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PATENTED FEB. 7, 1905.

G. PONAROUSE.
MUSIC LEAF TURNER.
APPLICATION FILED OCT. 12, 1904.

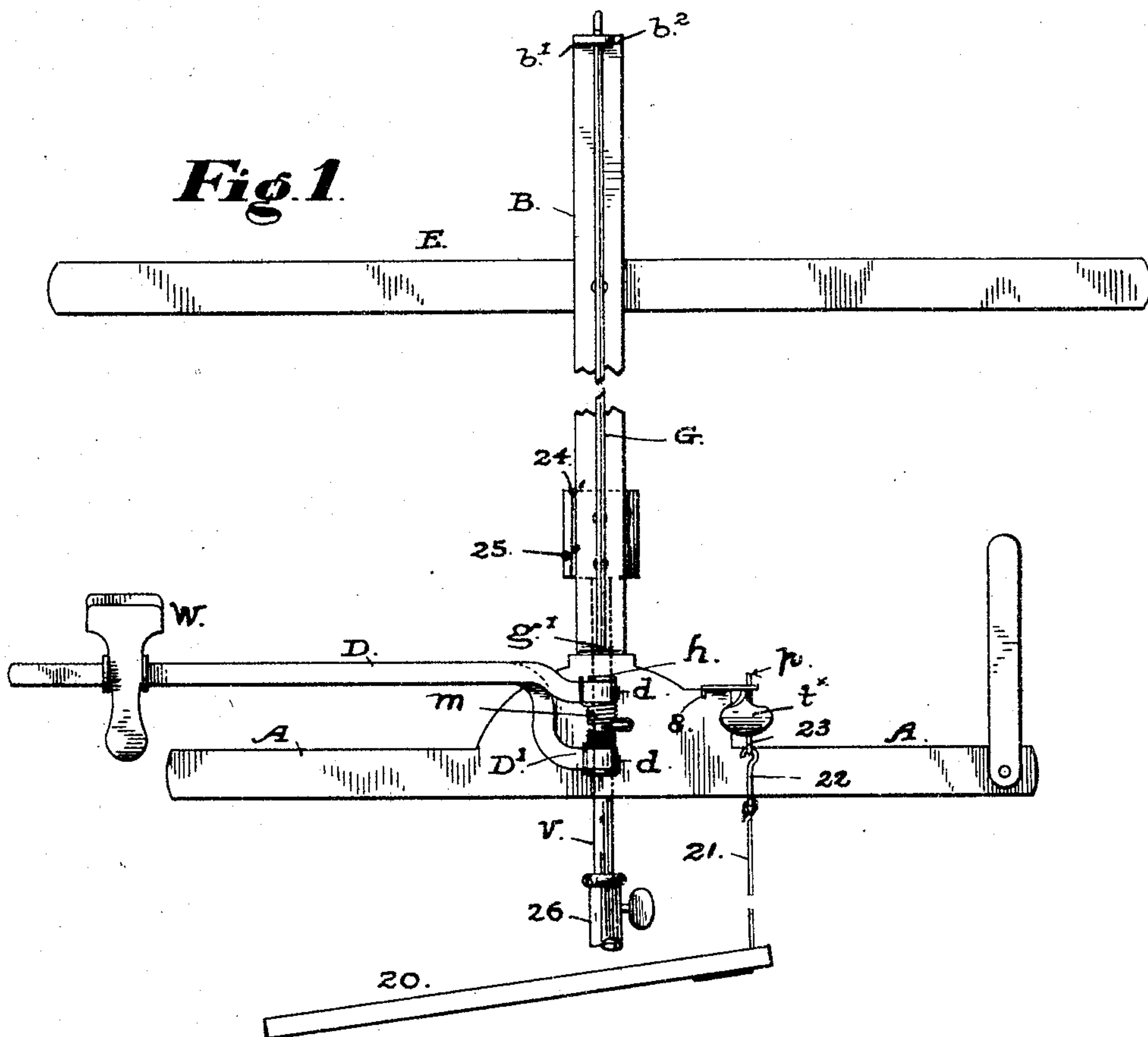
