J. MICHALOVITZ.

GLAZIER'S T-SQUARE GAGE.

APPLICATION FILED DEC. 30, 1918.

1,298,995. Patented Apr. 1, 1919.

FIG. 1.

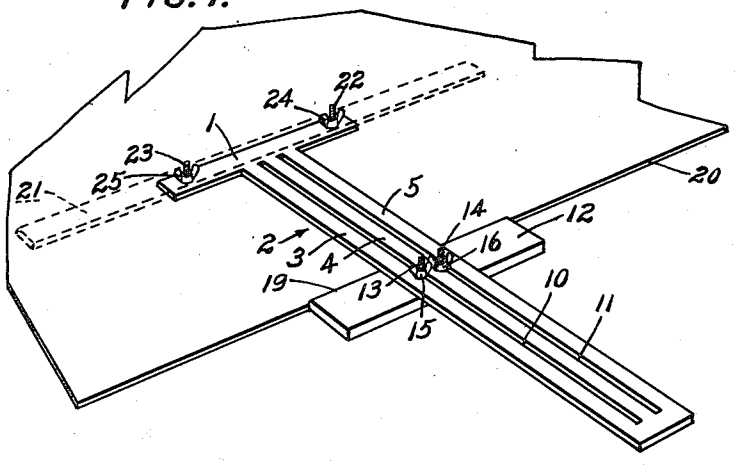


FIG. 5.

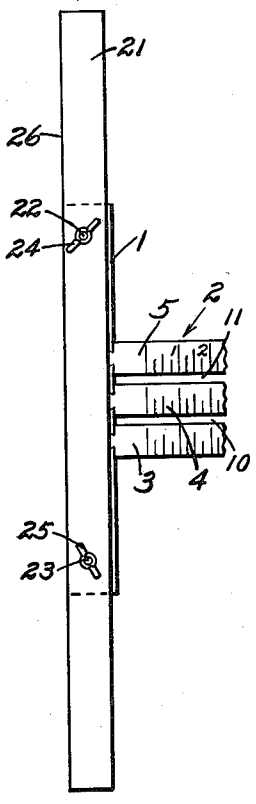


FIG. 2.

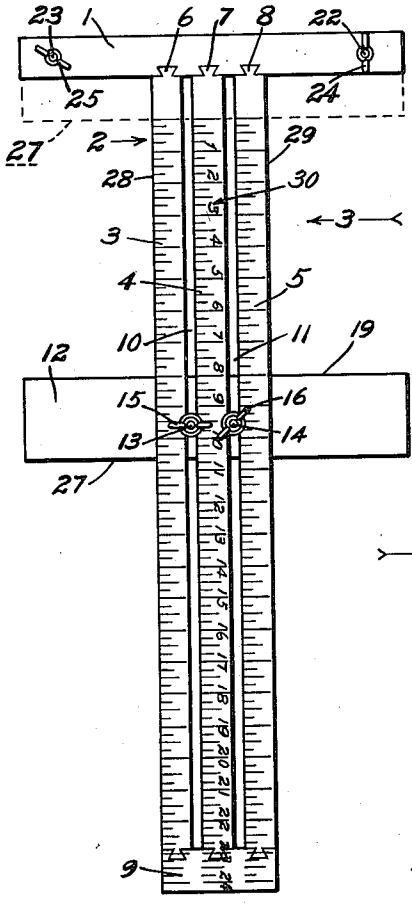


FIG. 3.

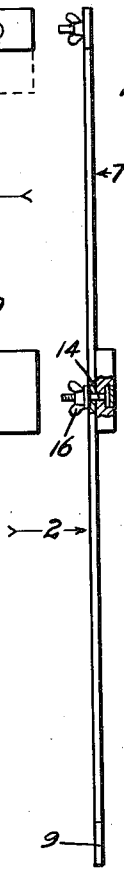
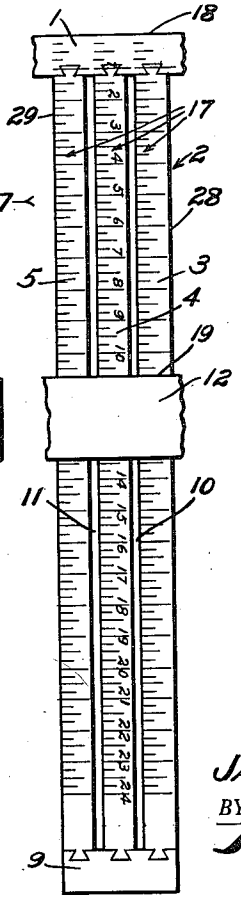


FIG. 4.



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GLAZIER'S T-SQUARE GAGE.

1,298,995. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed December 30, 1918. Serial No. 268,962.

To all whom it may concern:

Be it known that I, JACOB MICHALOVITZ, a citizen of the United States, residing at 512 Crocker street, Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Glaziers' T-Square Gages, of which the following is a specification.

My object is to make a glazier's T square gage, and my invention consists of the novel features herein shown, described and claimed.

Figure 1 is a perspective showing a glazier's T square gage embodying the principles of my invention in use for cutting glass, the glass plate being broken away to economize space.

Fig. 2 is a detail top plan view of the T square gage shown in Fig. 1, the view being taken looking in the direction indicated by the arrow 2 in Fig. 3.

Fig. 3 is an edge view looking in the direction indicated by the arrow 3 in Fig. 2.

Fig. 4 is a fragmentary bottom plan view looking in the direction indicated by the arrow 4 in Fig. 3.

