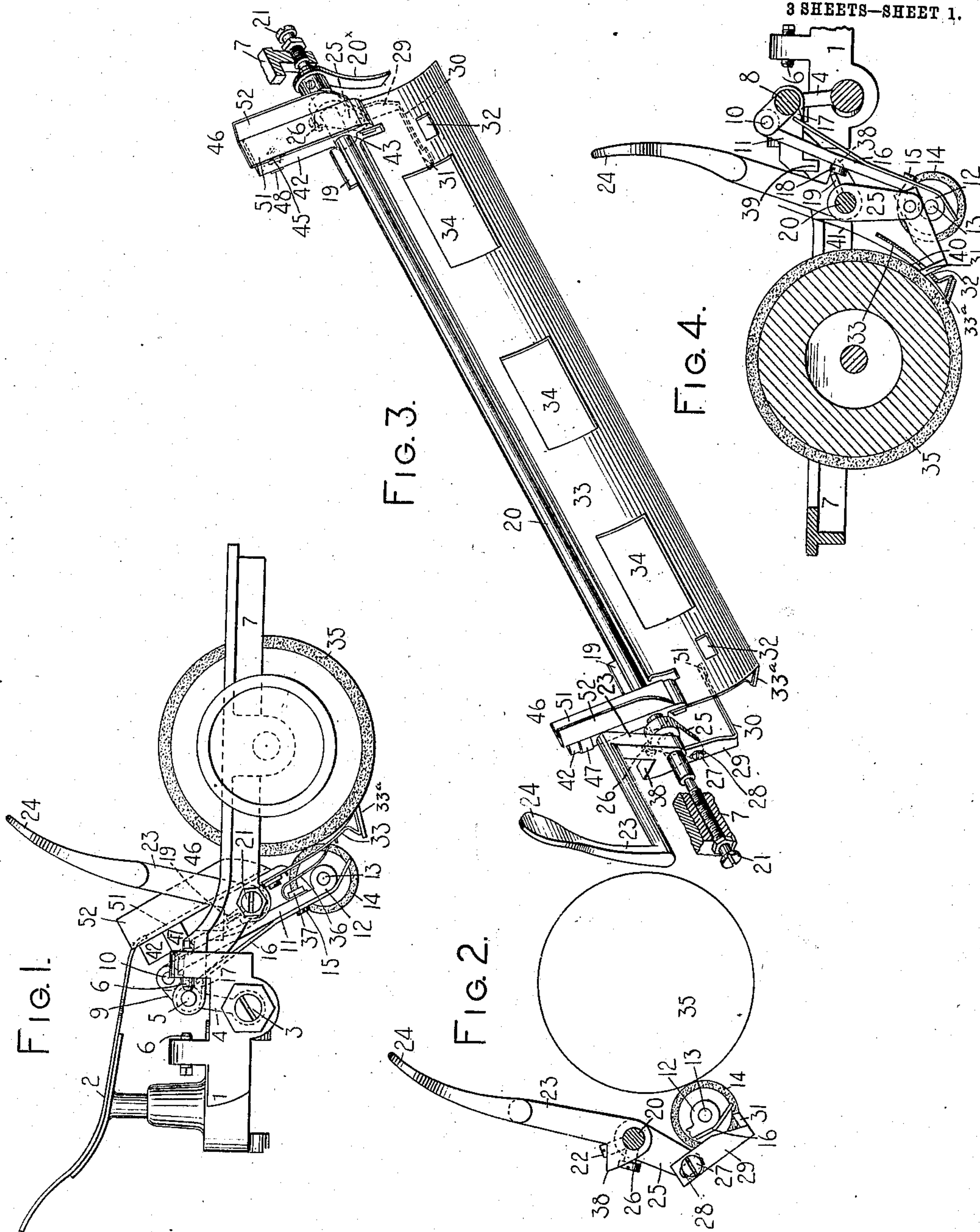


915,732.

