

No. 675,989.

Patented June 11, 1901.

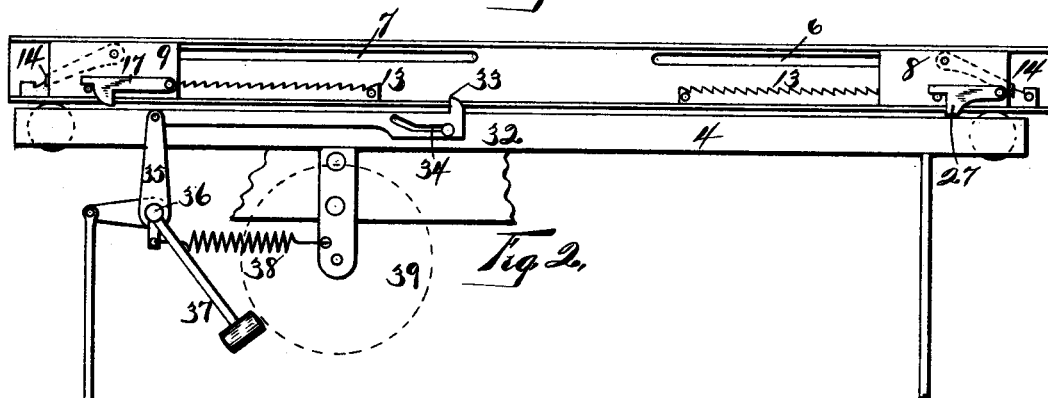
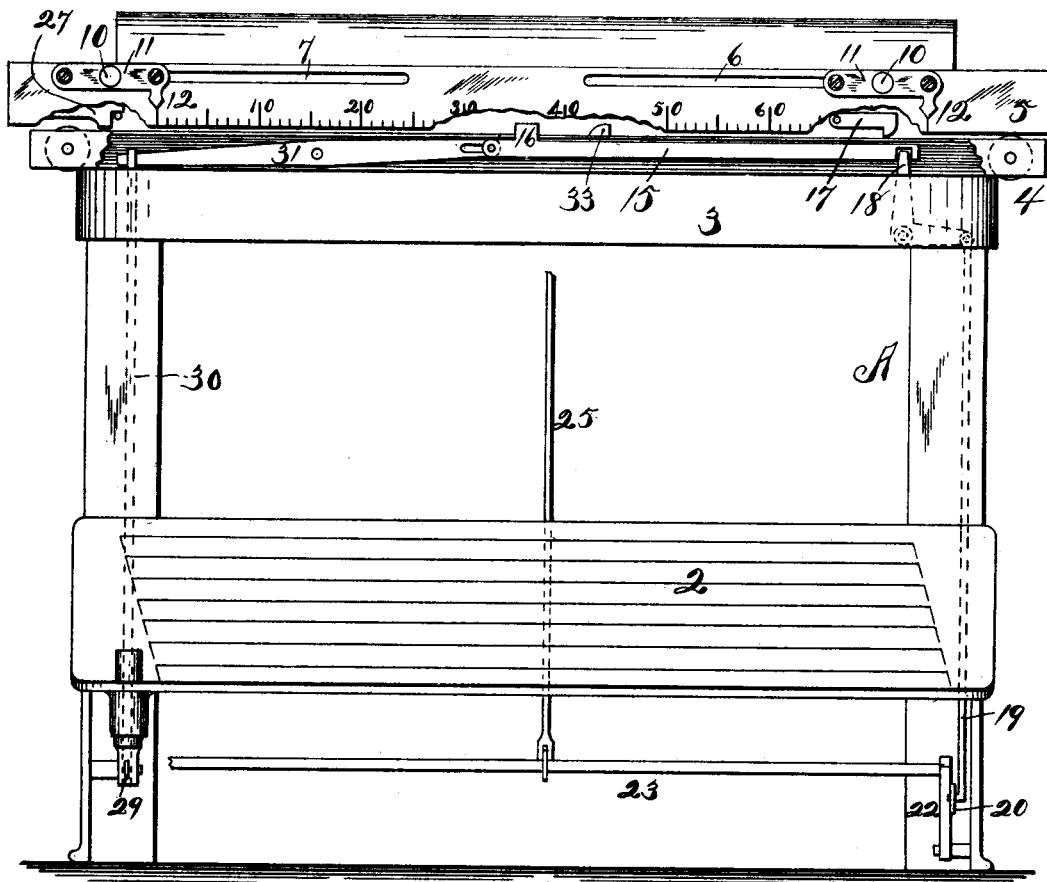
R. TURNER.

