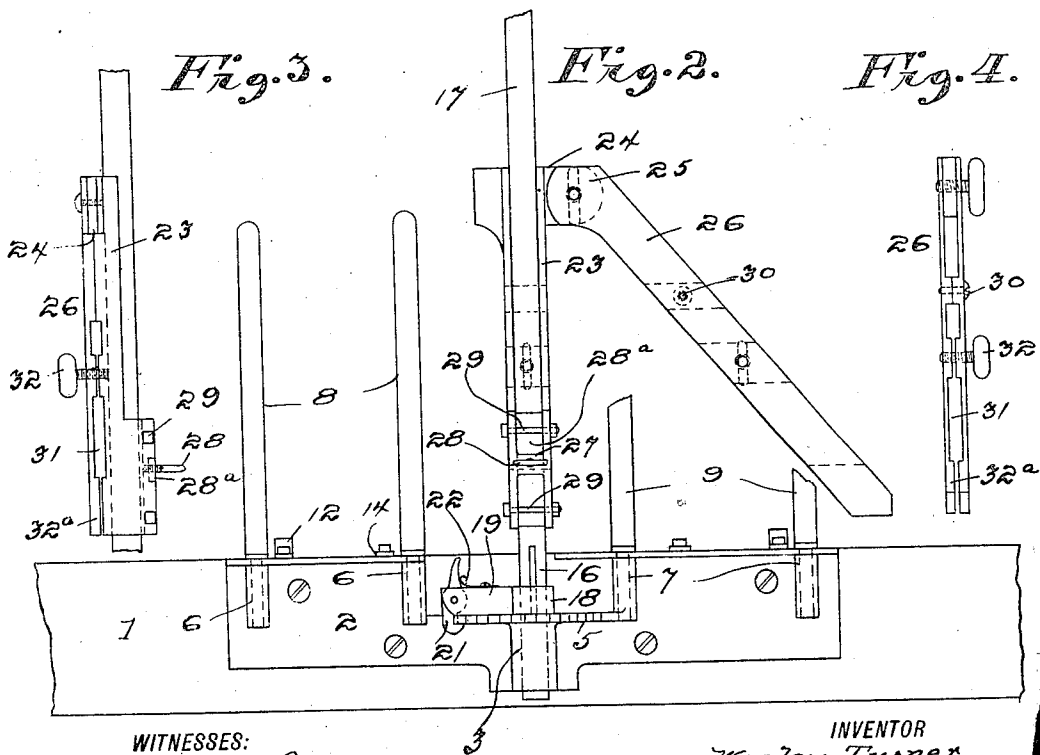
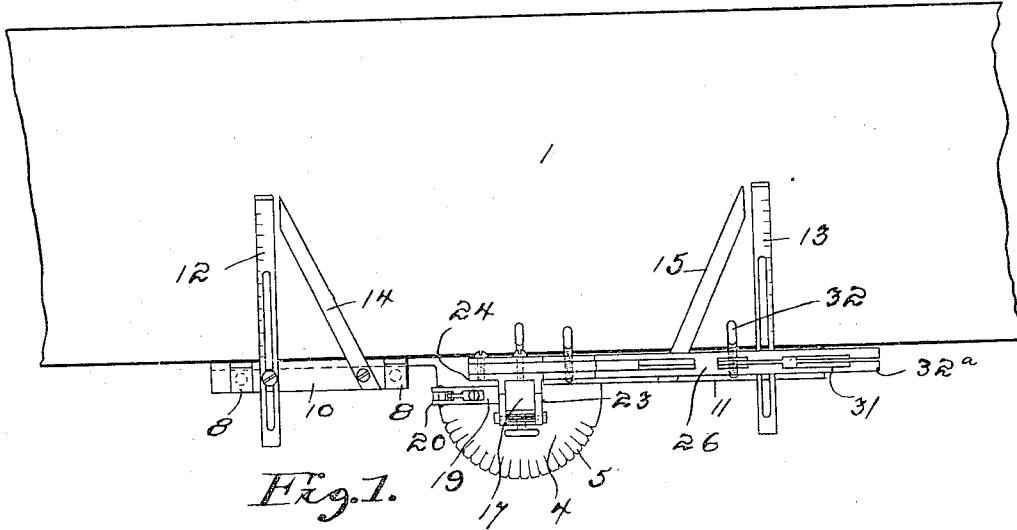


W. TURNER.
MITER BOX.

APPLICATION FILED APR. 7, 1909.

Patented Feb. 15, 1910.

949,100.



