June 15, 1971 P. D. BOOTH 3,584,385

LETTERING GUIDE

Filed May 26, 1969

FIG. 1.

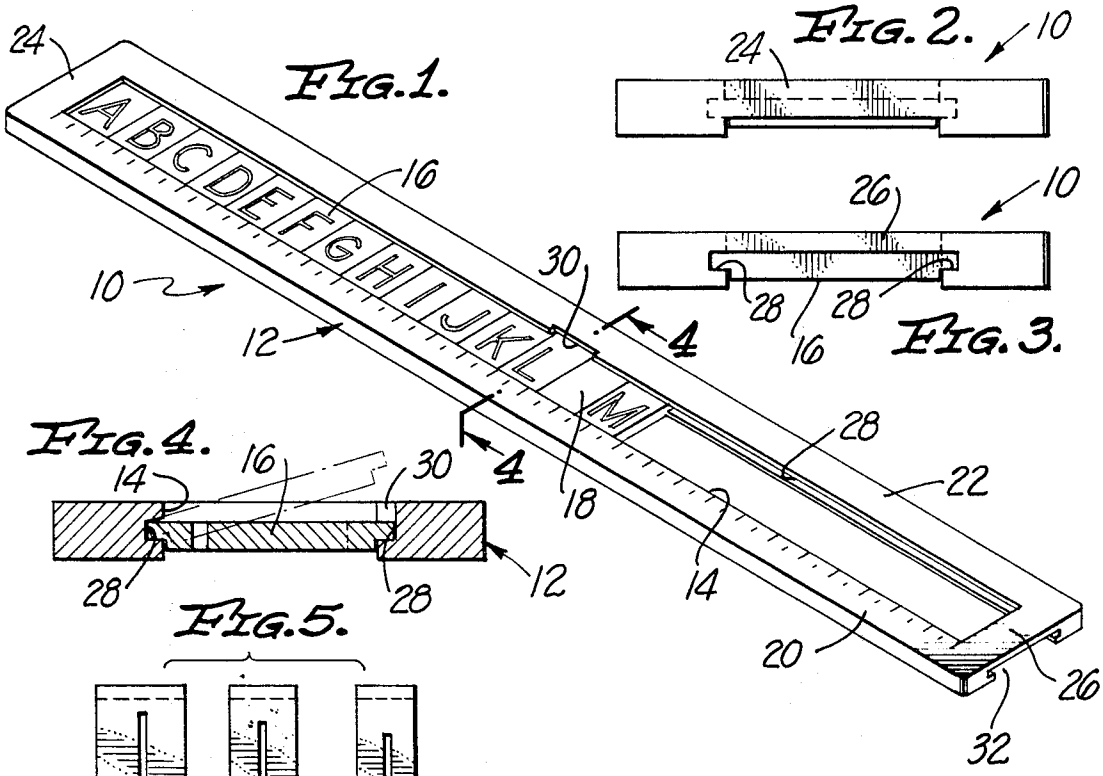


FIG. 2.

FIG. 3.

FIG. 4.

FIG. 5.

FIG. 6.

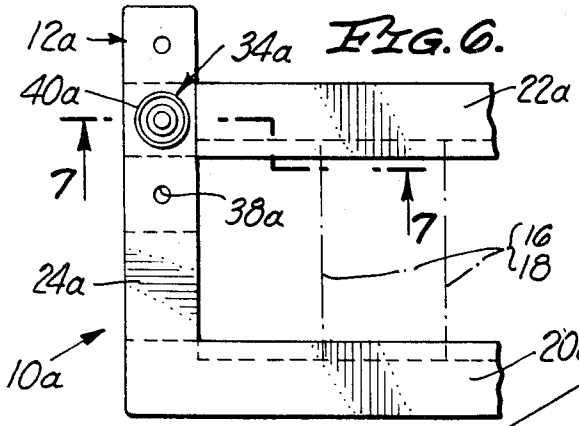


FIG. 7.

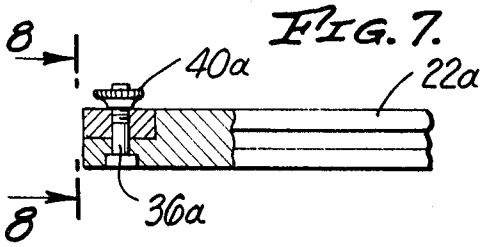


FIG. 8.

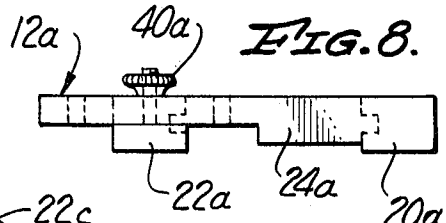


FIG. 9.

