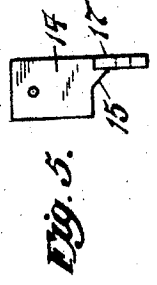
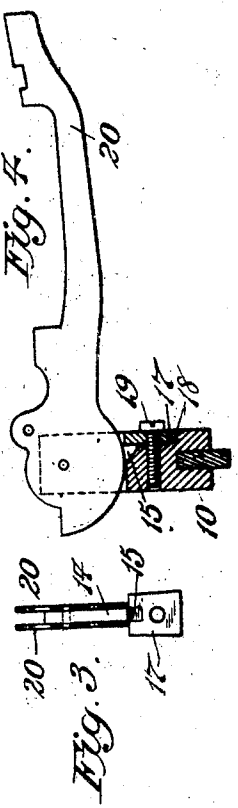
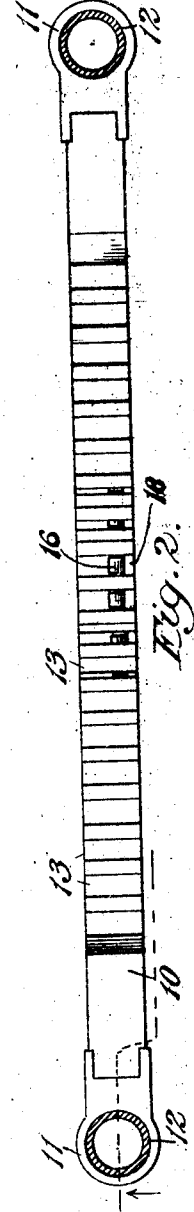
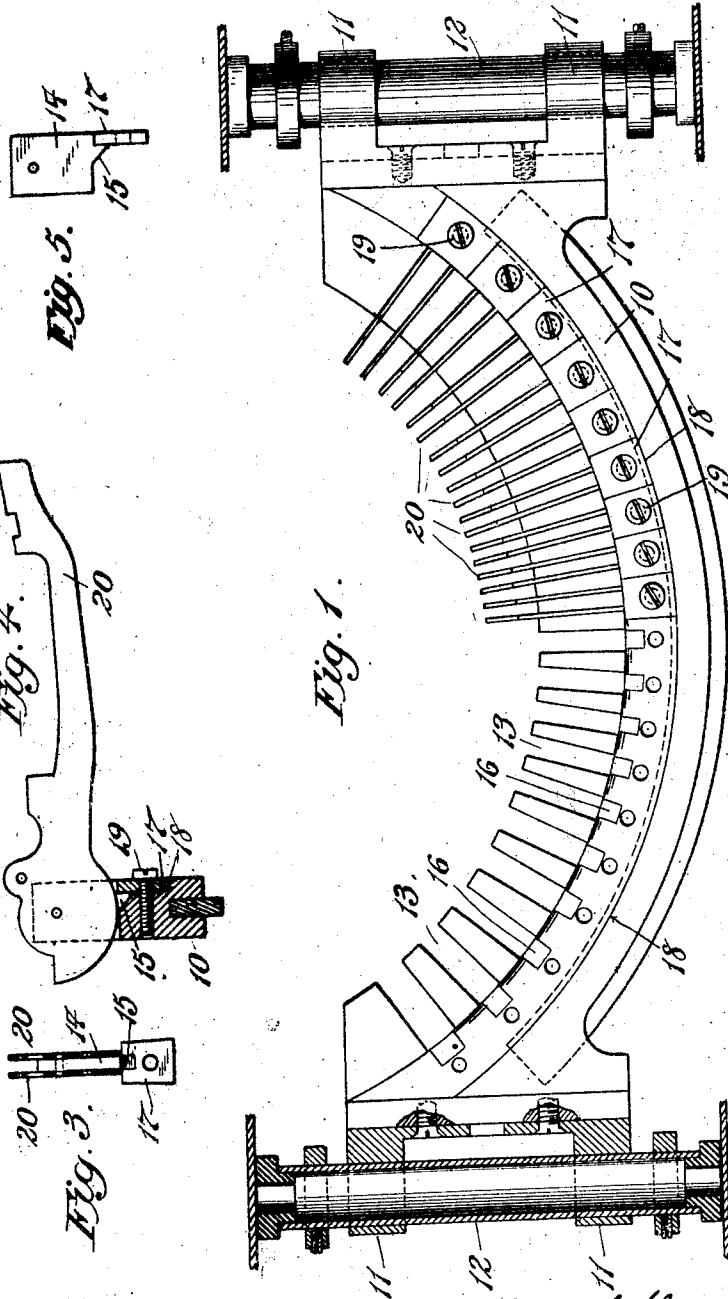


Z. G. SHOLES & J. M. FRAAZ.
TYPE WRITER.
APPLICATION FILED FEB. 28, 1911.

Patented May 14, 1912.

1,026,056.



Witnesses:
Edward Bowland
Richard C. Mead

Inventors
Zalmon G. Sholes and Joseph M. Fraaz
By their Attorneys H. W. K. K. K.

