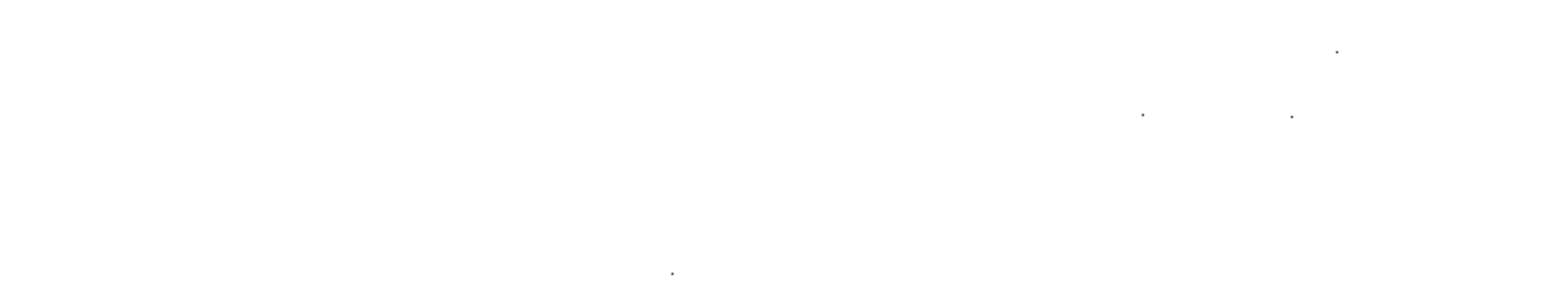
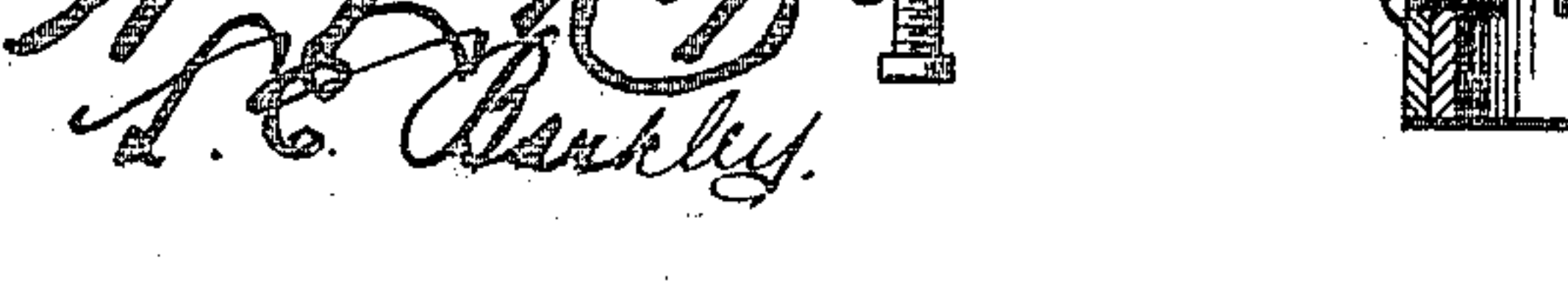
