

(No Model.)

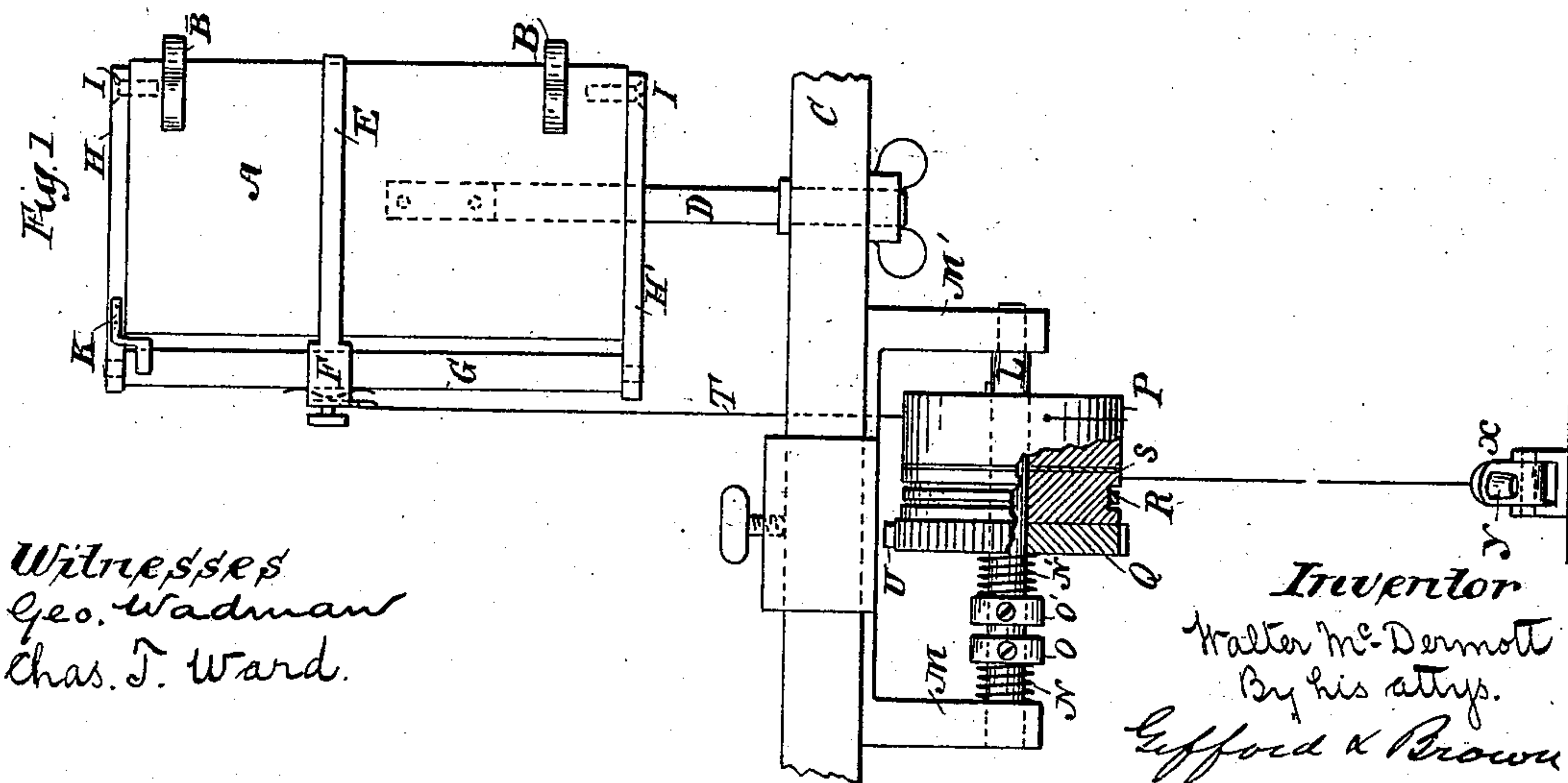
