

No. 705,281.

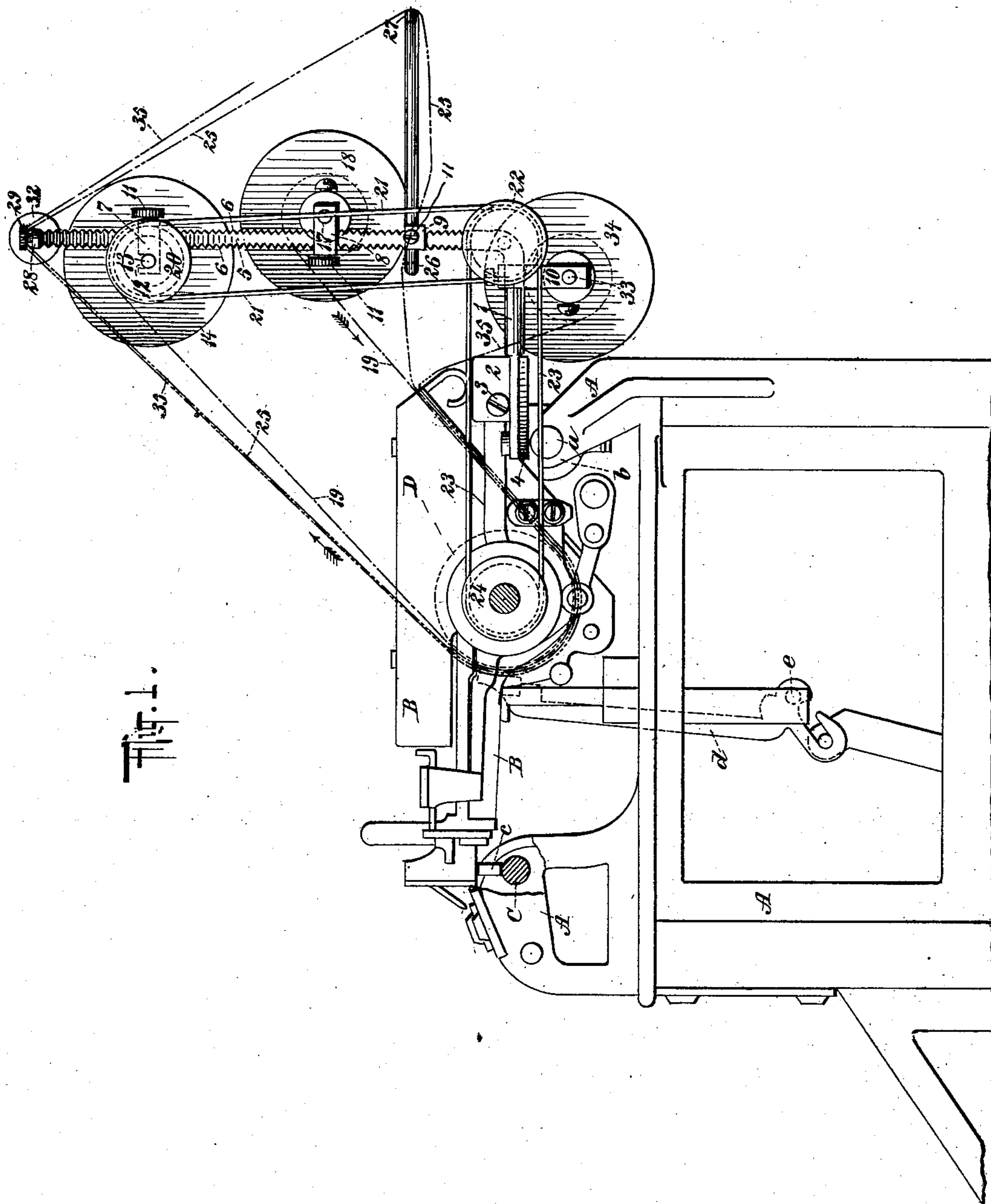
Patented July 22, 1902.

J. E. NEHR.
TYPE WRITING MACHINE.

(Application filed Mar. 27, 1901.)

(No Model.)