TYPE WRITING MACHINE.

(Application filed June 7, 1899. Renewed Mar. 16, 1901.)

(No Model.)

3 Sheets—Sheet 1.



WITNESSES:

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M. M. Holt.

INVENTOR

Robert Turner

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ATTORNEYS.

No. 675,989.

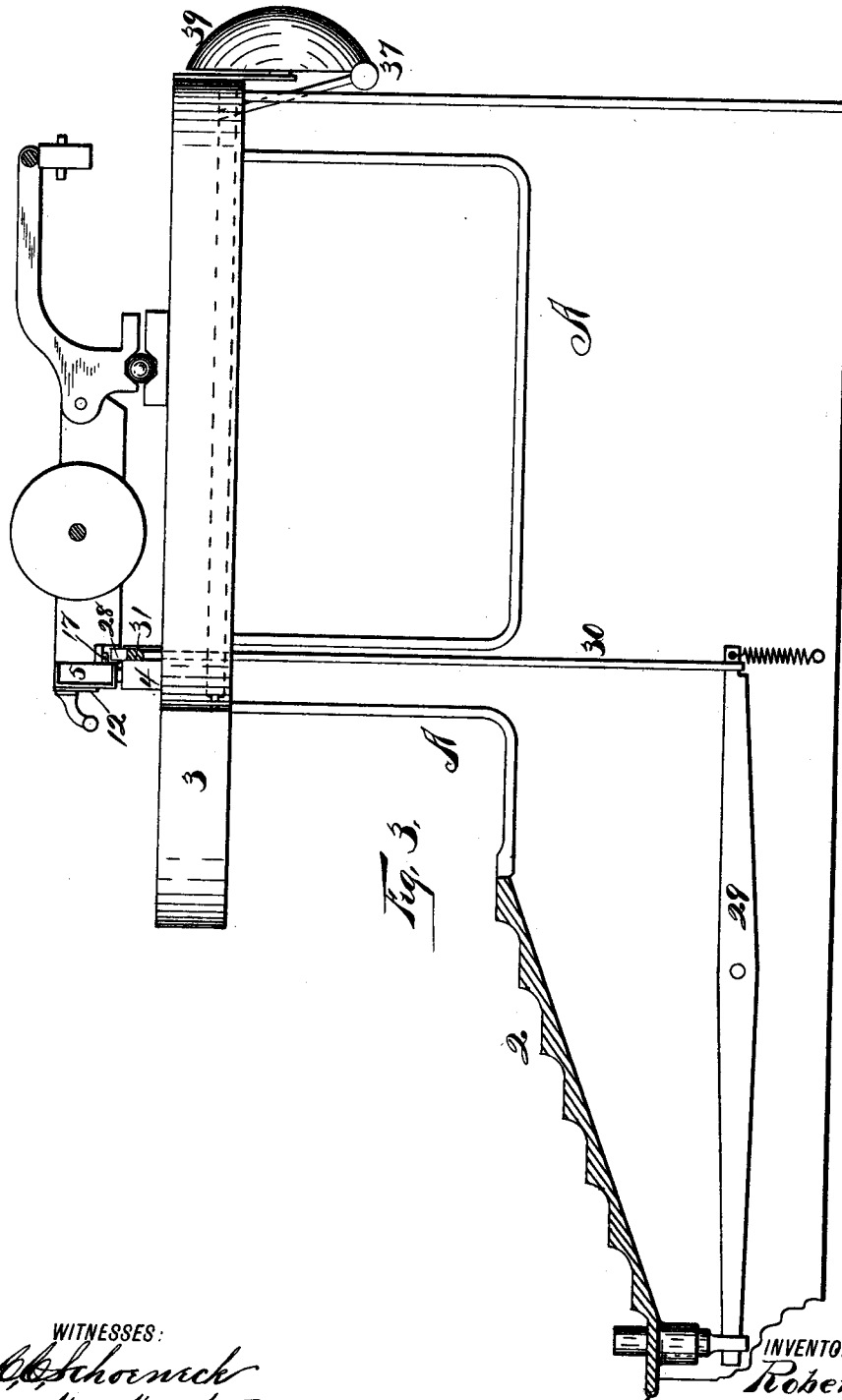
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(No Model.)

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3 Sheets—Sheet 2.



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3 Sheets—Sheet 3.

