O. THIEME.

PLATEN FOR WRITING MACHINES.

APPLICATION FILED DEC. 28, 1911.

1,170,708.

Patented Feb. 8, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

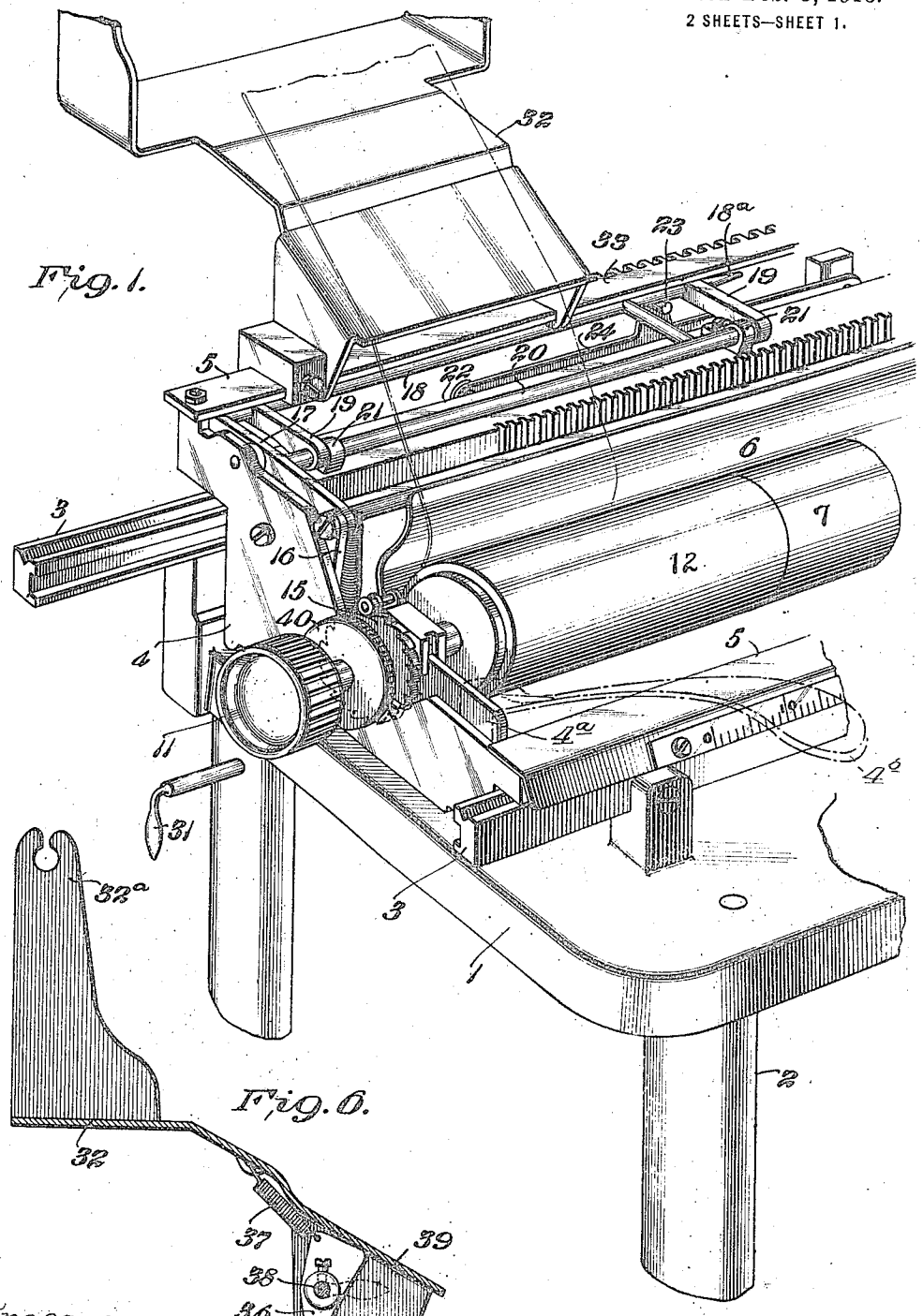


Fig. 6.

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2 SHEETS—SHEET 2.

Fig. 2.

