

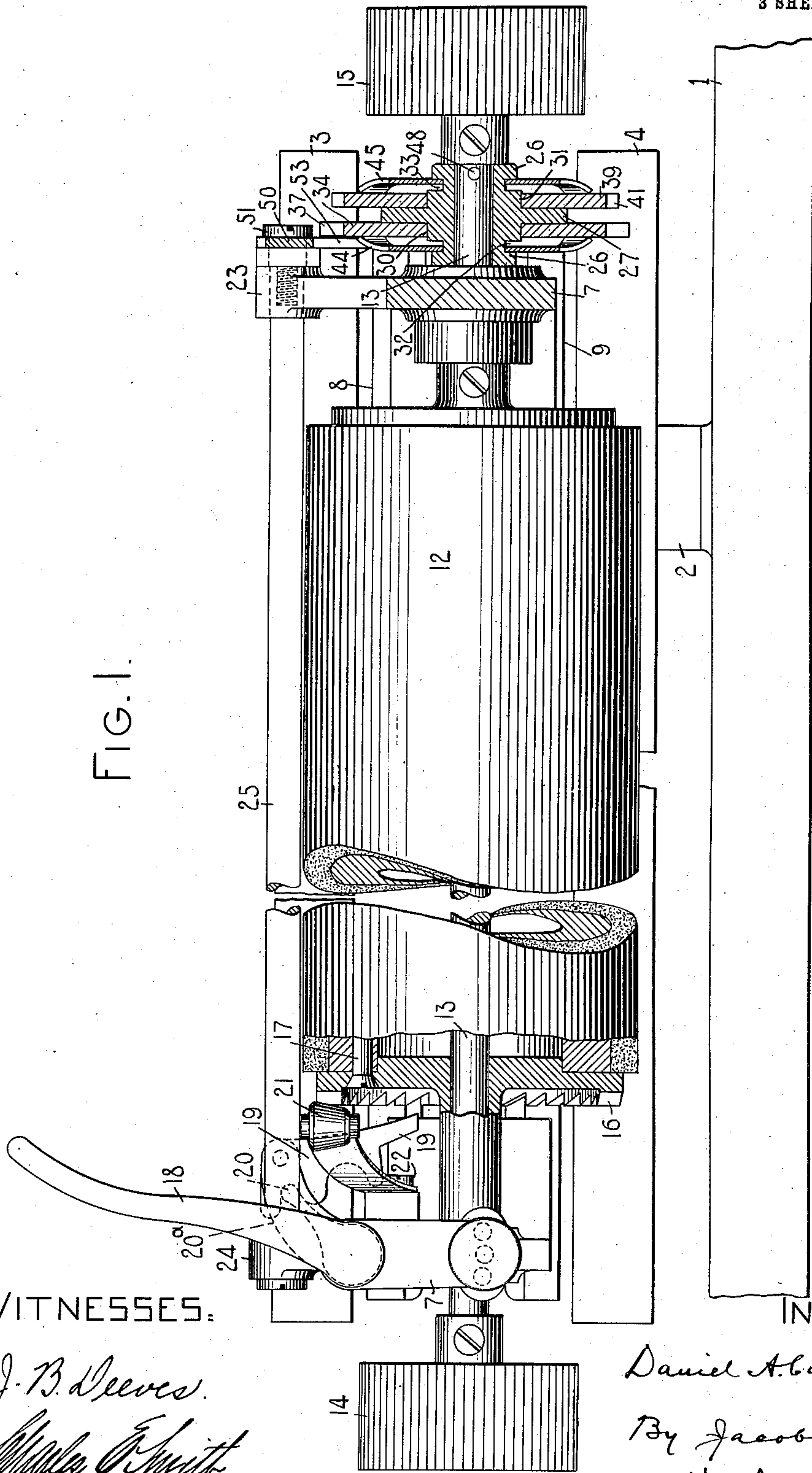
No. 843,071.

PATENTED FEB. 5, 1907.

D. A. CARPENTER.  
TYPE WRITING MACHINE.  
APPLICATION FILED JULY 12, 1906.

3 SHEETS—SHEET 1.

FIG. 1.



WITNESSES:

*J. B. Deeves.*  
*Wm. Smith*

INVENTOR

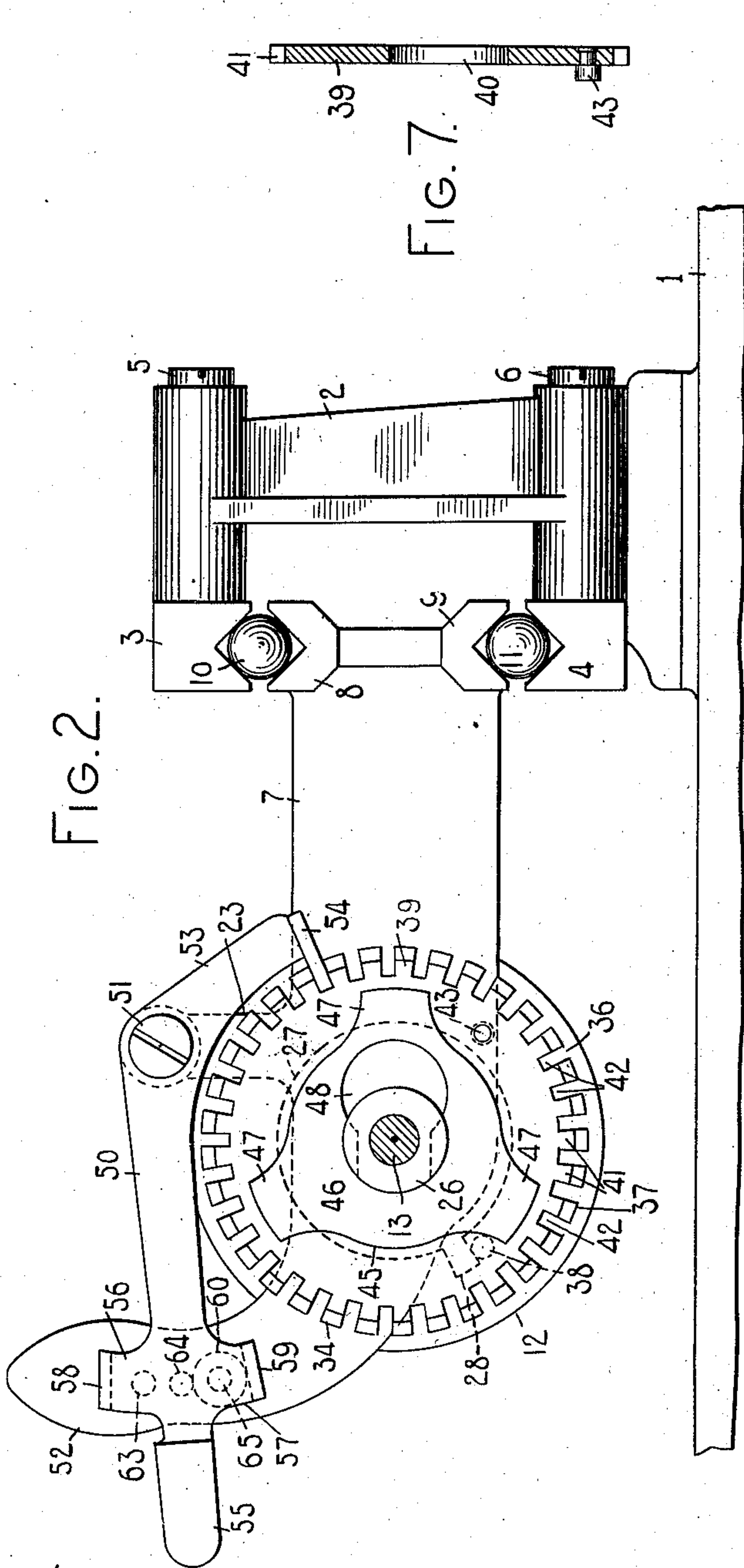
*Daniel A. Carpenter*  
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No. 843,071.

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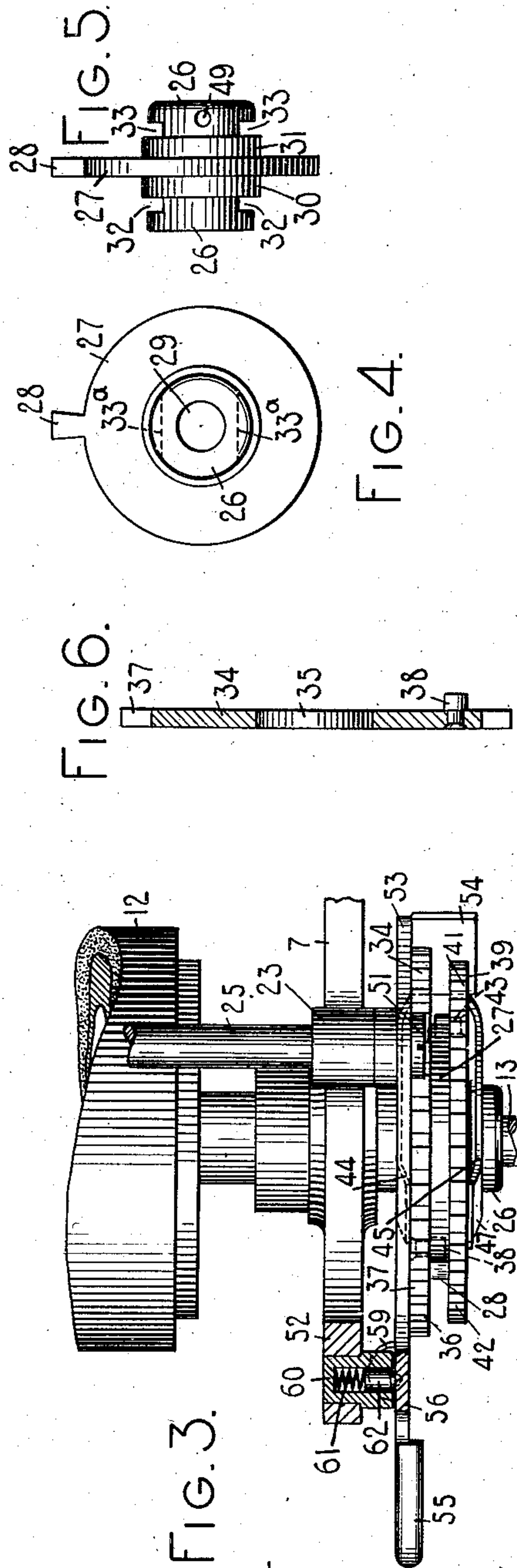
D. A. CARPENTER.  
TYPE WRITING MACHINE.  
APPLICATION FILED JULY 12, 1906.