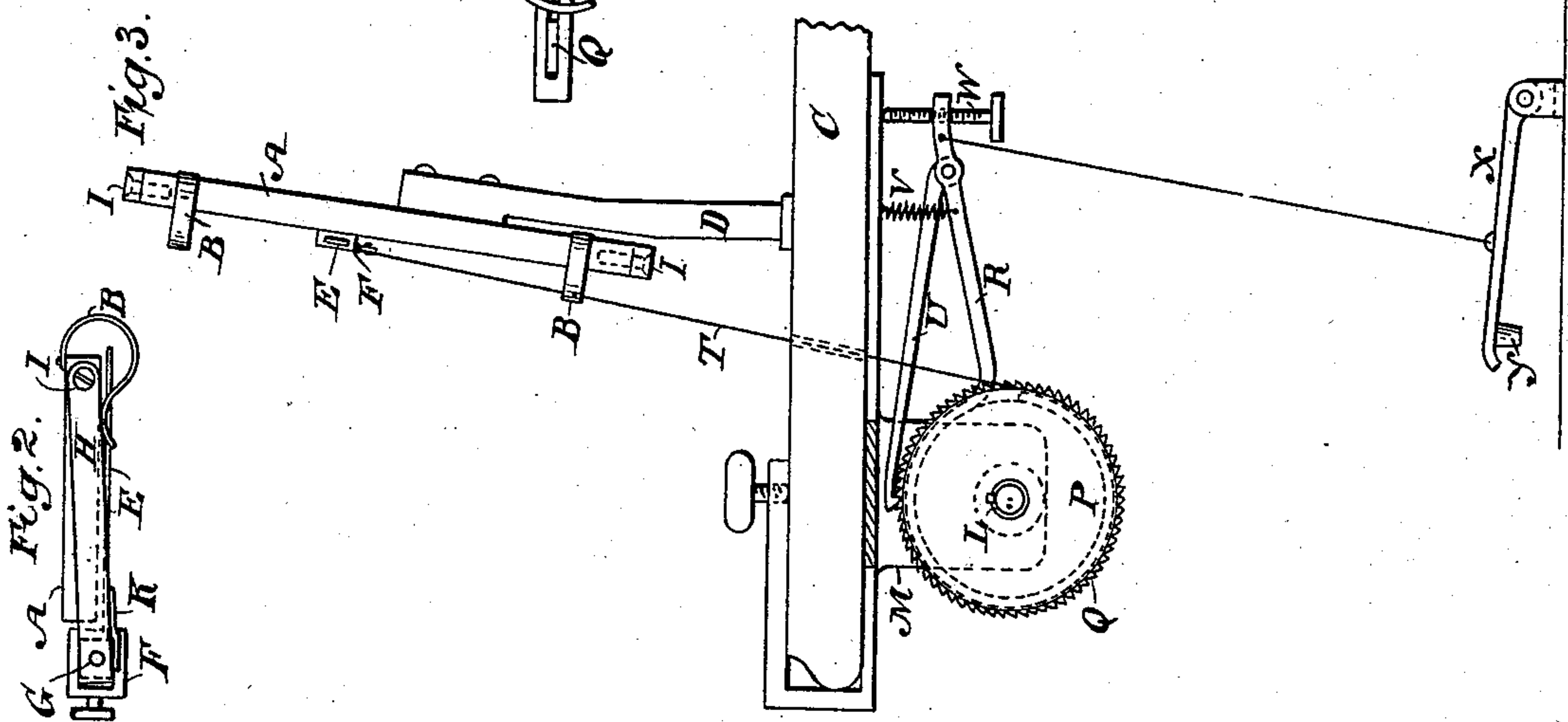
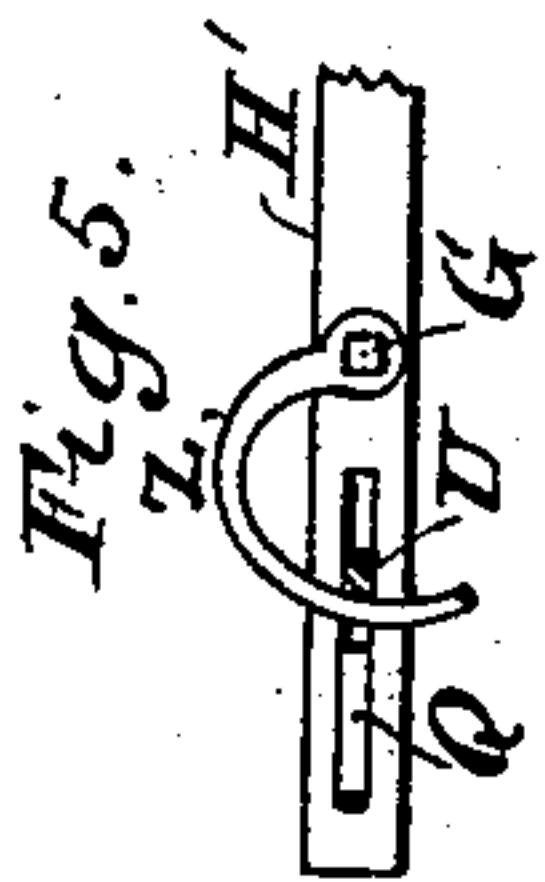
