

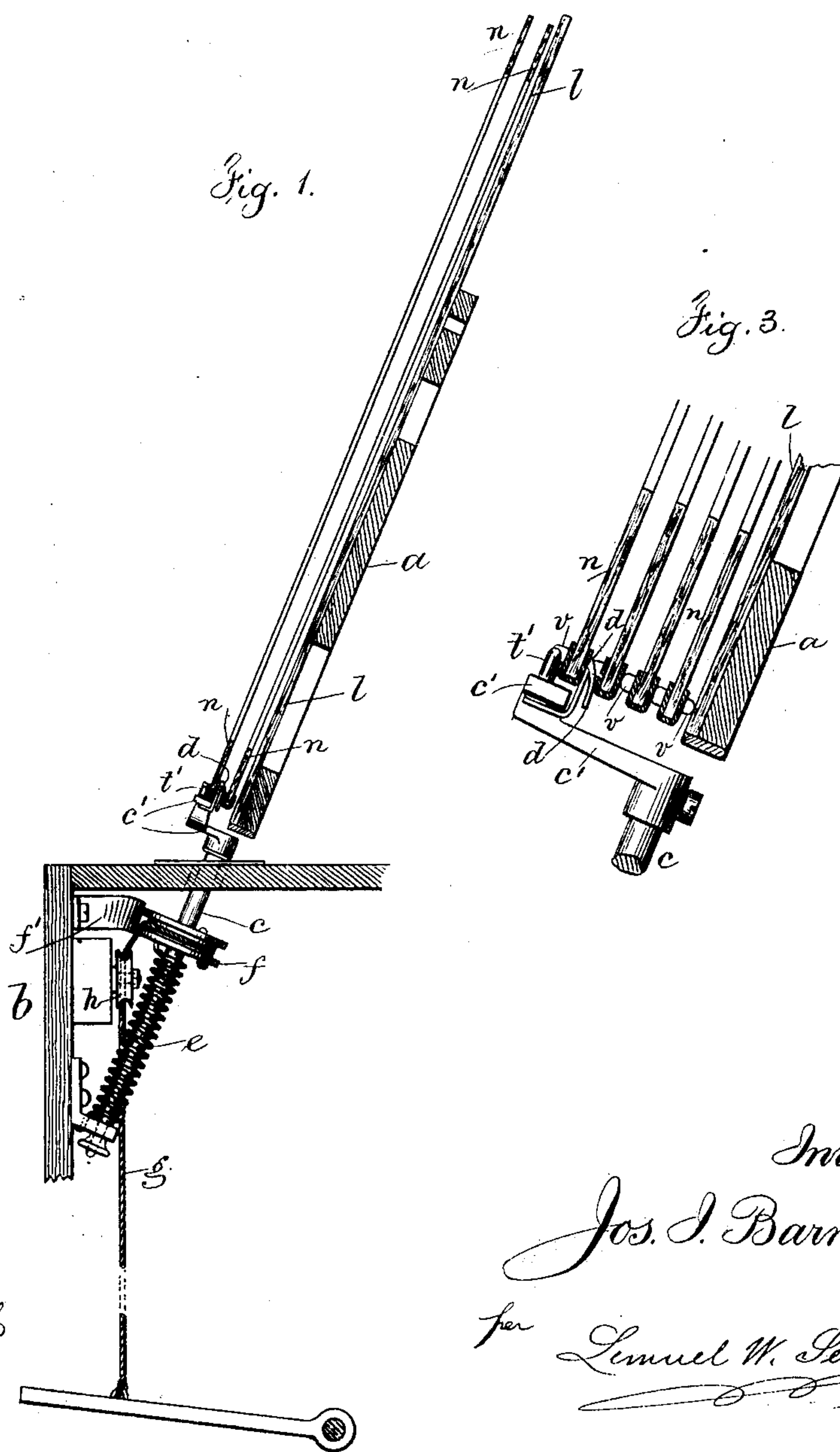
(No Model.)

3 Sheets—Sheet 1.

J. I. BARNUM.
MUSIC LEAF TURNER.

No. 272,938.

Patented Feb. 27, 1883.



Witnesses

Char. H. Smith
J. Hail

Inventor
Jos. I. Barnum
per Lemuel W. Perrell
Atty.

