

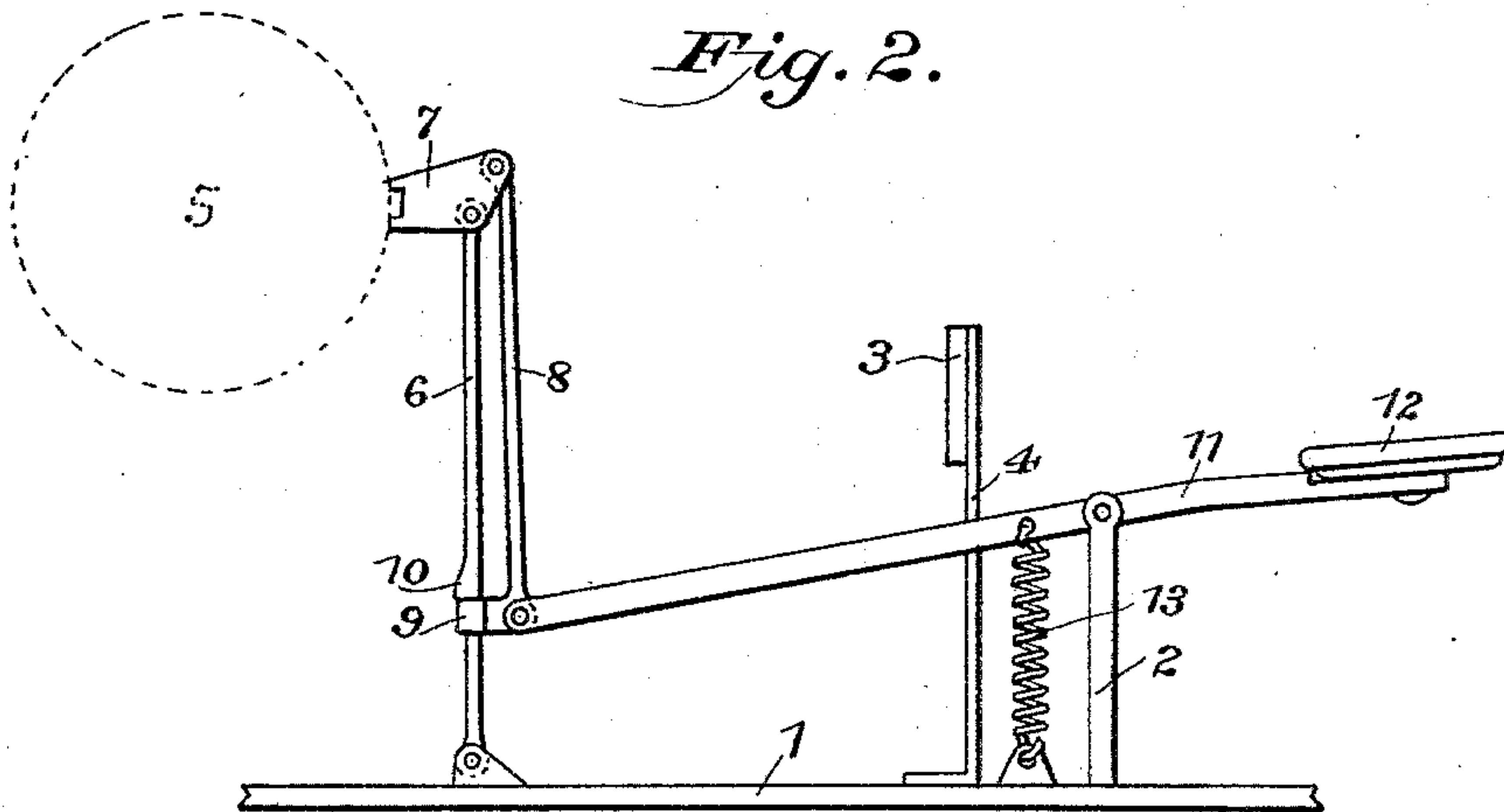
