

(No Model.)

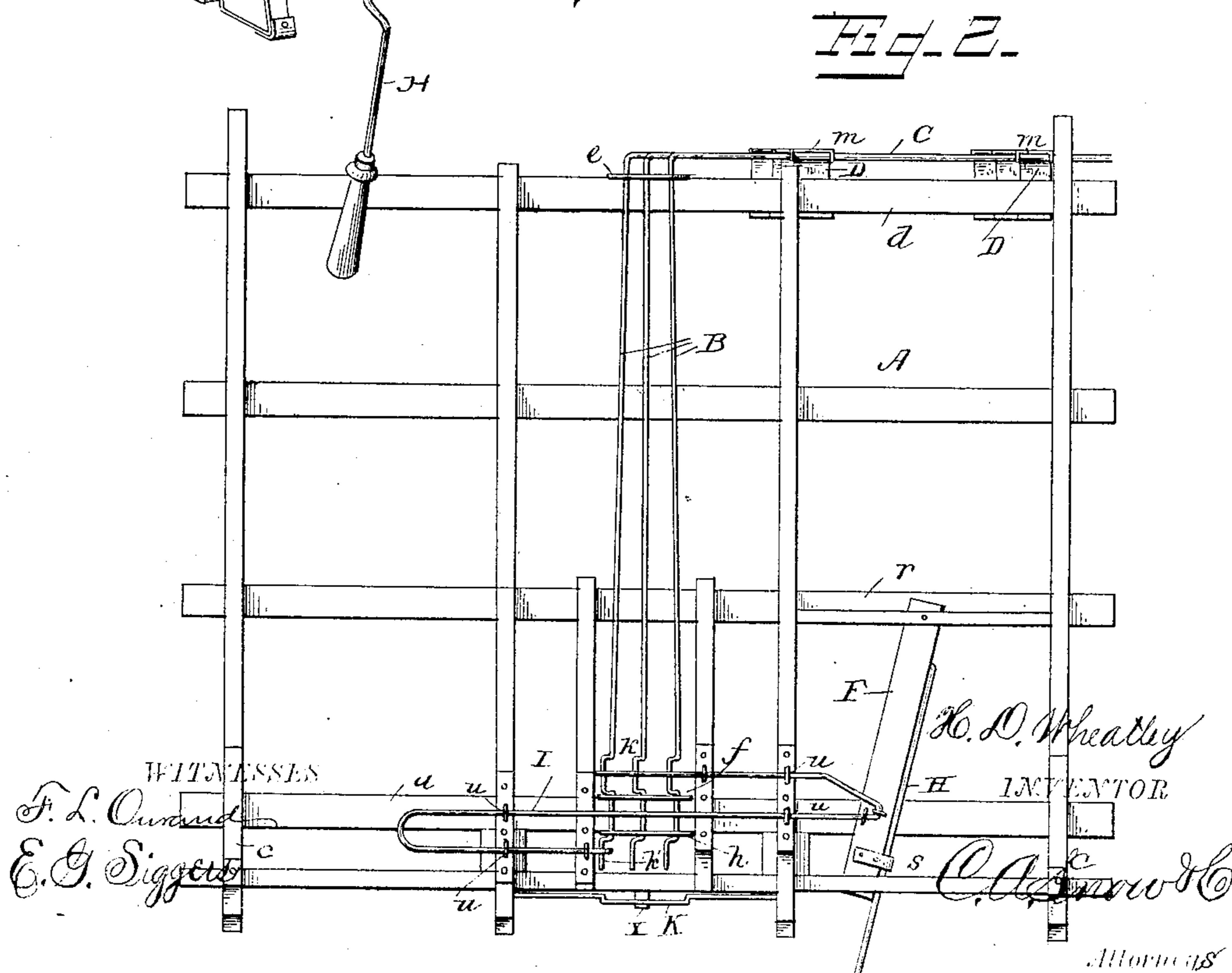