Fig. 4.

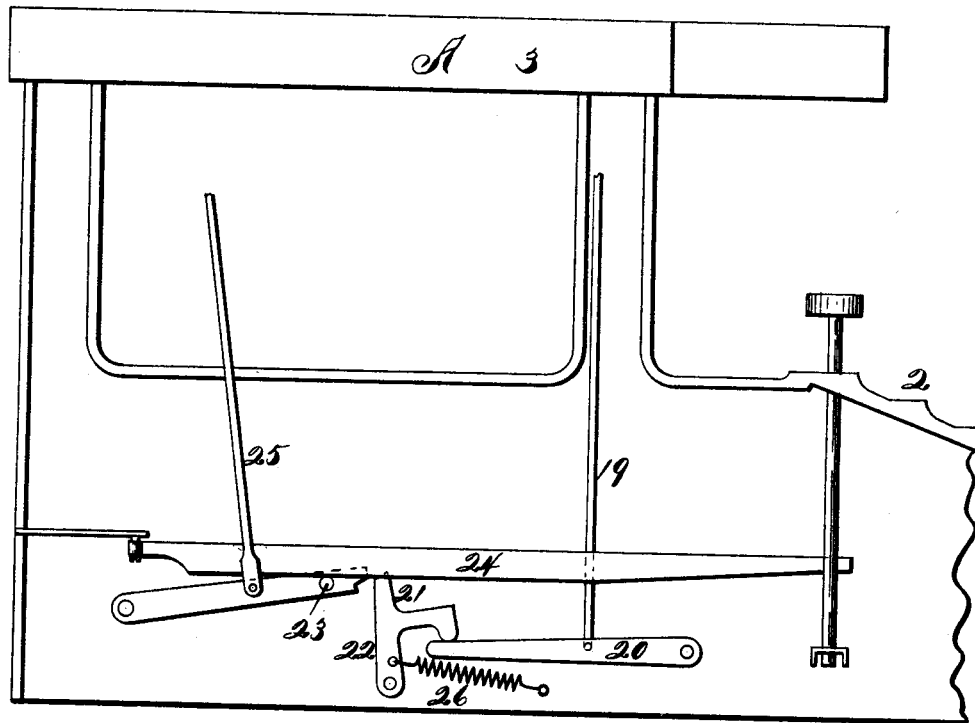
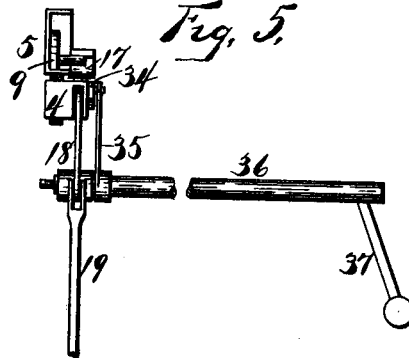


Fig. 5.



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UNITED STATES PATENT OFFICE.

ROBERT TURNER, OF DES MOINES, IOWA, ASSIGNOR TO THE DUPLEX TYPEWRITER COMPANY, OF SAME PLACE.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 675,989, dated June 11, 1901.

Application filed June 7, 1899. Renewed March 16, 1901. Serial No. 51,554. (No model.)

To all whom it may concern:

Be it known that I, ROBERT TURNER, of Des Moines, in the county of Polk, in the State of Iowa, have invented new and useful Improvements in Type-Writing Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to type-writing machines.

My object is to improve their construction by providing a novel marginal stop and a novel key-lever or "action" lock, the margin stop or regulator being manually adjustable and being also connected to a key-lever, whereby it can be depressed out of the path of the carriage operated at the keyboard, the key-lever lock being operated by the movement of the front rail of the traversing carriage to lock the universal bar, whereby it and the escapement are locked and the key-levers rendered inoperative.

It is constructed and operated as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a type-writing machine, part of the carriage being broken away. Fig. 2 is a rear elevation of the front of the carriage and track and part of the rear of the body of the machine, the dotted circle indicating the alarm-bell. Fig. 3 is a sectional elevation detailing part of the margin-stop mechanism. Fig. 4 is an elevation detailing that part of the key-lever-locking mechanism which is not shown in Fig. 1. Fig. 5 is an elevation detailing that part of the bell-ringing mechanism which is not shown in Fig. 2.

