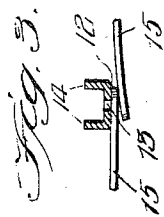
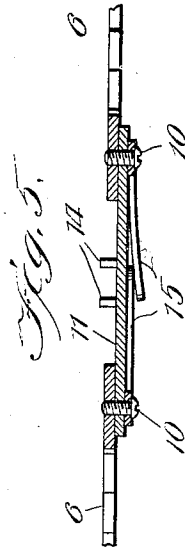
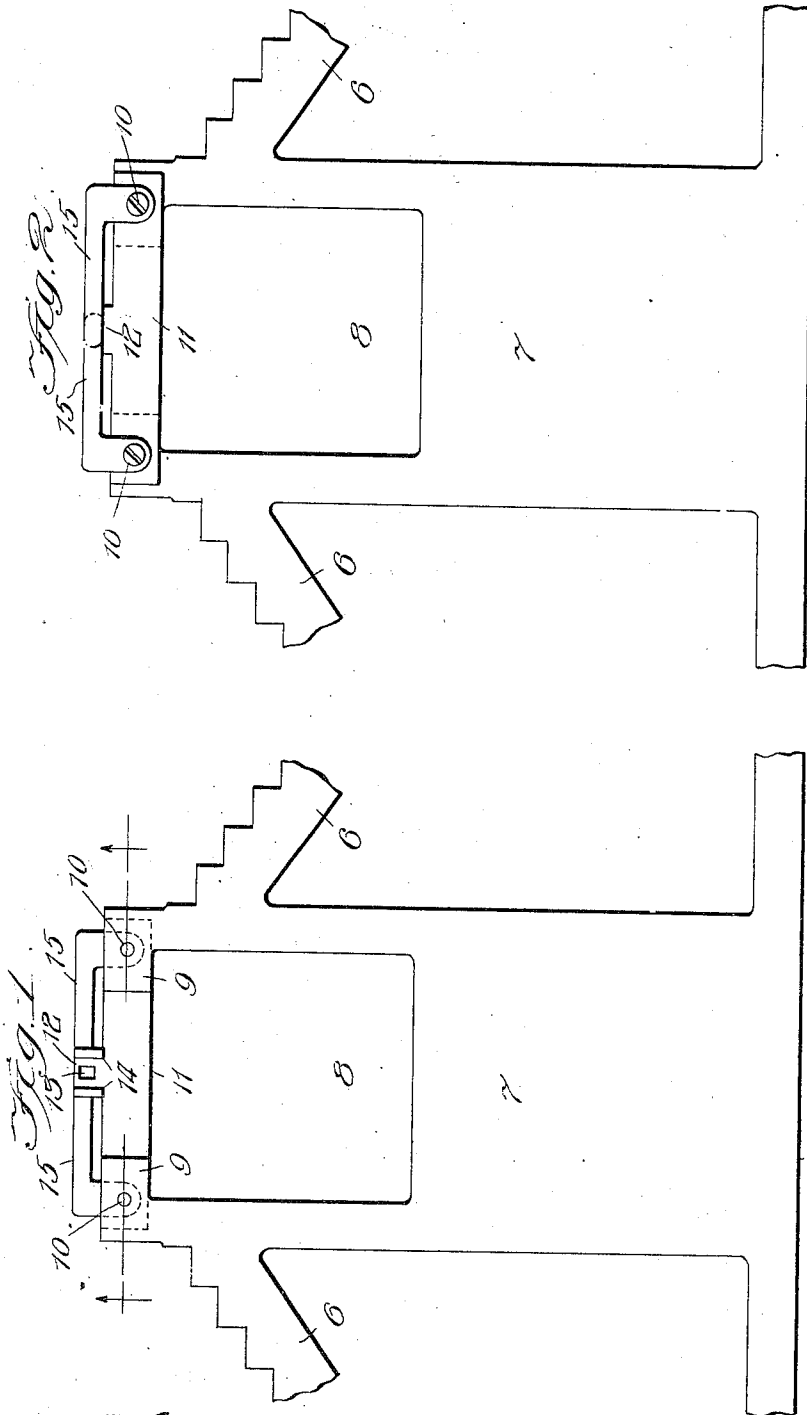


M. PFAU.
 TYPE WRITER CENTERING MECHANISM.
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1,026,601.

Patented May 14, 1912.



WITNESSES

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MAX PFAU, OF WOODSTOCK, ILLINOIS, ASSIGNOR TO THE EMERSON TYPEWRITER CO.,
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TYPE-WRITER CENTERING MECHANISM.

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To all whom it may concern:

Be it known that I, MAX PFAU, a citizen of Saxony, Germany, residing at Woodstock, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Type-Writer Centering Mechanism, of which the following is a specification.

The present invention relates to an appliance used on a typewriting machine for the purpose of centering the type prior to the writing operation, so as to insure its striking the platen at the proper point.

One of the objects of the present invention is to provide means for exerting a rebounding action on the type during the centering operation, so as to insure the restoration of the type to normal position after it has performed the writing operation.

A further object of the invention is to provide a cheap and simple method of mounting the centering mechanism on the type bar supporting frame.

