A. C. ROEBUCK.

TYPE WRITER.

APPLICATION FILED NOV. 12, 1913.

1,206,032. Patented Nov. 28, 1916.

Fig. 1.

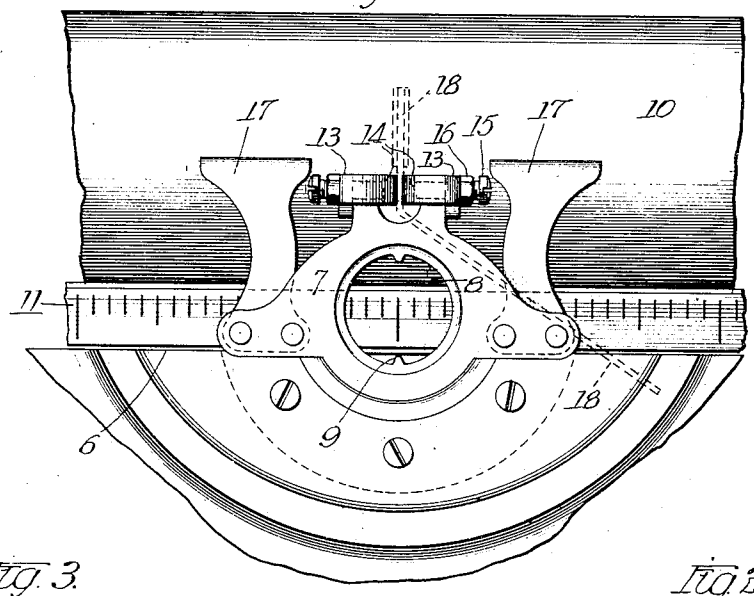


Fig. 3.

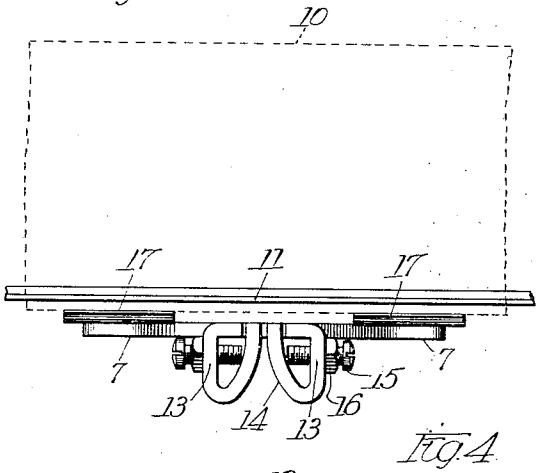


Fig. 2.

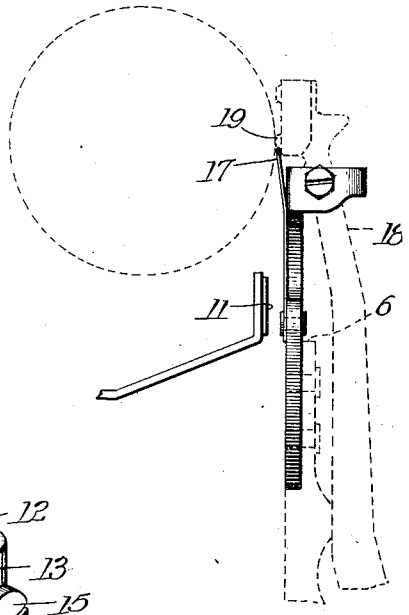
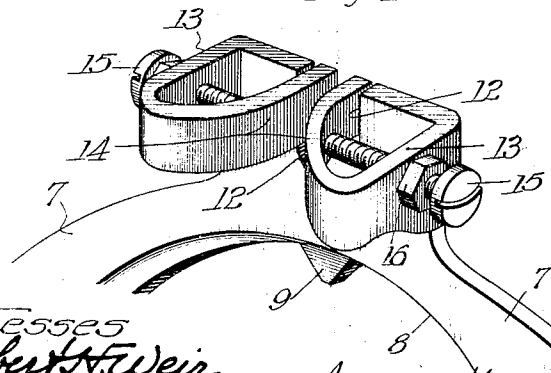


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ALVAH C. ROEBUCK, OF WOODSTOCK, ILLINOIS, ASSIGNOR TO WOODSTOCK TYPEWRITER COMPANY, OF WOODSTOCK, ILLINOIS, A CORPORATION OF ILLINOIS.

TYPE-WRITER.

1,206,032. Specification of Letters Patent. Patented Nov. 28, 1916.

Application filed November 12, 1913. Serial No. 800,433.

To all whom it may concern:

Be it known that I, ALVAH C. ROEBUCK, a citizen of the United States, residing at Woodstock, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Type-Writers, of which the following is a specification.

This invention relates more particularly to the type-bar guide and the means for locating the relationship between the carriage or platen and the printing point of the machine.

