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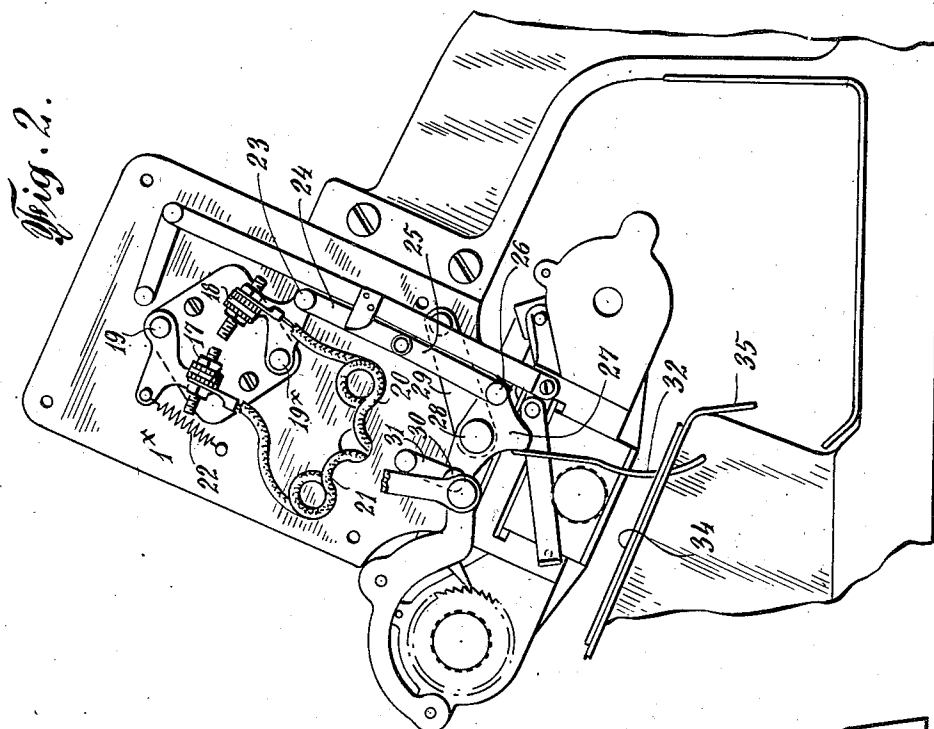
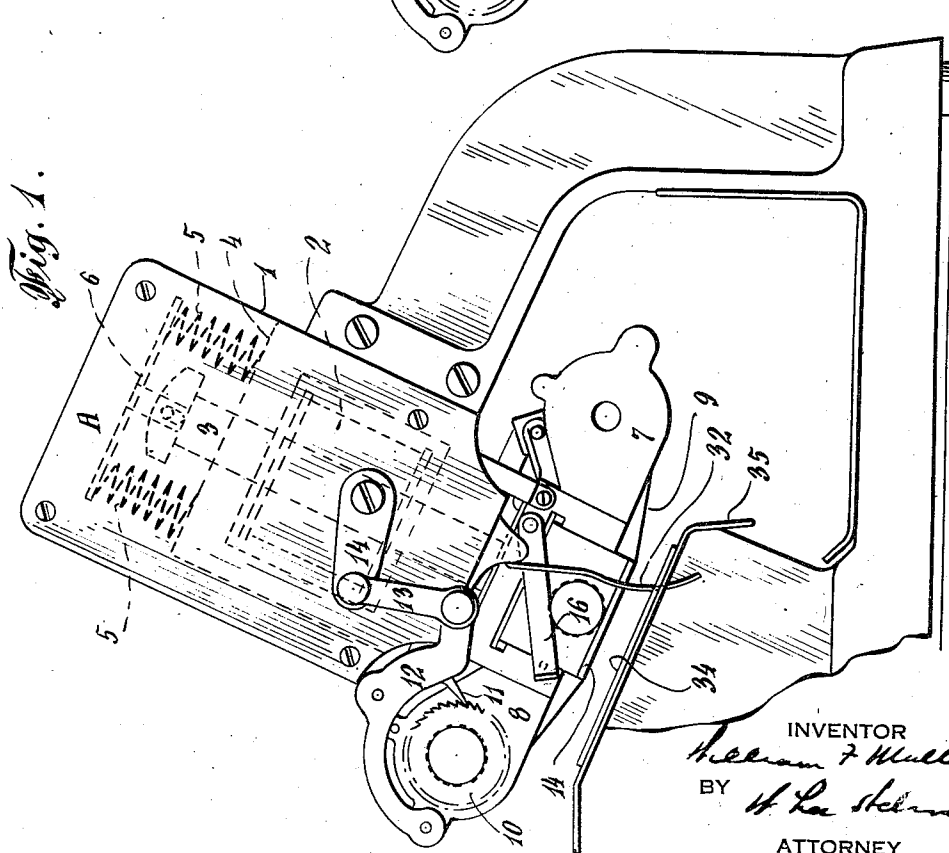
W. F. MULLER