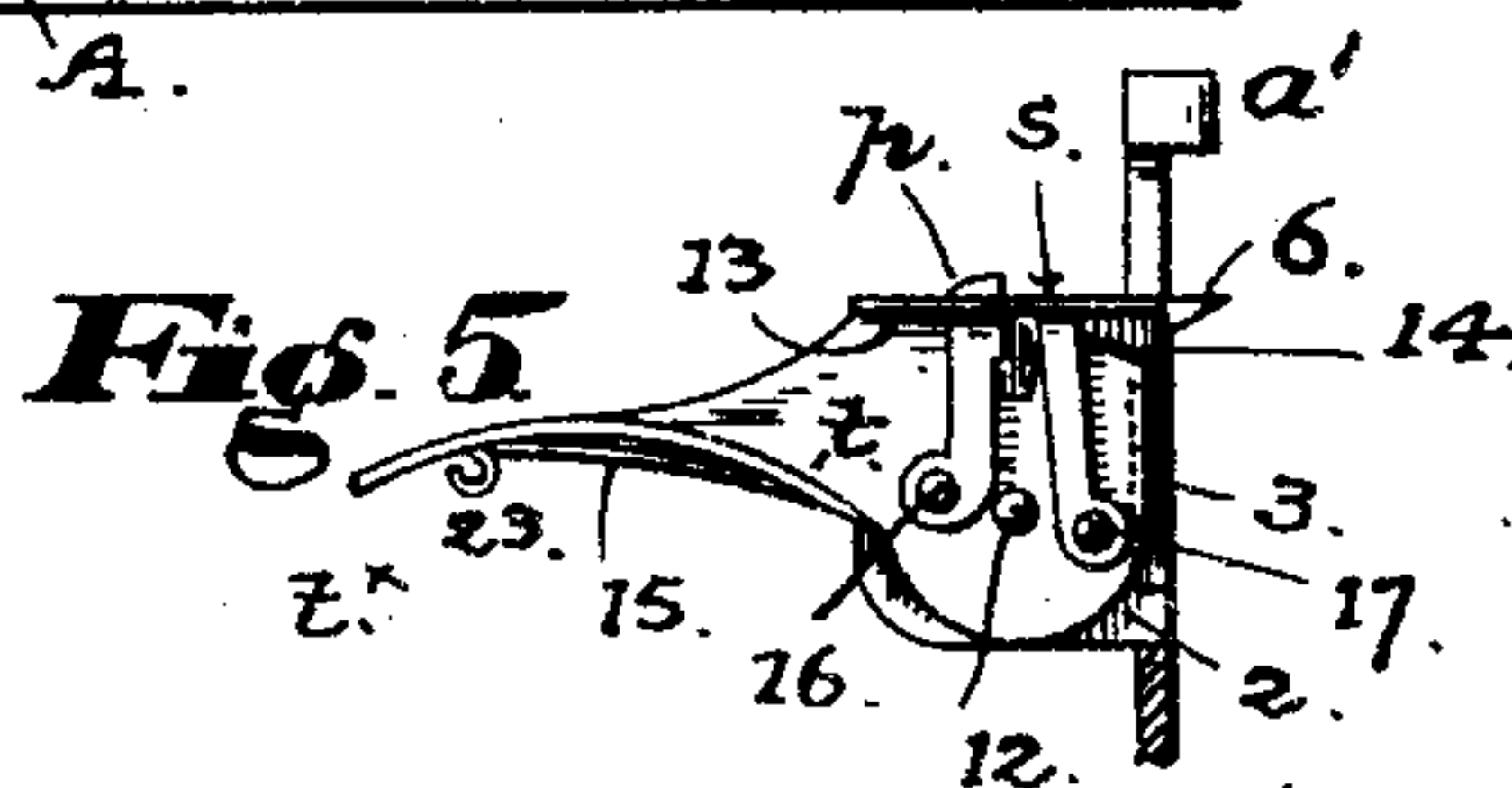
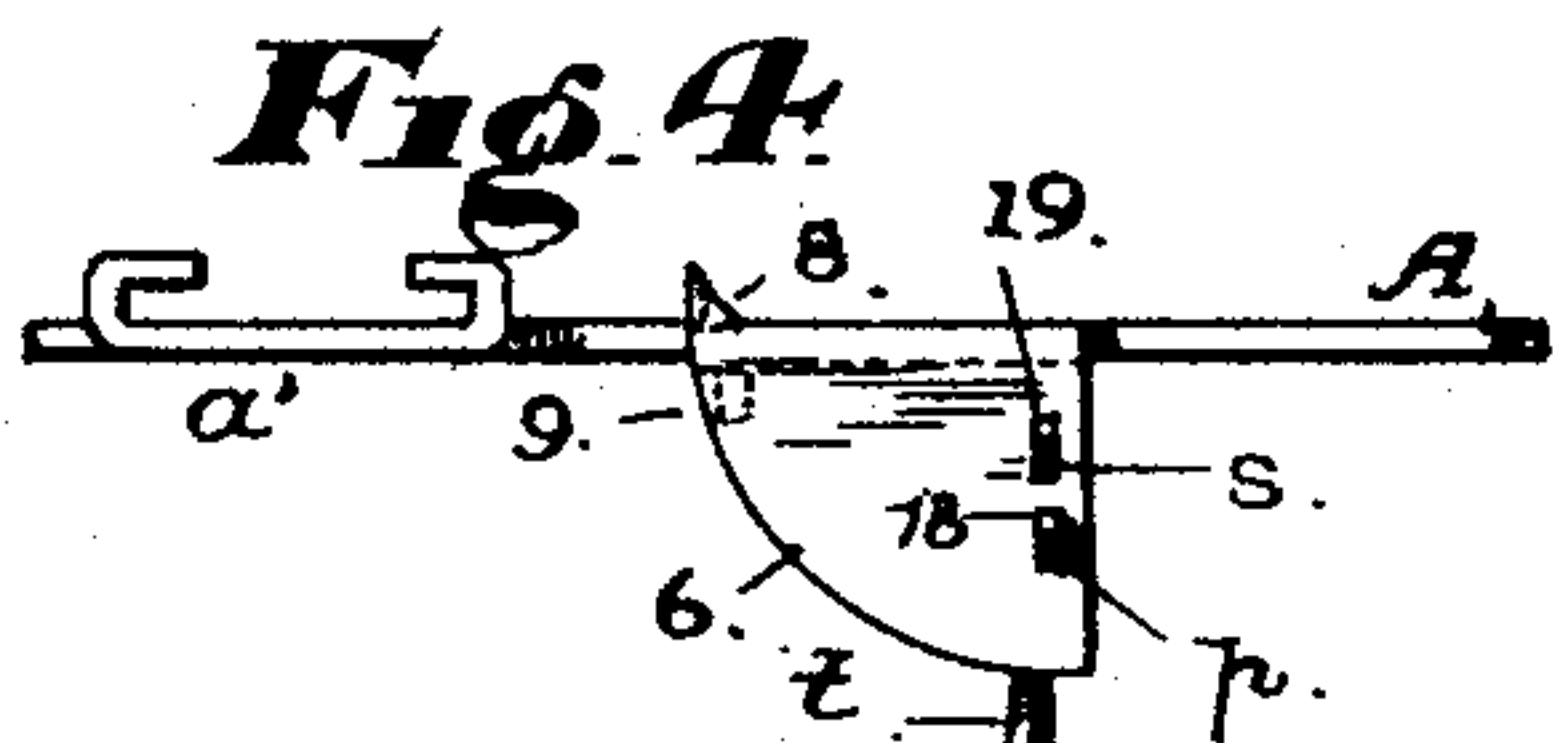
