

Nov. 28, 1950

W. F. HERRING

2,531,880

ADJUSTABLE TYPEWRITER SUPPORT

Filed Feb. 24, 1947

2 Sheets-Sheet 1

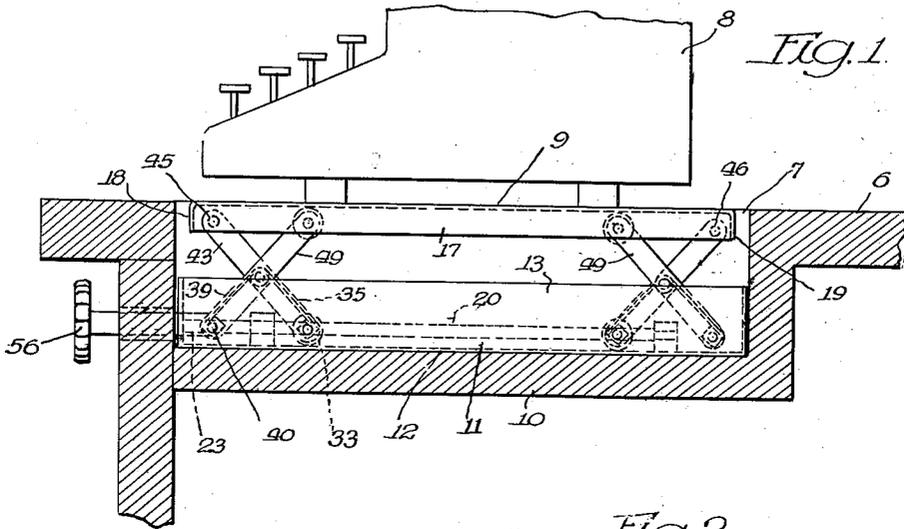


Fig. 1

Fig. 2

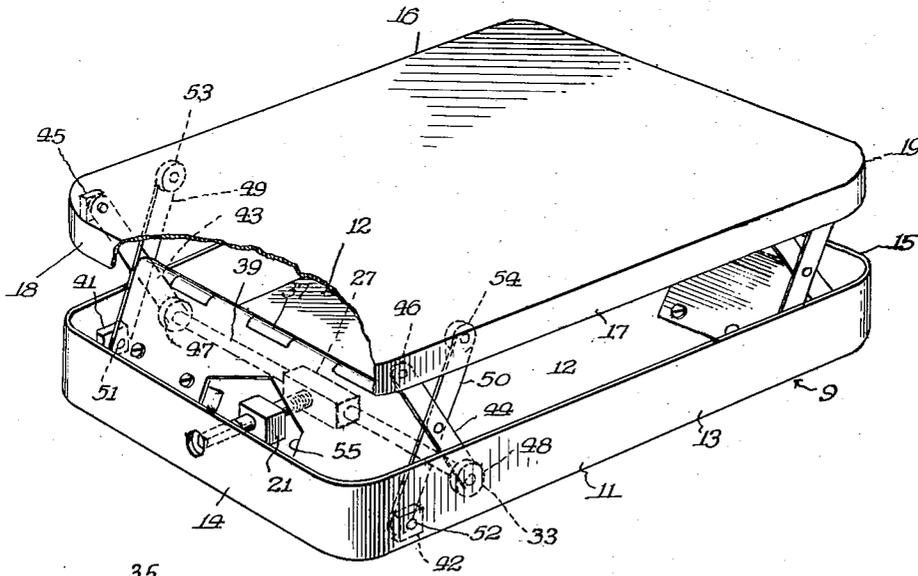
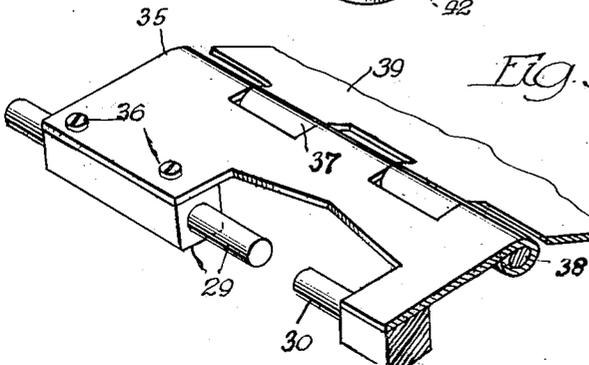


Fig. 3



Inventor
Wayland F. Herring

By Glenn S. Noble
att.

