

[54] MEANS FOR ATTACHING PENCILS TO
TEMPLATES

[76] Inventor: Clifford P. Dailey, 6275 Halstead,
Alta Loma, Calif. 91701

[22] Filed: June 11, 1973

[21] Appl. No.: 368,600

[52] U.S. Cl. 33/174 B, 211/69, 248/316 D,
33/104

[51] Int. Cl. B43k 31/00

[58] Field of Search 33/174 B, 104, 107;
24/73 RM, 73 SA, 221 L, 221 R; 248/74 A,
73, DIG. 3, 113, 316 D, 226 E; 211/69.1,
69.9, 69.8; 281/30

[56] References Cited
UNITED STATES PATENTS

591,804	10/1897	Barrie	33/107 R
1,160,458	11/1915	Smith	24/221 R
1,227,614	5/1917	Hauptman	24/81 PH

1,696,285	12/1928	Rile	24/109
2,171,925	9/1939	Fitts	24/73 SA

Primary Examiner—Harry N. Haroian
Assistant Examiner—John W. Shepperd
Attorney, Agent, or Firm—Boniard I. Brown

[57] ABSTRACT

A plastic clip of generally lyrate configuration has a pair of arms upstanding from a neck portion which overlies the base of the clip. An instrument to receive the clip has a T-shaped cutout void for the clip base on the instrument underside, with the clip neck snugged between inwardly directed shoulder flanges of said instrument overlying the cutout. The resulting T-shaped void is somewhat elongate with the span between the shouldering flanges being substantially equal to the thickness of the arms for inserting the clip arms there through from the bottom side of the instrument.

4 Claims, 5 Drawing Figures

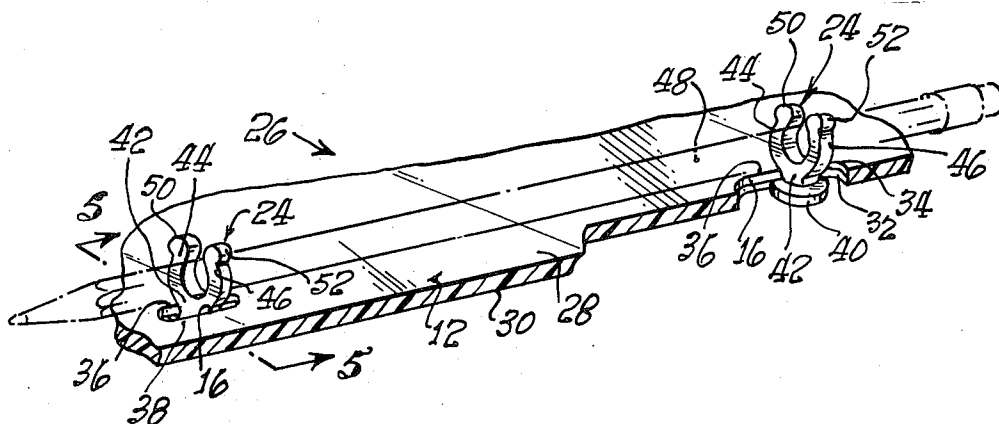


Fig. 1.

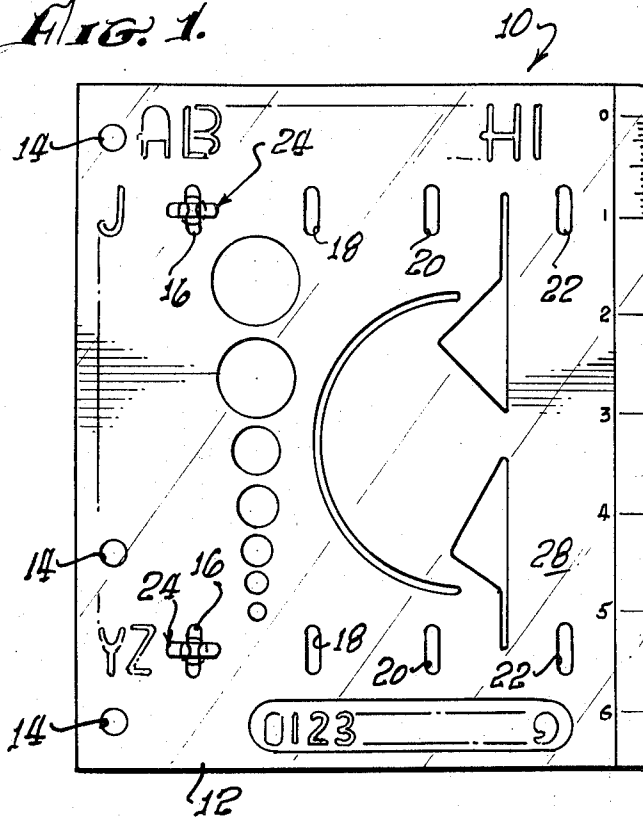


Fig. 2.

