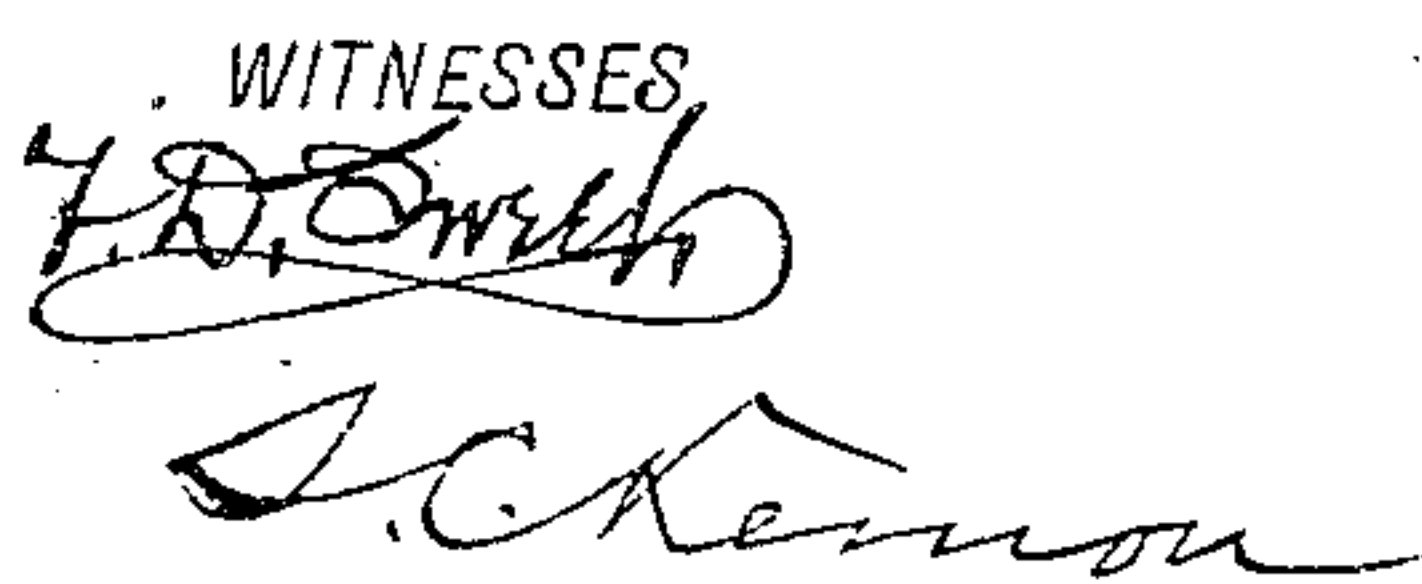


TYPE WRITER STAND.

946,218.

2 SHEETS—SHEET 1.



Charles E. Goulding.