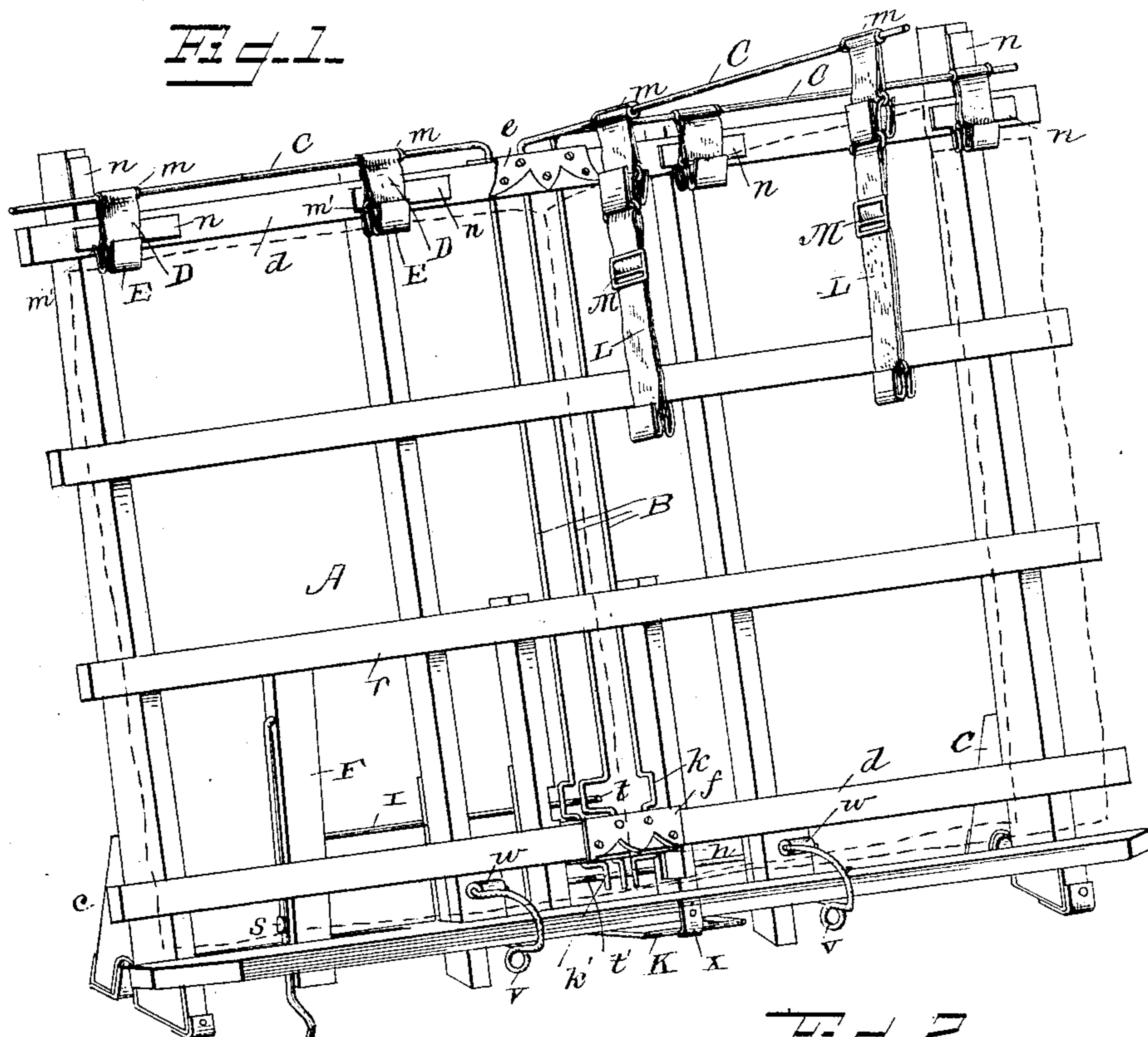
2 Sheets—Sheet 1.

