C. PHELPS & A. K. TUTTLE.

ATMOSPHERIC LEAF TURNER.

No. 109,448. Patented Nov. 22, 1870.

Fig. 1.

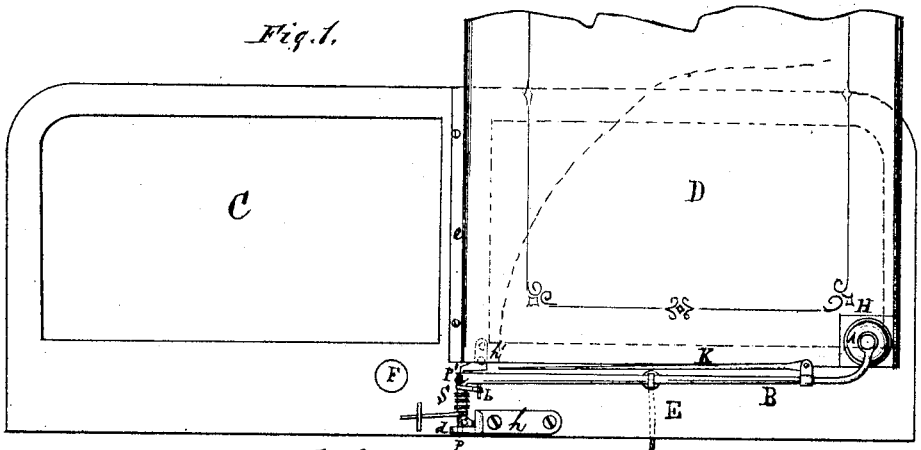


Fig. 2.

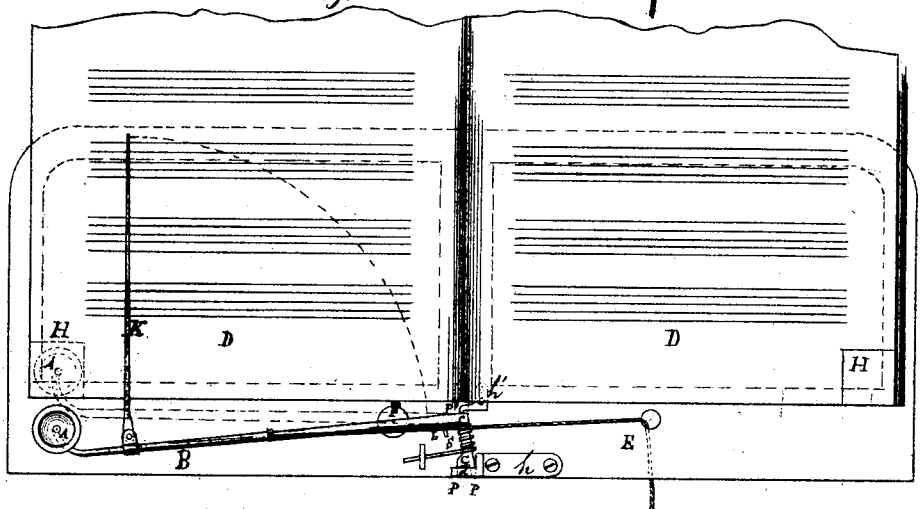


Fig. 3.

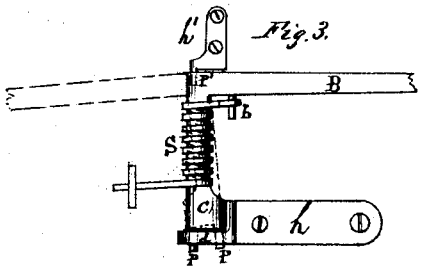
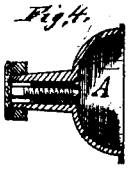


Fig. 4.



Witnesses.

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United States Patent Office.

CHAMBERLAYNE PHELPS, OF CLAYTON, AND AARON K. TUTTLE, OF CAPE VINCENT, NEW YORK.

