No. 791,313. PATENTED MAY 30, 1905.

B. F. BLAKEMAN.

TYPE WRITER ATTACHMENT.

APPLICATION FILED JUNE 23, 1904.

2 SHEETS—SHEET 1.

Fig. 1

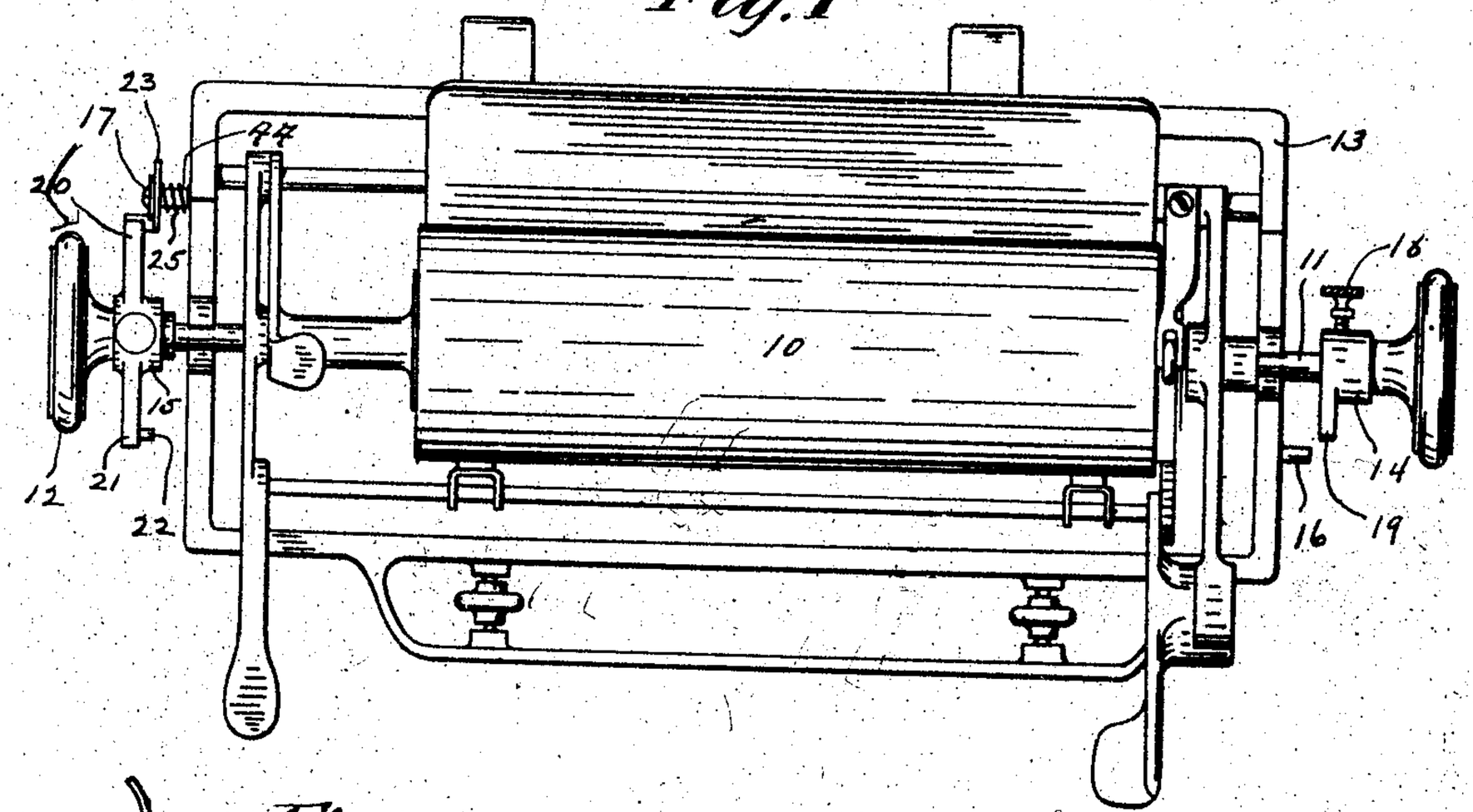

Fig. 2.

