Nov. 20, 1945. G. J. FORSLUND 2,389,303

LETTERING GUIDE HOLDER

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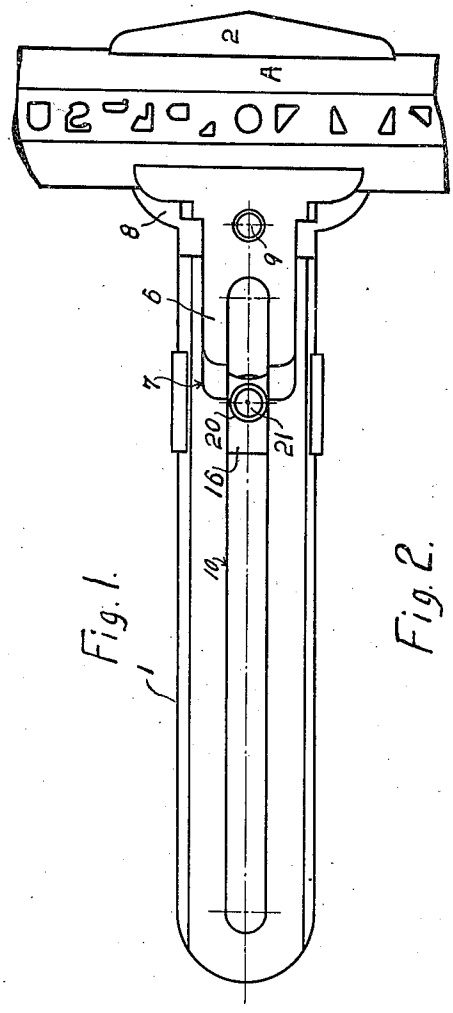


Fig. 1.

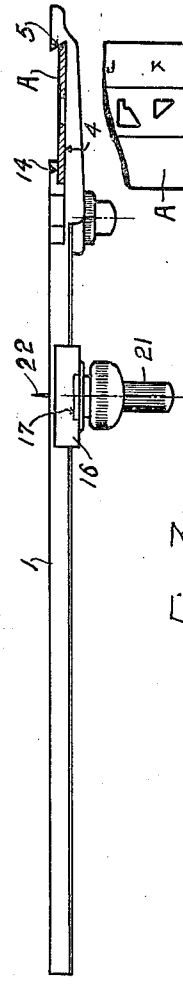


Fig. 2.

Fig. 3.

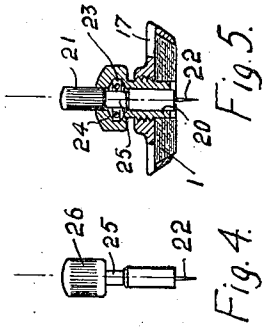


Fig. 4.

Fig. 5.

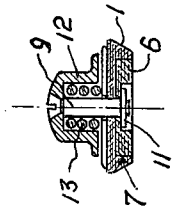


Fig. 6.

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LETTERING-GUIDE HOLDER

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Application April 15, 1944, Serial No. 531,200

6 Claims. (Cl. 33—75)

Draftsmen commonly use socalled lettering guides for placing letters of the alphabet and numerals on drawings and the like. These devices are flat ruler-like pieces composed of hard materials of various kinds and having distributed along the same little holes in which the user inserts his pen and, by moving it along the bounding edges of the holes, is able accurately to outline letters and numerals of uniform sizes. While such guides well serve their purpose of determining the size and shape of a character, they must themselves be properly held in place to bring the proper hole at the point where the letter or other character is to be drawn. The positioning of a guide is simple where characters are to be placed in a row that may permit the guide to be laid against the edge of a T-square or other instrumentality used in drawing straight lines. However, when characters are to be arranged in the arc of a circle or in concentric arcs, there have not heretofore, to my knowledge, been available to draftsmen means quickly and accurately to position and hold the guide.

The present invention has for its object to produce a simple and novel holder for any of the usual lettering guides and like devices, whereby any guide opening therein may be positioned at any point in an arc of a circle of any desired diameter, within a considerable range, as easily and as accurately as can now be done when characters are placed in straight rows or lines.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a bottom plan view of a holder embodying the present invention, a fragment of a conventional lettering guide being shown therein; Fig. 2 is an edge view of the holder, up side down as in Fig. 1, and the guide being shown in section; Fig. 3 is a top plan view of the holder, with the guide therein; Fig. 4 is an elevational view of a second anchoring pin and center that may be interchanged with the one appearing in the other figures; and Figs. 5 and 6 are sections taken, respectively, on lines 5—5 and 6—6 of Fig. 3.

