

April 10, 1951

H. I. RICHARDS

2,547,973

COPYHOLDER

Filed Aug. 20, 1947

3 Sheets-Sheet 1

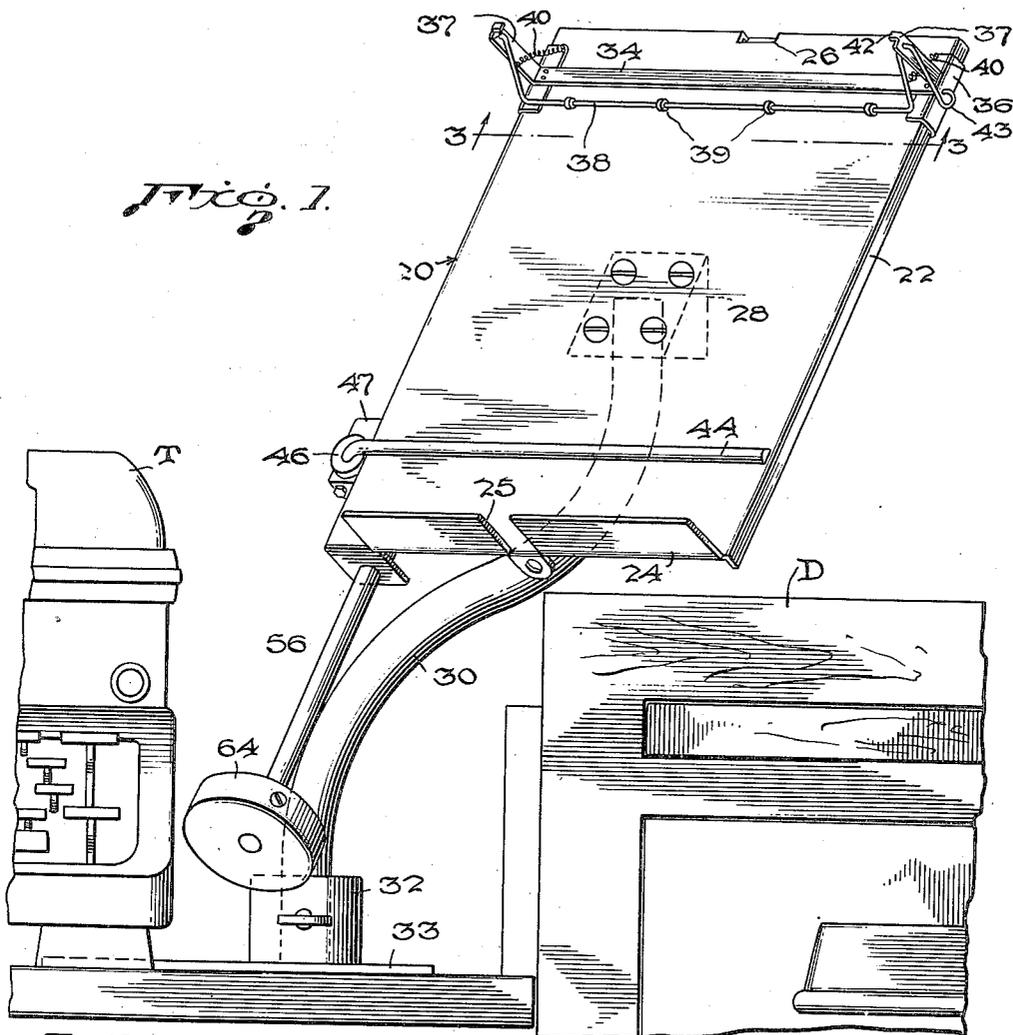


Fig. 1.

