

(No Model.)

W. J. BARRON.
TYPE WRITING MACHINE.

No. 461,863.

Patented Oct. 27, 1891.

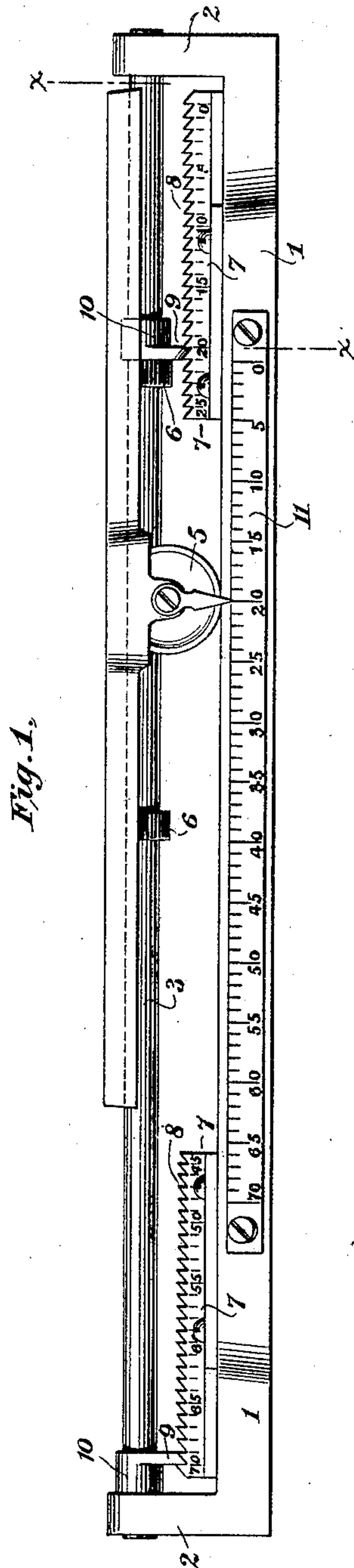


Fig. 4.

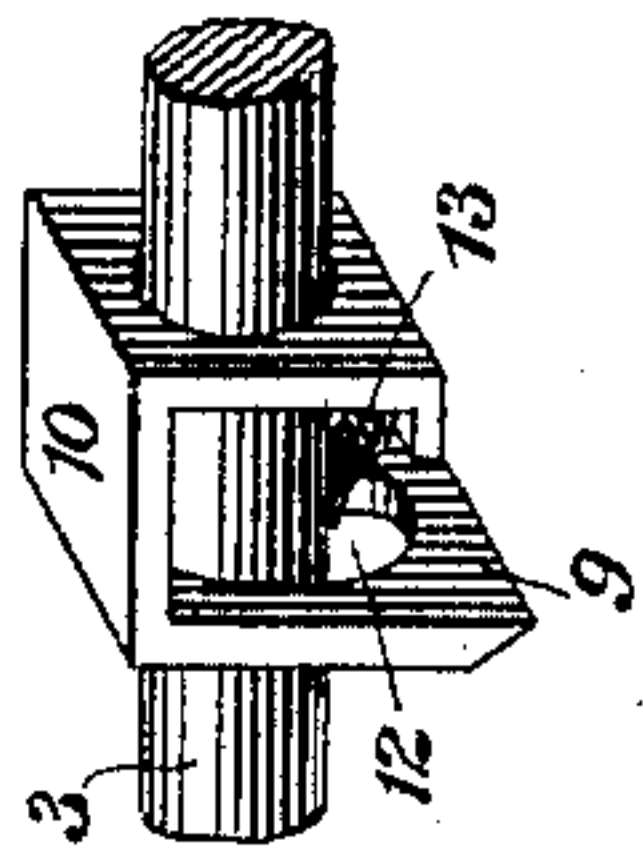


Fig. 3.

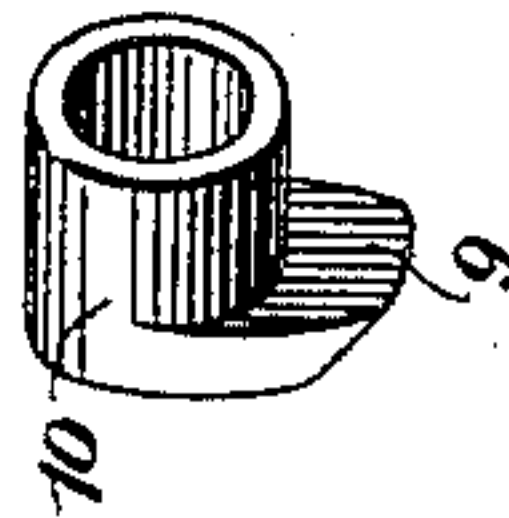


Fig. 2.