Referring to the drawing, 1 is a long, flat, stiff arm of any suitable material which is preferably but not necessarily transparent. At one end of the arm is a widened part or head 2 having the central part cut away to create a large window 3 surrounded by a relatively narrow frame-like border. On the rear or under side of the head is a depression 4 deeper than the thickness of a guide A to be inserted in the holder. The shoulder 5, extending at right angles to the axis of the arm, along the outer end of the head, is undercut so that a part of it overhangs the guide when the latter is pressed against the shoulder.

On the under or rear side of the arm or body member of the holder is a T-shaped slide 6 the stem of which lies and fits slidably in a depression 7 in the under face of the arm, while the cross piece of the T engages a widened flat surface 8 which is in the same plane as the bottoms of the depressions 4 and 7. The slide is connected to the arm so as to be yieldingly pressed against it and be frictionally held in any position into which it may be moved. The securing means comprises a pin 9 fixed to the slide and extending up through a slot 10 extending throughout the greater part of the length of the arm along the longitudinal center of the latter. A shoulder 11 on the lower end of the pin prevents it from being pulled up through the slide. Set on top of the pin and secured thereto, above the arm, is a button 12 in the form of an inverted cup the internal diameter of which is substantially greater than the diameter of the pin. In the space within the cavity in the button, and surrounding the pin, is a compression spring 13. The parts are so proportioned that normally the button stands a little apart from the arm, thereby permitting it to be depressed and the slide to drop away a little from the arm.

The cross piece of the slide, on the side toward the arm and along the free long edge, is cut away, as indicated at 14, for a depth a little less than the thickness of the guide; thereby providing a shoulder to engage an edge of the guide and a flange to overlap the guide. This arrangement makes it possible to move the slide so as to press the guide firmly against the long undercut shoulder or ledge 5 and to hold it there through the clamping action of the spring 13.

The head 2 bears a mark 15 which may be simply a short line along the longitudinal center of the device at the outer end of the window. This mark serves to locate any guide opening at the exact longitudinal center of the holder; the guide being simply shifted lengthwise in the proper direction to bring the desired opening into registration with the mark 15. The guide, being frictionally held, it will remain in any position into which it may be brought and yet be easily

shifted. By making the depression 4 deeper than the thickness of the guide, the guide is held above the paper on which characters are being placed, thus avoiding any smearing of the ink if the guide is shifted without lifting the device clear of the work, or blotting while a character is being drawn.

The holder is provided with a pin to serve as an anchor and center for the arc or arcs in which the characters in any particular job are to be placed. In the arrangement shown, there is mounted on top of the arm of the holder a slide 16 which may be moved along the arm and which may be made of spring material or, for other reasons, be frictionally held on the arm although movable lengthwise of the latter when sufficient force is applied to overcome the frictional resistance. In the arrangement shown this member is a plate of spring metal flanged at opposite ends to produce a channel in which the arm of the holder fits. At least one window 17 is cut in the member 16 to expose graduations 18 located on the upper side of the arm and distributed along one of its long edges; the window having at one side a mark 19 for registration with any one of the graduations.

A sleeve 20 is screwed into the member 16 from above and has a smooth portion at the lower end extending into the slot 10; the diameter of the smooth portion being equal to the width of the slot. The axis of the sleeve is so located that it passes through the intersection of the axis of the holder and a line extending from the mark 19 at right angles to the latter axis. A large pin 21 extends down through the sleeve and is provided at its lower end with a point 22 to be pressed into a drawing board, for example, to provide a fixed center about which the holder may swing. The pin is preferably of such shape that when it is separated from the holder it may be fixed firmly to the drawing board and the sleeve in the holder be then slipped down over it. With such an arrangement it is unnecessary to try to insert a pin in a centering hole, already made, while the hole is obscured by the overlying holder. Therefore, to permit the removal of the pin when desired, and yet prevent it from dropping out of its own accord, I provide means for yieldingly securing it to the holder in such a manner that with the exertion of a little force it may be pulled out. To this end, the sleeve is enlarged toward the top to make room for an enlargement of the bore; a spring ring 24 in the annular chamber thus formed around the pin yieldingly holding the pin in place. The pin preferably has a short section intersected by the plane of the ring which is of reduced diameter, as indicated at 25. Thus the ring may normally have an internal diameter somewhat less than the external diameter of the main portion of the pin; making it necessary for the pin to expand the ring before the part below the ring can pass up through it.

