Jan. 4, 1949. W. M. HALL 2,458,072

WINDOW PULLEY GAUGE

Filed April 6, 1946

Fig. 1

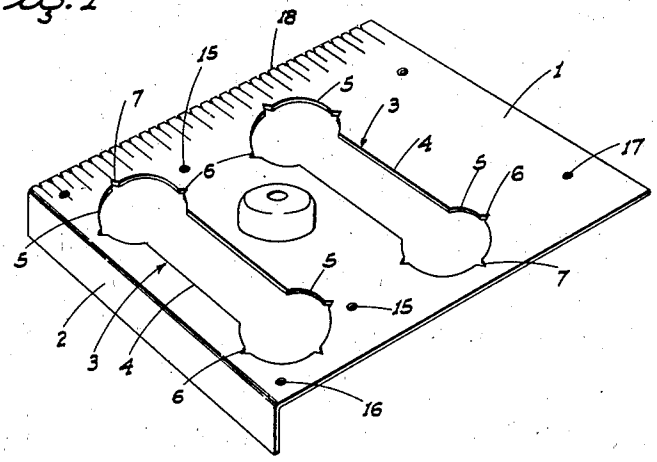


Fig. 2

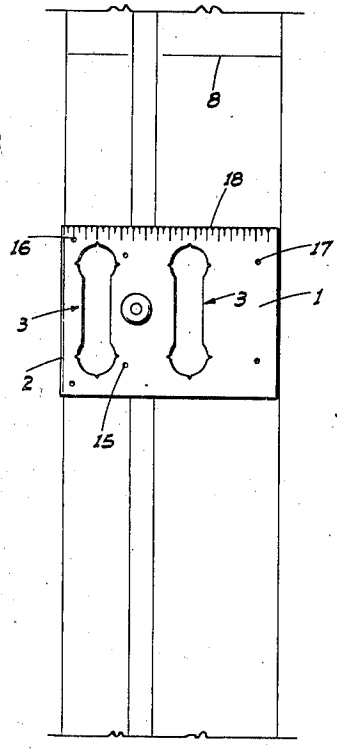


Fig. 3

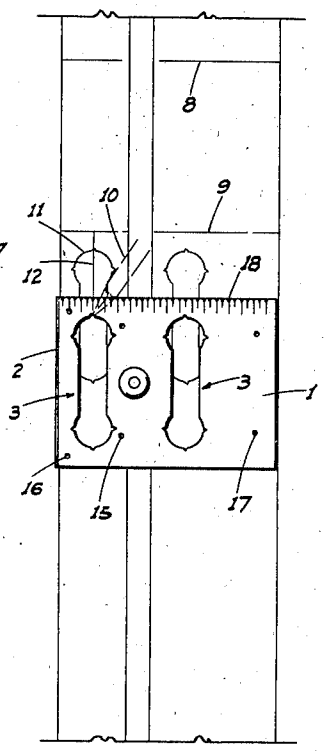
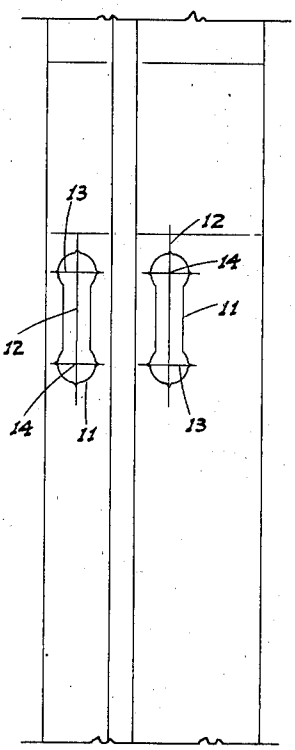


Fig. 4



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WINDOW PULLEY GAUGE

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1 Claim. (Cl. 33—174)

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This invention relates to the carpentry art, and is particularly directed to a gage for accurately and quickly marking out a pattern for installation of window pulleys in window frames. The object of the invention is to produce a gage of the character noted in which the carpenter may, with very few manipulations of the gage, effect the marking out of such patterns.

A further object of the invention is to produce such a gage which may be useful in marking out the patterns where two different commonly known standard type of pulleys are used.

A still further object of the invention is to provide such a gage that may be used not only for cutting out the patterns for the installation of the pulleys, but also may be used in related operations such as marking the correct bevel for the window sill and for measuring and marking off materials to be cut down in size.

A further object of the invention is to produce a simple and inexpensive device, and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects are accomplished by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings:

Fig. 1 is a perspective view of the improved gage.

