

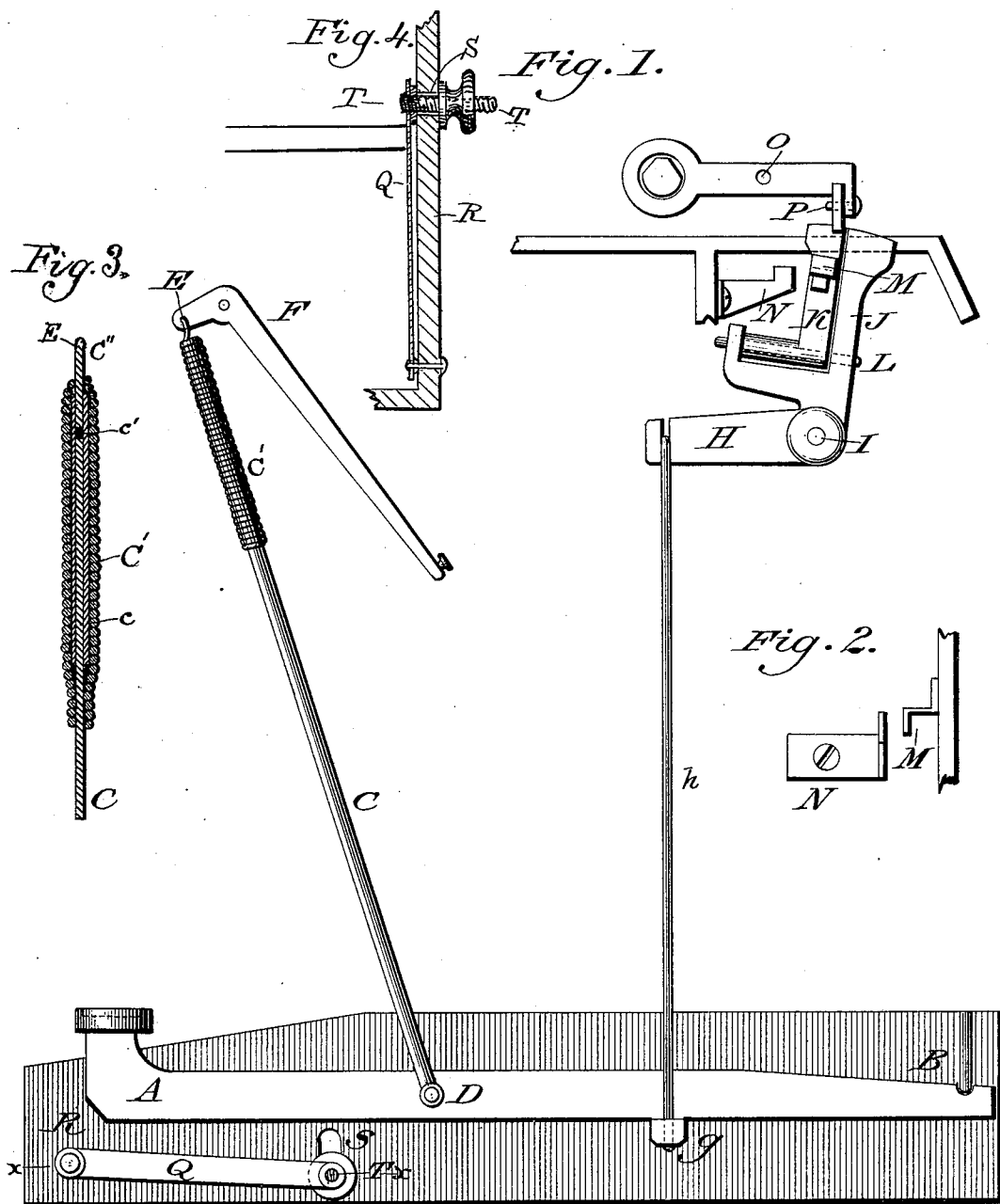
(No Model.)

F. H. PERRY.

TYPE WRITING MACHINE.

No. 394,607.

Patented Dec. 18, 1888.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRED HENRY PERRY, OF MONTPELIER, VERMONT.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 394,607, dated December 18, 1888.

Application filed May 6, 1886. Serial No. 201,381. (No model.)

To all whom it may concern:

Be it known that I, FRED HENRY PERRY, a citizen of the United States, residing at Montpelier, in the county of Washington and State of Vermont, have invented new and useful Improvements in Type-Writing Machines; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of writing-machines where key-levers are used, and is designed to obviate or do away with the spacing-lever in making spaces between words, and at the same time to obtain quicker and more elastic action of the keys. The spacing between the words is obtained in a still farther depression of the last key struck before the space required. I attain this by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the key-lever, showing the extensible connection, the rack, and the operation of the dogs and rocker. Fig. 2 is a longitudinal section showing the loose dog and the stop. Fig. 3 is a vertical section showing the extensible connection C C' and guide. Fig. 4 is a horizontal transverse section of the thumb-screw, as shown in Fig. 1 at *x x*.

Like letters refer to similar parts in the different drawings.

A represents the key-lever, with the fulcrum-bearing B resting upon the space-bar *g*.

C represents the extensible connection secured at one end to the key-lever at D by suitable pins or button attachment and at the other end to the type-bar F at E, and is provided with a spring, C', or any suitable extensible connection. The sectional drawing in Fig. 3, to the left, represents the manner of constructing the extensible connection.

C C' are two rods. The lower one, C, is connected at its lower end to the key-lever A by means of a bolt at D. The upper end is secured to the lower part of the spring C', with a sufficient length above the connection to enter the guide-tube *c*. The upper rod, C'', is secured to the spring C', with a projecting

part below which enters the guide-tube *c* some distance. There is space enough between the ends of the two rods C C'' to permit the spring to recoil.

II represents the rocker pivoted to the machine-frame, one of which pivot-bearings is shown by the letter I, and having an upward rigid extension, (shown by the letter J,) the extreme upper end of the rigid extension forming a dog which operates on the rack, as shown. The rocker II is operated by the key-lever A by means of the connecting-rod *h*, which is secured to the space-bar *g* at its lower end and in a slot in II at its upper end.

K represents the loose dog attached to the rigid extension or dog at L by a movable hinge or pin, its extreme upper end forming another dog which operates to make the space long or short, as required by the operator. This dog is provided with the stop M, which engages the stop N as the rocker is turned on its pivot for spaces for successive letters, and which in the instance of the space between words passes around the stop N as the key-lever is farther depressed, allowing the rack to move laterally two spaces instead of one.

Q represents the stop-bar, which is pivoted at one end to the frame R of the machine. The other end is provided with a thumb-screw, T, which works in the slot S, by which screw the bar can be secured at any height to regulate the depression of the key-levers, as may be required.

The object of the stop-bar is twofold: first, to prevent any unnecessary strain upon the extensible connection; second, to enable the operator to make either spaces for successive letters singly or to make an additional space at the end of a word. The thumb-screw, being fastened at the upper end of the slot S, secures the stop-bar and lessens the depression of the key-levers, obtaining only sufficient space for successive letters, while if fastened at the lower end of the slot the key-levers may be depressed sufficiently to obtain an additional space, if desired.

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

1. The combination of the type-bar, the extensible connection, the key-lever, connecting-bar *h*, rocker H, having dogs J K, and the stops M N, all substantially as described.

5 2. The extensible connection consisting of the rods C C'', having an end of each attached to a spring, C', surrounding a guide-

tube, *c*, all constructed as and for the purpose described.

FRED HENRY PERRY.

Witnesses:

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