

No. 632,680.

Patented Sept. 5, 1899.

R. J. FISHER.
TYPE WRITING MACHINE SUPPORT.

(Application filed Feb. 21, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

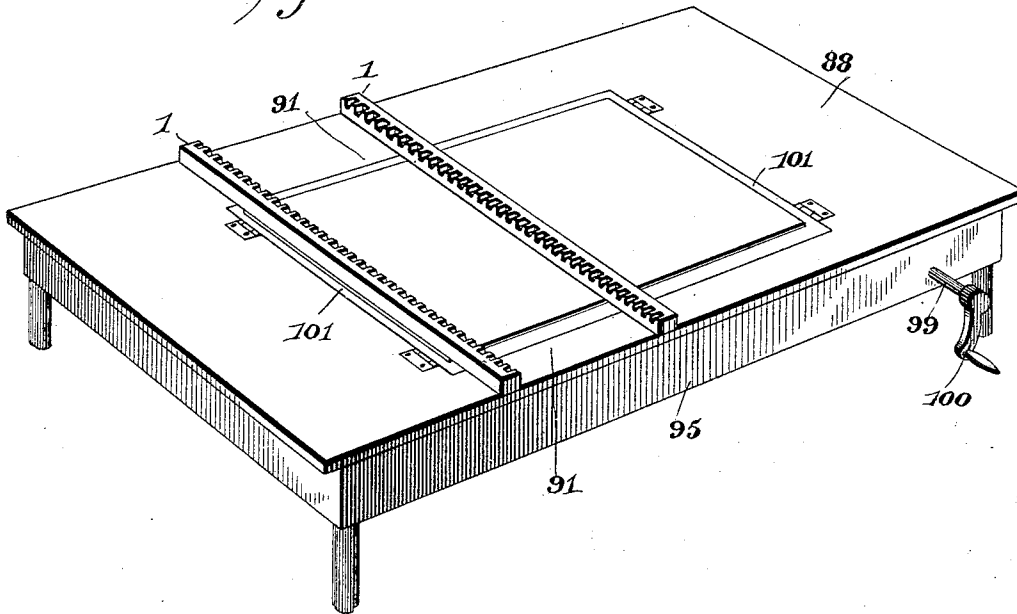
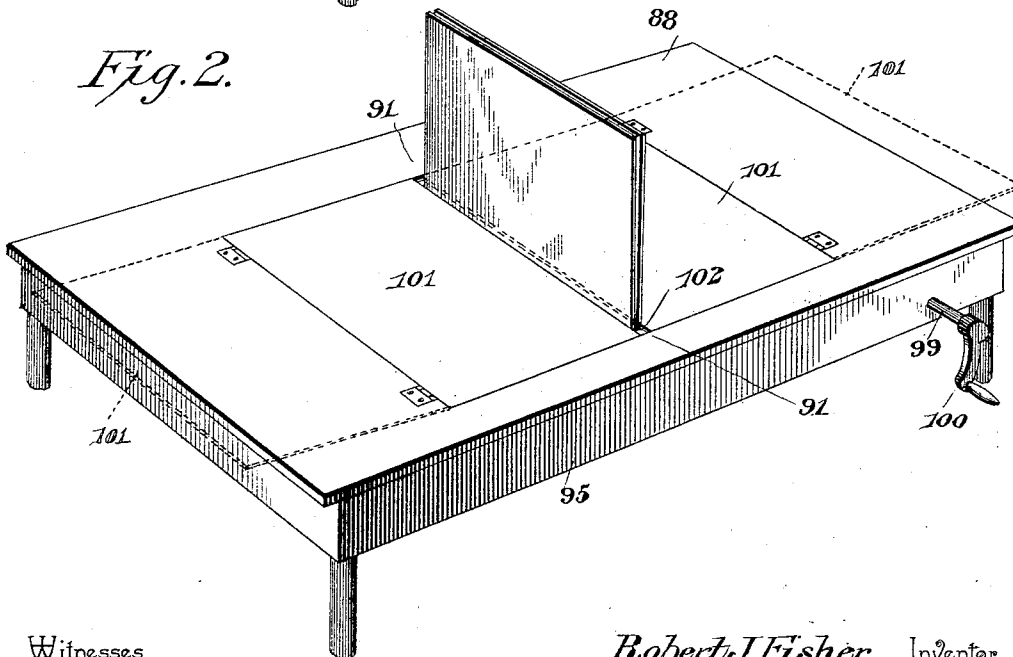


Fig. 2.