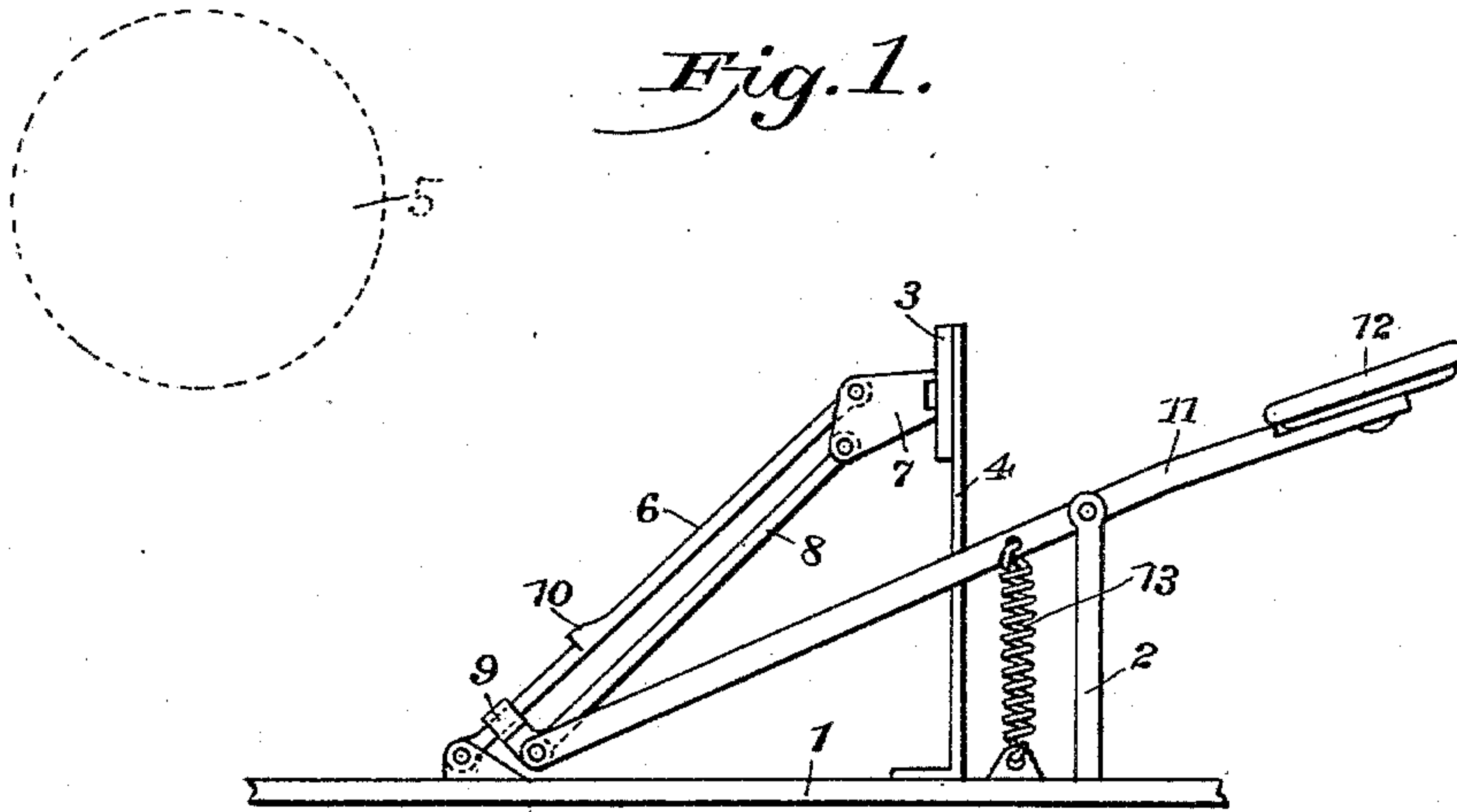
(No Model.)