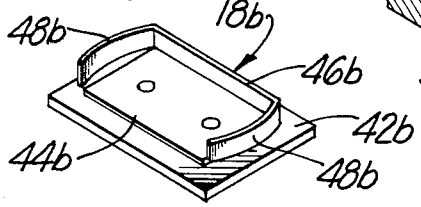
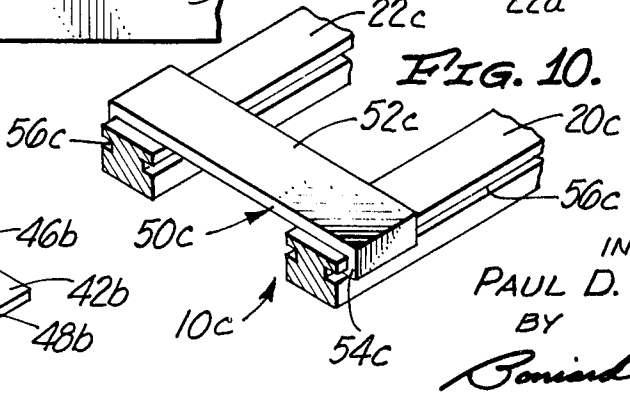


FIG. 10.



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LETTERING GUIDE

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U.S. Cl. 33—174B 3 Claims

ABSTRACT OF THE DISCLOSURE

A lettering guide having an elongate frame containing a longitudinal lettering slot, and a plurality of stencil and spacer plates to be selectively positioned in side by side relation along the slot and adjustable to any position along the slot so as to form selected words or numbers.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates generally to drafting aids and more particularly to a novel lettering guide.

Prior art

One of the more tedious, precise, and time-consuming tasks performed by draftsmen, artists, and persons engaged in other similar fields of endeavor involves the placement of uniformly sized characters, such as letters and numbers, on drawings and other graphic illustrations. A variety of lettering guides have been devised to simplify and aid this task. Representative of the existing lettering guides are those disclosed in the prior art Pat. Nos. 2,298,635 and 3,381,384. While these existing lettering guides are useful to a degree, they possess certain disadvantages which the present invention overcomes. Foremost among these disadvantages are the complexity and relatively high cost of the existing guides, the difficulties involved in replacing and adjusting the locations of the character defining elements of the guides to permit the formation of various words or numbers, and the inability of the lettering guides to be adjusted to accommodate the formation of characters of various size.

SUMMARY OF THE INVENTION

The present invention provides an improved lettering guide which avoids the above noted and other disadvantages of the existing lettering guides. The present improved lettering guide is characterized by a frame including a pair of laterally spaced frame bars defining an intervening lettering slot, and a plurality of stencil and spacer plates which may be selectively positioned in side by side relation along the slot so as to form any desired word or group of words or numbers. The inner confronting edges of the frame bars are grooved to slidably receive the stencil and spacer plates, thus to permit adjustment of these plates to any desired position along the lettering slot. One or more access openings are provided to the frame bar grooves through which the plates may be inserted into and removed from the grooves. The stencil and spacer plates have a thickness somewhat less than the thickness of the frame bars, such that when the plates are mounted on the frame, the frame bars project below the undersurfaces of the plates. As a consequence, when the lettering guide is placed on a drawing surface to be lettered, the undersurfaces of the stencil and spacer plates are spaced from the drawing surface so as to avoid smearing of this surface.

The present lettering guide embodies various additional innate features. According to one of these features, the frame bars are laterally adjustable to vary the width of the lettering slot so as to condition the frame of the

lettering guide to receive stencil and spacer plates of various size. This feature permits the lettering guide to be used to form characters of various size. According to another feature of the invention, the lettering guide is equipped wih one or more bridge members which fit within the grooves in the frame bars for slidable adjustment along the lettering slot. These bridge members are equipped with friction means, such as springs, which bear against the frame bars to frictionally retain the bridge members in fixed position. The bridge members are useful in retaining the stencil and spacer plates in fixed position along the lettering slot.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a lettering guide according to the invention;

FIG. 2 is an enlarged left-hand end view of the lettering guide;

FIG. 3 is an enlarged right-hand end view of the lettering guide;

FIG. 4 is an enlarged section taken on line **4—4** in FIG. 1;

FIG. 5 illustrates different stencil plates for use in the lettering guide;

FIG. 6 is an enlarged fragmentary plan view of a modified, adjustable lettering guide according to the invention;

FIG. 7 is a section taken on line **7—7** in FIG. 6;

