

G. W. FISH.

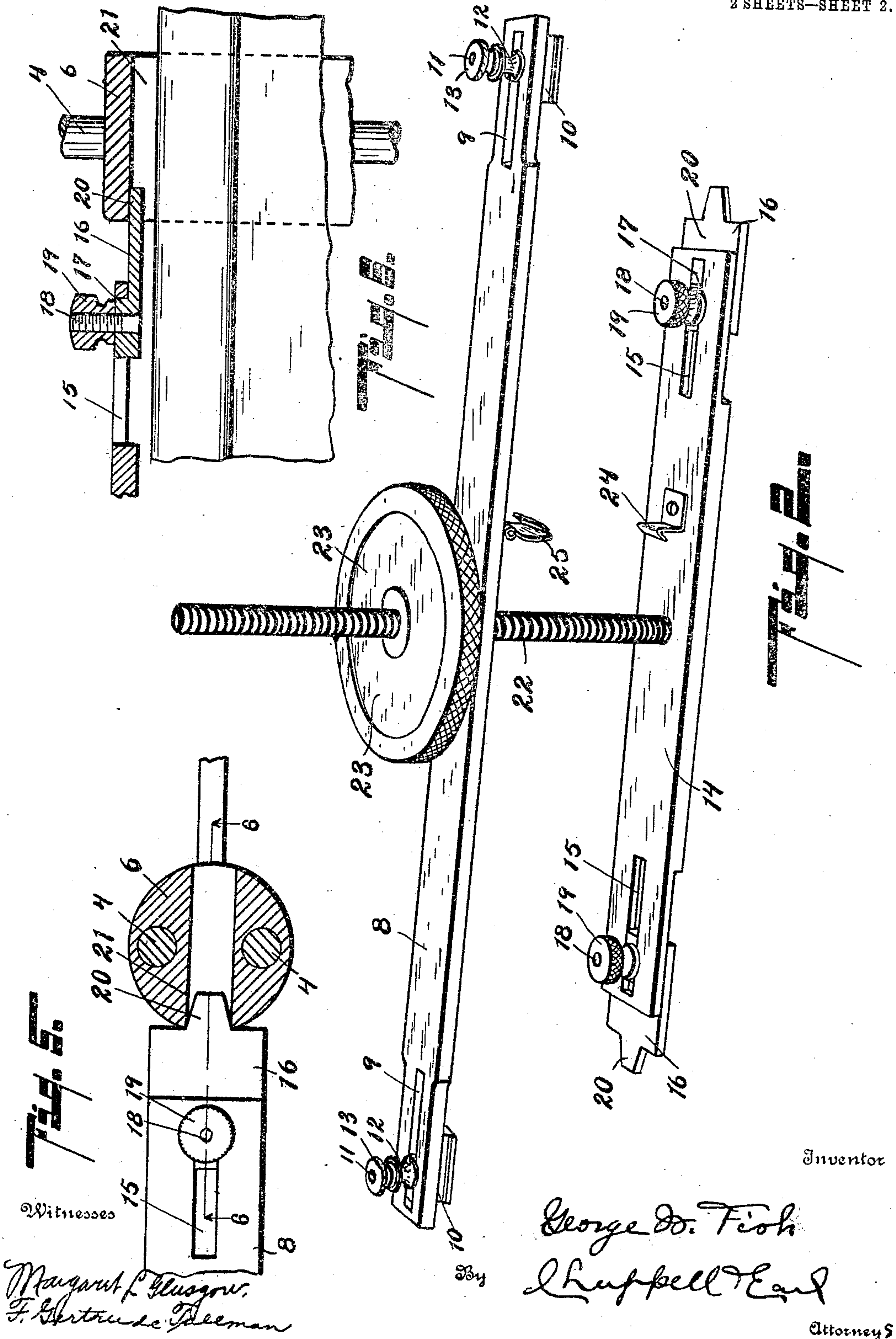
MITER BOX.

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955,149.

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2 SHEETS—SHEET 2.



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MITER-BOX.

955,149.

Specification of Letters Patent.

Patented Apr. 19, 1910.

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To all whom it may concern:

Be it known that I, GEORGE W. FISH, a citizen of the United States, residing at Kalamazoo, Michigan, have invented certain
5 new and useful Improvements in Miter-Boxes, of which the following is a specification.

This invention relates to improvements in miter-boxes.