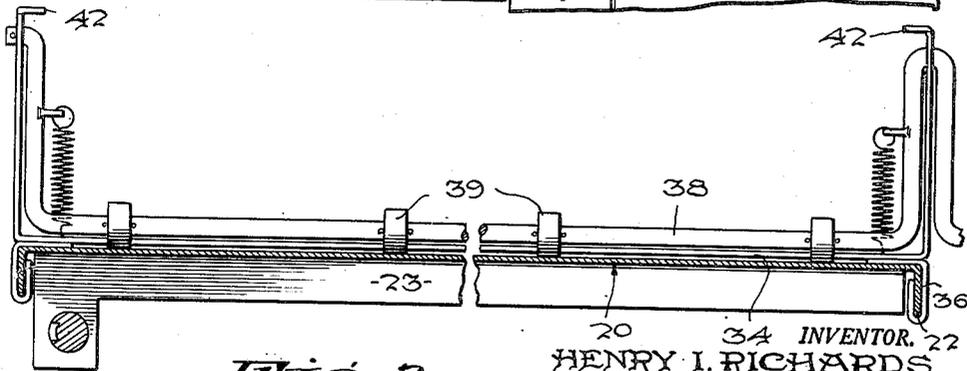


Fig. 3.

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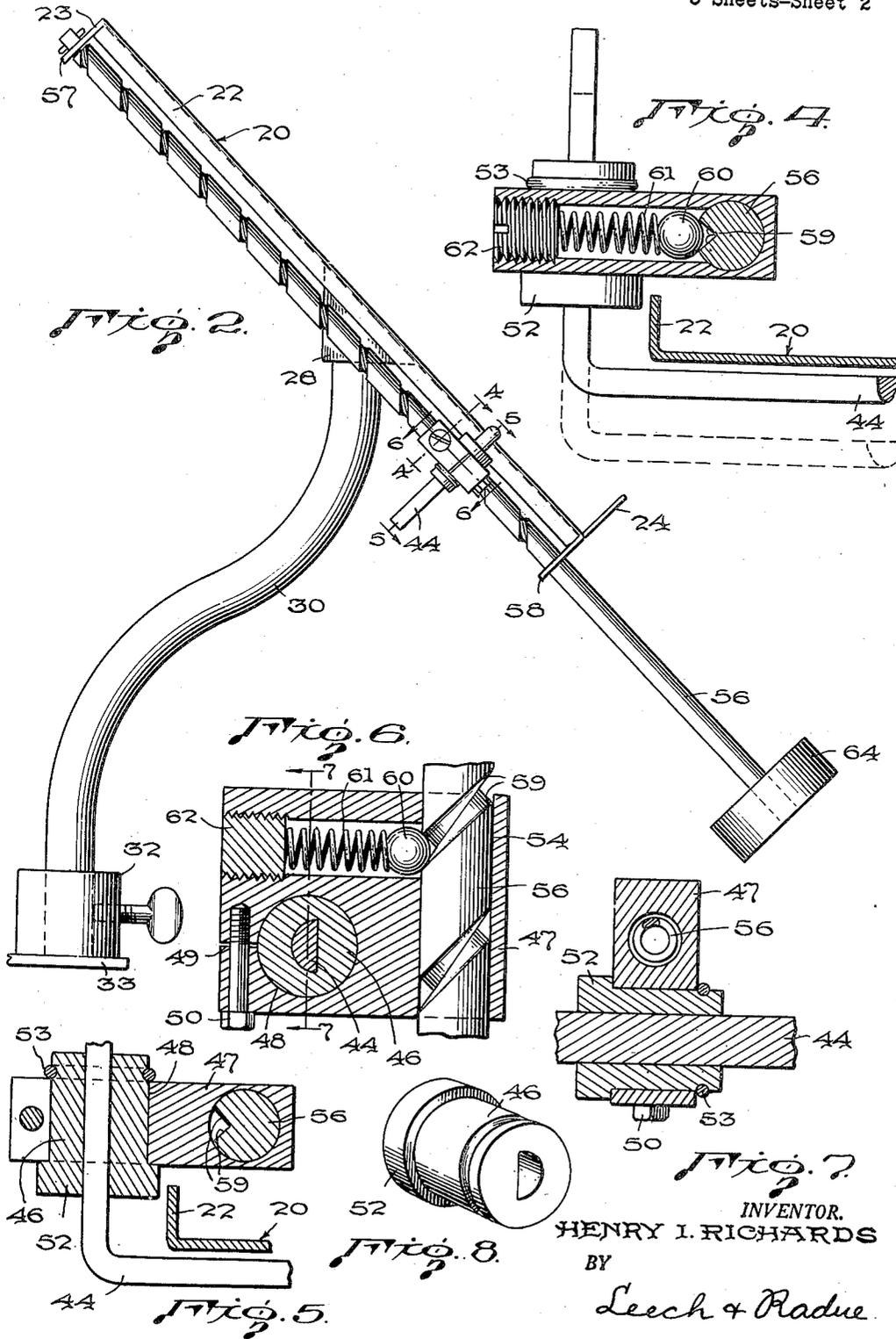
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3 Sheets-Sheet 2