3 Sheets—Sheet 1.



WITNESSES:

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Charles E. Smith

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Jacob E. Neahr

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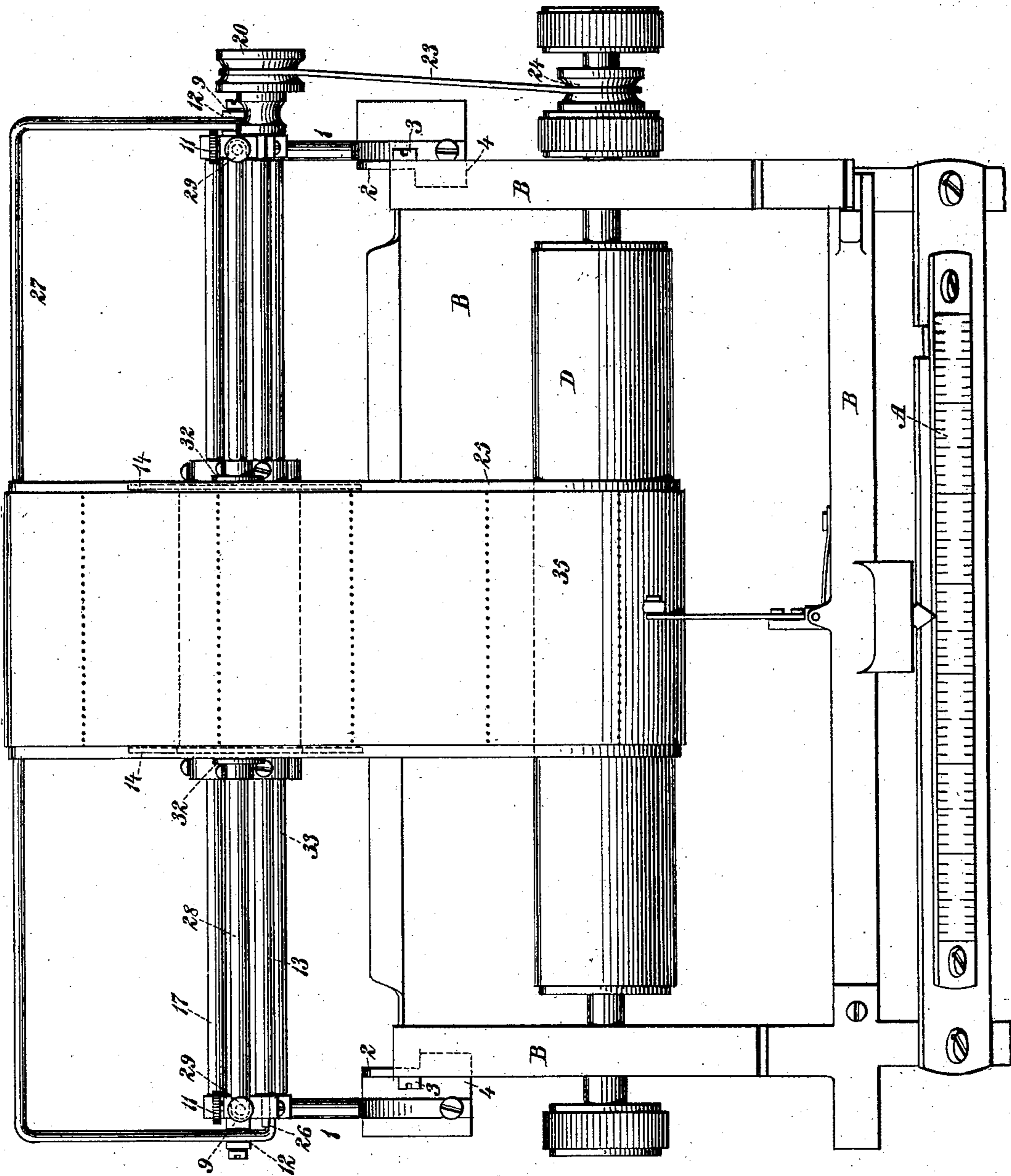
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3 Sheets—Sheet 2.



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Fig. 2.