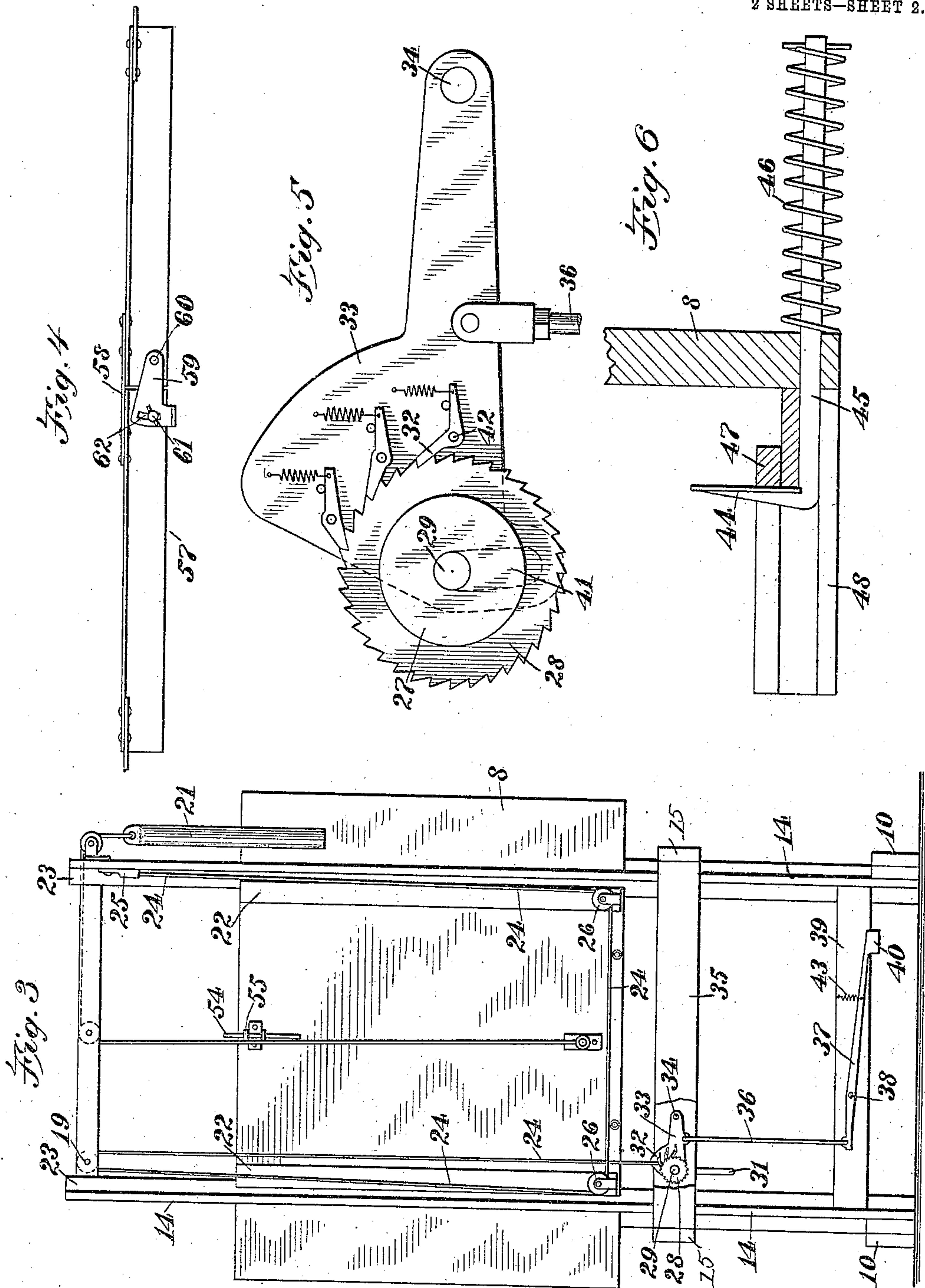
BY *Mum Co.*

ATTORNEYS

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C. E. GOULDING.
TYPE WRITER STAND.
APPLICATION FILED MAY 7, 1909.

Patented Jan. 11, 1910.
2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CHARLES EDWIN GOULDING, OF TAMPA, FLORIDA.

TYPE-WRITER STAND.

946,218.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed May 7, 1909. Serial No. 494,650.

To all whom it may concern:

Be it known that I, CHARLES EDWIN GOULDING, a citizen of the United States, and a resident of Tampa, in the county of Hillsboro and State of Florida, have invented a certain new and useful Type-Writer Stand, of which the following is a full, clear, and exact description.

One embodiment of the invention is shown in the accompanying drawings wherein like characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of a type-writer stand constructed in accordance with my invention; Fig. 2 is a side elevation of the same; Fig. 3 is a rear elevation of the same; Fig. 4 is a top view of the line indicating ruler employed in my invention; Fig. 5 is an enlarged detail view of the raising mechanism for the copy holder; Fig. 6 is an enlarged detail, partly in section, of the clamps for holding the copy upon the copy table; and Fig. 7 is a detail view of the upper clamping devices.

Among the principal objects which the present invention has in view are: to provide means whereby heavy and cumbersome records may be held in view of the typewriter operator while operating the typewriting machine; means whereby the pages may be secured or clamped in a flat position upon the copy holder; means whereby the successive lines may be accurately followed by the operator; and means whereby the heavy and cumbersome record may be shifted easily; and to simplify the construction and arrangement of the various instrumentalities employed.

With the above stated objects in view the detailed description of the construction shown in the accompanying drawings is as follows:

The stand primarily consists of two distinct parts, which may be enumerated as the table 7 upon which the typewriting machine is mounted when in operation, and the copy board 8 upon which the copy matter is held.