Nov. 28, 1950

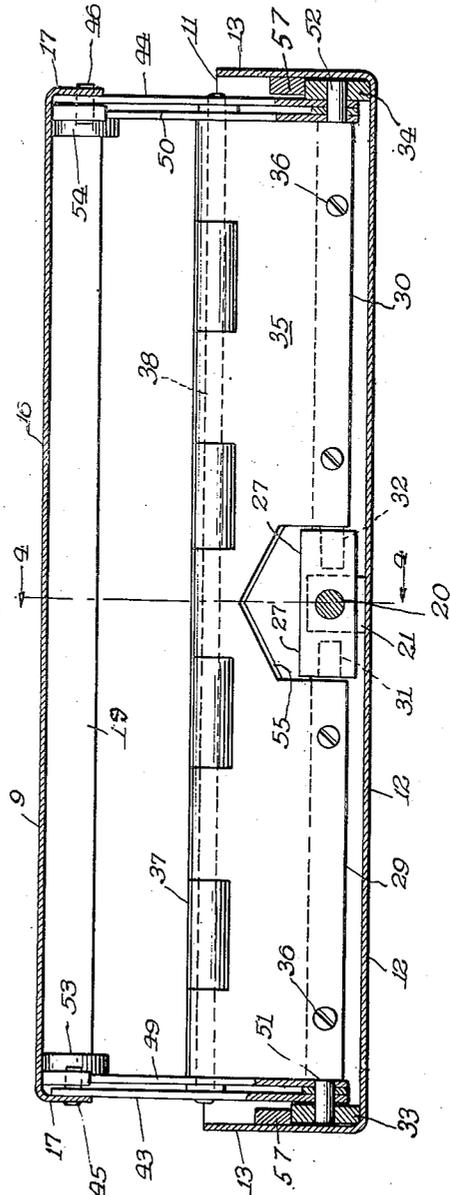
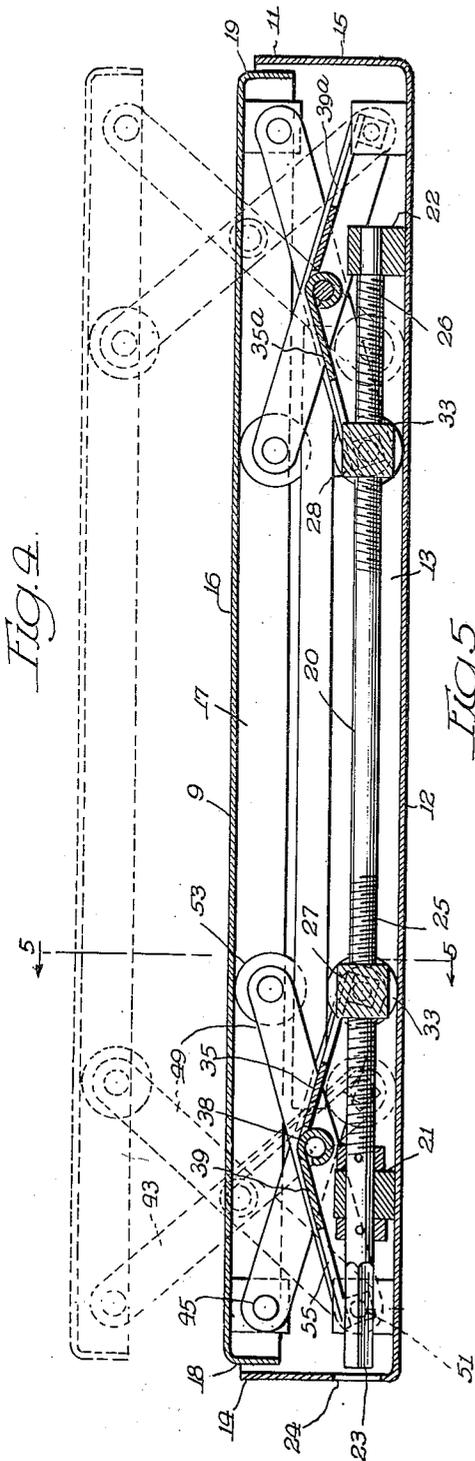
W. F. HERRING

2,531,880

ADJUSTABLE TYPEWRITER SUPPORT

Filed Feb. 24, 1947

2 Sheets-Sheet 2



Inventor
Wayland F. Herring

By *Glenn B. Noble*
Atty

UNITED STATES PATENT OFFICE

2,531,880

ADJUSTABLE TYPEWRITER SUPPORT

Wayland F. Herring, Calumet City, Ill.