D. BRIGGS.  
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APPLICATION FILED MAR. 3, 1902.

Patented Mar. 23, 1909.  
3 SHEETS—SHEET 1.



WITNESSES.

K. V. Donovan.  
Charles Smith

INVENTOR.

Daniel Briggs  
by Jacob Felber  
HIS ATTORNEY

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FIG. 5.

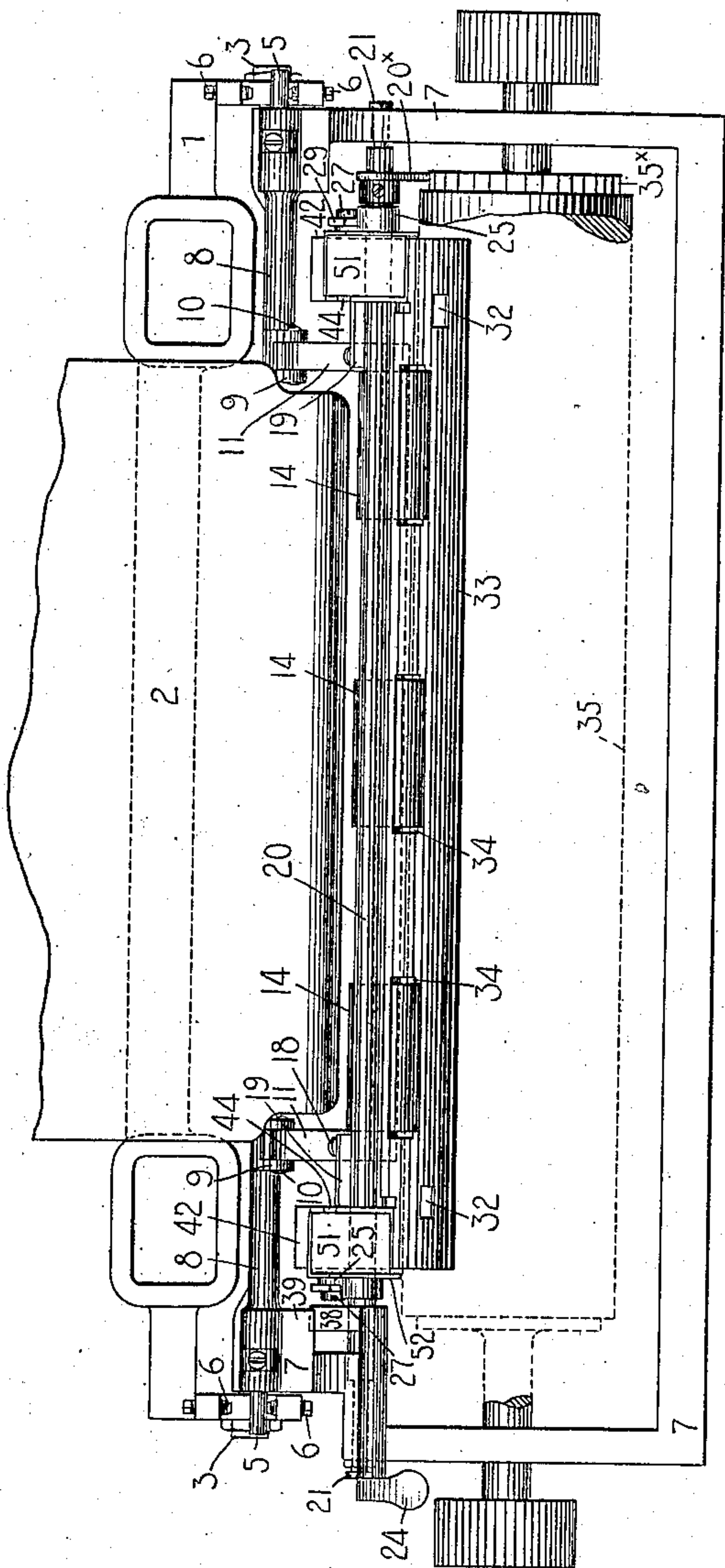
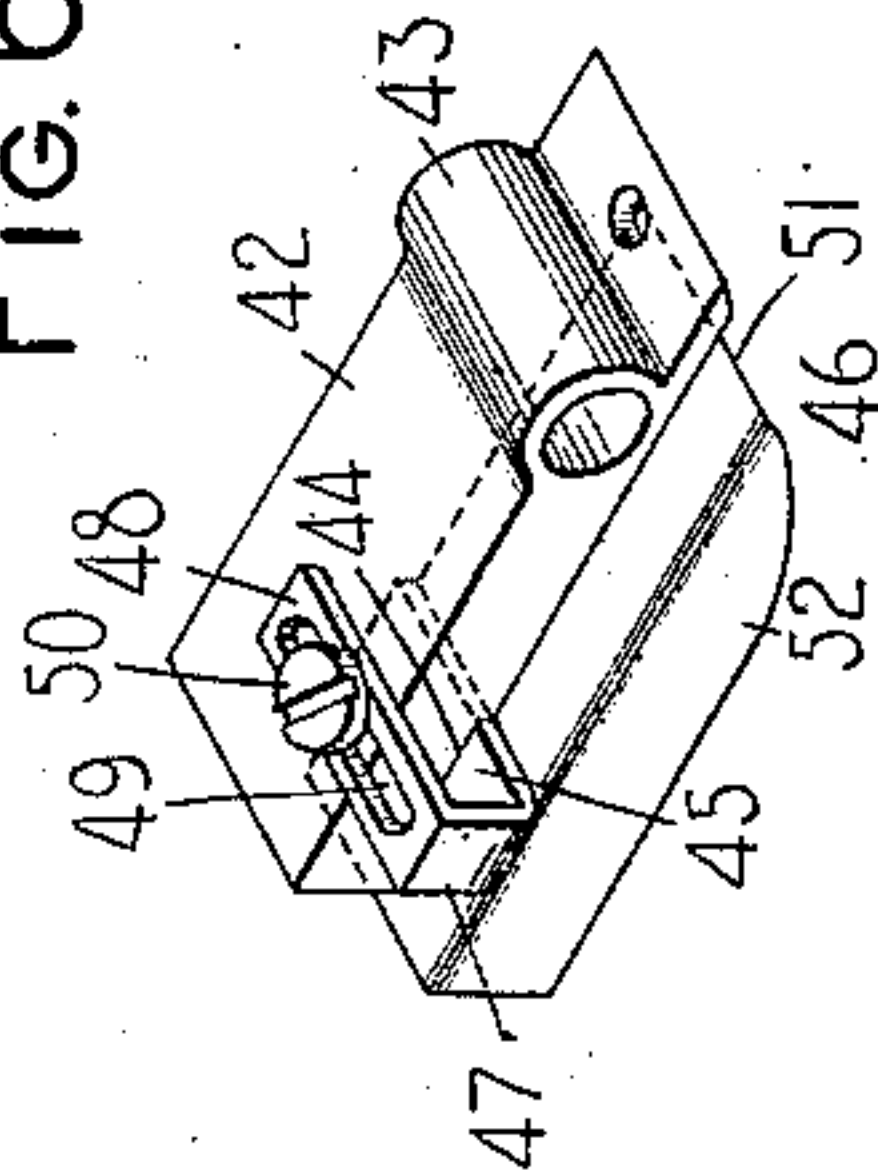


FIG. 6.



