## C. F. LUDINGTON.

COPY HOLDER. (Application filed May 22, 1901.) (No Model.) 2 Sheets-Sheet 1.  $\alpha^{6}$ 

No. 685,778.

Patented Nov. 5, 1901.

## C. F. LUDINGTON.

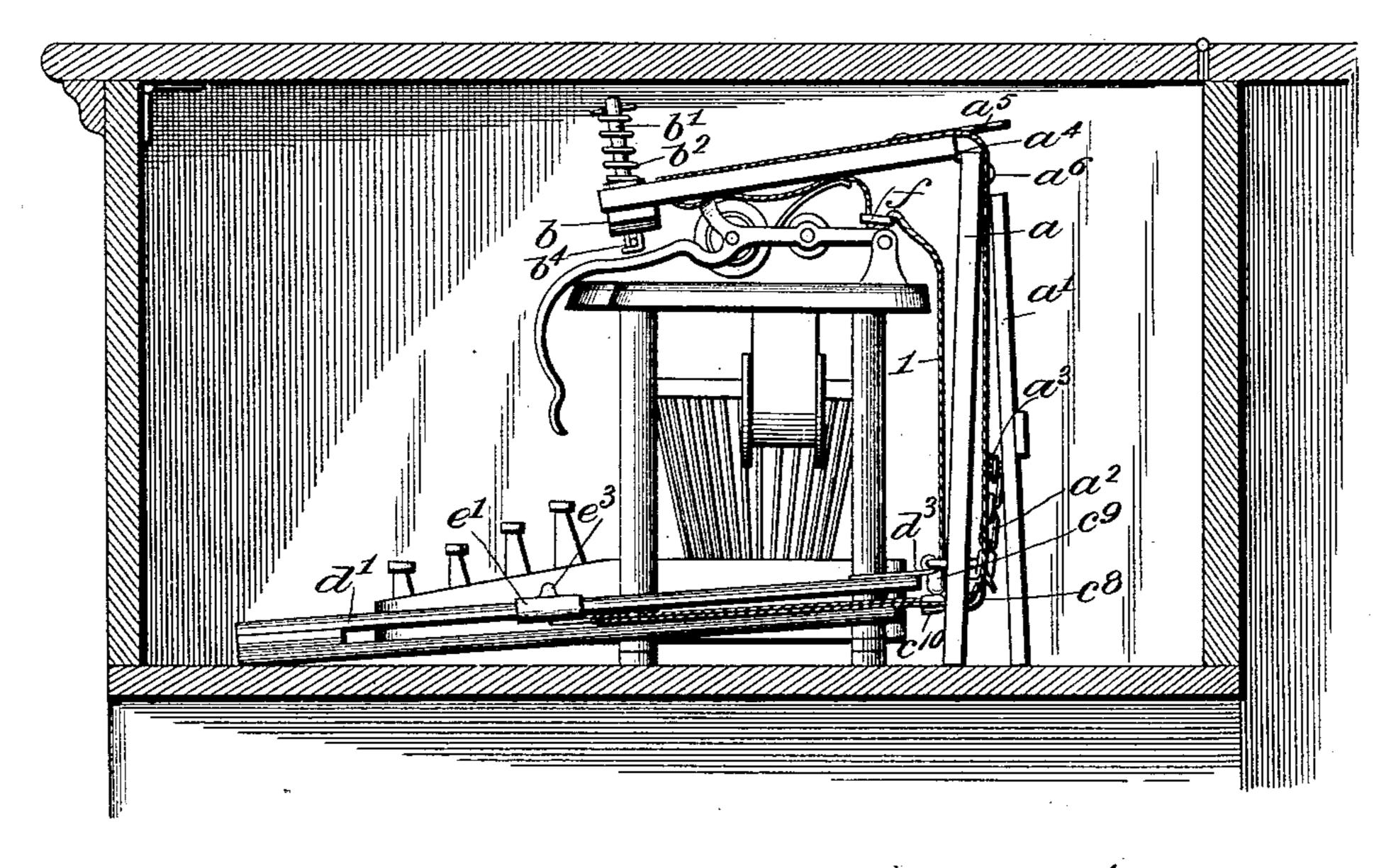
COPY HOLDER.