The operative mechanisms in the present device are related to the copy holder and have for their particular purpose the raising and lowering of the copy holder and the maintaining of the copy matter rigidly and firmly thereon while being so moved. In the order as above mentioned I will proceed with the description of the rigid structure.

The table 7 is mounted upon uprights 9, 9, which are rigidly secured in the foot braces 10, 10, the connection with the foot braces being strengthened by means of a cross rail 11. The table 7 is supported on one side of the uprights 9 by means of braces 12, 12, which are set in an angular position between the uprights 9, 9, and battens 13 provided for the said table 7. The uprights 14, 14, are secured to the foot braces 10, 10, and are held in upright position thereon and in rigid relation to the table by means of cross braces 15. At the upper ends of the said uprights there is provided a cross piece 16, on which are mounted the pulleys 17 and 19. The pulleys 17 and 18 are provided to lead a cable 20 from its attachment on the back of the copy holder 8 to a counterweight 21, which is provided to balance the weight of the copy holder 8. The counterweight 21 may be increased to accommodate and balance the added weight of the copy matter. The copy holder is formed with guide bars 22, 22, secured to the back of the board 8 to encompass the upright runner members 23, 23, which form slides whereon the copy holder 8 moves in its vertical adjustment.

With the construction thus far described, it will be seen that the copy holder may be moved to any position facing the typewriter operator, and that it will be held in such position by means of the counterweight 21. The various instrumentalities whereby the copy holder with its copy matter held thereon may be adjusted vertically, embody a cable 24 which is rigidly secured to the frame 14 at 25 and passed over the pulleys 26, 26 and 19, and then wound upon a drum 27 to which a ratchet wheel 28 is secured. The said drum is mounted upon a shaft 29 which is extended forward from the rigid frame 14 to within easy reach of the hand of the typewriter operator, and suitably mounted in a bearing bracket 30 and also at this point is provided with a crank handle 31. The copy holder, and copy held thereon, are raised by manipulating the handle 31.

By turning the crank handle 31, the drum 29 is caused to rotate to wind upon itself the cable 24, thereby lifting the copy holder 8 to expose the copy line by line. The copy holder is prevented from falling by the spring-actuated detents 32, 32, a plurality of which are mounted upon a plate 33, as

shown more particularly in Fig. 5 of the drawings. The plate 33 is pivotally mounted at 34 between cross frames 35 extended between the uprights 14. These cross frames consist of two pieces of board through which the shaft 29 passes and in which it has its bearing. This framing forms a convenient housing for the plate 33 and the movable parts connected therewith. The plate 33 is held in holding position by means of a rod 36, and a lever 37, to the free end of which the said rod 36 is connected. The lever 37 is pivotally mounted at 38 on a cross frame 39 extended between the uprights 14, 14, and is provided with a foot pedal 40 which is extended forward beyond the frame 39 to within convenient reach of the typewriter operator's foot.

When in the course of operation the typewriter operator desires to shift the copy holder to a lowered position, as when the top line of the copy is exposed, this is accomplished by pressing upon the pedal 40, which action being transferred through the lever 37 and the connecting rod 36 to the plate 33, raises the said plate and with it the detents 32, 32. The drum 27 is then rotated by the handle 31 to unwind so much of the cable 24 as will lower the copy holder 8 to the desired position. The free end of the plate 33 is guided in its action by a slot 41 which encompasses the shaft 29, the slot 41 being rounded at both ends so that the upward reach of the plate 33 is limited as well as the lowered position of the same, by the ends of the slot impinging on the shaft 29.

When the plate 33, shaft 29 and the ratchet 28, are in the position shown in Fig. 5 of the drawings, it will be observed that the plate 33 cannot assume a lowered position because of the upper end of the slot resting on the shaft. Further it will be seen that any thrust strain is transferred to the plate 33.

When the copy holder 8 is adjusted to the position desired, the operator releases the pedal 40 and permits a spiral spring 43 to move the lever 37 to draw the plate 33 into its lowered position, wherein the detents 32, 32, engage the teeth of the ratchet wheel 28. From now on the operation proceeds as above set forth.

