(No Model.)

A. HEILPRIN.

MUSIC LEAF TURNER.

No. 253,043. Patented Jan. 31, 1882.

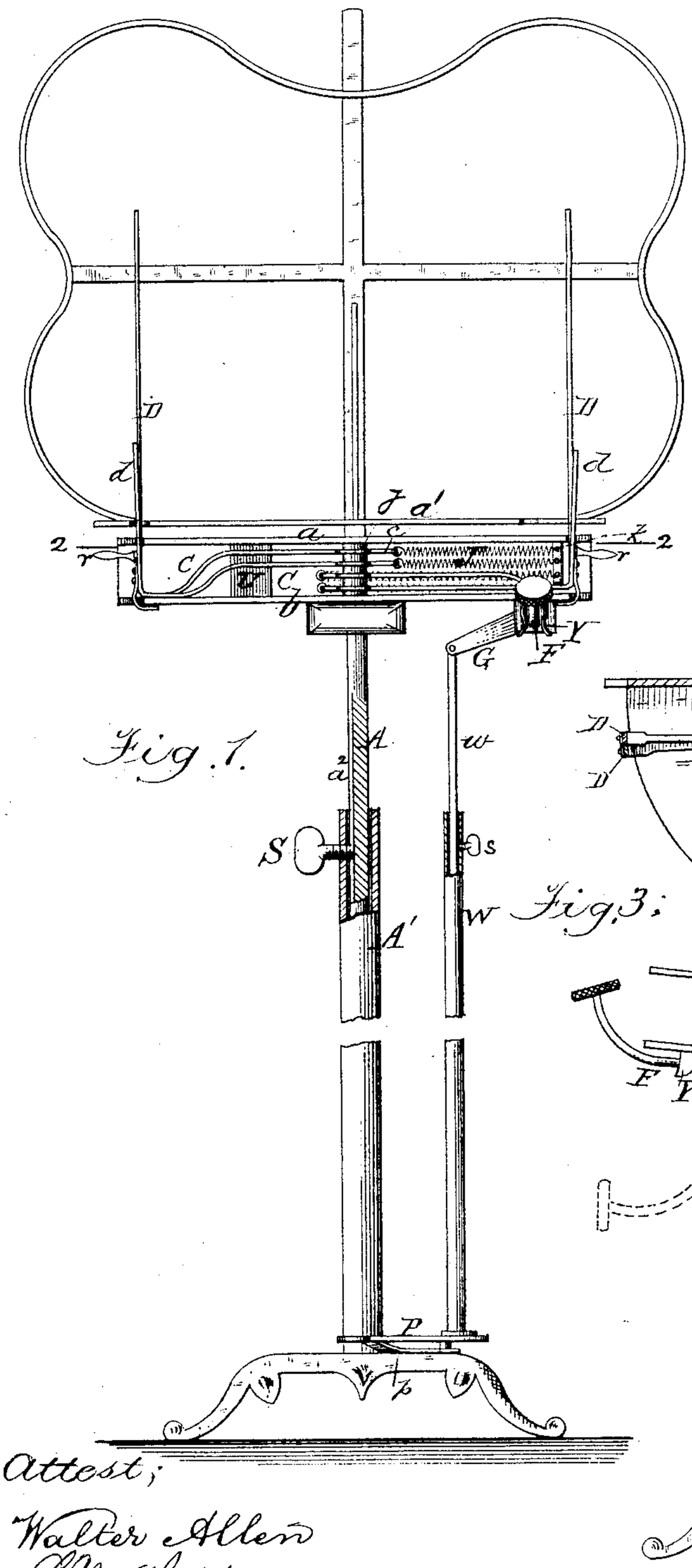

Fig. 1.