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3 Sheets-Sheet 3

Fig. 9.

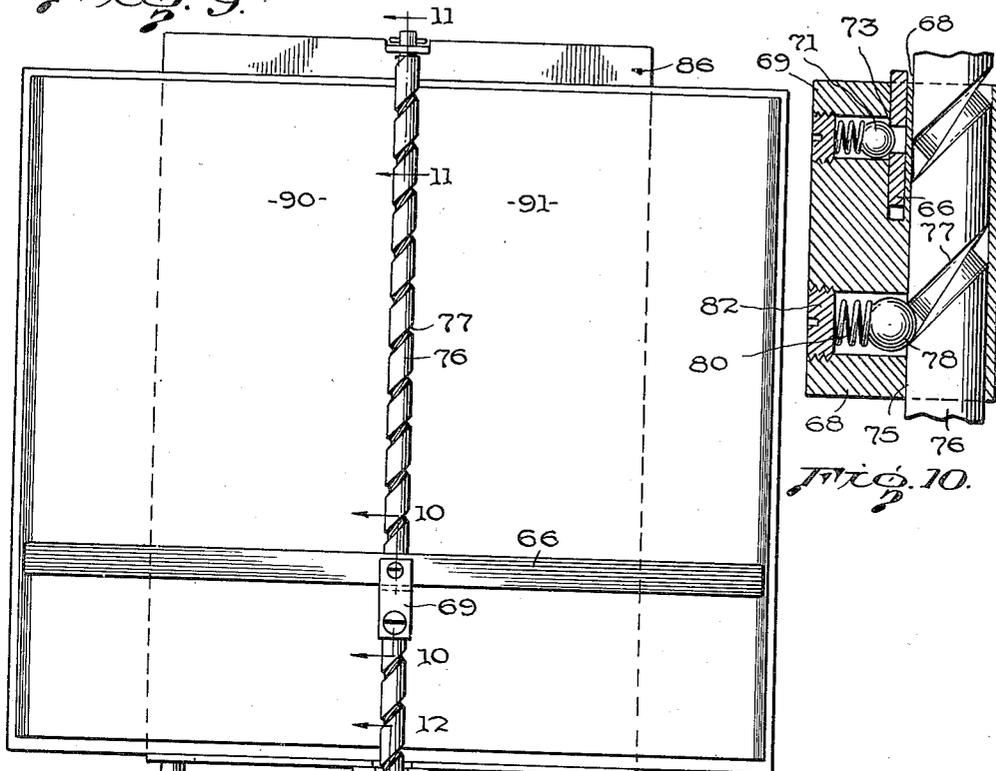


Fig. 10.