Letters Patent No. 109,448, dated November 22, 1870.

IMPROVEMENT IN ATMOSPHERIC LEAF-TURNERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, CHAMBERLAYNE PHELPS, of the town of Clayton, and AARON K. TUTTLE, of the town of Cape Vincent, in Jefferson county and State of New York, have invented a new and improved Atmospheric Music-Leaf Turner; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which like letters refer to like parts of the invention, and in which—

Figure 1 represents the device attached to a music-rack, with music-sheets closed, and rubber disk pressed upon the enameled surface preparatory to turning the leaf.

Figure 2 represents the positions of the arm after the leaf has been turned.

Figure 3 is a detailed view of the hinges and spring as attached to the arm.

Figure 4 is a detailed vertical section of the rubber cup or disk.

Nature.

Our invention relates to a device for turning the leaves of music, and consists of a concave flexible rubber disk attached to an oscillating arm, arranged to be operated with a pedal by the foot or knee, cards with enameled surface being attached to the lower corners of the leaves to receive the pressure of the rubber disk, which, by atmospheric action, adheres to the enameled surface, while the leaf, by a spring attached to the arm, is carried over. A pivoted finger is attached to the arm for the purpose of turning the leaves back when required for repeating the music.

Description.

A is a concave flexible rubber disk attached to the end of the oscillating arm B, which is made with a pin, *b*, for attaching one end of the spiral spring S, and with an elbow and base, *c*, having a pivot, P, on the end thereof, which works in the elongated slot *d* upon the lower hinge *h*.

The upper hinge *h'* is provided with a pivot, P', which works in a socket in the elbow *c* of the arm.

The hinges *h h'* are screwed to the music-rack C, and the music-sheets D are properly secured by a clamp or holder, *e*, all as shown in fig. 1.

E represents a cord attached to the arm and to a pedal below the rack, (not shown,) by means of which and the spring S the arm is operated with the foot or knee of the performer.

F represents a pad made of chamois-skin or any other suitably soft material, to receive the force of the arm when it is thrown over with the leaf, as seen in fig. 2, to avoid noise or injury to the rack.

H H represent thin cards, enameled on one side, and attached on the other side, by adhesive substance, to the lower corners of the leaves, as shown in figs. 1 and 2.

K represents a pivoted finger, attached by a pivot or other suitable device to the arm B, for the purpose of turning the leaves back when the music is to be repeated.

Operation.

By pressing upon the pedal to which cord E is attached the arm B is brought over and the rubber disk A pressed upon the enameled surface H, which, by atmospheric action, adheres to the disk, while the arm, by the force of the spring S, is carried over, turning the leaf, as shown in fig. 2, and the rubber disk very soon disengages itself from the surface H, and the arm, by its own weight, drops down, pivot P sliding in the slot *d* to the position seen in fig. 2, ready to be carried over for another leaf.

When, in repeating the music, it may be necessary to turn the leaves back, the pivoted finger K is turned up, as seen in fig. 2; and when the finger is not in use it is folded down upon the arm, as seen in fig. 1.

Claims.

We claim and desire to secure by Letters Patent—

1. The concave flexible disk A, or its equivalent, for turning the leaves of music D, or other leaves, by atmospheric action, substantially as described.

2. The oscillating arm B, having elbow *c*, arranged to work upon the pivot P in slot *d*, as described.

3. The enameled surfaces H applied to the leaves D, substantially as described.

4. The combination of the disk A, arm B, and finger K, with the enameled surfaces H upon the leaves D, as described.

In attestation of the foregoing specification of our invention of a new and improved atmospheric music-leaf turner, we hereunto subscribe our names this 7th day of October, 1870.

CHAMBERLAYNE PHELPS.
AARON K. TUTTLE.

Witnesses:
JAMES F. MOONEY,
ALEXANDER LADD.