

No. 725,492.

PATENTED APR. 14, 1903.

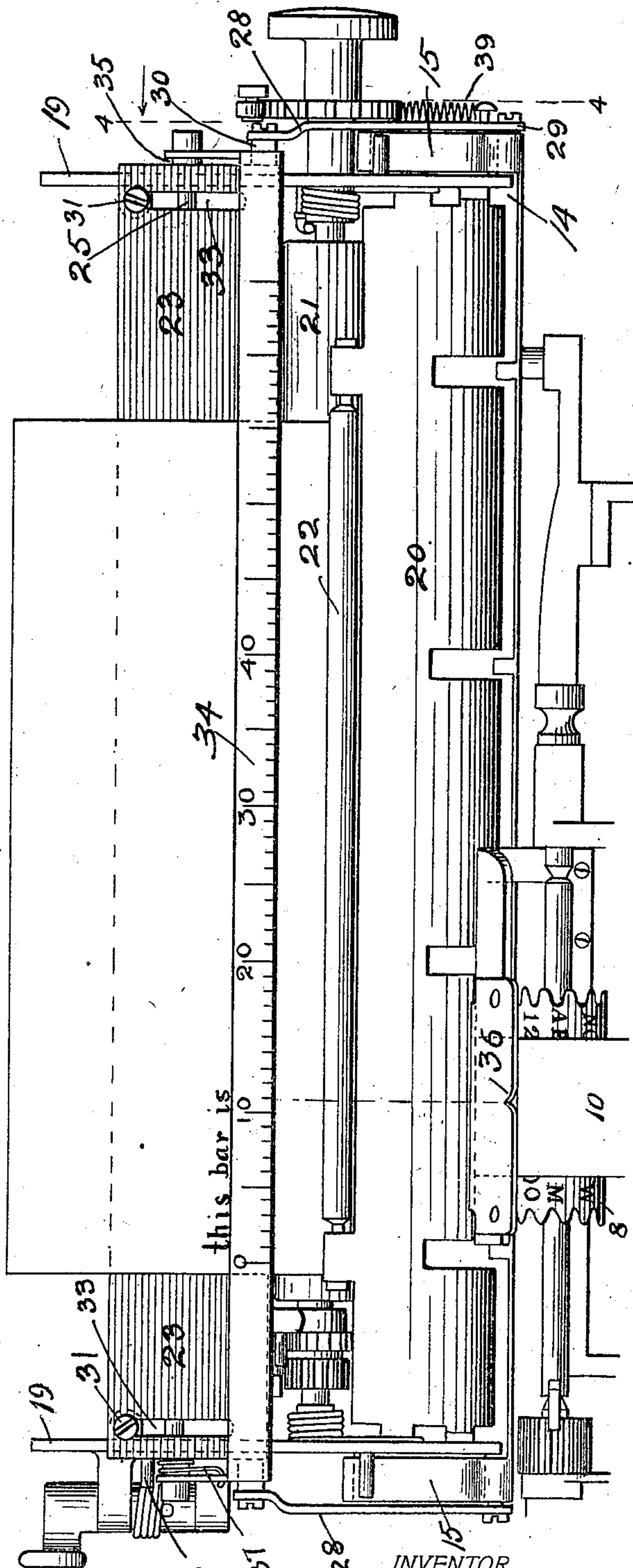
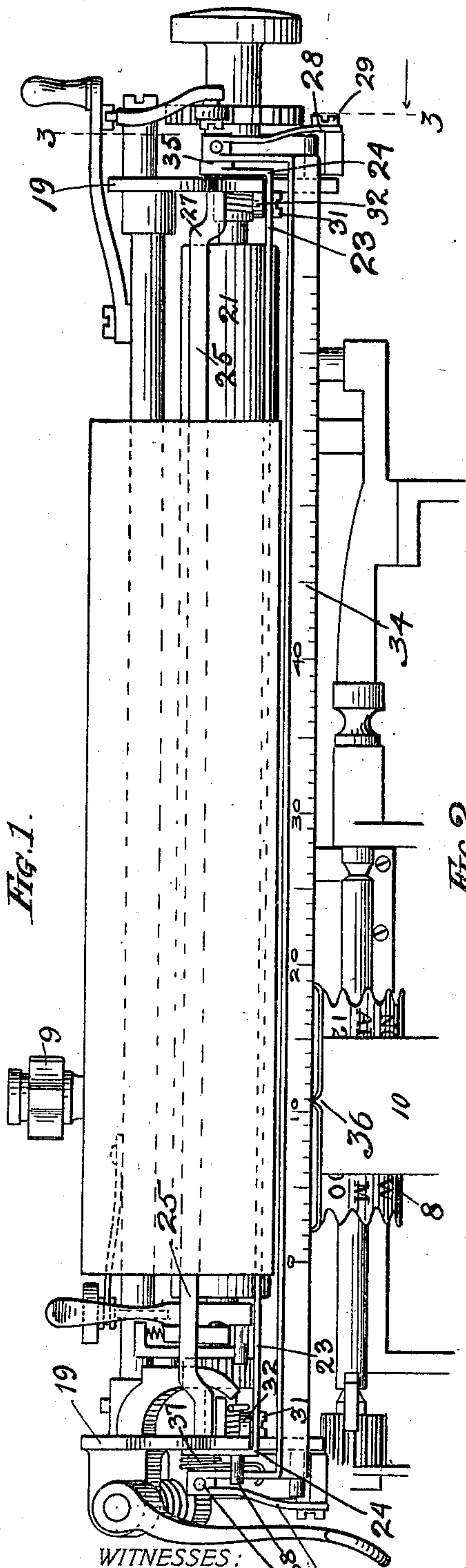
S. J. SEIFRIED.

