June 22, 1943. F. W. THURSTON 2,322,260

LINE INDICATING COPYHOLDER

Filed July 11, 1942 2 Sheets-Sheet 1

Fig. 1

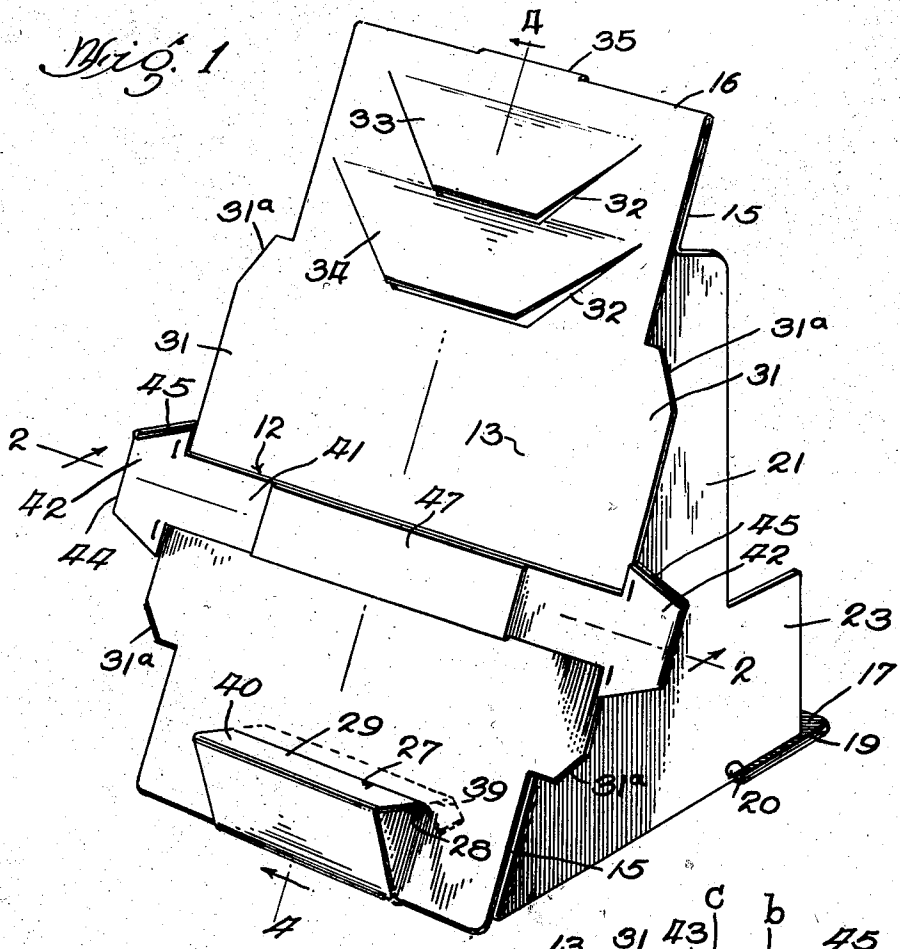


Fig. 2

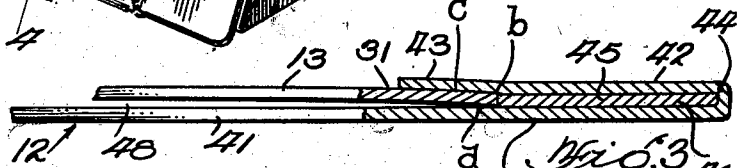
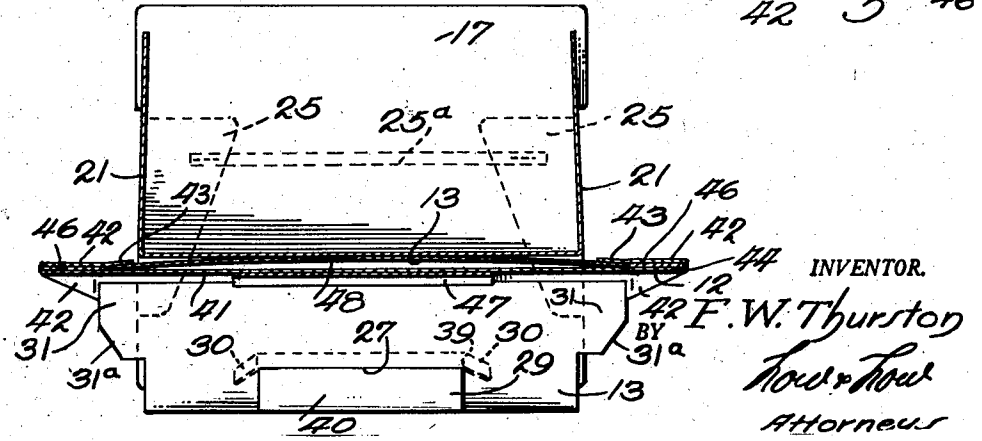