The principal object of the invention is to provide new and improved means for guiding the type-bars to the printing point and for providing improved facilities for locating the position of the sheet to be printed with respect to the printing point of the sheet.

For the attainment of these ends and the accomplishment of other new and useful objects, as will appear, the invention consists in the features of novelty in the construction, combination and arrangement of the several parts generally shown in the accompanying drawing and described in the specification but more particularly pointed out in the appended claims.

In the accompanying drawing, Figure 1 is a view of a portion of a typewriter illustrating my invention as applied, showing a type-bar in dotted outline; Fig. 2 is a side view of the same; Fig. 3 is a top view, and Fig. 4 is an enlarged perspective view of the type-bar guide proper.

To provide for a perfect alinement it is necessary not only that the type-bar guide proper be possessed of a certain resiliency but also that means be provided for bodily shifting the printing point in a lateral direction. It is also desirable to provide the best possible means for locating the line of printing when shifting paper in the platen to match a line already printed or begun, as for example, making additions or insertions. The present invention is particularly designed and intended to accomplish these results.

In the drawing a type-bar segment 6 is shown to which a type-bar guide 7 is secured. This type-bar guide comprises a guide proper and is formed with a peep-hole 8 preferably circular in form with pointers 9 diametrically opposite at the top and bottom of the opening. Supported by the type-writer carriage (not shown) is a platen 10 and a carriage scale 11. The carriage scale is visible from the front of the machine through the peep-hole 8, the pointers 9 coöperating with the scale to indicate the position of the carriage and the platen 10 with respect to the type-bar guide proper.

The type-bar guide proper comprises a notch 12 in the upper edge of the type-bar guide 7 of greater width than the width of the type-bars. The type-bar guide is preferably constructed of a single sheet or piece of material so that it is stamped from sheet material and formed with a forming die. Extending laterally from the sides of the notch 12 are portions 13 which are bent first substantially at right angles to the plane of the sheet of material and then are rounded inwardly toward each other forming a curved striking surface 14 with the extremities disposed in the notch 12, the sides of the ends being substantially parallel, spaced from each other and spaced from the sides of the notch to permit a movement of the extremities in either direction in the notch. These extremities, however, are of resilient material and tend to separate at the ends. In order to accurately define the opening between the ends, an adjusting screw 15 is provided for each of the oppositely extending portions 13. These screws are threaded through the portion at right angles to the plane of the guide member so that the extremity of the screw bears against the portion at a distance from the end thereof which is in the notch. The object of this is to permit a certain resiliency of the extremities of the guide portions proper and also to provide means for adjusting them. With this adjustment it is obvious that the extremities of the portions 13 may be adjusted with respect to each other and may also be moved to shift the guiding surface to one side or the other, thus furnishing an adjustment to compensate for any inaccuracies in the manufacture of a part and to make it possible to have the type strike centrally with the segment 6. In order to hold the adjusting screws 15 in any adjusted position locknuts 16 are provided.

Secured to the type-bar guide are line finders 17 formed of resilient or flexible material, one on each side of the guide proper, the upper edges of which accurately define

the printing line. The position of the printing point with respect to the printing line is shown more clearly in Fig. 2, in which a type-bar 18 is shown in dotted outline with one of its types 19 located on the line defined by the line finders 17. With these line finders it is possible to locate the printing line more quickly when shifting paper in the platen to match a line already begun, as for example, when making insertions or additions. This line finder coöperates with the peep-hole sight and the carriage scale 11 for more accurately and quickly locating the relationship between the platen and the printing point of the machine.

What I claim is:

1. In a typewriter, a type bar guide formed entirely of a single piece of material with parallel extending portions bent out of the plane of the material and then turned toward each other to form a guide proper.

2. In a typewriter, a type-bar guide formed of a single piece of sheet material with a notched portion along the upper edge, and portions extending oppositely from the sides of the notch adapted to be bent out of the plane of the material and rounded inwardly with the ends of said portions disposed in the notch to form a guide proper.

3. In a typewriter, a type-bar guide composed of a single piece of resilient sheet material having a notch in the upper edge thereof wider than the type-bar, with portions extending oppositely from the sides of the notch adapted to be bent out of the plane of the material and to be rounded inwardly with the ends thereof disposed and freely movable laterally in the notch, the said opposite ends in the notch being substantially parallel and the notch being of sufficient width to permit the lateral movement of both of the said ends in the notch.

4. In a typewriter, a type-bar guide comprising a member with a notch in the upper edge thereof, and resilient members formed as a continuation of the sides of the notch bent outwardly and rounded toward each other and inwardly with resilient extremities substantially parallel, spaced apart and spaced from the sides of the notch, and a single adjusting device for each resilient extremity to vary the position of the extremity in the notch.