Witnesses

Jas. H. McLathran
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Fig. 3.

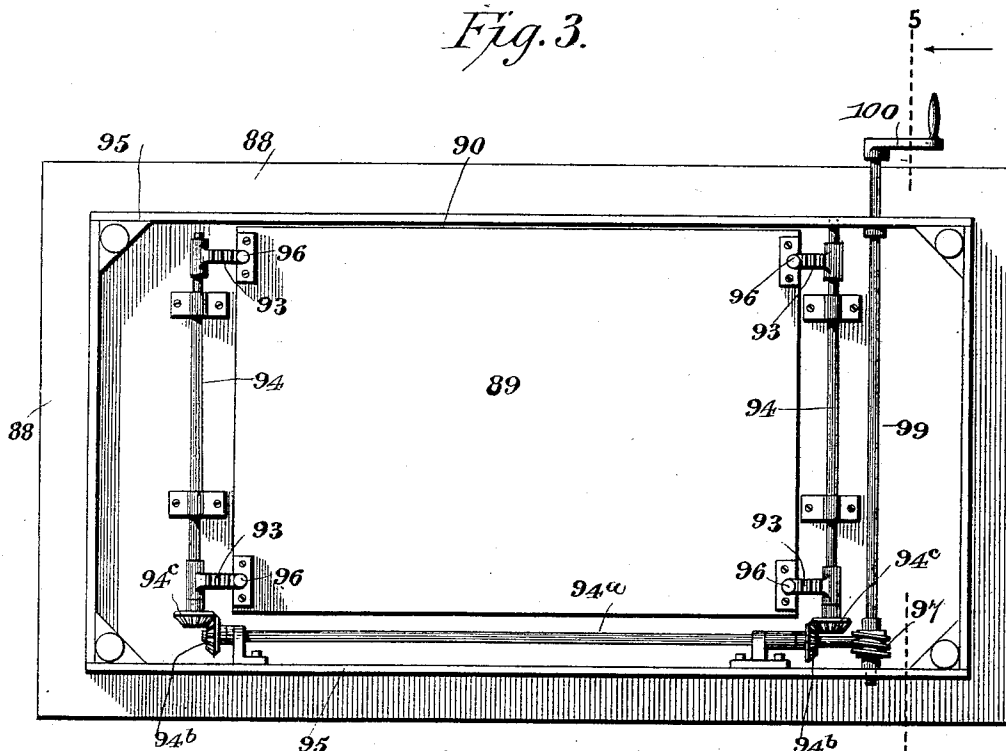


Fig. 4.

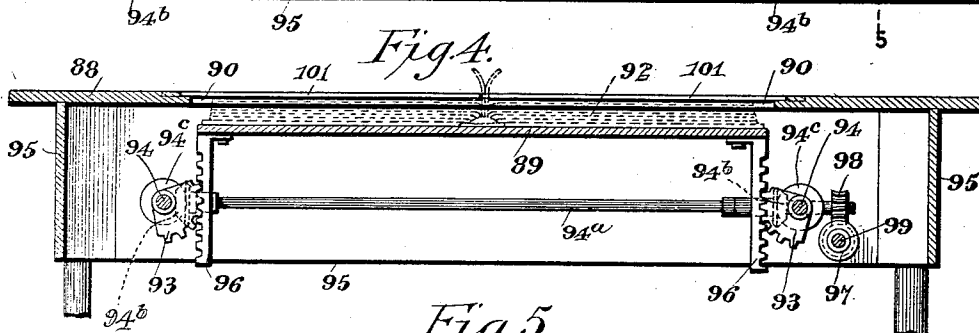
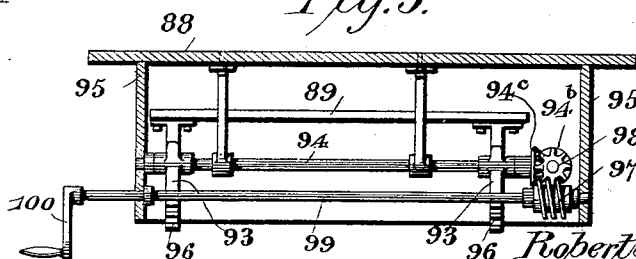


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT JOSEPH FISHER, OF ATHENS, TENNESSEE, ASSIGNOR TO THE
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TYPE-WRITING-MACHINE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 632,680, dated September 5, 1899.