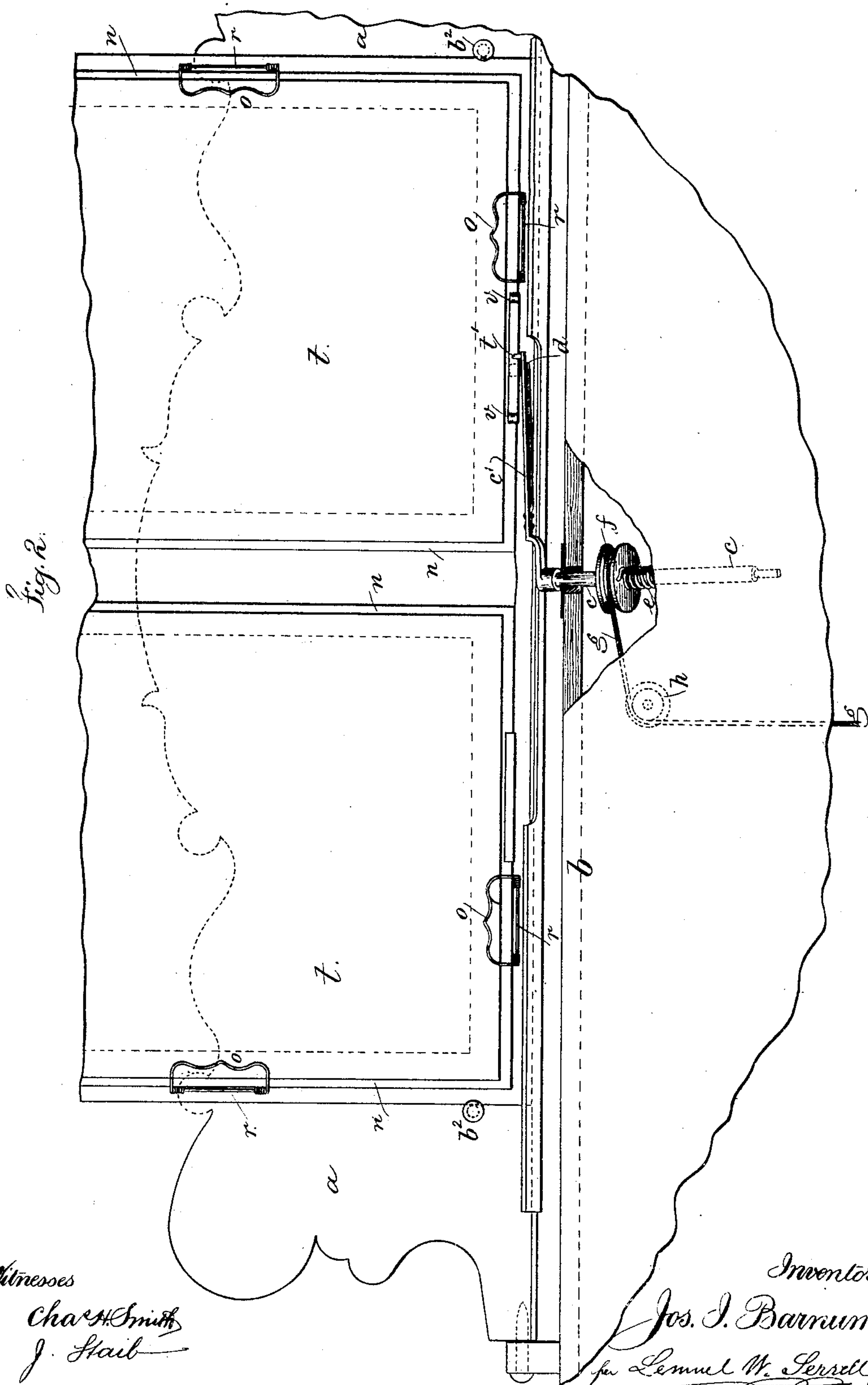
(No Model.)

3 Sheets—Sheet 2.

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3 Sheets—Sheet 3.