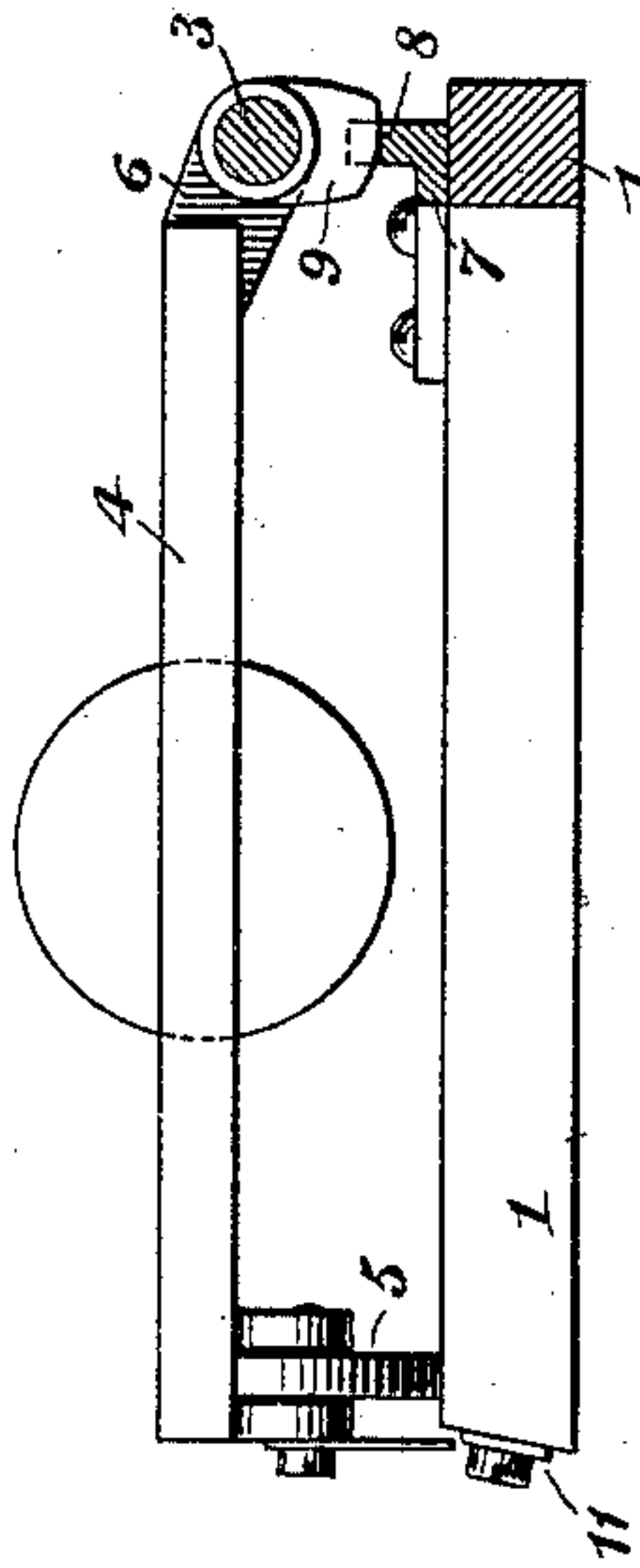


Fig. 6.

