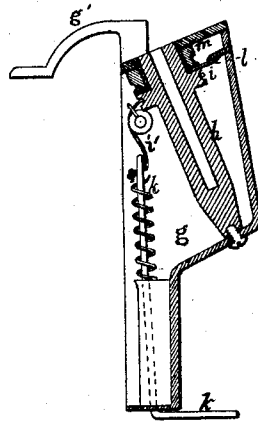
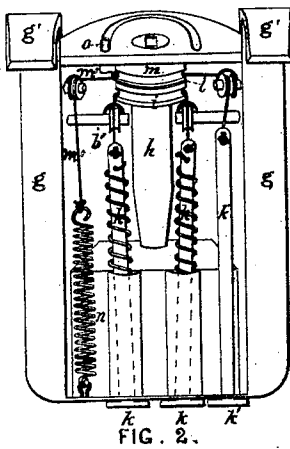
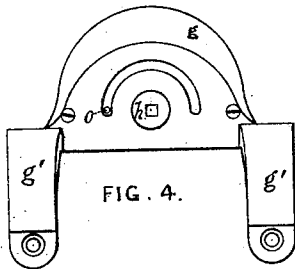
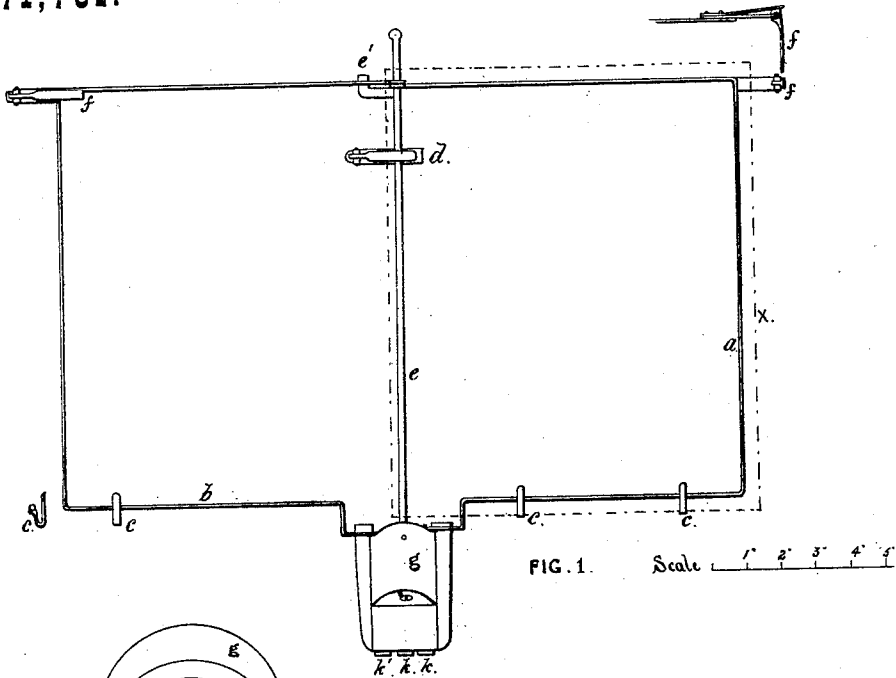


T. DONNELLAN.
MUSIC LEAF-TURNER.

No. 171,781.

Patented Jan. 4, 1876.



Scale 1/4" 1/2" 1" 2"

Witnesses:

Symond H. Stone
Jonas G. Hobert

Inventor:

Thomas Donnellan

UNITED STATES PATENT OFFICE.

THOMAS DONNELLAN, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN MUSIC-LEAF TURNERS.

Specification forming part of Letters Patent No. 171,781, dated January 4, 1876; application filed November 23, 1875.

To all whom it may concern:

Be it known that I, THOMAS DONNELLAN, of Syracuse, Onondaga county, New York, have invented an Apparatus for Holding and Turning Leaves of Music, of which the following is a specification:

My apparatus is composed of certain frames turning on a center rod, and actuated independently of each other. Each of these frames is attached to the leaf to be turned, and one, two, or more of the frames can be used as required. The frames are revolved by a simple apparatus conveniently affixed to the instrument on which it is used, so as to be put in action by the hand of the performer without materially interfering with the performance of the music.

The construction is as follows: The frames *a b*, shown at Figure 1 in the drawing, are formed of wire, or other efficient light material. On the lower bar of each of the frames one or more looped springs, *c*, of thin metal should be affixed to receive and hold the lower edge of the leaf; and at the upper outer corner I hinge a spring-finger, *f*, that shuts down upon the leaf and holds it at top. The leaf is shown by dotted lines in Fig. 1. On the shaft I affix also a spring-finger, *d*, similar to *f*, to hold a single leaf of music to the frame while turning. The frame *a* is permanently affixed to the center shaft *e*, on which the additional frame or frames *b* turn loosely. At or near the upper end of this shaft or rod *e* a stop-piece, *e'*, is permanently affixed, against which the loose frame *b* strikes when opened out, as seen in Fig. 1. The lower end of shaft *e* is made square, or prismatic, in form to fit into a socket in the upper end of a short shaft, *h*, set in the base *g* in an inclined position, as clearly indicated in Fig. 3. The base is made of any plain or ornamental form to suit the taste and purpose of the constructor. In it there is a chamber in which the shaft *h* is located, with its upper end extending up through the cap to receive the lower end of the shaft *e*, as above described. On the shaft *h* there is a grooved pulley, *i*, around which a cord or chain, *v*, passes, and is affixed to it at its center, each end passing over a stud-roller on each side, and thence down to a key, *k*, below. These keys *k* are held up by a coiled spring when not in action, as clearly seen in the

drawing, Figs. 2 and 3, which represent the interior of the chamber in the base *g*. By alternately depressing the keys *k* the shaft *h* is made to turn, carrying with it the frame *a*, which is thus made to turn a semi-revolution to the right or left. Above the pulley *i* there is a flanged collar, *l*, surrounding the shaft *h*, and affixed permanently to the case in front. (See Fig. 3.) On this collar as a center a pulley, *m*, turns, actuated by a cord, *m'*, one end of which is attached to the spring *n*, the other to the key *k'*. From a projection on the periphery of the pulley *m* a stud or wrist-pin, *o*, projects, extending up through a slot in the cap that forms a semicircular track for it to turn in, as clearly seen in Figs. 2 and 4. This wrist-pin *o* strikes against the lower bar of the frame *b*, and by depressing the key *k'* the frame *b* is made to revolve. One or more additional frames may be added like the frame *b*, which overlie it when turned to the right. These are caused to turn in like manner by additional keys and fixtures.

As a modification to cheapen the construction, (but less convenient,) handles or arms can be made to project directly from the frames through the base to turn them by; but I deem the key movement the better form.

For music not exceeding four pages, two on the music-rack and two on the frame, the frame *a* is sufficient. For a greater number of pages additional frames are required, one for each additional leaf. These additional frames can be readily removed, if desired, and the center shaft *e* with all the frames can quickly be removed, so that the base *g* can be permanently affixed to the instrument, and the cover shut down, without interfering with it. For the purpose of attachment, permanent or otherwise, the curved arms *g'* are added to the base, and set-screws may be employed to affix it where they can be used.

What I claim in the above-described invention is—

The combination of the frames *a b*, shaft *h*, pulleys *i m*, cords *v m'*, and keys *k k'*, substantially in the manner and for the purpose herein set forth.

THOS. DONNELLAN.

Witnesses:

J. J. GREENOUGH,
F. H. WILLIAMS.