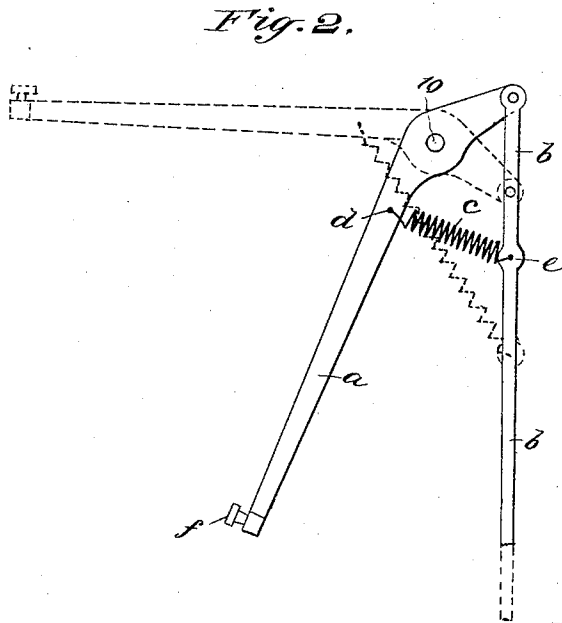
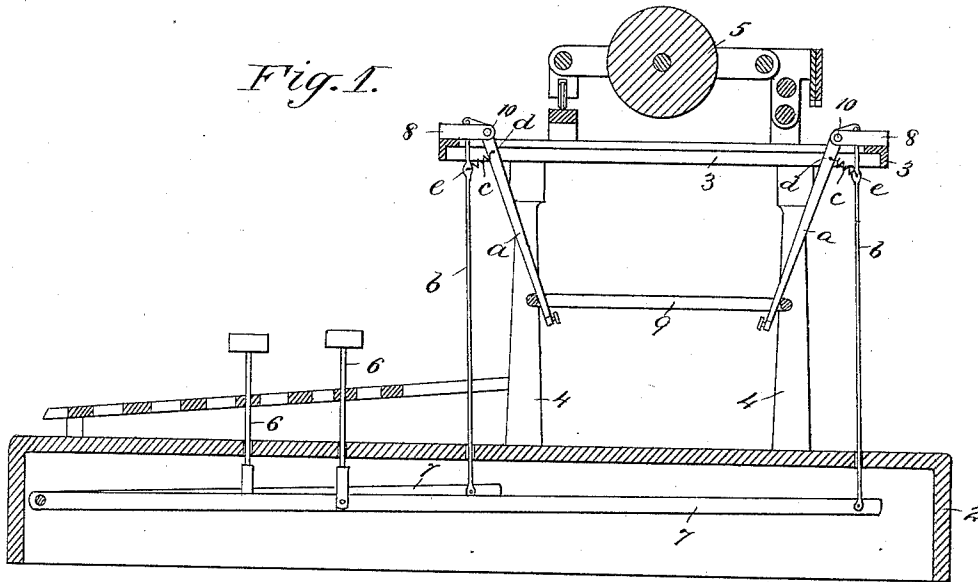


(No Model.)

W. J. BARRON.
TYPE WRITING MACHINE.

No. 452,825.

Patented May 26, 1891.



WITNESSES:

Andrew W. Steiger
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INVENTOR:

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UNITED STATES PATENT OFFICE.

WALTER J. BARRON, OF NEW YORK, N. Y., ASSIGNOR TO THE YOST
WRITING MACHINE COMPANY, OF SAME PLACE.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 452,825, dated May 26, 1891.

Application filed September 26, 1888. Serial No. 286,402. (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 New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention relates to that class of type-writing machines in which are used type-levers, connecting-rods, and key-levers. Heretofore springs have been arranged in various ways and at different localities to return the connecting-rods and type-bars to their first position after having been actuated by the fingers of the operator.

My invention has for its object to so arrange the returning-spring that the type-bar when pulled back thereby, after the release of the finger-key, will have no tendency to rebound from the type basket or rest, and hence not be apt to collide with an adjacent ascending type-bar; and my invention consists in the combination and arrangement of a connecting-rod, type-bar, and spring, as hereinafter more fully described, and particularly set forth in the appended claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of a type-writing machine embodying my invention, and Fig. 2 is a detail view of my improvement on an enlarged scale to more fully show the construction and mode of operation.

In both views the same part will be found designated by the same numeral or letter of reference.

2 is the base or bed-plate of the machine.

3 is the type-ring or top plate supported upon posts 4 4.

5 represents the paper-carriage; 6, a finger-key; 7, a key-lever; 8, a type-bar hanger, and 9 the type rest or basket.

a represents a type bar or lever; *b*, a connecting-rod, and *c* a coiled or spiral spring. The type-bar is journaled or fulcrumed at 10 in the hanger, and to its shorter bent arm is attached the upper end of the connecting-rod.

Between the fulcrum of the type-bar and

the lower or type end of the same one end of the spring is connected, the other end being secured to the connecting-rod a short distance below its upper end, as indicated respectively by the letters of reference *d e*. The lower end of the connecting-rod is attached to the means for reciprocating it, the same in this case being the key-lever 7. When the connecting-rod is pulled down to elevate the type end *f* of the type-bar to do the printing, the upper shorter end of the type-bar is vibrated downwardly about the fulcrum 10. As the longer arm of the type-bar is swung upwardly, the spring is stretched and its tension thus somewhat increased, so that on releasing the pull on the connecting-rod (by removing the pressure of the finger-key) the resiliency of the spring operates to draw up the connecting-rod (and also the key-lever) and assist the gravity of the front end of the type-bar to return the latter quickly to its normal position against the face of the type rest or basket. The spring not only hastens the descent of the type-arm of the lever, but when the same comes to a stop against the basket prevents it from rebounding, thus avoiding any possibility of collision with any ascending type lever.

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

1. In a type-writing machine, the combination, with a type bar or lever and a connecting-rod, of a coiled spring connected at one end to the type-bar and at its other end to the connecting-rod.

2. In a type-writing machine, the combination, with a type bar or lever and a connecting-rod, of a coiled spring connected at one end to the type-bar between its fulcrum and its lower or type end and at its other end to the connecting-rod, as set forth.

Signed at New York city, in the county of New York and State of New York, this 18th day of February, A. D. 1888.

WALTER J. BARRON.

Witnesses:

JACOB FELBEL,

THOS. Z. CLIFFORD.