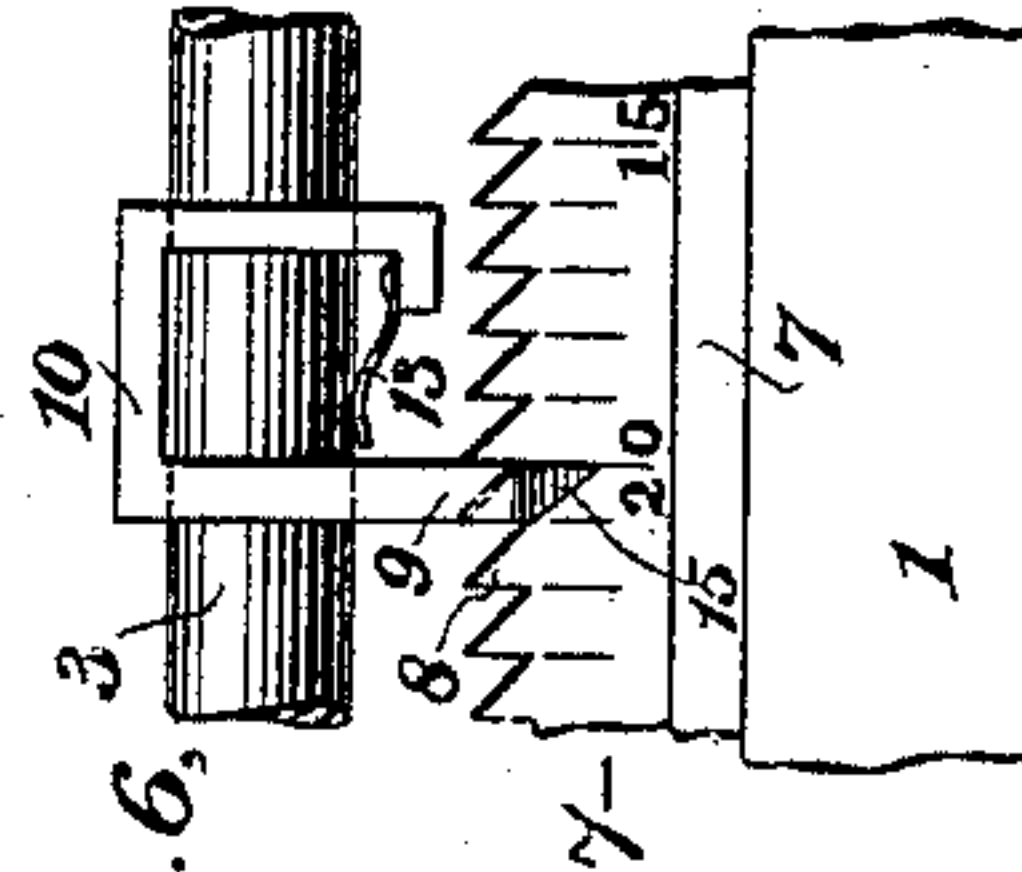
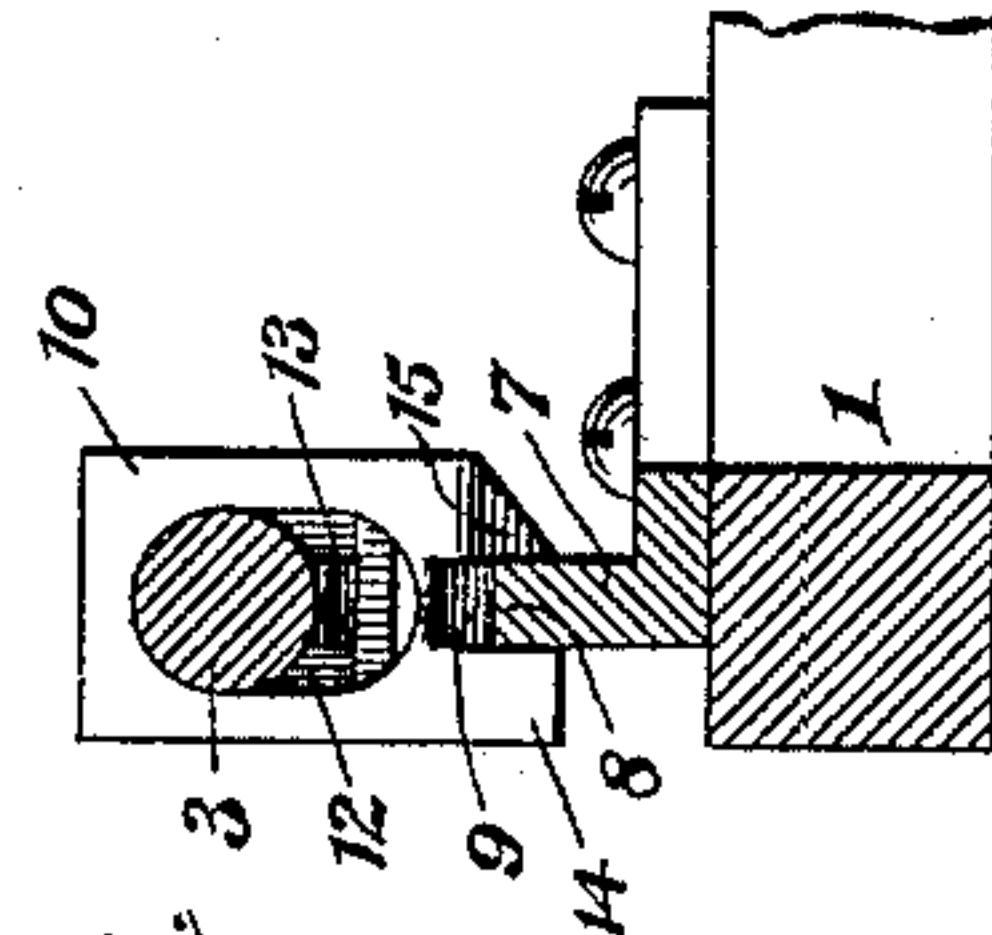