Application February 24, 1947, Serial No. 730,481

3 Claims. (Cl. 248—23)

1

When a typewriter, supported on a desk in the usual manner, is being operated, it causes more or less vibrations in the desk which tend to react on the machine. Such vibration is objectionable for a number of reasons inasmuch as it may tend to impair the accuracy of the writing as well as the speed of operation. I have found that by supporting the machine with a novel support positioned between the machine and the desk, such vibrations may be largely reduced or eliminated. I have found that by having flat plates or surfaces mounted on and supported by curved or rounded supporting members, the initial vibration is transmitted from the flat plate to the curved surface in such a manner that it is largely eliminated and this arrangement forms one of the novel features of the present invention.

It is also desirable to adjust the height of the typewriter with respect to the desk for convenience in operation by operators of different size so that the operator may assume a convenient and restful position for speed and ease in striking the keys.

The objects of the present invention are to provide an improved adjustable typewriter support which may be installed as a part of the desk for adjustably supporting the typewriter; to provide an improved support for typewriters whereby they may be adjustably and rigidly held in different positions; to provide a support which will tend to eliminate vibration; and to provide such other novel features and advantages as will appear more fully hereinafter.

In the accompanying drawings illustrating this invention,

Fig. 1 is a more or less diagrammatic sectional view showing a portion of a desk with the support mounted therein and a typewriter resting on the support;

Fig. 2 is a perspective view of the adjustable support with parts broken away for convenience in illustration;

Fig. 3 is a detail showing portions of the adjusting members;

Fig. 4 is a longitudinal sectional view taken substantially on the line 4—4 of Fig. 5; and

Fig. 5 is a cross sectional view taken substantially on the line 5—5 of Fig. 4.

As shown in these drawings, 6 is a typewriter desk having a recess 7 for the typewriter 8. My support, indicated generally by the numeral 9, is positioned between the typewriter and the floor or bottom 10 of the recess. The support has a substantially rectangular bottom pan or base 11 provided with a bottom 12, sides 13, front end 14, and rear end 15. The support also has a coact-

2

ing top plate or member 16 in the form of an inverted pan having side flanges 17, front end 18, and rear end 19. The flanges of the upper plate are adapted to telescope or pass within the lower pan as shown particularly in Fig. 4. A shaft 20 is mounted in bearings 21 and 22 which are secured in any suitable manner to the bottom 12 as shown in Figs. 4 and 5. This shaft is manually turned by any suitable means, in the present instance being shown as squared at 23 at the front end for receiving a crank or wheel 56 which may be inserted through a hole 24 in the wall 14. The shaft 20 which actuates the adjusting mechanism has right hand threads 25 at the front end and left hand threads 26 at the rear end which coact with threaded blocks or nuts 27 and 28 respectively.

Two bars or rods 29 and 30 have their inner ends reduced and engaging with bearings 31 and 32 in the ends of the block or nut 27, the arrangements being such that the rods may rotate freely with respect to the nut. The outer ends of the rods are provided with rollers 33 and 34 which roll upon the bottom 12 of the lower pan or support 11, and are held down by rails 57.

A hinge plate or leaf 35 has its lower edge secured to the bars 29 and 30 in any suitable manner as by means of screws 36. The upper edge of the plate 35 is connected by means of the usual knuckle 37 and pintle arrangement 38 to a coacting leaf or plate 39 which also extends substantially across the entire width of the support. The lower edge of the plate 39 is secured to a shaft or bar 40 which extends across the lower pan and pivotally engages bearings 41 and 42 secured to the sides of the pan. Levers or links 43 and 44 are secured to or formed integrally with the ends of the hinge leaf 35 with their central portions pivoted on the shaft or pintle 38. The upper ends of these levers are pivoted to the side flange 17 at 45 and 46 respectively. The lower ends of these levers engage with the pivots for the rollers 33 and 34 which roll on the bottom 12. Other links or levers 49 and 50 are secured to the ends of the hinge leaf 39 or formed integrally therewith and are pivoted on the shaft or pintle 38 and are arranged crosswise with respect to the levers 43 and 44 as shown in Fig. 2. The levers 49 and 50 are pivoted at their lower ends to the sides of the pan 11 as shown at 51 and 52 and are provided at their upper ends with rollers 53 and 54 respectively, which rollers engage with the lower surface of the upper plate 16. The several links or arms should all extend at equal distances from the center of the pintle 38 in order