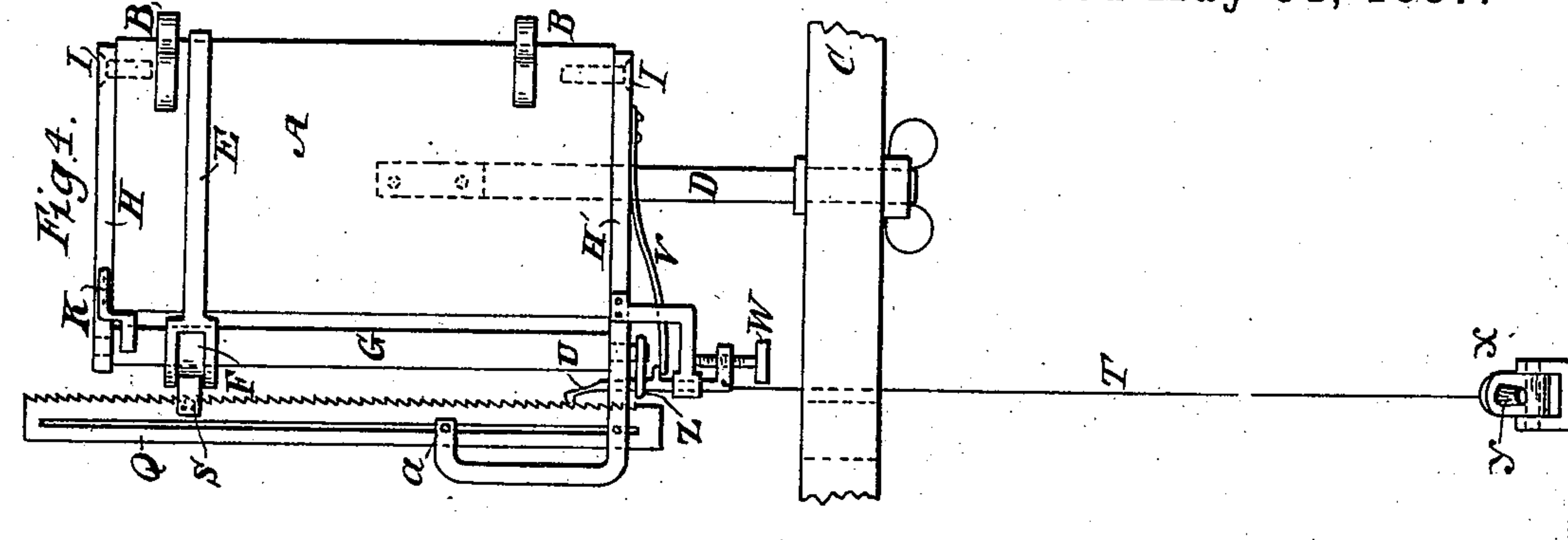
2 Sheets—Sheet 1.