PAPER CARRIAGE FOR TYPE WRITERS.

APPLICATION FILED JULY 11, 1901.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

L. B. Townsend,
H. M. Munday,

INVENTOR.

Samuel J. Seifried
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2 SHEETS—SHEET 2.

Fig. 4.

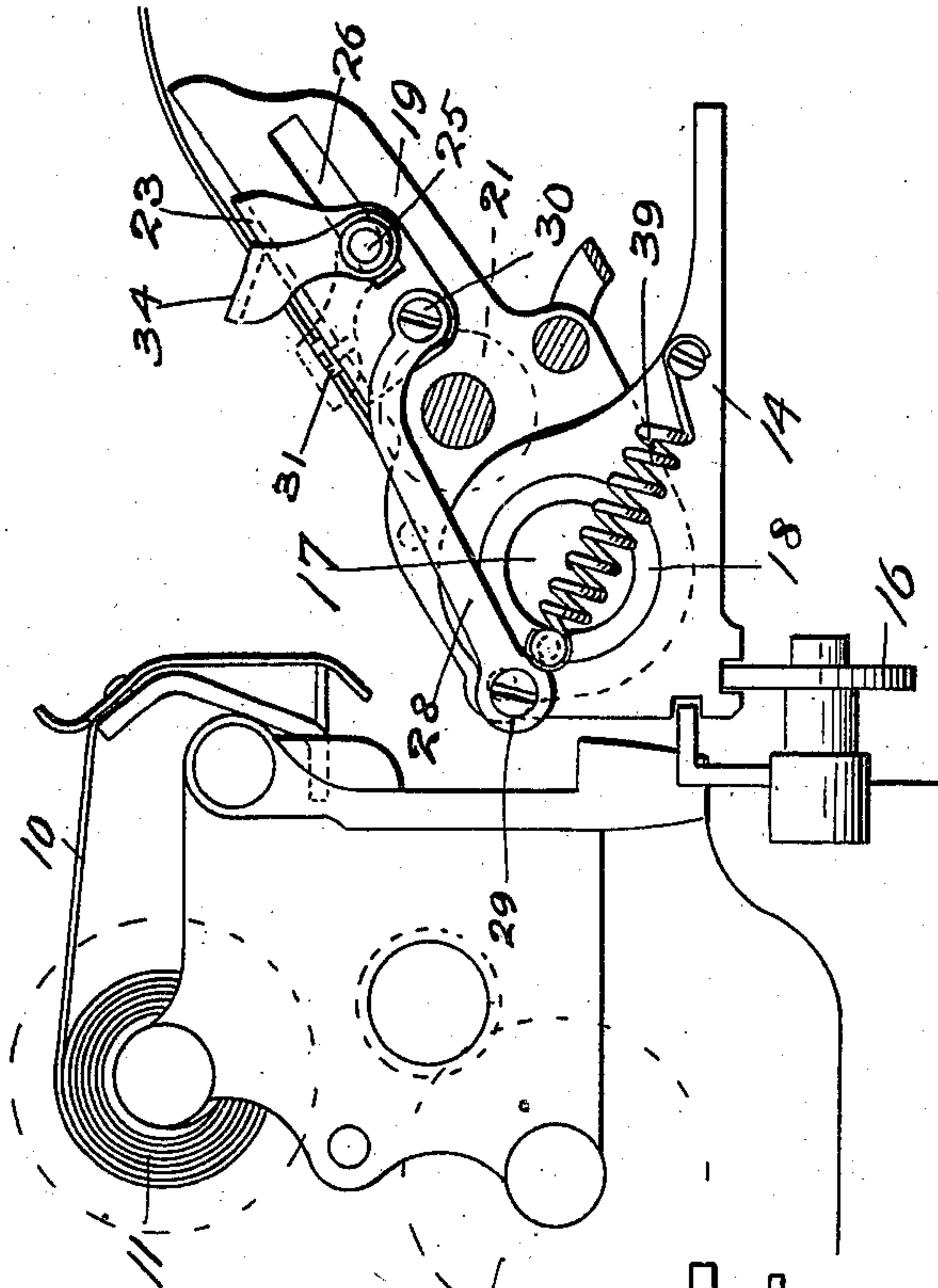
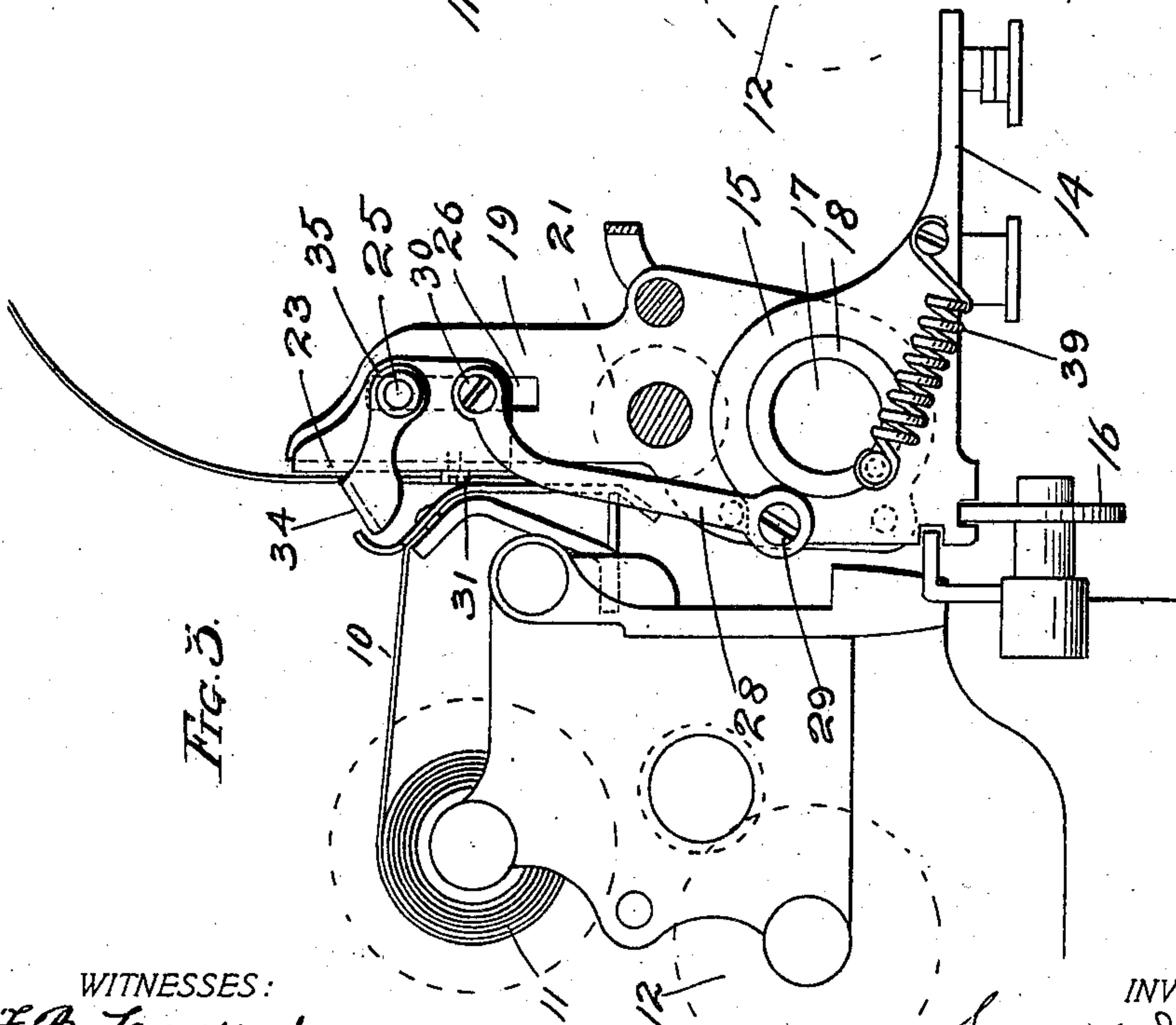