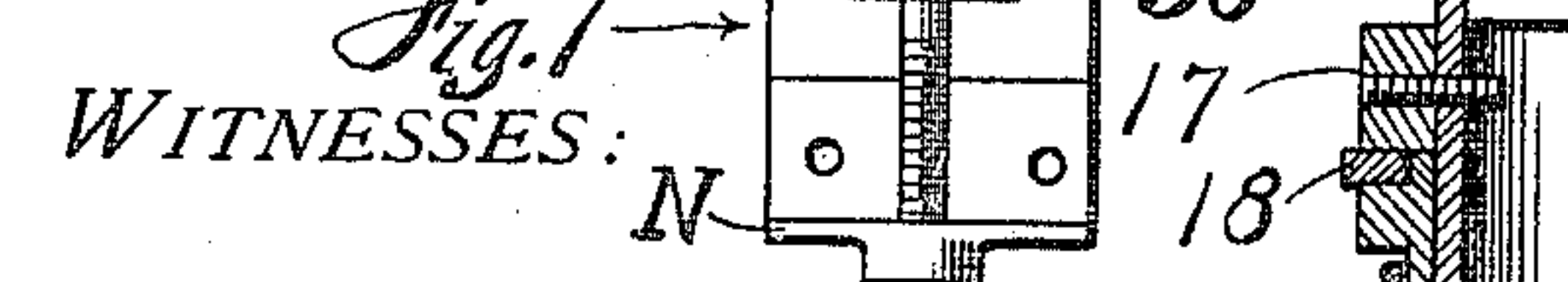
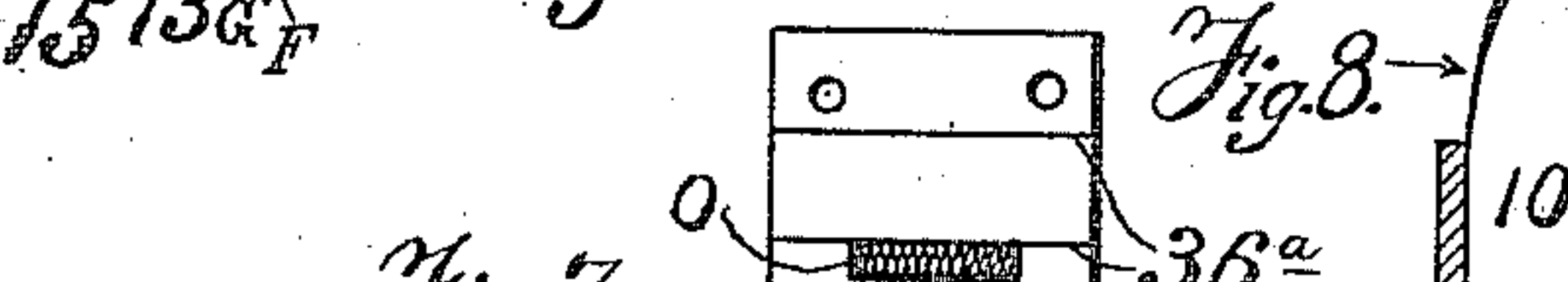