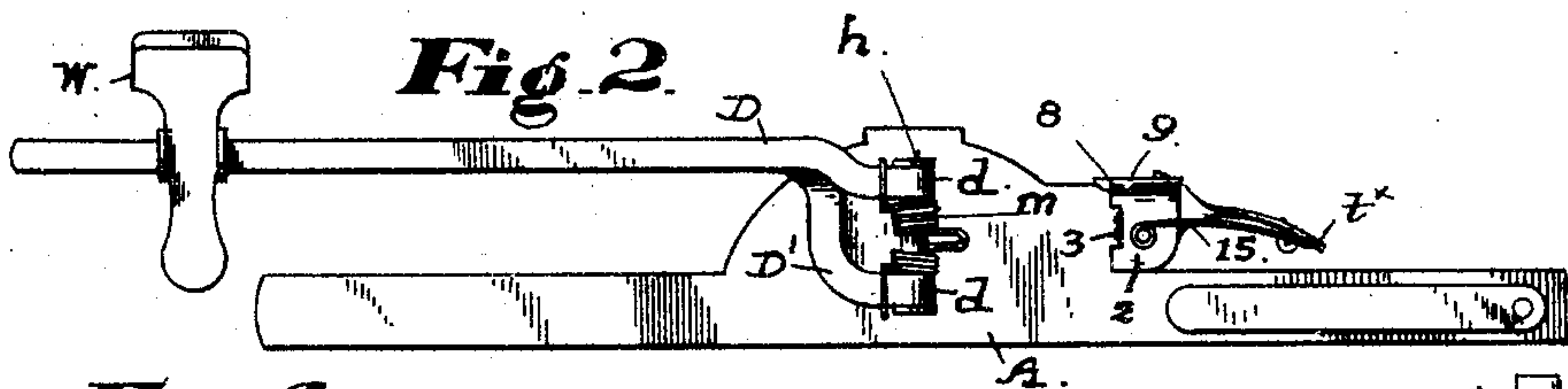
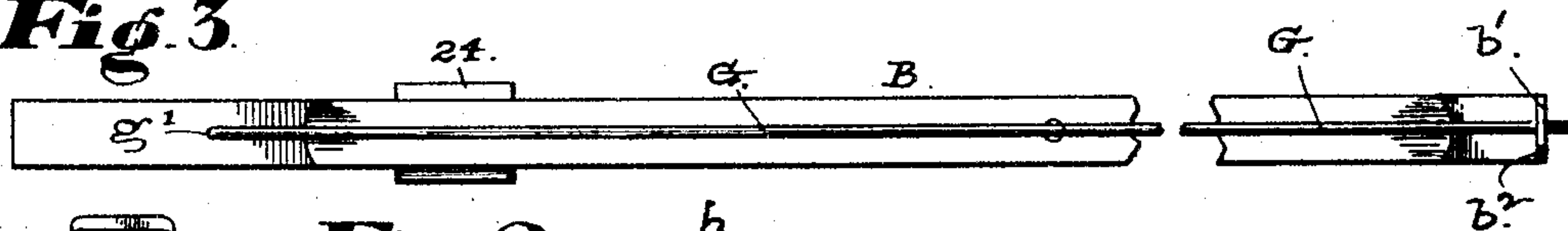


