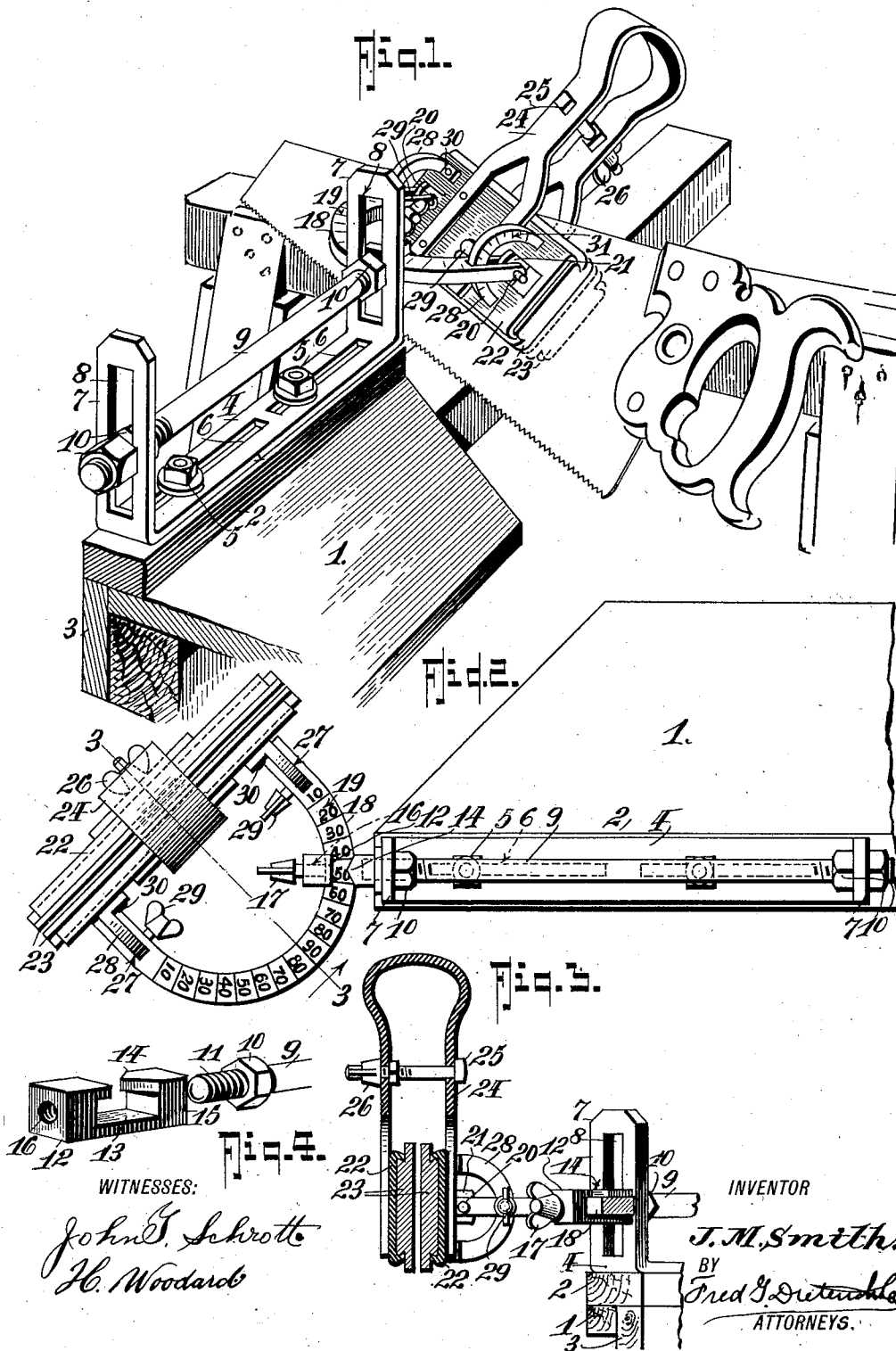


J. M. SMITH.
MITER BOX AND SAW GUIDE.
APPLICATION FILED SEPT. 3, 1912.

1,054,876.

Patented Mar. 4, 1913.



UNITED STATES PATENT OFFICE.

JAMES MILLER SMITH, OF MONTGOMERY CREEK, CALIFORNIA.

MITER-BOX AND SAW-GUIDE.

1,054,876.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Application filed September 3, 1912. Serial No. 718,246.

To all whom it may concern:

Be it known that I, JAMES MILLER SMITH, residing at Montgomery Creek, in the county of Shasta and State of California, have invented certain new and useful Improvements in Miter-Boxes and Saw-Guides, of which the following is a specification.