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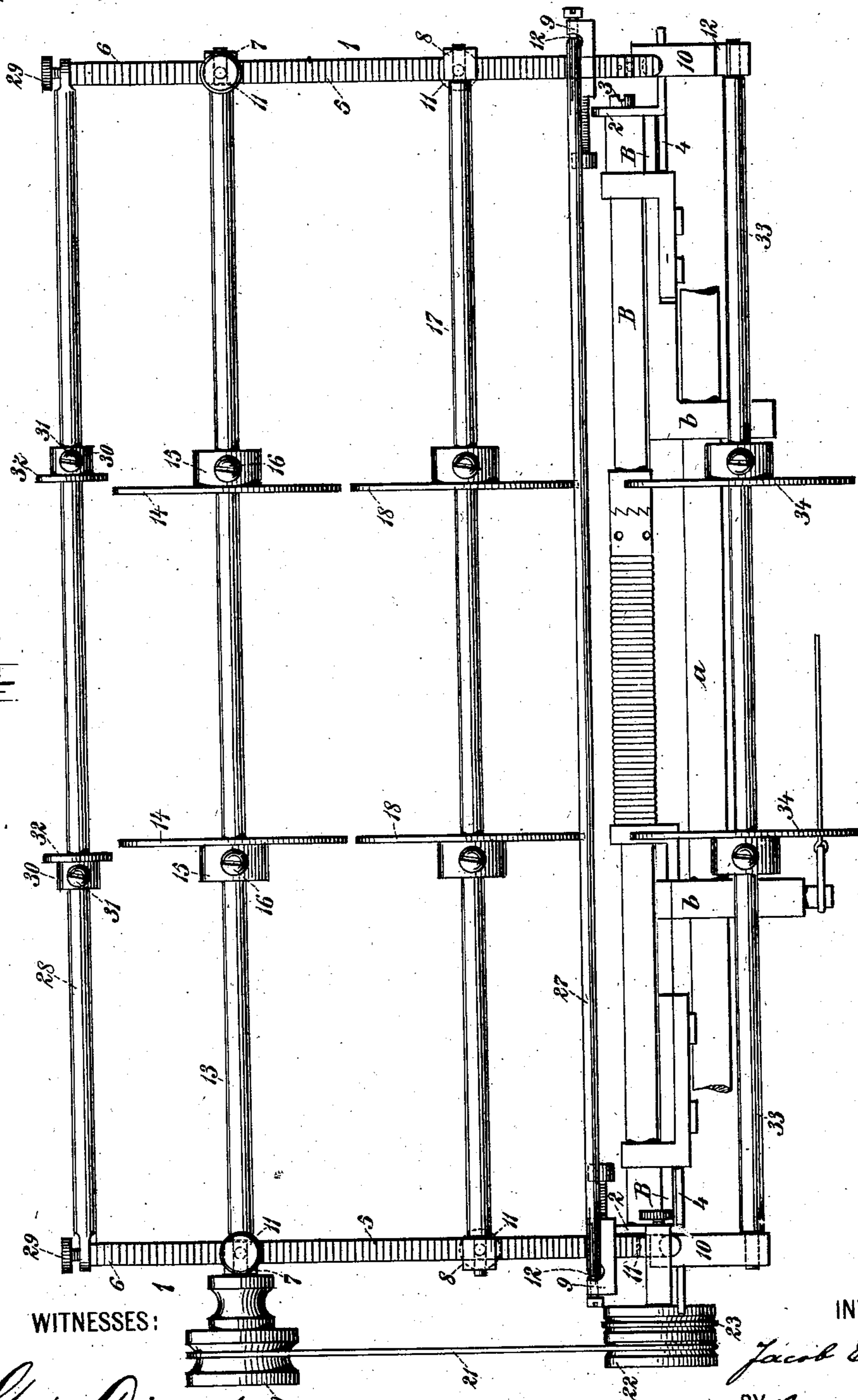
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3 Sheets—Sheet 3.

Fig. 3.



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UNITED STATES PATENT OFFICE.

JACOB E. NEAHR, OF BUFFALO, NEW YORK, ASSIGNOR TO THE WAGNER TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 705,281, dated July 22, 1902.

Application filed March 27, 1901. Serial No. 53,032. (No model.)

To all whom it may concern:

Be it known that I, JACOB E. NEAHR, a citizen of the United States, residing at Buffalo, New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention relates to type-writing machines, and more particularly to mechanism which may be employed in the nature of an attachment for carrying rolls of paper which may be written on by the machine and in which a copy of the written matter may be produced.

To these and other ends which will hereinafter appear my invention consists in the novel arrangement and combination of parts to be hereinafter described and claimed.