The copy matter is held on the copy holder by foot clamps 44. The foot clamps 44 are formed as shown in the drawings in Fig. 6 and are provided with shanks 45 which are extended through suitable perforations provided in the bottom of the copy holder 8 and are there provided with a spiral spring 46, against the compression of which the foot clamps 44 are extended from the copy holder 8. The copy holder is provided with a book rail or rest 47, extended across the front of the copy holder 8 and mount-

ed upon end brackets 48 with which the said copy holder is provided. In placing the copy matter in position, the foot clamps 44 are withdrawn from the copy holder 8 until the copy matter is rested upon the rail 47. The clamps 44 are then released and permitted to bear against the copy matter with the full strength of the springs 46, and thus the device maintains firmly in position the copy matter at the lower end thereof.

The upper edge of the copy matter is maintained in position by clamps 49, 49, which consist of small pad-like members pivotally mounted upon the vertical extensions of arms 50, 50. These arms 50 are suitably mounted in a holder 51, which is provided with a small shaft 52 extended through suitable bearings 53 of a rod 54 adjustably mounted in perforated brackets 55, rigidly secured on the back of the copy holder 8. Each of the arms 50 is formed from spring wire sufficiently heavy to clamp the copy matter firmly in position. By means of the feet 49, 49, at the top of the copy matter and of the clamps 44 at the bottom of the copy matter, both being held rigidly in position, the copy matter held on the copy holder 8 is retained rigidly in such position.

Fixedly mounted upon the bearing 53 is a crown toothed quadrant 53^a. In the teeth provided in the quadrant 53^a is seated a vertical extension of the spiral spring 52^a, upon which the handle 53^b is mounted. The opposite end of the spring 52^a is bent and inserted in a small slot 52^b formed in the end of the shaft 52. It is by connecting the bent portion of spring 53^a with the slot 52^b that the tension of the spring 52^a is exerted upon the shaft 52 and the holder 51 and pads 49, 49. By means of the handle 53^b the pressure upon the pads exerted by the spring 53^a may be varied. The vertical section of the wire constituting the spring 52^a forms a detent for the wire when engaged with the quadrant 53^a. The engagement of the wire with the quadrant may be rapidly and readily made. When it is desired to lift the pads 49, 49 away from the copy this is accomplished by retracting the handle 53^b until the wire connected therewith is removed from the teeth of the quadrant 53^a, when the shaft 52 may be rotated by moving the same handle backward, lifting forward and upward the pads 49, 49.

When provided with the copy matter (which in the present drawings is shown as a large book), the copy holder may be raised and lowered by means of the mechanism above described. The line reading of the said copy matter will be indicated by a ruler 57 which is extended against the same. The ruler 57 is shown in Fig. 4 of the drawings, wherein it is illustrated as being constructed from two half sections joined by a yielding

plate 58, so that the two sections may be bent around the bulged center of books of the character mentioned and for the handling of which this invention is particularly designed. In this bent position the two sections are maintained by a plate 59 which is pivotally connected at 60 upon the one section of the ruler 57, and is clamped to the other by means of a wing bolt 61, suitably mounted upon the other section, the wing bolt 61 being mounted in a slot 62 formed in the said plate 59. The slot 62 is struck from the center of the pivot 60. When the sections are bent to the form of the book, the wing bolt 61 is screwed rigidly in position, clamping firmly the plate 59 which holds the sections of the ruler 57 in the set position. The ruler 57 is provided with side extensions 63, 64. The extension 63 is suitably slotted while the extension 64 is provided with a wing bolt or screw clamp of any desired description adapted to clamp the two together. In this manner the horizontal extensions of the ruler 57 are suitably vertically adjusted on the copy matter. The extensions 64 are pivotally mounted at 65, 65, on the table 7 upon which the typewriter machine is mounted. The ruler 57 remains in stationary position while the copy matter is moved upward, thereby exposing the succeeding line but not having changed the line of vision of the typewriter operator. This operation proceeds, successively exposing line after line of the copy matter until the bottom line of the said copy matter is raised above the ruler 57. In this position it is desired to either remove the book containing the copy matter or to turn the succeeding leaf thereof. This is done while the book is in the raised position, for in such position the bottom of the leaf is above the typewriter machine. The ruler 57 is now rotated upon the pivots 65, 65, away from the pages of the copy matter, and the arms 50, 50 are raised from engagement with the top of the book by sliding the bracket 54 upward in its bracket holder 55, until the feet 49, 49, clear the top of the page. The feet 44 at the bottom of the page are then withdrawn sufficiently to release a page of the book, and the same is turned. The feet 44, 44, and the feet 49, 49, are then adjusted upon the copy matter, the new pages being exposed. The operator now grasps the handle 31 and depresses the pedal 40 to throw the detents 32, 32 out of engagement with the ratchet 28. The shaft 29 and the drum 27 are now rotated to unwind the cable 24 to lower the copy holder 8 to a position wherein the ruler 57 registers with the top line of the said copy matter. The foot of the operator is then employed to release the pedal 47, permitting the spiral spring 43 to return the lever 37 and rod 36 and plate 33 to a position wherein the detents 32, 32, engage the teeth of the