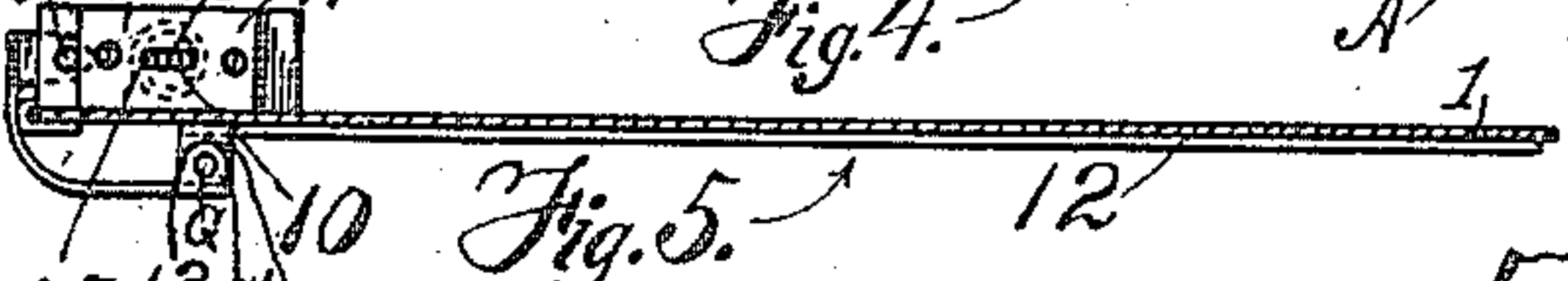
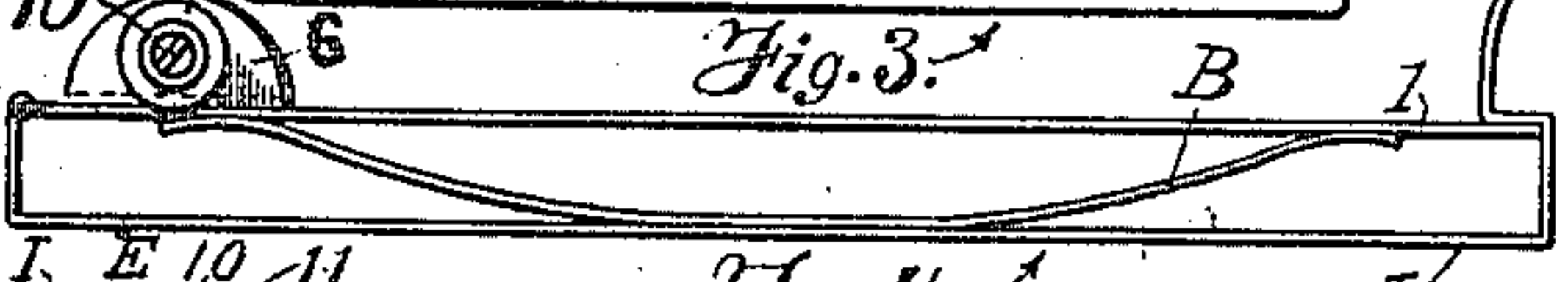