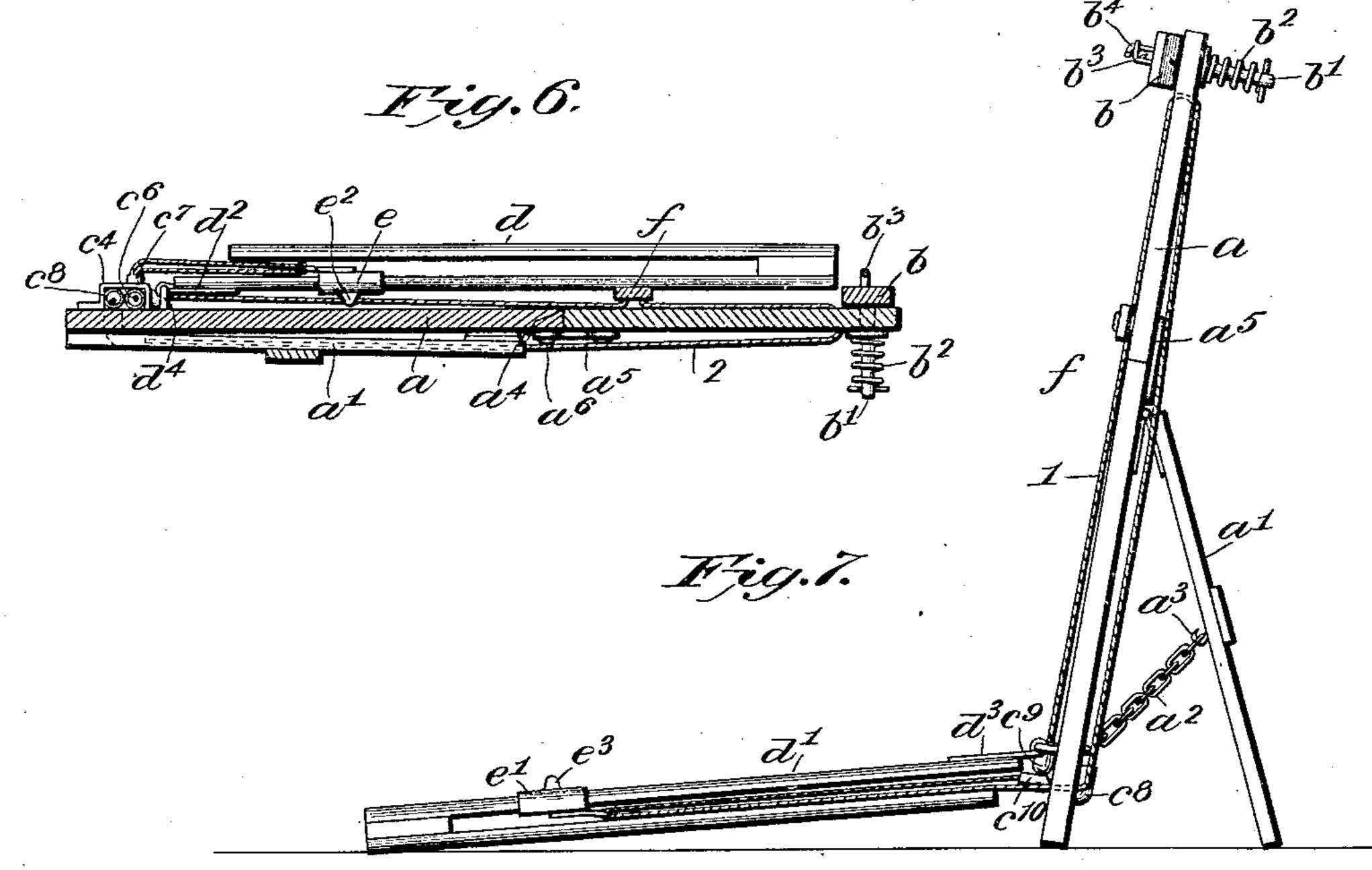
(Application filed May 22, 1901.)

(No Model.)

