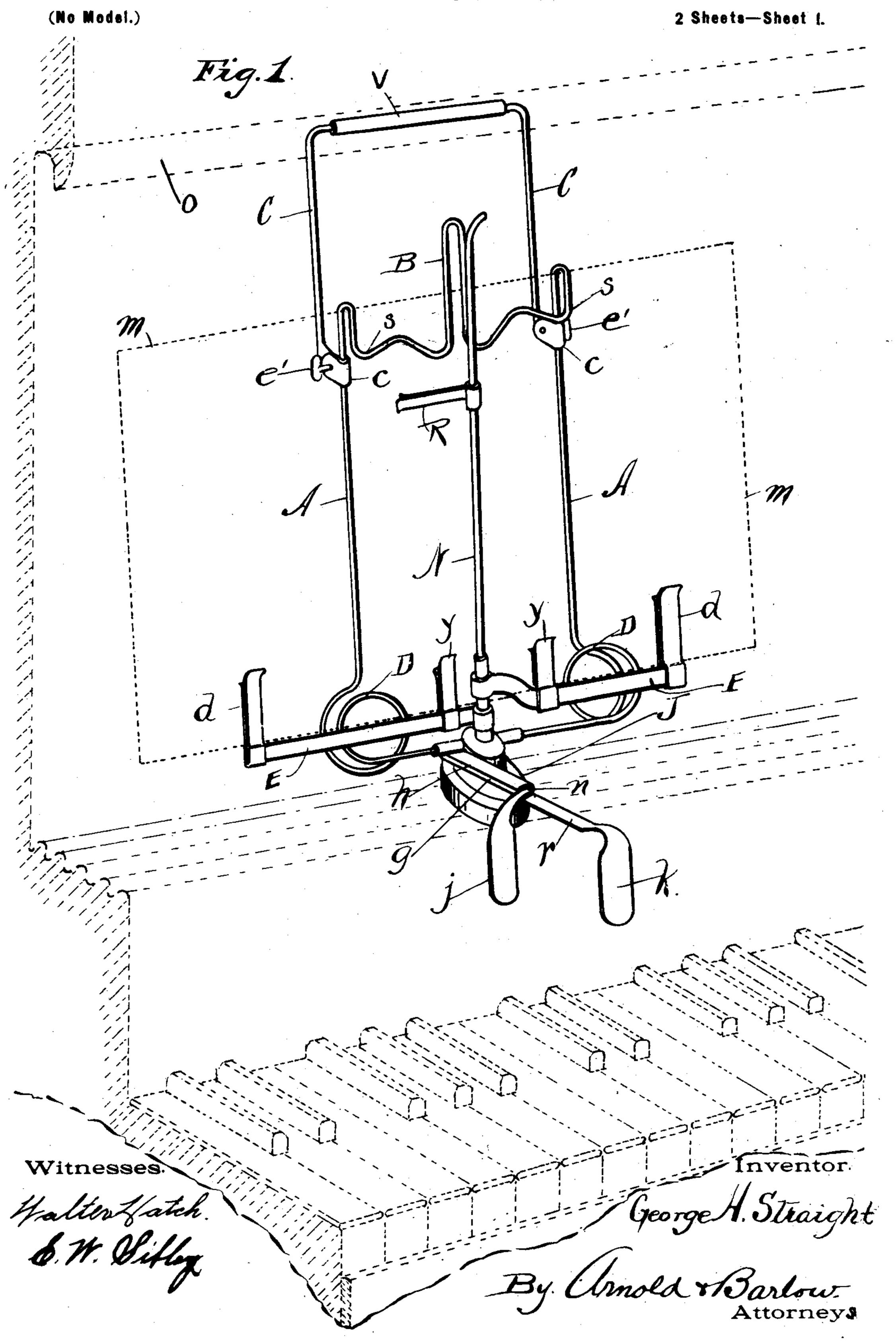
G. H. STRAIGHT. MUSIC LEAF TURNER.

(Application filed Sept. 26, 1901.)