Fig. 3



INVENTOR.
F. W. Thurston
BY
Howe & Howe
Attorneys

June 22, 1943. F. W. THURSTON 2,322,260

LINE INDICATING COPYHOLDER

Filed July 11, 1942 2 Sheets-Sheet 2

Fig. 5

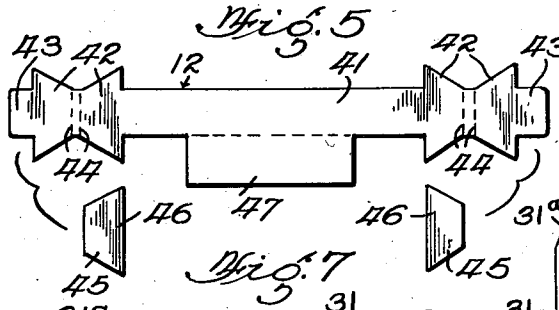


Fig. 7

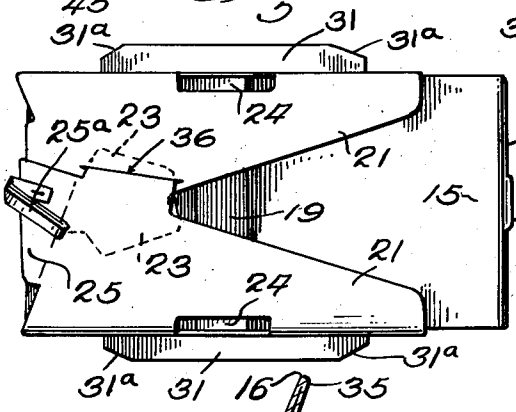


Fig. 4

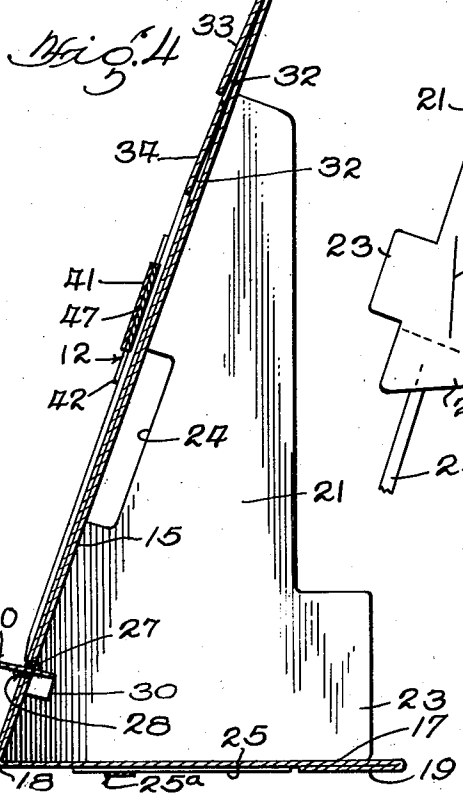
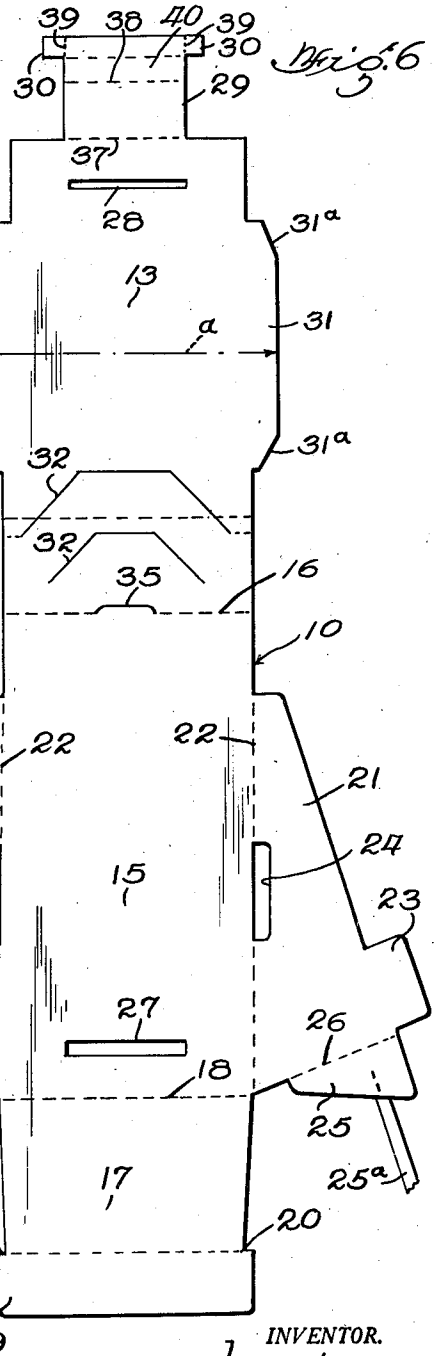


Fig. 6



INVENTOR.

F. W. Thurston

BY

Howe & Howe

Attorneys

Patented June 22, 1943 2,322,260

UNITED STATES PATENT OFFICE

2,322,260

LINE INDICATING COPYHOLDER

Fred W. Thurston, Chevy Chase, Md.

Application July 11, 1942, Serial No. 450,601

5 Claims. (Cl. 120—33)

The invention relates to manually operated line indicating copyholders for manuscript or typed copy sheets, and constitutes an improvement over a device of this character as disclosed in my copending application Serial No. 416,724, filed October 27, 1941, for line indicating copyholder.

As in the instance of my said copending application the instant copyholder is primarily designed to be economically constructed of commercially available paper or cardboard, as well as other non-metallic materials, thereby lending itself for unobstructed economical manufacture and distribution under conditions where more expensive and less available sheet metal may be difficult to obtain.

A primary object of the present improvement over the copyholder disclosed in my aforesaid application, is to provide such a device which is composed of a reduced number of parts and which is capable of mass manufacture as by simple die cutting with the assurance of each copyholder being of identical construction and dimensions with desired convenient manipulation, thereby obviating any possibility of slight variations in dimensions which may affect subsequent operation, as a result of an assembly of a greater number of pre-cut parts.

The present improvement obviates the necessity for pre-cutting and accurately assembling the copyholder, and to insure identical dimensions and subsequent desirable manner of operation in respect to each completed device.

A further object of the instant improvement is to provide a paper or fibre line-indicating copyholder wherein the cost of manufacture as well as the number of assembling operations are reduced to a minimum.

A further object is to provide a copyholder device of the character described wherein the use of metal, such as stitching or staples may be completely eliminated or reduced to a minimum, and wherein a readily available adhesive, such as glue, may be substituted therefor.