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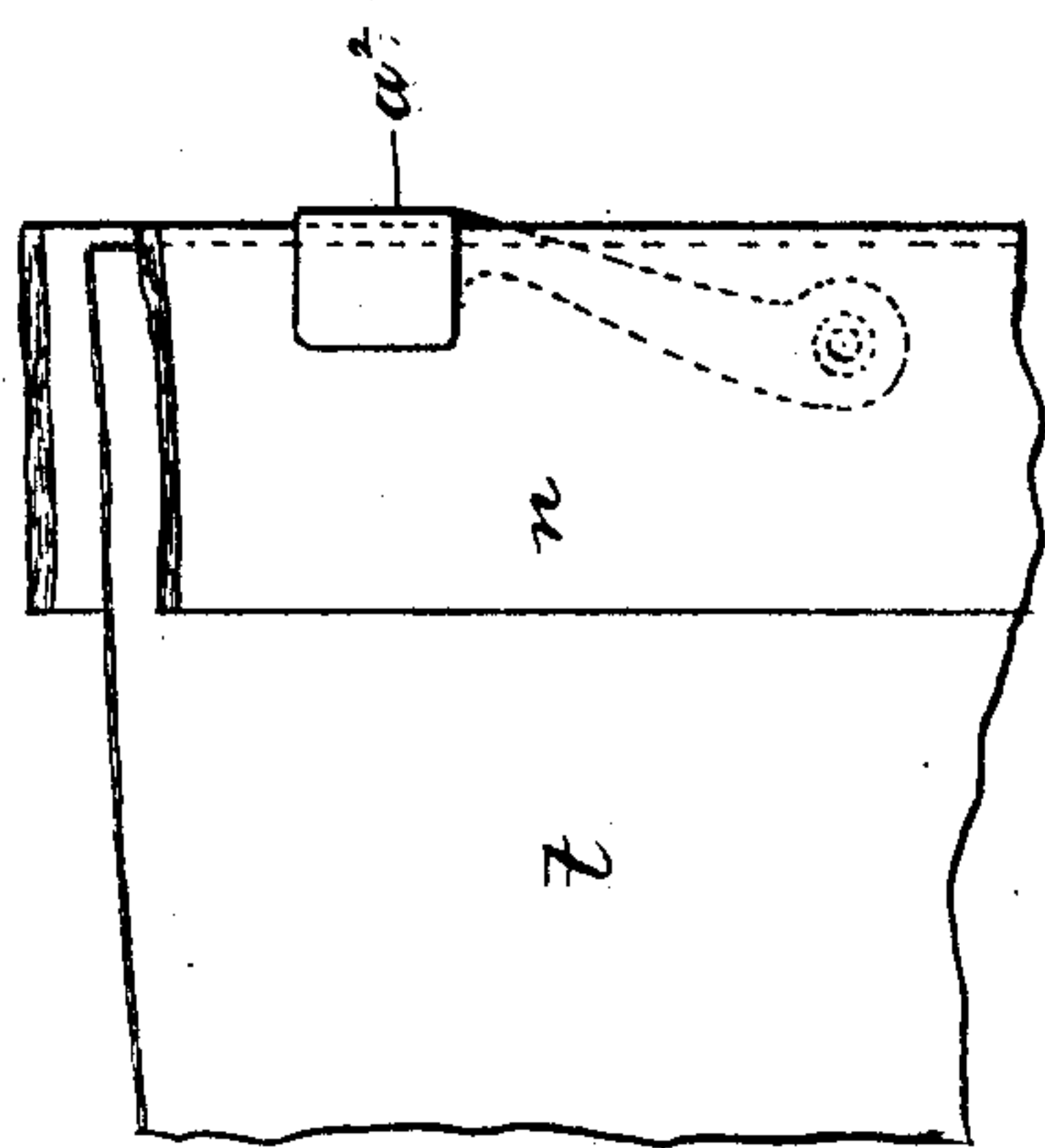


Fig. 6.

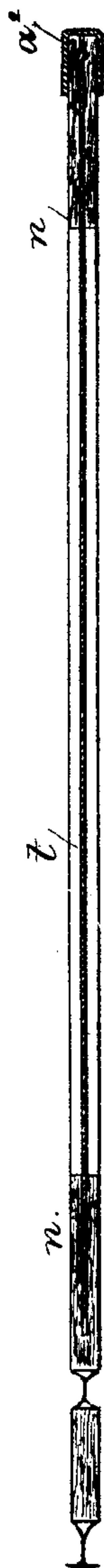


Fig. 5.

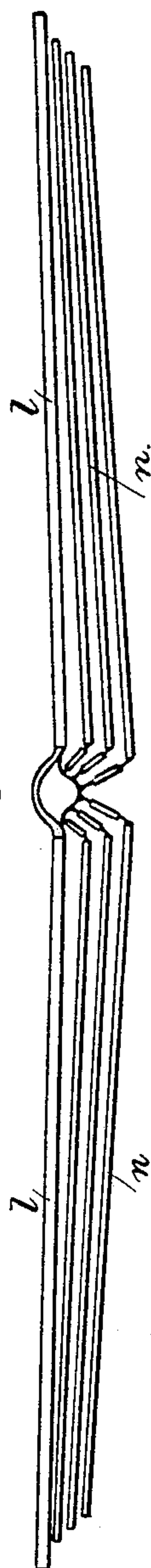


Fig. 4.

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UNITED STATES PATENT OFFICE.

JOSEPH I. BARNUM, OF NEW YORK, N. Y.

MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 272,938, dated February 27, 1883.

Application filed July 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH I. BARNUM, of the city of New York, in the State of New York, have invented an Improvement in Music-Leaf Turners, of which the following is a specification.

The object of this invention is to provide an attachment for pianos, organs, and similar instruments and music-stands, by means of which the music-leaves can be turned by the action of a pedal moved by the foot, so that the hands are kept free for playing upon the instrument, and the musician is not dependent upon any person for turning the sheets. I also place the sheet-music in a holder somewhat resembling a photograph-album, so that the sheet-music is supported and can be reliably turned by the turning of the album sheets or frames.

