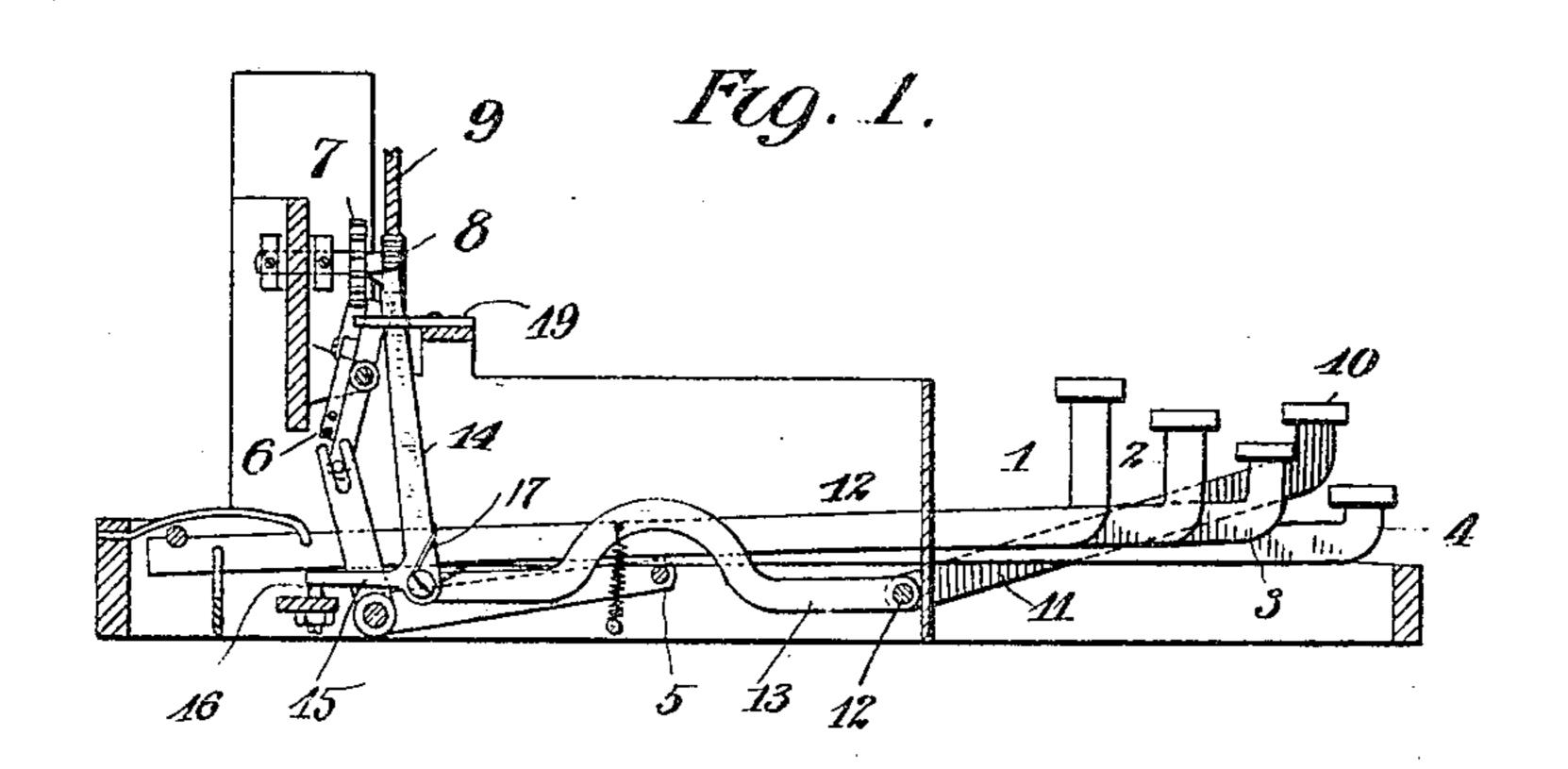
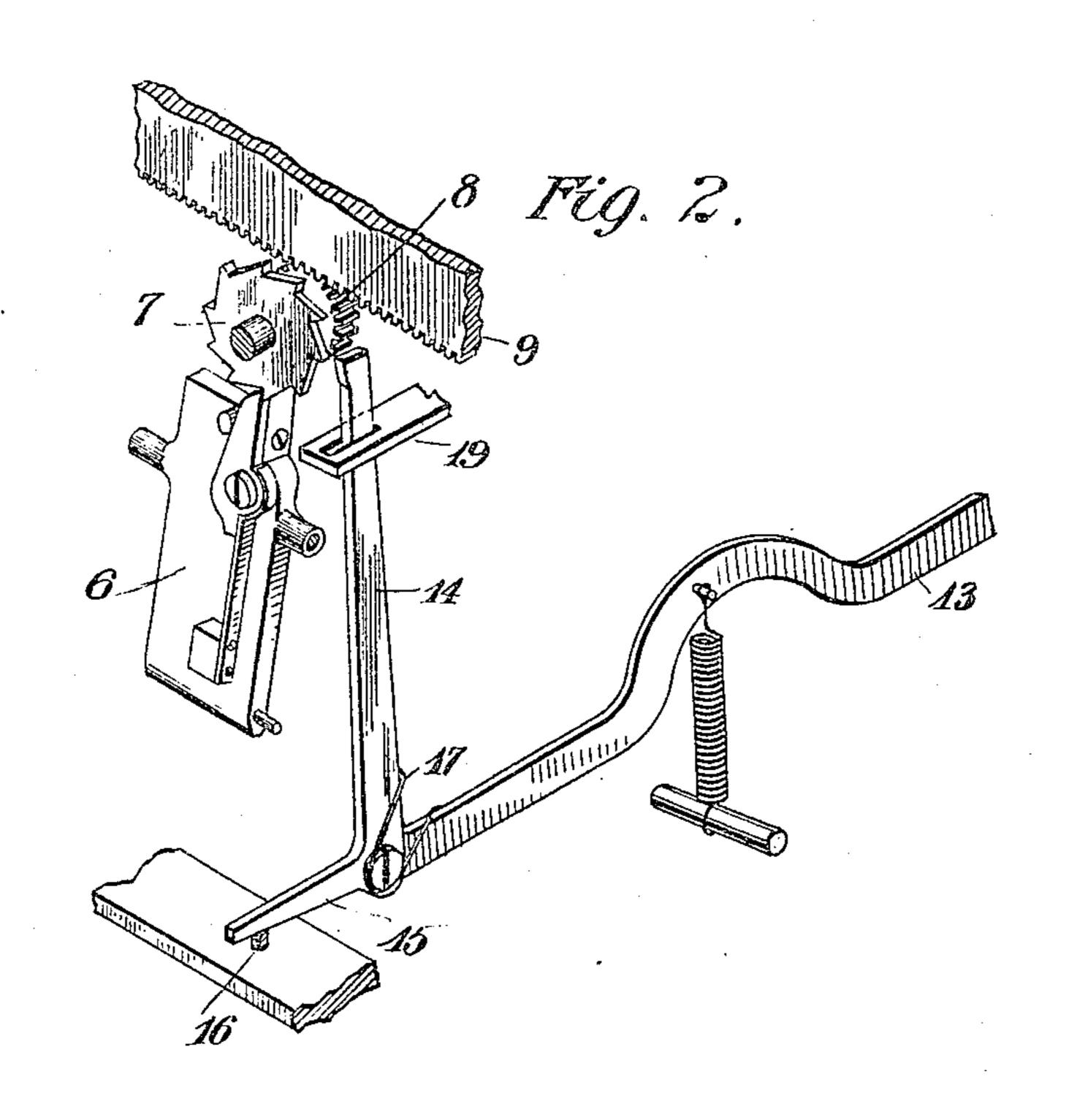
L. C. MYERS.
WRITING MACHINE.
APPLICATION FILED AUG. 29, 1901.