A second pin, as shown in Fig. 4, having a large head, may be provided. This pin may be used to form the pin hole in the drawing board, the large head making it easy to exert a heavy pressure, when necessary, to cause the point to penetrate the drawing board. The other pin may then be set in the hole thus produced and the holder be set down to embrace it.

In using the device, the guide is placed in the holder while the slide 6 is drawn back, and the slide is then pushed firmly against the near edge of the guide to clamp it yieldingly in place. Knowing the radius of the arc in which letters or other characters are to be placed, the pin carrying slide 16 is moved along the arm of the holder until mark 19 registers with the graduation corresponding with that radius; the instrument being calibrated to bring zero at about the line of the lower ends of the letters to be made with the guide. The holder is then anchored by means of its pin at the proper center, the guide is shifted in the holder until the opening for the first letter or other character registers with the mark 15, and this character is then drawn. The opening for the next character is then brought into drawing position relative to the holder through shifting the guide and, either before or after this is done, the holder is swung laterally far enough to cause the second character to be properly spaced with the one previously drawn. This process is repeated until the legend is completed.

When lettering is to be done in concentric circles or arcs, that in one arc may be completed in the manner just explained and then the pin carrier 16 is shifted to increase or decrease the radius, as the case may be; and, the center remaining the same, the formation of characters in the second circle or arc is begun.

I claim:

1. A holder for an elongated letter guide containing openings distributed lengthwise of the same comprising an arm, means at one end of the arm to hold the letter guide crosswise of the arm for sliding movements in the direction of the length of the guide, a pin extending through the arm and having at the lower end a point to penetrate a drawing board or the like, a bearing sleeve on the arm for the pin, and means yieldingly to hold the pin in the sleeve and to release the same when a moderate force acts lengthwise on the pin.

2. A device such as described in claim 1, in which the pin is no larger in diameter at any point than the internal diameter of the sleeve, whereby the sleeve may be slipped down around the pin after the latter has been attached to the drawing board.

3. A holder for an elongated letter guide containing openings distributed lengthwise of the same comprising an arm, means at one end of the arm yieldingly to grip the lettering guide to permit lengthwise movement thereof and hold it crosswise of the arm and elevated slightly above a flat surface on which the device may be resting, said means being formed to expose the upper side of the guide in the vicinity of the axis of the arm and means to anchor the arm for angular movements across such a surface.

4. A holder for an elongated letter guide containing openings distributed lengthwise of the same comprising an arm, means at one end of the arm to grip the lettering guide and yieldingly hold it against lengthwise movement crosswise of the axis of the arm with its upper and lower faces exposed in the region intersected by said axis over an area larger than the largest opening in the guide, and means on the arm adjustable along said axis to anchor the arm to an underlying support for angular movements across such support.

5. A device of the character described comprising a flat arm widened at one end and having a large central opening in the widened part; a long undercut shoulder, higher than the thickness of a letter guide to be held, extending crosswise of the arm on the under side of the latter and beyond the outer end of said opening; means on the under side of the arm, inwardly from the opening, to engage a letter guide lying crosswise of the arm beneath the said opening and press the same

yieldingly against said shoulder and against the under face of the arm; and means to anchor the arm for swinging movements over the face of a drawing board or the like.

6. A device of the character described comprising a flat arm widened at one end and having a large central opening in the widened part; a long undercut shoulder, higher than the thickness of a letter guide to be held, extending crosswise of the arm on the under side of the arm and beyond the outer end of said opening; a T-shaped slide on the under side of the arm having the long free edge of its cross piece parallel with said shoulder and shaped to engage both an edge and a marginal portion of the under face of a letter guide underlying said opening and bearing against said shoulder and against the under surface of said widened part of the arm; a fastening between the slide and the arm that permits movements of the slide lengthwise of the arm and movements downwardly from the arm while yieldingly holding the slide against the arm in any position which the slide may occupy lengthwise of the arm; and means to connect the arm to a drawing board for swinging movements across the same.

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