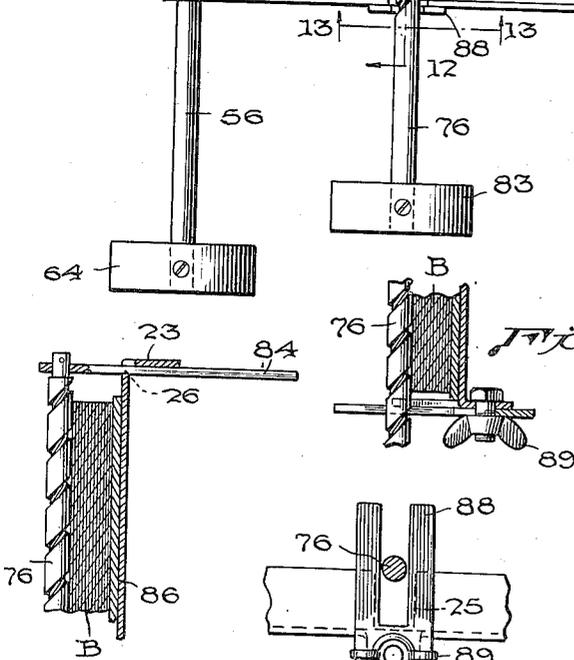


Fig. 11.

Fig. 13.

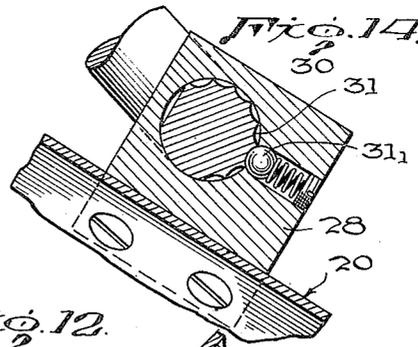


Fig. 14.

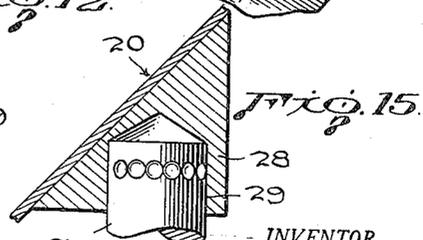


Fig. 15.

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# UNITED STATES PATENT OFFICE

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COPYHOLDER

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Application August 20, 1947, Serial No. 769,609

8 Claims. (Cl. 120—34)

1

The present invention relates generally to copy holders and more particularly to improvements in the construction thereof.

Copy holders including their supporting means, copy clamps and line guides are old in the art and as a whole are characterized by a number of disadvantages which tend to discourage their use. Many copy holders are suitable for use in only a single type of copy work or with only a single type of machine, due to a lack of flexibility and the inability to place the copy holder in a position where it will be of assistance rather than a handicap in copy work.

Among other disadvantages of known copy holders are: inadequate copy clamps which must either be held open or which lack adjustability to accommodate the different sizes of copy; fixed line guides preventing accurate alignment with all lines of successive pages of misaligned copy; lack of flexibility in raising or lowering the line guide over copy independently of the step-by-step advancing means; and an inability to support or operate with heavy copy material such as books of different sizes.

Accordingly the chief object of the present invention is to provide a copy holder which will obviate the aforementioned disadvantages.

Another important object of the present invention is to provide a copy holder which is readily positionable with respect to various types of machines, such as typewriters and other business machines, and which will receive various types of copy for support thereon.

A further important object of the present invention is to provide a copy holder having a copy support and an adjustable clamp for cooperation therewith.

Another important object of the invention is to provide a copy holder having an adjustable copy clamp which will remain in open or closed position so as to free both hands of the user for the accurate placing of the copy on its support.

Another important object of the invention is to provide a copy holder having a novel supporting pedestal which will enable the former to be rotated about its own axis and also about the axis of the pedestal for ready adjustment of the copy to a position where it is most easily read.

Another important object of the invention is to provide a copy holder including a pedestal support which is maintained in upright position by the machine with which it is being used but without attachment thereto.

Still another important object of the invention is to provide a copy holder having a line guide

2

which is pivotally and slidably mounted so as to be accurately aligned with varying amounts or thicknesses of unaligned copy.

Another important object of the present invention is to provide a copy holder having a line guide support which may be advanced or retracted by increments or which may be manually and quickly moved to the desired position in either direction adjacent the edge of the copy without first disconnecting any portion of the advancing mechanism.

Another important object of the present invention is to provide a copy holder having a novel line guide support which permits the line guide to be quickly adjusted to any position on or to align with the copy and to accommodate various thicknesses thereof.