Fig. 3.



WITNESSES

Arthur F. Lee
M. Regner

Inventor

George Ponarouse
By G. C. Osborn
his attorney

UNITED STATES PATENT OFFICE.

GEORGE PONAROUSE, OF SAN FRANCISCO, CALIFORNIA.

MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 781,906, dated February 7, 1905.

Application filed October 12, 1904. Serial No. 228,110.

To all whom it may concern:

Be it known that I, GEORGE PONAROUSE, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Music-Leaf Turners, of which the following is a specification.

This invention has for its object the production of a portable music-leaf turner for use in connection with or as an attachment to a musician's music-stand, and one that is adapted by its construction also to be taken apart and packed in a small compass and a compact form for carrying. It is designed to be operated either by the hand or the foot, and it is constructed also with a view to be set up for use on the desk of a piano or other similar instrument.

To these ends the invention comprises a novel construction and combination of music-holding rack, spring-operated leaf-turning arms, and an escapement controlled by a single key, the parts being so constructed that they are readily taken apart and packed closely together without disconnecting or disturbing the leaf-turning mechanism.

The construction of my improved leaf-turner and the manner of setting up the same will be understood from the following description, in which the accompanying drawings, forming a part thereof, are referred to.

Figure 1 is a front elevation of the device set up for use, but showing the central bar of the rack broken away in the middle to reduce the height of the figure. Fig. 2 is a front view of the base-plate, on which the leaf-turning arms and the escapement and its controlling-key are carried. Fig. 3 is a view of the center-bar of the rack detached from the base-plate. Fig. 4 is a plan or top view of the escapement device and the key for operating it. Fig. 5 is a side elevation taken from the right side of Fig. 4.

The base-plate A on the bottom of the center bar B of the rack furnishes a support for the leaf-turning arms D D' and for the key-operated escapement that controls the arms. The lower end of the bar B is fitted to a socket a' on the back of the base-plate and is drawn out from it to separate the two parts for fold-

ing. A cross-bar E, pivotally attached to the back of the bar B, opens and closes thereon, so as to stand at right angles to the bar and support the sheet across the back or to fold up against the bar when the parts are separated.

A loose rod G on the front of the bar B is attached to the bar by a hinge-joint g' at the lower end and held at the top by springing into a slot b' in the end b' of the bar B, which is bent forward at right angles to form a catch for that purpose. This rod G confines the sheets of music in place on the rack, and it is similar in its function to the movable member of a newspaper-file or to the rods or wires on the racks of many music-leaf turners that extend through the middle fold of the sheets as a means of confining the sheets in place on the rack.

The arms D D' are attached to the base-plate A by a hinge-joint composed of a short post h and an eye d on the end of each arm, and to each arm is connected a spring m, so arranged that its force is applied in the proper direction to throw the arm over from the right to the left side of the center, the spring being put in tension each time by setting the arm over to the right ready for action. In the last-mentioned position the arm is held against the reactive force of the spring by an escapement device consisting of two alternately-acting dogs or catches p s and a key or lever t, projecting from the front of the base-plate A. The catches are so connected with the key-lever that as often as the latter part is depressed the first catch p, which is directly in front of the arm, will be drawn down and the arm will be released, while the remaining catch s will arrest and hold the arm next behind, thus allowing the first arm to escape and fly over to the other side. In the rising movement of the key as it is released by the performer the position of the two catches is reversed, and the front catch p intercepts and retains the next arm at the instant that the back catch is drawn away from it. The construction and operation of the escapement will be more clearly understood by reference to the details, Figs. 4 and 5.

The part 2 is a bracket attached to the side

of the plate A by a hinge-joint 3, so that the bracket can be turned back to lie in line with the plate A, as shown in Fig. 2, or it can be turned at right angles to the plate, so that it will stand forward and project from the front of the plate. This is the working position of the key, as seen in Figs. 1, 4, and 5. The top plate 6, standing at right angles to the bracket of which it is a part, is arranged to ride over the top edge of the base-plate A' and lock the bracket in that position, for which purpose the plate 6 is provided with a catch formed of the inclines 8 9 on the under side. The key *t* is formed with a circular center part loosely fitted to a pivot 12, that attaches it to the side of the bracket and having two stops 13 14 standing above the line of the pivot and on opposite sides of the center. The finger portion *t*^x of the key is produced by shaping and twisting the plate *t* to stand at right angles to the part that works against the bracket. A spring 15, secured to the bracket and bearing against the under side of the key, holds it normally in elevated position with the stop 13 against the top plate and controlling the movement of the key in that direction. The other stop, 14, limits the movement of the key in the opposite direction. The catches *p s* are loosely pivoted to the key *t* at the points 16 17 on opposite sides of the center of motion 12, and extending upward from such points of connection the two catches stand in line with slots 18 19 in the top plate 6, through which one is alternately projected and the other drawn down flush, or nearly so, with the surface of the top plate by the movements of the key. The catches *p s* are situated one behind the other at such distance apart that when the front catch *p* is in elevated position, holding the arm D, the back catch *s* will lie in front of the line of the other arm, D', and will intercept and hold back that arm at the instant that the front catch *p* is drawn down and the end of the back catch *s* is elevated above the top face of the plate 6. The normal position of the catches, with the key elevated ready for action, is seen in Figs. 1 and 5, and on setting the leaf-turning arms over to the right ready for action they will ride over the front catch, and both will be held by that catch. In that position the arms are separated from each other by the leaf-holding clip *w*, with which each arm is provided, and sufficient space is left or provided between the arms to set the rear arm D behind the line of the back catch, and thereby give that catch time to rise and arrest the arm D at the moment that the front catch *p* is drawn down and the front arm D' is released. The arms are controlled in this manner by the simple depression and elevation of a single key.