WITNESSES:

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WESLEY TURNER, OF OAKLAND, CALIFORNIA.

MITER-BOX.

949,100.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed April 7, 1909. Serial No. 488,416.

To all whom it may concern:

Be it known that I, WESLEY TURNER, citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Miter-Boxes, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to miter boxes and has specially in view a device of the character described which may be readily attached to a work bench or table and which is provided with a novel type of saw guide which 15 may be adjusted both horizontally and vertically so as to permit various angles to be sawed and also to accommodate various thicknesses of material.

In carrying out the objects of the invention generally stated above it will, of course, be understood that the essential features of the same are susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown 25 in the accompanying drawings, wherein—

Figure 1 is a top plan view of the improved miter box, showing the same attached to one side of a work table or bench. Fig. 2 is a side elevation of the same. Fig. 30 3 is a detail elevation of the arm supporting standard and the sleeve adjustably mounted thereon. Fig. 4 is a detail side elevation of the saw guide.

Referring to said drawings by numerals, 1 35 designates a portion of a work table or bench to one edge of which a supporting plate 2 is detachably fastened, said plate being vertically arranged thereon, and at its central portion being provided with an outstanding annular socket 3 the upper end of which is below the top edge of said plate and which is surrounded by an outstanding horizontally arranged semicircular plate or table 4 the periphery of which is toothed as indicated at 5. To each side of the said central socket 3 of the plate 2, the latter is provided with a pair of spaced apart sockets 6—7 into which the lower ends of vertically arranged side posts or straps 8—9 are fitted and which 50 serve to square the material that is to be sawed, as will be readily understood. Said plate may have its upper edge outturned on each side of the central socket 3 to form rest flanges 10—11 which are arranged in a horizontal plane, and said flanges each have an 55 inwardly projecting graduated spacing arm

12—13 adjustably connected therewith. The said flanges are also provided with squaring arms 14—15 which serve to hold the plate in proper position against the side of the work bench or table before the same is fastened thereto. The said central socket 3 of the plate 2 has the lower rounded end 16 of a vertically arranged standard 17 mounted therein, the major portion of said standard 17 being rectangular, and its lower rounded portion adjacent to the table 4 has keyed thereon a collar 18 which carries a laterally projecting arm 19 the outer end of which is slotted as indicated at 20. A latch 21 is pivotally mounted in the slotted end of the arm 19 and has its latching head projecting downwardly and below the lower edge of said arm so as to engage with the toothed periphery of said table 4. The heel of said latch projects above the upper edge of said arm and is pressed outwardly by means of a spring 22 carried by the arm 19 so that the latching head of said latch will be held in engagement with the said toothed periphery of the table 4.

A sleeve 23 surrounds a portion of the standard 17, said sleeve being preferably of channel iron, and having a laterally projecting pivot ear 24 at its upper end to which the upper horizontally arranged end 25 of a saw guide 26 is pivotally connected. Said sleeve is provided with an intermediate bridging piece 27 which carries an adjusting screw 28 the threaded end of which carries a pressure plate 28^a which bears upon the standard 17 when said screw is tightened to retain the sleeve in the desired vertical adjustment on the standard. The sleeve may also be provided with bolts 29 which extend across its open side and connect oppositely disposed flanges so that the embracing pressure of the sleeve may be regulated relative to said standard.

The saw guide 26 projects downwardly and outwardly relatively to the standard 17 and is preferably formed of two members which are held in close relation by means of an intermediate rivet or bolt 30. The members of said arm or guide 26 adjacent to their lower ends are cut away to provide clearance space 31 for the thickened upper edge of a saw, and above said clearance space an adjusting screw 32 connects said members so that the same may be relatively adjusted to permit the use of various thicknesses of saws as will be apparent. The ends of said 110

members may be thickened to provide opposed gripping ends 32^a.

It will be seen from the foregoing that the standard may be turned in its socket 3 by releasing the engagement between the collar and the toothed edge of the table 4 to swing the saw guide to any portion of the miter box, and also that said guide may be vertically adjusted by means of its described sleeve connection with said standard, and further that said guide may be adjusted inwardly or outwardly relatively to its sleeve by means of the pivotal connection between the same. This manner of supporting said guide permits of the same being moved to various positions relatively to the box, thus permitting various angles to be cut and also permitting the device to be used in connection with various thicknesses 20 of material.

What I claim as my invention is:—

1. A miter box comprising a plate adapted for detachable engagement with a bench or table, a standard rotatably mounted 25 thereon, a sleeve adjustably mounted on said standard, and a guide arm pivotally connected with said sleeve.