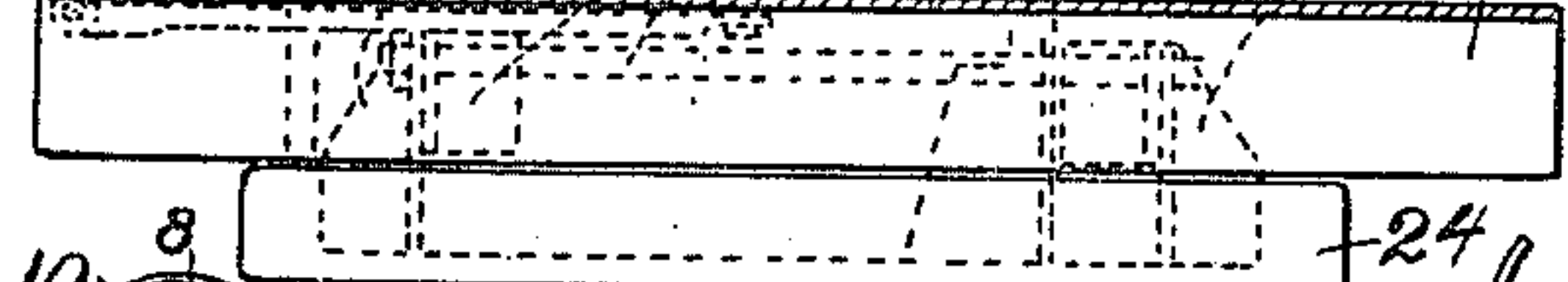
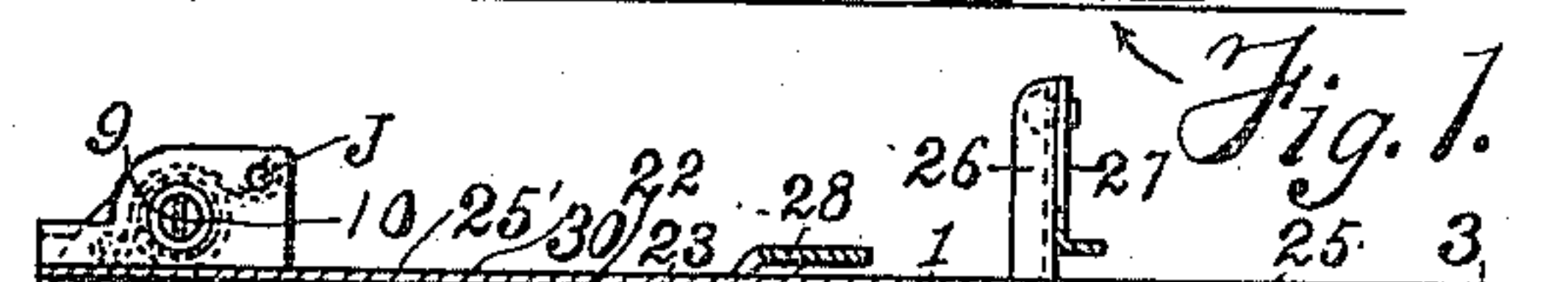