5. In a typewriter, a type-bar guide comprising a member having an opening and resilient portions extending oppositely from the sides of the opening bent first at right angles and then rounded inwardly toward each other until the extremities are disposed in the opening, the sides of the extremities being substantially parallel with each other, spaced apart and spaced from the sides of the opening, the resiliency of the said portions tending to separate them at the extremities, and an adjusting screw inserted through the right angled portion of each member with the end of the screw bearing against the oppositely extending member adjacent the end to vary the positions of the parallel ends in the opening.

6. In a typewriter, a type-bar guide comprising a member having an opening and resilient portions extending oppositely from the sides of the opening bent first at right angles and then rounded inwardly toward each other until the extremities are disposed in the opening, the sides of the extremities being substantially parallel with each other, spaced apart and spaced from the sides of the opening, the resiliency of the said portions tending to separate them at the extremities, a single adjusting screw for each oppositely extending portion to vary the position of the end thereof, said screws being inserted through the bent portion of the oppositely extending portions, and a locknut to hold the screw in any adjusted position.

7. In a typewriter, a type-bar guide composed of a single piece of sheet material with oppositely extending portions bent out of the plane of the sheet and rounded inwardly toward each other to form a guide proper and having a peep-hole disposed below the guide proper with pointers on opposite sides of the peep-hole in alinement with the printing point defined by the guide proper.

8. In a typewriter, a one piece type bar guide having a circular peep-hole with a pointer therein, and a slotted upwardly extending portion above the peep-hole with laterally extending extremities bent toward the slot and adjustable to form a guide proper directly above the said pointer.

9. In a typewriter, the combination with a movable platen, of a letter scale carried thereby, and a one-piece type bar guide having adjustable portions forming an adjustable guide proper and having a peep-hole below the guide proper with pointers formed therein at the top and bottom to indicate on the scale carried by the platen the proper relative position of the printing point defined by the guide proper.

10. In a typewriter, the combination with a carriage, of a carriage scale, a fixed type-bar guide having a circular peep-hole with pointers on opposite sides thereof through which the carriage scale may be seen from the front of the machine, the type-bar guide proper comprising resilient members formed integrally therewith, and means for adjusting the position of the members with respect to each other and both of them laterally for defining the printing point.

11. In a typewriter, the combination with a platen, of a carriage scale movable with the platen, a type-bar guide comprising an

adjustable guide proper and a circular peep-hole through which the carriage scale is visible from the front of the machine with pointers extending inwardly from the sides of the hole in line with the printing point to show the position of the printing point with respect to the carriage scale, and flexible line finders extending on both sides of the guide proper and with the upper edges thereof defining the longitudinal printing line on the platen with respect to the printing point.

12. In a typewriter, the combination with a platen, of a carriage scale movable with the platen, a type bar guide comprising an adjustable guide proper and a circular peep-hole through which the carriage scale is visible from the front of the machine with pointers extending inwardly from the top and bottom of the hole in line with the printing point to show the position of the printing point with respect to the carriage scale.

13. In a typewriter, a type bar guide comprising integral members disposed in the same plane with parallel extending portions bent out of the same plane and then rounded inwardly toward each other to form a guide proper.

14. In a front strike typewriter, a one-piece type bar guide having spaced parts with extending flexible portions bent out of the plane of the material parallel with each other and then rounded inwardly toward each other to form a guide proper.

15. In a typewriter, a type bar guide formed of a single piece of sheet material having spaced portions with extremities extending out of the plane of the material parallel with each other and rounded inwardly until the ends thereof are substantially parallel and spaced apart to form a guide proper.

16. In a typewriter, a one-piece type bar guide formed of sheet material having integral flexible portions with extremities bent out of the plane of the material and then toward each other, and with only the tips of said extremities adjustable laterally to form a guide proper.

17. In a typewriter, a one-piece type bar guide having integral flexible extremities with tips bent toward each other to form a guide proper, and means on each extremity to separately adjust its tip.

18. In a typewriter, a one-piece type bar guide having integral spaced parts with flexible extremities bent to form a guide proper, and separate adjusting means on each part to vary the position of the extremity with respect to the other one and to move either one of them laterally for accurately defining the printing point.

19. In a front strike typewriter, the combination with type bars movable to an approximately common printing point, of a type bar guide consisting of members spaced apart adjacent the printing point having portions extending outwardly therefrom and bent inwardly toward each other until the ends lie substantially parallel to accurately guide the type bars to the printing point between the said members.

20. In a typewriter, the combination with type bars movable to an approximately common point, of a type bar guide consisting of members spaced apart adjacent the printing point having resilient portions extending laterally therefrom and bent inwardly toward each other until the ends are substantially parallel to yieldingly but accurately guide the type bars to the printing point between the said members.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 7th day of November A. D. 1913.

ALVAH C. ROEBUCK.

Witnesses:
CHARLES H. SEEM,
KENT W. WONNELL.