3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

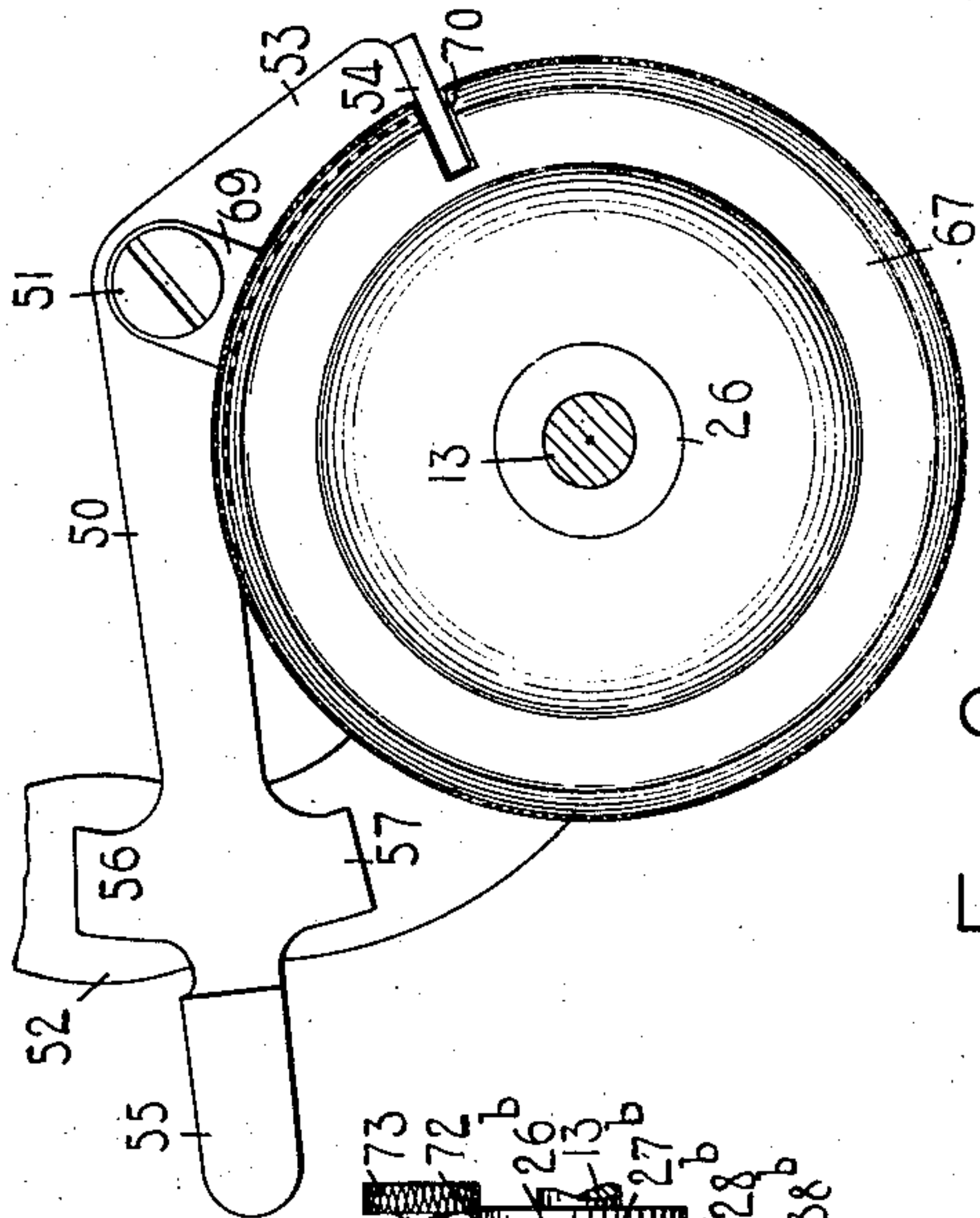
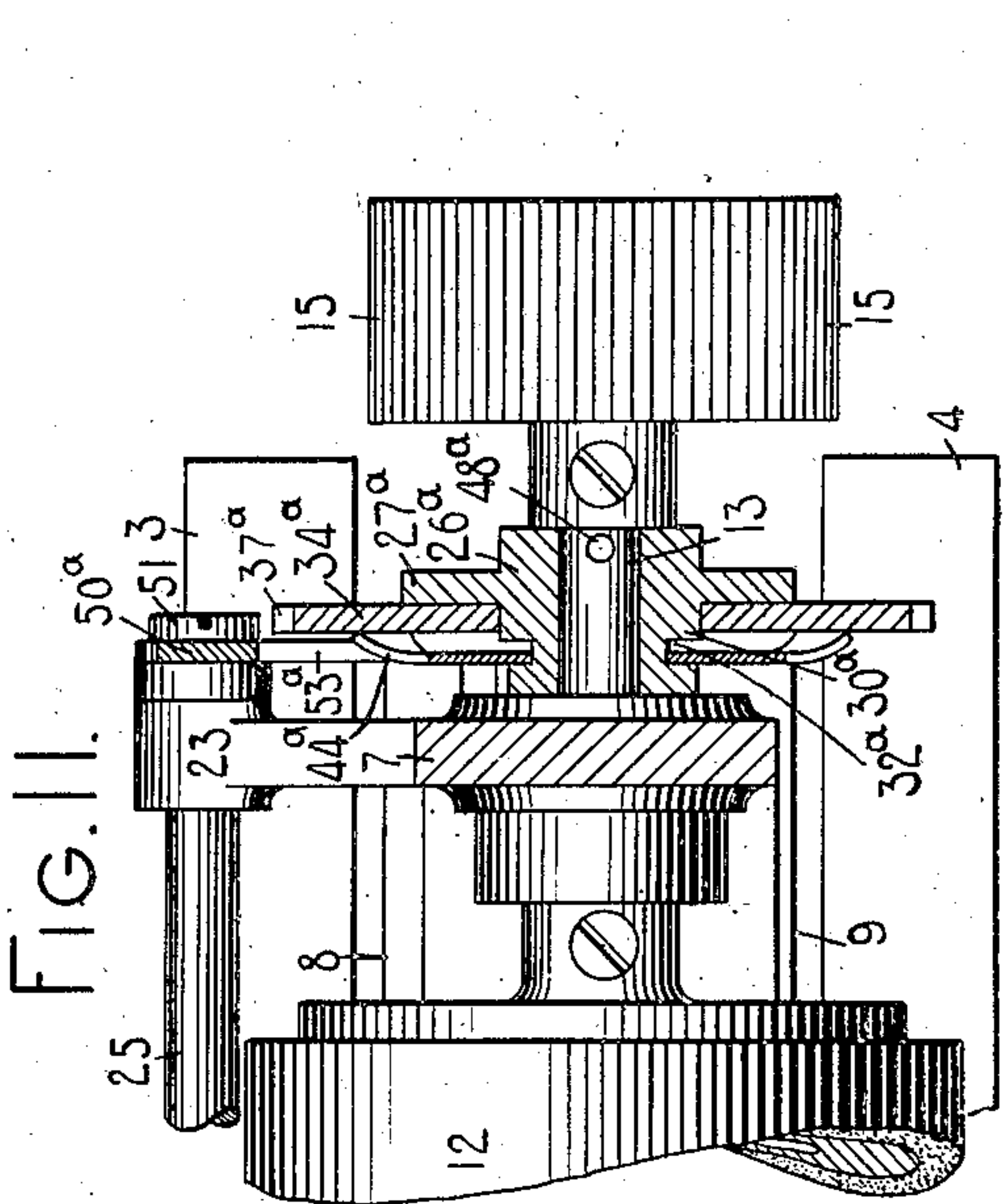


FIG. 9.

