

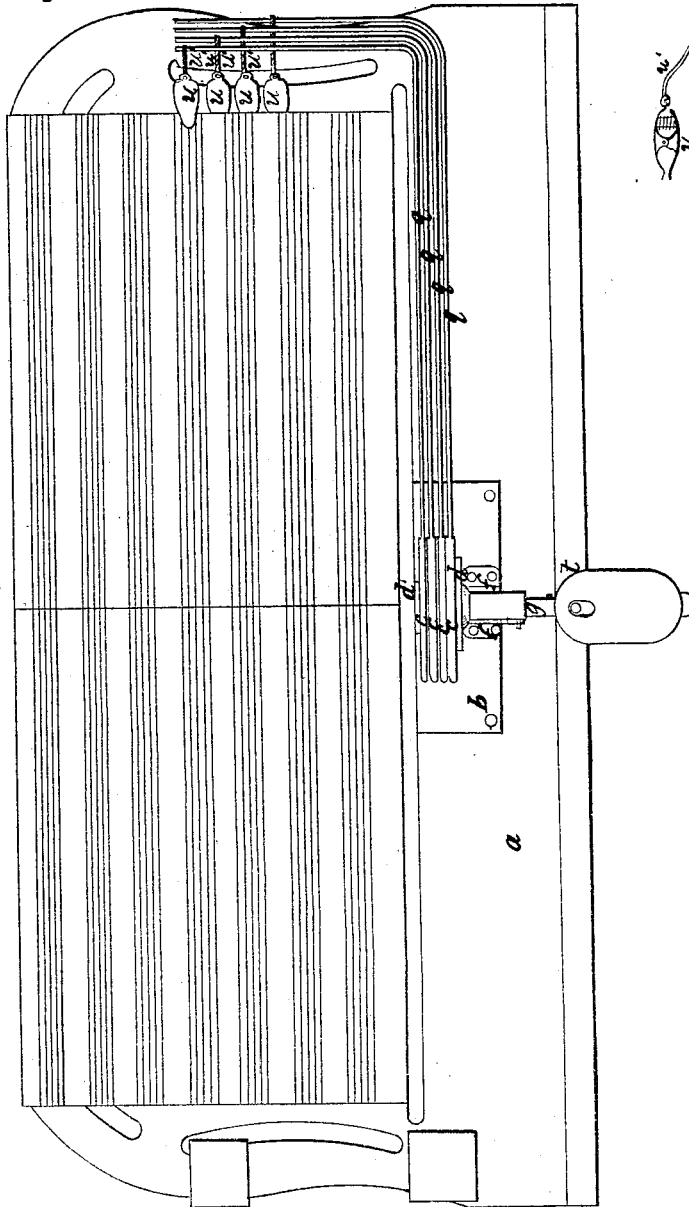
C. C. Clayn,

Music-Leaf Turner,

Nº 51,804.

Patented Jan. 2, 1866.

Fig. 1.



Witnesses

R. W. Morse

Jersey W. B. B. B.

