Dec. 22, 1925. 1,566,287

J. A. B. SMITH

TYPEWRITING MACHINE

Filed May 27, 1924

Fig. 1.

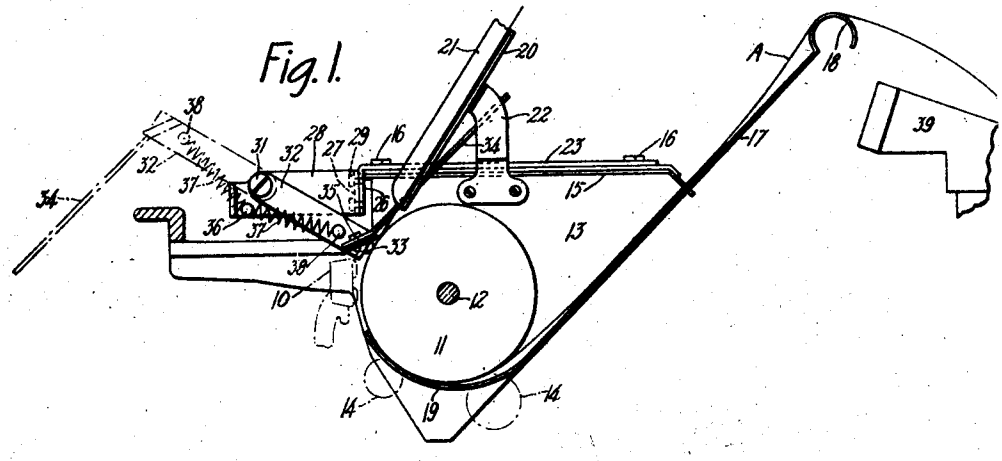
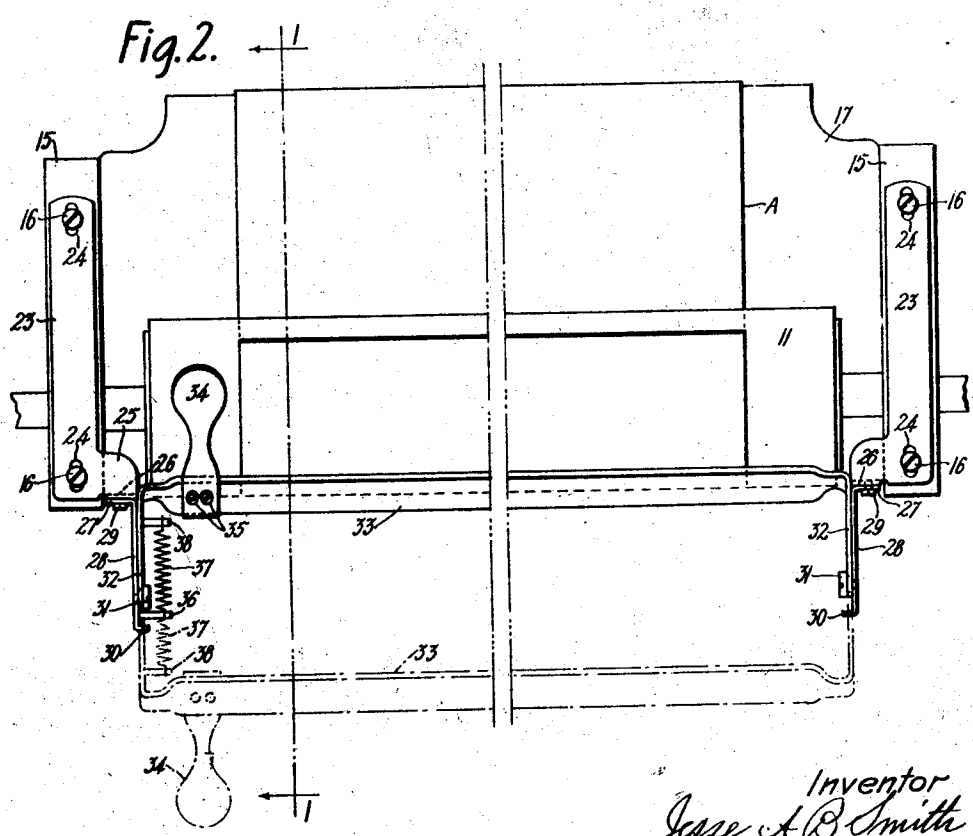


Fig. 2.



