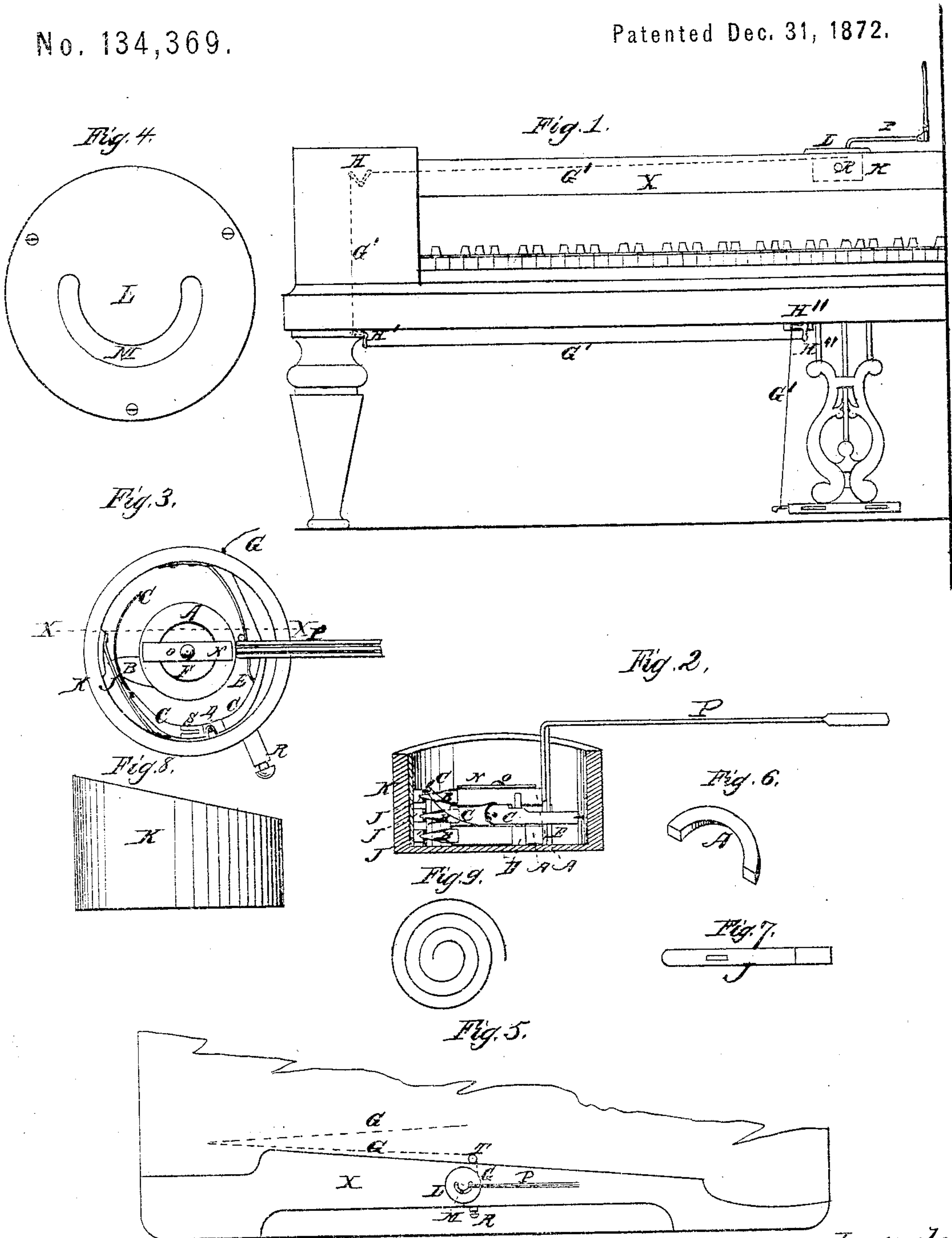


T. FOLKS.

Music-Leaf Turners.

No. 134,369.

Patented Dec. 31, 1872.



Witnesses.

Inventor.

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# UNITED STATES PATENT OFFICE.

THOMAS FOLKS, OF MELROSE, NEW YORK.

## IMPROVEMENT IN MUSIC-LEAF TURNERS.

Specification forming part of Letters Patent No. **134,369**, dated December 31, 1872; antedated December 27, 1872.

*To all whom it may concern:*

Be it known that I, THOMAS FOLKS, of Melrose, in the county of Westchester and State of New York, have invented an Improved Apparatus for Turning Leaves of Music, of which the following is a specification:

The first part of my invention consists in a round box, higher at the back than at the front, containing an upright shaft passing through a series of hollow barrels or washers, each containing a spring and provided with a nose or catch, and a horizontal swinging arm provided with an upright finger provided with a small clasp for the purpose of holding the leaf securely. Second, a series of side springs attached to the above-named box, provided with holes for the purpose of catching and holding said nose; a swinging jointed lever, operating against said side springs, connected to a pedal swing in the rear, and a button or thumb-punch in the front, by means of either of which said lever may be operated against said side spring, whereby said nose may be released and the leaves turned at pleasure.