2 Sheets—Sheet 2,

Fig. 5.





Invento

Witnesses

Malker Entimend Charles Franklin Sudington.

334 MM Fixel

hia Attorneu

## United States Patent Office.

CHARLES FRANKLIN LUDINGTON, OF NEW BRITAIN, CONNECTICUT.

## COPY-HOLDER.

SPECIFICATION forming part of Letters Patent No. 685,778, dated November 5, 1901.

Application filed May 22, 1901. Serial No. 61,420. (No model.)

To all whom it may concern:

Be it known that I, Charles Franklin Ludington, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Copy-Holders, of which the following is a full,

clear, and exact description.

This invention relates to that class of devices which are adapted to hold copy to be transcribed and which are commonly known as "copy-holders;" and the object of the invention is to provide a copy-holder especially adapted to be used in connection with type-used at the rear of the machine and directly in front of the operator, thereby obviating the necessity of the operator twisting or turning the head to read the copy, as in those copy-holders which are designed to be placed to one side of the machine.

The invention consists in a copy-holder comprising a base upon which the copy is adapted to be supported, a movable marker adapted 25 to be slid upon said base over the copy, a pair of arms or guides secured to said base and extending alongside the machine toward the operator, pull-pieces arranged and adapted to slide upon said arms or guides, and flexible 30 connections between said marker and pullpieces, whereby the marker may be moved in either direction by a direct pull upon both ends of the marker; and the invention also consists in a divided and jointed base or copy-35 support, whereby the upper member thereof may be folded down upon the machine, and thus permit the ready concealing of the machine and the copy-holder within any ordinary type-writer cabinet or desk; and the in-40 vention further consists in details of construction, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of my copy-holder, showing a portion of a stenographer's note-book attached thereto in position for use. Fig. 2 is a front elevation showing the arms or guides folded up against the base or copy-support. Fig. 3 is a rear elevation. Fig. 4 is a partly detail and diagrammatic view show-

ing the arrangement of the flexible connections between the marker and pull-pieces. Fig. 5 is a side elevation of my copy-holder 55 placed in position about a type-writing machine, with the base folded down upon the machine, and also showing in section a portion of a type-writer desk or cabinet in closed position. Fig. 6 is a section taken substantially in the plane of line 6 6, Fig. 2, looking in the direction of the arrow, the marker and pull-piece being adjusted to a different position from that shown in Fig. 2; and Fig. 7 is a side elevation of the device in position 65 for use.

In carrying out my invention I provide a base or support a, provided at its rear with a hinged supporting-brace a'. A chain  $a^2$  or other suitable connection is arranged between 70 the base or support a and the brace a' for limiting the movement of the brace away from the base and by which the base or support may be adjusted to any desired inclination. I have herein shown the brace a' provided with a hook  $a^3$ , (see Fig. 7,) the chain  $a^2$  being permanently connected to the base a and its links being adapted to be placed upon the hook  $a^3$  for purposes of adjustment.

The base a is divided transversely at substantially midway of its length, and the two members thereof are hinged, as at  $a^4$ , to fold inwardly for a purpose presently appearing. For the purpose of securing the members of the base a in their open position or position of use I provide one member with the swinging hooks  $a^5$  and the other member with suitable catches  $a^6$  for said hooks. (See particularly Fig. 3.) Any other suitable fastening devices may be used for this purpose.

At the upper end of the base a I arrange the copy-holding device, which consists of a bar b, provided near its ends with pins b', passing loosely through holes or perforations in the base a, coiled springs  $b^2$  being arranged 95 and secured upon said pins and normally drawing the bar b up against the face of the base a. Upon the front of the bar b is arranged a leaf-holding arm  $b^3$ , constructed as a wire, secured at one end in said bar and at 100 its other end adapted to engage a catch  $b^4$ , secured in the bar b. The base a is also provided at its four corners with openings c, c',  $c^2$ , and  $c^3$  for a purpose presently appearing.