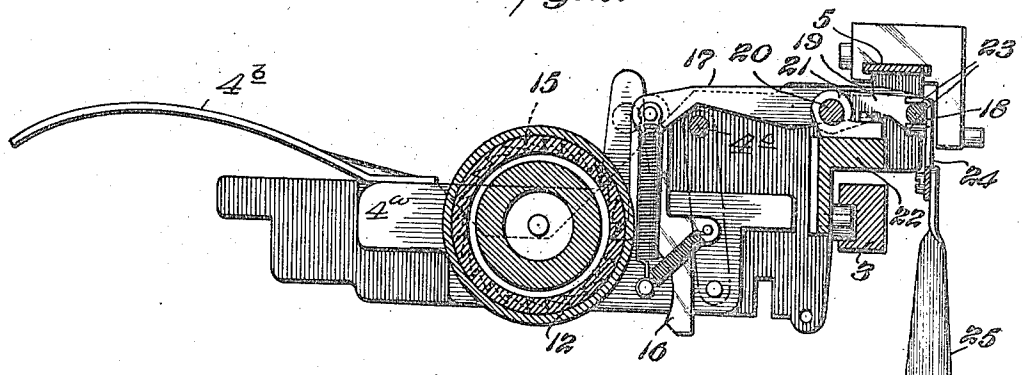


Fig. 3.

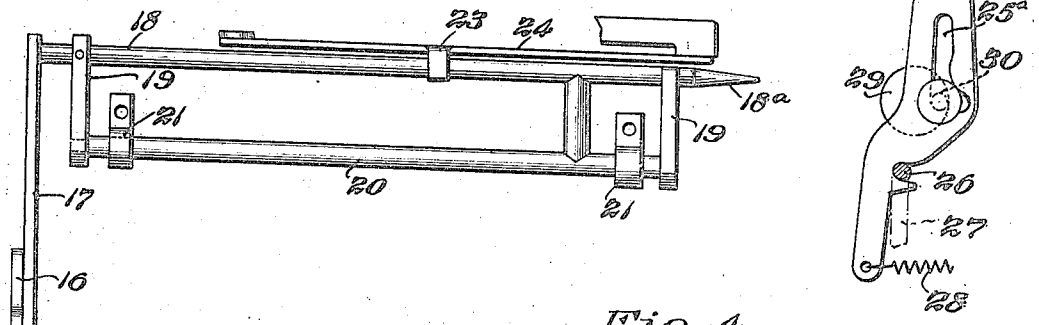


Fig. 4

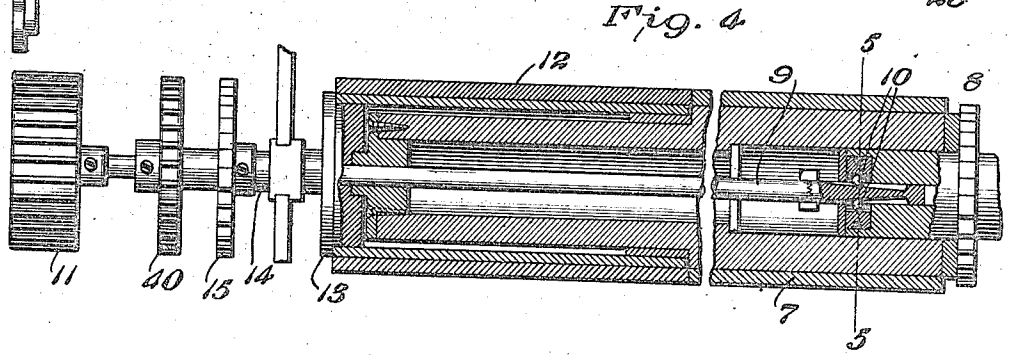
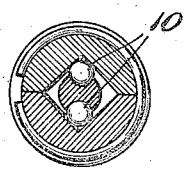


Fig. 5.



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UNITED STATES PATENT OFFICE.

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PLATEN FOR WRITING-MACHINES.

1,170,708. Specification of Letters Patent. Patented Feb. 8, 1916.

Application filed December 28, 1911. Serial No. 668,255.