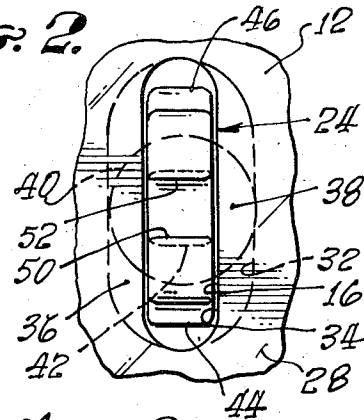


Fig. 3.

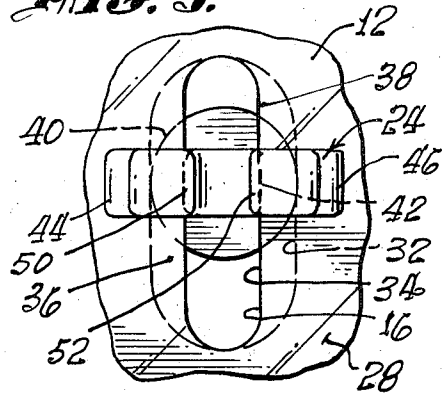


Fig. 4.

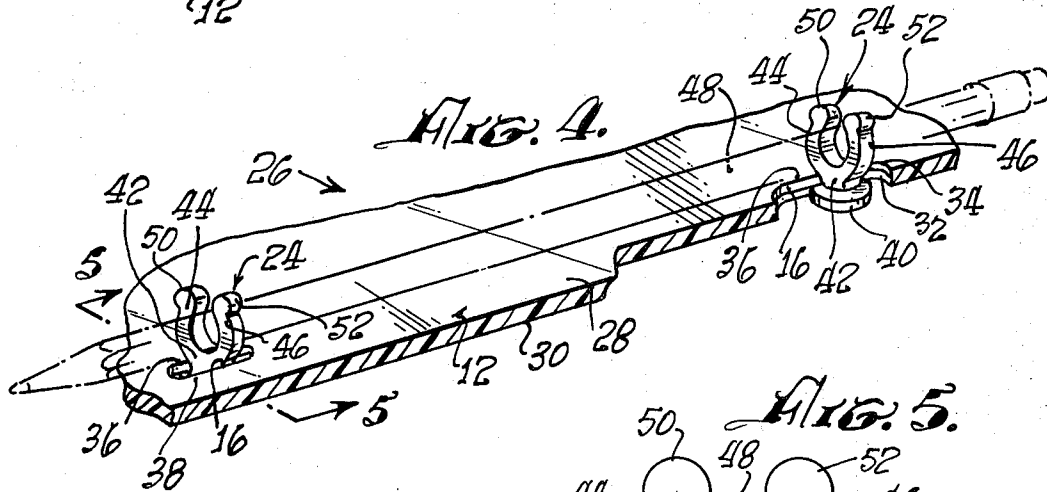
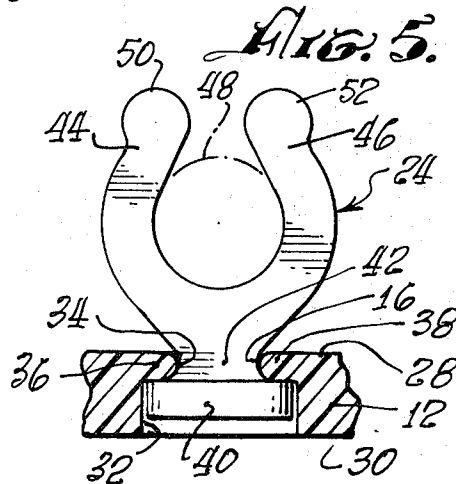


Fig. 5.