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Patented Dec. 22, 1925. 1,566,287

UNITED STATES PATENT OFFICE.

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TYPEWRITING MACHINE.

Application filed May 27, 1924. Serial No. 716,100.

To all whom it may concern:

Be it known that I, JESSE A. B. SMITH, a citizen of the United States, residing in Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Typewriting Machines, of which the following is a specification.

This invention relates to typewriting machines, and more particularly to attachments which may be applied to typewriting machines using a continuous work-sheet or web of paper. Such webs may be proivded in the form of rolls, or folded zigzag to rest in a receptacle below or at the rear of the machine, and may consist of printed forms, upon which certain accounting is to be typed, the web being thereafter severed to produce individual sheets as required.

To this purpose the attachment is provided with a knife co-extensive with the length of the platen, and so pivoted that it may be oscillated into operative position with respect to the web and platen, or swung into an inoperative position, in which it avoids obscuring the accounting as it is typed.

In a more general way the invention relates to combined typewriting and computing machines, in which a set of jacks is usually operated by selectors controlled from the keyboard in making computations, as disclosed in Patent No. 1,237,895 granted to William L. Gumprecht, August 21, 1917. The web-severing knife is placed at the upper front side of the platen, where incidentally it covers up a portion of the work-sheet. It is found that where it becomes necessary for the typist to refer to the typed amounts on the work-sheet, for the purpose of making corresponding subsequent entries in or subtractions from the computing registers, it sometimes happens that the web-severing knife covers up the amounts on the work-sheet that the typist needs to copy. This difficulty is overcome by mounting the knife on arms to swing it forwardly, to uncover the typed part of the work-sheet, the arms swinging the knife bodily forwardly away from the platen and the usual collating table at the front of the platen.

Another feature is to provide means whereby the knife is held relatively rigid in either of its two positions, its operative position permitting the portion of the work-sheet or web extended above the platen to be normally grasped and severed by drawing it across the extended edge of the knife, held spring-pressed thereagainst, the knife, when turned to a position of rest, having its edge reversed to extend downwardly, avoiding inadvertent injury to an operator and presenting no impediment to a view of the work.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a transverse sectional view, taken on line 1—1 of Figure 2, of the platen-carrying frame showing the application of the knife.

Figure 2 is a top plan view of the same, only such parts of the typewriting machine appearing as are necessary to disclose the invention.

In the drawing the numeral 10 designates one of the usual machine types, shown in dot-and-dash lines, as being in a raised position, adjacent the face of a cylindrical platen 11, mounted on an axle 12 which is journaled in the platen-frame sides 13. This platen is provided with the usual feed-rolls 14, and with the customary line-spacing devices and means for manual rotation, not shown. The upper edges of the plates 13, constituting the platen frame, are flanged as at 15, and provided with screws 16 as common.

A paper-guide 17 is formed with the roll beading 18 at its upper edge, against which the work-sheet or web A makes contact, the front of the guide being curved as at 19 to suit the circumference of the platen 11. The upper edge of the sheet A is prevented from bending excessively rearwardly after leaving the platen by a collating table 20 having raised side edges 21 and supported by brackets 22 in the usual manner; the computing device being partially shown at the rear and generically designated by the numeral 39. A pair of plate-brackets 23 are provided with slots 24 through which the screws 16 pass to clamp the brackets adjustably in position on the flanges 15. At the forward ends of the brackets 23 are lateral inreaching extensions 25 bent at right angles downwardly, affording seats 26 for the feet 27 of a pair of outstanding supports 28 held by screws 29 and disposed horizontally outward, their lower edges being substantially

level with the uppermost peripheral part of the platen 11, and the extreme forward ends of the supports 28 are formed to present inturned lugs 30, for a purpose presently to appear.