To all whom it may concern:

Be it known that I, OTTO THIEME, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Platens for Writing-Machines, of which the following is a a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved platen for writing machines in position on a combined adding and typewriting machine. Fig. 2 is a vertical sectional view through the platen and its associated parts. Fig. 3 is a plan view of the operating means for one section of the platen. Fig. 4 is a longitudinal sectional view through the platen. Fig. 5 is a cross sectional view on line 5—5 of Fig. 4. Fig. 6 is a sectional view through the supporting bracket for the roll of paper.

This invention relates to a new and useful improvement in platens for writing machines particularly that type wherein the typewriting mechanism is combined with the adding mechanism, the object of my present invention being, to provide a sectional platen whereby the computations of the adding machine may be recorded on a separate strip of paper other than that on which the typewritten words are recorded. In this manner it is possible to carry on separate computations, certain of which are in connection with typewritten words and others of which are independent thereof, so that the operator may be kept advised of the different computations.

To carry out my invention in its most approved form, I have divided the platen of the machine into a plurality of sections independently rotatable whereby one section may be employed in the usual way in connection with the typewriting mechanism and the recording mechanism of the adding machine, while the other section is designed to be used exclusively with the recording mechanism of the adding machine, although it will be understood that words may be typewritten thereon, if desired.

One section, that identified with the typewriting mechanism, is preferably longer than the other so as to take in an ordinary letter sheet of paper and is manually rotated step by step in line spacing operations, or by mechanism which is well known. The other, or shorter section, is preferably independently rotated by mechanism identified with the adding machine so that when the laterally movable carriage containing the platen is in certain positions, this short section will be placed under control of the adding machine so far as its line spacing operations are concerned. In another position of the carriage the short section remains inactive, although permitting manual operation of the other, or longer section. When the other or longer section is operated, the short section remains stationary. The operator in this manner may carry on computations on the web or strip of paper passing under the short section which is automatically line spaced and the adding machine operated without disturbing the positions of the letter sheet on the longer section and afterward the results of such computation may be printed on the letter sheet or transcribed thereon as the case may be.

In the drawings, 1 indicates the top plate of a typewriting machine, and 2, the post which supports the same.

3, are track rails on which is slidingly mounted the traveling carriage of which 4 is an end plate and 5 the bars or rods connecting said end plate to an end plate at the other end of the carriage.

6 is the paper shield and 7, the manually operable platen having the usual hand-wheel, not shown, at its right hand end to which is conjoined the spacing ratchet 8. The tapered rod 9 coöperates with locking balls 10 whereby when said rod 9 is pulled outwardly by means of its handle 11 located at the left hand end of the platen, the platen 7 is released from its line spacing ratchet and can be rotatably adjusted to any desired position.

I do not in this application claim the construction of this releasing mechanism as the same forms the subject matter of U. S. Patent No. 985,713 granted to me February the 28th, 1911.

The left hand portion of the platen 7 is preferably reduced so as to provide a mounting for the short section of the platen 12, the outer end of which is mounted upon a head piece 13 which is arranged upon a sleeve 14 loosely mounted on the rod 9. On this sleeve

14 is secured a ratchet wheel 15 said ratchet wheel coöperating with a line spacing pawl 16 (see Fig. 2) pivotally suspended from a lever 17, pivotally mounted in one of the frame plates 4. This lever 17 at its rear end provides a mount for a rod 18 which is carried by arms 19 extending from a shaft 20 mounted in bearings 21 secured to one of the notched bars 22 of the traveling carriage. The inner end of the bar 18 is tapered to form an entering point 18ª which is designed to enter between lug extensions 23 on one end of the lever 24 which lever is pivoted on an extension of the top plate 1.

25 indicates an operating bar or link connected to the lever 24 and which has a notch near its lower end designed to engage a lateral projection 26 on a vibrating rod 27 operated from the adding mechanism in an up and down reciprocating movement. A spring 28 is connected to the lower end of this link 25 so as to hold the same in mesh with the projection 26. A disk 29 provided with a crank pin 30 operates in a slot 25ª in the link 25 so that said link may be thrown into and out of engagement with the projection 26. A rod provided with a handle 31 extends to the side of the machine and is connected to the disk 29 for rotating the same so as to engage or disengage the link 25 from said lateral projection. In this manner, when the link 25 is connected to the vibrating rod 27, each operation of the adding machine operates the line spacing mechanism of the sectional platen 12 by virtue of their connection through the rod 27 and link 25. When the link 25 is disconnected from the vibrating bar 27, the operation of the adding mechanism will of course not operate the line spacing mechanism. So, likewise when the carriage is moved leftward to such position that the bar 18 is out of engagement with the lugs 23 or lever 24, the line spacing mechanism will not be operated.

