

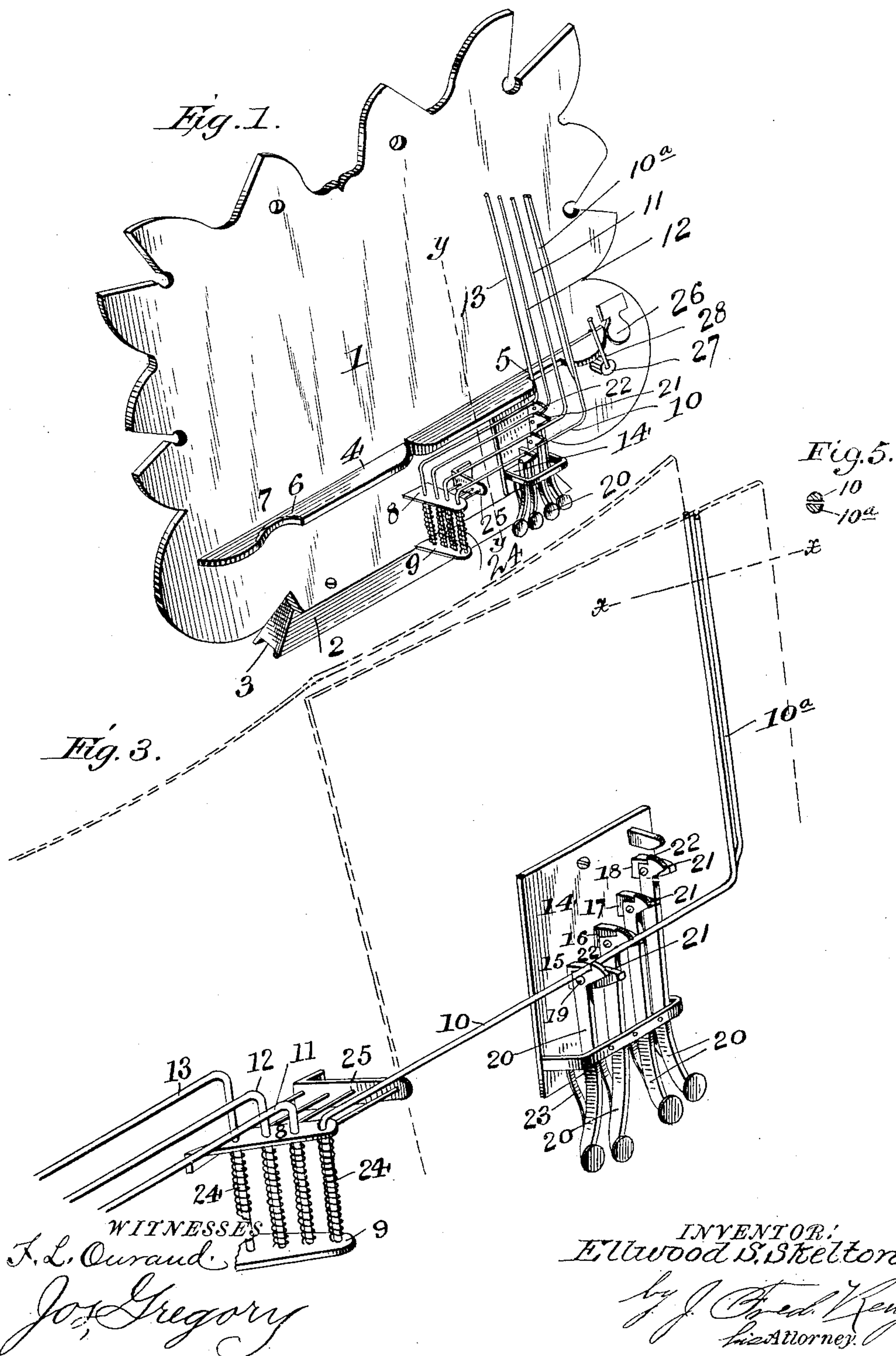
(No Model.)

2 Sheets—Sheet 1.

E. S. SKELTON.
MUSIC LEAF TURNER.

No. 534,455.

Patented Feb. 19, 1895.