Set in the inner sides of the supports 28, near their outer ends, are screw-threaded, shouldered studs 31, upon which are pivotally mounted parallel arms 32 formed on a knife 33, which extends substantially across the entire length of the platen 11. A handle 34 of appropriate form to clear the collating table 20 and its supports, and also the front rail of the platen-frame, is secured by screws 35 to one end of the knife 33, and by which it may be swung on the pivot studs 31.

A pin 36 is fastened in the outer end of one of the supports 28 at its extreme lower edge, near the lug 30, the pin having attached to it one end of a coiled tension spring 37, the other end of the spring engaging a pin 38 fastened in the adjacent arm of the knife, this spring normally tending to draw the sharply beveled cutting edge of the knife 33 against the outer surface of the paper or work-sheet A. The edge is presented in a plane tangential to the platen, so that the knife will clear the type 10 and permit the sheet to be grasped and severed by drawing it across the length of the knife-blade.

By operating the handle 34, the knife, by reason of its arms 32, may be pivoted on the studs 31, the arms 32 finally making contact with the upper edges of the lugs 30, holding the knife in a reversed position, out of the line of vision, as directed to the plane of printing contact on the platen.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. In a typewriting machine, the combination with a platen-frame, and a platen revoluble therein, of forwardly extending brackets attached to the ends of said frame, means for independently adjusting each bracket, a knife extending coincidentally in length with the platen, arms on said knife pivoted to the brackets, and a handle on said knife whereby it may be swung into operative position against said platen or swung outwardly therefrom.

2. In a typewriting machine, the combination with a platen-frame, and a platen revoluble therein, of forwardly extending brackets attached to the ends of said frame, means for independently adjusting each bracket, a knife extending coincidentally in length with the platen, arms on said knife pivoted to the brackets, a handle fixed on said knife to swing it into or out of operative position with respect to said platen, and a stop on the brackets defining the inoperative position of the knife.

3. In a combined typewriting and computing machine, the combination with a platen-frame and a cylindrical platen revoluble therein, of brackets attached to the ends of said frame and limitedly lengthwise adjustable thereon, supports fixed to the forward ends of said brackets to extend forwardly in a horizontal plane, a knife having arms bent at right angles to extend between the supports and being pivotally engaged therewith, said knife having an angular cutting edge to contact with the platen when in operative position, a handle for swinging the knife into operative or inoperative position, and stops on the supports defining the inoperative position of said knife.

4. In a combined typewriting and computing machine, the combination with a platen-frame and a cylindrical platen revoluble therein, of brackets attached to the ends of said frame and limitedly lengthwise adjustable thereon, supports fixed to the forward ends of said brackets to extend forwardly in a horizontal plane, a knife having arms bent at right angles to extend between the supports and being pivotally engaged therewith, said knife having an angular cutting edge to contact with the platen when in operative position, a handle for swinging the knife into operative or inoperative position, stops on the supports defining the inoperative position of the knife, and a spring for maintaining the knife in either of its adjusted positions.

5. In a combined typewriting and computing machine, the combination with a platen-frame and a cylindrical platen revoluble therein, of brackets attached to the ends of said frame, a knife having forwardly extending arms pivotally mounted in the brackets, said knife being coincident in length with the platen and swung in a plane parallel thereto, said knife presenting its cutting edge against the platen at a tangent thereto and above the path of type used in the machine when in effective position, a handle for actuating the knife, a stop for said arms defining the ineffective position of the knife and maintaining it out of the plane of vision of type impact, and a single spring to hold said knife in either its operative or inoperative position.

JESSE A. B. SMITH.