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MUSIC LEAF TURNER.

No. 318,529.

Patented May 26, 1885.

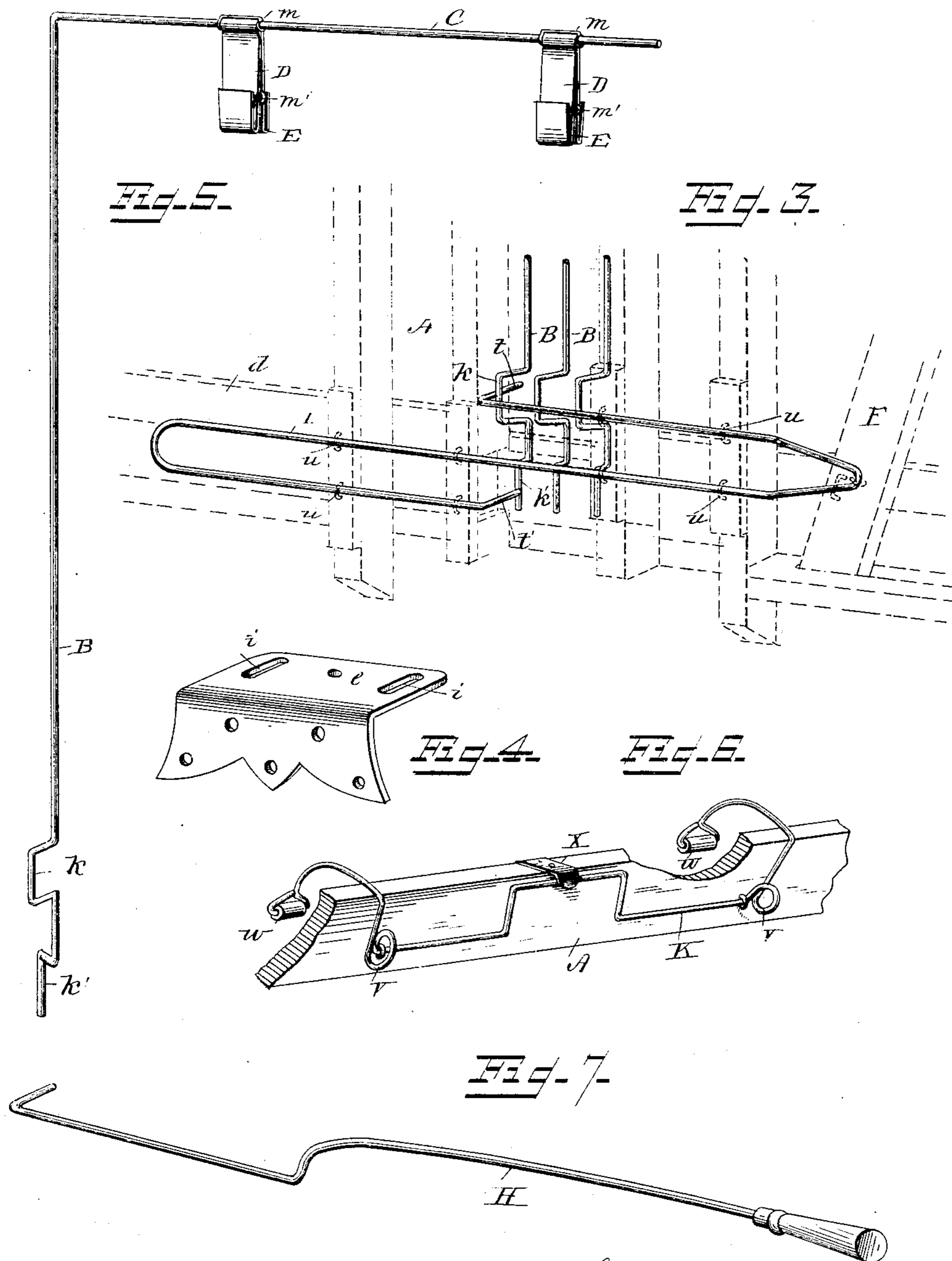


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# UNITED STATES PATENT OFFICE.

HARRY DUNBAR WHEATLEY, OF CENTREVILLE, OHIO.

## MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 318,529, dated May 26, 1885.

Application filed December 29, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY D. WHEATLEY, a citizen of the United States, residing at Centreville, in the county of Montgomery and State of Ohio, have invented a new and useful Music-Leaf Turner, of which the following is a specification, reference being had to the accompanying drawings.

Figure 1 is a perspective view of my improved music-leaf turner, with a sheet of music indicated by dotted lines. Fig. 2 is a rear view of the same without the said sheet of music. Fig. 3 is a detail perspective view, on an enlarged scale, of the shifting mechanism. Fig. 4 is a perspective view of the upper cap-plate. Fig. 5 is a view of one of the turning-rods. Fig. 6 is a view of the holding-clamp; and Fig. 7 is a view of an interchangeable shifting lever-handle.