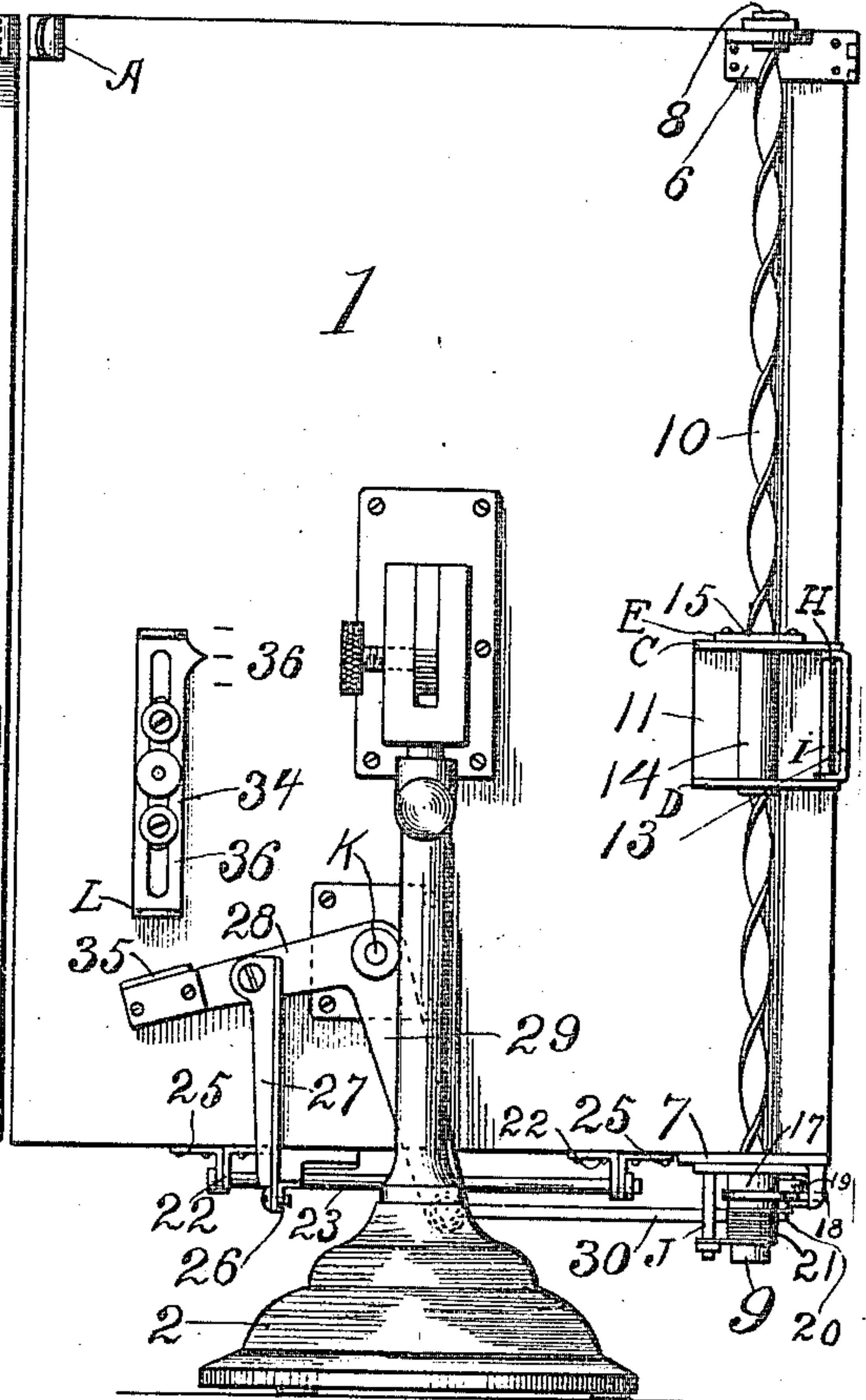
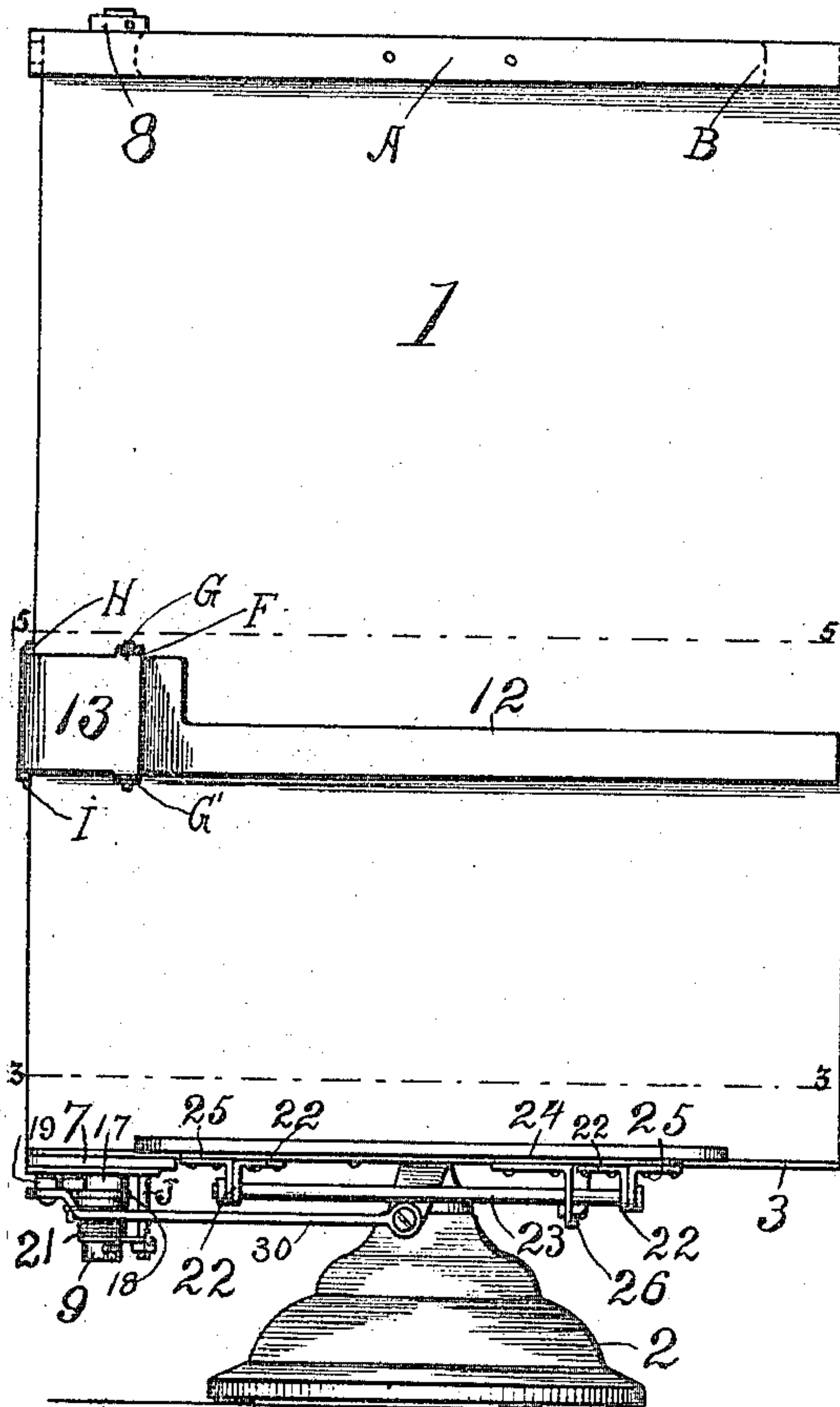