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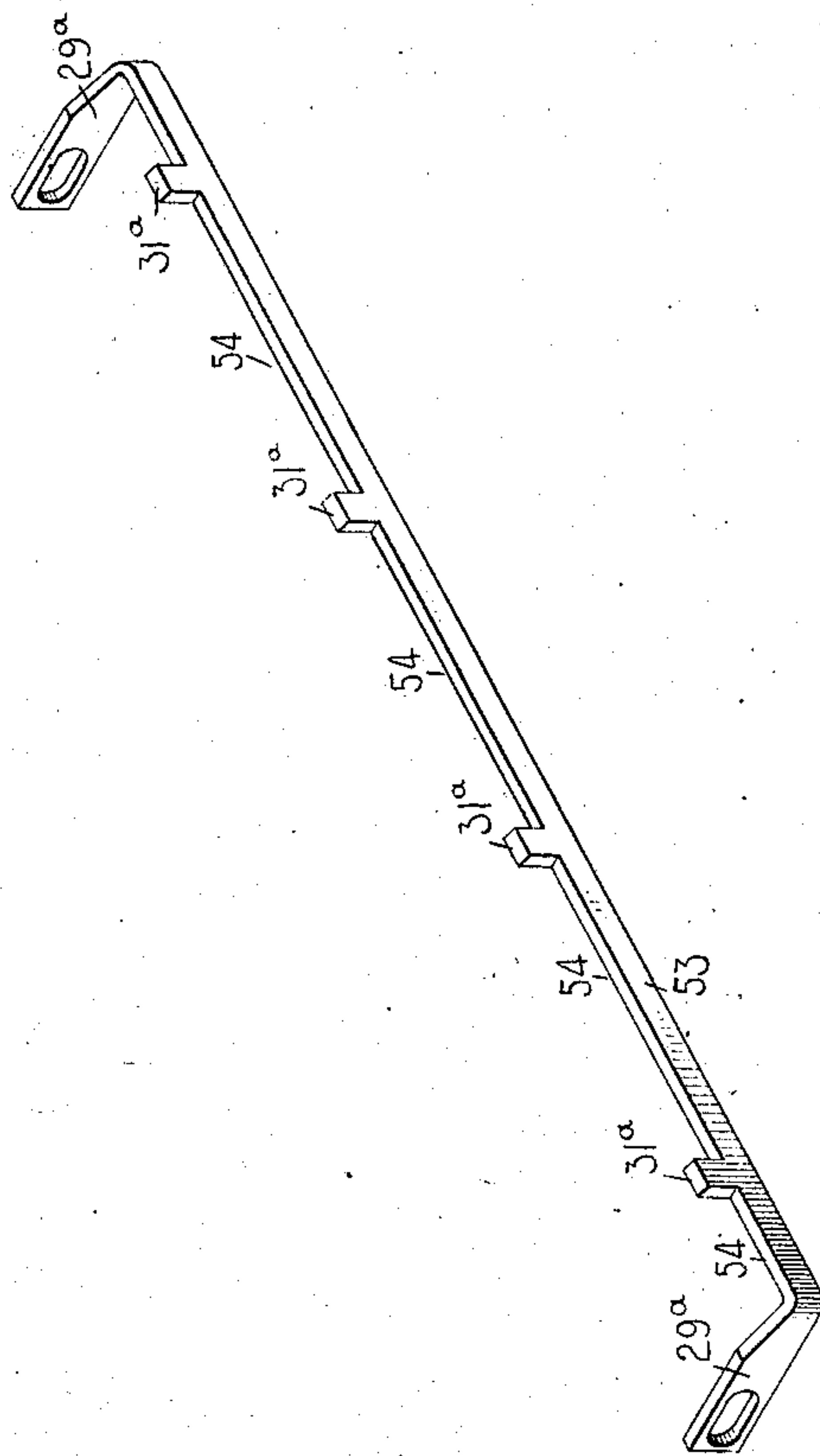
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*Fig. 7.*



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# UNITED STATES PATENT OFFICE.

DANIEL BRIGGS, OF NEW YORK, N. Y., ASSIGNOR TO WYCKOFF, SEAMANS & BENEDICT, OF  
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## TYPE-WRITING MACHINE.