A still further object is to provide an improved line-indicating copyholder of integral or one-piece construction wherein convenient and integral self-locking means are provided for converting the device from the flat into easel-like operative condition.

A further object is to provide an improvement in the construction and manner of sliding frictional operating engagement of the separate marker or line-indicating element which is employed in releasable frictional engaging relation with the one-piece copyholder proper.

My aforesaid copending application features what is termed a "triple friction grip" between the marker and copyholder panel as an insurance against undesired slippage when the marker is manually moved relative to the copies of varying thickness supported on the front panel of the copyholder. Such triple friction grip in said application includes a pair of marginal strip elements which are stitched to oppositie side edges of the copyholder front panel so as to provide in conjunction with said panel, a friction grip against three separate surfaces of the marker when the latter is removably assembled in slidable frictional engagement with the said strips for movement relative to the supported copy, all as fully explained in my said copending application.

The present improved copyholder eliminates the necessity for providing the separate strip members which must be accurately assembled and stitched or otherwise secured to the front panel member, with resulting danger of objectionable inaccuracies in mass production which would deleteriously affect desired operation of the device. However, the desirable "triple friction grip" feature of my aforesaid application is completely retained for its essential purpose, in the present improved copyholder. The manner of obtaining such triple friction grip engagement between the marker and copyholder panel is due to a dimensional differentiation between the marker and the copyholder panel, as will be more completely pointed out hereinafter.

A further object of the invention is to provide a device of the character described which may be conveniently folded into dismantled storing or shipping condition without danger of crushing or collapsing any of the parts, which might deleteriously affect operation of the subsequently assembled device from its knock-down condition.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description which, taken in connection with the accompanying drawings, discloses a preferred embodiment thereof.

In said drawings:

Fig. 1 is a perspective view of a copyholder and marker in assembled condition, constituting a preferred embodiment of the invention.

Fig. 2 is a horizontal sectional view taken substantially on line 2—2 of Fig. 1.

Fig. 3 is a horizontal sectional view showing upon an enlarged scale a portion of the copy-

holder and marker assembly as viewed in Fig. 2.

Fig. 4 is a vertical sectional view taken substantially on the line 4—4 of Fig. 1.

Fig. 5 is a plan view of the marker or line indicating element of the device in exploded or disassembled condition.

Fig. 6 is a plan view of the single or one-piece blank from which the copyholder proper is formed or die cut from a web or sheet of fibre or other non-metallic material, prior to being folded and interlocked into assembled condition.

Fig. 7 is a plan view of the copyholder folded into substantially flat knock-down position for shipping or storage purposes.

Referring to the drawings, the copyholder is composed of a substantially one-piece frame member or easel, as indicated generally by the reference character 10, and the movable marker or line indicator member, designed to be frictionally held in slideable relation thereon, is indicated at 12. The copyholder is preferably integrally die cut from a sheet or web of relatively heavy paperboard or fibre material so as to include a front panel portion 13 and an integral rear panel portion or backing member 15, formed by folding the blank of Fig. 6 along an intermediate crease or fold line 16. An integral supporting base portion 17 is provided by folding one end of the flat blank along a crease or fold line 18, such base portion being preferably provided with a terminal part 19 of slightly increased width set off by shoulders 20.

The rear panel portion 15 is provided on opposite sides thereof with integrally formed side wings 21 designed to be folded inwardly along creased or score lines 22 so as to cooperate with the rear panel and the base portion 17 in supporting the copyholder in easel like position. Each side wing member 21 is provided with an outward extension or projection 23 designed for cooperation with the shoulders 20 of the base member in supporting the device in operating position as best seen in Fig. 1. The rear panel member 15 is further cut away at its opposite sides as at 24 to provide elongated slots to facilitate folding the device into shipping condition, as will be hereinafter described. Each side wing member 21 is further provided with projecting portions or lugs 25 designed to be folded inwardly along a fold or crease line 26 to aid in maintaining the device in assembled copy supporting position. The rear panel is also provided with a horizontally disposed elongated slot 27 for a purpose to be described.

