

[54] **STRAIGHT EDGE WITH NON-SLIP INSERTS**

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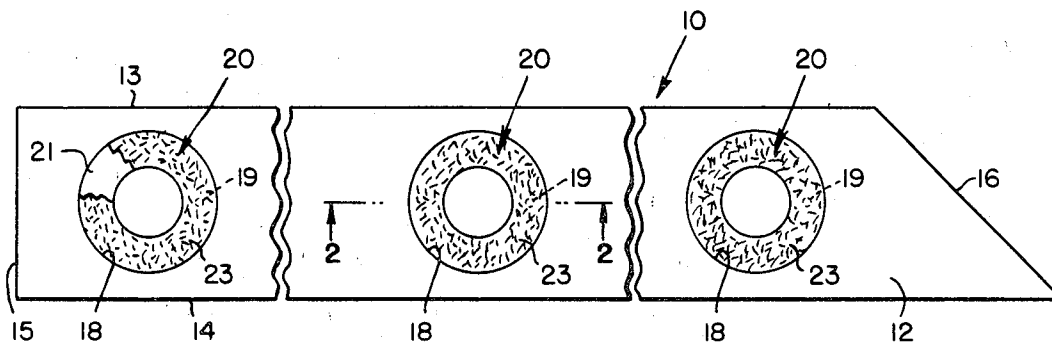
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[57] **ABSTRACT**

A flat, metal straight edge has a plurality of annular inserts releasably mounted, as by a press fit, in annular recesses formed in one side of the straight edge. Each insert has on one end a resilient, rubber-like surface, and on its opposite end a pile surface of the type sold, for example, under the trademark "Velcro." When the straight edge is used to guide a cutting tool during the cutting of a floor covering, the inserts are disposed with their pile sides out, if the floor covering is fabric, thereby to prevent the edge from sliding on the fabric. If the floor covering is a hard-surfaced linoleum or the like, the inserts are mounted with their rubber ends facing outwardly.

6 Claims, 2 Drawing Figures



STRAIGHT EDGE WITH NON-SLIP INSERTS

This invention relates to floor coverings, and more particularly to a novel straight edge for use in the installation of such coverings. Even more particularly, this invention relates to a straight edge having reversible, non-slip inserts for preventing accidental sliding of the straight edge on various types of floor covering.

One of the major problems heretofore encountered in the installation of floor coverings of both the soft, fabric variety (woven or tufted pile carpeting, etc.), and the hard surfaced or brittle variety (linoleum, congo- 10 leum, etc.), has been the difficulty encountered in accurately cutting the floor covering to suite the outline of the area that is to be covered. For example, in most such installations it is often necessary to sever a piece of floor covering along a straight line, either to match a correspondingly straight edge formed at the juncture of the floor and sidewall, or to permit two sections of floor covering to abut one another along a linear seam. For many such cuts, the craftsman installing the floor covering uses a hand-held knife or cutter together with a metal ruler or straight edge, which is placed upon the surface of the floor covering to guide the cutting knife along the line of the desired cut. However, because of the tendency of the straight edge to slide on the surface of the material that is being severed, the cut frequently is made accidentally along a jagged rather than straight line.

Heretofore rubber inserts or grommets have been employed on rulers, T-squares, etc., to grip the surface of the paper or other material upon which the instrument is placed, thus to prevent undesirable sliding of the rule or square, when in use. For straight edges of the type described, however, such inserts would not be suitable for preventing such movement during the cutting of soft floor coverings, such as for example, fabric floor coverings having pile or worsted surfaces.

Accordingly, it is a primary object of this invention to provide a novel straight edge of the type described that has reversible, non-slip inserts, which can be used to prevent undesirable sliding of the straight edge both on hard and soft surfaced floor coverings.

Still another object of the invention is to provide an improved straight edge having a plurality of reversible, non-slip inserts, each of which has a different type of non-skid or slip-resistant material on opposite sides thereof.

A more specific object of this invention is to provide for a straight edge of the type described a novel, non-slip insert, which has on one side a resilient material for resisting movement of the straight edge on a hard surface, and on its opposite side a fabric material which will tend to cling to a fabric surface to prevent accidental sliding of the straight edge thereon.

Other objects of the invention will be apparent hereinafter from the specification and from the recital of the appended claims, particularly when read in conjunction with the accompanying drawing.

In the drawing:

FIG. 1 is a fragmentary plan view showing the bottom or underside of a straight edge made in accordance with one embodiment of this invention; and

FIG. 2 is an enlarged, fragmentary sectional view taken along the line 2—2 in FIG. 1 looking in the direction of the arrows.

Referring now to the drawing by numerals of reference, 10 denotes generally an elongate, flat straight

edge having plane, parallel upper and lower surfaces 11 and 12; spaced, parallel, longitudinally extending side edges 13 and 14; an end edge 15 which extends at right angles to edges 13 and 14; and an inclined end edge 16, which forms an acute angle with edge 14, and an obtuse angle with edge 13. Preferably the straight edge 10 is made from a generally rigid material such as steel, or the like, so that its edges may be used for guiding therealong a sharp cutting tool or knife.

Intermediate its ends straight edge 10 has in its underside 12 a plurality of longitudinally spaced, annular recesses 18, which are disposed approximately medially of the side edges 13 and 14. The bottom of each recess 18 opens on the inner end of a small hole or opening 19, which is drilled or otherwise formed between the bottom of each recess 18 and the upper surface 11 of the straight edge.