No. 915,732.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed March 3, 1902. Serial No. 96,472.

*To all whom it may concern:*

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

My invention relates to paper feeding and guiding mechanism for typewriting machines and the object of said invention is to provide simple and efficient mechanism of the character described and mechanism wherein the paper may be quickly and properly squared or positioned on the platen without depending on the judgment of the operator to determine whether or not the paper is properly positioned.

To these and other ends which will hereinafter more fully appear, my invention consists in the novel construction, arrangement and combination of parts set forth in the following specification and particularly pointed out in the appended claims.

In the accompanying drawings, wherein like reference characters indicate corresponding parts in the various views, and wherein parts have been omitted or broken away in various views to more clearly illustrate other features of the structure, Figure 1 is an end view of the carriage of a No. 6 Remington typewriting machine, showing the application of my invention thereto. Fig. 2 is a detail end view of certain of the parts illustrated in Fig. 1, the parts being shown in the normal position. Fig. 3 is a detail perspective face view of the paper guiding and stop mechanism. Fig. 4 is a transverse or vertical front to rear sectional view through the carriage, the view looking in the opposite direction from that of Fig. 1. Fig. 5 is a fragmentary plan view of the carriage and the paper and guiding and feeding mechanism. Fig. 6 is a detail bottom perspective view of one of the paper guides. Fig. 7 is a detail perspective view of another form of stop device embodying my invention.

I have shown my invention in its application to the carriage of a No. 6 Remington machine, though it should be understood that the invention is in no sense limited in its application and may be applied to typewriting machines of various characters and that to this end various modifications may be made without departing from the spirit

of my invention. It should be noted, however, that the features which comprise my present invention may be applied to the No. 6 Remington machine without any structural modification of that machine.

The truck 1 of the carriage which is adapted to move from end to end of the machine in the usual manner supports a paper table 2 thereon, and has pivoted at each end thereof at 3, a link 4 which supports at its upper end a pin 5 that is adapted to oscillate with the link between the adjustable screw-stops 6 that are carried by the truck. The pivot pins 5 pivotally connect the platen frame 7 to the links 4 and permit a transverse movement of the platen frame for upper and lower case writing. The pivot pins 5 are seated within a cross-bar 8 which is rigidly secured to or forms a part of the platen frame. This cross-bar 8 is provided with supporting ears 9 that have pivoted therein at 10 the arms 11, each of which is provided at its lower end with a bearing 12 for the reception of a shaft 13 on which the paper feed rollers 14 are mounted to revolve; suitable spacing sleeves being employed between the rollers to maintain them separated. Each of the arms 11 has secured thereto at 15 a spring 16 which projects upwardly and bears at its free end against a stud 17 that projects from the cross bar 8, and the tension of these springs 16 is effective to normally maintain the paper feed rollers in contact with the platen. The arms 11 are each provided with a bearing stud 18 against which a finger 19 that extends from a rock shaft 20, is adapted to bear. This rock shaft 20 is supported by suitable screw bearings 21 carried by the platen frame. Rigidly secured, preferably to the left-hand end of the rock shaft, by a set screw 22 is an arm 23 which has a finger piece 24 extending therefrom. The rock shaft 20 likewise has an arm 25 adjustably secured thereto by a set screw 26 so that the arm may be adjusted around the rock shaft. The lower end of this arm has a threaded opening which is adapted to receive the stem of a headed screw 27 which projects through a slot 28 in a paper stop arm or carrier 29. The lower end of this arm 29 is provided with an angular bend 30 which terminates in a paper stop or finger 31 which is adapted to be projected through an aperture 32 in a paper apron or scale plate 33, as will hereinafter more clearly appear. An arm 25, stop carrier 29 and



