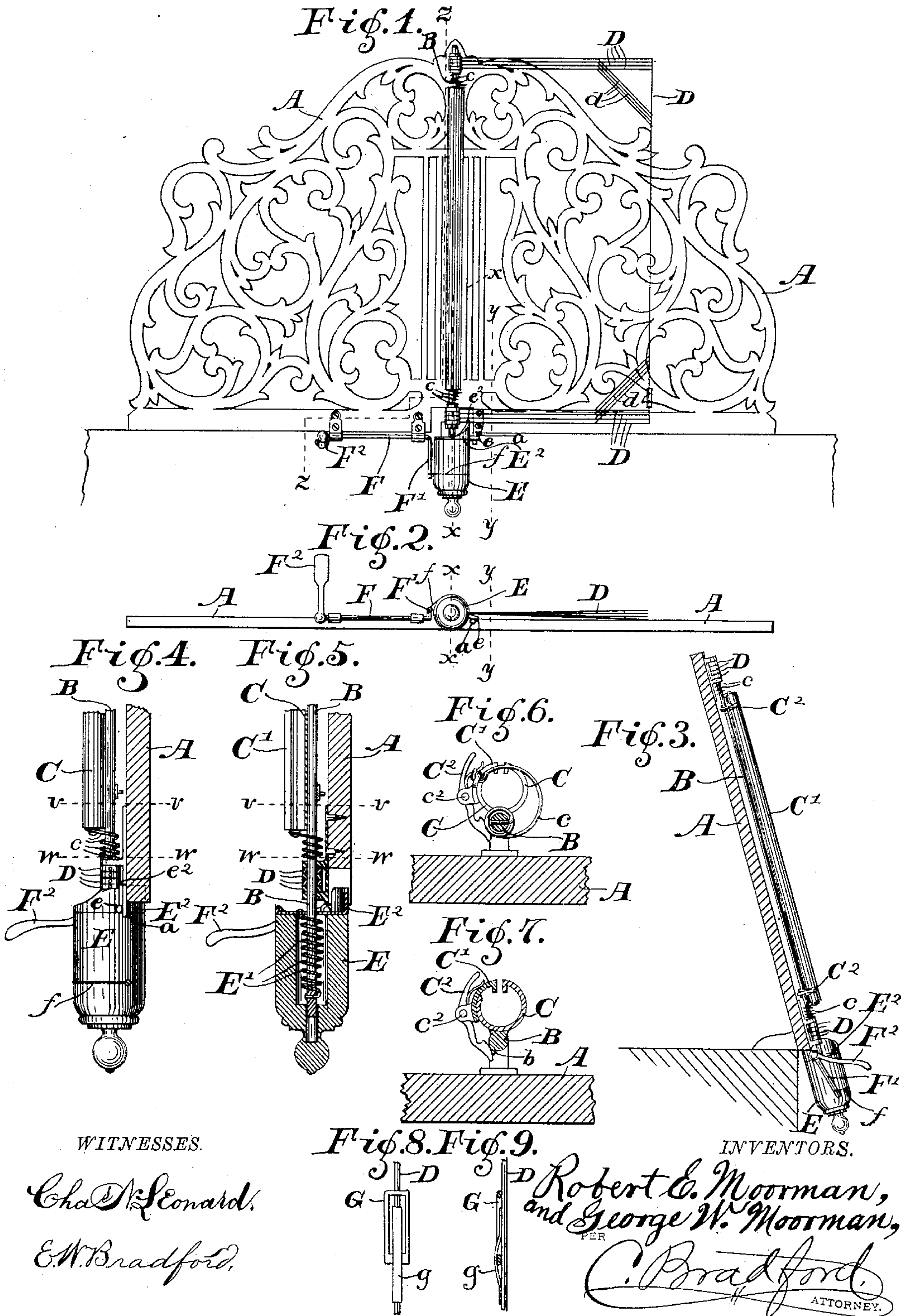
(No Model.)

R. E. & G. W. MOORMAN.

MUSIC LEAF TURNER.

No. 330,413.