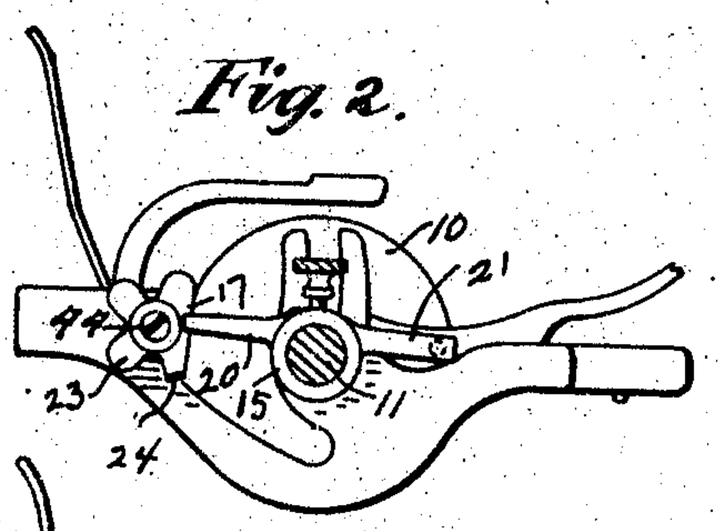

Fig. 3.

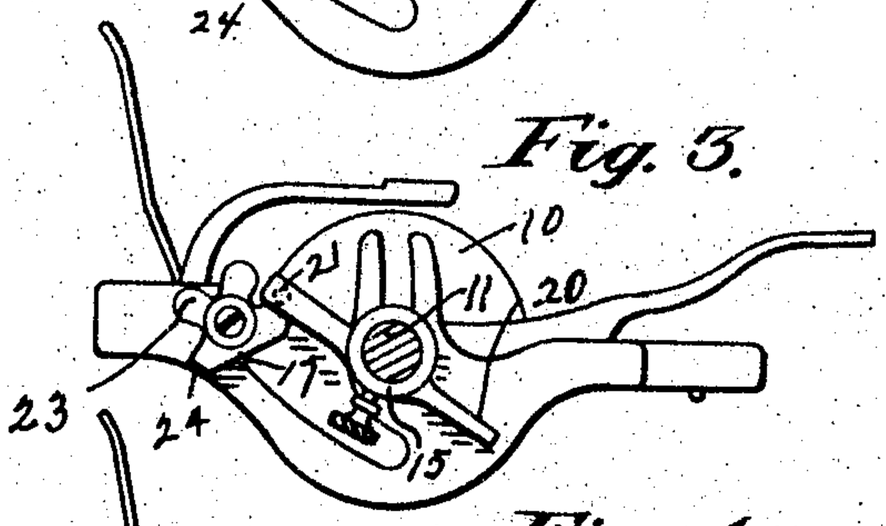

Fig. 4.

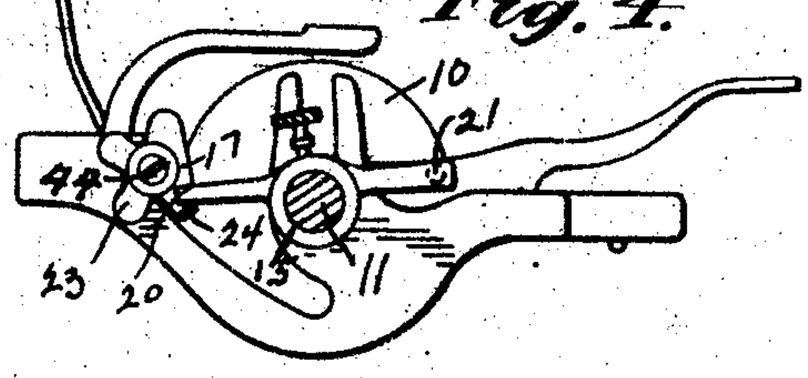

Fig. 5.