Also arranged upon the base a, at the lower end thereof and between and adjacent the openings c' and  $c^3$ , are a series of guides for the flexible connections for operating the 5 marker. These guides in the preferred construction comprise a series of tubes which are made in pairs, and the pairs are united in any suitable manner, as by soldering, and are also provided with brackets  $c^4$  and  $c^5$ , rigidly at-10 tached thereto, by which the respective pairs of tubes may be secured to the face of the base a. The tube  $c^6$ , carried by the bracket  $c^4$ , has its left-hand end, Fig. 2, bent adjacent the opening c' and turned away from said 15 opening, and secured to said bent end is a short curved section of tube  $c^7$ , also turned away from said opening c' at that end which is connected to the tube  $c^6$  and having its other end curved upwardly toward the upper 20 end of the base a. The tube  $c^8$ , also carried by the bracket  $c^4$ , has its left-hand end bent rearwardly through the opening c' and then upwardly toward the upper end of the base a. (See Fig. 3.) The tube  $c^9$ , carried by the 25 bracket c<sup>5</sup>, has its right-hand end, Fig. 2, bent upwardly adjacent the opening  $c^3$  toward the upper end of the base a, and the tube  $c^{10}$  has its right-hand end bent outwardly and away from the opening  $c^3$  in the base a. Also at 30 the lower end of the base a are arranged the arms or guides d d', and, as herein shown, said arms or guides are constructed of parallel bars or rods suitably spaced apart to form guides or supports for slidable pull-pieces, to be referred to. These arms or guides d d'are hinged to the base a just above the bottom edge thereof and just above and adjacent to the openings c' and  $c^3$  in said base, and in order to obtain a transverse adjustment of 40 the arms or guides d d' with relation to the base a, I provide the said arms or guides with the hinge members  $d^2$   $d^3$ , constructed with eyes to receive the transverse elongated pintle members  $d^4 d^5$ , secured to the face of the 45 base a.

Arranged and adapted to slide upon the arms or guides d d' are the pull-pieces e e', and, as herein shown, said pull-pieces e e' are constructed as sleeves loosely fitted upon the upper bars or rods of said arms or guides and provided with finger-pieces  $e^2e^3$ . By this construction it will be observed that the pull-pieces e e' are supported above and clear of the lower bars or rods of the arms or guides of d and that the said lower bars or rods will prevent the said pull-pieces from coming in contact with the table or desk upon which the device is used and permit a free manipulation of said pull-pieces.

of the base or copy-support a and adapted to be moved up and down upon the base or copy supported thereon by means of flexible connections 1 and 2 between said marker and the pull-pieces hereinbefore referred to, whereby said marker is moved in either direction by a direct pull upon both ends of the marker.

These flexible connections are preferably cords, and are arranged and guided about the base a and connected to the pull-pieces in the 70 following manner: The cord 1 is connected to pull-piece e' and is then passed through opening  $c^3$  in the base a, (see Figs. 1, 2, and 3,) up the back of the base, through the opening  $c^2$ , down the front of the base, where it 75 is connected in any suitable manner to the marker f, and then enters the tube  $c^9$ , through which it passes to the tube  $c^6$ , and, emerging from the outwardly-bent portion of the tube  $c^6$ , is connected to the pull-piece e. The cord 80 2 is connected to the pull-piece e and then enters and passes through the curved section of tube  $c^7$  and passes up over the front of the base a, where it is connected to the marker f, and then passes through the opening c in 85 the upper left-hand corner of the base a and down upon the back of the base and enters the upturned end of tube  $c^8$  and passes through said tube to and through the tube  $c^{10}$ , and, emerging from the outwardly-bent end of 90 said tube  $c^{10}$ , is connected to the pull-piece e'. Thus it will be seen that positive pull upon one pull-piece will draw the other pull-piece in the opposite direction; but since the direction of travel of the cords is reversed the 95 marker is drawn at both ends in one and the same direction up or down the base, as may be desired.