32 indicates the bracket mounted upon a notched bar 33 for supporting a roll of paper which paper is intended to operate with the short section 12 of the platen. This bracket is preferably made of pressed metal and has its ends bent downwardly and formed with hooked extensions 34 which are designed to engage the front edge of the bar 33. The shoulders 35 engage the rear edge of bar 33 and in this manner as the weight of the roll of paper tends to tilt the bracket rearwardly, the bracket will remain in position. I prefer, however, to lock the bracket to the bar 33 and therefore provide a hooked lever 36 which engages the rear edge of the notched bar 33 preferably between two teeth, the said lever being held in its locking position by means of a spring 37. This lever 36 engages the bracket 32 at its forward upper edge, said lever being preferably mounted upon a rod 38, upon one end of which is an operating handle 39, whereby, when it is desired to release the bracket, the handle 39 is swung forwardly to disengage the lever 36 and the bracket tilted forwardly, when it can be removed.

Bracket 32 extends rearwardly and is provided with post extensions 32ª preferably slotted at their upper ends to receive the axle of the roll of paper.

It is apparent from the above description that the section 7 of the platen may be operated manually from the hand-wheel at each end thereof, the hand-wheel 11 being capable of being moved outwardly so as to adjust the platen to any rotatable position between the line spaces, and, that when the section 7 of the platen is being rotated in this manner, the section 12 remains stationary.

The short section 12 of the platen is rotated one line space at each operation of the adding mechanism, such rotation being independent of the section 7, which remains stationary during the time that the section 12 is being operated in this manner. When the carriage is moved leftwardly to disengage the rod 18 from the lever 24, it is obvious that the section 12 can not be rotated except by hand, such manual rotation of section 12 being accomplished by means of a hand wheel 40 on the outer end of sleeve 14.

When the section 12 is under mechanical control of the adding mechanism (when the carriage is at the extreme right hand position) the line spacing mechanism may be rendered operative or inoperative by means of the handle 31 and the mechanism which it controls as heretofore described.

I do not claim in this application the means for rendering the line spacing mechanism of the section 12 operative or inoperative at the will of the operator, as the same is disclosed in an application filed by Hubert Hopkins on April 10, 1911, Serial No. 620,184.

In order to enable the operator to lift the platen so as to see the writing on the paper, I prefer to mount the platen in a supplemental frame 4ª from which extends a handle 4ᵇ designed to be grasped by the operator. This supplemental frame is pivotally mounted on a rod 4ᶜ by means of links one of which is shown in dotted lines in Fig. 2.

What I claim is:

1. In a machine of the character described, the combination of a laterally-movable carriage, a manually operable platen, a second platen on said carriage and operable independently of the first mentioned platen, line-spacing mechanism for said second platen, said line spacing mechanism including a bar extending parallel to said platen, said bar being provided with a pointed advancing end, and means capable of operating the line-spacing mechanism for said sec-

ond platen when said laterally-movable carriage is within a predetermined zone of its travel.

2. In a machine of the character described in combination, a machine frame, a laterally-movable carriage, a manually operable platen, a second platen mounted within said carriage, mechanical means for rotating said second platen, said mechanical means being mounted upon the movable carriage, said mechanical means comprising a substantially rectangular frame mounted upon said movable carriage and having one member comprising a bar whose advancing end is tapered, and the driving member mounted upon the machine frame and capable of operating said mechanical means when the laterally-movable carriage is within a predetermined zone of its travel.

3. In a machine of the class described in combination, a rotatable platen being wholly under manual control to rotate same, a secondary platen, manual means for turning said secondary platen, a transversely movable carriage for supporting said platens, a rod extending parallel to the movement of said carriage, an oscillating frame carrying said rod, a line-space device for said secondary platen operatively connected with said rod, and driving means capable of coöperation with said rod when the carriage is in a predetermined zone of its travel to operate said rod thereby actuating said line-space devices.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 23d day of December, 1911.

OTTO THIEME.

Witnesses:
M. P. SMITH.
LILY ROST.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."