In the drawings, Figure 1 is a vertical section transversely of the music-holder. Fig. 2 is an elevation, with part of the base of the music-rack in section. Fig. 3 is a section in larger size of the sheet-holder and turning-arm. Fig. 4 is a plan of the book for holding the sheet-music. Fig. 5 is a horizontal section through one of the frames in larger size, and Fig. 6 is an elevation of a portion of a frame, and of the clamp for retaining the sheet of music within the frame.

The music-rack *a* and its base *b* are usually above the keys in the instrument. These are to be of any desirable or ordinary character.

Within the base *b* there is a shaft, *c*, which extends up through the bottom of the music-rack, and is provided with an arm, *c'*, with a spring, *d*, at the end. This shaft has around it a helical or other suitable spring, *e*, by means of which the shaft and arm are thrown around to the right, when not otherwise acted upon. This spring *e* is fastened at one end to one of the journal-bearings that sustain the shaft *c*, and the other end to the shaft itself, so that the spring is either coiled or uncoiled by the partial rotation of the shaft. Upon this shaft *c* is a grooved pulley, *f*, around which is passed a cord, *g*, the end of which cord is fastened to the pulley, and said cord is led over the sheave *h* down to a pedal or pedal-lever, so that when the foot is pressed upon such pedal the cord *g* is drawn down and the pulley *f* and shaft *c* are given nearly a half-revolution. As the

pedal is relieved the helical spring *e* turns the shaft and arm *c'* back to the normal position and winds up the cord partially upon such pulley.

A spring-plate, *f'*, rests against the periphery of the pulley *f*, to prevent the leaf-turner moving or being moved too suddenly, and also to prevent the cord from flying from the pulley.

The shaft *c* is not vertical, but at an inclination, the lower end of the shaft being to the right of a vertical line. This is done so that the arm *c'*, with its spring-finger, as it is moved around from the right to the left in turning the music-leaf, may draw down from the plane in which the music-sheets are swung, and thereby separate the finger *d* from the music-sheet, allowing such sheet to fall to the left as the arm *c'* goes back to position at the right, where the spring-finger again takes another music-holding sheet, ready for being turned at the next movement of the turner-pedal.

The book into which the sheet-music is placed is provided with covers *l l* and a flexible back, and to this flexible back the frames *n n* are connected by flexible material, such as muslin or leather. Each frame is of card-board or other light material, of a size as large as the sheet-music, and there are clamps by which to hold the sheet-music to the frame *n*. These clamps are of any convenient character. Those as shown at *o o* are made of wire, with helices near the ends, through which helices the wires or staples *r* pass, and the ends of the spring-wires and the ends of the wire staples are fastened to the frames, so that the wire clamps may be raised and the sheet *t* passed between the clamp and the frames *n*, and then the clamps at the top, bottom, and front edges of the sheet will hold the same to the frame, so that the sheets can be turned by swinging the frames from the right side over to the left in the book. I however prefer to use two of the card-board frames for each sheet of music, such music being placed between the said frames and the frames held together by swinging clamps or clip-pieces *a'*, of sheet metal, set over the edges of the frames, as seen in Figs. 5 and 6.

It is to be understood that the frames for the sheets are kept apart a slight distance by studs or stops *v*, so that there will be a space for the spring-latch *d* to pass up and catch

each sheet in succession, and a stop at t' is provided upon the arm which comes against the surface of the frame as the arm returns to the normal position at the right side of the book and below the outer sheet of unturned music.

It is to be understood that as each frame with the sheet-music is turned the stop t and spring-finger become separated from the under edge of the sheet-holding frame automatically, in consequence of the arm swinging in an inclined plane to the plane described by the leaves in being turned, the inclination of the shaft c effecting this movement.

There are to be studs or pins at b^2 upon the music-rack at each edge of the book-covers when open, so that the book will be held in its proper position relatively to the devices that turn the sheets.

I claim as my invention—

1. The combination, with the leaf-turning arm c' , of a shaft, c , supporting such arm, with

the lower end inclined to the right, so that the arm and sheet separate automatically, and a pulley, cord, and treadle, substantially as set forth.

2. The combination, in a music-leaf turner, of an inclined shaft, an arm with a stop and spring-latch, a pulley, a cord, and a treadle for moving the shaft, and a friction-plate, substantially as set forth.

3. The combination, with the music-turning arm, of a sheet-holding book having open card-board frames, a back to which the frames are fastened, and clamps to hold the sheet-music against the card-board frames, substantially as set forth.

Signed by me this 28th day of June, A. D. 1882.

JOS. I. BARNUM.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.