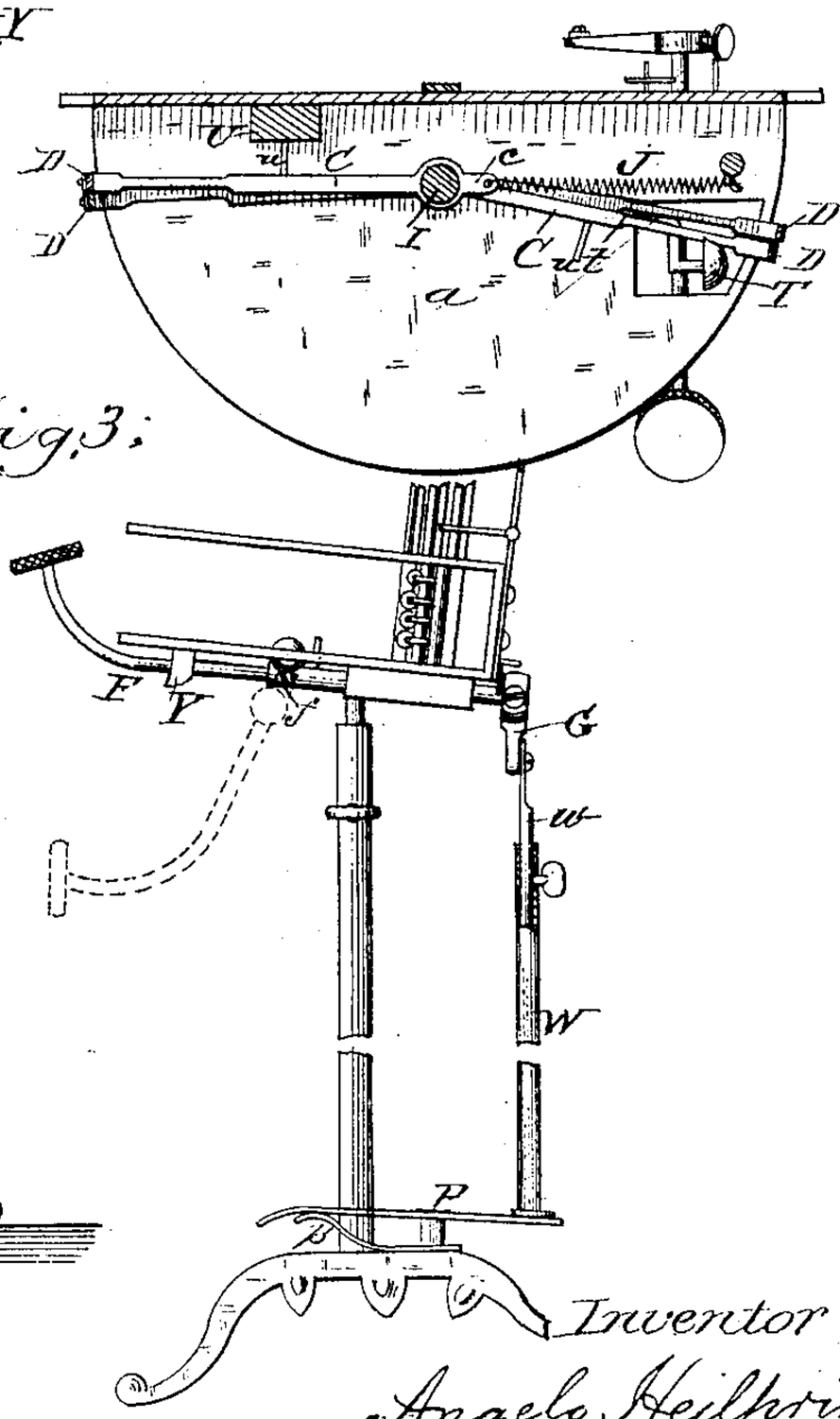

Fig. 3.

Fig. 2.

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MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 253,043, dated January 31, 1882.

Application filed August 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, ANGELO HEILPRIN, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented new and Improved Music-Stands and Leaf-Turners, of which the following is a specification.