Another important object of the present invention is to provide a line guide attachment for copy holders which is capable of ready alignment with the pages of books regardless of the tendency of the pages to sag in opposite directions.

Another important object of the invention is to provide a copy holder having an adjustable support and line guide for copy such as books.

Another important object of the invention is to provide a copy holder which may be readily disassembled so as to be placed beside a machine such as a typewriter and folded with it back into a typewriter desk.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawings I have shown one embodiment of the invention. In this showing:

Figure 1 is an elevational view showing the copy holder in operative position with respect to a typewriter and desk;

Figure 2 is a view in side elevation of the invention;

Figure 3 is a sectional view taken on the line 3—3 of Figure 1, parts being shown in elevation;

Figure 4 is an enlarged sectional view of the line guide support taken on the line 4—4 of Figure 2;

Figure 5 is an enlarged sectional view of the line guide support taken on the line 5—5 of Figure 2;

Figure 6 is an enlarged sectional view of the line guide support taken on the line 6—6 of Figure 2;

Figure 7 is a sectional view of the line guide support taken on the line 7—7 of Figure 6;

Figure 8 is a perspective view of the rotatable plug of the line guide support;

Figure 9 is a front elevational view of the copy holder showing a line guide operatively mounted on the open pages of a book;

Figure 10 is a sectional view thereof taken on the line 10—10 of Figure 9;

Figure 11 is a sectional view taken on the line 11—11 of Figure 9 showing the manner in which the book line guide is mounted on the copy holder;

Figure 12 is a sectional view similar to Figure 11 but taken on the line 12—12 of Figure 9;

Figure 13 is a sectional view thereof taken on the line 13—13 of Figure 9;

Figure 14 is a detail sectional view illustrating the mounting of the copy holder on its pedestal; and

Figure 15 is a side elevational view thereof.

Referring to the drawings, numeral 20 generally designates a copy holder preferably formed of sheet metal, aluminum, etc. of sufficiently heavy gauge for the purpose in question, and including a pair of lateral longitudinally extending, downturned flanges 22, an upper downwardly extending flange 23 and a lower upwardly extending shelf 24 which includes a slot 25 located centrally therein for a purpose to be described. The upper face of the copy holder 20 includes a lateral extending slot 26, which is also formed in the upper downwardly extending flange 23 for a purpose which will become apparent.

The rear face of the copy holder 20 is provided (Fig. 15) with a triangular block 28 in the bottom of which is formed a socket 29 which receives the upper end of an S-shaped pedestal 30, the lower end of which is received in a socket formed in a base member 32 to which is secured a supporting rectangular base plate 33.

The pedestal 30 has free rotatable motion with respect to the base member 32 and with respect to the triangular block 28 so that the copy holder 20 may be adjusted into any desired position with respect to a typewriter or business machine T (Fig. 1) under which the base plate 33 is positioned to anchor the pedestal and copy holder in a rigid upright position. The pedestal 30 is of such height as to clear the top portion of the desk D on which it may be positioned and where it is free from interference with the carriage of the business machine. The upper end of the pedestal 30 while being freely rotatable with respect to the socket 29, is provided with a series of semi-spherical depressions 31 about its periphery which are engaged by a ball 31<sup>1</sup> to permit definite positions of adjustment as desired. The opposite side of the upper end of the pedestal 30 is flattened so as to permit it to be easily attached to the copyholder.

A clamp 34 extends transversely across the face of the copy holder and is movable longitudinally with respect thereto by means of a pair of U-shaped flanges 36, which engage the downturned flanges 22 of the copy holder and are freely slidable therealong to adjust for copy of different lengths.

The copy clamp 34 is provided with a pair of upstanding flanges 37 which rotatably support a U-shaped bail 38 provided with rollers 39 to engage the surface of the copy. Tension spring members 40 are connected between the flanges 36 and the legs of the bail 38 so as to urge it either against the surface of the copy or upwardly against a stop member 42 formed in either or both of the upstanding flanges 37. One of the ends of the bail which are rotatably received in the flanges 37, is provided with an actuating handle member 43 so that the bail may be readily

swung into either desired position, thus leaving the hands free for insertion of the copy in proper position upon the copy holder.