J. B. LYFORD.

# MECHANICAL MOVEMENT FOR TYPE WRITING MACHINES.

No. 565,009.

Patented Aug. 4, 1896.



WITNESSES:

J. F. Finch.  
M. T. Longden.

INVENTOR

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BY *M. Smith*  
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# UNITED STATES PATENT OFFICE.

JAY B. LYFORD, OF BRIDGEPORT, CONNECTICUT.

## MECHANICAL MOVEMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 565,009, dated August 4, 1896.

Application filed August 29, 1895. Serial No. 560,920. (No model.)

*To all whom it may concern:*

Be it known that I, JAY B. LYFORD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Mechanical Movements; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in mechanical movements such as are especially adapted for use in effecting the proper movements to type-bars for type-writing machines, and has for its object to insure a rapid, positive, and easy movement, while at the same time the construction of my invention is exceedingly simple.

In the accompanying drawings, which form a part of this application, Figures 1 and 2 are side elevations, respectively showing the position of the several parts of my improvement when in their normal and effective positions.

Similar numbers of reference denote like parts in both figures of the drawings.

It is not deemed necessary to show my improvement in connection with any machine, and I have therefore merely illustrated such parts of an ordinary type-writing machine with which my invention may be especially identified.

1 is a base; 2, an upright projecting therefrom; 3, an inking-pad, supported in any ordinary manner, and in the present instance secured upon the face of a vertical standard 4, rising from the bed, and 5 represents an ordinary platen of a type-writing machine, which is herein shown in dotted lines.

6 is a small rod, and 7 is a head to which the upper extremity of said rod is pivoted.

8 is a rod whose upper extremity is pivoted to the head 7 at a point eccentric to the point where the upper end of the rod 6 is pivoted, the lower extremity of this rod 8 being provided with a laterally-extending eye 9, which surrounds the rod 6 loosely, so as to permit of the free movement of said eye along such rod.

The movement of the rod 8 in the direction of its length or in substantial parallelism with the rod 6 will cause the head 7 to be swung

upon its pivotal connection with the upper end of the rod 6, and as it is desirable to limit this swinging movement of the head, so that the latter may always be brought to the same position, such as is shown at Fig. 2, I have provided a stop-shoulder 10 on the rod 6, against which shoulder the eye 9 will strike, so as to limit the throw of the rod 8. Of course in some instances the position of this stop-shoulder would be changed, or perhaps said shoulder would be omitted altogether, since this depends entirely upon the position assumed by the head when it performs its function.

11 is a lever, which is pivoted at any suitable point between its extremities to the upright 2, the outer extremity of this lever being provided, in the present instance, with the usual finger-disk 12, common in type-writing machines, while the inner extremity of said lever is pivoted to the lower end of the rod 8 at or about the point where the eye portion 9 joins said rod.

13 is a spring the extremities of which are connected, respectively, with the base 1 and with said lever 11, the function of which spring is to return said lever to its normal position, such as is shown at Fig. 1.

When the outer end of the lever is depressed, the rod 6 will thereby be swung upward, carrying with it the head 7, while at the same time the rod 8 will be elevated in the direction of its length, (the eye 9 readily sliding along the rod 6 to permit of such elevation,) and as this rod is elevated the head 7 will thereby be swung around to the position necessary for the performance of its function, as is fully shown at Fig. 2.

Of course it will be readily understood that the manner in which the rods 6 8 are pivoted to the head 7 depends entirely upon the position which said head must assume in performing its function, and I therefore do not wish to be limited to the precise details of construction shown, the gist of my invention in this respect resting in the broad idea of pivoting the head to one of the rods so that said head will be carried thereby and in so connecting the other rod with this head that it will act as a lever to swing the head around the first-mentioned pivot.

Having thus described my invention, what



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

1. The combination of the base, the rod 6 pivoted at its lower extremity to said base, the head 7 pivoted to the upper extremity of said rod, the rod 8 having its upper end pivoted to said head at a point eccentric to the first-mentioned pivotal point and provided at its lower extremity with an eye which loosely embraces the rod 6, the lever 11 pivotally supported upon said base and having its inner extremity pivoted to the lower end of said rod 8, and the spring having its extremities connected respectively with said base and lever, substantially as set forth.

2. The combination of the base having projecting upwardly therefrom the upright 2, the rod 6 pivoted at its lower end to said base and provided with a stop-shoulder 10, the head 7 pivoted to the upper end of said rod,

the rod 8 having its upper extremity pivoted to said head at a point eccentric to the first-mentioned pivotal point of said head and provided with an eye at its lower extremity which extends laterally and loosely embraces the rod 6 at a point below said shoulder 10, the lever 11 pivotally connected to said upright 2 and having its inner extremity pivoted to the lower end of said rod 8, and the coil-spring 13 having its extremities respectively secured to said base and lever whereby the normal position of the latter is maintained. substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAY B. LYFORD.

Witnesses:

F. W. SMITH, Jr.,  
M. T. LONGDEN.