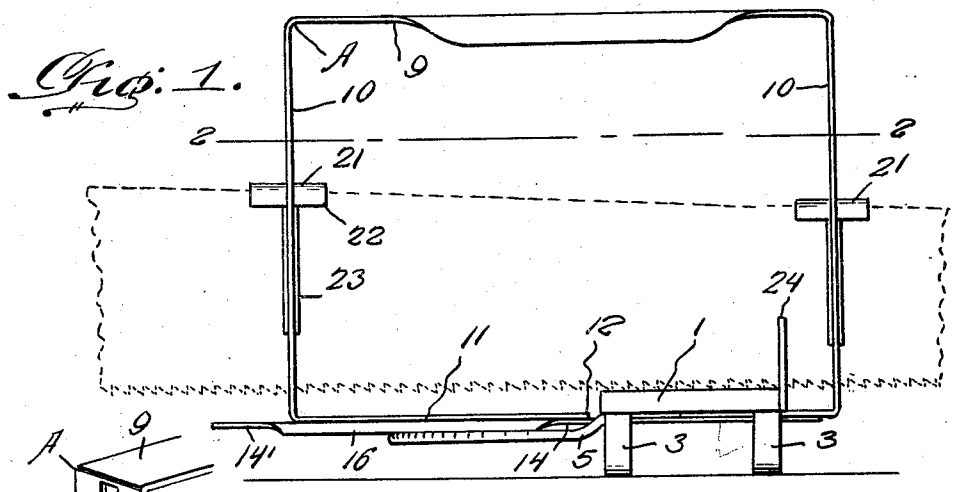
April 19, 1927. D. PELLETIER 1,625,424

MITER BOX

Filed April 9, 1925

Fig. 1.



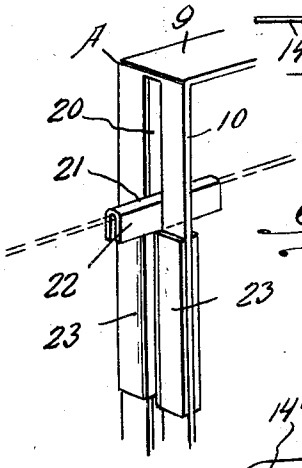


Fig. 3.

Fig. 2.

Fig. 4.

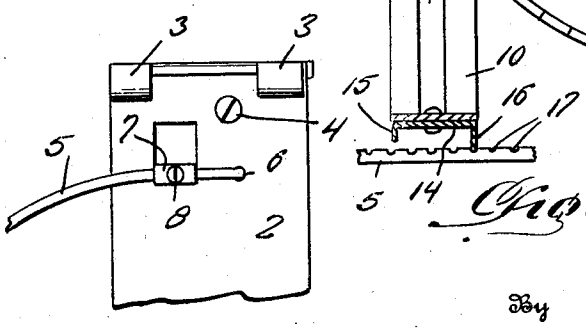


Fig. 5

Inventor
D. Pelletier,

By Clarence O'Brien

Attorney

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UNITED STATES PATENT OFFICE.

DOMINICK PELLETIER, OF FALL RIVER, MASSACHUSETTS.

MITER BOX.

Application filed April 9, 1925. Serial No. 21,863.

The present invention relates to improvements in miter box structures, and has for its principal object to provide a device of this nature, which is exceedingly simple, strong, durable, light, inexpensive to manufacture, efficient, reliable, easy to handle, and manipulate, not liable to easily become out of order, and otherwise well adapted to the purpose for which it is designed.

A specific object of the invention is to provide a miter box which may be conveniently used with the ordinary hand saw by a carpenter or any other person.

With the above and numerous other objects in view, as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is a side elevation of the miter box embodying the features of my invention.

Figure 2 is a horizontal section, taken on the line 2—2 of Figure 1, looking downwardly.

Figure 3 is a perspective view of one corner of the frame.

Figure 4 is a plan view of one end of the base plate, and

Figure 5 is a detail section, taken substantially on the line 5—5 of Figure 2.