The copy holder 20 is provided with an extended line guide 44, which is slidably mounted for vertical adjustment with respect to the copy in a rotary plug 46 provided with a semi-circular aperture or bore to conform to the cross-sectional shape of the line guide. The line guide support 47 comprises a rectangular block member having a circular bore 48 for the reception of the plug 46, the bore 48 opening into an externally extending slot 49 so that the frictional bearing engagement of the support 47 on the plug 46 may be adjusted by means of a screw bolt 50. The rotary plug 46 is retained in the bore 48 by means of a support abutting collar 52 formed integrally therewith and a detachable snap ring 53 which seats in a recess formed in the periphery of the other end of the plug.

The line guide support is provided with a second aperture or bore 54 for the reception of a helically grooved screw 55, which is rotatably supported in the copy holder 20 by means of a pair of downturned apertured flanges 57 and 58. The grooves 59 of the helical screw shaft are V-shaped in cross section and are frictionally engaged by a hard, highly polished metal ball 60, which is resiliently urged thereagainst by means of a compression spring 61, the outer end of which bears against an adjustable plug 62. The lower end of the screw 55 is provided with an operating knob 64, and upon rotation thereof in a clockwise manner, the line guide support 47 is urged downwardly along the edge of the copy holder by virtue of the engagement of the ball 60 with the V-shaped groove 59. Thus, the line guide 44 may be advanced downwardly or over the surface of the copy in any desired increments by so rotating the knob 64. When returning the line guide support 47 and hence the line guide 44 to the upper portion of the copy, it is merely necessary to slide the support 47 along the screw shaft 55 as the compression of the spring 61 is so adjusted as to permit the ball 60 to readily ride out of the groove 59. Thus, the line guide support 47 may be advanced or retracted in increments or rapidly moved the entire length of the screw 55 to move the guide 44 across the surface of the copy. The support 47 may also be rotated with or relative to the shaft 55.

The construction of the line guide and its support comprise a very important feature of the present invention as will now be readily apparent. The line guide 44 can be readily and easily moved short increments up and down the surface of the copy or the entire distance thereof inasmuch as the ball 60 will snap in and out of the V-shaped grooves, thus eliminating the need for manually disengaging the conventional groove engaging pin, etc. The line guide support 47 is of very simple but practical construction with nothing to get out of order. Frictional engagement of the plug 46 in the aperture or bore 48 is controlled by the screw bolt 50 whereas the compression of the spring is readily controlled by the screw plug 62.

It will be noted that the flat-sided, perpendicular end portion of the line guide 44 has a close but easy sliding fit in the plug 46 to permit the line guide to be easily adjusted vertically, that is, perpendicularly to the copy supporting surface to accommodate different thicknesses of copy. Moreover, line guides of different length may be readily substituted for each other in the plug 46.

Another important feature of the present inven-

tion resides in the rotary mounting of the line guide 44 in the support 47 by virtue of the rotary plug 46 so that the line guide may be readily angularly adjusted against the clamping friction of bore 48 to align with such copy which is not parallel therewith. This is a very important advantage inasmuch as in a plurality of sheets of copy, the lines thereof may be inclined in either direction. Heretofore, it was necessary to readjust the copy, but the present invention eliminates this sometimes difficult or impossible task by the pivotal mounting of the line guide 44, which is readily adjusted by pressure on its outer end.

The S-shaped pedestal 30 enables the copy to be held close to and approximately the same level as a typewriter platen to thus reduce the eye movements required of the typist. Moreover, the operating knob 64 is positioned closely adjacent to the keys or space bar of the typewriter, thus reducing the hand movements required of the operator. The particular amount of rotation of the knob to obtain line-at-a-time movement is readily determined by a typist after a few turns thereof.

