(No Model.)

H. B. SMITH.

BEVEL GUIDE FOR SAW TABLES.

No. 453,893. Patented June 9, 1891.

Fig. 1.

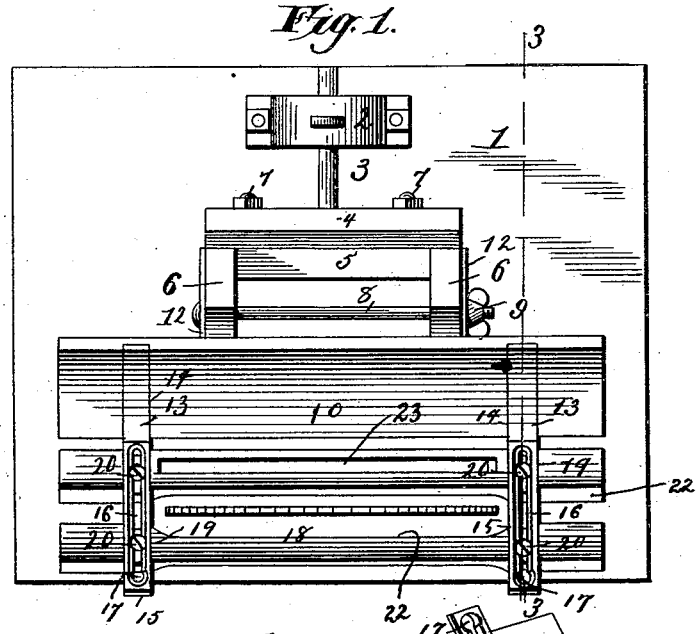


Fig. 2.

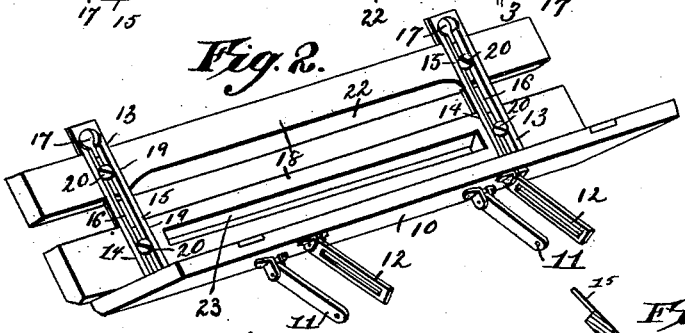


Fig. 4.

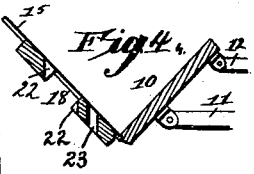
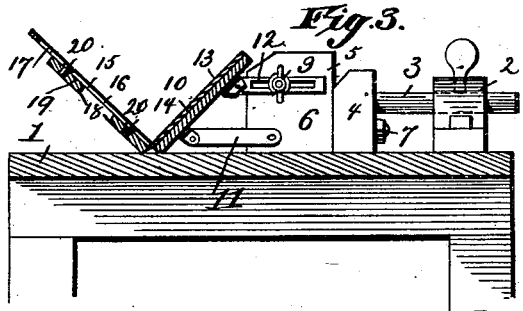


Fig. 3.



Witnesses

H. G. Dieterich.

Inventor

H Burton Smith

By his Attorneys,

Wm. Bagger & Co.

C A Snow & Co.

UNITED STATES PATENT OFFICE.

H BURTON SMITH, OF PHILADELPHIA, PENNSYLVANIA.

BEVEL-GUIDE FOR SAW-TABLES.

SPECIFICATION forming part of Letters Patent No. 453,893, dated June 9, 1891.

Application filed August 5, 1890. Serial No. 361,056. (No model.)

To all whom it may concern:

Be it known that I, H BURTON SMITH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Bevel-Guide for Saw-Tables, of which the following is a specification.

This invention relates to bevel-guides for saw-tables; and it has for its object to provide a device of this class which shall be simple in construction and efficient in operation, and which shall take the place of the tilting saw-table now usually employed for beveled work, and which is objectionable on account of the expense of the machine.