Fig. 5.



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UNITED STATES PATENT OFFICE.

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TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 461,863, dated October 27, 1891.

Application filed April 20, 1891. Serial No. 389,563. (No model.)

To all whom it may concern:

Be it known that I, WALTER J. BARRON, a citizen of the United States, and a resident of Brooklyn, 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 present improvements in type-writing machines relate to means for arresting the travel of the paper-carriage. The means employed for stopping the carriage when moving from right to left or in the direction in which the carriage travels while the printing is taking place is usually designated the "line-stop," and the means for stopping the carriage when moving from left to right or when the carriage is being returned for the commencement of a new line is usually designated as the "margin-stop."

My invention has for its main object to provide simple and effective means for stopping the carriage, which may be used either as a line-stop or as a margin-stop, or both; and my invention consists, primarily, in combining, with the carriage, its guide rail or track, and a series of teeth or stops or abutments on the machine-frame, a dog or tooth mounted to slide on said track or way and adapted to engage with the teeth, stops, or abutments on the machine-frame for the purpose of arresting the carriage at any desired locality, and, secondarily, in certain other features of construction and combinations of devices, all of which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a front elevation of so much of a type-writing machine as is necessary to illustrate my invention. Fig. 2 is a side sectional view of the same. Fig. 3 is a perspective view of the dog or tooth enlarged, which is adjustable lengthwise of the track or rail. Fig. 4 is a perspective view of a portion of the track or rail and of a modified construction of sliding dog or tooth. Fig. 5 is a vertical section of a further modification of my invention, and Fig. 6 is a side or front view of the same.

In the several views the same part will be found designated by the same numeral of reference.

1 designates the machine-frame, having at each end a standard 2, in which is mounted a rail or rod 3 to guide and support the rear end of the carriage 4, whose front end may be guided and supported by an anti-friction roller 5, adapted to run upon the top of the machine-frame. The rear side of the carriage is provided with a yoke 6, which is fitted to slide on the guide-rail 3, all in about the usual manner.

On the machine-frame or some stationary part of the machine is attached at the right-hand side of the machine a vertically-arranged bar 7, having along its upper side a series of ratchet-teeth 8, to form stops or abutments for a dog or tooth 9, formed on or made integral with a sleeve or hub 10, fitted to slide upon the guide-rail 3. As shown, the rack is arranged immediately beneath the guide-rail, so as to receive between its teeth the dog or tooth 9, depending from the sleeve or hub 10.

The bar 7 may be of any desired length and may be provided with any desired number of teeth. The teeth 8 are arranged apart a distance equal to the distance between the teeth of the letter-spacing mechanism of the machine or to correspond with the graduations of the machine-scale 11. This bar 7 is preferably graduated and marked, as shown, to correspond with a portion of said scale, and beginning with "0" and ending at "25."

On the machine-frame at the left-hand side of the machine is another similar vertical bar 7, having a series of teeth 8 along its upper edge to receive between any two of them the dog or tooth 9, depending from the sleeve or hub 10, mounted to slide upon the guide-rail 3 in the manner shown at the right-hand side of the machine and above explained. The only difference between the teeth of the two bars is in the direction which they are cut, and the only difference between the two dogs 9 is also in the direction of their bevel or slant.

The bar 7 at the left-hand side of the machine is graduated and marked to correspond with a portion of the machine-scale 11, and is numbered from "45" to "70." The devices at the left-hand side of the machine are provided to stop the carriage in its movement to the left or in that direction which the carriage

travels during the printing operation, and the devices at the right are provided to stop the carriage in its travels to the right or in that direction which the carriage is moved for the
5 beginning of a new line.