The copy holder is readily adjusted to any one of a large number of positions since the pedestal 30 is rotatable with respect to the socket at either end. Furthermore, as previously explained, the copy holder is readily detachable from the pedestal 30 which is detachable from the base member 32 so that it may be laid beside the typewriter when the latter is folded into the desk for the night.

The sliding clamp 34 is a further important feature of the present invention. The fact that the clamp will remain open greatly facilitates the insertion of copy sheets and due to the construction and its manner of mounting on the copy holder, special tracks, etc. are entirely eliminated. In the use of the copy holder, copy is placed on its upper surface and allowed to rest on the lower shelf 24, the clamp being in open position. When the copy is correctly adjusted, the clamp 38 is snapped thereagainst by means of the operating handle 43 to cooperate with the shelf in maintaining it in correct position regardless of its thickness.

An auxiliary line guide 66 is pivotally mounted in a slot 68 formed in a supporting block 69 by means of a hard steel ball 71 which engages the sides of an aperture 73 formed in the line guide 66 so as to force it against the sides of the slot 68 to frictionally hold it in any angularly adjusted position. The line guide support 69 is provided with a bore 75 which receives a helically grooved shaft 76. The sides of the groove 77 on the shaft 76, which is V-shaped in cross section, are engaged by a ball 78 which is urged thereagainst by a compression spring 80, the outer end of which bears against an adjustable screw plug 82 (Fig. 10).

The helically grooved screw 76, which is provided with an operating knob 83, is rotatably mounted at its upper end in the aperture of a flat bar 84 which is received in the slot 26 of a copy holder 86 which is identical in construction to the copy holder 20 disclosed in Fig. 1 of the drawings. The lower end of the screw 76 is received in the slot 25 which may be provided with an extension or U-shaped member 88 to permit vertical adjustment to accommodate unusually thick books or copy work. The U-shaped member 88 is suitably secured to the bottom of the copy-holder by a thumb screw 89.

As stated, the slot 26 is formed in the top of the front surface of the copy holder and in the top end of the flange 23, and is of such width as to support the bar 84 in a horizontal position.

That is, the lower surface of the bar rests on the lower edge of the slot formed in the surface of the copy holder and the bar is prevented from sagging downwardly by the flange 23. Thus, the screw 76 can be adjusted toward and away from the surface of the copy holder to accommodate for different thicknesses of copy, such as books, without the screw sagging into an inoperative position although lateral movement thereof is permitted by the bar at the top due to the width of the slot 26 and by pivotally adjusting the member 88 at the bottom. The screw and its supporting bar may also be pivoted upwardly within the slot 26 until the screw is at right angles to the copyholder to permit the pages of the copy to be turned.

It will now be readily apparent that the line guide 66 may be pivotally adjusted to accommodate for the slope of the page 90 to the left or to the right to accommodate for the slope of the lines of copy on page 91 whereas it is relatively impossible to align the conventional line guide with the lines of the pages of a thick book.

The auxiliary line guide 66 cooperates with the copy-holder 20 making it adaptable for use with all types of copy work, the position of the screw 76 being adjustable not only outwardly or toward the copy, but angularly in the plane thereof. This freedom of movement together with the pivotal mounting of the line guide 66 adapts the latter for use with any type of copy. Obviously, the line guide is moved along the surface of the copy by rotating the knob 83 in either direction or by sliding the support 69 along the screw 76 as previously described. Furthermore, when not in use, the line guide 66 and its supporting and actuating structure may be readily detached from the copy holder and stored in a small space.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departure from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. In combination with a copyholder having a copy supporting surface and a shaft extending in spaced parallel relation to said surface; a line guide support member mounted for longitudinal movement on the shaft; an extended line guide carried by the line guide support member, said line guide being provided with an integral end portion projecting at right angles thereto; plug means pivotally mounting said end portion on said support member for rotation about its longitudinal axis, said plug means also being formed to slidably engage and guide said end portion for non-turning reciprocation relative to said support member; and spring pressed yieldable friction means carried by the line guide support member and engaging the shaft to retain the line guide support member in selected positions along the shaft.