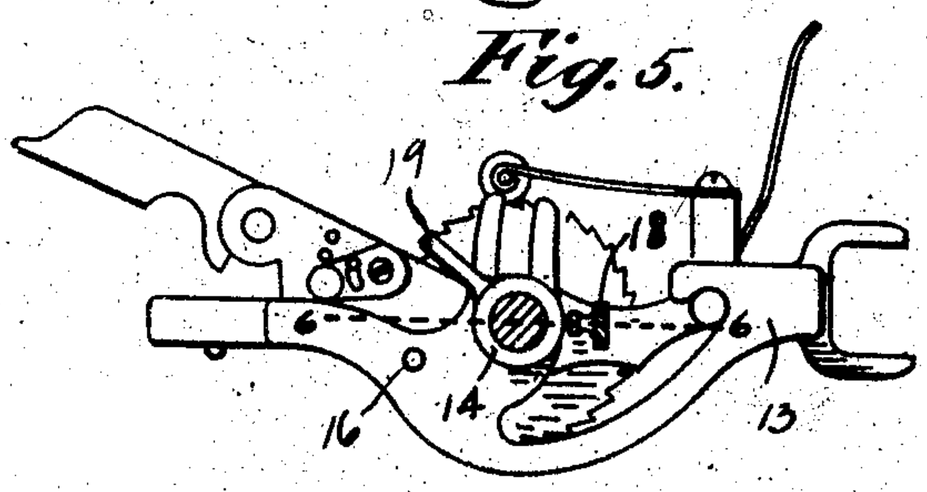

Fig. 6.