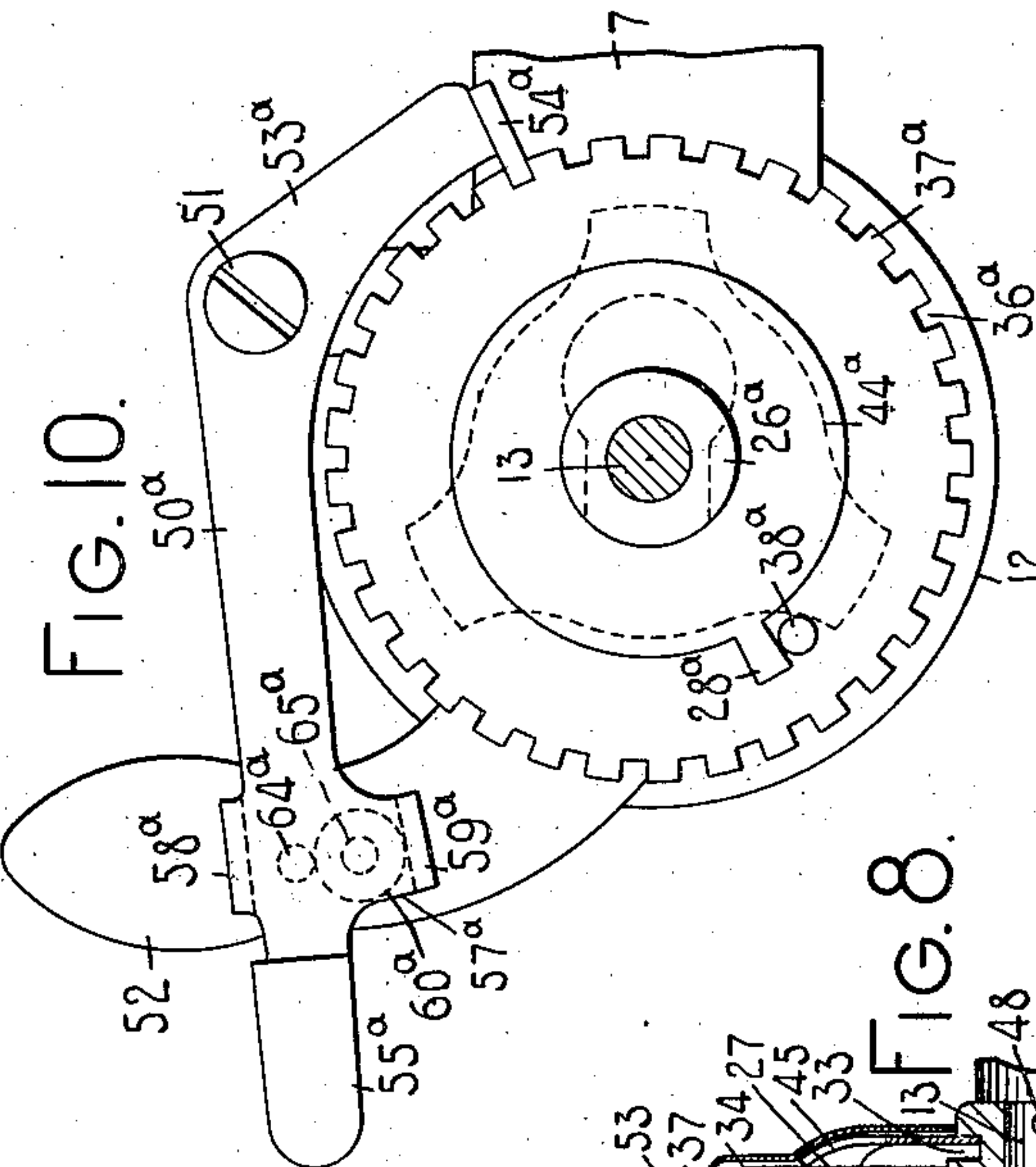


FIG. 10.

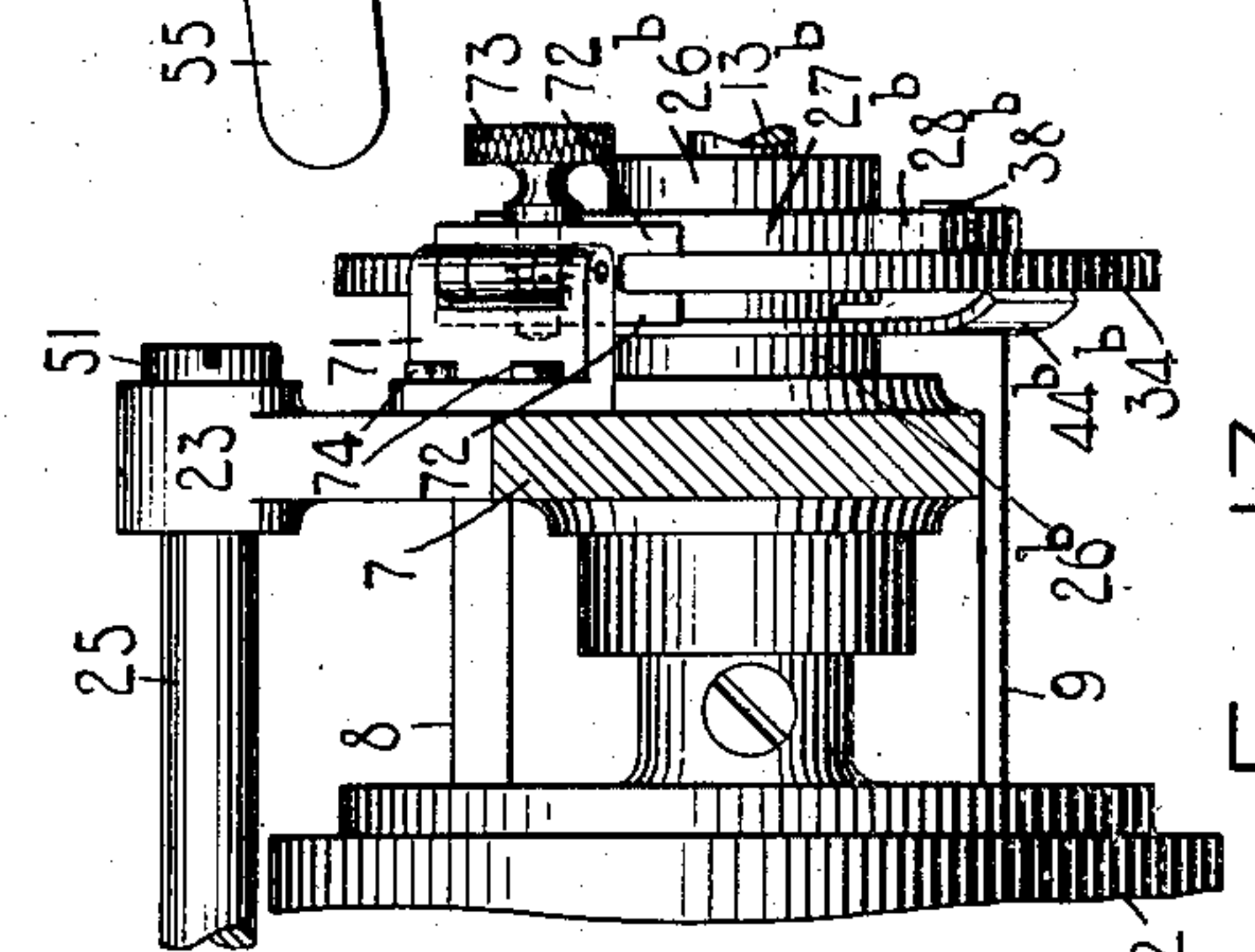


FIG. 13.

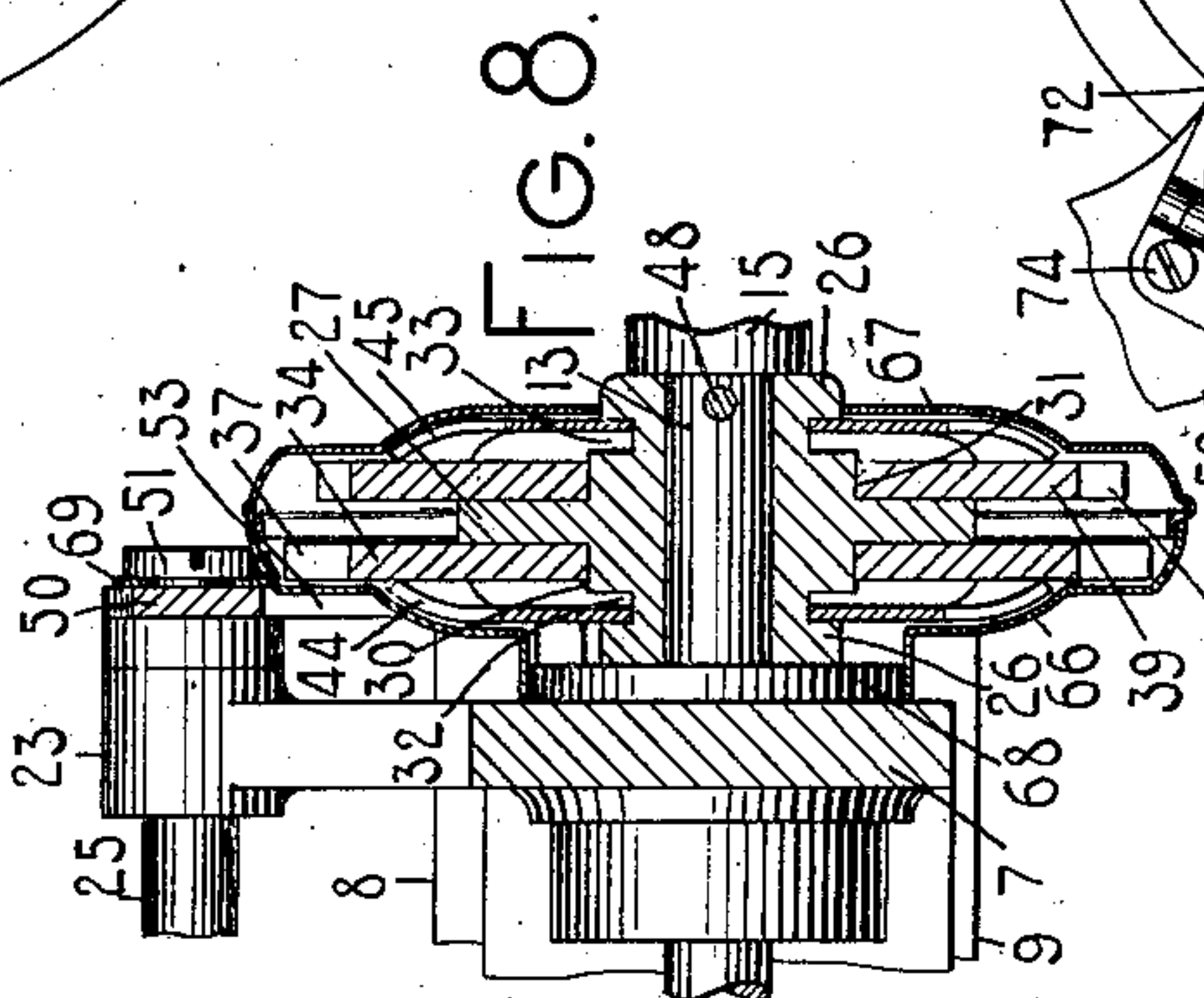


FIG. 8.