The integral front panel portion of member 13 is provided with an elongated slot 28 and also includes an integral copy supporting extension 29 terminating in outwardly projecting oppositely disposed lugs or ears 30 designed for cooperative assembly with the slots 27 and 28 when the copy-holder is folded into assembled position.

The front panel portion 13 is further provided with integrally formed oppositely disposed lateral extensions or flanges 31 which are designed for removable and frictional engagement with the marker 12 during operation of the device for its intended purpose as best seen in Fig. 1. The said front panel member 13 is further preferably cut away in spaced angular lines 32 so as to provide outwardly inclined depending upper and lower flange elements 33, 34 for the purpose of removably retaining the upper edges of sheets to be copied, for example sheets of legal and letter sizes respectively. The upper fold line 16 of the blank may be cut away as indicated at 35 so as to provide a slot to receive a paper clip for removably retaining the upper edges of a sheet or sheets of maximum or minimum length to be supported by the device.

A slit 36 may be provided as illustrated in one of the side wing members 21 of the rear panel portion, to receive one of the outward extensions or projections 23 when the holder is folded into knock-down condition as illustrated in Fig. 7.

The copyholder device is initially folded from flat form along the line 16 so as to superpose the front panel 13 over the rear panel portion 15, with the slots 27, 28 disposed in substantial registry. The base portion 17 is then folded rearwardly along the line 18 and the side wing members 21 also folded rearwardly along the lines 22 so as to engage the extensions 23 thereof with the shoulders 20 of the base portion. The triangular projections 25 are next folded inwardly along the lines 26 and beneath the base portion 17 so as to constitute a substantial easel-like supporting assembly with the copy supporting front panel 13 in rearwardly inclined position as illustrated. A flexible or elastic strip 25a secured at its opposite ends to the said projections 25, may be provided for yieldably maintaining the described elements in their desired assembled and supporting position.

The copy supporting extension 29 of the front panel element is next folded upwardly along fold or crease line 37, thence inwardly on fold or crease line 38 to form a substantially horizontally copy supporting shelf 40. The lug extensions 30 may then be folded reversely or inwardly along short fold lines 39 so as to permit insertion of the extension through the aligned slots or apertures 27, 28. Release of the lug extensions permits the same to spring outwardly by their inherent resiliency so as to removably lock the front and rear panel members 13, 15 in superposed position as best seen in Figs. 1 and 4.

The device may be disassembled into knock-down position for shipping and storage by a reverse procedure, including disengagement of the lug extensions 30 from the aligned apertures or recesses 27, 28, so as to compactly fold the device into the condition shown in Fig. 7 with one of the side wing extensions 23 inserted within the slit 36 of the opposite wing 21, to maintain its substantially flat folded relationship of the parts. When in folded position the flexible strip 25a assumes the position substantially as shown in Fig. 7 and the opposite ends of increased width of the terminal portion 19 of base member 17 engage within the oppositely disposed slots 24 of the rear panel member 15, as an aid in maintaining the parts in substantially flat relation without any tendency to deform at the locality of the fold or crease lines 22.

The separate fibre marker or line indicating element 12 (Fig. 5) is preferably formed from a flat die cut strip including an intermediate line indicating body portion 41 having oppositely disposed enlarged head portions 42 of double trapezoidal shape. The opposite ends of the marker terminate in flange or tab extensions 43 which constitute the portions of the marker which frictionally engage rearwardly of the opposite marginal portions of the front panel 13, specifically rearwardly of the integrally formed oppositely disposed flanges 31 thereof.