In the accompanying drawings, wherein like reference characters designate corresponding parts in the various views, Figure 1 is a side view of a sufficient number of parts of a type-writing machine to illustrate my invention. Fig. 2 is a top view of the same. Fig. 3 is a rear view of the same.

Referring to the drawings, A indicates the framing of a type-writing machine, to which is secured a traverse-rod *a*, which passes through the perforated studs *b*, that constitute the connection between the traverse-rod and the carriage B. The forward or front end of the carriage B is provided with a traverse-roll *c*, that is adapted to bear upon the rail C, fixed to the framing of the machine, and which constitutes a support for the front of the carriage. This carriage B is provided with a platen D, that moves with the carriage in the usual manner. The type-bars *d* are pivoted at *e* and contact with the platen at the front thereof, so that what is known as a "front-strike" machine is provided. Motion is transmitted from the key-levers to the type-bars in any suitable manner.

Secured to the carriage B in any suitable manner is a frame 1. This frame 1 is adapted to carry all of the parts which constitute the attachment forming in part the subject-matter of my invention. In the present instance I have shown a bracket 2 at each side of the frame, which is adapted to be secured to the

carriage B by a screw 3, and an angular projection 4 projects forwardly of the screw 3 and is adapted to take under a flange on the carriage in order to better support the frame 1 on the carriage. The frame 1 is made up of side bars 5, which are serrated on the sides, as indicated at 6. Sliding on the side bars 5 are adjustable bearings 7, 8, 9, and 10. The bearings 7, 8, and 9 on each side bar each carry a set-screw 11, by which the bearings may be secured in the adjusted position. The serrations 6 in each side bar enable the bearings 7 and 8 upon opposite sides of the frame 1 to be adjusted to the same level and to be secured against slipping. If desired, suitable indices may be provided on each side bar to indicate at a glance the various points to which the bearings are capable of being adjusted and in order to assure the coöperating bearings being adjusted to the same level. One of each set of bearings 7, 8, 9, and 10 is open-mouthed, as indicated at 12, in order that the spindle contained therein may be readily withdrawn when desired. The bearings 7 are adapted to receive a spindle 13, which is freely rotatable therein. This spindle 13 is provided with disks 14, which are each provided with a sleeve 15, carrying a set-screw 16, that projects therethrough and is adapted to bear upon the spindle in order to maintain it fixed in any position to which it may be adjusted upon this spindle. These adjustable disks 14 and the spindle 13 therefore constitute, essentially, paper-reels, upon which a roll of paper may be placed, as indicated in Fig. 1 of the drawings. The bearings 8 are constructed in a similar manner to the bearings 7, and, like them, are adapted to receive a spindle 17, which is rotatable in the bearings and is likewise provided with adjustable disks 18. These disks and the spindle 17 and 18, respectively, likewise constitute, essentially, a paper-reel, which is adapted to receive a paper-roll, as indicated in Fig. 1 of the drawings. The paper 19 in passing from one of these reels to the other extends around the platen D and is fed from the lowermost reel to the uppermost reel, as indicated by the arrow in Fig. 1. I have therefore termed the lowermost reel the

"supply-reel" and the uppermost reel the "take-off" reel. This so-called "take-off" reel has its spindle 13 projected beyond the bearing at one end and is provided with one or more pulleys 20. A band, preferably a rubber band 21, extends around this pulley and likewise extends around pulley 22, which is journaled in the framing 1. This pulley 22 likewise has a band 23, which extends around it and passes around a cooperating pulley 24, carried by the shaft of the platen, so that as the platen is rotated motion is transmitted to the pulley 22 and from the pulley 22 to the pulley 20, thus rotating the spindle 13 in order to take up the paper which is delivered from the supply-reel.

It will be understood from the foregoing description that the take-off reel is rotated automatically at each intermittent rotation which is transmitted to the platen and preferably at the same rate of speed. When the diameter of the paper on the reel increases, the band 23 will slip slightly on the pulley 20.