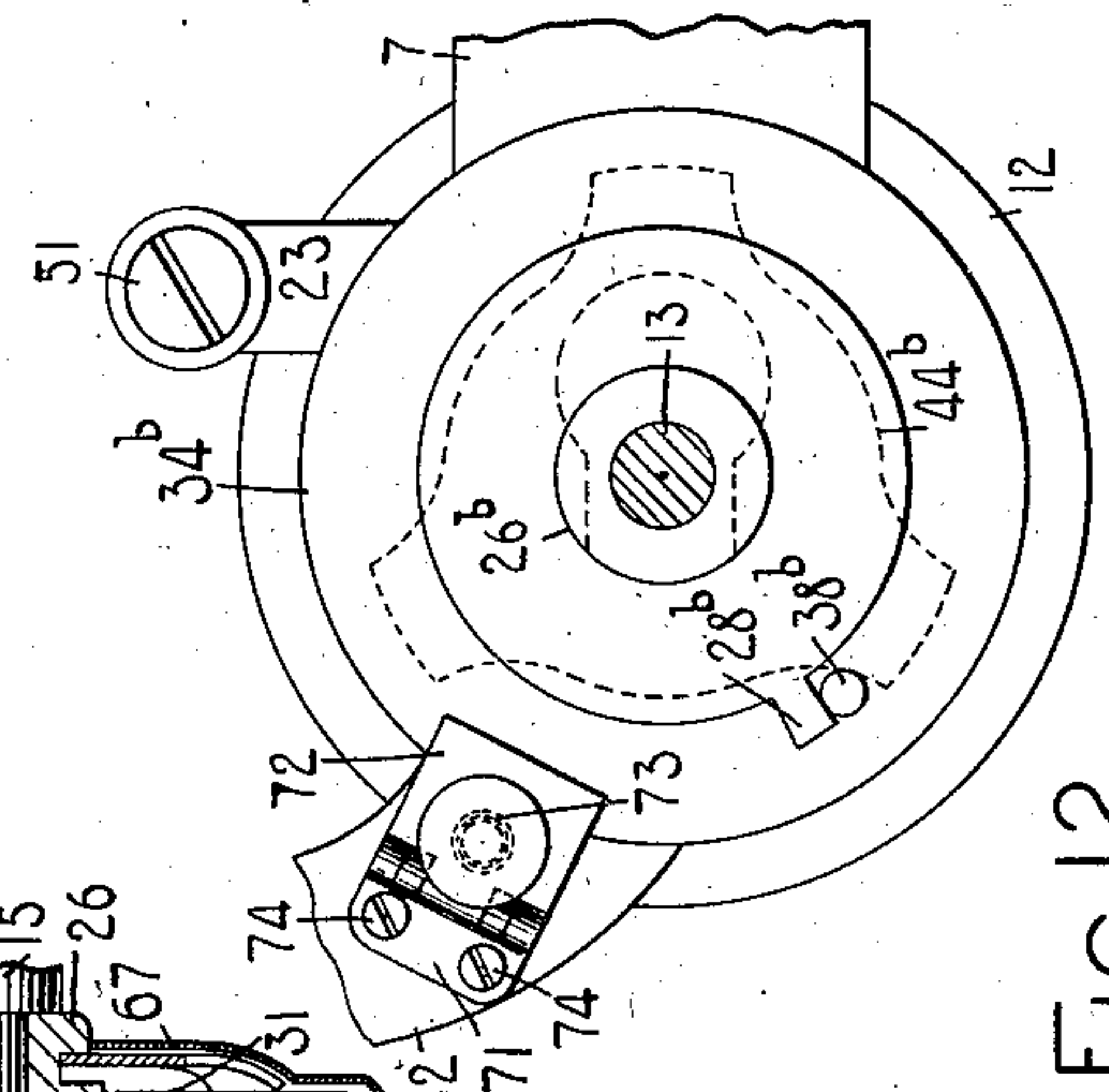


FIG. 12.

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# UNITED STATES PATENT OFFICE.

DANIEL A. CARPENTER, OF NEW YORK, N. Y., ASSIGNOR TO UNION TYPE-WRITER COMPANY, OF JERSEY CITY, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## TYPE-WRITING MACHINE.

No. 843,071.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed July 12, 1906. Serial No. 325,791.

*To all whom it may concern:*

Be it known that I, DANIEL A. CARPENTER, a citizen of the United States, and a resident of the borough of Bronx, city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to improvements in stop mechanism which is operative to arrest the platen of a type-writing machine, and thus to facilitate the doing of condensed billing and other work of similar character.

The invention consists of the features of construction, combinations, and arrangements of parts, which are hereinafter described, and specified in the claims.

On the accompanying sheets of drawings, on which like reference-numerals designate like parts in different views, Figure 1 is a front and sectional elevation of mechanism embodying the invention, parts of the platen, platen-carriage, and line-spacing mechanism of a Monarch type-writing machine being shown. Fig. 2 is a right end view of the platen and platen-carriage and a right side view of devices shown in Fig. 1 at the right of the carriage, the finger-wheel being sectioned away. Fig. 3 is a top and partly-sectional view of these devices and of fragments of the platen, platen-shaft, and right end of the carriage. Fig. 4 is a side view of one of the stop devices. Fig. 5 is a front view of this device. Fig. 6 is a cross-section of a notched and toothed disk having a stop thereon. Fig. 7 is a cross-section of another notched and toothed disk having a stop thereon. Fig. 8 is a sectional elevation of devices shown in Figs. 1, 2, and 3 and of a case inclosing some of those devices. Fig. 9 is a view of the right sides or faces of the case and the detent shown in Fig. 2. Fig. 10 is a right end view of the platen and a fragment of the platen-carriage and a right side view of a detent and stop devices substantially like the detent and two of the stop devices shown in Figs. 1, 2, and 3. Fig. 11 is a sectional elevation of the parts shown in Fig. 10 and of fragments of the platen and the support for the platen-carriage. Fig. 12 is a right end view of the platen and fragment of the platen-carriage and a right side view of two stop devices and a clamp, whose operation is similar to that of the stop devices and detent shown in Fig. 10.

Fig. 13 is a front elevation of the stop devices and clamp illustrated in Fig. 12 and of a fragment of the platen and a sectional elevation of a fragment of the platen-carriage.

Although the invention is shown applied to a Monarch type-writing machine, it is to be understood that any of the well-known type-writing machines which have rotary platens may be equipped with the invention.

The platen, platen-carriage, and line-spacing mechanism of the Monarch machine are so well known that it is obviously unnecessary to fully describe their construction and operation. The top plate 1 of the frame of the machine has on it standards 2, to which grooved guide-rails 3 and 4 are attached by screws 5 and 6, respectively. The platen-carriage 7 comprises grooved guides 8 and 9, and in the ball-channels formed by the grooves in the rails 3 and 4 and guides 8 and 9 are antifriction-balls 10 and 11, by means of which the carriage is so connected to the rails 3 and 4 as to render it movable back and forth over the top plate 1.

The platen 12 is fast on the platen-shaft 13, which has bearings in the ends of the platen frame or carriage, and on the ends of the shaft are finger-wheels 14 and 15. The line-spacing wheel 16 is formed as part of the left platen-head, which is attached to the left end of the platen by screws 17. On the left end of the platen-frame is mounted the line-spacing arm 18, which is operatively connected with the pawl 19 by the arm 20, the pawl being pivoted to the usual spring-restored arm 20<sup>a</sup>. The line-spacing arm is operative to move the pawl into engagement with the teeth of the line-spacing wheel 16 and to turn the platen for half-spacing, full-spacing, or double-spacing. A spring and roller-detent 21 is arranged to engage the teeth of the line-spacing wheel, the spring of this device being fastened by a screw 22 to the platen-frame. On the ends of the platen-frame are formed upright supports 23 and 24, and to these supports a rod 25 is attached, on which paper-fingers are usually mounted.