2,185,797

ELECTRICAL ENDORSING MACHINE

Filed May 2, 1938

2 Sheets-Sheet 1



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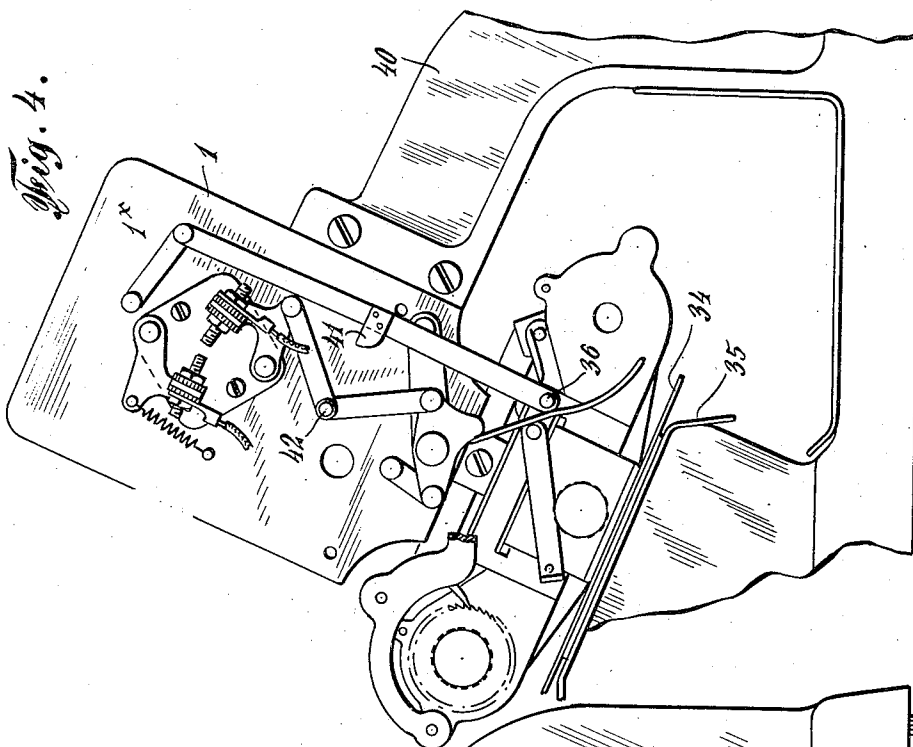
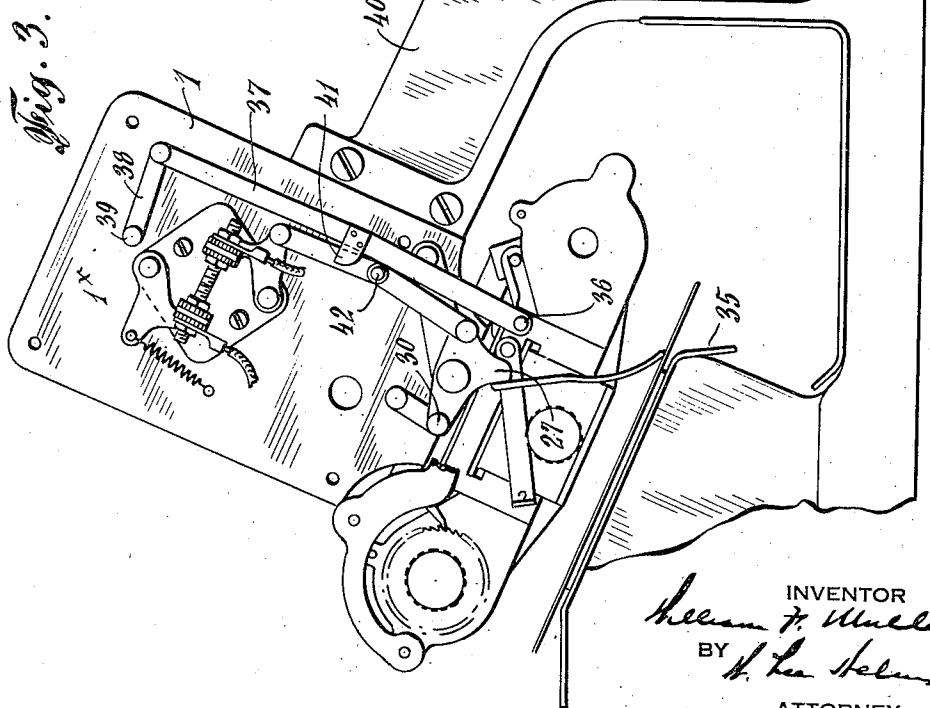
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ELECTRICAL ENDORSING MACHINE

Filed May 2, 1938

2 Sheets-Sheet 2



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2,185,797

ELECTRICAL ENDORSING MACHINE

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Application May 2, 1938, Serial No. 205,454

1 Claim. (Cl. 101—318)

The object of the present invention is to provide a machine for stamping endorsements upon checks, commercial paper, and the like.

A specific object of the invention is to provide a novel type of switch mechanism adapted to be actuated by the paper as it is moved under a printing carriage, whereupon the carriage descends, stamps the endorsement, and is immediately released through breaking of the circuit.