Fig. 2 shows the gage as mounted on the window stile in the positon for marking out the pattern of the pulley slots.

Fig. 3 is a similar view showing the gage as it would apear as it was being moved down to draw the longitudinal center line for the pattern of the pulley slots.

Fig. 4 is a plan view of the window stile showing the patterns for the pulley slots after they have been delineated on the stile through the use of the improved gage.

Referring now more particularly to the characters of reference on the drawings, the improved gage comprises a relatively flat plate 1 on one edge of which is a guide flange 2 extending at right angles to the plate 1. Blanked out of the plate 2 are slots 3, each slot being identical with the other and of a configuration conforming to the pattern of a pulley slot to be cut into the window stile. Each said slot 3 comprises an elongated rectangular portion 4 terminating at each end in a substantially circular orifice 5 which registers with the portion 4. In the sides of the plate 1 adjacent each orifice 5 are diametrically opposed notches 6, and at each outer end of each

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orifice 5 there is a notch 7; the notches 7 in the two opposed notches being diametrically opposed to each other and extending substantially in line with the longitudinal center line of the slot 3.

When the device is to be used it is first determined what length the window stile is to be cut. The gage is then squared on the stile and the lines are marked for the sill. Proper measurements are then made for the header, and the stile is ruled off, as at 8, accordingly.

The gage is then squared against the stile with the edge of the gage on the inside of the header mark 8. A marker line 9 is then drawn along the bottom side of the gage. The gage is then moved downwardly on the stile so that the upper side of the gage rests on the marker line 9. This positions the gage at the exact place where the pulleys are to be installed.

A pencil 10 is then traced around the cut-out portions 3 so as to outline the form of the slots 11 to be cut for the pulleys, as shown in full lines in Fig. 4. While the gage is still in the position in which this outline has been made the pencil is placed in the upper notch 7. The gage is then drawn down over the stile, during which operation the center line 12 for the pulley slots is drawn on the stile. The gage is then placed with one edge extending across the configuration of the diametrically disposed notches which have been traced on the stile, and lines 13 are drawn across these points. This establishes the exact centers 14 for boring the end holes of the slots for the installation of standard window pulleys. These are bored out and then the connecting slots are cut out to form the complete openings for the reception of the pulleys. This establishes the practice used on one type of commonly used pulley.

There is also another type of pulley known as the jam-proof pulley, in which a substantially rectangular slot is cut in the stile. When the gage is to be used for this purpose it is positioned as shown in Fig. 2. No outline of the slot, however, is traced. Instead, a pair of spaced points are marked off on the stile by inserting the pencil through small holes 15 which extend through the plate 1. The gage is then moved down to these points and lines are drawn across the stile. The pencil is then placed against the sides of the portion 4 of the slot and the gage moved up and down in order to mark side lines on the stile. The pencil is then placed in one of the notches 7, and the gage and pencil is drawn downward to mark the center line for making the borings or other cuts for the pulleys; such resulting cuts being of

the exact measurements necessary for the installation of the jam-proof type of pulley.

The gage may also be used for marking on the stile, the correct bevel at which it must be cut in order to fit the window sill. To do this the gage is placed on the stile where the sill is to be located and the pencil projected through holes 16 and 17 which extend through the plate 1, and which are offset relative to each other so that when a line is drawn across the points thus marked on the stile this line will be established on the usual standard slant at which the window sill extends. This marking may be made by a try-square or by manipulation of the plate 1.

The gage may also be used for measuring and marking off materials to be cut down in size. When this is to be done there is provided a ruled edge 18 which is deeply notched in eighths of inches. The point of the pencil may be placed in one of these notches, which indicates the required measurement, and the gage and pencil is then drawn along the board, thus accurately and quickly marking it for planing or sawing.

It will also be obvious that the gage may be used for squaring small materials.

This gauge can also be used to get centers for boring holes for sash saddles, which are sometimes used instead of the conventional sash pulleys.

The sash saddle is a wooden plug 1 inch in diameter by 1½ inches long, designed for the sash cord to slide through.

From the foregoing description it will be readily seen that there has been produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as set forth herein.

Having thus described the invention, the following is claimed as new and useful, and upon which Letters Patent are desired:

A gage comprising a flat plate, a flange projecting at right angles to one edge of the plate, the plate being provided with a slot which comprises a substantially rectangular portion terminating at each end in a substantially circular orifice, the plate being provided with a pair of notches disposed in opposed relation diametrically of each orifice, and such plate being also provided with a pair of notches disposed in opposed relation substantially in line with the longitudinal center of the slot.

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