The marker is assembled by folding the enlarged trapezoidal shaped portions 42 into superposed relation along one or more fold lines indicated in dotted lines at 44. Separate insert mem-

bers 45 of conforming configuration are inserted between the folded parts 42 and in abutting engagement with the fold line or lines 44, as best illustrated in Fig. 3 of the drawings. This positions the inner edges 46 of the said insert members in definite predetermined relation to the ends of the assembled marker and particularly to the intermediate body portion 41 thereof.

When so assembled the flange or tab extensions 43 of the marker extend inwardly beyond the inner edges of the inserts 45 so as to constitute flexible marker portions for frictional engagement with the rear surface of the front panel flange parts 31.

The opposite ends of the marker, including the inserts 45 may be permanently secured in their described folded position by means of stitching or adhesive as desired, so as to constitute a unitary device.

The opposite ends of the integral flange portions 31 of the front panel member 13 are inclined or tapered inwardly as at 31*a* to facilitate engagement with and removal from such flange portions, of the opposite ends of the marker element 12.

The described cooperating parts of the assembly are preferably accurately die cut in such manner as to insure the presence of what may be termed a "triple friction grip" between the marker and side flange portions 31, as in the instance of my copending application aforesaid. To this end the overall length of the marker or line indicating element between its opposite panel edge engaging insert portions 46 is of a predetermined dimension slightly less than the distance between the opposite edge portions 31 of the panel, represented by the line *a* in Fig. 6. This results in slightly flexing or bowing of the panel flange portions when the marker is assembled therewith, as best seen in Figs. 2 and 3 of the drawings, and is due to the inherent flexibility of the fibre or cardboard material of which the panel is constructed. By reason of the described dimensional difference, a friction engagement is obtained between opposite edges of the panel flange portions 31 and the inner edges 46 of the insert members 45 at opposite ends of the marker 12, as best seen at *b* in Fig. 3. A frictional surface gri is also present between the opposite end flanges 43 of the marker and the rear surface of the slightly flexed panel as indicated by the reference character *c* in said Fig. 3. A third frictional surface grip is present between the rear surface of the insert body portion 41 and the front wall surface of the flange 31 at opposite ends of the assembly, such friction grip surface being indicated by the reference character *d* in Fig. 3. The described separate and distinct friction engaging surfaces *b*, *c*, and *d* between the marker and front panel flanges 31 constitute the desirable non-slipping triple friction grip between the marker and panel so as to insure retention of the marker in its adjusted position relative to copy sheets of varying thickness supported by the front panel on the ledge or shelf 40. The marker may be manually moved upwardly and downwardly as desired while retaining the multiple friction grip and when the marker is removed from the panel the latter assumes its original flat configuration until the marker is again engaged with the oppositely disposed flange portions 31 thereof.

If desired and for the purpose of reenforcement as well as an aid to the manual manipulation of the marker, a reenforcing intermediate strip member 47 may be provided and secured as by adhesive to the front body wall 41 of the marker. As illustrated in Fig. 5 the strip element 47 may be die cut as an integral part of the marker 12 and folded over the body portion 41 where it may be adhesively or otherwise secured in position.

By reason of the described interengagement of the parts the marker may be moved relative to the panel and supported copy as desired while insuring the marker remaining in adjusted position with no tendency to slip or fall from its adjusted position. Furthermore, the described flexing of the panel by reason of the slightly less longitudinal dimension of the marker when the parts are engaged, results in a slightly concave clearance space between these elements, indicated at 48 in Figs. 2 and 3 wherein a multiple page copy may be conveniently housed without undue binding or distortion of the parts. Since a triple friction grip is insured by the slight flexing of the panel when the marker is assembled therewith, each copyholder device will be identical in dimensions, clearance and degree of friction present, it being understood that the combined resistance afforded by the multiple friction surface engagements is not such as to render it difficult to move the marker manually but is merely sufficient as to prevent slipping and insure uniformity as between a plurality of die cut copyholder devices of the character contemplated herein.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

What is claimed is:

1. A line indicating copyholder comprising a frame including a flexible copy supporting panel, and a manually adjustable line indicating marker having inwardly extending resilient tab portions at its opposite ends frictionally engageable with oppositely disposed marginal portions of the rear surface of said panel, the rear surface of said marker at its opposite ends frictionally engaging oppositely disposed marginal portions of the front surface of said panel, the longitudinal dimension of the marker between its extreme panel engaging portions at opposite sides of the panel being less than the distance between the opposite edges of said panel to insure flexing of said panel when said indicator member is assembled therewith to provide an additional friction grip between said marker and panel at the opposite side edges of the latter, whereby said marker is maintained by friction exerted at three separate and distinct localities in manually adjusted position against displacement relative to said panel and the copy supported thereby.

2. A line indicating copyholder comprising a frame including a flexible copy supporting panel, and a manually adjustable line indicating marker having inwardly extending resilient tab portions at its opposite ends frictionally engageable with oppositely disposed marginal portions of the rear surface of said panel, the rear surface of said marker at its opposite ends frictionally engaging oppositely disposed marginal portions of the front surface of said panel, insert members respectively carried by said marker at opposite ends thereof and disposed between said tab portions and the body portion of the marker, edge portions

of said insert members being respectively engageable with opposite edges of said panel, the dimension between said panel engaging edge portions of said insert members at opposite ends of said marker being less than the dimension between the opposite edges of said panel to insure flexing of said panel when said indicator member is assembled therewith to provide an additional friction grip between said marker and panel at the opposite side edges of the latter by means of said insert members, whereby said marker is maintained by friction exerted at three separate and distinct localities in manually adjusted position against displacement relative to said panel and the copy supported thereby.

3. A foldable line indicating copyholder comprising a one-piece frame including a flexible copy supporting front panel and an integral rear panel adapted to be folded into substantial flat engagement with said front panel, each of said panels having an aperture therein disposed so as to be in substantial registry with one another when said panels are thus engaged, and an integral extension on one of said panels having thereon a laterally projecting bendable terminal portion, said extension being adapted to be folded and projected through said aligned apertures of said panels to yieldably interlock said bendable terminal portion with a said panel, whereby to releasably maintain said panels in superposed relation with said folded extension constituting a shelf support for a copy resting against said front panel.

4. A foldable line indicating copyholder comprising a one-piece frame including a flexible copy supporting front panel and an integral rear panel adapted to be folded into substantial flat engagement with said front panel, each of said panels having an aperture therein disposed so as to be in substantial registry with one another when said panels are thus engaged, rearwardly foldable side wing members and a supporting base member formed integrally with said rear panel for maintaining the copyholder in assembled easel-like position, and an integral extension on said front panel having oppositely disposed laterally projecting bendable terminal portions, said extension being adapted to be folded upwardly and projected rearwardly through said aligned apertures of said panels to yieldably interlock said bendable terminal portions with said rear panel, whereby to releasably maintain said panels in superposed relation with said folded extension constituting a shelf support for a copy resting against said front panel.

5. A line indicating copyholder comprising a frame including a copy supporting panel having integrally formed laterally projecting flexible flanges at opposite sides thereof, and a manually adjustable line indicating marker having inwardly extending resilient tab portions at its opposite ends frictionally engageable with oppositely disposed marginal portions of the rear surfaces of said panel flanges, the rear surface of said marker at its opposite ends frictionally engaging oppositely disposed marginal portions of the front surfaces of said panel flanges, the longitudinal dimension of said marker between its extreme panel flange engaging portions at opposite sides of the panel being less than the distance between the oppositely disposed outer edges of said panel flanges to insure flexing of said panel when said marker is assembled therewith to provide an additional friction grip between said marker and panel flanges at the opposite side edges of the latter, whereby said marker is maintained by friction exerted at three separate and distinct localities in manually adjusted position against displacement relative to said panel and the copy supported thereby.

FRED W. THURSTON.