MEANS FOR ATTACHING PENCILS TO TEMPLATES

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention is directed generally to the art of drafting aids and guides and is particularly concerned with those devices of a prior art which require a graphic marking device, such as a pen or pencil, for their end use utilization.

2. Description of the Prior Art

There has long existed an unsupplied need for drafting guides such as plastic triangles, templates, and the like, provided with simple clip arrangements for removably retaining pencils, pens, and the like, for convenience and transport and immediate readiness for use. The need is particularly felt among general students who have no need nor desire for the more sophisticated devices available to the professional artist or draftsman. Rather the need is directed to inexpensive devices which are readily adaptable to being clipped in a loose-leaf notebook for handy use in class or lecture room.

As is well known, pencils, pens and the like are usually carried by students in pockets or purses, and are usually not immediately at hand when they are required for unscheduled and randomly occurring purposes such as occur in class and lecture hall. Likewise, the student may have a template with his or her classroom effects for use as the occasion requires for the rapid sketching of figures and the like. Templates, triangles, and the like are awkward by their very configuration and must of necessity be carried in notebook pockets, on the rings of notebooks, or in similar places.

It is seen from the foregoing that although the template requires a pencil or pen for its use, the two devices are usually not carried in adjacent relationship, hence the student must spend valuable time searching for them in order to bring them together for their cooperative use.

SUMMARY OF THE INVENTION

It is the general object of the invention to provide a drafting guide having cooperative devices removably secured together. It is a further general object to provide such a guide in which an instrument having a generally flat planer surface portion is provided with at least one clip outstanding in elevation from the instrument adjacent to the flat planer surface portion, for removably retaining a graphic marking device to be used with the instrument. It is a specific object to provide a guide of the type immediately aforesaid in which the clip is configured with a base portion and a neck portion immediately adjacent the base portion, the neck portion being of reduced section, and further in which the instrument is provided with a generally T-shaped slot within which said base and neck portions of said clip are received. It is an object to provide such a guide in which the T-shaped slot defines inwardly directed shoulders between which said clip neck portion is disposed, the clip having a pair of arms outstanding from the neck portion to overlie the shoulders of the instrument and adapted to removably enfold in part a graphic marking device such as a pen or pencil.

It is a particular object to provide a template and clip combination in which the template is provided with a T-shaped slot and in which the distance spanned be-

tween the shoulders of the slot is substantially equal to the thickness of the clip arms, the slot having a longitudinal length sufficient to permit the clip arms there through, whereby the clip arms may be inserted into the slot between the shoulders from below the template and thereafter rotated substantially 90° to overlie the shoulders with the clip firmly secured to the template. It is a further particular object to provide a combination as aforesaid in which said clip arms are lytrately configured of resilient plastic material for relatively soft yielding apart from each other to permit easy insertion and removal of a pen or pencil in the clip.

Other and further objects of the invention will be apparent upon consideration of the drawing when considered with the description thereof, it being obvious that the embodiment shown and described is merely by way of disclosure of the novel elements of the invention without limitation to the specific form so disclosed.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a plan view of a drafting guide illustrating a preferred embodiment of the invention;

FIG. 2 is an enlarged plan view of a portion of a template with a clip inserted through the template slot from below;

FIG. 3 is a view similar to FIG. 2 but showing the clip rotated;

FIG. 4 is an isometric fragmentary view of a portion of a template showing a pair of clips in secured positions; and

FIG. 5 is an enlarged elevation view of a clip and section of a fragment of the template, taken on the line 5-5 of FIG. 4.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawing there is shown a drafting guide 10 having an instrument in the form of a template 12 for guiding graphic marking devices such as pens, pencils, or the like in known manner. The template 12 is provided with spaced apart pulls 14 aligned near the left edge of the template for the purpose of removably securing the template 12 on the snap rings of conventional loose leaf notebooks. The particular template arrangement shown comprising guide edges for alphabet figures, numerals, circles, etc., is merely by way of illustration since the invention is amenable to use with any of a variety of templates such as electrical, electronic, chemical, furniture, architectural, or any of the infinite variety of small flat plastic templates available for use by students as well as technical and professional people.

