March 21, 1939. C. W. HARSIN 2,151,467

PAPERHANGER'S FOLDING STRAIGHT EDGE

Filed Jan. 31, 1938

FIG. 1

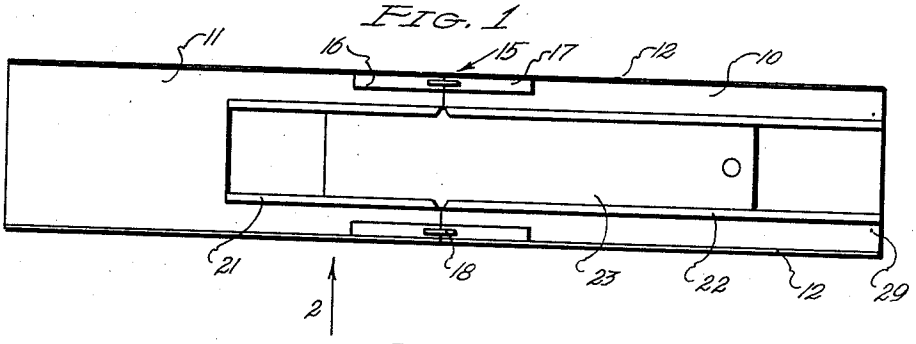


FIG. 2

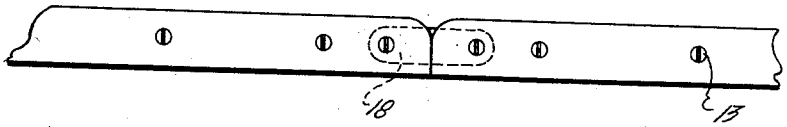
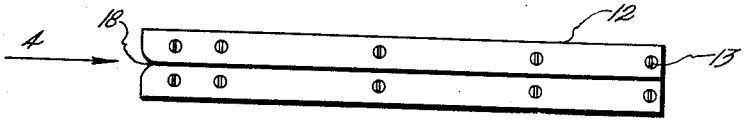


FIG. 3



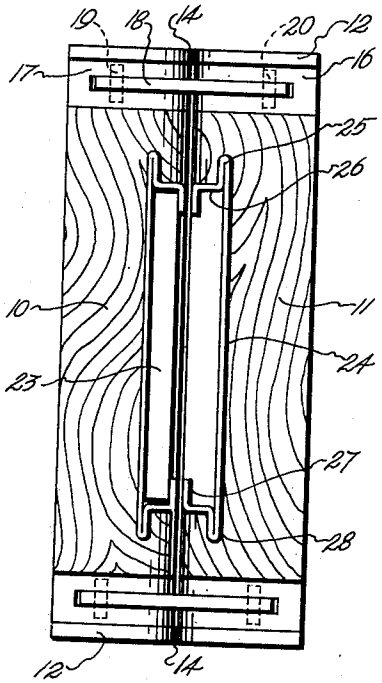


FIG. 4

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PAPERHANGER'S FOLDING STRAIGHTEDGE

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3 Claims. (Cl. 33—107)

This invention relates to a paper hanger's folding straight edge and may be considered an improvement over the construction disclosed in my prior United States Letters Patent No. 1,535,917, issued April 28, 1925.

In my prior patent there is disclosed a paper hanger's folding straight edge consisting of two elongated sections arranged in end-to-end relationship and hingedly connected together whereby the sections may assume a collapsed position wherein one section overlies the other or an extended position wherein the sections are arranged in alignment and locked in this position by means of a locking bar slidable in guides recessed in the bodies of the sections. In the construction disclosed therein a conventional type of hinge was employed to hingedly connect the sections together and when this hinge was properly mounted, the knuckles projected slightly above the surface of the sections. Also, the guides for the locking bar were fastened in their respective recesses in the sections by means of screws.

Disadvantages of this construction became apparent with continued use in that the projecting knuckles of the hinges were objectionable and with continued use, the screws that attached the guides in their recesses in the bodies of the sections had a tendency to loosen and to interfere with the sliding of the locking bar.

It is an object of the present invention to provide an improved paper hanger's folding straight edge wherein an improved form of hinge is used that would eliminate the objectionable projections and wherein the guides for the locking bar are so constructed and installed as to avoid the use of screws, nails, or equivalent fastening devices so that these fastening devices cannot loosen or interfere with the sliding of the locking bar.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawing for an illustrative embodiment of the invention, wherein:

Figure 1 is a top plan view of the improved straight edge in an extended position, illustrating the locking bar as having been partially slid into locking position;

Fig. 2 is a partial view of the edge of the straight edge illustrating the nature of the hinge employed and may be considered as having been taken in the direction of the arrow 2 upon Fig. 1;

Fig. 3 is an edge view of the straight edge illustrating the straight edge in collapsed or folded position; and

Fig. 4 is a view in end elevation of the straight edge when in collapsed position and may be considered as being taken in the direction of the arrow 4 upon Fig. 3.