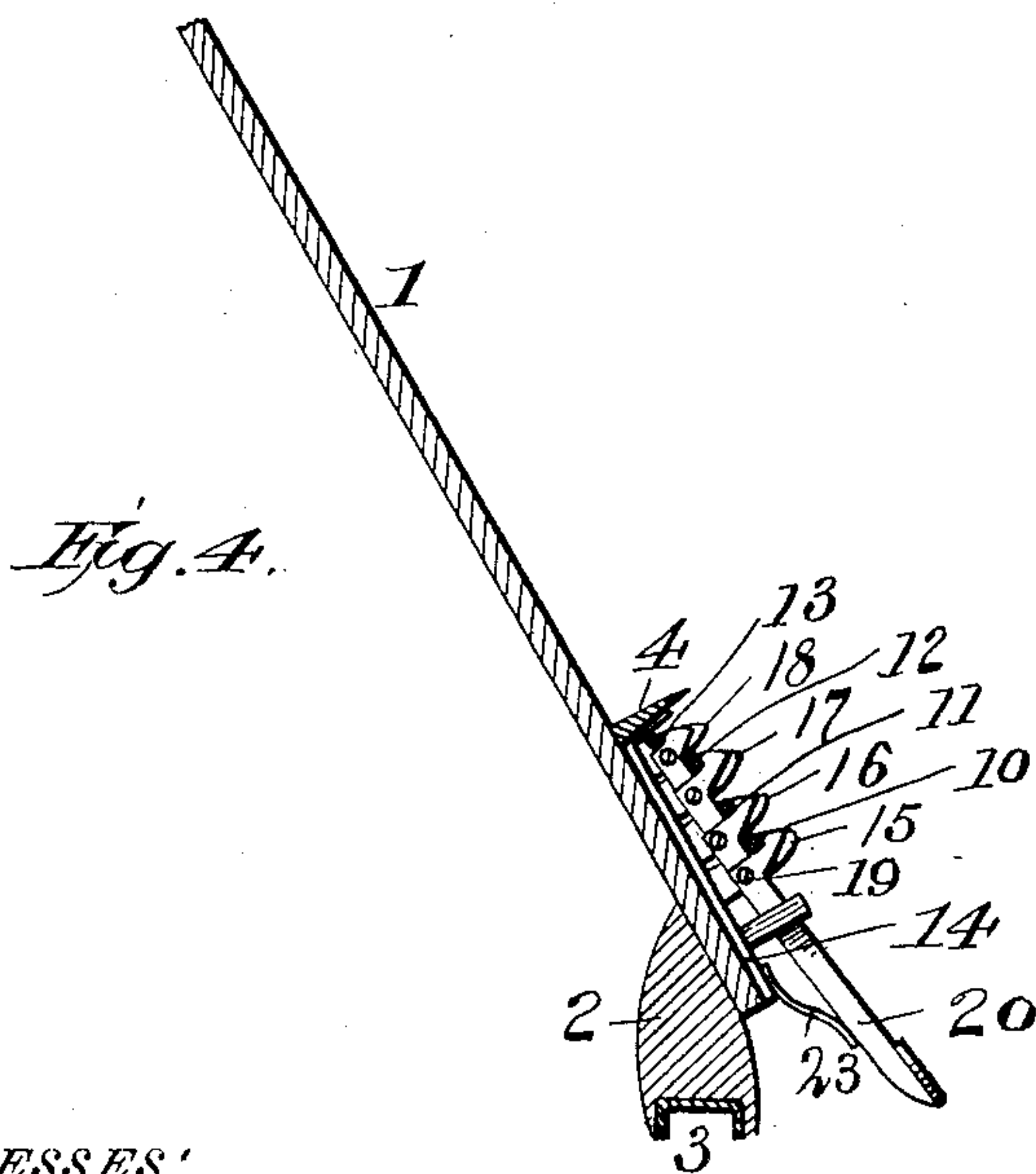
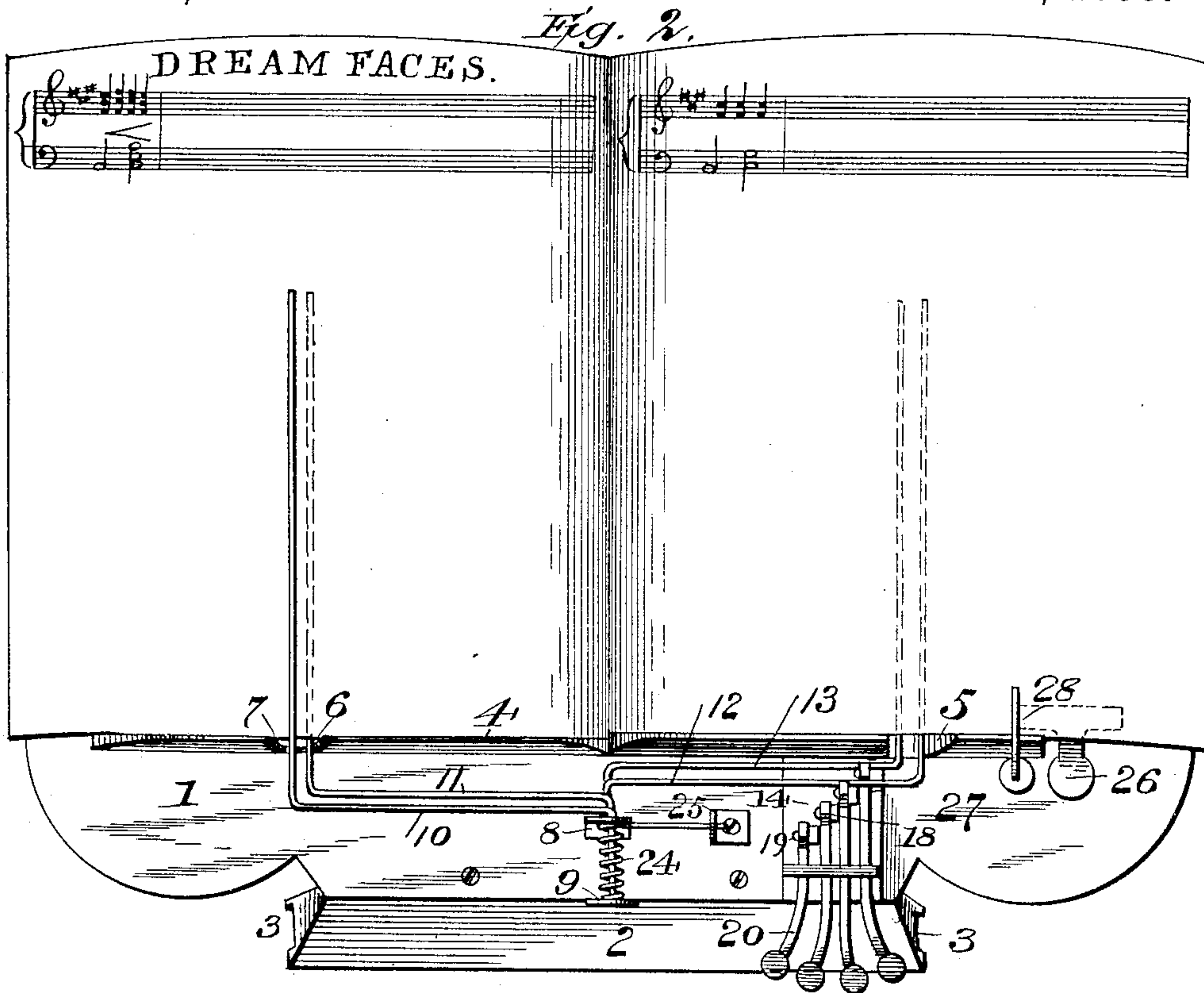
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UNITED STATES PATENT OFFICE.