FIG. 8 is an edge view of the modified lettering guide looking in the direction of the arrows on line **8—7** in FIG. 7;

FIG. 9 is a perspective view of a bridge member for use in the present lettering guide; and

FIG. 10 is an enlarged fragmentary perspective view of one end of a further modified lettering guide according to the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Turning first to FIGS. 1 through 4 of these drawings, there is illustrated a lettering guide **10** according to the invention. This guide includes a frame **12** containing a longitudinal lettering slot **14**, and a plurality of stencil plates **16** and spacer plates **18** to be selectively mounted on the frame in side by side relation along the slot **14**. In the particular inventive embodiment under consideration, the frame **12** is a unitary frame structure which may be molded in one piece from plastic or otherwise fabricated. The frame includes a pair of parallel frame bars **20, 22** which are laterally spaced to define therebetween the lettering slot **14** and are permanently joined at their ends by cross members **24** and **26**. Along the inner confronting edges of the frame bars **20, 22** are grooves **28** which open inwardly to the lettering slot **14**. As may be best observed in FIG. 3, the stencil plates **16** and spacer plates **18** have opposite edges which engage within the frame bar grooves **28**. These plate edges are sized to fit slidably within the grooves, thus to permit slidable adjustment of the plates along the lettering slot **14**. If desired, the plates **16, 18** may be of uniform thickness. Preferably, however, these plates are stepped, as shown in FIG. 3, to provide the central portions of the plates, i.e., the plate portions which extend across the lettering slot **14**, with increased thickness. A feature of the invention resides in the fact that the stencil plates **16** and spacer plates **18** have a thickness which is substantially less than the thickness of the frame **12**, such that the frame bars **20, 22** project below the undersurfaces of the plates when the latter are positioned within the frame, as shown in FIG. 3. As a consequence, when the lettering guide is placed upon the surface of a drawing to be lettered, the undersurfaces of the stencil and spacer plates are spaced from the drawing surface

so as to avoid smearing of this surface, particularly when ink is used in lettering.

According to another feature of the invention, the lettering guide frame **12** is provided with access openings through which the stencil plates **16** and spacer plates **18** may be inserted into and removed from the frame grooves **28**. The particular embodiment of the invention selected for illustration in FIGS. 1 through 4 is equipped with two access openings for this purpose. One of these access openings is defined by a lateral cut-out or notch **30** in the frame bar **22** which opens laterally to its groove **28**. This notch is located midway between the ends of the lettering slot **14**. The slot permits a selected stencil plate **16** or spacer plate **18** to be removed from the frame **12** by first sliding the plate along the frame to a position directly below the notch, as illustrated in solid line in FIG. 4. One end of the plate is then rotated upwardly through the notch to the broken line position of FIG. 4. Thereafter, the plate is moved edgewise to disengage the opposite end of the plate from the groove **28** in the frame bar **20**. It will be understood that a stencil plate **16** or spacer plate **18** may be inserted into the frame grooves **28** by reversing this procedure.

Referring to FIG. 1, it will be observed that the frame bar grooves **28** open through one end of the lettering guide frame **12** to form a second access opening **32** through which the stencil plates **16** and spacer plates **18** may be inserted into and removed from the frame. The opposite ends of the grooves are closed by the frame cross member **24**, as shown in FIG. 2.

Reference is now made to FIGS. 6 through 8 illustrating and adjustable lettering guide **10*a*** according to the invention. This adjustable lettering guide is generally similar to the lettering guide **10** of FIG. 1 except that the longitudinal frame bars **20*a*** and **22*a*** of the lettering guide **10*a*** and laterally adjustable toward and away from one another. The modified lettering guide is thereby adapted to receive stencil and spacer plates **16**, **18** of various sizes. It will be immediately evident to those versed in the art that the lettering guide frame bars **20*a***, **22*a*** may be laterally adjustable in various ways. In the particular embodiment of the invention selected for illustration, the end cross members of the lettering guide frame **12*a*** (only one cross member **24*a*** shown) are integrally joined to the longitudinal frame bar **20*a***. The ends of the remaining longitudinal frame bar **22*a*** are adjustably secured to the cross members by releasable adjustable connecting means **34*a***. In this instance, the connecting means comprise threaded studs **36*a*** which are fixed in and project above the ends of the frame bar **22*a*** for selective insertion in holes **38*a*** in the frame cross members. The studs **36*a*** are longitudinally dimensioned to extend above the cross members for receiving knurled nuts **40*a***. Referring to FIG. 7, it will be observed that the frame cross members and the ends of the adjustable frame bar **22*a*** are reduced in thickness to overlap or interfit with an overall thickness equal to that of the lettering guide frame. The modified lettering guide **10*a*** is otherwise similar to the lettering guide **10** described earlier.