ratchet 28. All the parts are now in position again to resume the operation of copying from the copy matter as above described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A typewriter stand, comprising upright guide members having a cross bracing frame; a copy supporting frame vertically movably mounted thereon; a horizontally extended shelf mounted on said guide members; a drum rotatively mounted in said cross bracing frame; flexible hoisting connections attached to said frame and adapted to be wound upon said drum and guidably mounted in rolling devices on said guide members; a winding device for said drum extended in suitable bearings to near the forward edge of said shelf; and a foot operated mechanism for releasing the said drum.

2. A typewriter stand, comprising upright guide members having a cross brace framing; a copy supporting frame vertically movably mounted thereon; a horizontally extended shelf mounted upon said guide members; a drum rotatively mounted in said cross brace framing and having an extended shaft and crank handle supported in bearings depended from the under side of said shelf and located near the forward end of said shelf; a foot actuated releasing device for said drum; flexible hoisting connections fixedly secured to said frame and adapted to be wound upon said drum; supporting pulleys for said hoisting connections mounted in the said cross brace framing; counter-balancing weights; and flexible connections mounted in rolling devices on said guide members and cross brace framing and fixedly attached to said counter-balancing weights and copy supporting frame.

3. A typewriter stand, comprising upright guide members having suitable cross brace framing; a copy supporting frame vertically movably mounted upon said guide members; a horizontally extended shelf mounted upon said guide members; a raising and lowering mechanism for said copy supporting frame embodying a rotary member engaged with said frame to raise the same when said member is rotated; a shaft for said rotary member having a crank handle located near the forward edge of said horizontally extended shelf; and a guide member hingedly mounted upon said shelf and adapted to rest against the front of said copy supporting frame or copy matter when carried thereby.

4. A typewriter stand, comprising upright guide members having suitable cross brace framing; a copy supporting frame vertically movably mounted upon said guide members; a horizontally extended shelf

mounted upon said guide members; a raising and lowering mechanism for said copy supporting frame embodying a rotary member engaged with said frame to raise the
5 same when said member is rotated; a shaft for said rotary member having a crank handle located near the forward edge of said horizontally extended shelf; and a guide member having a horizontal arm to extend
10 across the surface of the said frame and provided with extensible and adjustable side arms whereby the said horizontal arm may be raised or lowered on the said frame, said side arms being pivotally mounted upon the
15 said shelf in such manner that the horizontal arm falls by its own weight against the said frame or copy.

5. A typewriter stand, comprising upright guide members having suitable cross
20 brace framing; a copy supporting frame vertically movably mounted upon said guide members; a horizontally extended shelf mounted upon said guide members; a raising and lowering mechanism for said copy
25 supporting frame embodying a rotary member engaged with said frame to raise the same when said member is rotated; a shaft for said rotary member having a crank handle located near the forward edge of said
30 horizontally extended shelf; a guide member having side arms extensible and adjust-

able and pivotally secured to the said shelf, said side arms being joined by a horizontal arm and hingedly connected at the center thereof; and securing means for the said
35 side arms and the said horizontal arm for locking the same in the adjusted positions.

6. A typewriter stand, comprising upright guide members having suitable cross
40 bracing; a horizontally extended shelf supported upon said cross bracing and separated therefrom to leave a space between; a copy supporting frame vertically movably mounted upon said guide members to extend within the space between the said
45 guide members and said shelf; manually operated means for raising and lowering said frame on said guide members, said means embodying a rotary member having a shaft and crank shaft extended to near the
50 forward edge of said shelf; and a guide member for reading said copy embodying a horizontal arm and extensible side arms pivotally mounted upon said shelf to fall against said frame or copy held thereon.
55

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES EDWIN GOULDING.

Witnesses:

FREDERICK RUSSELL,
A. HETTER.