ELLWOOD STUBBS SKELTON, OF AIRVILLE, PENNSYLVANIA.

MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 534,455, dated February 19, 1895.

Application filed April 19, 1894. Serial No. 508,199. (No model.)

To all whom it may concern:

Be it known that I, ELLWOOD STUBBS SKELTON, a citizen of the United States, residing at Airville, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Music-Leaf Turners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention consists in a new and improved music leaf turner, the object of which is to turn sheet music on the piano, organ, or music stand or easel, on which sheet music is desired to be turned, in single leaf or in book form; the device being operated by the performer with a single touch of the finger or thumb, without stopping the instrument to turn the music, and doing away with all necessity for a second person to turn the music for the performer.

My invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings, in which the same numerals of reference indicate corresponding parts in the several views, Figure 1 is a perspective view of my music leaf turner, showing the operating wires engaged with the keys. Fig. 2 is a similar view showing a piece of music in position, and illustrating the operation of the device. Fig. 3 illustrates more particularly the construction and operation of the single loose leaf turner. Fig. 4 is a sectional view, taken on line $y-y$, Fig. 1. Fig. 5 is a detail section of the fingers on the line $x-x$ of Fig. 2.

Referring to the several parts by their designating numerals:—1 indicates the music board or foundation on which the several parts of the device are secured; which is preferably made of wood, about one-fourth of an inch thick, with its edges scalloped or finished in any ornamental manner. The lower end of this board is secured upon a horizontal foot-piece, 2, the bottom of which is formed with a longitudinal gutter or recess, 3, which engages, fits over, the ledge or bar of the instrument or easel where the music would rest

if the turner were not used; this bottom recess being lined with cloth, as shown in Fig. 4, to prevent the scratching or soiling of the instrument where the device rests. A supporting ledge, 4, is secured horizontally upon the part 1 about two and three-fourths inches from the lower end thereof, this ledge being formed in two halves, the left-hand one of which is secured or placed one-eighth of an inch lower than the right-hand half, as shown in the drawings; the center of the music book being placed at the center of this ledge, where it is cut in half. The ledge is recessed at the right, at 5, to give room for the operating wires when they are turned over and engaged with the keys, and to the left of the center is recessed at 6, and there cushioned with a rubber strip, 7, to receive the wires when they swing the leaves over in turning, this rubber cushion preventing the smallest jar, and protecting the ledge at that point from wear.

The supporting ledge has the top surface of its left hand half in a relatively lower plane to give clearance for the leaves as they are mechanically moved from the right hand half to the left hand half of the ledge. Normally, the lower edges of the leaves touch the right hand portion of the ledge and in turning said lower edge portions would engage with the front edge of the left hand portion of the ledge if the said ledge were of the same level throughout its length, but by having the left hand top surface in a lower plane the leaves pass by and over its front edge.

Upon the board 1, below the center of the ledge, are secured the two parallel brass plates 8, 9, which form bearings to receive the stems of the operating wires. The first wire, as it may be termed for convenience of reference, 10, has a straight stem which passes through the bearing-plates 8, 9, and immediately above the upper bearing-plate the wire (all of the operating wires being formed of round brass wire of suitable diameter) is bent at right-angles, and extends horizontally for five and one-fourth inches, when it is bent again at right-angles, parallel with its stem, extending up for nine and one-half inches. The second, third, and fourth operating wires here shown, 11, 12, and 13, each have a stem extending up three-eighths of an inch longer than the stem of the pre-

ceding wire, as shown, and their horizontal part is three-eighths of an inch shorter than the corresponding part of the preceding operating wire. One result of this construction is that the wires all swing clear and independent of each other, so that they can be used in any order, without any necessity for using them in any special order. The upper ends of the wires extend up each three-eighths of an inch above the end of the preceding wire, which add to the convenience in slipping the leaves of the music between them. The special construction of the outer turning wire will be described farther on.

The key-board, 14, consists of a metal plate which is secured to the board 1 below the ledge, and to the right of the central line, in which are set four metal posts, 15, 16, 17, 18, each post being arranged three-eighths of an inch in advance of the preceding post, as shown. To the side of each post is pivoted by a screw, 19, the head of a finger-key, 20, this head being formed with the curved upper edge 21 and locking shoulder 22, as most clearly shown in Fig. 3. A spring, 23, under the outer part of each key, keeps said outer end normally raised, with the locking shoulder of the head projected in advance of the front edge of the post to which the key-head is pivoted. (See Fig. 4.) The wires are actuated by coiled springs 24, encircling their stems, between the bearing-plates 8, 9, one end of said springs passing through a transverse aperture in said stems, while the other end of the springs run out to a securing plate or post, 25, through which they are secured.