Application filed February 21, 1898. Serial No. 671,147. (No model.)

To all whom it may concern:

Be it known that I, ROBERT JOSEPH FISHER, a citizen of the United States, residing at Athens, in the county of McMinn and State of Tennessee, have invented a new and useful Type-Writing-Machine Support, of which the following is a specification.

My invention relates to type-writing machines of that class designed for bookwork, and particularly to a combined machine-support and platen; and the object in view is to provide a simple and efficient construction of support for upholding a book and a machine for maintaining a platen in operative relation with the book-leaves, the platen being of such a construction as to support both of the exposed leaves of a book in position to receive the impression of the printing characters and the book-support being of such construction as to receive an open book and support the same throughout its extent, whereby it may be raised to dispose the sides of the book respectively in contact with the under surfaces of the platen leaves or members.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a type-writing-machine support constructed in the form of a table and showing a book arranged in operative position thereon. Fig. 2 is a similar view showing the manner of arranging the platen leaves or members in operative relation with the book-leaves. Fig. 3 is an inverted plan view of the support. Fig. 4 is a longitudinal section of the same. Fig. 5 is a detail vertical sectional view on the line 5 5 of Fig. 3.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The support embodying my present invention consists of a stationary base or frame 88, beneath the horizontal top of which is arranged a vertically-movable book-support 89, the horizontal top of the base or frame being provided with an opening 90, bounded at its front and rear sides by parallel supporting-strips 91, the interval between these strips

being such as to receive a book 92, upheld by the adjustable book-support 89. These supporting-strips are adapted to maintain the tracks or guides 1 of a type-writing machine (such as that illustrated in either of my former patents, No. 569,491, dated October 13, 1896; Nos. 569,625, 569,626, and 569,627, dated October 20, 1896; No. 572,535, dated December 8, 1896, and No. 573,868, dated December 29, 1896) in a horizontal position.

The means whereby the book-support 89 is adjusted vertically to suit the thickness of the book supported thereby include segment-gears 93, connected in pairs by spindles 94, which are arranged transversely of the tabletop, preferably above the plane of the lower edges of the skirting boards 95. These segment-gears mesh with racks 96, depending from the book-support 89, contiguous to its extremities, and simultaneous rotary motion in opposite directions is communicated to the spindles of the segment-gears by means of a worm 97, meshing with a worm-gear 98 on a counter or connecting spindle 94^a, which extends longitudinally between the spindles 94, and is provided with bevel-gears 94^b to mesh with corresponding gears 94^c on said spindles, the worm being carried by a worm-shaft 99, which is mounted transversely of the tabletop and extends beyond the front edge thereof to receive an operating-crank 100. By turning this worm-shaft the book-support 89 may be raised or lowered to the desired height, and the use of a worm meshing with a worm-gear provides for retaining the book-support at the desired adjustment without the use of auxiliary locking devices. Hence the operation of the book-support in adapting it to the thickness of a book is simplified and I am enabled to adjust it instantly to the desired height and change the adjustment as often as may be required in the operation of the machine without the loss of time which would be involved by the manipulation of auxiliary locking device.

Spanning the opening 90 in the supporting-frame between the parallel supporting-strips 91, which in the construction illustrated are fixed or stationary, is a horizontal platen or book-leaf support for maintaining book-leaves in contact with the under sides of the

tracks 1 to receive the impression of the printing characters. In the construction illustrated in the drawings the platen or leaf-support is of sectional construction, and comprises platen leaves or members 101, each being approximately coextensive with the leaf of a book on the book-support 89, and the inner edges of said platen leaves or members being separated to form a transverse elongated opening or slot 102, through which one or more book-leaves may be extended upwardly for arrangement in a flat position upon the upper surface of the platen. Obviously after the extension of the book-leaves and their arrangement in contact with the upper surface of the platen they are held from displacement by the weight of the tracks 1 and of the superposed type-writing machine, which, however, is not illustrated in the present drawings. Furthermore, in the construction illustrated the platen leaves or sections are higher at their outer or remote edges to the base or supporting-frame and are adapted to fit wholly within the opening 90 to occupy positions with their upper surfaces flush with the upper surface of the base, and hence with the upper surfaces of the supporting-strips 91; but it is obvious that in practice said platen leaves or members may be disposed to rest upon the supporting-strips and may be made separate from the supporting-frame instead of permanently connected therewith, as illustrated.