paper finger or stop 31 are secured at each end of the rock shaft 20, as illustrated in Fig. 3. The paper apron 33 is likewise apertured at 34 to permit the paper feed rollers 14 to be projected therethrough and into contact with the platen 35 which is revolvably carried by the platen frame 7. The lower edge of the paper apron 33 which carries the usual scale 33<sup>a</sup> is maintained in contact with the platen by springs 36, one of which is secured at 37 to each of the arms 11 and the tension of these springs is such that the lower edge of the paper apron will be maintained against the platen at all times irrespective of the fact that the lower ends of the arms 11 may be moved away from the platen to carry the paper feed rollers out of contact therewith. It will be observed from an examination of Fig. 4 that the disposition of the fingers 19, with relation to the arms 11 which are under spring pressure, is such that the tension of the spring 16 tends to maintain the rock shaft 20 and the finger piece 24 in a normal position. These parts are limited in their movement to the normal position by an abutment 38 which is carried by the arm 23 of the finger piece and is adapted to contact with a rigid abutment 39, carried by the platen frame, when the parts are in the normal position. The movement of the rock shaft 20 and the parts carried thereby in an opposite direction is limited by the usual locking pawl 20<sup>x</sup> which is carried by the rock shaft and is adapted to be forced into contact with the usual ratchet wheel 35<sup>x</sup> and thus limit the movement of the parts.

In the normal or operative positions of the parts, the feed rollers 14 are projected through apertures 34 in the paper apron and are in contact with the platen, as indicated in Fig. 1, and at this time the paper stops 31 are withdrawn from the apertures 32 and are maintained away from the platen, as shown in Fig. 2. When, however, the finger piece 24 is moved toward the rear of the machine, it will cause the fingers 19 carried by the rock shaft to bear against the abutments 18 on the arms 11 and to move said arms against the tension of their springs, thereby withdrawing the feed rollers from contact with the platen. During the movements of the parts just described, the paper fingers 31 will be projected through the apertures 32 in the paper apron and into contact with the platen, as shown in Fig. 4. It will be observed that when the parts are in the position shown in this figure, the paper stops are interposed in the path of the leading end 40 of the paper 41, which is inserted in the machine, and that these paper stops provide means by which the paper can be quickly and efficiently squared or positioned on the platen. As soon as the finger piece 24 is released, the paper fingers 31 will be withdrawn from the path of the paper and

the paper feed rollers 14 will be simultaneously moved through the apertures 34 in the paper apron and into contact with the paper so as to clamp it in its proper position on the platen, to which it has been adjusted with the aid of the paper fingers. It will be understood that the screws 26 and 27 together with the slot 28, enable the paper fingers to be adjusted so that they may be projected toward the platen to varying extents, though I prefer to adjust the parts so that when the finger piece 24 has been moved in the direction of the arrow in Fig. 3 to its full extent, the paper fingers will be brought into contact with the platen. This adjustment likewise enables the stops to be properly aligned so that the paper will be squared on the platen when brought into contact with the stops. Furthermore, the adjustment enables the line at which the paper is arrested by the stops to be varied, so that the paper after it is arrested may be fed to the proper position to begin the first line of writing.

The paper stops of my invention not only aid in squaring or properly positioning the paper on the platen but they likewise insure that the paper will always start to be fed with the platen from the same point and a subsequent actuation of the ordinary line spacing mechanism (after the paper stops are withdrawn and the paper feed rollers are in contact with the paper) will feed the paper to the proper position to begin the first line of writing. It will be understood therefore that the device may be used without alteration in connection with a line counting or indicating device of the character shown for instance in the patent to Higham No. 682,870, dated Sept. 17, 1901.