Patented Nov. 17, 1885.



UNITED STATES PATENT OFFICE.

ROBERT E. MOORMAN, OF CHICAGO, ILLINOIS, AND GEORGE W. MOORMAN,
OF EDINBURG, INDIANA.

MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 330,413, dated November 17, 1885.

Application filed January 13, 1885. Serial No. 152,731. (No model.)

To all whom it may concern:

Be it known that we, ROBERT E. MOORMAN, of Chicago, Cook county, Illinois, and GEORGE W. MOORMAN, of Edinburg, Johnson county, Indiana, have invented certain new and useful Improvements in Music-Turners, of which the following is a specification.

The object of our said invention is to produce efficient and easily-operated mechanism for turning sheets of music upon the music-holder of a piano or other like instrument, as will be hereinafter more particularly described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a front elevation of a music-holder to which our improved music-turner has been applied; Fig. 2, an under side plan thereof; Fig. 3, a vertical sectional view, looking toward the right from the dotted line *z z*; Fig. 4, a side elevation of the mechanism at the lower end of the device, as seen when looking toward the left from the dotted line *y y*; Fig. 5, a central vertical sectional view, looking toward the left from the dotted line *x x*; Fig. 6, a horizontal sectional view, looking upwardly from the dotted line *w w*; Fig. 7, a similar view as seen from the dotted line *v v*; Fig. 8, a front elevation of a spring-clamp for securing the outer corners of the music to the frames, and Fig. 9 a vertical section of the same on the dotted line *u u*.

In said drawings, the portions marked A represent an ordinary music-holder; B, a shaft centrally mounted thereon; C, a clamp secured to said shaft for holding the music; D, the several frames; E, the device at the bottom of the shaft for operating said frames; F, a rock-shaft provided with a finger-piece for more conveniently operating said device, and G a clamp for securing the outer corners of the sheets of music in position on the frames. The music-rack A is or may be of any ordinary construction, and may be secured to the piano or other instrument in any ordinary manner. It is provided with bearings, whereby the shafts B and F are secured thereto. The shaft B extends vertically from the bottom to the top of said music-rack, and is secured thereto in the center of said rack, and upon it are mounted the

music-clamp, the swinging frames, and the device for operating the same. The music-clamp C consists of one stationary and one movable part, the stationary part being secured to the shaft B, and the movable part being mounted upon and adapted to move partially around said stationary part. It is spring-mounted, and is thus held in closed position, except when forcibly separated therefrom. The springs *c*, which support the movable part C' of the clamp C, are preferably coiled springs, and are secured to and surround the shaft B at one end, and extend out and engage with an eye formed for that purpose in said part C', one of these springs being arranged at the lower end of the clamp and the other at the upper end. A spring-catch, C², is secured to the movable part C' of the clamp, and serves both to operate said movable part and secure it in open position, its lower end being adapted to engage with a projection, *b*, on the shaft B, or on some convenient part of the device. When it is desired to open the clamp, the operator presses upon the upper end of this spring-catch, forcing it and the movable part of the clamp around the stationary part, and permitting the lower end of said catch to engage with the projection *b*, provided therefor. When it is desired to close the clamp, the upper end of said spring-catch is pressed in, releasing the lower end from the projection *b*, when the springs *c* operate to return it to closed position, these clamps thus clamping the edges of the music tightly between the upper or outer edges of the part, C and C', as will be readily understood. The frames D are simply rectangular frames, made ordinarily of wire, with bearings at each end adapted to surround the shaft B, thereby providing means for mounting said frames on said shaft, as shown. They may be strengthened at the outer corners by brace-like portions *d*, which also provide a greater surface for the sheets of music to rest upon. They are turned one at a time from one side to the other of the music-rack by the operation of the device E, as will be presently described. The device E is secured to the lower end of the shaft B by means of the spring E', coiled around said shaft within said device, one end of said spring