In the present construction I have provided only two leaf-turning arms, for the reason that much of the sheet-music published at this time does not require a greater number of

arms. I do not desire, however, to be understood as restricting this leaf-turner to any particular number of arms, and a greater number than two can be provided and can be controlled by the same escapement.

A means is provided in connection with this escapement for operating the same by the foot, and thus leave the hands of the performer free for playing the instrument. This means consists of a pedal 20 and a cord 21, attached to one end of the pedal and provided with a hook 22 on the end for connecting it to an eye 23 on the key. This device is readily connected when it is required to operate the leaf-turner by the foot, while at other times it is disconnected. This device is attached to the post V of a portable music-stand by means of a block 24, secured to the back of the center bar A, and a socket 25 on the end of the post V, to which the block 24 is fitted. This is one of several well-known ways of fixing the rack or music-support to the legs or frame in a portable music-stand, the socket being secured to or formed on the end of the post V, that is adjustable up and down in the socket 26 on the frame. Such means for fixing the rack on a portable stand is not required and may be omitted where the device is constructed for use on the desk or music-support of a piano or similar instrument. The base-plate A in that case will rest on the ledge or projecting front board and will support the leaf-turner in position without special fastenings.

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

1. A music-leaf turner comprising the base-plate, leaf-turning arms on the base-plate having a center of movement thereon, springs operating to throw the arms in one direction, an escapement device for holding the arms against the reactive force of the springs and separately releasing them consisting of a rocking lever extending from the front of the base-plate and the catches pivotally attached to said lever on opposite sides of the center of motion of the lever.

2. In a music-leaf turner, the combination with a base-plate having spring-operated leaf-turning arms pivotally mounted on it, of an escapement device on the base-plate, comprising a hinged bracket, a top plate on said bracket adapted to engage the base-plate and hold the bracket in working position at the front thereof, a rocking lever carried by the bracket and provided with a finger-key, catches pivotally attached to the rocking lever on opposite sides of the center and arranged to work through apertures in the top plate of the bracket, and a spring operating to hold the rocking lever normally in position to elevate one catch and project it in front of the front arm and depress the other catch.

3. In a music-leaf turner, the combination of the base-plate, music-supporting center

bar, spring actuated leaf-turning arms, key-operated rocking lever, a front catch attached thereto on one side of the center of movement of the lever, a back catch similarly attached on the opposite of said center, a spring operating to hold the rocking lever normally elevated, and stops on said lever adapted to limit the movements thereof.

4. In a music-leaf turner, a music-supporting center bar, a base-plate on the bottom of said bar detachable therefrom, a hinged bracket on the base-plate adjustable with reference thereto to lie in the same plane, or to stand outwardly from the front of the base-

plate, means for locking the bracket in the last-mentioned position, a key-operated rocking lever pivotally attached to the bracket, catches on said lever pivotally attached thereto on opposite sides of the center, a pedal, and a cord connecting said pedal to the lever.

In testimony whereof I have hereunto set my name to this specification in the presence of two subscribing witnesses.

GEORGE PONAROUSE.

Witnesses:

EDWARD E. OSBORN,
M. REGNER.