Letters Patent No. 229,313, granted to me the 29th of June, 1880, described a music-leaf turner applicable either to a piano or to a music-stand, and operated by a pedal attachment, said invention embracing independent fingers turning on a central pivot actuated by springs and controlled by a rock-shaft having detents moving in different parallel planes, so as to release the fingers successively for the turning of the leaves, as desired, under control of the performer, the rock-shaft being, moreover, hinged to permit the retraction of the detents when the fingers are to be moved back to their operative position, and being held in its normal position by a spring-catch.

Under my present improvement I have produced a music-stand with leaf-turner attachment, more especially designed for orchestra use, though parts of the improvement are still adapted for the piano or organ.

The invention embraces an improved construction and combination of finger-arms and cushioning device, as hereinafter described.

In the accompanying drawings, Figure 1 is a front elevation of a music-stand, illustrating the invention. Fig. 2 is a horizontal section of the same on the line 2 2, Fig. 1. Fig. 3 is a side view.

a b are respectively the upper and lower plates of the frame, and *a'* a shelf on which the music is supported.

F is a rock-shaft mounted in suitable bearings beneath the lower plate, *b*, and having a rigid arm, G, projecting horizontally from its rear end for the reception of the operating-rod *w*, which fits within a hollow rod, W, extending down to the pedal P.

The frame, of which the plates *a b* form a part, is mounted on a rod, A, sliding within the hollow pillar, A', so that the desk or frame may be fixed at any desired height by means of a thumb-screw, S. A similar thumb-screw, *s*, applied to the hollow pedal-rod W, fixes the extension pedal-rod *w* in similar manner, so as to adapt it to operate at any height of adjustment of the desk. In order to prevent rotation of the desk or frame on its supporting-stand, the rod A is made square or is finished with a longitudinal groove, a^2, to receive a stud or spline projecting inwardly from the interior of the hollow pillar; or this function may be performed by the thumb-screw S, if preferred, as illustrated in Fig. 1.

On the rock-shaft F are a pair of detents, T *t*, formed upon a hub, as described in my original patent, before referred to, said detents being in the form of curved or oblique studs or horns projecting upwardly at different angles, and so located that as the rock-shaft is oscillated they will move in two different planes, one behind the other, so that the finger-arm, released by the rear detent, *t*, will be caught by the front detent, T, and when the front detent, T, is retracted to release the arm bearing against it the next arm will be detained by the rear detent, *t*. The pedal P is pressed up by a spring, *p*, so that when released by the foot it will automatically restore the detents T *t* to their normal position, in readiness for the next operation. The fingers are shown at D D. As before, they are each provided with a supplemental finger, *d*, parallel with the main finger, between which and the finger D the music-leaf is placed. These fingers project rigidly upward from horizontal arms C, attached to sleeves *j*, fitted one above another on a central pivot, I. Instead, however, of employing helical or coiled springs, as described in my former patent, I form the needle-arms C with extended heels *c*, to the extremities of which are connected tension-springs J, fixed at their outer ends to attaching-studs *k*.

For the purpose of indicating springs I have shown them as made of coiled wire. In practice I prefer to make them of rubber, as this material is very readily applied and renewed. As in my former patent, all the arms C above the lowest are bent downward, each succeeding one more than that directly under it, so as to bring all their outer ends in one horizontal plane, as shown in Figs. 1 and 3. They are provided with radially-projecting studs *r*, for moving them back into operative position, as before described. I have further provided the arms C with spurs or studs *u*, projecting at about right angles, and impinging against a cushion, U, of rubber or other suitable material, so as to prevent noise by the contact of

the fingers or their arms with each other or with the frame at the termination of the stroke.

The rock-shaft F is hinged at *f*, so that it may be turned down, as shown in dotted lines in Fig. 3, for the purpose of retracting the detents T *t* when the fingers are to be moved back into operative position, and is held up in its normal position by a spring-catch, Y, as described in my original patent, before referred to.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

The arms C C, carrying turning-fingers D D and projecting studs *u u*, in combination with a cushion, U, against which said studs are received, as described.

ANGELO HEILPRIN.

Witnesses:

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OCTAVIUS KNIGHT.