In Fig. 4 of the drawings I have indicated the cord 1 and its course or direction by a 100 broken line, and the cord 2 and its direction or course by a full line, the said lines being made light to indicate where the cords are in the rear of the base and heavy where they appear in front of the base. The arrows in 105 said figure indicate not the direction of movement in operation, but the manner in which the cords pass about the base from one pullpiece to the other when applied as above described. It will be observed that by this ar- 110 rangement of the cords and their connections with the pull-pieces if the pull-piece e be pulled toward the operator and away from the base a direct and simultaneous pull is obtained on both ends of the marker, and 115 thus the marker will be moved down over the base or the copy supported thereon in an even and regular manner, and at the same time the pull-piece e' is being drawn toward the base through its connections with the marker 120 and the opposite pull-piece, and similarly, if pull be exerted upon the pull-piece e' a direct and simultaneous pull is obtained on both ends of the marker to move the marker up over the base or copy supported thereon. 125

The operation of my invention is as follows: The base or copy-support is suitably arranged at the rear of the type-writing machine and adjusted to the proper inclination by its support a', and the arms or guides d' 130 are lowered alongside the machine, upon opposite sides thereof, and rest upon the table or desk. The copy to be transcribed is suitably arranged upon the base, as shown in Fig.

1, and the marker f arranged at the desired place upon the copy by manipulating the pullpieces e and e'. The operator having proceeded with the copying and desiring to move 5 the marker to expose the next succeeding line it is only necessary to place the left hand upon the pull-piece e with one or more of the fingers engaging said pull-piece or its fingerpiece  $e^2$ , and with a slight pull toward the 10 front of the machine the marker is pulled down over the copy a sufficient distance to expose the next succeeding line. This operation is carried on until the marker reaches its lowest point of use, and the marker is then 15 returned to the starting-point by pulling upon the pull-piece e' with the right hand, the said pull-piece e' having been drawn toward the base by its connections with the marker during the progress of the marker over the copy. 20 The restoration of the marker to the startingpoint by drawing out the pull-piece e' serves to drag the pull-piece e toward the base, and thus restores it to position for use and for progressively moving the marker down the 25 next matter to be copied. It will be observed that the marker is moved in either direction by a direct pull upon both its ends.

In Fig. 1 I have shown a stenographer's note-book arranged upon the base, or it will 30 be observed that the upper portion, or that much of the book which is not to be used, is arranged beneath the bar b and is firmly held by the spring-pressure of said bar. As the copying progresses the marker is moved down 35 over the copy line by line until the page is finished, and as each page is finished it may be turned up out of the way and secured under the leaf-holding arm  $b^3$ .

If it be desired to use the copy-holder for 40 sheet-copy, then the sheet is simply placed beneath the spring-pressed bar b, and should the sheet be longer than the base its lower end may be folded or rolled and its upper end advanced beneath the bar b as the copying 45 progresses. The operator having finished, and it being desired to close the desk or cabinet upon which the machine and copy-holder are used, the upper member of the copy-holder is folded down upon the machine, and, as 50 clearly shown in Fig. 5, will be out of the way of the cover or top of the desk.

In order that the copy-holder may be applicable to type-writing machines having frames of varying widths and that the arms 55 or guides d d' may be brought in close to the frame, the said arms in accordance with my invention are capable of lateral adjustment upon the elongated pintle members  $d^4$  and  $d^5$ of the hinges of said arms, and so, also, the 60 pairs of guide-tubes are laterally adjustable upon the base or copy-support by simply adjusting their supporting-brackets  $c^4$  and  $c^5$ . (See dotted lines, Fig. 2.)

As shown in Fig. 6, the copy-holder may be 65 folded in a very compact manner for purposes of packing and transportation.

I wish to be understood as not limiting my invention to the exact details of construction herein shown and described, as the same may be changed in various particulars and still 70 be within the scope of my invention.

What I claim is—

1. In a copy-holder, a traveling marker, a stationary support therefor, and means to move the said marker up and down the sup- 75 port, such means comprising essentially flexible connections applied to opposite ends of the marker and movably arranged upon the sides of the support, movable pull-pieces in front of said support and to which opposite 80 ends of said flexible connections are secured, and guides upon which said pull-pieces are movable.

2. A copy-holder, comprising a stationary support, a movable marker adapted to be slid 85 upon said support, arms or guides in front of said support, pull-pieces slidably mounted upon said arms or guides, and flexible connections applied to opposite ends of the marker and movably arranged upon the sup- 90 port and having their opposite ends connected to opposite pull-pieces, whereby the said marker may be moved in either direction by pull upon the proper pull-piece, substantially as described.