A is a suitable frame having a keyboard 2 and top plate 3, and 4 is the front trackway for the traversing carriage, of which 5 is the front rail. This rail is in the form of a channel-iron and is provided with slots 6 7, and its front face is provided with a scale, as shown. In the concaved or channeled back slides 8 9 are mounted, each having a handle 10 pivoted therein and projecting forward through a slot 6 or 7 beyond the front of said rail. A plate 11 in front of said rail is secured to each slide and provided with a pointer 12. Racks 13 are secured in the channel

of said rail, and 14 is a pawl secured on each slide-handle engaging with one of said racks. These slides are thus separately adjustable to determine the margin on either side of the sheet and to variably determine the length of a line of print, said pawls holding them against outward movement. Upon or in the front track a sliding bar 15 is suitably mounted, having a lug or arm 16 projecting above the track into position to be engaged by a dog 17 on the slide 9, said bar being adapted to yield with such engagement and rock the bell-crank 18, lift the rod 19 and lever 20, and tilt the bell-crank 22 to bring its arm 21 under the universal bar 23 and lock it against depression by any key-lever 24, thus locking the escapement to which the rod 25 is suitably connected, said escapement not being shown nor described, as it does not constitute any part of my invention. A spring 26, connected to said bell-crank, retracts all of the members of this mechanism whenever said slide or dog is disengaged. This mechanism locks the printing mechanism at the predetermined point indicated by the pointer on the right in Fig. 1. The slide 8 is also provided with a dog 27, normally carried by a pin, as shown in Fig. 2, which when the carriage is retracted engages with the lug 16 and stops the carriage to begin a line of print at the point indicated by the pointer on the left in Fig. 1 to regulate the width of the margin on the left side of the paper.

To permit printing in the left-hand margin, a finger-key 29 raises a rod 30 and rocks a lever 31, connected to the slide 15, whereby the lug or stop 16 is depressed out of the path of dog 17, and thus permits the carriage to be moved to the point desired. This also removes the stop 16 from the path of the dog 17 and permits printing in the right-hand margin.

In Figs. 2 and 5 a bell-ringing device is shown, comprising a slide 32, mounted on the track 4 by a pin and angular slot 34 and having a lug 33 normally projecting above said track into the path of the dog 17, a crank 35, connected to said slide, a spindle 36, carrying said crank, a hammer 37 on said spindle, and a spring 38, whereby the pawl 17 will force said stop and slide to the left until it is

depressed by said angular slot out of said path, whereupon said spring will retract said parts and at the same time cause the hammer to strike a blow upon the bell 39.

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

1. In a type-writing machine, the combination with a traversing carriage, the front rail of which is provided with a scale, and with
10 horizontal lengthwise slots adjacent to its ends, of slides upon the rear of said rail, a horizontal pin on each slide projecting forward through a slot, and a pointer on each pin in front of said scale whereby either slide
15 can be separately adjusted and its pointer set to regulate the right or left margin.

2. In a type-writing machine the combination with a traversing carriage having a longitudinally-slotted front rail, provided with
20 a scale on its outer face, of separate slides upon the back of said rail, separate pointers in front of the rail connected through said slots to said slides and separate handles connected to said slides whereby they can be
25 separately adjusted to determine the margin either upon the right or the left side of a sheet.

3. In a type-writing machine the combination with a traversing carriage having a slot-
30 ted front rail, and a scale on the outer face of said rail, of separate racks upon the back of and adjacent to the ends of said rail, separate slides having pawls engaging with said racks, separate pointers in front of said rail

and connected through said slots, to said 35 slides and a handle on each slide whereby it is adjusted and its pawl shifted, to determine the margin upon either the right or left side of a sheet.

4. In a type-writing machine the combination with a traversing carriage having a front rail provided with a scale and a longitudinal horizontal slot, a slide upon said rail, a pointer connected to said slide through said slot, and
40 a dog upon said slide, of a margin-stop below the rail and projecting upward normally in the path of said dog, and means to depress the stop from said path to permit the dog to pass over it when the carriage is shifted from
45 left to right.

5. In a type-writing machine the combination with a traversing carriage, having a scale and longitudinal slots in its front rail, slides upon said rail, pointers connected to said
50 slides through said slots and separately adjustable, and a dog on each slide, of a margin-stop between said dogs and normally in their path, a lever connected to said stop, a key-lever, and a rod connecting said levers, whereby said stop is swung out of said path
55 by operating said lever.

In witness whereof I have hereunto set my hand this 8th day of May, 1899.

ROBERT TURNER.

Witnesses:

G. A. WHITE,
RICHARD R. ROLLINS.