Inventor

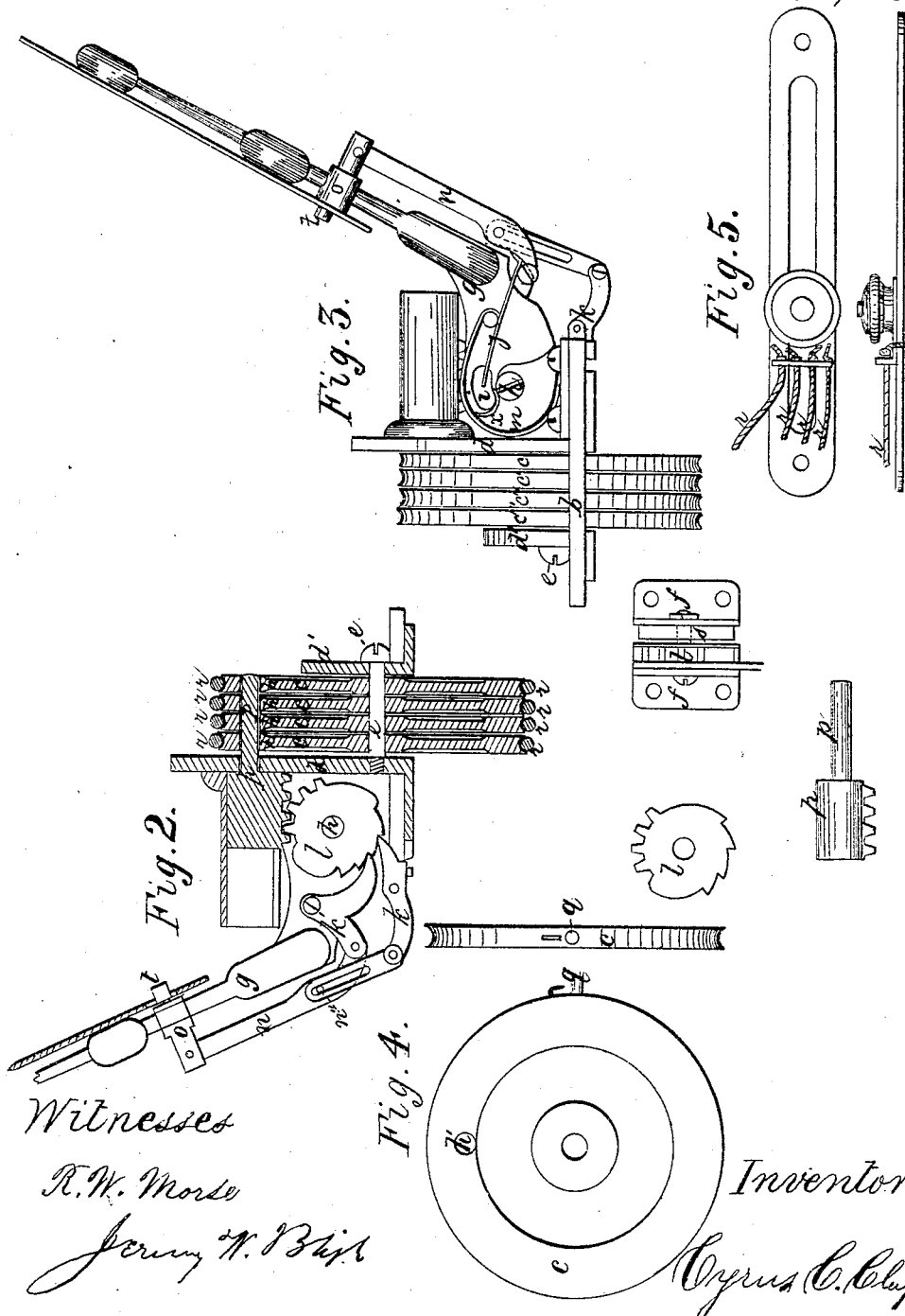
Cyrus C. Clapp

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UNITED STATES PATENT OFFICE.

CYRUS C. CLAPP, OF HARTFORD, CONNECTICUT.

BOOK-LEAF TURNER.

Specification forming part of Letters Patent No. 51,804, dated January 2, 1866.

To all whom it may concern:

Be it known that I, CYRUS C. CLAPP, of Hartford, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Devices or Instruments for Turning Leaves of Books; and I do hereby declare that the same is described and represented in the following specification and drawings; and to enable others skilled to make and use the same I will proceed to describe its construction and operation by referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this improvement will be understood from the specification and drawings. The object desired to be attained thereby is to provide suitable and efficient means or instrument for successively turning the leaves of a book automatically by the simple touch of a finger or foot upon a key or pedal attachment when desirable.

Figure 1 is a face view of the instrument as presented when placed upon a piano-forte or table. Fig. 2 is a side view of the mechanism, partly in section. Fig. 3 is a view of the same from the opposite side. Fig. 4 is a side and edge view of one of the fly-wheels. Fig. 5 is a side and edge view of the device secured upon the back of the instrument for holding and adjusting the tension of the elastic cord, which consists of a slitted plate secured to the back of the frame-work, having a sliding bracket, (to which the ends of the cords are secured,) which works back and forth thereon to tighten or slacken said cords, as desirable, and secured in place by a bolt and set-nut.

a is the frame-work.

b is the plate to which the mechanism is secured and held in place upon the frame-work.

c are grooved wheels secured between the studs *d d'* by a screw or pin, *e*.

f f are studs placed upon the plate *b* at right angles with the studs *d*, between which the key-lever *g*, with its appendage, is secured by a pin or screws, *h*.

i is a detent or stop firmly attached to the lever *g*, which, in connection with the fixed shoulder or edge of the stud *f*, with which it comes in contact, serves to limit the upward motion of the key-lever *g*. The detent *i* also

serves to secure a spring, *y*, the office of which is to keep the pawl *k'* against the ratchet and gear wheel *l*.

m is a spring for lifting and holding the key *g* up in its proper position for use after the turning of a leaf.

o is a stud secured to the end of the arm *n*, end *t* of which works in a slot in the key.

k k' are pawls which work into teeth or notches of the ratchet-wheel *l*, one of which, *k'*, is connected to the lower end of the arm *n*, and the other, *k*, has a slitted link, *n'*, secured to its lower end, and its slit works upon the pin *n''* of the arm *n*, so that when the lever *g* is depressed it acts upon the pawl *k'* (by means of the stud *o* and arm *n*) to move the wheel *l* just enough to draw the rack-pin *p* from one of the wheels *c*, which allow it (the wheel *c*) to be turned with its arm *q* about a half-revolution from right to left by the action of the cord *r*, and repeated successively till the pin *p* is withdrawn from all of the holes *h'* in the wheels *c*. Then by replacing the arms *q* back from left to right, and lifting the lever *g* up, so that the detent *i* will strike against the edge of the stud *f*, and pulling back the end of the stud-pin *t*, which works in the slot in the key, the arm *n* will, by means of the pin *n''*, (working in the slotted link *n'*), draw both of the pawls *k k'* out free of the notches in the ratchet-wheel *l* and allow the pin *p* to be thrown back into the holes *h'* of the wheels *c* by the action of a coil-spring, *s*, or its equivalent, in readiness for a new action. Said spring *s* is made in the form of a watch-spring, one end of which is secured to the stud *f* and the other end to the wheel *l* in such a manner that after the pawls *k k'* have moved the said wheel *l* two or more teeth in one direction, and then been withdrawn, the spring *s* will react or throw back the wheel *l*, with the pin *p*, into the hole *h'*, as before stated. Thus by means of the spring-clips *u*, properly secured to the ends of the arms *q* by means of cords *u'*, or otherwise, and grasping the outer edge of the leaf of the book, they will be turned successively and quickly by a simple touch of the finger (or pedal arrangement) upon the key.

I believe I have thus shown the nature,

construction, and operation of this improvement, so as to enable others skilled to make and use the same therefrom.

What I claim, therefore, and desire to secure by Letters Patent, is—

The combination of the rotating wheels *c*, rack-pin and wheels *p l*, key *g*, and elastic

cords *r*, with proper connections for operating the same, substantially in the manner as and for the purpose described.

CYRUS C. CLAPP. [L. S.]

Witnesses:

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JERMY W. BLISS.