Removably mounted in each of the recesses 18 coaxially thereof is an annular, non-slip insert 20. Each insert comprises a rigid annulus or ring 21, which is seated snugly, or with a press-fit, in the associated recess 18 coaxially thereof. Secured to one end of each ring 21 coaxially thereof is a thin, ring-shaped layer 22 of resilient material, such as rubber, or the like. Secured to the opposite end of each ring 21 is a thin, ring-shaped layer 23 of a pile fabric material such as is sold, for example, under the tradename "Velcro." On one side thereof (the upper side in FIG. 2) each layer 23 has a plurality of rigid, generally hook-shaped pile elements 24 which project outwardly from the face of the fabric in known manner.

When the straight edge 10 is to be used in the cutting of a fabric floor covering or carpet, the inserts 20 are positioned in the recesses 18 with the fabric surfaces 23 thereof facing outwardly as in FIGS. 1 and 2, so that the pile elements 24 on each layer 23 project outwardly beyond the adjacent lower surface 12 of the straight edge for engagement with the surface of the carpet or fabric that is to be cut. The hook-shaped elements 24 thus penetrate and cling to the fabric that is to be cut, thereby preventing accidental sliding movement of the straight edge 10 relative to the fabric during the cutting operation.

If a hard-surfaced floor covering is to be cut, the inserts 20 can be removed, for example, by inserting a small pin through each opening 19 to force the associated insert 20 out of its recess 18; after which the inserts are reversed and reinserted into the recesses 18 so that the resilient surfaces 22 thereof will project slightly beyond the underside 12 of the straight edge so as to grip the hard surface of the material that is to be cut, thus to prevent sliding movement of the straight edge 10 on this hard surface during the cutting operation.

From the foregoing it will be apparent that the instant invention provides a very simple and inexpensive means for increasing the utility of the average straight edge — i.e., by making it suitable for cutting both hard and soft-surfaced floor coverings. Heretofore conventional straight edges have had a tendency to slide relative to the material being cut. However, by using the novel inserts 20 disclosed herein, the straight edge 10 can be rendered substantially more stable during a cutting operation, whether the operation be on, for example, linoleum or pile carpeting. Since the inserts 20 are releasably press-fit in the associated recesses 18, it is a relatively simple matter to convert the straight edge 10

for use with either of the above-noted types of floor covering.

While it has been suggested that layers 22 and 23 be made from rubber and "Velcro" material, respectively, it will be readily apparent to one skilled in the art that similar materials may be employed in place thereof. For example, instead of using "Velcro" material it is clear that various types of pile fabric 23 can be employed, provided that the pile elements thereof will project into frictional engagement with the soft surface of the fabric carpeting that is to be cut. For that matter, layer 23 could comprise a rigid member having a plurality of pointed tines or burrs, which would project beyond surface 12 to engage the soft face of a pile carpet, or the like, when the inserts 20 are disposed as shown in FIGS. 1 and 2. Similarly, the layer 22 could be made of a synthetic sponge rubber or resilient plastic material, which would tend to grip or cling to a hard surface, such as found, for example, on linoleum and other such hard-surfaced floor coverings.

Having thus described my invention, what I claim is:

1. A cutting tool guide for use in cutting either soft or hard floor coverings, comprising
 - an elongate member having at least one longitudinally extending straight edge for guiding a cutting tool, and a plane undersurface containing a plurality of spaced openings, and
 - a reversible insert removably mounted in each of said openings selectively to have one end or the other thereof face outwardly toward said undersurface, each of said inserts having on said one end thereof a plurality of closely spaced, projections that extend slightly beyond said undersurface for engagement in a soft floor covering to resist sliding movement between said member and said soft floor covering, when said one end faces outwardly, and
 - each of said inserts having on said other end thereof a resilient surface that extends slightly beyond said undersurface for engagement with a hard floor covering to resist sliding movement between said member and said hard covering, when said other end faces outwardly.
2. A cutting tool guide as defined in claim 1, wherein

each of said inserts comprises

a rigid body having a configuration similar to that of the opening in said member in which it is mounted, a layer of fabric is secured to one end of said body and has a pile surface defining said spaced projections, and

a layer of resilient material is secured to the other end of said body to form thereon said resilient surface.

3. A cutting tool guide as defined in claim 2, wherein each of said openings comprises a recess formed in undersurface of said member, and

said member has therein a further plurality of openings, each of which opens at one end on the side of said member opposite said undersurface, and at its opposite end on the bottom of one of said recesses.

4. A straight edge, comprising

an elongate plate having plane, parallel, upper and lower surfaces, respectively, and a longitudinal edge disposed in a plane extending transversely of said surfaces, and having a plurality of longitudinally spaced recesses formed in said lower surface, a plurality of flat inserts removably mounted in said recesses,

a layer of resilient material secured to one end of each of said inserts, and

a layer of fabric secured to the opposite end of each of said inserts,

each of said inserts being reversibly seated in one of said recesses with the outer end thereof projecting slightly beyond said lower surface.

5. A straight edge as defined in claim 4, wherein said layer of resilient material is made from a foamed, spongy material, and said fabric has a pile surface comprising a plurality of spaced, hook-shaped projections.

6. A straight edge as defined in claim 5, wherein said inserts and recesses are annular in configuration, and said inserts are press-fit in said recess coaxially thereof.

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