The invention further consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a detail showing a portion of a type supporting frame with the centering mechanism of the present invention mounted thereon; Fig. 2, a rear view of the parts shown in Fig. 1; Fig. 3, a detail section showing the arrangement of the tension members with respect to the centering member; Fig. 4, a view similar to Fig. 3, showing the movements of the tension members when they are engaged by the type; and Fig. 5, a detail section on line 5-5 of Fig. 1, looking in the direction of the arrow.

In the typewriting art, it is necessary to provide what is termed a centering member which acts to guide the type just prior to the time it performs the printing operation, so as to insure the type striking at the proper point on the platen, and thus maintain an even line of characters on the work. There has been difficulty experienced with the operation of such devices, due to the fact that the type, after it has been centered, will not release itself from the centering member, and hence a piling of the type ensues, which interferes with the writing operation. This feature is one of the leading ones of the present invention, although the invention further relates to a very cheap

and efficient way of manufacturing and assembling the different portions which constitute the centering mechanism.

Referring to the drawings, the centering member is shown as applied to a type supporting frame 6. This particular form of frame, however, is not essential to the present invention, and is merely shown for illustrative purposes, it being understood that any other frame of suitable construction could be applied without departing from the spirit of the present invention. The frame, as shown, is provided with a centrally located webbed member 7, which is provided with an opening 8, the function of this opening being to permit the operator to see the scale which determines the position of the typewriter carriage. This scale is old and well known in the art and is not illustrated in the present drawings. The opening 8 is somewhat contracted at its upper end to provide oppositely disposed lugs 9 formed on the body of the frame, and attached to these lugs, by suitable fastening members 10, is a plate 11, best shown in Fig. 2, which has formed therein a neck 12 provided with a rectangular opening 13; and said neck is further provided with outwardly extending wings or flanges 14. These flanges and the opening 13 cooperate to perform the centering operation.

Secured to the plate 11 by the fastening members 10 are L-shaped leaf springs 15, which have their free ends overlapping, as shown more clearly in Fig. 3, and the point of intersection of these two spring members is approximately in alinement with the opening 13. The function of these springs is to exert a rebounding action upon the type while it is performing the centering operation, so as to insure its restoration to normal position. It is to be understood that these springs will not be of sufficient strength to prevent the type from coming into full and perfect engagement with the platen.

From the foregoing description it will be seen that the formation of the centering member is very simple, consisting, as it does, solely of a plate with a neck thereon having a hole therein, and that the method of securing this plate in place is very simple and strong. Solidity of mounting is one of the features necessary to all centering members, since the centering member must be main-

tained in rigid position during the operation of the machine, in order to enable it to perform its centering function. Obviously, if it moved out of its proper position, it would then be out of alinement with the type when the latter is projected into writing position, and hence it would fail to accomplish its centering function.

The operation of the springs, to impart the rebounding action to the type, is obvious from the foregoing description and from a study of the drawings. It will, however, be more clearly seen from a study of Fig. 4, where a centering member on a type is shown projected through the opening 14 and engaging with the springs. As shown in this figure, the springs are forced away from the neck 12 by engagement of the centering member on the type with said springs, and hence a tension is created in the springs. This tension is of a nature to tend to force the springs back to the position shown in Fig. 3, and hence the tension is of a nature to throw the type member away from the centering member and start it on its return to normal position. By the employment of these springs, the danger of the centering member on the type becoming clogged after it has entered the centering member on the type bar frame and failing to disengage itself is eliminated. Any binding which might take place between the centering member and type is overcome by the rebounding action exerted on the type by the springs.

I claim:

1. A type centerer for typewriters, comprising a recessed member, and tension mechanism lying across and in alinement with said recess and adapted to be engaged by that portion of the type projected through said recess prior to the engagement of the type with the platen, whereby a rebounding action is imparted to the type to assist in its return to normal position, substantially as described.

2. A type centerer for typewriters, comprising a recessed member, and tension mechanism consisting of overlapping leaf springs having their free ends lying across said recess, said free ends being moved by the type during the centering operation and

exerting a rebounding action on the type tending to assist in its return to normal position, substantially as described.

3. In a typewriter, the combination of a type bar supporting frame, a plate secured to said frame carrying a recessed centering member for the type, and tension members secured to said plate, adapted to be engaged by that portion of the type projected through the recess, whereby a rebounding action is imparted to the type to assist in its return to normal position, substantially as described.

4. In a typewriter, the combination of a type bar supporting frame, a recessed plate secured to said frame acting as a centering member for the type, and tension members in the form of overlapping leaf springs secured to said plate and having their free ends lying across said recess, said free ends being sprung away by the engagement of the type therewith during the centering operation, whereby a rebounding action is imparted to the type to assist in its return to normal position, substantially as described.

5. A type centerer for typewriters, comprising a plate-like member having a portion constituting a recessed centering member, and tension members lying across said recess and adapted to be engaged by that portion of the type projected through the recess prior to the contact of the type with the platen, whereby a rebounding action is imparted to said type to assist in restoring the same to normal position, substantially as described.

6. A type centerer for typewriters, comprising a plate-like member, having a neck thereon provided with a recess, overlapping leaf springs secured to said plate and having their free ends lying across said recess, said ends being engaged by the type during the centering operation, whereby the springs are forced away from the centering member and a rebounding action is imparted to the type to assist in restoring the type to normal position, substantially as described.

MAX PFAU.

Witnesses:

FRANK WILDER,
D. C. AKERS.