At the right-hand end of the ledge 4 is pivotally mounted a spring-actuated clamp, 26, the wide upper end of which extends up as shown one-half of an inch above the line of the ledge. Just below the same end of the ledge 4 a small round post, 27, is secured on a pivot, so that it can be turned freely, and in its outer end is set the stem of a wire of retaining finger, 28, which extends out at right-angles to the axis of the pivoted post.

The loose leaf turner, the operating wire 10, has its long leg 10^a filed flat on the upper side, removing one-third of its thickness, when another wire of the same size, filed flat on one side in the same manner, is laid against the first wire, with the two flat sides together, and is secured thereto at its lower end, thus forming double wire with the flat sides contiguous; the free end of one of said parts projecting about one-fourth of an inch beyond the other end, to render it more convenient in placing a single, loose, sheet in this wire.

The operation will be now described.

In operation, the wires being turned over to the right, between the sheets of music, and engaged by the notched retaining-heads of the spring-actuated keys as shown, the last leaf of the music, or that part of the music-book which is not to be turned, is caught under the wide upper end of the spring-clamp

26, which thus holds the music securely in position on the ledge. The retaining finger 28 of the pivoted post 27 is then turned over the leaves as shown, and as the leaves are successively turned by the wires it serves a double purpose:—first, to prevent the operation, the turning of the leaves, from being too swift, causing them to be drawn from under the finger smoothly and evenly; and secondly, it prevents the suction of one leaf, as it is swung over, from taking two leaves at a time; a decided practical advantage, as I have proved by actual test. When the performer reaches the bottom of a leaf, he simply touches the proper key with his finger, which turns its shouldered head back on its pivot and frees the operating wire, which is then swung over by its actuating spring 24, turning the desired leaf of the music without further attention from the performer. The great practical advantage of the loose leaf turner, 10, is that when playing from a piece of music having only the two connected outer leaves and a single middle loose leaf, as much music has, this loose leaf is slipped down between the double wire 10, as shown in Fig. 3, and when the key controlling that wire is touched, this wire does not merely push the leaf over, but lifts it, as the loose leaf is securely held in it, and carries it over, turning it upon the left-hand side of the stand. If a plain wire were placed under a loose leaf, the leaf would be thrown off of the stand when thrown over by said wire. This is a decided practical advantage, and adds much to the effectiveness of the device.

It will be seen that the entire surface of the board 1 above the music-ledge 4 is left perfectly clear; and that my music leaf turner is very simple and practical in its construction while exceedingly effective and satisfactory in its operation. It does not require any permanent attachment to the instrument, but is compact, portable, and entirely separate and independent; can be moved from place to place, and set on any instrument, or music stand and does not mar the instrument in any way. The board and base piece may be divided down the center and hinged, for conveniently folding it, if desired. I may of course make the turners with a less or greater number of wires and keys than those here shown.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A music leaf turner comprising a base, a supporting ledge for the music near the lower end having the top surface of its left hand half in a lower plane than the right hand top surface, operating wires, and keys for releasing the operating wires, substantially as described.

2. The herein specified music leaf turner comprising a base having a supporting ledge whose left hand top surface is in a relatively lower plane, and whose front edge has a notch

near each end, a pivoted vacuum check arranged near the right hand end of the ledge, leaf turning wires having their horizontal and outer vertical portions in different relative
5 planes to admit of any wire turning without interference from or with the others, and having their inner vertical ends mounted in plates, operating springs mounted on the said vertical ends of the wires, and a series of
10 spring actuated keys arranged parallel with the base and pivoted at their upper ends to

posts projecting out from the said base, and having their upper ends bent outward to provide horizontal catches to engage with the said wires, substantially as set forth.

In testimony whereof I affix my signature
15 in presence of two witnesses.

ELLWOOD STUBBS SKELTON.

Witnesses:

SARAH E. KYLE,

WILLIAM M. BLACKLOCK.