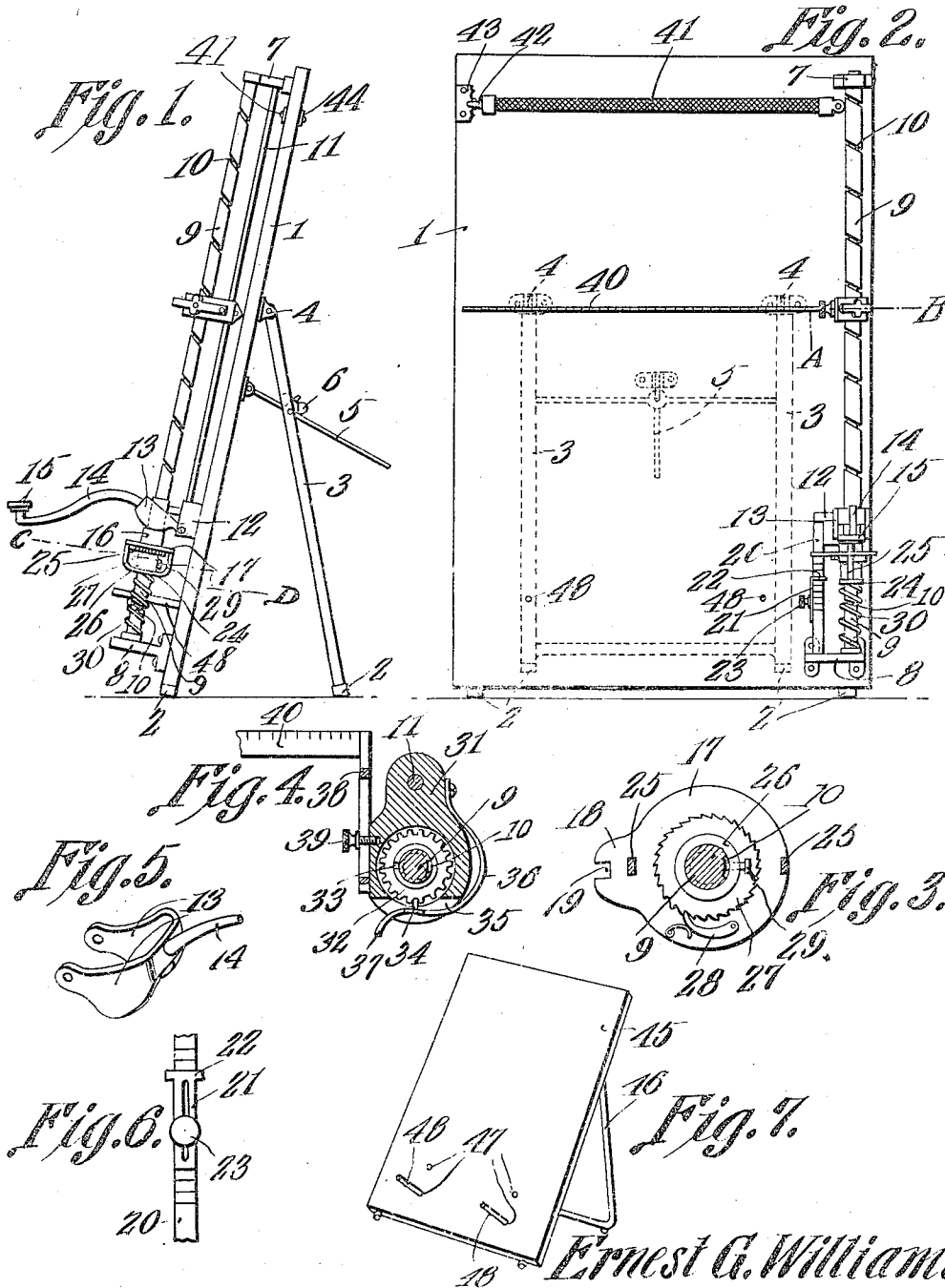


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COPY HOLDER.
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Witnesses

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COPY-HOLDER.