This invention relates to music-leaf turners of that special class shown and described in United States Letters Patent granted to me June 27, 1882, and numbered 260,071.

The objects of this improvement are to move the leaves of music, either in book or sheet form, from the right to the left, and vice versa, through the agency of a shifting means; to provide flexible means for connecting the upper ends of the music-leaves to the turning-arms; to cushion the frame against noise in turning over the leaves, and against injury to the musical instrument, and to improve the construction and efficiency of the music-leaf turner. With these and other objects in view my improvements will be fully set forth, and pointed out in the claims.

In the drawings, A represents a music-rack with ledge of a suitable construction for holding music either in book or sheet form. The lower ends of the end vertical pieces are made inclined and provided with soft cushions of felt, rubber, or other suitable material, and have connected thereto the notched brackets or supports *c*, likewise cushioned with like material. These inclined ends and brackets are for aiding the support of the rack at a desirable angle.

To the middle portion of the upper and lower horizontal bars, *d*, of the frame are attached the bearing-plates *e*, *f*, and *h* for the vertical rods B that turn the leaves of music.

The end perforations, *i*, in the upper plate, *e*, are made elongated to allow a vibrating motion to the upper ends of the outer rods. Each of the vertical rods B, mounted in these bearings, is formed at its lower end with the bends *k k'*, forming cranks arranged at right angles, or nearly so, to each other, and at its upper end with the arm C bent at right angles to the body of the wire, as shown in Fig. 5 of the drawings.

To each horizontal arm C are preferably attached two tapes, D, carrying at their lower ends the spring-fingers E, and the tapes are retained in place from lateral displacement by means of the spring-clips *m*, fitting into little grooves or circular depressions in the arms. Each spring-finger forming the leaf-clamp is made of a flat strip of metal bent into W shape, and the middle bend is provided with a wire loop, *m'*, fastened to the lower end of the tape, as shown. The tapes or other flexible material, with their leaf-clamps, are made of desirable lengths to engage with the upper edges of the music-leaves on the rack, and to carry the same over with the movement of the turning-rods.

The upper ends of the vertical end bars and the upper horizontal bar are faced with felt or other soft material strips *n*, to form cushions for the arms C and the leaf-clamps, and to deaden the blows as the leaves are turned over.

The letter F represents the shifting-lever, suitably pivoted to and near one end of the horizontal bar *r*, and provided with a detachable handle, H, fastened thereto by the upper bent end fitted into a side perforation, and by the cap-plate *s*. This method of attaching a handle to the shifting-lever permits of the ready attachment of interchangeable handles of different lengths to be operated either by the hand or knee of the operator.

To the rear surface of the shifting-lever F is fastened the leaf-turning mechanism, consisting of the bent S-shaped rod, I, having its ends bent inward at right angles to the body of the rod, to engage, respectively, with the upper and lower cranks of the turning-rods. By reference to Figs. 2 and 3 it will be observed that the rod I works horizontally in the loop-bearings *u*, attached to the inter-

mediate vertical bars and strips, and that the bent ends  $t$   $t'$  thereof are in the same vertical plane, or nearly so, to engage with and operate the turning-rods by striking the cranks thereof, in the manner as will be hereinafter more fully stated.

To the bottom of the rack-ledge is attached the double music-holding clamp K, made of a single piece of wire bent into shape to form the end coils,  $v$ , and bent-over ends for the tube-cushions  $w$ , and also bent at the middle to engage with the locking device  $x$ , as shown in Fig. 6. This clamp is intended to hold the backs of the music-book or the leaves of the music that are not to be played from.

The tapes D are provided with attachable tapes L, carrying at their upper ends wire loops passed over either open end of the W-shaped spring-fingers E, and at their lower ends with spring-fingers similar to those marked E, to clamp the sheets of music. The tapes L are provided with sliding buckles M, for adjusting their length to music-leaves of intermediate sizes. These attachable tapes, with their adjuncts, are only used when small or intermediate sized book or sheet music is placed upon the rack. When long sheet-music is used, they are not required, as the tapes D and their clamps will be sufficiently long to make the connection and carry the sheets over to the other side of the rack.