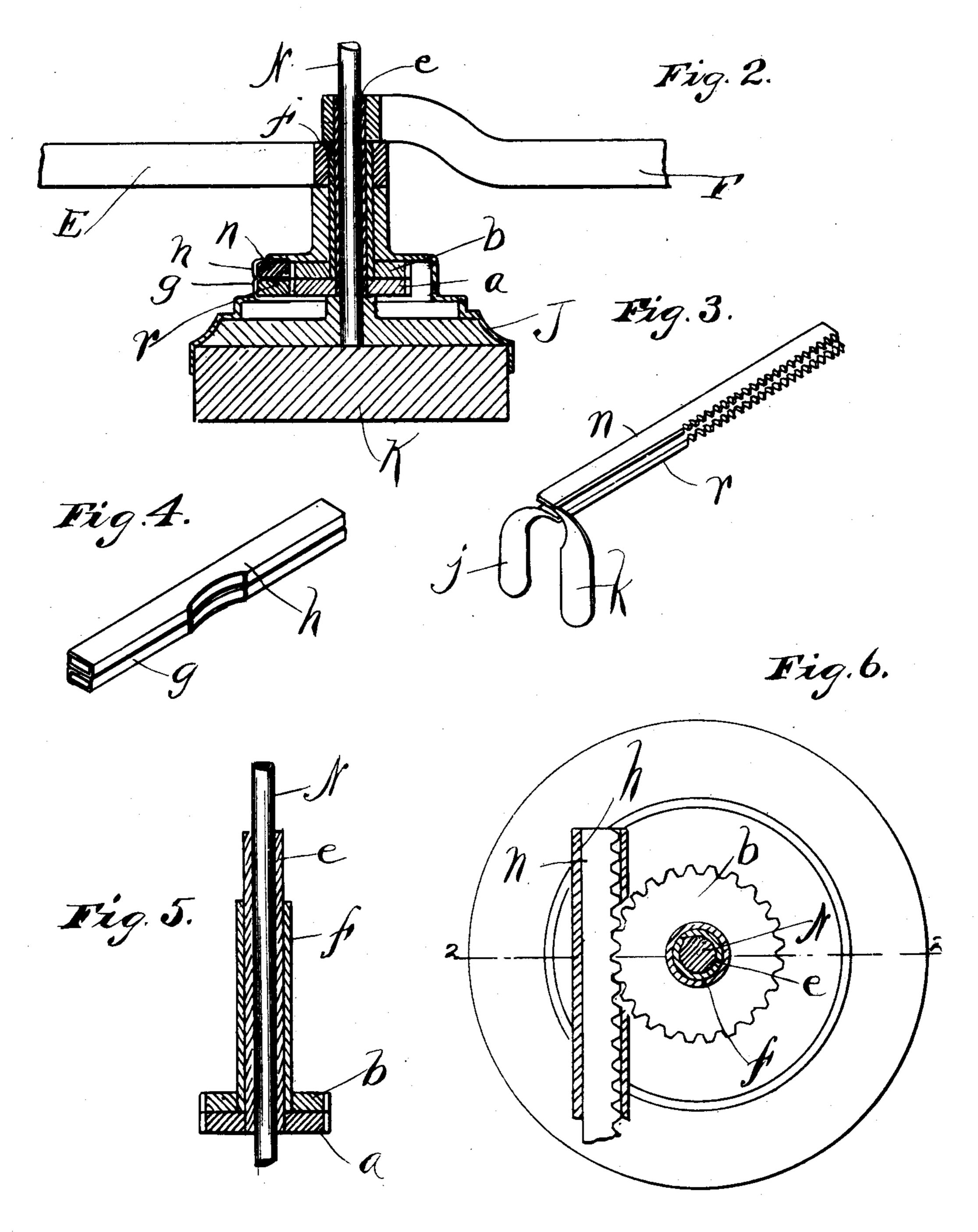


G. H. STRAIGHT. MUSIC LEAF TURNER.

(Application filed Sept. 26, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

Haller Hatch. 6.4 Hilly George H. Straight

By Chald Serlow. Attorneys

United States Patent Office.

GEORGE H. STRAIGHT, OF ALLENTON, RHODE ISLAND.

MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 711,189, dated October 14, 1902.

Application filed September 26, 1901. Serial No. 76,641. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. STRAIGHT, a resident of Allenton, in the county of Washington and State of Rhode Island, have invented certain new and useful Improvements in Music-Leaf Turners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in devices for enabling a performer on a piano or other like musical instruments to turn the leaves of the sheet-music without interrupt-

ing the playing.

It is fully described and illustrated in this specification and the annexed drawings.

the apparatus placed in position on an upright piano, shown in dotted lines. Fig. 2 is a vertical cross-section taken through the axis of the turning parts on line 22, Fig. 6. Fig. 3 is a perspective view of the two racks that operate the arms that carry the sheets of music. Fig. 4 is a perspective of the cases that hold the racks. Fig. 5 is a vertical section of the tubes and gears that carry the arms that hold the sheets of music, with the central rods in elements of the tubes are the racks that turn them, with the tubes and central rod in cross-section.

The construction and operation of the ap-

paratus are as follows.