UNITED STATES PATENT OFFICE.

ZALMON G. SHOLES AND JOSEPH M. FRAAZ, OF NEW YORK, N. Y., ASSIGNORS, BY
MESNE ASSIGNMENTS, TO ZALMON G. SHOLES TYPEWRITER COMPANY, A COR-
PORATION OF DELAWARE.

TYPE-WRITER.

1,026,056.

Specification of Letters Patent.

Patented May 14, 1912.

Application filed February 28, 1911. Serial No. 611,378.

To all whom it may concern:

Be it known that we, ZALMON G. SHOLES and JOSEPH M. FRAAZ, citizens of the United States, residing in the city, county, and State of New York, have invented new and useful Improvements in Type-Writers, of which the following is a specification.

The present invention has relation to an improvement in the mode of hanging the type bars in typewriters, which improvement is particularly useful in those machines having a movable segment for carrying the type bars.

The principal object of the invention is the provision of means for supporting and adjusting the type bars whereby is attained an increased economy in building combined with ease in placing and replacing the bars and accomplishment of accurate and ready adjustment thereof.

The invention is shown in a preferred form in the accompanying drawings, wherein—

Figure 1 is a front view, partly in section, of the supporting segment with half of the type bars in place, Fig. 2 is a sectional plan view of the same, Fig. 3 is an elevation of a hanger with the attached type bars shown in section, Fig. 4 is a view partly in elevation and partly in section of a type bar and its supports, and Fig. 5 is a side elevation of a hanger.

The movable supporting segment 10 is provided with ears 11 which surround the pillars 12 upon which they slide when the segment is moved up and down in a well known manner. The mechanism for moving the segment is not shown, as it forms no part of our invention. The pillars 12 are preferably made hollow, but this is not essential. The segment is arc-shaped in the form shown and is provided with notches 13 in its upper surface, which converge toward a center at the printing point. Into these slots are slid the flat hangers 14, preferably shaped as shown in Figs. 3 and 5 with a beveled portion 15 intended to bear against the sloping shoulder 16 in front of each slot 13. Each hanger 14 is also provided with a fastening flange 17 adapted to fit snugly into the rabbet formed by the projection 18 on the front of the segment 10, as shown in Figs. 1 and 4. The hangers 14 are held in place by screws 19 passing through said flanges 17.

The type bars 20 are pivoted in pairs to the opposite sides of the hangers 14, so that, by simply removing any screw 19, the corresponding hanger 14 with its attached type bars may be instantly removed.

In the preferred construction shown in the drawing, the flat type bars are made to play within the appropriate narrow spaces separating the opposite faces of each hanger from the inner faces of the slot or notch in which such hanger is placed. The base of each type bar is preferably enlarged as shown in Fig. 4, and thus a very firm and unyielding bearing of large area, not subject to easy derangement is afforded. This insures preservation of alinement.

This construction makes it very easy to assemble the bars, first by pivots to the two sides of the hangers 14, and then by simply sliding each hanger 14 into place in its proper notch 13. By assembling the type bars in pairs, they can be placed in half the time that is consumed in adjusting them one by one.

Various changes can be made in this device without departing from the spirit of our invention, and we do not limit ourselves to the details herein shown and described.

What we claim is—

1. In a typewriter, a support provided with slots, flat hangers within said slots, and type bars pivoted in pairs on opposite sides of said hangers within said slots, substantially as described.

2. In a typewriter, a support provided with slots, removable flat hangers adapted to be slid into said slots, and type bars pivoted in pairs on opposite sides of said hangers and so placed thereon as to be within said slots when said hangers are slid into place, substantially as described.

3. In a typewriter, a support provided with slots and having a rabbet extending along the bases of said slots in a plane at right angles to the plane of said slots, flat hangers adapted to slide into said slots, each provided with a flange fitting said rabbet, type bars pivoted to said hangers, and means for fastening said flanges in place in said rabbet, substantially as described.

4. In a typewriter, a support provided with slots cut across one edge thereof and having a rabbet on one adjoining face extending along the bases of said slots, flat hangers adapted to slide into said slots each

provided with a flange fitting said rabbet, type bars pivoted to said hangers within said slots, and means for fastening said flanges in place in said rabbet, substantially
5 as described.

5. In a typewriter, a support having a slot with a beveled shoulder at its bottom, a hanger shaped to fit in said slot against said shoulder and having a flange for attachment to said support, and a pair of type
10 bars pivoted to opposite sides of said hanger, substantially as described.

6. In a typewriter, a support provided with slots cut across one edge thereof and
15 having a sloping portion at the bottom of

one side of each slot and having a rabbet adjoining said sloping portion extending along the bases of said slots, flat hangers adapted to slide into said slots, each provided with a beveled portion fitting the bottom portion of its slot and with a flange fitting said rabbet, type bars fitted to said hangers and means for fastening said flanges in said rabbet. 20

ZALMON G. SHOLES.
JOSEPH M. FRAAZ.

Witnesses:

H. S. MacKAYE,
KATHARINE C. MEAD.