With these ends in view my invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view of a saw-table having my improved bevel-guide attached. Fig. 2 is a perspective view of the bevel-guide detached. Fig. 3 is a sectional view taken on the line 3 3 in Fig. 1. Fig. 4 is a sectional detail view of the bevel-guide.

Like numerals of reference indicate like parts in all the figures.

1 designates the saw-table, which is provided with a box or bearing 2 for a rod 3, carrying the ordinary straight guide 4.

5 designates a block provided with laterally-extending wings or flanges 6 6. This block is secured detachably to the straight guide 4 by means of bolts 7.

Through the wings or flanges 6 of the block 5 extends a shaft 8, provided at one end with a thumb-nut 9. 10 designates a guide-board, the lower inner side of which is connected with the flanges 6 by means of pivoted links 11. Slotted links 12 are connected pivotally to the inner side of the guide-board 10, near the upper edge of the latter, and the slots in the said links work over the ends of the longitudinal shaft or rod 8, that extends through the flanges 6. It will be seen that by this method of connecting the guide-board 10 with the flanges 6 it may be readily adjusted to any desired angle or inclination, and may be secured at such adjustment by simply tightening the thumb-nut 9.

The guide-board 10, which practically constitutes the bevel-guide, is provided with right-angled brackets 13, secured in grooves or recesses 14 in its upper side. The outwardly-extending arms 15 of said brackets are provided with slots 16, the outer ends of which terminate in eyes or enlargements 17. Guide-slats 18, having transverse grooves 19 for the accommodation of the arms 15 of the angle-irons, are secured to the latter by means of set-screws 20, the heads of which work in the slots 16, which thus admit of the convenient adjustment of said slats. The latter may also be conveniently removed by simply loosening the set-screws and moving the slats in an outward direction, when the heads of the set-screws may pass out through the eyes 17 at the outer ends of slots 16.

The edges of the supporting-slats 18 are to be beveled, as shown at 22, so as not to interfere with the saw at any position to which the guide may be adjusted, and the lower slat 18 may have a slot 23, whereby the saw can be operated therethrough nearer the angle than in the opening between the slats.

The operation of my invention and its advantages will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed, by those skilled in the art to which it appertains. The slats 18 are to be adjusted on opposite sides of the saw, and the said slats, together with the guide-board 10, form a trough, in which the material to be operated upon may be accurately guided past the saw. The guide-board 10 may be readily adjusted by means of the slotted links 12 to any desired position, and the position of the said board with relation to the saw may also be gaged by adjusting the rod 3 of the straight guide in its boxing, where it is secured in the usual manner by a set-screw.

It will be seen from the foregoing that my improved bevel-guide forms a complete attachment, which may be readily applied by bolting it to the straight guide which is found upon any ordinary saw-table.

The construction of the device is exceed-

ingly simple, and it may be furnished at an expense very much less than that of a tilting saw-table, which it in every respect supplants.

Having described my invention, what I claim is—

1. In a bevel-guide, the combination of the guide-board, means for tilting and adjusting the same, the angular brackets secured to the guide-board, and the supporting-slats attached to said brackets, substantially as set forth.

2. In a bevel-guide, the combination of the guide-board, means for tilting and adjusting the same, the angular brackets secured to the guide-board, and the supporting-slats secured adjustably to the said brackets, substantially as set forth.

3. In a bevel-guide, the combination of the guide-board, the angular brackets secured to the same and having outwardly-extending slotted arms, and the supporting-slats having set-screws whereby they are mounted adjustably upon said arms, substantially as set forth.

4. In a bevel-guide, the combination of the adjustable guide-board, the angular brackets secured in recesses in the outer side of said guide-board and having outwardly-extending slotted arms, and the bevel-edged supporting-slats attached adjustably to the said slotted arms, substantially as set forth.

5. A bevel-guide for saw-tables, comprising a block having laterally-extending flanges, a rod extending through said flanges and having a thumb-nut, a guide-board connected with said flanges at its lower end by means of pivoted links and at its upper end by means of slotted links working over the rod having the thumb-nut, the angular brackets secured to said guide-board, and the supporting-slats secured adjustably to the outwardly-extending arms of said brackets, the whole adapted to be connected detachably with the straight guide of an ordinary saw-table, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

H BURTON SMITH.

Witnesses:
WALTER W. J. LANCE,
ED. J. MCGROGAN.