The template 12 is provided with spaced apart pairs of slots 16, 18, 20 and 22, as shown here for the reception of clips such as the clips 24 shown disposed in the slots 16. It will be observed that the slots are somewhat elongate along a common axis for each pair. As will be explained in detail below, the elongate slots permit entry, from below the bottom face of the template 12, of the spaced apart arms of the clips, whereafter the clips are rotated 90° about their axis normal to the upper planer surface portion of a template 12 to a position whereat they are adapted to their use as pencil retainers, for example.

Referring more particularly to FIGS. 4 and 5, the fragment 26 of the template 12 shown there discloses the top planer flat surface portion 28 and the parallel

3

bottom planar surface portion 30 having spaced apart slots 16 with clips 24 disposed through the slots.

As best seen in FIG. 5, the slot 16 is generally T-shaped having an enlarged cutout portion 32 and a portion 34 of reduced section defined by inwardly directed shoulders 36 and 38.

The clip 24 of FIG. 5 is provided with a base portion 40 nested in the enlarged cutout void 32, a neck portion 42 of reduced section disposed between the shoulders 36 and 38, and a pair of arms 44 and 46 extending upwardly and divergently from the neck portion and thereby overlying, at least in part, the shoulders 36 and 38. Preferably, arms 44 and 46 are lyrate configured to removably retain a pencil, for example, shown at 48 in outlying form, wherefor the arms 44 and 46 converge somewhat from their greatest span to define at their upper end 50 and 52 a spanned distance somewhat less. Preferably the clip 24 is formed of resilient plastic material for relatively soft resilient yielding of arms 44 and 46 apart from each other to permit insertion and removal of the pencil by light finger pressure.

Referring now to FIGS. 2 and 3 there is illustrated the simple and novel means by which the clips are secured to the template. For purposes of illustration the insertion of one of the clips 24 of the pair in one of the slots 16 is shown. FIG. 2 is an enlarged plan view of a fragment 26 of the template 12 showing the clip 24 with its arms 44 and 46 inserted through the slot portion 34, with the clip base 40 nested in the enlarged cutout portion 32 of the slot 16. It will be noted that the thickness of the arms 44 and 46 is substantially equal to the span of the restricted slot portion 34 between the shoulders 36 and 38.

Referring now to FIG. 3, it is seen how the clip 24 had been rotated 90° so that the arms 44 and 46 overlies the shoulders 36 and 38 for retention of the clip 24 on the template, after the fashion thus seen on FIG. 5.

Accordingly, there has been disclosed a novel drafting guide fulfilling all the objects outlined hereinabove. Although disclosed in combination with a template, it will be recognized by those skilled in the art that the invention has utility in connection with other instruments such as triangles and the like which are utilized, for example, by students in their day-to-day classroom and lecture hall studies.

The inventor claims:

1. A drafting guide comprising:

4

a template having normally upper and lower surfaces and containing at least one undercut slot having a relatively wide lower portion opening through said lower surface and a relatively narrow upper portion opening through said upper surface, whereby said slot forms shoulders at opposite sides of said upper slot portion spaced from said lower template surfaces by said lower slot portion,

a clip of generally Y-shape removably fitted within each template slot including a central neck extending through said upper slot portion, a lower end portion comprising an enlarged base at the normally lower end of said neck extending laterally under said shoulders in contact therewith and having a thickness normal to the plane of said lower slot portion, and an upper end portion comprising a pair of resilient arms at the normally upper end of said neck normally disposed in a transverse plane of said slot and projecting above said upper template surface and laterally of said shoulders in contact therewith, whereby said clip is retained in said slot by said shoulders,

said arms of each clip being shaped to yieldably grip a marking implement therebetween,

each clip being rotatable in its slot about the longitudinal axis of its neck to a position wherein its arms are disposed in the plane of its slot, and

one of said end portions of each clip being sized relative to the dimension of its respective slot to pass through said upper slot portion for removal and replacement of the clip when it occupies said latter portion in the slot.

2. A drafting guide according to claim 1 wherein: said one clip end portion comprises said upper clip end portion.

3. A drafting guide according to claim 1 wherein: said template has a pair of said undercut slots, a pair of said clips disposed in said slots, respectively, and

said slots are co-linear whereby in the normal positions of said clips their arms are disposed in substantially parallel planes to grip opposite ends of said marking implement.

4. A drafting guide according to claim 3 wherein: said one clip end portion comprises said upper end portion of each clip.

* * * * *

50

55

60

65