If it be desired to commence the writing at a point marked "20" on the scale 11, the dog or tooth 9 is inserted in the twentieth space or notch formed by two of the teeth 8 of the
10 bar 7. If it be desired to commence the work with a smaller or narrower margin—say at "15" on the scale 11—the hub or sleeve 10 is rotated and the tooth 9 carried out of the teeth 8 and the sleeve slid back along the rail 3
15 until the dog or tooth 9 is over the fifteenth notch, when the sleeve is again rotated to swing said dog or tooth into said notch. While the dog 9 is in this position the carriage will be positively arrested by the dog
20 9 and teeth 8 every time the carriage is returned to the right and its yoke strikes against the sleeve or hub 10 and dog. In this manner the dog may be inserted in any of the notches formed by the teeth 8 of the bar 7,
25 and hence the carriage may be stopped at any desired point within the length of said bar.

At the left-hand side of the machine the line-stop 9 is shown in its farthest position;
30 but if it be desired to stop the carriage before it arrives at this point—as say at "55" on the machine-scale 11—the sleeve or hub may be turned on the guide-rail 3 to free the dog from the teeth 8, the hub then slid along the
35 rail 3 until the dog is opposite the notch 55, when the sleeve may be turned back to allow the dog to swing into and occupy said notch. When the dog has been thus placed, the carriage will be arrested at 55 at each
40 line.

Referring to the modification shown at Fig. 4, the sleeve or hub 10 is made preferably of sheet metal and square in form, and at that side bearing the tooth or dog is provided with
45 an elongated bearing 12, to enable the dog to be lifted out from between the teeth of the rack in place of being rotated or turned out therefrom, as in Figs. 1 and 2. The under side of the sleeve or support 10 is preferably
50 provided, as shown, with a flat spring 13, which bears frictionally on the under side of the guide-rail to better retain the device upon the guide-rail, and in a manner to avoid any accidental rotation thereof.

In the modification shown at Figs. 5 and 6 the device is also adapted to be lifted and is provided with lugs or fingers 14 and 15 on opposite sides of the bar 7, which prevent
55 any rotation of the contrivance, the lug 15 serving also the purpose of a pointer or index to assist in bringing the tooth or dog 9 to the

desired locality. The carriage-stop shown at Figs. 4, 5, and 6 is adapted to be set at different places by lifting the end having the elongated slot 12 until the tooth 9 clears the rack,
65 and then sliding the device along the guide-rail 3 until it is brought to the point at which it may be desired to stop the carriage and then permitting the tooth 9 to drop into engagement with the rack. 70

The modifications at Figs. 4, 5, and 6 are of course adapted for use at either end of the machine—that is, as a line-stop or as a margin-stop.

It is obvious that many changes in detail, 75 construction, and arrangement may be made without departing from the gist of my invention.

What I claim as new, and desire to secure by Letters Patent, is— 80

1. In a type-writing machine, the combination of a carriage, a guide rail or track therefor, a carriage-stop mounted to be moved lengthwise on the carriage guide rail or track, and a series of teeth, stops, or abutments 85 mounted on the machine-frame or on some stationary part on the machine to co-operate with said longitudinally-adjustable carriage-stop, substantially as set forth.

2. In a type-writing machine, the combination of a carriage, a carriage guide rail or track, a carriage-stop mounted to be moved lengthwise on said carriage rail or track and consisting of a sleeve or hub and a depending tooth or dog, and a series of teeth, stops, 95 or abutments arranged on the carriage-frame or on some stationary part of the machine, substantially as set forth.

3. In a type-writing machine, the combination of a carriage, a carriage guide-rail, a carriage-stop mounted to be moved lengthwise on the same, and a stationary or fixed toothed rack, substantially as set forth. 100

4. In a type-writing machine, the combination of a carriage, a carriage guide-rail, a carriage-stop adapted to be moved lengthwise on the same, and a stationary or fixed toothed rack graduated to correspond with the machine-scale, substantially as set forth. 105

5. In a type-writing machine, the combination of a carriage, a carriage guide-rail, a carriage-stop adapted to be moved lengthwise on the same and also to be rotated, and a toothed rack mounted fixedly on the carriage-frame, 110 substantially as set forth. 115

Signed at New York city, in the county of New York and State of New York, this 1st day of April, A. D. 1891.

WALTER J. BARRON.

Witnesses:

JACOB FELBEL,
LILLIE F. BROWNING.