Operation: The rack, with its attachments, being properly placed on the musical instrument, and the outer music-leaves secured at their lower ends by the double clamping device, the upper ends of the leaves to be turned are clamped to the spring-fingers of the tapes connected to the arms of the turning-rods. The performer, after finishing or about finishing the open pages, moves the projecting handle of the pivoted lever, which brings the inward-bent arm  $t'$ , constituting a trigger, in contact with the lower crank of the first turning-rod, and moves the same beyond the center, when the turning-rod, with its connected leaf of music, will fall to the other side of the rack, thus presenting another page of music to the performer. By repeating the slight pull or move on the shifting-lever handle as many leaves may be turned for the player as have been placed in engagement with the fingers E, and the number that may be turned is limited to the number of rods B and arms C, which may be varied to suit the purchaser. It is obvious, therefore, that the leaves of music must be previously arranged for turning.

It will be seen from an inspection of Figs. 2 and 3 that the handle  $h$  F (seen from the front) is at its extreme right-hand position, and the arm  $t$  at its extreme right-hand limit beyond the series of cranks  $k$ , and hence by several movements of said handle to the left the arm  $t$  acts on the cranks  $k$  successively, thereby turning their respective leaf-turning arms from left to right in succession, and when all are so turned then the handle  $h$  and arm  $t$  are at their extreme left-hand limits, ready to turn the

lower cranks in succession in the reverse direction, and consequently their several leaf-turning arms from right to left.

The office of the elongated transverse slots  $i$  in the upper bearing-plate is to permit the under and outer turning-rods of the series to yield, so that their arms can lie flat when shifted to either side of the rack.

To return the leaves backward to their original position on the rack, the handle of the shifting-lever is moved in the opposite direction, when the upper inward-bent finger,  $t$ , will strike the upper cranks of the turning-rods and cause them to move over with the leaves of music to the other side of the rack.

This music-rack is adapted to music-sheets of all sizes, and to all kinds of players, whether they shift the music-leaves to the right or to the left.

This music-leaf turner can also be attached to the uprights or pedestals of the ordinary music-stands by means of a socket-casting with or without a set-screw, to secure different inclinations, and by using the long lever-handle shown in Fig. 7 the musician can operate the shifting-lever for turning the leaves by his knee.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a music-leaf turner, the combination of the journaled turning-rods formed with the double cranks and mechanism, substantially as described, for operating the said rods, substantially as described.

2. In a music-leaf turner, the combination of the journaled turning-rods formed at the upper ends with horizontal arms and at the lower ends with double cranks, and mechanism, substantially as described, for operating the same, substantially as described.

3. In a music-leaf turner, the combination of the journaled turning-rods formed with the double cranks, and the operating mechanism provided with double fingers or triggers to operate the turning-rods in both directions, substantially as described.

4. In a music-leaf turner, the combination of the journaled turning-rods formed with the double cranks, and the operating mechanism with the pivoted shifting-lever and extended handle, substantially as described.

5. In a music-leaf turner, the combination of a plurality of journaled turning-rods formed with the double cranks at their lower ends and horizontal arms at their upper ends, carrying the tapes and clasps for attachment to music-sheets, and operating mechanism, substantially as described.

6. In a music-leaf turner, the rods bearing the leaf-turning arms, formed at their lower ends with bends forming cranks at right angles to each other, as set forth.

7. In a music-leaf turner, the rods bearing the leaf-turning arms at their upper ends, and the double cranks arranged at right angles near their lower ends, substantially as specified.

8. In a music-leaf turner, the S-shaped rod having the ends bent inward to form fingers or triggers, and connected to a pivoted lever, substantially as described.

5 9. In a music-leaf turner, the pivoted lever carrying the shifting-rod to operate the turning-arms, formed with a perforation and provided with a clip-plate to receive interchangeable handles, substantially as described.

10 10. In a music-leaf turner, the leaf-turning arms, in combination with the bearing-plates, the upper one of which has its outer bearing-passages made elongated, for the purpose stated.

11. A music-leaf turner consisting of a plurality of journaled turning-rods, formed with double cranks and horizontal arms, the elastic tapes with clamps, the operating-rod with triggers engaging the cranks of the turning-rods, and the pivoted shifting-lever and handle, substantially as described. 15 20

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HARRY DUNBAR WHEATLEY.

Witnesses:

M. J. SWADENER,

HORACE PEASE.