10 The main objects of this invention are: First, to provide in a miter-box an improved cut gage. Second, to provide in a miter-box, an improved gage device adapted to be used as an attachment. Third, to provide
15 in a miter-box, an improved gage device which is very simple in structure and easily operated or adjusted in use.

Further objects, and objects relating to structural details, will definitely appear from
20 the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

25 The structure described constitutes one effective embodiment of my invention. Other embodiments would be readily devised by those skilled in the art.

The invention is clearly defined and pointed out in the claims.

30 A structure constituting an effective and preferred embodiment of the features of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

35 Figure 1 is an end elevation of a structure embodying the features of my invention. Fig. 2 is a perspective view of my improved gage removed from the machine. Fig. 3 is an enlarged detail plan showing
40 one end of the post bar and its attaching means. Fig. 4 is a vertical section taken on a line corresponding to line 4—4 of Fig. 3. Fig. 5 is a detail horizontal section taken on a line corresponding to the irregular line
45 5—5 of Fig. 1, showing details of the carrier bar and the carrier engaging member. Fig. 6 is an enlarged detail vertical section taken on a line corresponding to line 6—6 of Fig. 5. Fig. 7 is a detail vertical section
50 taken on a line corresponding to line 7—7 of Fig. 1.

In the drawings, similar reference characters refer to similar parts throughout the several views, and the sectional views are

taken looking in the direction of the little
arrows at the ends of the section lines.

Referring to the drawing, 1 represents the frame, 2 the base plate and 3 the back plate of a miter-box. The saw carrier posts 4, which are preferably arranged in pairs,
60 as shown in Fig. 7, are carried upon the adjustable bar 5, which is mounted to swing in the well-known way. The carriers 6 are slidably mounted upon the posts. These parts described are old in the art, and are
65 shown herein to illustrate the application of my invention.

In the embodiment of my invention illustrated, the posts 4 are provided with cross-pieces 7 at their upper ends. On these cross-
70 pieces is arranged a post-bar 8, which is provided with a longitudinal slot 9 at each end. The bar 8 is preferably detachably secured to the post by means of the hook-like clamps 10, see Fig. 4, which are arranged
75 through the longitudinal slots 9 of the bar, and provided with upwardly-projecting threaded shanks or stems 11, and clamping nuts 12. A lock nut 13 is also preferably provided. The carrier bar 14 is provided
80 with longitudinal slots 15 at each end, with carrier engaging members 16. These carrier engaging members are provided with ribs 17 which engage the slots 15, and with stems 18 and clamping nuts 19. The mem-
85 bers 16 are preferably provided with A-shaped engaging tongues 20, which are adapted to engage with the openings 21 in the saw carriers. This enables the ready application of the device to well-known
90 types of miter boxes.

On the carrier bar 14 is an upwardly-projecting gage screw 22, which is slidably arranged through the post bar 8. On this screw is threaded an adjustable stop 23, the
95 stop being preferably disk-like in form and knurled to form a suitable hand piece, so that it may be readily adjusted. It is preferably made circular or disk-like, as illustrated, so that its position is not likely to
100 be changed on account of the vibration of the device in use. A latch is preferably provided for holding the carrier-bar in its elevated position. This, in the structure illustrated, consists of a keeper 24 on the
105 carrier bar, and a pivoted latch 25 on the post bar adapted to be engaged therewith.

My improved gage device may be used as

an attachment and readily applied to or removed from the miter-box and is conveniently adjusted for use. I have illustrated and described my improvements in detail in the form in which I have embodied them, and as adapted for application to a type of miter-box which is in quite common use. I desire to remark, however, that I am aware that my invention is applicable to various types of miter-boxes and can be readily adapted for use in connection therewith, and I desire to be understood as claiming the same, not only specifically in the form illustrated, but broadly as well within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a miter-box, the combination of posts arranged in pairs; cross-pieces at the upper ends of said posts; saw carriers slidably mounted on said posts; a longitudinally slotted post-bar adapted to rest on said cross pieces of said posts; hook-like clamp members adapted to be engaged with said cross pieces on said posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor and having A-shaped carrier engaging tongues, said carriers being provided with openings adapted to receive said tongues; and a threaded gage carried by said carrier bar slidably arranged through said post bar, said gage being provided with a disk-like stop threaded thereon.