The stop mechanism is applied to the platen-shaft and to the support 23 close to the right end of the platen-frame. The parts thereof which are mounted on the platen-shaft are the devices shown in Figs. 4 and 5, the two other devices shown in Figs. 6 and 7, and two springs. The stop device shown in



Figs. 4 and 5 is composed of a hub 26 and a disk 27, having on it a tongue or stop 28, the disk and hub being formed together and the hub having in it a hole 29, which extends through it from end to end and in which the platen-shaft fits snugly. The parts 30 and 31 of the hub 26 are cylindrical, and next to these parts slots 32 and 33 are cut in the hub, the flat bottom walls 33<sup>a</sup> of the slots (see Fig. 4) being parallel. The notched and toothed disk 34, which has in it a central round hole 35, fits on the part 30 of the hub 26 and close to the left face of the disk 27. The disk 34 has cut in it and formed on it as many notches 36 and teeth 37 as there are teeth in the line-spacing wheel, and on the tight face of this notched and toothed disk is a stop 38, which is fast on the disk, this stop consisting, preferably, of a shouldered pin, whose stem extends through a hole in the disk and is headed on the left face of the disk. The relations of the tongue or stop 28 on the disk 27 and the stop 38 on the disk 34 are such that when the parts are put together the stop 38 will be brought into contact with the tongue 28 if the disk 34 is turned far enough on the hub 26 in either direction. The stop 38 projects from the right face of the disk 34 a distance which is slightly less than the thickness of the disk 27. The other notched and toothed disk 39 has in it a central hole 40, in which the part 31 of the hub 26 fits loosely, and this disk is mounted on the hub 26 at the right of the disk 27, fitting on the part 31 of the hub and against the right face of the disk 27. This disk 39 has teeth 41 and notches 42 equal in number to those of the disk 34, and on the left face of the disk 39 is a stop 43, which is fast on the disk, the stop being preferably riveted to the disk, as shown. The stop 43 is at the same distance from the axis of the hub 26 as is the stop 38 on the disk 34, so that as the disk 39 is turned on the hub 26 the stop 43 may be brought into contact with the tongue 28 on the disk 27. The bottoms of the notches 36 in the disk 34 and of the notches 42 in the disk 39 are all equally distant from the axis of the hub 26; but the teeth of the disk 34 are about twice as long as the teeth of the disk 39, the disk 34 being consequently somewhat larger than the disk 39. Springs 44 and 45 are mounted on the hub 26 at the left of the disk 37 and at the right of the disk 39, respectively. These springs, which are alike, have the form shown in Figs. 1, 2, and 3 of the drawings, each consisting of a central portion 46, having on it three projections 47 and having in it an opening similar in shape to a keyhole-slot. Each of these springs may be pushed over the hub, the end of the hub passing through the round part 48 of the hole in the spring, and then the spring may be moved edgewise, so that the edges of the straight part 49 of the opening shall enter the slots 32 or 33 in the

hub and cooperate with the parallel bottom walls 33<sup>a</sup> of the slots to lock the springs to turn with the hub. The spring 44 bears against the left sides of the slots 32, the parts 47 of this spring pressing against the left face of the disk 34, and the spring 45 bears against the right sides of the slots 33, and the parts 37 of this spring bear against the right face of the disk 39. The hub 26 and disk 27, with the disks 34 and 39 and springs 44 and 45, mounted on the hub, as described, may be pushed on the platen-shaft to the position shown, the left end of the hub 26 being close to the right end of the platen-frame. The hub 26 is affixed to the platen-shaft by a pin 48, driven through a hole 49 in the hub and into the platen-shaft.

A lever 50 is pivoted by a shouldered screw 51 to the right end of the rod 25 or to the support 23, one arm of this lever extending backward and downward from its fulcrum and the other extending forward therefrom in front of the rigid finger-piece 52 of the platen-frame. The rear arm 53 of this lever has on it a flange or lip 54, which fits in the notches 36 and 42 of the disks 34 and 39, and at the front end of this lever a finger-piece 55 is formed on it. This lever also has formed on it near its front end projections 56 and 57, which comprise lugs 58 and 59, extending toward the part 52 of the platen-frame from the left face of the lever. A bushing 60 is fixed in the part 52 of the platen-frame, and in this bushing, which extends close to the left face of the lever 50, are a coil-spring 61 and a pin 62, the outer end of this pin being pointed and the spring tending to force the pin outward. Recesses 63, 64, and 65 are made in the left face of the lever 50 and projections 56 and 57, these recesses being so arranged that the pointed end of the pin 62 will be forced into them as the front end of the lever is moved up and down and will tend to keep the lever in any one of three different positions. When the front end of the lever is in its highest position, the lug 59 then being in contact with the bushing 60, the pin 62 extends into the recess 65 and the part 54 of the lever extends into one of the notches 36 of the disk 34 and one of the notches 42 of the disk 39, as appears in Fig. 2. When the lug 58 is in contact with the bushing 60, the front end of the lever then being in its lowest position, the pin 62 extends into the recess 63, and the lip 54 is out of engagement with both of the disks or racks 34 and 39. When the position of the lever is such that the pin 62 extends into the recess 64, then the lip 54 of the lever engages the disk or rack 34, but does not engage the other disk or rack 39, the front edge of the lip 34 then being farther from the axis of the platen-shaft than are the outer ends of the teeth 41 of the last-mentioned disk.

The stop mechanism described is so con-



5 constructed and its parts are so arranged that  
 when the lever or detent 50 is disengaged  
 from the notched disks 34 and 39 and the  
 platen is rotated the hub 26, the disk 27 with  
 the stop 28 thereon, the notched disks 34 and  
 39 with the stops 38 and 43, and the springs  
 44 and 45 all rotate together, the relations of  
 these parts to one another being unaffected  
 by the rotation, and the platen may be ro-  
 10 tated in either direction to any extent with-  
 out being arrested by the stop devices. The  
 springs 44 and 45 so act on the disks 34 and  
 39 as to cause these disks to normally turn  
 with the hub 26 and disk 27. When, how-  
 15 ever, the disks 34 and 39 are locked by the  
 lever or detent 50, the platen, with the hub 26  
 and disk 27 and its stop 28, may be turned in  
 either direction until the platen is arrested  
 by the contact of the stop 28 with either the  
 20 stop 38 or the stop 43, the pressure exerted  
 by the springs 44 and 45 on the disks 34 and  
 39 being such as to allow the hub 26 and disk  
 27 to be freely turned back and forth within  
 the limits indicated while the disks 34 and  
 25 39 are locked. So long as the lever 50 is dis-  
 engaged from the disks 34 and 39 the platen  
 may be turned in either direction to any ex-  
 tent by each of the finger-wheels and by the  
 ordinary line-spacing mechanism.

30 To set the stops for use in condensed billing,  
 supposing, for example, the stop 43 is not in  
 contact with either of the other stops 28 and  
 38, the handle 55 of the lever 50 is so moved  
 that the pin 62 enters the recess 64 in the  
 35 lever and the disk 34, but not the disk 39, is  
 locked by the lever. Then the platen is turned  
 forward or in a line-spacing direction by the  
 finger-wheel until it is arrested, whereupon  
 it is turned backward by the finger-wheel  
 40 until it is again arrested, and then a bill is  
 fed into the machine until its position is seen  
 to be such as to enable the first line to be  
 written on it at the desired place. With the  
 bill a sheet of carbon and record-sheet may  
 45 also be fed into the machine, the bill-sheet be-  
 ing given the desired "lead" in the usual  
 manner to bring the first entry on the record-  
 sheet near the top thereof. By the forward  
 movement of the stop 28 with the platen be-  
 50 fore the bill has been inserted in the machine  
 this stop is brought into contact with the  
 stop 43, and thereafter the stops 43 and 28  
 travel together until the stop 43 makes con-  
 tact with the stop 38. The stop 38 prevents  
 55 the further forward movement of the stops  
 28 and 43 and of the platen, because the disk  
 34 is locked by the lever or detent 50. As  
 the platen is next turned backward, the  
 stop 43 travels with the stop 28 until the  
 60 latter stop makes contact with the locked  
 stop 38, and the backward movement of the  
 platen is thus arrested. The stop 28 is then  
 between and in contact with the stops 38  
 and 43. Now the platen may be turned for-  
 65 ward, but not backward. As the bill, carbon,

and record sheets are fed together into the  
 machine the stop 43 is pushed from the stop  
 38 by the stop 28, the angular movement of  
 the stop 28 being the same as that of the  
 platen and that which is required when any 70  
 similar bill is inserted in the machine and fed  
 to the proper position to receive the first line  
 of writing. The arrangement of the three  
 stops 28, 38, and 43 is then such that entries  
 may be made on the bill which has been fed 75  
 into the machine, and no further setting of  
 the stops will be required so long as the use  
 of other bills like that in the machine con-  
 tinues. After the first bill has been posi-  
 tioned in the manner described to receive the 80  
 first line of writing the lever or detent 50 is  
 to be disengaged from the disk 34 before the  
 bill is fed farther into the machine. As the  
 bill, carbon, and record sheets are fed for-  
 ward together to enable successive entries to 85  
 be made, the disks 27, 34, and 39, with the  
 stops 28, 38, and 43, all travel together, the  
 stop 28 remaining in contact with the stop  
 43 and as far from the stop 38 as it was  
 moved when the sheets were fed into the 90  
 machine, as described. After the last entry  
 has been made on the bill and reproduced  
 through the interposed carbon on the record-  
 sheet, the line-spacing handle 18 is actuated  
 to give the platen a double-line-space move- 95  
 ment in order to provide a proper space on  
 the record-sheet between the last line of the  
 last written bill and the first line of the next  
 succeeding bill to be reproduced on the rec-  
 ord-sheet. The handle 55 of the lever 50 is 100  
 then raised until its upward movement is ar-  
 rested by the action of the lug 59 on the  
 bushing 60 and the pin 62 engages with the  
 recess 65 in the lever. The lip or flange 54 on  
 the lever has then been pushed into notches 105  
 in the disks 34 and 39 and both of these  
 disks have been locked by the lever, so as  
 to prevent them from being turned. The  
 platen is then turned backward by one of  
 the finger-wheels, the stop 28 leaving the 110  
 stop 43, until the platen is arrested by the  
 action of the stop 28 on the stop 38. The  
 next bill is then inserted in the machine and  
 the platen is turned forward until it is again  
 arrested, when the stop 28 reaches the stop 115  
 43. With this forward movement of the  
 platen the new bill is fed into the machine  
 the desired distance, or as far as the first bill  
 was fed before the first line was written upon  
 it. The finger-piece 55 is then depressed 120  
 until the lug 58 strikes the bushing 60 and  
 the pin 62 engages with the recess 63 in the  
 lever. The disks 34 and 39, from which the  
 lever 50 has then been disengaged, will again  
 turn with the disk 27 when the platen is 125  
 rotated to enable successive entries to be  
 made on the bill, and the first line of this  
 second bill will be reproduced on the record-  
 sheet a double-line-space distance away from  
 the last entry on the record-sheet. The 130



operation described may obviously be repeated indefinitely, and as the bills are successively written they will be successively fed out of the machine or to a position where they can be readily removed from the machine without disturbing the other sheets.