In operation the platen leaves or members are outwardly foldable to the positions indicated in dotted lines in Fig. 2, when the book 92 may be disposed upon the vertically-adjustable book-support 89, the latter being moved by the manipulation of the crank 100 to bring the upper surface of the thicker side of the book as close to the plane of the upper surface of the base or supporting-frame as possible without interfering with the subsequent arrangement of the platen leaves or members in their normal horizontal positions. One or more leaves of the book may then be turned up, as shown in Fig. 2, and the platen leaves or sections folded inward to locate said up-turned book-leaves in the elongated opening or slot 102 between the contiguous parallel edges of the platen leaves or members, and subsequently the book-leaves are folded outward to the position illustrated in Fig. 1 and the tracks 1 are arranged in parallel positions upon either of the book-leaves to hold it in a flat position suitable for receiving the impression of the printing characters.

It will be seen that by arranging the segment-gear spindles 94 parallel with the end edges of the base or supporting-frame and connecting said spindles for simultaneous rotation by a counter-shaft 94*, which is located at the rear edge of the base or supporting-frame, the front of the base or supporting-frame is left free, whereby when the support is constructed as a table sufficient space is allowed for the knees of the operator without

necessitating a support of an inconvenient height, and as the means for manipulating the adjustable book-support, and consisting of the crank 100, is located at the front edge of the base it is obvious that it is within convenient reach of the operator and may be adjusted from time to time, as found necessary, in order to dispose the book in a proper position with relation to the platen, which when in use is fixed in position, although capable of outward displacement, as above described, in order to give access to the impression-receiving object and facilitate the arrangement of the book-leaves or other objects in contact with the upper surface of the platen.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A type-writing machine having a normally stationary platen, a vertically-adjustable book-support, disposed below the plane of the platen and having a continuous book-receiving surface, whereby an open book may be elevated throughout its extent toward the plane of the platen, and means for securing the book-support at the desired adjustment, substantially as specified.

2. A type-writing-machine support having a base, a normally stationary platen having leaves or members separated at their adjacent edges to form a book-leaf-receiving slot, a vertically-adjustable book-support having a continuous book-receiving surface, whereby an open book may be elevated throughout its extent toward the plane of the platen, to arrange its opposite sides in contact with the under surfaces, respectively, of the platen leaves or members, and means for securing the book-support at the desired adjustment, substantially as specified.

3. A type-writing-machine support having a normally stationary platen, a vertically-adjustable support, disposed below the plane of the platen and having a continuous book-receiving surface, whereby an open book may be elevated throughout its extent toward the plane of the platen, and operating mechanism for the book-support, connected with the latter at a plurality of points, substantially as specified.

4. A type-writing-machine support having a base, a platen having separate platen leaves or members hingedly mounted upon the base, to normally occupy a common plane with their contiguous edges separated, a vertically-adjustable book-support arranged below the plane of the platen, and means for securing the book-support at the desired adjustment, substantially as specified.

5. A type-writing-machine support having a base, a platen comprising separate platen leaves or members hingedly mounted at their remote edges upon the base, and normally oc-

cupying positions in a common plane with their contiguous edges separated, a vertically-adjustable book-support arranged below the plane of the platen, and means for securing the book-support at the desired adjustment, substantially as specified.

6. A type-writing-machine support having a base for supporting a platen, a vertically-adjustable book-support arranged below the plane of the platen and provided with depending racks, segment-gears meshing, respectively, with said racks and having parallel spindles located contiguous to opposite ends of the supporting-frame, a counter-shaft connected by gearing with said segment-gear spindles and carrying a worm-gear, and an operating-worm meshing with said worm-gear and having its shaft provided with an operating-crank exposed beyond the base for manual actuation, substantially as specified.

7. A type-writing-machine support having a base, a vertically-adjustable book-support, and operating devices for the book-support, having gearing including intermeshing racks and gears connected for simultaneous move-

ment, and a single operating-shaft provided beyond one edge of the base with an operating device, and connecting with said gearing for communicating motion in either direction thereto, substantially as specified.

8. A type-writing-machine support having a base, a vertically-adjustable book-support, and operating devices for the book-support, having gearing including intermeshing racks and gears connected for simultaneous movement, and a single operating-shaft terminating near one edge of the base and provided with a manually-movable operating device, said shaft having a worm-gear connection with said gearing, whereby the book-support is automatically held in any of its adjusted positions, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT JOSEPH FISHER.

Witnesses:

JOHN LUTHER EMERSON,
JAMES DAVID WILLIAMS.