being attached to each in such a manner that the device is returned to position thereby, and also urged along said shaft toward and against the frames D, said position being determined by the projection *e* and stop *a*, as shown. It is provided upon its upper end with the flange E^2 , upon which is the catch e^2 at its highest portion, said catch being adapted to engage with the lower horizontal bar of each of the frames D, and as said device is revoluble the frame with which it engages is turned from one side to the other of the music-rack. After said device is revolved, and one of the frames has thereby been turned around from one side to the other, and after said device has been released, the spring E' returns it to position, and also presses it upwardly far enough to engage with the next frame, and so on until all of the frames have been operated. The rock-shaft F is mounted in horizontal bearings attached to the music-rack A, and is provided at one end with a downwardly-projecting arm, F' , which is connected by means of a cord or fine wire, *f*, with the device E, and at the other with an outwardly-projecting finger-piece, F^2 , by which it may be conveniently operated. The spring-clamps G are secured to the outer corners of the frames, as shown, and consist simply of a small frame or clip secured to the frame D, near the corner, by means of a small spring, *g*, secured at each end preferably to the vertical bar of the said frame D. The lower portion of the device G being flattened, said device is held down against the frames D by the force of said springs, except when forcibly raised. The corners of the sheets of music being placed under these clamps, holds them in position and prevents them from becoming separated from the frame with which they are intended to move.

The operation of our invention may be briefly recapitulated as follows: The clamp is first opened by pressing down on the spring-catch C^2 , and the music, or a strip for the purpose attached thereto, inserted. The spring-catch is then released and the part C permitted to come against said music or strip, clamping it tightly against the part C. The several frames are then arranged between the leaves as desired, and the whole usually turned to the right of the player. As the playing proceeds the player, by simply striking on the projecting arm or finger-piece F^2 , in a similar manner that the piano-keys are struck, will, through the rock-shaft, the device E, and the connections between them, throw one of the frames D, with the sheet of music resting thereon, over to the other side. Upon releasing the rock-shaft the device E is thrown back into position by its spring, and at the same time up against the next frame, ready to operate said next frame in a similar manner as soon as desired. The device E is capable of being turned without the aid of the rock-shaft by simply seizing it at the lower end with the thumb and finger; but we pre-

fer to use the rock-shaft, as it enables the player to turn the music by the same motion employed in playing the instrument.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a music-rack, of the music-turner consisting of frames mounted on a vertical shaft adapted to be thrown from one side to the other, and a device upon the end of said shaft, secured thereto by a spring which operates to hold it in position, or return it thereto, and also operates to press it along said shaft toward the frames, and provided with a catch adapted to successively engage with said frames, substantially as set forth.

2. The combination of a music-rack, a shaft thereon, frames loosely mounted on said shaft, a device, E, also mounted on said shaft, a spring, E' , connecting said shaft and said device, whereby said device is held and returned to position after operating said frames, said device being also provided with a catch adapted to engage successively with said frames, substantially as set forth.

3. The combination of a music-holder, a shaft thereon, a series of frames loosely mounted on said shaft, a partially-revoluble device also mounted on said shaft and adapted to engage successively with said frames, and a rock-shaft provided at one end with an arm connected to said device and at the other with a projecting arm, whereby it may be operated, substantially as set forth.

4. The combination, with the music rack and turner, of a clamp for securing the music in the center, consisting of a stationary part, a movable part mounted upon and adapted to move partially around said stationary part, and springs arranged to operate upon said movable part and hold it toward or against said stationary part, whereby the music may be readily clamped between them and secured in position, substantially as set forth.

5. The combination, with a music holder and turner, of a music-clamp consisting of a stationary and a spring-mounted movable part, said movable part being provided with a spring-catch, whereby it may be held open, substantially as set forth.

6. The combination, with a music holder and turner, of a music-clamp consisting of a stationary part, C, rigidly secured to the shaft B of the music-turner, a spring-mounted movable part, C' , springs *c* therefor, a spring-catch, C^2 , and the projection *b* therefor, substantially as set forth.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, this 8th day of January, A. D. 1885.

ROBT. E. MOORMAN. [L. S.]
GEORGE W. MOORMAN. [L. S.]

In presence of—

C. BRADFORD,
E. W. BRADFORD.