The disks 27, 34, and 39, together with the stops 28, 38, and 43 and the springs 44 and 45, are shown in Fig. 8, inclosed in a case, which is composed of parts 66 and 67. The part 66 of this case fits on the hub or boss 68 of the platen-frame and has attached to it an ear 69, through which the screw 51 passes, so that the case is kept in its proper position. The parts 66 and 67 of this case fit together as do a box and its cover. A slot 70 is cut in the case, as appears by Fig. 9, the lip 54 on the lever 50 extending into this slot and being movable therein into engagement with the teeth of the disks 34 and 39 within the case. This case not only protects the parts of the stop mechanism which are inclosed therein from dust, but it also renders them inaccessible to the hand unless the case is opened, and thus tends to prevent them from being accidentally disarranged.

If from the stop mechanism described the disk 39 and spring 45 should be omitted, an operative and useful structure, such as is shown in Figs. 10 and 11, would remain. The mechanism shown in these figures, however, will ordinarily be used only to limit the backward movement of the platen. This mechanism comprises a hub 26<sup>a</sup>, on which is formed a disk 27<sup>a</sup>, a stop 28<sup>a</sup>, and a cylindrical surface 30<sup>a</sup>, and in which are cut slots 32<sup>a</sup>, the disk 27<sup>a</sup> and stop 28<sup>a</sup> being substantially the same as the disk and stop 27 and 28 and the hub 26<sup>a</sup> being substantially the same as the hub 26, except that the part of the hub 26<sup>a</sup> on the right of the disk 27<sup>a</sup> is shorter than the part of the hub 26 on the right of the disk 27 and is not slotted. On the cylindrical part 30<sup>a</sup> of the hub 26<sup>a</sup>, next to the left face of the disk 27<sup>a</sup>, is mounted a disk 34<sup>a</sup>, having notches 36<sup>a</sup> and teeth 37<sup>a</sup> and having a stop 38<sup>a</sup> affixed to it. This disk is like the disk 34, except that the teeth 37<sup>a</sup> are shorter than the teeth 37. A spring 44<sup>a</sup>, which is exactly like the spring 44, is mounted on the hub 26<sup>a</sup> and acts on the disk 34<sup>a</sup> as the spring 44 acts on the disk 34. The hub 26<sup>a</sup> is mounted on the platen-shaft 13 at the right of the platen-frame 7 and is fastened to the shaft by a pin 48<sup>a</sup>. A lever 50<sup>a</sup> is pivoted by a screw 51 to the upright support 23, formed on the platen-frame, or to the rod 25, this lever having an arm 53<sup>a</sup>, on which is a lip or flange 54<sup>a</sup>, which fits the notches 36<sup>a</sup> and having a handle 55<sup>a</sup>. On this lever is a projection 57<sup>a</sup> and lugs 58<sup>a</sup> and 59<sup>a</sup>, the latter lug being formed on the projection 57<sup>a</sup>, and these lugs extend from the left face of the lever 50<sup>a</sup> above and below a bushing 60<sup>a</sup>, which is fixed in the part 52 of the platen-frame and

contains a spring and pin adapted to enter recesses 64<sup>a</sup> and 65<sup>a</sup> in the left face of the lever and projection 57<sup>a</sup>. The bushing 60<sup>a</sup> and the spring and pin contained therein are the same as the bushing 60, spring 61, and pin 62.

If the stop 28<sup>a</sup> is not in contact with the stop 38<sup>a</sup> when it is desired to use the particular stop mechanism shown in Figs. 10 and 11, the platen is turned backward, the disk 34<sup>a</sup> being locked by the lever 50<sup>a</sup> until the platen is arrested by the stops 28<sup>a</sup> and 38<sup>a</sup>. When the disk 34<sup>a</sup> is locked with the lever 50<sup>a</sup>, the front end of the lever is in its highest position, the lug 59<sup>a</sup> being in contact with the bushing 60<sup>a</sup>. The stops 28<sup>a</sup> and 38<sup>a</sup> being in contact with each other, as they are shown in Fig. 10, and the disk 34<sup>a</sup> being locked by the lever 50<sup>a</sup>, a bill with carbon and record sheets may be fed into the machine, and the operator may easily determine, by looking at the bill when it reaches such a position as to enable the first line to be written on it at the desired place, it being understood that the mechanism is preferably, though not necessarily, embodied in a "visible-writing" machine. The front end of the lever 50<sup>a</sup> is then depressed until the lug 58<sup>a</sup> meets the bushing 60<sup>a</sup> and the pin in the bushing enters the recess 64<sup>a</sup>, so that the disk 34<sup>a</sup> is released, and entries are thereafter made on the bill, which may be fed forward in the machine any desired number of line-spaces, the disk 34<sup>a</sup> traveling with the disk 27<sup>a</sup> whenever the platen is turned and the stops 28<sup>a</sup> and 38<sup>a</sup> remaining at the proper distance from each other. When the last entry has been made on the bill and a double-line space is given the platen to space between copies of the different bills on the record-sheet, the disk 34<sup>a</sup> is locked and the platen is turned backward until it is arrested by the stops 28<sup>a</sup> and 38<sup>a</sup>. Then another bill is fed into the machine until the operator observes that it is in the proper position, the handle 58<sup>a</sup> is raised, and the items of the account are written.

A modification of the structure shown in Figs. 10 and 11 is illustrated in Figs. 12 and 13. This modification comprises a hub 26<sup>b</sup>, disk 27<sup>b</sup>, and a stop 28<sup>b</sup>, precisely the same as the hub, disk, and stop 26<sup>a</sup>, 27<sup>a</sup>, and 28<sup>a</sup>, respectively, this hub 26<sup>b</sup> being fast on the platen-shaft 13. A disk 34<sup>b</sup>, having a stop 38<sup>b</sup> fast thereon, is mounted to turn on the hub 26<sup>b</sup> at the left of the disk 27<sup>b</sup>, and on the hub is a spring 44<sup>b</sup>, which bears against the left face of the disk 34<sup>b</sup> and acts on this disk as the spring 44<sup>a</sup> acts on the disk 34<sup>a</sup>. The edge of the disk 34<sup>b</sup> is smooth instead of being provided with notches and teeth; but in other respects this disk with the stop 38<sup>b</sup> thereon is essentially the same as the disk 34<sup>a</sup> with the stop 38<sup>a</sup> affixed to it. On the part 52 of the platen-frame is a clamp which is composed of a base 71, jaws 72, and a thumb-



screw 73. The base of the clamp is fastened to the platen-frame by screws 74, and the jaws 72 are hinged to the base of the clamp. The disk 34<sup>b</sup> extends between the jaws 72 of the clamp, and the thumb-screw 73 passes through and is loose in the right jaw 72 and engages with the left jaw 72, which contains a threaded hole like that of a nut. It will be seen that the disk 34<sup>a</sup> may be locked or unlocked by means of this clamp, so as to render the stop 38<sup>b</sup> cooperative with the stop 28<sup>b</sup> in the same way as the stops in the structure shown in Figs. 10 and 11 cooperate. The effect of this clamp acting on the disk 34<sup>b</sup> is essentially the same as that of the lever 50<sup>a</sup> acting on the disk 34<sup>a</sup>. The operation of the particular form of stop mechanism shown in Figs. 12 and 13 will be understood, it is believed, without a full description thereof, inasmuch as it is essentially the same as that of the other form of mechanism shown in Figs. 10 and 11 and fully described above.

Should it be desired to limit the backward movement only of the platen when the construction of the stop mechanism is that shown in Figs. 1, 2, and 3, the portion of this mechanism which is represented by the structure shown in Figs. 10 and 11 may be operated to produce that result. The lever 50 would then be moved into and out of engagement with the disk 34, but would not be made to engage the disk 39. Consequently the stop 43 on the latter device would not perform its natural function, for it would move whenever the platen was turned, and only the stop 38 would coact with the stop 28 in arresting the platen. The action of the stops 28 and 38 would be the same as that of the stops 28<sup>a</sup> and 38<sup>a</sup>, which was above described.

The invention may be embodied in other forms differing in details of construction or arrangement of parts from any of the three forms shown and specifically described herein.