W. McDERMOTT.

ATTACHMENT FOR TYPE WRITERS, &c.

No. 363,903.

Patented May 31, 1887.



Witnesses  
Geo. Wadman  
Chas. T. Ward.

20  
 Inventor  
 Walter Mc-Dermott  
 By his attys.  
 Efford & Brown

(No Model.)

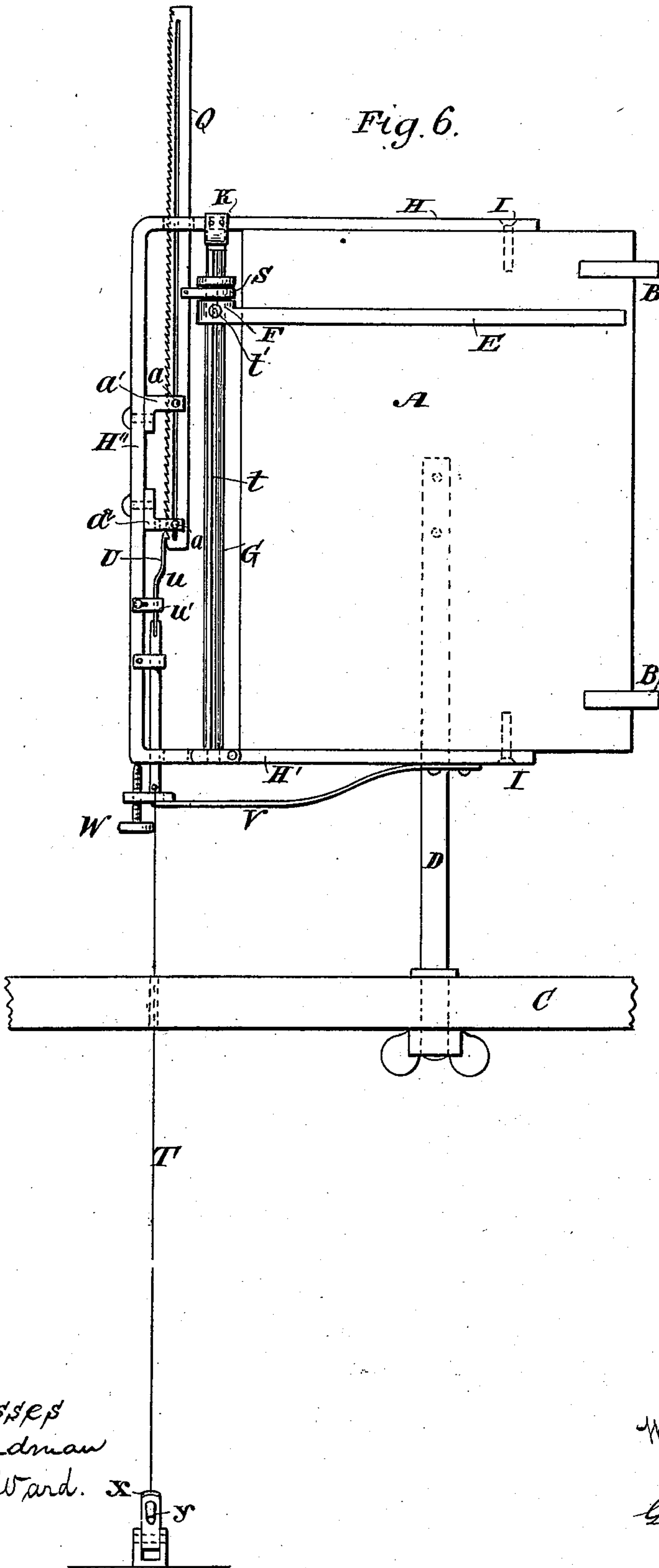
2 Sheets—Sheet 2.

W. McDERMOTT.

ATTACHMENT FOR TYPE WRITERS, &c.

No. 363,903.

Patented May 31, 1887.



Witnesses  
Geo. Wadman  
Chas. J. Ward.

*Inventor*  
Walter Mc Dermott  
By his atty.  
Lufford & Brown



# UNITED STATES PATENT OFFICE

WALTER McDERMOTT, OF MORRISTOWN, NEW JERSEY.

## ATTACHMENT FOR TYPE-WRITERS, &c.

SPECIFICATION forming part of Letters Patent No. 363,903, dated May 31, 1887.

Application filed January 25, 1887. Serial No. 225,418. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER McDERMOTT, of Morristown, New Jersey, have invented a new and useful Attachment for Type-Writers or Transcribing-Instruments, of which the following is a specification.

This invention relates to a device for holding the stenographic notes or the copy from which an operator of a type-writing machine is transcribing the contents.

It consists of mechanism for moving an indicator-mark down the notes or copy as the work progresses without necessitating the removal of the operator's hands from his keyboard.

The invention would be equally applicable in any work other than type-writing in which the operator's hands are in constant use and a movable indicator on the copy of service.

In the accompanying drawings, Figure 1 is a front view, partly in section, of the mechanism embodying my improvement, with sufficient of the type-writer table to show its support. Fig. 2 is a top view of the stand for holding the copy. Fig. 3 is a side view of the same. Fig. 4 is a front view of a modification. Fig. 5 is a detail view showing the under side of the cam-arm Z and some other adjacent parts. Fig. 6 is a front view of a second modification.

A is a small stand or desk, on which the paper or book to be copied is held by suitable clamp-springs, B B. This stand is carried on a short upright, D, attached to the table C of the type-writing machine.