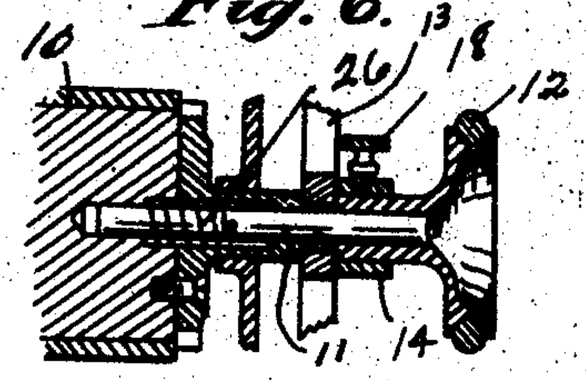

Fig. 7.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 8

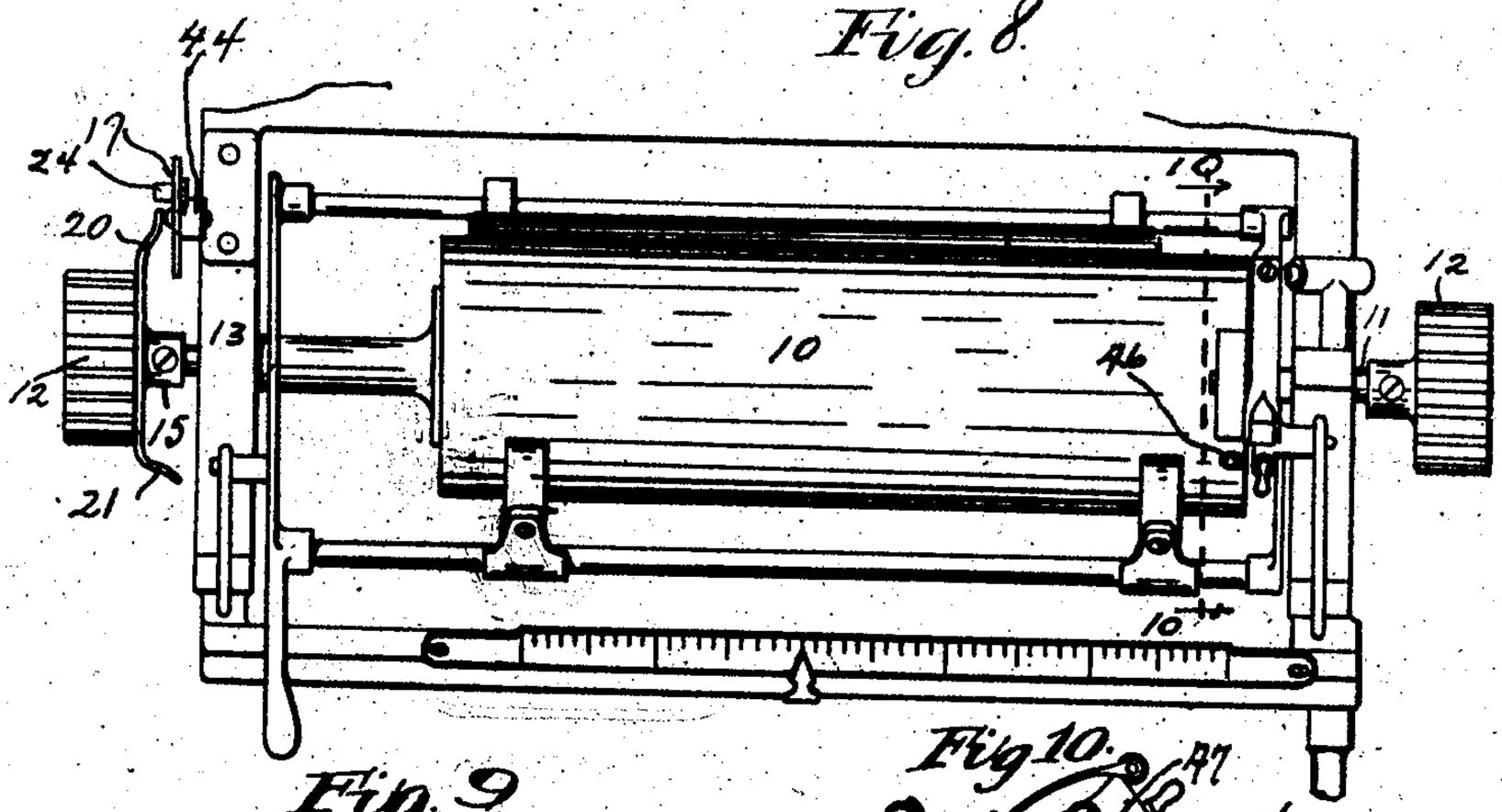


Fig. 9

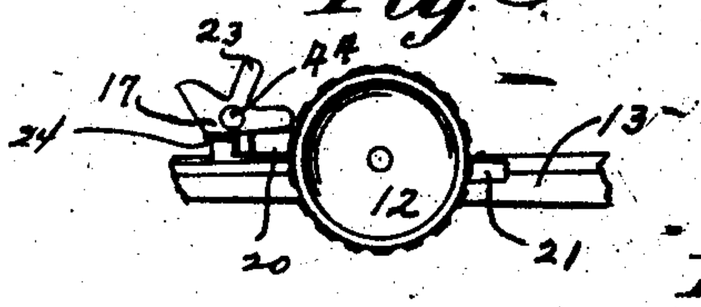


Fig. 10.