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To all whom it may concern:

Be it known that I, ERNEST G. WILLIAMS, a citizen of the United States, residing at Huntington, in the county of Cabell and State of West Virginia, have invented a new and useful Copy-Holder, of which the following is a specification.

This invention relates to copy holders, one of its objects being to provide a simple and compact structure of this type having an index or indicator adapted to be fed downwardly along the copy, adjustable means being provided whereby said indicator can be shifted any distance desired.

A further object is to provide means whereby the indicator can be quickly raised or lowered to any desired position on the copy and independently of its operating mechanism.

Another object is to provide means for adjustably connecting the indicator to its operating mechanism whereby said indicator can be moved toward or from the copy.

A further object is to provide a holder which can be used for supporting books or the like as well as loose pages of copy.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a side elevation of the holder. Fig. 2 is a view of the front face of the structure. Fig. 3 is a bottom plan view, on an enlarged scale, of the holding disk and the pawl and ratchet thereon, the feed worm and the yoke on the disk being shown in section, and said section being taken on the line C—D Fig. 1. Fig. 4 is an enlarged section on line A—B Fig. 2. Fig. 5 is a perspective view of one end portion of the operating key. Fig. 6 is an elevation of the adjustable stop. Fig. 7 is a perspective view of a supplemental support for use in connection with the structure shown in Fig. 2.

Referring to the figures by characters of reference 1 designates a back board which

can be of any proportions and material desired, the same having feet 2 at its lower end which may be formed of rubber or other soft material. A support 3 is hingedly connected, as at 4, to the back face of the board 1 and a brace 5 is also hingedly connected to said board and is adjustably connected, as at 6, to the support 3 so that, by adjusting said support to any desired angle relative to the board 1 and securing it against movement relative to the brace 5, the back board 1 can be held at any inclination desired.

A bracket 7 extends forward from the upper portion of the board 1 close to one side thereof and another bracket 8 extends from the bottom portion of the back board and close to said side. A feed element 9 is journaled at its ends in the brackets 7 and 8 and is parallel with the board 1, this rod being provided, for the greater portion of its length, with a spiral groove 10 whereby a feed worm is formed for the actuation of a carriage such as hereinafter described.

A rod 11 is interposed between and parallel with the worm or element 9 and the board 1 and is mounted at one end within the bracket 7 and, at its other end, in a block 12 which is secured to the board 1 back of the lower portion of the spiral groove 10. Pivottally mounted in the lower end of the block 12 is a fork 13 arranged at the inner end of a stem 14 and a finger piece or key 15 is mounted on the outer or free end of this stem. The lower edges of the fork 13 are convex so as to constitute cams. These cams bear downwardly on the end of a sleeve 16 which is slidably mounted on the feed worm or element 9 and has a disk 17 integral therewith. An extension 18 is formed upon the periphery of the disk and is recessed, as at 19, so as to straddle a gage rod 20 extending from the bracket 8 and parallel with the feed worm or element 9. This rod 20 is preferably graduated and a longitudinally slotted stop plate 21 is slidably mounted thereon and has a forked head 22 which straddles the rod 20. A set screw 23 extends through the slot in the plate 21 and engages the rod 20, this screw serving to hold the plate 21 in any position to which it may be adjusted. The forked head 22 lies in the path of the extension 18 on the disk 17 so as thus to limit the movement of the disk in a downward direction.

A ring 24 extends around the lower portion of the feed worm or element 9 and constitutes the central portion of a yoke 25 the

ends of which are secured within the disk 17 at diametrically opposed points. Ring 24 serves to support a sleeve 26 which is mounted on the feed element 9 and has a ratchet wheel 27 integral with the upper end portion thereof, said ratchet wheel lying close to the lower face of the disk 17. A spring pressed pawl 28 is connected to the lower face of the disk 17 and normally engages the ratchet wheel 27. A pin 29 which can be in the form of a screw, if desired, is extended through the wall of sleeve 26 and projects into the groove 10.