2. In combination with a copyholder having a copy supporting surface and a shaft extending in spaced parallel relation to said surface; a line guide support member mounted for longitudinal movement on the shaft; an extended line guide carried by the line guide support member, said

line guide being provided with an end portion projecting at right angles thereto and having a flat side; means pivotally mounting said end portion on said support member for friction retarded rotation about its longitudinal axis, said means being also formed to complementally engage the flat side and slidably guide said end portion for reciprocation relative to said support member; and yieldable friction means carried by the line guide support member and engaging the shaft to retain the line guide support member in selected positions along the shaft.

3. In combination with a copyholder having a copy supporting surface and a shaft extending in spaced parallel relation to said surface: a block member having a first bore therethrough slidably engaging the shaft, a second bore extending through the block member perpendicularly to the direction of the first bore and to one side thereof, and a third bore extending perpendicularly to and intersecting the first bore; a plug rotatably mounted in the second bore, said plug being formed with a non-circular bore therethrough; means for adjusting the frictional resistance of the second bore to rotation of the plug; a line guide strip having an end portion extending perpendicularly thereto and shaped for complemental sliding engagement with the non-circular bore of the plug; and yieldable means in the third bore arranged frictionally to engage the shaft.

4. As a subcombination, a line guide assembly for copyholders, said assembly comprising a slide member formed for reciprocating movement on a shaft and having a circular bore therethrough; a plug mounted for friction retarded rotation in the circular bore, said plug having a non-circular bore extending longitudinally therethrough; and a line guide strip having an angularly projecting end portion formed complementally with and slidably engaging the non-circular bore of the plug whereby the guide strip can be raised or lowered without turning relative to said plug.

5. As a subcombination, a line guide assembly for copyholders, said assembly comprising a block member formed for reciprocating movement on a shaft and having a circular bore therethrough and an external slit extending from and intersecting the circular bore; a plug of circular cross-section mounted for rotation in the circular bore and projecting from the ends thereof, said plug having a non-circular bore extending longitudinally therethrough and being formed with a shoulder at one end abutting on the block member; a screw threadedly secured in the block member and spanning the slit for adjusting the frictional resistance to rotation of the plug; a line guide strip having a perpendicularly projecting end portion formed complemental with and slidably engaging the non-circular bore of the plug; and detachable means engaging the other end of the plug and engaging the block member to retain the plug therein.

6. As a subcombination, a line guide assembly for copyholders, said assembly comprising a generally rectangular block member having a circular bore extending between opposite faces there-

of and a slit extending from another face and intersecting the circular bore; a plug rotatably received in the circular bore, said plug having a non-circular bore extending longitudinally therethrough; a screw threadedly secured in the block member and spanning the slit for adjusting the frictional resistance to rotation of the plug; a line guide strip having a perpendicularly projecting end portion formed complemental with and slidably engaging the non-circular bore of the plug; said block member having also a shaft bore extending therethrough perpendicularly to the direction of the plug bore and to one side thereof; and means projectible into the shaft bore to operatively engage a shaft reciprocable therein.

7. In combination with a copyholder having a copy supporting surface and a shaft mounted in spaced relation to said surface: a line guide support mounted on said shaft for longitudinal and rotational movement, said line guide support having a bore formed therein and extending in a direction perpendicularly to said shaft and to one side thereof; a plug rotatably mounted in said bore; and a line guide having a non-circular end portion extending at right angles thereto, said plug being formed to complementally engage and guide said end portion for reciprocation only relative to said support, whereby said line guide may be rotated toward and away from said surface, angularly adjusted relative to copy on said surface, and moved perpendicularly to said surface to accommodate various thicknesses of copy.

8. In combination with a copyholder having a copy supporting surface and an elongated guide member extending parallel thereto: an extended line guide having an end portion at right angles thereto; a line guide support slidably mounted on the elongated guide member; a cylindrical member rotatably mounted and frictionally clamped in the line guide support, said line guide end portion and said cylindrical member being formed to provide non-circular complementally interengaging slide portions guiding the line guide for bodily adjusting movement perpendicularly of the copy supporting surface.

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