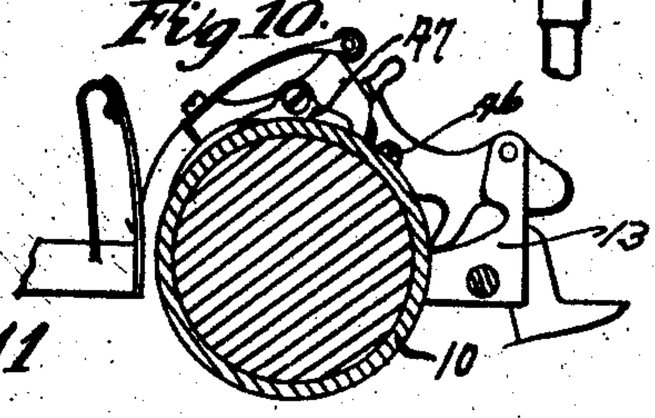


Fig. 11

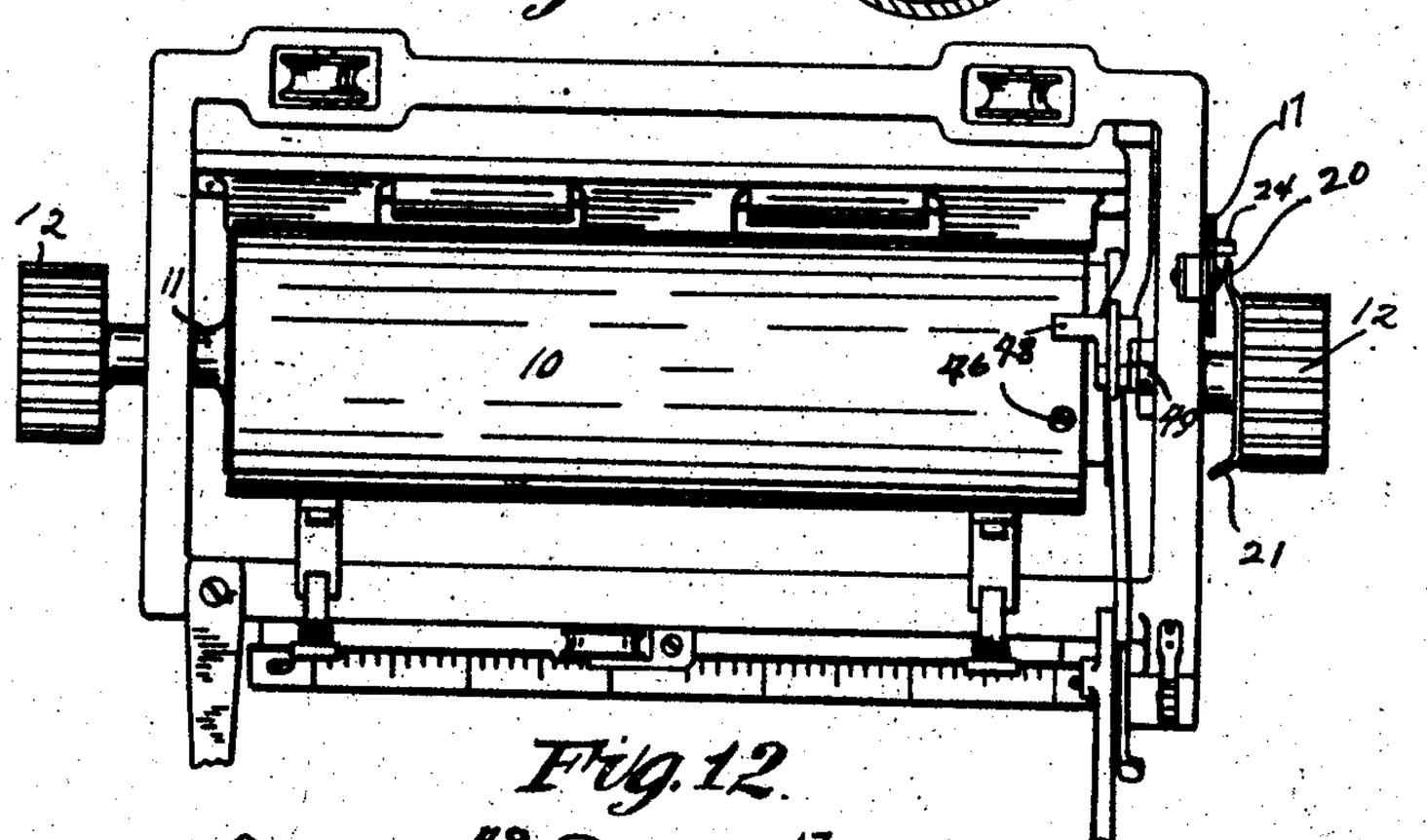
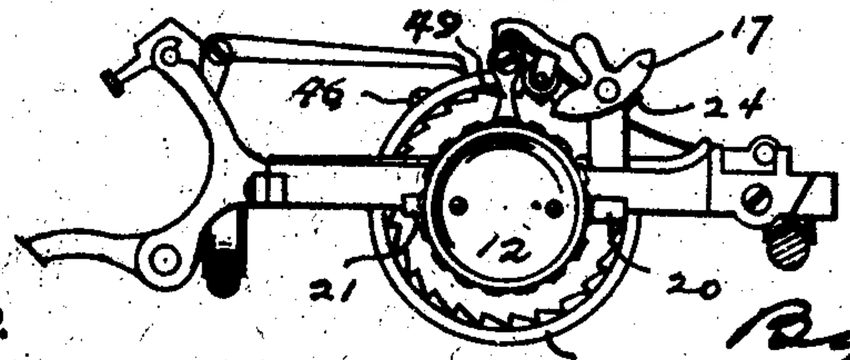


Fig. 12.



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No. 791,313. Patented May 30, 1905.

UNITED STATES PATENT OFFICE.

BENJAMIN F. BLAKEMAN, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO WILLIAM M. BIRD, JR., OF INDIANAPOLIS, INDIANA.

TYPE-WRITER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 791,313, dated May 30, 1905.

Application filed June 23, 1904. Serial No. 213,855.

To all whom it may concern:

Be it known that I, BENJAMIN F. BLAKEMAN, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Type-Writer Attachment; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

My invention relates to an improvement in type-writing machines whereby the paper-feeding means may be automatically stopped at a certain predetermined time, so as to fix the bottom margins of the sheets to suit any need that may arise in operating the machine. A machine with said improvement will write down on each sheet to a certain predetermined limit and then automatically stop. This result is accomplished by two or three very slight and simple attachments to a type-writing machine.

