

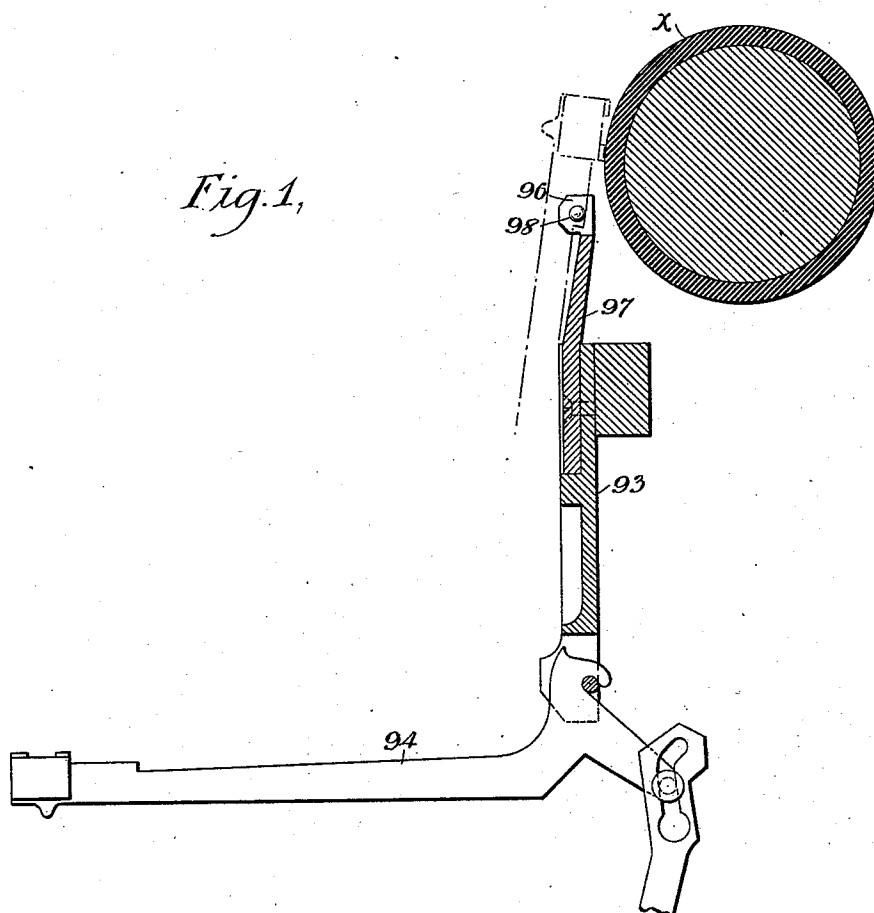
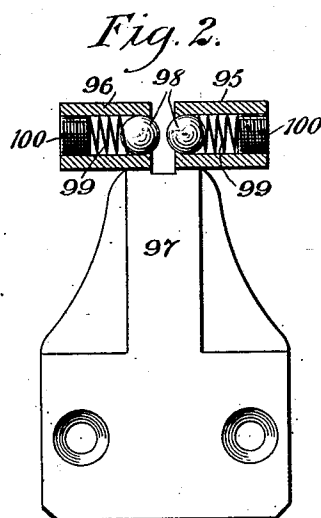
No. 714,091.

Patented Nov. 18, 1902.

J. ALEXANDER.
ALINER FOR TYPE BARS OF TYPE WRITERS.

(Application filed Feb. 27, 1902.)

(No Model.)



WITNESSES:

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JESSE ALEXANDER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
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ALINER FOR TYPE-BARS OF TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 714,091, dated November 18, 1902.

Original application filed October 1, 1901, Serial No. 77,184. Divided and this application filed February 27, 1902. Serial No. 95,850. (No model.)

To all whom it may concern:

Be it known that I, JESSE ALEXANDER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Aliner for the Type-Bars of Type-Writers, of which the following is a full, clear, and exact description.

This invention relates to improvements in aliners for type-writers; and the object is to provide a simple, effective, and adjustable device to cause the type to strike on the paper in proper place or in proper alinement, this application being a division of my application for patent for a type-writer, filed October 1, 1901, Serial No. 77,184.

I will describe an aliner for the type-bars of type-writers embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional elevation of an aliner embodying my invention, and Fig. 2 is a longitudinal section thereof.

Referring to the drawings, 93 indicates a front plate of a type-writer frame to which type-carrying bars 94 are fulcrumed. To cause the type at all times to strike in the proper place or in proper alinement on the paper, I provide a guide just forward of the impression-roller α and consisting of tubular members 95 96, the space between the adjacent ends of which is sufficient to permit the end of the type-bar to pass through. These tubular members are mounted on the upper end of a post 97, attached to the front plate 93.

Arranged in the inner end of each tubular member and projecting slightly outward therefrom is a movable bearing device, here shown as a hard-metal ball 98. These balls

are prevented from moving too far outward by crimping or swaging the ends of the tubes. The balls are pressed yieldingly toward each other by means of springs 99, arranged in the tubes, and as a means for adjusting the tension of the springs I employ screws 100, which engage in the outer portions of the tubes. It is obvious that by adjusting the tension of one spring slightly greater than the other the pressure of the ball at one side of the type-bar will be greater than at the other, this having a tendency to press the type-bar toward said weaker side, which may be found necessary during some adjustments; but of course the tension of the two springs may be made equal.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a type-writer, a guide for type-bars, comprising tubular members, balls arranged loosely in the adjacent ends of said tubular members, and bearing-springs for the balls in the tubular members.

2. In a type-writer, a guide for type-bars, comprising fixed tubular members, balls loosely mounted in the adjacent ends of said tubular members, bearing-springs for the balls, and tension-adjusting devices for the springs.

3. In a type-writer, a guide for type-bars, comprising fixed tubular members, movable devices in the adjacent ends of said tubular members, springs in said members engaging with said movable devices, and adjusting-screws for the springs.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JESSE ALEXANDER.

Witnesses:

JNO. M. RITTER,
C. R. FERGUSON.