Fig. 5 is a fragmentary top plan view showing an extension straight edge applied to the normal straight edge shown in Fig. 2.

Referring to the drawings in detail, the rigid head 1 is rigid with the blade 2. The blade 2 consists of parallel bars 3, 4 and 5, and the ends of the bars 3, 4 and 5 have dovetail tongues 6, 7 and 8 fitting in dovetail slots formed at the center and inner edge of the head 1. The head 1 and the bars 3, 4 and 5 are of the same thickness, and the head 1 extends equal distances both ways from the blade as is usual in a T square. The other ends of the bars 3, 4 and 5 are rigidly connected together by a cross piece 9 having dovetail slots to receive dovetails extending from the bars and the cross piece 9 is the same thickness as the bars, so that the head 1 and blade 2 will lie flat upon a level surface either side up. In securing the bars 3, 4 and 5 together by the rigid head 1 and the cross piece 9, the bars are evenly spaced apart to form longitudinal parallel slots 10 and 11. The movable head 12 is the same length as the head 1 and substantially twice as wide and somewhat thicker, and the movable head 12 fits upwardly against the rigid head 1 and the blade 2, and screw threaded studs 13 and 14 are fixed in the movable head 12 in positions to extend through the slots 10 and 11, and wing nuts 15 and 16 are mounted upon the studs above the bars 3, 4 and 5, so that the head 12 may be moved to the limits of the slots 10 and 11 and clamped to the bars 3, 4 and 5. The studs 13 and 14 are fixed in the movable head 12 by inserting the studs upwardly through the head, embedding the heads of the studs in the head 12, and fastening the studs rigid in place with cement or the like, so that the head 12 is smooth on its lower face.

On the lower side of the rigid head 1 and the blade 2 are graduations 17, preferably in inches and fractions of inches, the graduations reading downwardly from the straight outer edge 18 of the rigid head 1, and the graduations extending across the lower faces of the bars 3, 4 and 5 on lines parallel with the edge 18, so that by loosening the nuts 15 and 16 and turning the gage bottom upward, the movable head 12 may be accurately set a desired distance from the edge 18 with the straight edge 19 of the movable head parallel with the edge 18, and then the movable head held securely in place by tightening the nuts 15 and 16.

If it is desired to cut a piece of glass eleven inches wide, for instance, the edge 19 is set on the eleven inch mark, as in Fig. 4; then the gage may be turned right side up, the edge 19 placed against the plate 20 of glass and a glass cutter moved along the edge 18 to cut the glass. If it is desired to have a straight edge longer than the edge 18 upon the rigid head 1, an extension straight edge 21 may be employed. Screw threaded studs 22 and 23 are fixed in the rigid head 1 and extend upwardly. The straight edge 21 has perforations to receive the studs 22 and 23, and then nuts 24 and 25 are applied to the screws and screwed down upon the extension straight edge 21 to clamp the extension straight edge rigidly to the rigid head 1. The extension straight edge 21 may be simply a long slat having a straight edge 26.

The movable head 12 will pass upwardly until the studs 13 and 14 engage the inner face of the rigid head 1, and then the edge 19 of the movable head will be flush with the edge 18 of the rigid head, and when it is desired the movable head 12 may be adjusted any distance from the edge 18 within limits of the slots 10 and 11.

If the movable head is clamped with the edge 19 flush with the edge 18, as indicated

in dotted lines in Fig. 2, then the whole device may be used as a T square, the edge 27 upon the movable head 12 being at right angles to the edges 28 and 29 of the blade 2. Upon the upper face of the blade 2 there is a series of graduations 30 reading downwardly from the edge 27 when the movable head 12 is in position to be used as a T square, said graduations extending straight across the bars 3, 4 and 5.

Various changes may be made without departing from the spirit of my invention as claimed.

I claim:

1. A glazier's T square gage comprising a rigid head, a blade extending from one side of the head and having longitudinally extending parallel slots, a movable head fitting against the blade, studs fixed in the movable head and extending through the slots, and clamping nuts upon the studs.

2. A glazier's T square gage comprising a rigid head; bars extending from one side of the rigid head and forming a blade having parallel slots, there being graduations reading downwardly from the outer edge of the rigid head upon the blade; a movable head fitting against the blade; studs fixed in the movable head and extending through the slots; and nuts upon the studs against the blade, so that the movable head may be accurately adjusted and set relative to the straight edge of the rigid head.

3. A glazier's T square gage comprising a rigid head; bars extending from the center of one side of the head and forming a blade having parallel slots, the blade and rigid head being flush on the upper and lower faces, and the outer face of the head being a straight edge; a movable head fitting against one face of the blade; studs fixed in the movable head and extending through the slots; clamping nuts upon the studs; graduations upon one face of the rigid head and blade and reading from the straight edge of the rigid head; screw threaded studs fixed in the rigid head; and an extension straight edge adapted to be mounted upon the studs of the rigid head.

4. A glazier's T square gage comprising a rigid head having a straight outer edge; bars extending from the rigid head and forming a blade having parallel slots, the rigid head and blade being flush on one side; a movable head fitting against the flush side of the blade; studs fixed in the movable head and extending through the slots; and clamping nuts upon the studs, so that the movable head may be moved and clamped into position to form a T square, there being graduations upon the opposite face of the blade reading from the inner face of the movable head when in T square position.

In testimony whereof I have signed my name to this specification.

JACOB MICHALOVITZ.