Fig. 5.



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UNITED STATES PATENT OFFICE.

SAMUEL J. SEIFRIED, OF CHICAGO, ILLINOIS, ASSIGNOR TO CHICAGO WRITING MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

PAPER-CARRIAGE FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 725,492, dated April 14, 1903.

Application filed July 11, 1901. Serial No. 67,914. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. SEIFRIED, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Paper-Carriages for Type-Writers, of which the following is a specification.

This invention relates to improvements in type-writers, and more especially to features of the paper-carriages used therein.

One of the main objects lies in the provision upon a tipping paper-carriage of a movable erasure-plate and means for automatically positioning the plate directly behind the line being printed when the carriage is tipped, so that the plate is always ready for service when the carriage is in position to permit erasures.

Another object has been to render the scale-plate more useful to the operator than it has been heretofore.

The invention consists in the novel features of construction and the novel combinations of parts and devices hereinafter described, and set forth in the claims.

In the accompanying drawings, forming a part of this description, Figure 1 is a plan view of that part of a type-writer embodying my invention, showing the parts in their normal position. Fig. 2 is a similar view showing the paper-carriage tipped back and the scale-plate as turned down below the line of writing. Fig. 3 is a vertical section on the line 3 3 of Fig. 1, and Fig. 4 is a similar section on the line 4 4 of Fig. 2.

In said drawings, 8 represents the type-cylinder; 9, the hammer for impressing the paper on the type; 10, the ink-ribbon; 11 12, the ribbon-spools, and 13 the ribbon-guide.

The paper-carriage frame is shown in part at 14, and it is provided with end risers 15 15 and is supported in the usual manner, one of its supporting-rollers being shown at 16. In the risers are formed openings 17, and parts of the carriage which tip backward to allow inspection of the writing and the making of corrections are supported from movable bushings 18, located in the openings 17 and rigidly attached to or in one piece with swinging side frames or uprights 19 19, united at the bottom by a curved plate 20. The uprights 19

are preferably provided with studs riding on the rounded tops of the risers 15, and the uprights form bearings for and support the main paper-feed roll 21, the auxiliary or pressure roll 22 being supported on the upper edge of plate 20. The frames 19 are adapted to swing backward from the position of Figs. 1 and 3 to that of Figs. 2 and 4 to give opportunity to inspect the writing or to make erasures.

The erasure-plate is shown at 23, and it is movably attached to the uprights 19 by bending its ends at right angles, as at 24, against the outer faces of the uprights and securing such bent ends together by a rod 25, passing through slots 26 in the uprights. This rod is bent, as at 27, so as to avoid interference by it with the hammer 9. The movement of the erasure-plate occurs when the movable parts of the carriage are tipped and is caused by the links 28, one at each end of the carriage, and pivotally joined at their lower ends to the risers 15 and at their upper ends to the bent ends of the erasure-plate, as seen at 29 and 30.