3. A copy-holder, comprising a stationary support, a movable marker adapted to be slid upon said support, arms or guides hinged to said support, pull-pieces slidably mounted upon said arms or guides, and flexible connec- 100 tions applied to opposite ends of the marker and movably arranged upon said support and having their opposite ends connected to opposite pull-pieces, whereby the said marker may be moved in either direction by pull 105 upon the proper pull-piece, substantially as described.

4. A copy-holder, comprising a stationary support, a movable marker adapted to be slid upon said support, arms or guides adjustably 110 hinged to said support, pull-pieces slidably mounted upon said arms or guides, and flexible connections applied to opposite ends of said marker and movably arranged upon said support and having their opposite ends con- 115 nected to opposite pull-pieces, whereby the said marker may be moved in either direction by pull upon the proper pull-piece, substantially as described.

5. A copy-holder, comprising a stationary 120 support, a movable marker adapted to be slid upon said support, arms or guides hinged to said support, pull-pieces slidably mounted upon said arms or guides, flexible connections between said marker and pull-pieces, and 125 guides for said connections arranged upon the support for directing the opposite ends of said connections to each of said pull-pieces, whereby direct pull upon both ends of the marker is obtained from either pull-piece to 130 move the marker in the desired direction, substantially as described.

6. A copy-holder, comprising a stationary support, a movable marker adapted to be slid. upon said support, arms or guides adjustably | hinged to said support, pull-pieces slidably 5 mounted upon said arms or guides, flexible connections between said marker and pullpieces, and adjustable guides for said connections arranged upon the support for directing the opposite ends of said connections to each 10 of said pull-pieces, whereby direct pull upon both ends of the marker is obtained from either pull-piece to move the marker in the de-

sired direction, substantially as described. 7. A copy-holder, comprising a base pro-15 vided with openings at its upper and lower corners, a movable marker adapted to be slid upon said base, a pair of arms or guides secured to said base, pull-pieces slidably mounted upon said arms or guides, a series of guide-20 tubes secured to said base, and flexible connections between the marker and pull-pieces passing through the openings in said base and about said base and through said guidetubes from one pull-piece to the other, where-25 by a direct pull upon both ends of the marker is obtained to move said marker in either direction, substantially as described.

8. In a copy-holder, a base or copy-support provided with means for holding the copy, 30 comprising a spring-pressed bar arranged at the upper end of said base, and a leaf-holder secured to the front of said bar, substantially as described.

9. In a copy-holder, a base or copy-support 35 provided with means for holding the copy, comprising a spring-pressed bar arranged at the upper end of said base, and a leaf-holder arranged upon said bar and comprising an arm secured to the barat one end, and a catch for securing the other end of said arm in 40

place, substantially as described.

10. A copy-holder for type-writing machines, comprising a base or support having a hinged upper portion adapted to be folded down upon the machine, a marker movable 45 upon said base or support, arms or guides arranged in front of said support, pull-pieces slidably mounted upon said arms or guides, and flexible connections applied to opposite ends of the marker and movably arranged 50 upon the sides of said support and having their opposite ends connected to opposite pull-pieces, whereby the marker may be moved in the desired direction by the proper pull-piece and the other pull-piece simulta- 55 neously moved to its operative position, substantially as described.

11. A copy-holder, comprising essentially, a base upon which the copy is held, a traveling marker, a flexible medium movably ap- 60 plied to said base and engaging the marker, pull-pieces to which opposite ends of said flexible medium are secured, and guides upon which said pull-pieces are slidably mounted, the said parts arranged to effect the traverse 65 of the marker up and down the base by alternate outward pull upon one and then the other of said pull-pieces, such movement of one pull-piece serving to set the other pullpiece for the reverse movement of the marker, 70

substantially as described.

In testimony whereof I have hereunto set my hand this 20th day of May, A. D. 1901.

CHARLES FRANKLIN LUDINGTON.

Witnesses:

CLAUDE D. CLARK, JOHN COATS.