E is a narrow strip of thin spring steel, which constitutes the movable marker, to show the line from which the operator is copying. This marker E is attached to a nut, F, which slides with slight friction up and down the square rod G. The guide-rod G is turned off at its two ends and pivoted in sliding bars H H', which are each pivoted at their other ends by screws I I into the ends of stand A. This arrangement permits of the guide-rod G being swung above the upper face of stand A, as shown in end view, Fig. 2, and thus allowing the placing of a stenographer's note-book under the marker E, or of pressing the same down upon a single sheet of paper, if placed on stand A. To keep the rod G from turning and throwing marker E away from the copy, a small

bent spring, K, is fastened on one of the sliding bars, H, so as to press on the flat side of G and hold it in the same position relatively to rods H H'. This spring K permits, however, the turning over of rod G and marker E by a little pressure, to allow of the placing of copy on A or of turning over a leaf.

The motion of the marker E may be given from mechanism shown in Figs. 1 and 3, or the modification shown in Fig. 4, placed under or upon the table C of the type-writer. The first form of this mechanism consists of a shaft, L, which turns in bearings M M'. The end of shaft in bearing M' is turned down to give a shoulder against the inside of bearing; or a collar may be used, and the shaft is kept with a slight pressure against this shoulder or collar by a spring-washer, N, between bearing M and adjustable collar O. This is to prevent too great a freedom of revolution by the shaft and to limit its motion to that intentionally imparted to it, as hereinafter described.

P is a small winding-drum, on which the cord T is attached to draw down the marker E. This drum P is keyed firmly onto shaft L.

Q is a fine-toothed ratchet-wheel operated by lever R and pawl U. This ratchet is on one edge of a grooved drum, which supports the lever R and presses on the other side with a friction-surface against winding-drum P. Between the two drums a sheet of thin rubber, S, can be placed, if required, to increase the friction of their surfaces. The pressure of the friction-surfaces is regulated by spring-washer N' and adjustable collar O'.

The lever R is held in position by spring V against adjusting-bolt W, and is operated by treadle X. This treadle is supplied on its lower side with a spring-buffer, Y, which regulates the extent of motion downward of the treadle, but allows a little margin on this motion, at the discretion of the operator, from the compressibility of the rubber stop, and for the purpose hereinafter described.

The operation of the mechanism is as follows: The stenographic notes or sheets to be copied are clamped on the stand A, which is so situated as to be conveniently in front of the operator. The marker E is then pushed up the rod G to the top of the page, and turned down on the same just under the first line to be copied. The pressure of marker E on the copy



is regulated by moving pivoted bars H up or down on their pivots. The operator, on reaching the end of the first line, presses with his foot on treadle X till spring-buffer Y lightly touches the floor. The motion of the treadle is communicated to winding-drum P by means of ratchet-wheel and pawl U and the friction-surface S, which is regulated by pressure of spring-washer N', so as to move the marker E by winding the cord T. On removing the foot from treadle X the latter is raised by the spring V, and the pawl U moves back on the ratchet-wheel, ready for the next movement. If the motion of marker E is more or less than the distance between the lines of the copy, it is regulated by the adjusting-screw W on lever R until at each pressure on the treadle it moves exactly one line down the page. In case of the lines being somewhat irregular in their intervals, the elastic buffer Y allows of a little greater or less motion of the treadle downward, at the discretion of the operator, guided by the eye. The purpose of the spring-washer N is to prevent any back revolution of the winding-drum on raising the lever R. When the marker E has reached the bottom of the page to be copied, it is turned up at right angles to the desk A, where it is held by spring K while the page is turned or a fresh sheet placed on A. The marker is then pushed up the rod G by using sufficient force to overcome the friction-surfaces of winding-drum P and ratchet-wheel Q, and is then turned down on the new sheet at the top, ready for operation.

The advantages of this invention consist in the greater ease and speed with which an operator will copy from stenographic notes or ordinary writing when the same is held conveniently before him and his place is constantly marked. In type-writing, as in ordinary copying, much time is lost by the operator bending away from his work to look at copy and in finding on it the word to be next copied, then turning again to his work. With my invention an operator need not bend away from his work at all, nor remove his hands from his work, except to turn over the pages of his copy as completed, for the latter is held conveniently before him and his place indicated distinctly by the marker. The treadle X can be placed so as to be operated by motion of the operator's knee, if required; but I prefer to arrange it for the foot. A friction-wheel can also be used in place of the ratchet-wheel, if preferred.