While in the drawings herein the attachment is shown in connection with the platen and carriage of a Densmore, Smith Premier, or Remington type-writing machine, I do not wish to be limited in the use of the invention to any particular machine, as it can be placed on any of them.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a plan view of the platen and carriage of a Densmore type-writing machine, the same being centrally broken away. Fig. 2 is an elevation of the left-hand side with the platen-elevating lever broken away and showing the adjustable platen-stop in an unoperative position. Fig. 3 is the same as Fig. 2, with the adjustable stop set in an engaging position. Fig. 4 is the same, showing the parts when the rotation of the platen has been stopped. Fig. 5 is an elevation of the right-hand end of what is shown in Fig. 1. Fig. 6 is a horizontal section on the line 6 6 of Fig. 5. Fig. 7 is a perspective view of the stop. Fig. 8 is a plan view of the device as adapted for use in connection with the Smith Premier machine. Fig. 9 is an elevation of a portion of the left-hand end of Fig. 8. Fig. 10 is a section on the line 10 10 of Fig. 8. Fig. 11 is a plan view of a Remington machine with my improvement on it. Fig. 12 is an elevation of the right-hand end.

In the drawings there is shown a platen 10 on a platen-shaft 11.

12 represents the rubber-tired hand-wheels at each end of the platen-shaft. The platen-shaft is mounted in a carriage 13.

The parts referred to and all the other unnumbered parts in the drawings are old and common in machines of the type referred to. The invention resides in the combination, with the platen and shaft and the carriage, of the collars 14 and 15, with their projecting arms, the stationary back-stop pin 16, and an adjustable forward stop 17. In other words, the new and added parts consist only of the four parts last mentioned, 14, 15, 16, and 17.

The back-stop apparatus of the machine is on the right-hand side and consists of the collar 14, secured on the shaft 11 by the set-screw 18 or in any other manner and having a finger 19, adapted to engage the stationary stop-pin 16 on the carriage 13 when the right-hand end of the platen-shaft is pushed inward. In resetting the platen the right-hand end of the platen-shaft is pushed inward against the action of the spring 26 and the platen turned until the finger 19 engages the stop 16, as seen in Fig. 6. That will set the platen each time in the same position with reference to the forward stop apparatus of the platen. The construction of the right-hand end of the platen-shaft, whereby it is longitudinally movable, is shown in Fig. 6. It is old and well known. At the other end of the platen the collar 15 has two arms—one, 20, a stop-arm, and the other, 21, extending opposite to and slightly shorter than the arm 20, has a pin 22 extending from it adapted to engage at times the plain arms 23 and one stop-arm 24. The latter has a rectangular projection from it in position to be engaged by the stop-arm 20 on the collar 15. The stop-disk 17 is mounted rotatably on a spindle, secured to the carriage, and is pressed outward by a spring 25, coiled around the spindle.

This stop-disk 17 has three plain arms, (seen in Figs. 1 to 6;) but it may have more or less, and by them the point on the sheet of paper at which it is desired to stop writing may be predetermined.

In operation when the device is set, as shown in Fig. 3, with the third plain arm 23 in position to be engaged by the pin 22 the platen will rotate two-and-one-half times, and the arm 20 will then engage the stop 24, as shown in Fig. 4. Then the machine will stop feeding the paper. If, however, one wants to write another line or two, he can turn the stop-disk 17 slightly, so that the stop-arm 24 thereon will not be engaged by the arm 20. The platen for the next sheet is reset at the right-hand end of the machine, as has been explained, with the resetting construction herein shown. Less than a revolution will reset it. If the stop-disk were turned from the position shown in Fig. 3, so that the second instead of the third arm 23 would first be engaged by the pin 22, the machine would not not write so far down on the paper—say to line 20. If the first arm 23 were set so as to be first engaged by the pin 22, the machine would write a correspondingly-smaller page, stopping, say, at line 10. In this manner not only will the machine be stopped at a certain limit, but that limit can be readily predetermined, and when the stop-disk 17 is set it will always stop the paper-feed at exactly the same place on each successive sheet. When it is desired not to use this stop mechanism, the disk-stop 17 is turned to the position shown in Fig. 2, where neither arm 20 or 21 will engage it, because the stop is cut away on one side.