994,857.

Patented June 13, 1911.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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COPY-HOLDER.

994,857.

Specification of Letters Patent. Patented June 13, 1911.

Application filed November 4, 1910. Serial No. 590,752.

To all whom it may concern:

Be it known that I, GEORGE A. MARSH, a citizen of the United States of America, and resident of Washington, in the District of Columbia, have invented certain new and useful Improvements in Copy-Holders, of which the following is a specification.

The invention forming the subject matter of this application is directed more particularly to copy holders of a type that have a line indicator which is movable over the copy step by step and the device illustrated herein is designed more particularly for the use of typists in transcribing from copy, and the illustration shows the novel and essential elements of my invention for such purposes though the same construction may be used for other analogous purposes with obvious modifications of the details.

One of the objects of the invention is to provide a copy holder or support with a line indicator which may be readily moved by hand in either direction over the copy, a part that engages or carries the line indicator being rotatable to impart movement to the line indicator whereby the same may be caused to travel.

In the make-up of my invention I embody with helicoidal or spirally twisted bar, a carrier which is maintained in slidable relation with the bar, the carrier having associated therewith a line indicator and I also associate with the bar means other than the carrier for rotating the same to effect movement of the line indicator for a predetermined distance over the copy.

In the construction of my improvement, due regard has been paid to the practical embodiment of the means whereby, in operation, the device will be practically noiseless, durable, precise as to the distance to be traveled by the line indicator when the key or space bar is actuated, easily operated to move the line indicator either up or down over the copy by hand or to move the same by the actuation of a key or space bar as the operator may desire, all as will hereinafter appear in the accompanying specification.

In the accompanying drawings Figure 1 illustrates a front elevation showing a standard type of copy holder with my improvements applied thereto; Fig. 2 illus-

trates a rear elevation; Fig. 3 illustrates a sectional view taken on the line 3—3 of Fig. 1; Fig. 4 illustrates a plan view of the upper portion of the copy holder; Fig. 5 illustrates a section on the line 5—5 of Fig. 1; Fig. 6 illustrates a rear elevation showing a part of a modified form of connections between the helicoidal bar and the spacing bar; Figs. 7, 8 and 9 illustrate detail views.

Referring to the drawings which show an adaptation of my invention to a standard form of copy holder, the platen 1 and the base 2 are both of ordinary construction, the platen having a ledge 3 upon which the copy may rest. The platen has in hinged engagement with its upper portion a flat bar or plate A that carries one or more spring leaves B which are intended to engage the copy and hold the same against the platen when the hooked end of the bar engages the platen on the opposite side from which it is hinged. The platen has formed integral therewith or attached thereto plates or brackets 6 and 7 which maintain revoluble journals 8 and 9 for a spirally twisted or helicoidal bar 10, which is maintained in parallel relation to the part to which it is attached, as the platen 1. The pitch of the helicoidal bar is such as to permit a carrier, to be hereinafter described, to move longitudinally of the bar by pressure applied to the said carrier. The brackets maintained by the support are fixed and the journals attached adjacent to the ends of a helicoidal bar are revoluble in the brackets; said journals being fastened to the bar in any suitable manner and said helicoidal bar between the brackets has mounted thereon a non-rotative carrier 11 to which the line indicator 12 is connected, preferably by a swinging plate or link 13 that is hinged to the carrier at one end, the line indicator being hinged to the other end of the link so that the link will automatically adjust itself and the line indicator to the copy as to the thickness or number of sheets placed upon the platen. This construction permits the line indicator to assume positions parallel with the copy even though said copy may bulge from the platen or have creases therein. The carrier is held against turning by reason of its structure presenting flat surfaces which lie

parallel to and engage the faces of the platen.

The carrier 11, is preferably provided with flanges C and D, and a guide tube 14 may be placed between the flanges. A plate E is shown in the drawing as having an aperture 15 to receive the helicoidal bar, the walls of said aperture engaging the helicoidal bar. The helicoidal bar is shown also as passing through the tube, which tube serves the function of preventing other movement of the carrier than that longitudinally of the bar. The relation of the carrier to the helicoidal bar and the pitch of its spirals is such that the carrier can be reciprocated by hand and when so moved will rotate the helicoidal bar and when the helicoidal bar is rotated, a change of position of the carrier upon the helicoidal bar will be effected. The line indicator 12 is formed with apertured lugs F for the reception of a pintle G which pintle passes through ears G' of the link 13; the said link or part 13 being hinged to the carrier. The link 13 has ears H which receive the pintle I extending through the flanges C and D of the carrier.