My invention is a modification and improvement on the miter box which forms the subject matter of my Patent #810,175 issued January 16, 1906, and the present invention has for its object to render the construction of miter box disclosed in such patent more practical and of a more durable nature, and to that end the present invention resides in those novel details of construction, combination and arrangement of parts all of which will be first fully described, and then be specifically pointed out in the appended claims, reference being had to the accompanying drawing, in which:—

Figure 1 is a perspective view illustrating the invention in use. Fig. 2 is a top plan view of the invention. Fig. 3 is a cross section on the line 3—3 of Fig. 2. Fig. 4 is a detail perspective view of a part of the apparatus.

In the drawing in which like numerals of reference designate like parts in all the figures, 1 represents the base which is provided on its upper surface with a straight edge 2, and on its rear surface with another straight edge 3, so that the base 1 may be set over a suitable support which may be the timbers to be cut as indicated in Fig. 1.

Mounted on the straight edge 2 is the supporting frame which has slots 6, through which the bolts 5 pass, to adjustably secure the supporting frame on the straight edge 2. The construction of the supporting frame is the same as that disclosed in my patent hereinbefore referred to, and includes the upright members 7 that are slotted at 8, to receive the rod 9 which is adjustably held in place by nuts 10. The rod 9 has its forwardly projecting end threaded at 11 to receive the head 12 which is provided with a cross rectangular slot 13, open at the top and cut to form an indicator finger 14, the slot 13 being adapted to receive the main semi-circular member 18.

The member 18 is graduated at 19 on its face and is adjustably held in the slot 13 of the head 12 by a set screw 17 that has threaded engagement with the hole 16, of

the head. The main semi-circular member 18 is pivoted at 20 to the ears 21, that are secured to the back plate 22 of the saw-guide.

The construction of the saw-guide *per se* is essentially the same as that disclosed in my patent referred to and includes the back and front plates 22, which receive the removable blocks 23 and are pressed toward one another by the spring arms 24, the tension of which may be regulated by the bolt and wing nut device 25 and 26. Secured at 30 to the back plate 22, in a rigid position, is a pair of supplemental semi-circular members 28, which pass through slots 27, in the ends of the main semi-circular member 18, and the members 18 and 28 are adjustably held from movement with relation to one another by wing set screws 29. The supplemental semi-circular members 28 are graduated on their outer faces, as at 31, so that the degree of tilting of the saw-guide on the axis of the pivots 20 may be instantly determined.

By making the head 12 with the open slot 13 and pointer 14, the exact "set" of the semi-circular member 18 may be determined at a glance.

By the construction herein shown and described all of the advantages of the miter-box and saw-guide of my patent referred to are retained, and the disadvantages in the construction of the same are eliminated. By the present construction, a more rigid holding of the saw-guide is attained than is possible by the construction shown in my patent referred to and therefore a more accurate cut can be attained.

From the foregoing description, taken in connection with the accompanying drawing, it is thought that the complete construction, operation and advantages of the invention will be apparent to those skilled in the art to which it appertains.

What I claim is:—

1. In an apparatus of the class described, a base, a supporting frame mounted thereon, and including a rod, a head secured to said rod and having an open slot, a saw-guide, a main semi-circular member mounted in said slot, said saw-guide being pivoted to said main semi-circular member, and a supplemental semi-circular member carried by said guide and passing through a slot in said main semi-circular member, and means for adjustably securing said main semi-circular

member in said head slot, and means for adjustably securing said supplemental semi-circular member and said main semi-circular member against relative movement.

- 5 2. In an apparatus of the class described, a base, a supporting frame mounted thereon, a rod carried by said frame, a head mounted on said rod, and including an open slot, and having an indicator portion at said slot, a
10 main semi-circular member mounted in said slot, and having graduations visible through the open portion of said slot, a set screw for holding said main semi-circular member
15 rigidly in said head, a saw-guide, means for pivotally securing the ends of said main semi-circular member to said saw-guide in virtue of which said saw-guide will swing

on an axis passing through said pivotal connection, said main semi-circular member having its ends slotted, supplemental semi-circular members rigidly secured to said saw-guide and passing through the slotted ends of said main semi-circular member, and held in planes normal to the plane containing said main semi-circular member, set
25 screws for securing said supplemental semi-circular members from movement relative to said main semi-circular member substantially as shown and described.

JAMES MILLER SMITH.

Witnesses:

CHAS. A. HILL,
EDWIN OVERMYER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."