Passing around the platen D is an endless inking-band 25, which may be made of carbon-paper, inking-ribbon, or any other suitable material. The inking-band 25 passes outside of the paper strip 19 and rests upon a guide-bar 26 and thence passes around the guide-bar 27 and over a bar 28, secured to the upper ends of the side bars 5. This guide-bar 28 is preferably secured to the top of each side bar by a screw 29, so that it may be removed when desired. The bar 28 is of substantially the same diameter throughout, and sleeves 30 are adapted to slide along said bar and over the ends thereof. The sleeves 30 each carry a set-screw 31, that is adapted to bear upon the rod in order to secure the sleeve in the adjusted position, and the rod may be serrated along one face thereof to receive the ends of the screws 31 to prevent the sleeves from slipping and to determine the proper positioning of the sleeves 30. Each sleeve 30 has secured thereto a disk 32, which disks constitute guides to guide the inking-band in its movement and for other purposes which will hereinafter appear. After the inking-band passes over the bar 28 it passes down the forward face of the platen and around the same. This endless inking-band is preferably secured in place or threaded in the machine by first passing a free end of a strip which is to constitute the band through the machine in the manner described and then securing the free ends of the strip together in order to make an endless band of it.

The bearings 10 are adjustable forward and rearward on the horizontal lower portions of the side bars 5 of the frame 1 and are adapted to receive a spindle 33, which, like the spindles 13, 17, and 28, is provided with adjustable disks 34 and is free to rotate in its bearings. This spindle 33 constitutes a support and, essentially, a reel for the paper-roll, as

indicated in Fig. 1 of the drawings. The paper strip 35, which passes from this reel, extends outside of the inking-band and around the platen and over the bar 28 and between the guides 32, as indicated in Fig. 1. The bar 28 forms a support for the paper strip 35. In the movement of the paper strip in the direction of the arrow, Fig. 1, the written matter is constantly before the operator and an unobstructed view thereof is presented. As the writing progresses the line-spacing or intermittent rotation of the platen causes the three fabrics 19, 25, and 35 to be moved together, and the matter which is written upon the face of the strip 35 is reproduced as a folio copy upon the strip 19, it being understood that an inking-surface is provided upon only one side of the inking-band 25. As the matter is reproduced upon the strip 19 it is reeled upon the take-off reel, whereas the written matter contained upon the strip 35 may be separated as the writing proceeds.

It will be understood that the usual or any preferred paper-feed mechanism which cooperates with the platen D enters into cooperation with the platen to feed the various fabrics 19, 25, and 35 forward as the platen is rotated, whereas the take-off roller or reel is operated by the pulley-and-band connection heretofore described.

It will be observed that the bearings of the various reels and guides are adjustable, so that the positions of the various reels may be varied to suit the various circumstances. It will also be seen that the provision of the adjustable sides 14, 18, and 34 of the reels and the adjustable guides 32 will permit the employment of various widths of paper.

My invention will be found of great practical advantage as a label-addressing machine. Thus, for instance, the strip 35 may be gummed upon one side and may be perforated at intervals throughout its length. The paper contained between each two lines of perforations will constitute a detachable label. The operator may place the address or other suitable inscription upon each of these labels and as it is being produced a copy thereof is being produced upon the strip 19. This strip 19 may constitute a record and copy which will show the names and addresses indicated upon the labels and may be retained as a list from which to reproduce other labels. After the labels have been written on in the manner indicated they may be separated and attached, as desired.

It will be seen that no change in the construction of the type-writing machine itself is necessary in order to connect the attachment thereto and that the attachment can be readily removed by unscrewing the screws 3, when the type-writing machine proper is left at its original form.

From the foregoing description it is thought that a clear understanding of the construction

and operation of the mechanism constituting the subject-matter of my invention can be arrived at.

5 In illustrating my invention I have shown it in its application to the well-known Underwood type-writing machine, though obviously it might be applied to any type-writing machine wherein the invention may be found available.

10 Having described my invention, what I claim, and desire to secure by Letters Patent, is—

15 1. In a type-writing machine, the combination of a frame, a carriage, an auxiliary frame secured to the carriage to travel therewith, and paper-roll supports for the supply and

take-off each of said supports being adjustable independently on the said auxiliary frame toward and from the other support.

2. In a type-writing machine, the combination of a stationary frame, a traveling carriage, an auxiliary frame connected with the carriage, a platen, a guide in the rear of the platen, another guide in front of the said guide, but at a higher level and in the rear of the platen, an endless copying-ribbon extending over said guides and platen, and means for guiding paper over said platen.

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Witnesses:

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