Figure I is the front elevation of a piano provided with my improved device. Fig. II is a transverse section of box in front of line X X, Fig. III. Fig. III is a plan of device. Fig. IV is a plan of cover of box. Fig. V is a plan of the top of front of piano provided with my device. Fig. VI is a vertical transverse view of one of the barrels, Figs. II and III, cut in center. Fig. VII is a view of one of the side springs J, Figs. II and III. Fig. VIII is a side view of box. Fig. IX is a plan of spring inclosed in the barrels A, Figs. II, III, and VI.

A, Figs. II, III, and VI, is hollow barrels or washers. B, Figs. II and III, is a nose or catch attached to the barrel A, Figs. II, III, and VI. C, Figs. II and III, is a swinging jointed lever, made in such a manner that that part to the left of the joint may be raised to the desired height by means of the nose B, Figs. II and III, passing under it, when the arms P, Figs. I, II, III, and V, are being moved to the right, and, by dropping to the next nose, when the nose on which it rests is released and passes to the right. D, Figs. II and III, is a pivot on which the lever C, Figs. II and III, swings. E, Figs. II and III, is an upright post, against which said nose B, Figs.

II and III, strikes when the leaf has been turned the required distance. F, Fig. III, is a shaft which passes through the barrels A, Figs. II, III, and VI. G, Figs. I, III, and V, is a cat-gut string connected to the lever C, Figs. II and III, running backward over a small pulley, T, Fig. V; it is there connected to wire rod G' running to the left; thence connecting to a bell-crank, H, Fig. I; then passing downward, through the bass-block of the piano, to the bottom, and there connecting to a second bell-crank, H'; then passing to the right backward to the center of the piano, there connecting with a third bell-crank, H''; then downward, and is connected with the pedal. J, Figs. II, III, and VII, is the side spring which holds the nose B, Figs. II and III, in position before the music-leaf has been turned. K, Figs. II, III, and VIII, is the box. L, Fig. IV, is the top of the box. M, Figs. IV and V, is a half-circle, cut out of top of box L, for the purpose of allowing the swinging arms P to pass from one side to the other. N, Figs. II and III, is a cap or small piece of thin metal passing over the barrels A, Figs. II, III, and VI, and secured to the shaft F, Fig. III, by means of screw O, Figs. II and III, for the purpose of preventing the barrel A, Figs. II, III, and VI, from rising above its natural position. S, Figs. II and III, is a pin or pivot passing through the joint in the lever C, Figs. II and III. R, Figs. III and V, is a button or thumb-punch passing through the bar of the piano from the front, and connecting with the lever C, Figs. II and III.

The spring, Fig. IX, has a small hole in each end. The hole on the inside end is caught by a small pin projecting from the shaft F, Fig. III, opposite each barrel, and the hole on the outside end of the spring is caught by a pin projecting from the inside of the nose B, Figs. II and III, in such a manner that when said nose is turned to the left, by means of the arm P, Figs. I, II, III, and V, being turned to the right, the spring, Fig. IX, is being wound up, which is the motive-power.

When it is desired to turn a leaf of music, press the foot lightly on the pedal or the finger on the thumb-punch, either of which will cause the lever C to press against the side spring J, causing the nose to be released,



which, by means of the spring, Fig. IX, contained in the barrel A, will be thrown round to the upright post E, bringing the arm P and music attached thereto to the opposite side.

When it is desired to turn the arms P to the right it may be done either separately or together.

The object of the box K, Figs. II, III, and VIII, being made higher at the back than at the front is, first, to incline the upright fingers backward; and second, to allow the top of the box to be on a level with the top of the bar of the piano, while, at the same time, the bottom of the box being thrown a little forward, the hole in which the box sits being bored from the rear forward, on an angle of about forty-five degrees, by means of which the swing-arms will rise slightly while approaching the performer, and lower slightly while passing to the left from the performer. The object of this is to allow the small clasp attached to the up-

right arm to hold the leaf securely while passing from right to left.

I am aware of various devices having been heretofore patented in which arms actuated by springs have been employed for turning leaves of music; these, broadly, I do not claim.

What I claim as my invention is—

1. The box K, the lever C, and barrel A, as and for the purpose hereinbefore set forth.

2. The combination and arrangement of the box K, barrel A and springs confined therein, side spring J, and swinging jointed lever C, operated by a pedal and thumb-punch, as and for the purpose hereinbefore set forth.

THOMAS FOLKS.

Subscribed to before us this the 14th day of February, 1872.

Witnesses:

JOHN L. BURNETT,  
H. G. COOPER.