When tipped back, the plate moves from its normal position given at Figs. 1 and 3 to that of Figs. 2 and 4, and when tipped forward the plate returns to its normal position. The plate is guided in these movements by the guide-screws 31, held in ears 32 on the uprights 19 and passing through slots 33 in the erasure-plate. The movement thus given the erasure-plate carries it downward behind the paper and into position directly back of the line being printed, and this occurs at each tipping back of the carriage, so that if it is desired to make an erasure the plate is always ready to support the paper where the erasure is needed without any act on the part of the operator other than the tipping of the carriage, which is, of course, necessary to give access to the printing-line.

The scale plate or bar is shown at 34. It extends along in front of the erasure-plate and preferably at an angle normally inclined thereto, as plainly shown, and its ends are bent at right angles and extend back to pivotal junctions 35 with the bent ends of the erasure-plate. Being thus attached to the plate it of course moves with the latter; but it can also be swung on pivots 35 downward

and into position with its flat side parallel with and against the paper, and this change of position, which may be made whenever the erasure-plate is in its backward position and is indicated by dotted lines in Fig. 4 and in full lines at Fig. 2, brings the upper edge of the scale in exact coincidence with the plane of the bottoms of the characters in the line then being printed or for which the machine is then set. This swinging scale is a great convenience, as it enables the operator to reposition the paper even after it has been once removed by simply pulling it up or down until any desired line is immediately above the depressed scale, as shown at Fig. 2. It is also specially convenient when the work in hand consists in filling blanks in printed matter—such, for instance, as deeds, leases, &c.—because by first turning the scale down on the paper, as in Fig. 2, and then moving the latter up or down until the top edge of the scale is coincident with the bottom of the blank to be filled by the machine the operator brings the blank into accurate alinement, and by then noting the scale-number at the initial end of the blank he is able at once by the aid of the printing-center indicator 36 to laterally position the carriage correctly, so that the first character struck will with certainty fall in its proper place at the beginning of the blank.

The scale-plate returns to its normal position after being used as stated, under the power of spring 37, and a pin 38, projecting from the bent end of the erasure-plate, limits the throw of the spring. The spring 39 is attached to a stud on one of the bushings 18 and assists in returning the tipping portions of the carriage to and holding them in normal position.

By hinging the tipping parts of the paper-carriage to open bushings 18 I obtain room for the laterally-movable U-shaped frame of the hammer mechanism shown in my application, Serial No. 64,646, filed June 15, 1901.

I claim—

1. In a type-writer, a paper-carriage adapted to tip, a movable erasure-plate mounted in

said carriage, and devices adapted to automatically position the plate each time the carriage is tipped, substantially as specified.

2. In a type-writer, the combination with the tipping paper-carriage, of a movable erasure-plate mounted in the carriage, and devices for positioning the plate actuated automatically by the tipping of the carriage, substantially as specified.

3. In a type-writer, a paper-carriage adapted to be tipped away from the printing-center, a movable erasure-plate mounted in said carriage and adapted to be positioned close behind the paper when the carriage is in its tipped position, and means, actuated by the carriage in its tipping movement, for thus positioning the plate, substantially as specified.

4. The type-writer having a movable scale-plate, in combination with tipping paper-holding devices, and an erasure-plate supporting the paper at the back, substantially as specified.

5. The type-writer having embodied in its paper-carriage, tipping paper-holding devices, in combination with a movable erasure-plate and a movable scale-plate, both supported upon said paper-holding devices, substantially as specified.

6. The type-writer having embodied in its paper-carriage, tipping paper-holding devices, in combination with a movable scale-plate supported upon said paper-holding devices and moving from its normal position above the line of writing to a position below such line whenever the paper-holding devices are tipped, substantially as specified.

7. The combination of the main carriage-frame and the swinging side frame 19, of the erasure-plate movably mounted on said side frames and the links connecting the erasure-plate to the main frame, substantially as specified.

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Witnesses:

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