The paper apron 33 is connected at its upper edge to blocks 42, one of such blocks being provided at each end of the apron. These blocks are provided with apertured ears 43 by means of which they are movably supported upon the rock shaft 20. Upon reference to Fig. 6, it will be observed that the blocks 42 are each transversely recessed at 44 for the reception of a sliding piece or bar 45 which is secured to a paper guide 46. This bar 45 is bent at 47 and forms an extension 48 which is parallel with the bar 44 and is provided with a slot 49 through which the stem of a headed set screw 50 is adapted to pass. The stem of this set screw is received within a threaded opening in the block 42 and means are thus provided for adjusting each of the paper guides 46 for a limited distance in the direction of the length of the platen. The tightening of the screws maintain the guides 46 in their adjusted positions. Each of the paper guides 46 is formed of an L-shaped plate which comprises a paper support 51 and an extension or abutment 52 that extends at right angles



thereto. The angular extension or abutment 52 of each paper guide constitutes a guide against which each side edge of the paper is adapted to bear, whereas the plate-like supporting portion 51 of each guide constitutes a support upon which the paper is adapted to rest.

Upon reference to Fig. 1 it will be observed that the plane of the lower portion of the paper table 2 is substantially coincident with the plane of the portions 51 of the paper guides so that paper which is placed upon the paper table may be readily fed and guided to the paper guides 46. It will likewise be observed that the paper apron forms a continuation of the portions 51 of the paper guides so that the paper which is received on these portions 51 may be readily guided to the paper apron.

While I have shown and described the use of two paper guides 46, which are independent of the paper stops but which however, are adapted to cooperate therewith to properly position the paper, it should be understood that it may be sufficient in most instances to provide but a single guide near the left-hand side of the platen. It should likewise be understood that while I have described with considerable detail, the separate paper stops or fingers 31, a single bar 53 (Fig. 7) provided with slotted stop carrying arms 29<sup>a</sup> and which extends throughout or substantially throughout the length of the platen may be employed in their stead, and if desired, this bar may be cut away at intervals throughout its length as shown at 54 so as to provide a series of paper stops 31<sup>a</sup>.

From the foregoing description, it will be understood that the paper gage or stops are independent of the platen and operate forwardly of the sight of the feed between the feed rollers and platen and are rearwardly of the horizontal scale or paper retainer 33<sup>a</sup>, which is in the rear of the printing line, and that the stops are capable of an up and down adjustment.

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

1. In a typewriting machine, the combination of a platen, paper guiding devices for directing the paper in its rotation with the platen, a paper stop independent of said paper guiding means, means independent of said paper guiding means for moving said paper stop into the path of the leading edge of the paper, and means for adjusting said stop relatively to its moving means.

2. In a typewriting machine, the combination of a platen, a paper guide independent of the paper table and cooperative with the paper as it is introduced into the machine and which constitutes a support for the paper and an abutment for one side edge thereof, and means for adjusting said paper guide in the direction of the length of the platen.

3. In a typewriting machine, the combination of a carriage, a platen, a paper table fixed to the carriage, a paper guide independent of the paper table and outside of the field thereof and cooperative with the paper as it is introduced into the machine and which is substantially L-shaped in cross section and constitutes a support for the paper and an abutment for one side edge thereof, and means for adjusting said paper guide in the direction of the length of the platen.

4. In a typewriting machine, the combination of a platen, a paper table, a paper guide independent of the paper table and which constitutes a support for the paper and an abutment for one side edge thereof, means for adjusting said paper guide in the direction of the length of the platen, and a paper apron which constitutes a continuation of said guide.

5. In a typewriting machine, the combination of a platen, a paper table, a paper apron, a paper guide independent of said table and intermediate of the paper apron and the plane of the paper table and extending from one to the other, and continuous with the paper apron, said guide being substantially L-shaped in cross section and constituting a support for the paper and an abutment for one side edge thereof, and means for adjusting said paper guide in the direction of the length of the platen.

6. In a typewriting machine, the combination of a platen, a paper table, and a paper guide which is supported independently of the paper table and is cooperative with the paper as it is introduced into the machine and has a portion thereof that is in substantially the same plane as a portion of the paper table and is adapted to support the paper and constitute an abutment for one side edge thereof.