To provide for the rotation of the helicoidal bar in one direction to effect a step by step movement of the line indicator over the copy by actuating a space bar or key, there is connected to the lower end of the rod 10 below the bracket 7, the bearing 9 which is in the form of a sleeve, the said bearing 9 being connected to a sleeve 16, the bearing 9 carrying a fixed collar 17 against which a reduced portion at the upper end of the sleeve 16 abuts to provide between the collar and the sleeve a recess for the reception of an arm 18 which carries a dog 19, such dog being pivoted to the arm to be susceptible of engagement with a collar 17 and when in engagement movement of the dog will effect a rotative movement of the collar 17 and space bar. The dog is pivotally connected to the arm 18 by a pin or screw 20 which depends below the arm to be engaged by one end of a coiled spring which encircles the sleeve 16, its other end being made fast to the bracket 7 by means of a pin J which depends therefrom. The spring 21 will move the arm so that the dog maintained thereby will be out of engagement with the collar, such spring also operating to assist in maintaining the space bar or key in position to be moved downward to effect a clutch engagement of the dog with the collar and it will be noted that when the dog and collar are out of engagement which is their normal position, the carrier may be moved either up or down over the copy as the bar will not be restricted or held against a rotary movement.

The lower portion of the platen 1 has be-

neath the copy supporting ledge, brackets 22 which maintain a bar 23 upon which is pivoted a space bar or depressible key 24, such key being provided with arms 25 that maintain the space bar forward of the ledge of the platen, such arms contacting with the under side of the ledge Fig. 3 to limit the upward movement of the space bar and the space bar carries a rearward extending arm 26 that is connected by a link 27 to a lever 28, such lever being fulcrumed to the rear face of the platen 1 on a pivotal pin K, which lever is in turn connected with a dog 19 on the arm 18 and by means of the connection shown, or the mechanical equivalent thereof, when the space bar is depressed by the typist the lever 28 will be moved upward to act upon the dog and bring it in contact with the collar 17, thus moving the dog and arm against the action of the spring and imparting a rotative movement to the spiral bar 10 which effects a downward movement of the carrier and line indicator. The lever 28 may be of the bell crank type shown in Fig. 2 in which instance its arm 29 will be connected to the dog by a rod 30 and when a straight lever is used, the means for connecting the lever with a dog may be by a flexible connection 31 which extends from the end of the lever 28 about a guide roller 32 and from thence to the dog 19.

It will be noted that when the space bar is in its normal raised position the dog will be maintained out of contact with a collar and the space bar and correlated parts will be out of operative relation with a helicoidal bar and will only be brought into operative relation therewith when the space bar is depressed. When the space bar is depressed the lever will be moved and its movement may be arrested by a suitable adjustable gage.

As shown by Fig. 2 of the drawings the stop gage for limiting the movement of the lever and space bar may consist of a movable member 34 maintained in sliding engagement with the platen, the same being suitably guided and provided with a projecting portion L for engagement with a buffer 35 on one end of the lever 28. This gage is also provided with a pointer which may be moved in register with gage marks 36 which are spaced to correspond with the line spaces of an ordinary typewriter, such gage marks meeting the usual requirements though it is obvious that this gage may be set to give any desired movement of the line marker over the copy and in practice the operator will set the gage to suit the major portion of the copy, moving the line indicator and carrier by hand when the copy is irregular as to lining, the spacing of irregular copy may also be met by a partial depression of the space bar so as to effect less

than a full movement downward of the line marker. In the operation the carrier will be moved very frequently by direct contact therewith particularly when there are large spaces or cancellations in the copy.

Fig. 7 shows a modification of an adjustable gage in which a screw M is used for contact for the buffer on the lever 28, such screw being carried by a bracket N adapted to be attached to the platen and the bracket is provided with gagemarks 36^a located in line with the milled head O of the screw and this screw carries a jam nut P which would impinge against the bracket and hold the screw in adjusted position.