3

to prevent binding. The hinge leaf 39 is cut away at 55 to clear the threaded shaft and other parts as indicated in Fig. 2.

The opposite end of the support is provided with elevating mechanism similar to that just described so that it need not be set forth in detail. The portion of the shaft 20 having the left hand threads 26 coacts with a nut or block 28 which actuates a hinge device having leaves 35a and 39a with oppositely arranged cross arms pivoted and connected as shown for raising the opposite end of the upper plate or support 16. The cross arms are pivoted to the base 11 and movable support 16 in substantially the same manner as described with reference to the first named elements serving the same purpose.

As will be readily seen from Fig. 4, when the shaft 22 is turned in one direction, the nuts 27 and 56 are caused to approach each other and lower the plate or bed 16, and when turned in the opposite direction, the nuts are moved apart and the bed raised as shown in dotted position. By means of this arrangement, the typewriter may be readily adjusted to any desired position within the range of travel of the support.

While I have shown a preferred form of my support or device, it would be evident that the same may be modified in order to adapt the same for different makes of typewriters or other instruments without departing from the scope of the invention as set forth in the following claims in which I claim:

1. An adjustable typewriter support including a base and a relatively movable plate arranged above the base, a central shaft rotatably mounted on the base, means for turning said shaft, said shaft having right and left hand threads thereon, nuts coacting with said threads, hinge members having their outer leaves pivotally connected with the base and having their inner members secured to nuts having threaded engagement with the respective threads on the shaft whereby the hinge members will be actuated to raise and lower the center portions when the shaft is turned, arms extending upwardly from the hinge members and pivotally connected with the movable plate and other arms connected with the oppositely disposed hinge members, rollers on the ends of said last named arms engaging with the plate, and rollers on the ends of the first named arms engaging with the base.

2. An adjustable typewriter support, comprising a pan having upwardly extending sides, hinged plates extending transversely across the pan adjacent to either end thereof with their pivoted portions extending upwardly, means for

4

pivotally securing the outer edges of the endmost plates to the sides of the pan, bearings positioned in the center of the pan, a shaft rotatably mounted in said bearings, oppositely disposed threads adjacent to the ends of the shaft, threaded members coacting with said threads and adapted to move longitudinally of the shaft when the shaft is turned, said threaded members being secured to the inwardly extending portions of the hinge members, arms secured to the ends of the hinge members, two of the arms of the respective members being pivotally connected with the respective threaded members on the shaft and adapted to move longitudinally thereof when the shaft is turned, each of said hinge members also having arms extending upwardly at the ends of the leaves thereof, a top plate pivotally connected with one pair of arms of each hinge member, other pairs of arms extending upwardly from the coacting hinge members, and rollers on the ends of the last named arms engaging with said plate.

3. In a device of the character set forth, the combination of a supporting pan having upwardly projecting sides, a shaft mounted in said pan and extending longitudinally thereof, means for turning said shaft, right and left hand threads adjacent to the ends of the shaft, nuts coacting with said threads, bars pivotally connected with the nuts and extending across the pan, rollers on the ends of said bars engaging with the pan, hinge plates secured to said bars, other hinge plates pivotally secured to the first named hinge plates and extending downwardly, the said last named hinge plate being pivotally secured to the sides of the pan, arms projecting upwardly from the first named hinge plates, a top plate having a downwardly extending peripheral flange coacting with the pan, pivotal connections between said arms and said top plate, other arms projecting upwardly from the second named hinge members, and rollers on the ends of said arms engaging with the top plate.

WAYLAND F. HERRING.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,550,944	Beidler et al.	Aug. 25, 1925
1,941,301	Hanson et al.	Dec. 26, 1933
2,206,788	Meacham	July 2, 1940
2,415,820	Herring	Feb. 18, 1947