A coiled spring 30 is mounted on the lower portion of the feed element 9 and bears at one end against the bracket 8 and at its other end against the ring 24. This spring thus constitutes means for supporting the ring 24, sleeve 26, and disk 17, yieldingly, thereby maintaining the key 15 in its elevated position, as indicated in Fig. 1.

A carriage 31 is slidably mounted on the feed element 9 and has a gear 32 housed therein and mounted on the feed element 9. A stud or projection 33 extends inwardly from this gear and projects into the groove 10. A locking pin 34 normally projects through an opening 35 in the carriage so as to engage gear 32 and hold it against rotation. This locking pin is preferably carried by a spring 36 secured to the carriage. One end of the spring is outturned, as shown at 37, so as to form a finger piece whereby pin 34 can be readily disengaged from the gear 32.

A longitudinally slotted strip 38 is adjustably connected to one side of the carriage 31 by means of a set screw 39 or the like and connected to one end of this strip is an indicator 40 which is preferably graduated along its upper face so as to correspond with the graduations found on the scale of a typewriter. This indicator 40 is adapted to extend practically throughout the width of the back board 1 and by adjusting the strip 38 toward or from the back board, the indicator can be caused to lie in contact with or close to the page containing the matter to be copied.

An elastic holding band 41 may be attached to the upper portion of the back board 1 close to the feed element 9 and this band, as shown in Fig. 1, can be provided at its free end with a hook 42 for engaging a keeper 43 of any suitable form fastened to one side of the back board 1. With this band in place the pages of copy can be held to the back board. If desired, and as shown at 44 in Fig. 1, another band may be mounted on the back face of the board 1 for the purpose of holding in position any pages which may be folded back over the top of the board 1.

In using the holder the indicator 40 is loosened from the carriage 31 and the sheet

or sheets of copy are fastened between said indicator and the board 1 by means of the band 41. The spring 36 is then shifted outwardly so as to withdraw pin 34 from engagement with gear 32 after which the carriage 31 is pushed upwardly along the feed element 9 and the rod 11. As gear 32 is not fastened to the carriage, it will be seen that it can rotate freely therein and will not, therefore, interfere with the up or down adjustment of the carriage along the rod 11 and feed element 9. The rotation of the gear will of course be caused by the stud or projection 33 traveling within the spiral groove 10. After the carriage has been brought to position opposite the space below the upper line of the copy, the spring 36 is released and pin 34 will move back to engagement with gear 32, thus locking the said gear against rotation and holding the carriage against further longitudinal adjustment. The indicator 40 is then moved up against or close to the page to be copied and is fastened by means of the set screw 39, it being understood that the indicator will lie close to and under the first line on the page. The stop 22 is adjusted along the rod 20 so that the distance between said stop 22 and the extension 18 will be equal to the distance between two adjoining lines. With the parts thus set, the operator depresses the key 15, the fork 13 thus pushes downwardly on the sleeve 16 until the extension or projection 18 comes into contact with the stop 22. During this downward movement of the sleeve 16 the ratchet wheel 27 is held against rotation by pawl 28 and, therefore, the pin 29 which moves with the ratchet wheel and projects into the groove 10, will travel along said groove and cause the feed worm 9 to rotate. The carriage 31 will thus be fed downwardly by the element 9 until the indicator 40 is brought into position under the second line on the page. As soon as key 15 is released, spring 30, which has been placed under stress during the downward movement of sleeve 16, will return the key and the sleeve to their initial positions, the pin 29 traveling upwardly within the groove 10 and the ratchet wheel 27 rotating past the pawl 28 so that the element 9 will not be rotated in the opposite direction.