2. A miter box comprising a plate adapted for vertical attachment to an edge of a bench or table, an outstanding centrally located socket carried thereby, a standard rotatably mounted in said socket, a sleeve adjustably mounted on said standard, and a guide arm pivotally connected with said 35 sleeve.

3. A miter box comprising a plate adapted for attachable engagement with a table or bench, a centrally located socket carried thereby, a standard rotatably fitted in said 40 socket, a sleeve embracing said standard and adjustably mounted thereon, and a saw guide pivotally connected with said sleeve.

4. A miter box comprising a vertically arranged plate adapted for detachable engagement with a bench or table and provided with a central outstanding socket, a semi-circular plate surrounding said socket and provided with a toothed periphery, a standard rotatably mounted in said socket, a collar fast on said standard and provided with an outstanding arm, a latch carried by said arm and adapted for detachable engagement with the toothed periphery of said semi-circular plate, a sleeve adjustably 55 mounted on said standard, and a saw guide pivotally connected with said sleeve.

5. A miter box comprising a plate adapted for detachable engagement with a work bench or table, an outstanding socket centrally located thereon, a semicircular plate surrounding said socket and provided with a toothed periphery, a standard rotatably mounted in said socket, a collar fast on said standard and provided with a laterally projecting arm, a spring pressed latch carried 65

by the outer end of said arm and normally retained in engagement with the toothed periphery of said semi-circular plate, a sleeve carried by said standard, and a saw guide carried by said sleeve.

6. A miter box comprising a supporting plate, a standard rotatably mounted thereon, a sleeve adjustably mounted on said standard and carrying a pivot ear at its upper end, and a downwardly and outwardly inclined saw guide pivoted to said pivot ear. 70

7. A miter box comprising a supporting plate, a standard rotatably mounted thereon, a sleeve adjustably mounted on said standard and having a laterally projecting pivot ear at its upper end, and a saw guide composed of parallel downwardly and outwardly inclined members pivoted to said ear and held in adjustable relation. 75

8. A miter box comprising a supporting plate, a standard rotatably mounted thereon, a sleeve adjustably mounted on said standard and having a pivot ear at its upper end, and a saw guide composed of parallel downwardly and outwardly inclined members 90 having a clearance space formed between their lower portions and held in adjustable relation.

9. A miter box comprising a supporting plate, a standard rotatably mounted thereon, a sleeve embracing said standard and adjustably held thereon, and a saw guide pivoted to said sleeve and composed of parallel members connected together at their intermediate portion and having their lower portions provided with a clearance space and terminating in thickened gripping ends, said members having their lower portions held in adjustable relation. 95

10. A miter box comprising a support, a standard rotatably mounted thereon and having its major portion rectangular shaped, a channel iron sleeve surrounding a portion of said standard, an adjusting screw for regulating the vertical adjustment of said sleeve on said standard, bolts for regulating the embracing pressure of said sleeve on the same, and a saw guide pivoted to said sleeve. 100

11. A miter box comprising a supporting plate provided with a socket, a horizontally arranged semi-circular plate surrounding said socket and provided with a toothed periphery, a standard mounted in said socket and provided with means for engaging with said toothed plate to limit its rotation in said socket, a sleeve mounted on said standard, and a saw guide carried by said sleeve. 115

12. A miter box comprising a supporting plate provided with a socket, a toothed plate surrounding said socket, a standard rotatably mounted in said socket, a latch carried by said standard for engagement with said toothed plate to limit the rotation of said standard, a sleeve adjustably mounted on 125

said standard, and a saw guide pivotally connected to said sleeve.

13. A miter box comprising a supporting plate adapted for detachable engagement with a work table or bench and provided with a central socket, work guiding standards vertically arranged on said plate, spacing arms horizontally arranged on said plate, a standard rotatably mounted in said socket, a sleeve on said standard, and a saw guide carried by said sleeve.

14. A miter box comprising a vertically arranged supporting plate adapted for detachable engagement with an edge of a table or bench and provided with a centrally located outstanding socket, a horizontally arranged semi-circular plate surrounding the upper portion of said socket and pro-

vided with a toothed periphery, a standard rotatably mounted in said socket, a collar fast on said standard above said toothed plate and provided with a laterally extending arm, a latch pivotally connected to the outer end of said arm, a spring carried by said arm for holding said latch in engagement with the toothed periphery of said plate, a sleeve adjustably mounted on said standard, and a saw guide pivotally connected to said sleeve.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WESLEY TURNER.

Witnesses:

J. S. BURCH,

H. C. SCHROEDER.