A A are the side bars of the main frame, which is preferably made of wire. These side bars are connected together at the top by a cross-bar either in an ornamental or plain shape and carried up in the middle to form a 40 loop B. The two side bars A A are extended down, and each bar after taking a turn and a half is carried in, and the ends are made fast in the base J. A vertical rod N has its lower end also secured in the base J, and its upper 45 end extends to the upper end of the loop B, I the opening in the loop being made just wide enough to allow the rod N to pass into it, and the extreme end of the rod is bent over toward the front to draw it out by when a sheet 50 of music is taken out of the frame. The vertical rod N serves as a pivot upon which the moving parts of the apparatus turn. These

parts consist first of two gears a and b. (See Fig. 2.) The lower gear is made fast on the lower end of the tube e, which is held to turn 55 freely on the rod N. (See Fig. 5.) The tube or sleeve e extends up from the base J and has a horizontal arm F secured to its upper end. The gear b is made fast on the lower end of the short tube f, large enough to be 60 held and turn freely on the tube e, and an arm E is made fast on its upper end. (See Fig. 2.) The arms E and F have at their outer ends vertical clamps d d, which hold and carry over the leaves of the sheet-music. 65 The two gears a and b are held in the upper part of the base J, which is made hollow for that purpose, and the two grooved bars or cases g and h (see Fig. 4, which is a perspective view of the cases) are made fast in one 70 side of the base J, so that the toothed keys rand n, (see Fig. 3,) which are held to slide in the cases g and h, may engage with the gears a and b, respectively, and turn them and the arms E and F when the racks are slid 75 in their cases. A block of india-rubber K is attached to the under side of the base J to rest on the front of the piano-case, and a wire frame C, composed of two uprights with a cross-bar at the top, is held to slide on the 80 bars A A (see Fig. 1) by means of couplings cc on the lower ends of the upright bars of the frame C, through which couplings the bars A A pass, and thumb-screws e'e' are put in the sides of the couplings $c\ c$ to hold the 85 frame at any height on the bars A A that it may be set.

The following is the method of using the apparatus: The base J is placed in front of the piano with the rubber foot resting on the 90 case above the keys. (See Fig.1.) The thumbscrews e' e' are loosened and the frame C is pushed up under the projecting edge O of the molding of the top of the piano, (shown in dotted lines,) and the thumb-screws e' e' are 95 tightened to hold the frame Cup in place. A rubber tube v is put on the top cross-bar of the frame C to prevent injury to the varnish. The outside piece or cover of the piece of music is then slid down between the loop B 100 and the rod N until its lower edge rests between the front and back circles of the coils D D, and the upper edge of the sheet is shoved up under the downward projections s, made

in the top cross-bar of the main frame for that purpose. Then the sheet will be in a position represented by the dotted lines m m in Fig. 1. The arms E F are then placed in position 5 shown in Fig. 1 and the sheet containing the music is put down between the loop B and bar N and the lower edge entered into the clasps d and y y and the upper end of the bar N is pressed in with the sheet between the 10 sides of the loop B, which from the shape of the bar are springy. The arm E to the left is then turned over to the right, exposing the first and second pages of the music, and when the performer has played these pages through 15 by a quick touch of the finger on the drop jof the rack n and by means of the gear b will turn the tube F and arm E, with the first leaf of the music, over to the left, exposing the third and fourth pages of the music. When 20 these pages have been played through, the rack r is pushed in by a touch of the finger on the drop k, and the gear a will turn the arm F and second leaf of the music over to the left, exposing the fifth and sixth pages of 25 music.

As will be seen, the capacity of the apparatus as illustrated is the cover and two leaves, making six pages; but it may be increased to ten pages or more by increasing the number of racks, gears, and tubes, arranged in like manner and operated as shown and described.

To accommodate a short single sheet of music printed on both sides, a spring-clasp R is placed on the rod N (see Fig. 1) to hold the top of the sheet and turn with it when the arm below that holds the lower edge of the sheet is turned. To repeat the playing for a

second verse, the leaves may be turned back to the right by drawing out the racks, as at 40 the beginning, and so on for any number of verses.

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

1. In a leaf-turning device, the combination of a base, a main frame fast on said base and bent to form loops at its lower end to hold the cover of the music, an auxiliary frame adjustably held on said main frame to hold 50 the top of the main frame, a central rod having its lower end fast to said base and its upper end free, a small tube free to turn on said central bar and having a gear fast on its lower end and an arm fast on its upper end, a larger 55 tube held to turn on said small tube and having a gear fast on its lower end and an arm fast on its upper end, said arms, a sliding toothed rack held to engage each gear and turn it, substantially as described.

2. In a sheet-music-leaf turner, the combination of a base, a main wire frame formed with loops at its four corners, and the upper cross-bar bent to form a spring-loop, a central bar to fit into said spring-loop, an auxiliary frame adjustably mounted on said main frame, swinging arms mounted in said base, and racks and gears, to operate said swinging arms, substantially as described.

In testimony whereof I have hereunto set 70 my hand this 24th day of September, A. D. 1901.

GEORGE H. STRAIGHT.

Witnesses:
HOWARD E. BARLOW,
BENJ. ARNOLD.