Referring to the drawing in detail, it will be seen that 1 designates a base board, on which the article to be sawed is placed. This base board is rectangular in formation, and has fixed to the under side thereof a base plate 2, formed of metal. A pair of integral leg extensions 3 are formed on each end of the plate 2. The plate is preferably fastened to the board 1, by means of screws 4 or any other suitable fastening elements. An arcuate gauge rod 5 has its ends offset and embedded in the plate 2, as at 6. Lips 7 are struck from the plates 2 and coiled about the gauge rod 5, adjacent its ends, and screws or other suitable fastening elements 8 are preferably engaged with the rod, through the coiled ears 7.

A rectangular frame A includes an upper longitudinally extending side 9, ends 10 and the bottom side 11. The bottom side 11 includes the terminals of the frame, as indicated at 12. This bottom side 11 extends transversely under the plate 2 and centrally thereof and is secured to a plate 14, having its edges bent at right angles as at 15 and 16, the edge 16 being longer than the edge 15 and adapted to engage the series of notches 17 provided on the gauge rod 5. The plate 14 and the bottom side 11 of the frame A are pivoted to the base plate 2 by pin 18 or in any other suitable manner. Thus it will be seen that the angle of the frame A to the base board 1 may be changed as desired, to conform with the angle of the cut to be made in the article placed on said board, as will be clearly understood by those familiar with the use of an ordinary miter box. This adjustment is possible, merely by lifting upwardly on the end 14′ of the plate 14, so as to disengage the end 16 from the gauge rod and then swinging the frame to the desired position and releasing the end 14′ so that the edge 16 may again engage one of the notches of the gauge rod.

The ends 10 are slotted, as at 20, throughout their length and guide members 21 are movable in these slots and each includes an upper member 22 of an inverted U-shaped formation, for receiving the upper edge of the saw, as is indicated in dotted lines in Figure 1, and the two rectangularly disposed members 23 depending therefrom and of a channel construction, for receiving the portions of the ends 10 formed by the slots 20, so that the saw may slide therebetween. One longitudinal edge of the plate 2 is bent upwardly to form the flange 24, which is disposed perpendicularly to the baseboard 1 and extends along one longitudinal edge thereof, so that the article to be sawed may be placed on the base board, in abutment with the flange 24.

The construction, operation, and advantages of this invention now being clearly understood by those skilled in the art, a more detailed description is thought unnecessary.

It is apparent that the present embodiment of the invention has merely been given by way of example and that this embodiment will attain all of the features of advantage enumerated as desirable in the statement of the invention and the above description.

It will be further apparent that numerous changes in the details of construction, in the sizes, in the materials, and in the combination and arrangement of parts may be resorted to, without departing from the spirit or scope of the invention as hereinafter claimed, or sacrificing any of its advantages.

Having thus described by invention, what I claim as new is:

1. In a structure of the class described, a base, a plate fixed to the under surface of the base and having portions adjacent its ends constructed therefrom and curved to form sleeves, said plate further provided with apertures adjacent said sleeves, an arcuate guage bar having a series of notches throughout the major portion of its length and having its ends piercing the sleeves and the terminals of its ends bent perpendicularly to extend into the apertures, a rectangular shaped frame having its bottom longitudinal side pivoted adjacent one end of the base, an arm on said side of the frame having an end engageable with the notches of the gauged bar, the ends of said frame being slotted so that an ordinary hand saw may be reciprocated therethrough for cutting an article resting on the face at different desired angles.

2. In a structure of the class described, a base, a plate fixed to the under surface of the base and provided with portions of its ends struck outwardly therefrom and curved to form sleeves, said plate further provided with apertures adjacent the sleeves, an arcuate gauge bar having its ends extending through the sleeves and the terminals of its ends bent right angularly to pierce the apertures, a frame structure pivotally mounted on the base, and means associated with the frame structure for engaging the gauge bar to hold the frame in different adjusted positions.

In testimony whereof I affix my signature.

DOMINICK PELLETIER.