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

1. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, another movable stop, and means for temporarily holding the latter stop stationary in different positions in the path of the first-mentioned stop, said first-mentioned stop being movable, when the other stop is thus held in any of said positions, from and toward and into contact with the other stop.

2. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, another stop movable by the line-spacing lever and mechanism connected therewith, and means for temporarily holding the latter stop stationary in different positions in the path of the first-mentioned stop, said first-mentioned stop being movable, when the other stop is thus held in any of said positions, from and toward and into contact with the other stop.

3. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, another stop, a frictional connection rendering the latter stop movable with the platen, and means for locking the last-mentioned stop in different positions in the path of the first-mentioned stop, said stops being cooperative with each other to arrest the platen.

4. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, another movable stop, and means for temporarily holding the latter stop stationary in different positions in the path of the first-mentioned stop, said means including a device mounted on the platen-frame, and said first-mentioned stop being movable, when the other stop is thus held in any of said positions, from and toward and into contact with the other stop.

5. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, another stop, a frictional connection rendering the latter stop normally movable with the platen, and means for locking the last-mentioned stop in different positions in the path of the first-mentioned stop, said means including a device mounted on the platen-frame, and said stops being cooperative with each other to arrest the platen.

6. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a cooperative stop mounted on the axis of the platen-shaft and normally movable with the platen, and means for locking the latter stop in different positions.

7. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a cooperative stop mounted on the axis of the platen-shaft and normally movable with the platen, and means for locking the latter stop in different positions, said means including a device mounted on the platen-frame.

8. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a cooperative stop mounted on the axis of the platen-shaft, a frictional connection rendering the latter stop normally movable with the platen, and means for locking the last-mentioned stop in different positions.

9. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a cooperative stop mounted on the axis of the platen-shaft, a frictional connection rendering the latter stop normally movable with the platen, and means for locking the last-mentioned stop in different positions, said means including a device mounted on the platen-frame.

10. In a type-writing machine, the combination with a rotary platen of a disk and stop fast together, the disk being fast on the



platen-shaft, another disk and stop fast together, the latter disk being mounted on the axis of the platen-shaft, means for locking the latter disk in different positions, and a  
5 connection rendering the last-mentioned disk normally movable with the other, said stops being coöperative to arrest the platen.

11. In a type-writing machine, the combination with a rotary platen of a disk and stop  
10 fast together, the disk being fast on the platen-shaft, another disk and stop fast together, the latter disk being mounted on the axis of the platen-shaft, means for locking the latter disk in different positions, and a  
15 connection rendering the last-mentioned disk normally movable with the other, said connection including a frictional spring, and said stops being coöperative to arrest the platen.

20 12. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and a stop fast together, the rack being normally movable with the platen, and a detent movable  
25 into engagement with the rack and operative throughout the period of its engagement with the rack to prevent the rack from rotating in either direction, said stops being coöperative to arrest the platen.

30 13. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and a stop fast together, their axis of rotation being the axis of the platen-shaft, and the rack being  
35 normally movable with the platen, and a detent movable into engagement with the rack and operative throughout the period of its engagement with the rack to prevent the rack from rotating in either direction, said  
40 stops being coöperative to arrest the platen.

14. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and a stop  
45 fast together, their axis of rotation being the axis of the platen-shaft, a connection rendering the rack movable with the platen, said connection including a frictional spring, and a detent movable into engagement with the rack, said stops being coöperative to arrest  
50 the platen.

15. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and a stop  
55 fast together, their axis of rotation being the axis of the platen-shaft, a connection rendering the rack movable with the platen, said connection including a frictional spring, and a detent movable into engagement with the rack, the detent being mounted on the platen-  
60 frame, and said stops being coöperative to arrest the platen.

16. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a ro-  
65 tary disk and stop fast together, this disk be-

ing normally movable on its pivotal axis with the first-mentioned stop, and means for temporarily holding said disk stationary in different positions, said first-mentioned stop being movable when said disk is thus held in  
70 any of said positions, from and toward and into contact with the stop on said disk.

17. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a ro-  
75 tary disk and stop fast together, this disk being mounted on the axis of the platen-shaft and being normally movable on said axis with the first-mentioned stop, and means for locking said disk in different positions. 80

18. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a ro-  
85 tary disk and stop fast together, a frictional connection between the platen-shaft and said disk, and means for locking said disk in different positions. 85

19. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a ro-  
90 tary disk and stop fast together, this disk being mounted on the axis of the platen-shaft, a frictional connection between the platen-shaft and said disk, and means for locking said disk in different positions. 95

20. In a type-writing machine, the combination with a rotary platen of two rotary stops, each being normally movable with the other through more than a rotation on its pivotal axis, and means for rendering one of  
100 said stops operative on the other to arrest the platen.

21. In a type-writing machine, the combination with a rotary platen of two rotary stops mounted on the axis of the platen-shaft  
105 and normally movable together through more than a rotation, and means for rendering one of said stops operative on the other to arrest the platen.

22. In a type-writing machine, the combination with a rotary platen of two rotary stops mounted on the axis of the platen-shaft  
110 and normally movable together through more than a rotation, and means for rendering one of said stops operative on the other  
115 to arrest the platen, said means including a holding device mounted on the platen-frame.

23. In a type-writing machine, the combination with a rotary platen of two rotary  
120 stops, one being normally movable on its pivotal axis by the action of the other stop, and means for rendering one of said stops operative on the other to arrest the platen, said means being inactive when said stops are  
125 moved together.

24. In a type-writing machine, the combination with a rotary platen of two rotary stops mounted on the axis of the platen-shaft,  
130 one being normally movable on its pivotal



axis by the action of the other stop, and means for rendering one of said stops operative on the other to arrest the platen.

25. In a type-writing machine, the combination with a rotary platen of two rotary stops one being normally movable on its pivotal axis by the action of the other stop, and means for rendering one of said stops operative on the other to arrest the platen, said means including a holding device mounted on the platen-frame, and operative by hand to lock one of said stops in different positions.

26. In a type-writing machine, the combination with a rotary platen of two rotary stops mounted on the axis of the platen-shaft, one being normally movable on its pivotal axis by the action of the other stop, and means for rendering one of said stops operative on the other to arrest the platen, said means including a holding device mounted on the platen-frame.

27. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, another rotary stop, a connection through which the platen-shaft is operative to impart more than a whole rotation at a time to the latter stop, and means for rendering said stops cooperative with each other to arrest the platen.

28. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, another rotary stop mounted on the axis of the platen-shaft, a connection through which the platen-shaft is operative to impart more than a whole rotation at a time to the latter stop, and means for rendering said stops cooperative with each other to arrest the platen, said means being inactive when said stops are moved together.

29. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, another rotary stop mounted on the axis of the platen-shaft, a connection through which the platen-shaft is operative to impart more than a whole rotation at a time to the latter stop, and means for rendering said first-mentioned stop operative on the other to arrest the platen, said means including a holding device mounted on the platen-frame.

30. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, the rack being normally movable on its pivotal axis with the first-mentioned stop, and a detent mounted on the platen-frame and movable into engagement with said rack to prevent the rotation of the rack in either direction.

31. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, a frictional

connection between the platen-shaft and the rack, and a detent mounted on the platen-frame and movable into engagement with said rack.

32. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other movable stops, and means for locking each of the two last-mentioned stops in different positions in the path of the first-mentioned stop.

33. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other stops, a frictional connection rendering each of the two last-mentioned stops normally movable with the platen, and means for locking each of the two last-mentioned stops in different positions in the path of the first-mentioned stop.

34. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other movable stops, and means for locking each of the two last-mentioned stops in different positions in the path of the first-mentioned stop, said means including a device mounted on the platen-frame.

35. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other stops, a frictional connection rendering each of the two last-mentioned stops normally movable with the platen, and means for locking each of the two last-mentioned stops in different positions in the path of the first-mentioned stop, said means including a device mounted on the platen-frame.

36. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other stops each mounted on the axis of the platen-shaft and normally movable with the platen, and means for locking each of the two last-mentioned stops in different positions.

37. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other stops each mounted on the axis of the platen-shaft and normally movable with the platen, and means for locking each of the two last-mentioned stops in different positions, said means including a device mounted on the platen-frame.

38. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other stops mounted on the axis of the platen-shaft, a frictional connection rendering each of the two last-mentioned stops normally movable with the platen, and means for locking each of the two last-mentioned stops in different positions.

39. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, two other stops mounted on the axis of the platen-shaft, a frictional



connection rendering each of the two last-mentioned stops normally movable with the platen, and means for locking each of the two last-mentioned stops in different positions, said means including a device mounted on the platen-frame.

40. In a type-writing machine, the combination with a rotary platen of a disk and stop fast together, the disk being fast on the platen-shaft, a disk and stop fast together and mounted on the axis of the platen-shaft, another disk and stop fast together and mounted on the axis of the platen-shaft, means for locking each of the two last-mentioned disks in different positions, and a connection rendering each of the two last-mentioned disks normally movable with the first-mentioned disk.

41. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and a stop fast together, another rotary rack and a stop fast together, the racks being normally movable with the platen, and a detent movable into immediate engagement with each of said racks.

42. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, the axis of rotation of said racks being the axis of the platen-shaft and the racks being normally movable with the platen, and a detent movable into engagement with said racks.

43. In a type-writing machine, the combination with a rotary platen of a stop fast on the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, the axis of rotation of said racks being the axis of the platen-shaft, a frictional connection rendering each of the racks movable with the platen, and a detent movable into engagement with said racks.

44. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary disk and stop fast together, another rotary disk and stop fast together, said disks being normally movable with the first-mentioned stop, and means for locking each of said disks in different positions.

45. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary disk and stop fast together, another rotary disk and stop fast together, said disks being mounted on the axis of the platen-shaft and being normally movable on said axis with the first-mentioned stop, and means for locking each of said disks in different positions.

46. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a ro-

tary disk and stop fast together, another rotary disk and stop fast together, a frictional connection between the platen-shaft and each of said disks, and means for locking each of said disks in different positions.

47. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary disk and stop fast together, another rotary disk and stop fast together, said disks being mounted on the axis of the platen-shaft, a frictional connection between the platen-shaft and each of said disks, and means for locking each of said disks in different positions.

48. In a type-writing machine, the combination with a rotary platen of three rotary stops, each being normally movable with the others through more than a rotation, and means for rendering one of said stops cooperative with each of the others to arrest the platen.

49. In a type-writing machine, the combination with a rotary platen of three rotary stops mounted on the axis of the platen-shaft and normally movable together through more than a rotation, and means for rendering one of said stops cooperative with each of the others to arrest the platen.

50. In a type-writing machine, the combination with a rotary platen of three rotary stops mounted on the axis of the platen-shaft and normally movable together through more than a rotation, and means for rendering one of said stops cooperative with each of the others to arrest the platen, said means including a holding device mounted on the platen-frame.

51. In a type-writing machine, the combination with a rotary platen of three rotary stops arranged to be rotated together, and means for rendering one of said stops cooperative with each of the others to arrest the platen.

52. In a type-writing machine, the combination with a rotary platen of three rotary stops mounted on the axis of the platen-shaft and arranged to be rotated together, and means for rendering one of said stops cooperative with each of the others to arrest the platen.

53. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, two other rotary stops, a connection through which the platen-shaft is operative to impart more than a whole rotation to each of the two last-mentioned stops, and means for rendering one of said three stops cooperative with each of the others to arrest the platen.

54. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, two other rotary stops mounted on the axis of the platen-shaft, a connection through which the



platen-shaft is operative to impart more than a whole rotation to each of the two last-mentioned stops, and means for rendering one of said three stops coöperative with each of the others to arrest the platen.

55. In a type-writing machine, the combination with a rotary platen, of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, said racks being arranged to be rotated by the platen-shaft, and a detent mounted on the platen-frame and movable into immediate engagement with each of said racks.

56. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, a frictional connection between the platen-shaft and each of the racks, and a detent mounted on the platen-frame and movable into engagement with said racks.

57. In a type-writing machine, the combination with a rotary platen, of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, said racks being arranged to be rotated by the platen-shaft, and a detent adapted to engage one of said racks alone and to engage both of them together.

58. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, a frictional connection between the platen-shaft and each of the racks, and a detent adapted to engage one of said racks alone and to engage both of them together.

59. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, these racks being mounted on the axis of the platen-shaft and being arranged to be rotated with the first-mentioned stop, and a detent adapted to engage one of said racks alone and to engage both of them together.

60. In a type-writing machine, the combination with a rotary platen, of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, said racks being arranged to be rotated by the platen-shaft, and one of the racks being larger than the other and having longer teeth than the other, and a detent adapted to engage the larger rack alone and to engage both racks together.

61. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a ro-

tary rack and stop fast together, another rotary rack and stop fast together, one of these racks being larger than the other and having longer teeth than the other, a frictional connection between the platen-shaft and each of the racks, and a detent adapted to engage the larger rack alone and to engage both racks together.

62. In a type-writing machine, the combination with a rotary platen of a stop positively connected with the platen-shaft, a rotary rack and stop fast together, another rotary rack and stop fast together, these racks being mounted on the axis of the platen-shaft and being arranged to be rotated with the first-mentioned stop, and one of these racks being larger than the other and having longer teeth than the other, and a detent adapted to engage the larger rack alone and to engage both racks together.

63. In a type-writing machine, the combination with a rotary platen of stop mechanism including two rotary racks, and a detent adapted to engage both of said racks together.

64. In a type-writing machine, the combination with a rotary platen of stop mechanism including two rotary racks, and a detent adapted to engage one of said racks alone and to engage both of them together.

65. In a type-writing machine, the combination with a rotary platen of stop mechanism including two rotary racks mounted on the axis of the platen-shaft, and a detent adapted to engage both of said racks together.

66. In a type-writing machine, the combination with a rotary platen of stop mechanism including two rotary racks mounted on the axis of the platen-shaft, and a detent adapted to engage one of said racks alone and to engage both of them together.

67. In a type-writing machine, the combination with a rotary platen of stop mechanism including two rotary racks, one of the racks being larger than the other and having longer teeth than the other, and a detent adapted to engage the larger rack alone and to engage both racks together.

68. In a type-writing machine, the combination with a rotary platen of stop mechanism including two rotary racks mounted on the axis of the platen-shaft, one of the racks being larger than the other and having longer teeth than the other, and a detent adapted to engage the larger rack and to engage both racks together.

69. In a type-writing machine, the combination with a rotary platen of platen-arresting mechanism including a rotary stop-carrying device connected with and normally movable through any number of rotations by the platen-shaft, and means for locking said device in different positions, the platen-shaft being movable separately when said device is locked.

70. In a type-writing machine, the combi-



nation with a rotary platen of platen-arresting mechanism including a rotary disk connected with and normally movable through any number of rotations by the platen-shaft, and means for locking said disk in different positions, the platen-shaft being movable separately when said disk is locked.

71. In a type-writing machine, the combination with a rotary platen of platen-arresting mechanism including a rotary rack connected with and normally movable through any number of rotations by the platen-shaft, and a detent movable into engagement with said rack, the platen-shaft being movable separately when said detent is engaged with the rack.

72. In a type-writing machine, the combination with a rotary platen of platen-arresting mechanism including two rotary stop-carrying devices connected with and normally movable through any number of rotations by the platen-shaft, and means for locking said devices to the platen-frame.

73. In a type-writing machine, the combination with a rotary platen of platen-arresting mechanism including two rotary stop-carrying devices connected with and normally movable through any number of rotations by the platen-shaft, and means for locking one of said devices alone and both of said devices together to the platen-frame.

74. In a type-writing machine, the combination with a rotary platen of platen-arresting mechanism including a rotary device and a stop fast together, another rotary device and stop fast together, said devices being connected with and normally movable through any number of rotations by the platen-shaft, and means for locking said devices to the platen-frame.

75. In a type-writing machine, the combination with a rotary platen of platen-arresting mechanism including a rotary device and stop fast together, another rotary device and stop fast together, said devices being connected with and normally movable through any number of rotations by the platen-shaft, and means for locking one of said devices alone and both of said devices together to the platen-frame.

76. In a type-writing machine, the combination with a rotary platen of rotary devices including platen-arresting stops mounted on the axis of the platen-shaft and inclosed in a case which renders them inaccessible to the hand, and means operative with the hand outside of said case for actuating and regulating the action of said rotary devices.

77. In a type-writing machine, the combination with a rotary platen of rotary devices including platen-arresting stops mounted on the axis of the platen-shaft and inclosed in a case which renders them inaccessible to the hand, and means including a finger-wheel on the platen-shaft and a device mounted on the

platen-frame outside of the case for actuating and regulating the action of said rotary devices.

78. In a type-writing machine, the combination with a rotary platen of rotary devices including platen-arresting stops mounted on the axis of the platen-shaft and inclosed in a case, a finger-wheel on the platen-shaft, and a device mounted on the platen-frame outside of the case and movable through an opening in the case into operative connection with parts of the mechanism within the case.

79. In a type-writing machine, the combination with a rotary platen of rotary devices including a rack and platen-arresting stops mounted on the axis of the platen-shaft and inclosed in a case, a finger-wheel on the platen-shaft, and a detent mounted on the platen-frame outside of the case and movable through an opening in the case into engagement with said rack.

80. In a type-writing machine, the combination with a rotary platen of rotary devices including two racks and platen-arresting stops mounted on the axis of the platen-shaft and inclosed in a case, a finger-wheel on the platen-shaft, and a detent mounted on the platen-frame outside of the case and movable through an opening in the case into engagement with said racks.

81. In a type-writing machine, the combination with a rotary platen, of a stop fast on the platen-shaft, an adjustable stop movable to different positions in the path of the first-mentioned stop, and means for temporarily holding said adjustable stop stationary in any of said positions until the other stop is moved into contact with it to arrest the platen.

82. In a type-writing machine, the combination with a rotary platen, of two stops arranged to normally rotate with the platen, and means for temporarily holding one of said stops at rest, while the other is free to rotate with the platen and by such rotation may be finally engaged with the temporarily-held stop to arrest the platen.

83. In a type-writing machine, the combination with a rotary platen, of two stops arranged to normally rotate with the platen, one of said stops having a fixed relation to the platen, and the other being adjustable relatively to the platen and the said fixed stop, and means for temporarily holding the adjustable stop at rest in the path of the fixed stop, to render said stops operative to arrest the platen when it is rotated to a predetermined extent while the adjustable stop is thus held.

84. In a type-writing machine, the combination of two stops arranged to be normally rotated with the platen and adapted to make contact with each other to arrest the platen, one of said stops being fixed relatively to the



platen and the other stop being adjustable, and means for temporarily holding the adjustable stop at rest while the platen is rotated and until the said fixed stop is arrested  
5 by the temporarily-held adjustable stop.

Signed at the borough of Manhattan, city of New York, in the county of New York and

State of New York, this 11th day of July, A. D. 1906.

DANIEL A. CARPENTER.

Witnesses:

E. M. WELLS,  
M. F. HANNWEBER.