It is now evident that the modified lettering guide **10*a*** is adjustable in width to receive stencil and spacer plates **16**, **18** of different sizes. In this regard, of course, it will be understood that the stencil plates are made in different sizes to permit their use in forming characters of different size. Width adjustment of the lettering guide **10A** is accomplished by removing the knurled nuts **40*a*** from the threaded studs **36*a*** on the adjustable frame bar **22*a***, separating this frame bar from the cross members of the lettering guide frame **12*a***, inserting the studs into a new set of holes **38*a*** in the cross members, and replacing the nuts on the studs.

FIG. 9 illustrates a locking or restraining member or bridge which may be utilized in a lettering guide according to the invention for frictionally retaining the stencil

plates **16** in fixed position in the guide. The bridge **18*b*** comprises a plate **42*b*** of the same size as the stencil plates **16** or spacer plates **18**, such that the bridge may be inserted into the lettering guide frame, in the same manner as the stencil plates. Secured to the normally underside of the bridge plate **42*b*** is a spring bracket **44*b*** along one longitudinal edge of which is a depending flange **46*b***. Integrally joined to the ends of this flange and projecting laterally across the underside of the bridge plate **42*b*** are arcuate spring arms **48*b***. When the bridge is installed in the lettering guide **10** or **10*a***, the ends of the bridge plate **42*b*** engage in the stencil plate receiving grooves in the guide. The curved spring arms **48*b*** bear frictionally against the inner edges of the longitudinal frame bars to frictionally retain the bridge against movement along the frame bars. Thus, the restraining bridge **18*b*** may be placed in contact with a stencil plate **16** in the lettering guide to restrain the plate against movement in one longitudinal direction along the guide.

FIG. 10 illustrates a slightly modified lettering guide **10*c*** according to the invention equipped with an adjustable restraining member **50*c*** for reinforcing the longitudinal frame bars **20*c***, **22*c*** of the lettering guide against outward lateral deflection. The restraining member **50*c*** has a flat bar **52** which extends across the upper surfaces of the longitudinal frame bars **20*c***, **22*c*** and terminates in downwardly and inwardly turned ends defining lips or flanges **54*c*** for engaging in longitudinal slots or grooves **56*c*** along the outer surfaces of the longitudinal frame bars. It is evident that the restraining member **50*c*** may be adjusted to any position along the frame bars for reinforcing the latter against outward lateral deflection.

What is claimed is:

1. A lettering guide comprising:

a frame including a pair of separate parallel laterally spaced bars defining an intervening lettering slot, and generally U-shaped restraining members straddling and joining said bars and adjustable lengthwise of said bars,

said bars having laterally spaced longitudinal shoulders along their confronting inner edges defining intervening grooves extending along said edges,

a plurality of rectangular stencil and spacer plates to be selectively positioned on said frame in side by side relation along said slot with two opposite longitudinal edges of each plate engaging within said frame bar grooves,

said plate edges being sized to fit slidably within said grooves, whereby said plates may be moved lengthwise of said frame to any selected position along said slot, and

one frame bar having in its upper edge shoulder a slot opening to the respective bar edge groove through which said plates may be inserted into and removed from said groves.

2. A lettering guide according to claim **1** wherein:

said frame bars have grooves in their outer longitudinal edges, and

said restraining members extend laterally across the normally upper surfaces of said frame bars and terminate at their ends in downwardly and inwardly directed flanges which slidably engage within the outer grooves of said frame bars.

3. A lettering guide comprising:

a frame including a pair of parallel laterally spaced bars defining an intervening lettering slot,

said bars having laterally spaced longitudinal shoulders along their confronting inner edges defining intervening grooves extending along said edges,

a plurality of rectangular stencil and spacer plates to be selectively positioned on said frame in side by side relation along said slot with two opposite longitudinal edges of each plate engagng within said frame bar grooves,

said plate edges being sized to fit slidably within said

grooves, whereby said plates may be moved lengthwise of said frame to any selected position along said slot,

one frame bar having in its upper edge shoulder a slot opening to the respective bar edge groove through which said plates may be inserted into and removed from said grooves, and

a locking bridge to be positioned within said lettering slot for restraining the stencil and spacer plates against movement along said slot, said bridge comprising a plate having opposite edges slidably engaging within said frame bar grooves, and arcuate leaf springs secured on edge to one side of said bridge and bearing against said frame bar edges to yieldably resist movement of said bridge along said slot.

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HARRY N. HAROIAN, Primary Examiner

U.S. Cl. X.R.

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