Distresses L. F. Browning. A. a. Stælden Lewis C. Myers Inventor By his Afforneys Davidsur Hight

## UNITED STATES PATENT OFFICE.

LEWIS C. MYERS, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO ROYAL TYPEWRITER COMPANY, OF HOBOKEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## WRITING-WACHINE.

No. 800,754

Specification of Letters Patent.

Patented Oct. 3, 1905.

Application filed August 29, 1901. Serial No. 73,691.

To all whom it may concern:

Be it known that I, Lewis C. Myers, a citizen of the United States, residing in the borough of Brooklyn, city of New York, State of New York, have invented certain new and useful Improvements in Writing-Machines, of which the following is a specification.

This invention comprises an improved organization for feeding the carriage back step by step by means of a key located in the key-board, and, as is well understood, for the purpose of bringing a given space on the sheet to the printing-point for making corrections or interlineations or for any other purpose. To accomplish this end, I provide a key-lever controlling or actuating a push-pawl acting directly upon the feed-ratchet of the carriage to turn it backwardly step by step.

The particular form in which this invention is illustrated is hereinafter described in de-

tail.

In the accompanying drawings, Figure 1 is a longitudinal section through a type-writing machine, showing so much only of the apparatus as is deemed desirable to illustrate the construction and mode of operation of this invention. Fig. 2 is a detail perspective view on a larger scale.

1, 2, 3, and 4 indicate ordinary key-levers;
5, an ordinary universal bar; 6, the usual feed-pawl ratchet operated thereby; 7, the ratchet-wheel engaged by the pawl; 8, the pinion engaging the carriage-rack 9. The parts are all of usual or appropriate construction. Key
35 levers are shown; but obviously the invention about to be described is equally applicable to

other than key-lever machines.

In the keyboard is a key 10, preferably located at one side of the bank of keys. It is 4° shown at the right-hand side. This key comprises a lever 11, fast at its rear end to a rock-shaft 12, extending transversely between the side plates of the machine and having attached centrally to it a forwardly-extending 45 arm 13, which is arched in the construction shown to avoid the universal bar. The front end of this arm is approximately beneath the parts 7 8 and has pivoted to it an elongated push-pawl 14, which extends upwardly in 5° proper juxtaposition to the ratchet-wheel 7, as shown in the drawings. Formed with the pawl is a horizontal arm 15, extending rearwardly from it and normally abutting against an adjustable stop 16. A spring 17, applied I

at the hinge or pivot of the pawl, normally 55 tends to throw its vertical arm rearwardly. Normally the arm 13 is drawn downwardly by the spring 18, so that the horizontal arm 15, seating against the stop 16, throws the pawl 15 out of line with the teeth of the ratchet 7. 60 When the key 10 is depressed and the arm 13 rises, the reaction of the spring 17 moves the pawl 14 rearwardly under a tooth of the ratchet, and on further depression of the key the pawl carries the ratchet-wheel backward 65 one step. The operation may be repeated as often as desired. The pawl 14 may be guided and its fore-and-aft vibration limited by a slotted plate 19. A guide, however, is unnecessary, and any appropriate stop devices 70 may be employed.

This back-feed device is applied directly to the feed-ratchet, and no addition to or modification of machines to which it may be applied is required other than to supply a pawl 75 having a mode of operation of the pawl 14

and a means for actuating it.

I claim as my invention—

1. In a writing-machine, the

1. In a writing-machine, the combination of a back-feed lever arranged longitudinally of 80 the machine and having a finger-piece in the keyboard, a vertically-disposed back-feed pawl movable longitudinally of the machine and pivoted in the end of the lever, the carriage-feed ratchet-wheel arranged in proxim-85 ity to the upper end of said pawl, means for normally holding the pawl out of engagement with the wheel and a spring for throwing the pawl and wheel into engagement when the rear end of the back-feed lever is 90 moved vertically, to thereby turn the wheel backward one step.

2. In a writing-machine, the combination with the carriage-feed ratchet-wheel and its feed-pawl, of a back-feed key, a vertical 95 rocking arm actuated thereby, a pawl 14, 15, pivoted on said arm, a spring applied to the pawl, and the slotted guide and stop-plate in which the arm 14 of the pawl plays, the operation being substantially as and for the 100

purpose set forth.

In testimony whereof I have hereunto subscribed my name.

LEWIS C. MYERS.

Witnesses:

E. P. Hess, Emil Back.