In the arrangement of the invention in connection with the Smith Premier machine, as seen in Figs. 8 to 10, the forward stop 17 is mounted on a frame in the same way as in the Densmore machine. A collar 15 is secured to the platen-shaft and carries a stop-arm 20 and an arm 21 for actuating the stop. These two arms 20 and 21 are formed of one piece bent laterally so as to form projections, the part 20 doing the work of the pin 22 in Fig. 1 by way of engaging the arms of the forward stop 17 and rotating the same, and the part 21 adapted to engage the lateral projection 24 on said forward stop 17. The operation is therefore the same as that shown in Fig. 1.

The back-stop 46 in the Smith Premier machines consists in the head of a small screw, said screw entering the platen and the head thereof projecting so as to engage the pawl 47, and thus stop the rotation of the platen in the backward or resetting movement. The only thing new in this part of the construction over what is common in all the Smith Premier machines is the screw 46. The pawl 47 rides over the screw-head 46 in the forward rotation of the platen.

In the Remington machine (shown in Figs. 11 and 12) there is to be seen at the right-hand end (found at the left-hand end of Fig. 8) the forward stop 17, secured to the carriage. So the forward-stop mechanism is in no wise different from that in the Smith Premier machine. The backward or resetting stop mechanism is the same in having a screw-head 46 inserted in the platen. It is adapted to engage a pawl-like projection 48, pivotally mounted on a post 49, extending up from the frame of the machine. The operation of this resetting-stop is the same as that of the Smith Premier machine. In the Smith Premier machine and the Remington machine the platen-shaft is not telescoping, as in the Densmore machine. (Shown in Fig. 6.)

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination with the platen and carriage, of means rotatable with the platen, and a stop for said rotatable means that is connected with the carriage and is moved by said rotatable means to a stopping position and thereby limits the rotation of the platen.

2. In a type-writing machine, the combination with the platen and carriage, of an arm rotatable with the platen, and means connected with the carriage that is moved by said arm to a position to stop said arm.

3. In a type-writing machine, the combination with the platen and carriage, of an arm rotatable with the platen, and means for stopping said arm that is rotatably mounted in connection with the carriage and that is actuated by said arm to a stopping position.

4. In a type-writing machine, the combination with the platen and the carriage, of a disk rotatably mounted in connection with the carriage which is provided with a stop-lug, and means rotatable with the platen that engages said disk and rotates it until stopped by engagement with the stop-lug on said disk when the disk has been rotated to a certain position.

5. In a type-writing machine, the combination with the platen and the carriage, of a disk rotatably mounted in connection with the carriage and having radial arms and a stop-lug extending therefrom, and means rotatable with the platen that engages the arms of said disk at each revolution of the platen and rotates it until stopped by the stop-lug on said disk when the disk has been rotated to a certain position.

6. In a type-writing machine, the combination with the platen and the carriage, of a disk mounted in connection with the carriage and having a stop-lug, and two means rotatable with said platen, one of said means that engages and rotates said disk and the other adapted to be engaged and stopped by the stop-lug on said disk when the disk has been rotated to a certain position.

7. In a type-writing machine, the combination with the platen and carriage, of a disk

mounted in connection with the carriage and having a stop-lug, and two arms rotatable with said platen, one of said arms adapted to engage the disk and rotate it partially at each revolution of the platen, and the other arm adapted to be engaged and stopped by the stop-lug on said disk when the disk has been revolved to a certain position.

8. In a type-writing machine, the combination with the platen, the platen-shaft and carriage, of a disk mounted in connection with the carriage with radial arms and a stop-lug projecting from said disk, and a pair of arms secured on the platen-shaft, one of said arms adapted at each revolution to engage an arm on said disk and give it a partial revolution, and the other arm adapted to be engaged and stopped by the stop-lug on said disk when the disk has been revolved to a certain position.

9. In a type-writing machine, the combination with the platen and carriage, of a disk mounted in connection with said carriage that is cut away on one side and has a stop-lug projecting therefrom, and arms rotatable with the platen adapted to rotate said disk until the stop-lug thereon has been moved into a position to engage said arms and stop the revolution of the same, said arms, however, being too short to engage said disk when the cut-away portion of said disk is turned toward said arms, whereby the platen may be operated without being stopped by said disk.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

BENJAMIN F. BLAKEMAN.

Witnesses:

V. H. LOCKWOOD,

N. ALLEMONG.