Referring to the accompanying drawing wherein similar reference characters designate similar parts throughout, the improved straight edge consists of two elongated sections 10 and 11 preferably formed of wood or similar material. These sections are arranged end to end and are provided at their edges with metal wear strips indicated at 12 which may be fastened such as by screws 13. The wear strips preferably cover the entire edges of the sections and in the preferred form of construction they slightly project beyond the opposed faces of the sections 10 and 11 as indicated at 14 on Fig. 4. The sections are hingedly connected together as by a double or concealed hinge generally designated at 15. Each hinge comprises two body parts 16 and 17 which are recessed in the sections 10 and 11 and disposed inwardly of the adjacent ends of the wear strips 12. The body parts are connected by links 18 which are pivotally connected as by pintles 19 and 20 so that, in effect, there is a double hinge in that each link 18 has two pivots. This construction is such as to enable the two sections 10 and 11 to fold relatively to each other and to assume a position, as shown in Fig. 3, where one section overlies the other. The links 18 being recessed in the body parts 16 and 17 it will be noted that no portion of the hinge projects up above the surface of the sections 10 and 11 when the straight edge is unfolded as shown in Fig. 1. It will be noted that the upper opposed edges of the sections are rounded over to permit the sections to be folded so that their upper surfaces will be opposed. The lower edges are not rounded and are adapted to abut when the sections are extended. Guides 21 and 22 are recessed in the upper opposed faces of the sections 10 and 11. The guide 21 extends approximately half the length of the section 11 while guide 22 extends from end to end of section 10. These guides receive and retain a sliding locking bar 23 which is equal in length to section 10 so that it may assume a position wholly within that section or it may be slid into a position wherein the locking bar is partially disposed within section 11 and partially disposed within section 10 so as to lock the sections in extended and aligned positions. On sliding the locking bar 23 to the right from the position shown in Fig. 1 so as to assume a position wholly within section 10 the straight

edge is unlocked and is capable of being folded into the position shown in Fig. 3.

A feature of the invention resides in the construction of the guides 21 and 22. Each guide is formed of an elongated section of sheet metal bent to provide a back or bottom 24, the side edges of which are reversely folded as at 25 to provide outwardly extending flanges. The side edges are then bent upwardly as indicated at 26 forming sides for the guide, and finally, they are bent inwardly to provide inwardly extending flanges 27 which overlie the top of the locking bar. The guide 21 is made approximately one-half as long as guide 22 but otherwise both guides are similarly shaped. The opposed faces of the sections 10 and 11 are recessed to receive these guides and are grooved as indicated at 28 so as to receive the flanges formed by the reverse folds at 25. When the sections 10 and 11 are thus formed, the guides 21 and 22 are inserted by being forced endwise into the recesses and into the grooves 28. No screws or other fastening devices are used to attach these guides in position except small brads 29 may be driven through the body of section 10 and through the ends of the flanges on guide 22 to prevent guide 22 from sliding out of its grooves. It is unnecessary to use any fastening devices for guide 21.

From the above-described construction, it will be appreciated that in the improved paper hanger's folding straight edge the construction of the hinge is such that no portion thereof projects when the straight edge is unfolded. Furthermore, as there are no screws or other fastening devices driven through the bottom or back 24 of the guide, these screws cannot loosen under continued usage to interfere with the sliding of the locking bar 23.

Various changes may be made in the details of construction without departing from the spirit or scope of the invention as defined by the appended claims.

I claim:

1. A folding straight edge comprising two elongated sections arranged end to end, means hingedly connecting the sections, guides recessed in the sections, a locking bar slidable in the guides adapted to assume a position wholly within one section or a position partially within each section, each guide providing sides, a bottom, flanges overlying the locking bar, and anchoring flanges recessed in the bodies of the sections.

2. A folding straight edge comprising two elongated sections arranged end to end, means hingedly connecting the sections, guides recessed in the sections, a locking bar slidable in the guides adapted to assume a position wholly within one section or a position partially within each section, each guide providing a bottom, sides, and flanges at the tops of the sides overlying the locking bar, and anchoring flanges at the bottom of the sides which anchoring flanges are recessed in the bodies of the sections.

3. A folding straight edge comprising two elongated sections arranged end to end, means hingedly connecting the sections, guides recessed in the sections, a locking bar slidable in the guides adapted to assume a position wholly within one section or a position partially within each section, each guide being formed of sheet metal bent to provide a bottom having reverse folds at its side edges forming anchoring flanges, sides, and inwardly extending flanges at the tops of the sides overlying the locking bar.

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