Where broad pages are to be mounted on the holder or where books are to be supported, a supplemental back board such as shown at 45 in Fig. 7 may be used, this back board having a back support 46 which may be similar to the support 3. Openings 47 are formed within this back board and also within the back board 1 and are adapted to receive pins 48 which constitute rests for the book to be held. By placing this supplemental back board 45 at one side of and in alinement with the back board 1, it will be seen that a wide leaf or a book can be prop-

erly held. Furthermore the indicator 40 can be easily displaced by another longer one which can be extended throughout the width of the book or page mounted on the two back boards.

What is claimed is:—

1. A copy holder including a back, a feed worm mounted for rotation, a carriage mounted on said worm, means for holding the carriage against rotation, means within the carriage for engaging the worm, said means being revoluble within the carriage, means for engaging and locking said revoluble means against rotation within the carriage and means for rotating the worm to shift said locked means and move the carriage.

2. A copy holder including a back, a feed worm mounted for rotation, means for rotating the worm, a guide, a carriage mounted to slide upon the guide and feed worm, a toothed element mounted for rotation within the carriage and engaging the groove in the worm, an indicator movable with the carriage, and means for locking said toothed element against rotation within the carriage.

3. A copy holder including a back, a feed worm mounted for rotation, means for rotating the worm, a guide, a carriage mounted to slide on the worm and guide, a gear revoluble within the carriage and having means for engaging the groove in the worm, means upon the carriage for holding the gear against rotation, and an indicator connected to the carriage and extending across the back.

4. A copy holder including a back, a revoluble worm constituting a feed element, a carriage mounted on the worm and shiftable longitudinally therealong by the rotation of the worm, an actuating element engaging the worm, means for holding said element against rotation in one direction and for permitting it to rotate in the opposite direction, and means for sliding said element upon the worm.

5. A copy holder including a back, a feed worm mounted for rotation, a carriage thereon and shiftable longitudinally by the rotation of the worm, an actuating element engaging the worm and movable longitudinally therealong, means for holding said element against rotation while moving in one direction to rotate the worm and for permitting said element to rotate while moving in the opposite direction to prevent rotation of the worm, means under the control of the operator for shifting said element in one direction, and means for automatically returning said element to its initial position.

6. A copy holder including a back, a

worm mounted for rotation, a carriage engaging the worm and shiftable thereby along the worm in one direction, an actuating element engaging the worm and shiftable in either direction thereon, means for holding said element against rotation during its movement in one direction to rotate the worm and to release said element during its movement in the opposite direction to rotate independently of the worm, means for actuating said element, and adjustable means for limiting the movement of the element.

7. A copy holder including a back, a worm mounted for rotation thereon, an indicator connected to the worm and movable longitudinally thereof by the rotation of the worm, a non-rotatable member movably supported adjacent the worm, revoluble means carried thereby for engaging the worm, cooperating devices upon said member and revoluble means for holding the worm engaging means against rotation in one direction, means for shifting the member in one direction to rotate the worm, and means for automatically returning said member to its initial position.

8. A copy holder including a back, a feed element mounted for rotation, an indicator connected to and movable by said element during the rotation thereof, a non-rotatable member slidably mounted on said element, a revoluble element movable with said member and engaging the feed element, cooperating means upon said element and member for holding the element against rotation in one direction, means for shifting the member in one direction along the feed element, and means for automatically returning said member to its initial position.

9. A copy holder including a back, a feed element mounted for rotation, an indicator connected to and movable by said element during the rotation thereof, a non-rotatable member slidably mounted on said element, a revoluble element movable with said member and engaging the feed element, cooperating means upon said element and member for holding the element against rotation in one direction, means for shifting the member in one direction along the feed element, means for automatically returning said member to its initial position, and adjustable means for limiting the movement of said non-rotatable member.

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

ERNEST GOOCH WILLIAMS.

Witnesses:

R. P. TOWZEY,

H. H. WIGHTMAN.