A modification of the mechanism is shown in Figs. 4 and 5, which dispenses with the winding-drum and substitutes a rack-and-pawl motion actuated directly from the treadle. Similar letters describe the same or equivalent parts, as in the preceding description. The pawl U works a vertical rack, Q, which has near its upper end a lug, S, fitting into a groove in the sliding guide F of marker E. The groove in guide-nut F is made round or half-round, so that in turning up E at right an-

gles to desk A the lug S is still engaged in the groove. The pawl U is kept in its position of rest by spring V, attached firmly to H', so that on pulling down on cord T by treadle X and releasing the latter again the pawl U is raised by tension of spring V as far as the regulating-bolt W will permit. Z is a cam-shaped arm, which is attached to the extended end of guide-rod G in such a manner that when marker E is down on the desk A the pawl U engages the teeth of rack Q; but on turning the marker E, and with it guide-rod G, the cam-arm Z draws back the pawl from the rack-teeth, and so permits the marker and rack to be pushed up to the top of the desk A. The rack Q is held in vertical position and guided in its motion by slots in H' and pins a, which pass through a slot lengthwise of the rack Q.

The modification shown in Fig. 6 is in many respects similar to that last described. The bars H H', however, are connected by the yoke H'', a slot being cut in H, through which the rack Q extends upward. The brackets a' a<sup>2</sup> support the rack, which is free to reciprocate by means of the pin-and-slot connections a a. The rod G, instead of being square, is round, and provided with a slot, t, in which the set-screw t' of the hub F slides. The provision for disengaging the pawl U from its rack is made by forming on it an inclined shoulder, u, which will deflect the pawl backward when it strikes the guide u'. The parts are so adjusted, however, that this will not occur, excepting the treadle be very firmly depressed, so as to compress the buffer Y to a maximum extent. This pressure will not be exerted by the operator, excepting when it becomes necessary to push the marker upward on the page.

The same advantages in the use of treadle X with a rubber stop apply to this mechanism as to that already described—viz., the regular movement of the marker equal distances by simple pressure of the foot of the operator till the stop is felt, and yet sufficient give in this stop to allow of a slight variation in the extent of motion with any irregularity in the distances apart of the lines to be copied.

I do not desire to limit myself to the particular mechanism which I have described, as I am aware that other forms of mechanism might be substituted for the treadle and for the mechanisms which I have shown for conveying the motion of the treadle to the marker.

Having described my invention and its manner of working, what I claim as new, and wish to secure by Letters Patent, is—

1. In combination, the copyist's desk, the rotative and sliding marker E, the spring K, whereby the rotation of the marker is controlled, the treadle, and the rack or ratchet and pawl, whereby the operation of the treadle moves the marker, substantially as described.

2. The combination of oscillating supports H H' with guide-rod G and marker E, substantially as and for the purpose specified.

3. The combination of treadle X and elastic



buffer Y with the movable marker E, substantially as and for the purpose specified.

4. The combination of lever R and stop-bolt W with ratchet-wheel Q and friction-drum P, substantially as and for the purpose specified.

5. The combination of collars O and O' with shaft L and spring-washers N and N', substantially as and for the purpose specified.

6. The combination of rack Q, marker E, pawl U, and cam-arm Z, substantially as and for the purpose specified.

7. In combination, the copyist's desk, the sliding marker E, the reciprocating pawl U, whereby the marker is actuated, mechanism, substantially as described, whereby the pawl is moved by the copyist in one direction, and a spring, V, whereby the pawl is moved in the opposite direction.

8. In combination, the copyist's desk, the sliding marker E, the reciprocating pawl U, the ratchet-teeth engaging with the pawl, the

set-screw W, by which the extent of motion of the pawl is controlled, mechanism, substantially as described, whereby the copyist may move the pawl in one direction, and the spring, whereby the pawl is moved in the opposite direction, substantially as described.

9. In combination, the copyist's desk, the sliding marker E, journaled to its support, whereby it may be raised or lowered from the desk, the treadle, and the rack or ratchet and pawl, whereby the operation of the treadle moves the marker, substantially as described.

10. In combination, the copyist's desk, the revoluble marker E, connected with the extremities of the arms H H' by suitable mechanism, as the rod G, the said arms being journaled to the frame, substantially as described.

WALTER McDERMOTT.

Witnesses:

D. H. DRISCOLL,  
CHAS. T. WARD.