The invention will be described with reference to the accompanying drawings, in which

Fig. 1 is a view in side elevation of an embodiment of the invention, partly broken away.

Fig. 2 is a view similar to Fig. 1, showing a side plate of the machine removed so as to expose the elements of the switch mechanism, the view showing the parts prior to closing the switch.

Fig. 3 is a view similar to Fig. 2, showing the switch closed, the switch mechanism having been thrown by the placing of a paper sheet in the printing carriage.

Fig. 4 is a view similar to Fig. 3, showing the elements in the position at the end of a downward movement of the printing carriage, the switch being broken preliminary to rise of the printing carriage.

In the drawings, I have shown casing 1 enclosing a solenoid mechanism including a field 2 and a core rod 3. Resting upon a flat surface 4 are a plurality of springs 5 which engage a plate 6 connected to the top of the solenoid core, the latter projecting above surface 4, the springs acting to normally maintain the core rod in uppermost position.

The solenoid core rod carries a printing carriage comprising the holders 7 and 8 for a ribbon spool, the ribbon being indicated at 9 and at 10 I have indicated a ratchet wheel engaged by a pawl 11 carried by a lever 12 having connection by link 13 with a fixed arm 14 secured to casing 1. In this manner, a ribbon spool may be rotated by intermittent motion as the printing carriage descends and rises.

At 15, I have indicated a printing frame which will carry a printing plate 14, the printing frame being held in position by a spring clip 16.

The construction of the printing frame and the ribbon feeding means form no part of the present invention and are merely diagrammatically shown.

The solenoid actuating means, together with core rod 3 lies under a lateral wall 1x of the casing, said wall normally being covered by a plate A. Under the plate and carried by wall 1x

are certain switch and switch operating elements now to be described.

A contact member 17 and a contact member 18, pivoted respectively at 19 and 19x, are electrically connected to a source of electrical energy and are connected by wires 20 and 21 with the solenoid field 2. Contact member 17 is spring yielding, being carried by an arm engaged by inner springs 22. Contact member 18 is carried by an arm pivotally connected at 23 with toggle links 24 and 25, toggle link 25 being pivoted at 26 to a rock lever 27. The rock lever 27 is pivoted at 28 to a swinging carrying arm 29 and is pivoted at 30 to a swinging carrying arm 31. Rock lever 27 has depending therefrom a light arm 32 which lies in the path of the paper to be placed on platen 34 for endorsement by the printing plate 14. For example, the platen 34 may be cut away or slotted to receive arm 32 as indicated in Figs. 1 and 2 of the drawings inasmuch as the drawings show the end of arm 32 projecting below platen 34 and its supporting metal plate 35.

In the operation of the device, the parts will initially lie in the position illustrated in Figs. 1 and 2 wherein the contact members 17 and 18 are separated. When a sheet is moved across the surface of the platen toward the supporting arm 40 for casing 1, the sheet will strike arm 32 and will move it rearwardly, the arm in such manner raising rock arm 27 on pivotal point 30 as a fulcrum and the toggle links, being straight, will be moved upwardly to impart a swinging movement to contact member 18 to bring its point against the point of contact member 17 and establishing the circuit.

When the circuit through the solenoid field is established, as above set forth, core rod 3 will be moved downwardly against the action of springs 5, carrying with it the printing carriage and the paper will be stamped.

The switch release mechanism is as follows:

Connected at 36 to the printing carriage is switch release arm 37, the arm 37 at its upper end being connected to a swinging arm 38 pivoted at 39 upon wall 1x of the casing 1. Secured to arm 37 is a finger 41 which normally lies above pivoted stud 42 of the toggle. When the printing carriage is moved downward from the position illustrated in Fig. 3 the position illustrated in Fig. 4, finger 41 strikes stud 42 and breaks the toggle, thus moving the arm of switch member 18 to the position illustrated in Fig. 4.

Inasmuch as the action of the downward throw of the printing carriage is a short and rapid

stroke immediately followed by an upward movement which releases the paper sheet, enabling it to be pushed rearwardly out of range of arm 32, the latter and lever 27 drops downwardly through gravity and restores the toggle to a straight position as shown in Fig. 2.

Having described my invention, what I claim, and desire to secure by Letters Patent, is as follows, it being understood that various modifications may be made in the form and arrangement of the elements illustrated in the drawings, without departing from the spirit of the invention.

In a machine of the character described and in combination with a standard, a reciprocal printing carriage movable into and out of printing position and electrical means for imparting reciprocation thereto supported by said standard,

of a circuit, and circuit making and breaking means comprising a pair of contacts normally held in spaced relation, one of said contacts being pivotally mounted, a pair of toggle links connected to said pivotally mounted contact, an actuating lever pivoted to the standard and pivotally connected to said pair of toggle links, a finger lying in front of the printing carriage and adapted, upon movement, to actuate the lever and toggle links to close the contacts, and a cam device operatively connected to the carriage and adapted to strike the toggle links and break the same for separating the contacts in the movement of the carriage toward final printing position.

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