2. In a miter-box, the combination of posts arranged in pairs; cross-pieces at the upper ends of said posts; saw carriers slidably mounted on said posts; a longitudinally slotted post-bar adapted to rest on said cross pieces of said posts; hook-like clamp members adapted to be engaged with said cross pieces on said posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor and having A-shaped carrier engaging tongues, said carriers being provided with openings adapted to receive said tongues; and a gage carried by said carrier bar slidably arranged through said post bar, said gage being provided with an adjustable stop.

3. In a miter-box, the combination of posts arranged in pairs; cross-pieces at the upper ends of said posts; saw carriers slidably mounted on said posts; a longitudinally slotted post-bar adapted to rest on said cross pieces of said posts; hook-like clamp

members adapted to be engaged with said cross pieces on said posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor and having A-shaped carrier engaging tongues, said carriers being provided with openings adapted to receive said tongues; a gage carried by said carrier bar slidably arranged through said post bar, said gage being provided with an adjustable stop; a keeper on said carrier bar; and a pivoted latch on said post bar adapted to engage said keeper.

4. An attachment for miter-boxes provided with posts and saw carriers slidably mounted on said posts comprising a longitudinally slotted post bar; clamp members adapted to be engaged with the posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor; a threaded gage carried by said carrier bar slidably arranged through said post bar, said gage being provided with a stop threaded thereon; and a latch for supporting said carrier bar in its elevated position.

5. An attachment for miter-boxes provided with posts and saw carriers slidably mounted on said posts comprising a longitudinally slotted post bar; clamp members adapted to be engaged with the posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor; a threaded gage carried by said carrier bar slidably arranged through said post bar, said gage being provided with a stop threaded thereon.

6. An attachment for miter-boxes provided with posts and saw carriers slidably mounted on said posts comprising a longitudinally slotted post bar; clamp members adapted to be engaged with the posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor; a gage carried by said carrier bar slidably arranged through said post bar, said gage being provided with an adjustable stop; and a latch for supporting said carrier bar in its elevated position.

7. An attachment for miter-boxes provided with posts and saw carriers slidably mounted on said posts comprising a longitudinally slotted post bar; clamp members
5 adapted to be engaged with the posts, arranged in said slots, said clamp members being provided with threaded stems and clamping nuts therefor; a longitudinally
10 slotted carrier bar; carrier engaging members therefor arranged in said slots, said members being provided with threaded stems and clamping nuts therefor; and a gage carried
15 by said carrier bar slidably arranged through said post bar, said gage being provided with an adjustable stop.

8. An attachment for miter-boxes provided with posts and saw carriers slidably mounted thereon, comprising a post bar; a
20 carrier bar; clamps for securing said post bar and carrier bar to the posts and carriers, respectively; a gage carried by one of said bars slidably arranged through the other,
25 said gage being provided with an adjustable stop; and a latch detachably connecting said bars whereby said carrier bar is supported in its elevated position.

9. An attachment for miter-boxes provided with posts and saw carriers slidably mounted thereon, comprising a post bar; a
30 carrier bar; clamps for securing said post bar and carrier bar to the posts and carriers, respectively; and a gage carried by one of said bars slidably arranged through the
35 other, said gage being provided with an adjustable stop.

10. In a miter-box, the combination with the posts, of saw carriers slidably mounted on said posts; a post-bar; a carrier bar; a threaded gage carried by said carrier bar
40 slidably arranged through said post-bar, said gage being provided with a stop threaded thereon; and a catch for supporting said carrier bar in its elevated position.

11. In a miter-box, the combination with the posts, of saw carriers slidably mounted
45 on said posts; a post-bar; a carrier bar; and a threaded gage carried by said carrier bar slidably arranged through said post-bar, said gage being provided with a disk-like
50 stop threaded thereon.

12. In a miter-box, the combination with the posts, of saw carriers slidably mounted
55 on said posts; a post-bar; a carrier bar; and a threaded gage carried by said carrier bar slidably arranged through said post-bar, said gage being provided with a stop threaded thereon.

13. In a miter-box, the combination with the posts, of saw carriers slidably mounted
60 on said posts; a post-bar; a carrier bar; and a gage carried by said carrier bar slidably arranged through said post-bar, said gage being provided with an adjustable stop.

In witness whereof, I have hereunto set my hand and seal in the presence of two
65 witnesses.

GEORGE W. FISH. [L. s.]

Witnesses:

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MARGARET L. GLASGOW.