7. In a typewriting machine, the combination of a platen, a paper table, a paper guide which is supported independently of the paper table and has a portion thereof that is in substantially the same plane as a portion of the paper table and is adapted to support the paper and constitute an abutment for one side edge thereof, and a paper apron which constitutes a continuation of said paper guide.

8. In a typewriting machine, the combination of a platen, a paper table, a paper guide at each end of the platen and which are independent of the said table and cooperative with the paper as it is introduced into the machine and constitute supports for the paper and abutments for the side edges thereof, and means for adjusting said paper guides in the direction of the length of the platen.

9. In a typewriting machine, the combination of a platen, a paper table, a paper apron, a paper guide at each end of the platen and



intermediate the paper apron and the plane of the paper table and extending from one to the other, said guides being each substantially L-shaped in cross-section and constituting supports for the paper and abutments for the side edges thereof, and means for adjusting said paper guides in the direction of the length of the platen.

10. In a typewriting machine, the combination of a platen, a paper table, a paper apron, a paper guide at each end of the platen and intermediate the paper table and apron and flush therewith, which guides constitute supports for the paper and abutments for the side edges thereof, and means for adjusting said paper guides in the direction of the length of the platen.

11. In a typewriting machine, the combination of a platen, a paper table, a paper apron, a paper guide at each end of the platen, which guides are each independent of the paper table and substantially L-shaped in cross-section and which constitute independent supports for the paper and abutments for the side edges thereof, means for adjusting said paper guides in the direction of the length of the platen, and a paper apron which constitutes a continuation of the paper supporting portions of said paper guides.

12. In a typewriting machine, the combination of a platen, a paper table, and a paper guide at each end of the platen and each of which guides is supported independently of the paper table and is cooperative with the paper as it is introduced into the machine and has a portion thereof that is in substantially the same plane as a portion of the paper table and is adapted to support the paper and constitute an abutment for one side edge thereof.

13. In a typewriting machine, the combination of a platen, paper feed rollers, a rock shaft, means for turning said rock shaft, means carried by said rock shaft for moving said feed rollers out of contact with the platen, and a paper stop carried by said rock shaft and rigidly secured thereto and adapted to be projected into the path of the leading edge of the paper when the shaft is turned to move the feed rollers out of contact with the platen.

14. In a typewriting machine, the combination of a platen, paper feed rollers, spring-pressed arms which carry said feed rollers, a rock shaft, hand-operated means for turning said rock shaft, means carried by said rock shaft for moving said arms against their spring tension and thereby moving the feed rollers out of contact with the platen, and a plurality of independent paper stops carried by and rigidly secured to the rock shaft and adapted to be projected into the path of the leading edge of the paper when the shaft is turned to move the feed rollers out of contact with the platen.

15. In a typewriting machine, the combination of a platen, paper feed rollers, a rock shaft, means for turning said rock shaft, means carried by said rock shaft for moving said feed rollers out of contact with the platen, arms carried by said rock shaft and rigidly secured thereto, paper stops rigidly carried by said arms and adapted to be projected into the path of the leading edge of the paper when the shaft is turned to move the feed rollers out of contact with the platen, and means for adjusting the stops on said arms.

16. In a typewriting machine, the combination of a platen, a paper table, a paper apron having perforations therein, a rock shaft on which said paper apron is supported, paper feed rollers spring-pressed toward the platen and which are moved away from the platen by said rock shaft, substantially L-shaped side edge guides supported by said rock shaft and forming a continuation between the paper apron and paper table, and leading edge stops secured to said rock shaft and moved thereby through said perforations in the paper apron and toward the platen when said rock shaft is turned to move the feed rollers away from the platen.

Signed at the borough of Manhattan, city of New York, in the county of New York, and State of New York, this 20th day of February A. D. 1902.

DANIEL BRIGGS.

Witnesses:

K. V. DONOVAN,  
E. M. WELLS.