As before noted the dog and ring or band are adapted for frictional engagement of one part with the other and as the ring or band has a smooth surface where it is engaged by the dog and the shape and support of the dog is such that a depression of the space bar will effect frictional engagement only of these parts sufficient in practice to turn the handle or spirally twisted bar and should the line indicator be in its lowest position, to wit, in engagement with the ledge, the resistance will effect a slippage or sliding of the dog over the ring and this is one of the reasons for providing rounded contact surfaces between the dog and ring instead of a positive connection as a pawl and ratchet or a similar type of clutch.

I claim—

1. In a copy holder, a copy support, a non-rotatable carrier, a helicoidal bar mounted on the copy support and to which the carrier is applied, the said bar having a pitch of such degree as to permit the carrier to move longitudinally thereof in either direction by pressure on the carrier, a line indicator associated with the carrier and extending across the copy support, and means for rotating the helicoidal bar.

2. In a copy holder, the combination with a support, a carrier having a line indicator, a spirally twisted bar maintained in operative relation with the support and free to rotate in either direction and on which the carrier is mounted, the pitch of the spiral of the twisted bar being of such degree as to permit the carrier to move longitudinally thereof in either direction by force applied to the carrier, and means for imparting partial rotary motion to the spirally twisted bar to effect the movement in one direction only of the carrier with relation to the support.

3. In a copy holder, a support, a spirally twisted bar having its edges pitched to admit of the rotation thereof by a sliding movement of a carrier thereon, means for mounting the twisted bar normally free to rotate in either direction, a carrier slidably

mounted on said bar and held against rotative movement by engagement with the support, means for turning the bar to effect movement of the carrier in the direction of the length of the bar, and a line indicator maintained by the carrier.

4. In a copy holder, a support, a helicoidal bar maintained in rotative engagement with the support and normally free to be turned in either direction, a carrier mounted upon the bar and held in non-rotative engagement therewith, the degree of pitch of the helicoidal bar being such as to permit free movement of the carrier longitudinally thereof, a line indicator connected to the carrier, means normally out of operative engagement with the bar for rotating the same, and manually actuated means for imparting a movement to the bar rotating means in a direction which will move the carrier and its connected line indicator in one direction over the support, the parts being organized so that the carrier is normally free to be moved manually in either direction longitudinally upon the bar when the second rotating means for the bar is out of operative engagement therewith.

5. In a copy holder, a support, a spiral bar maintained in rotative engagement with the support, a non-rotative carrier which is movable longitudinally upon the bar, a line indicator which is movable with the carrier, manually operated means adapted when actuated to impart a rotative movement to the bar, such means including a clutch and a movable member for effecting engagement of the clutch with the bar, and means for limiting the movement of the movable member to determine the travel of the carrier upon the bar.

6. In a copy holder, a helicoidal bar mounted rotatably in bearings, a carrier and line indicator mounted upon the bar to be moved longitudinally thereof, means for imparting a rotary motion to the bar to move the carrier and the line indicator thereon comprising means having smooth engaging surfaces which are adapted to be brought in frictional contact to effect a rotation of the bar when under a strain, the organization being such that one of the surfaces which frictionally engages may slip or slide upon the other surface when the rotation of the bar is restrained.

7. In a copy holder, a copy support, a helicoidal bar mounted to rotate in operative relation to the copy support, a carrier having an aperture to receive the helicoidal bar, the walls of said aperture being engaged by said bar, means on the carrier for engaging the copy support to prevent rotation of said carrier, a line indicator on the carrier, sleeves to which the helicoidal bar is connected, an arm extending from the

sleeve, a collar fixed to one of the sleeves, a
dog pivoted on the arm and engaging the
collar to turn the helicoidal bar, means for
manually actuating the dog in one direction,
5 and mechanical means for retracting the
said dog.

In testimony whereof, I have hereunto af-

fixed my signature in the presence of two
witnesses.

GEORGE A. MARSH.

Witnesses:

LATTIE E. BARKLEY,
FREDK. C. HANDY.
