

L. W. Langdon,

Miter Box,

No. 45,055,

Patented Nov. 15, 1864.

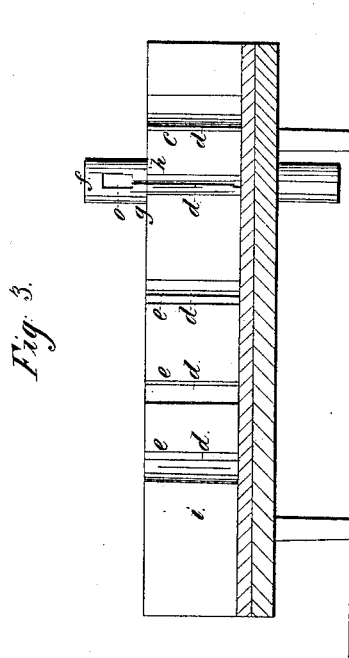


Fig. 3.

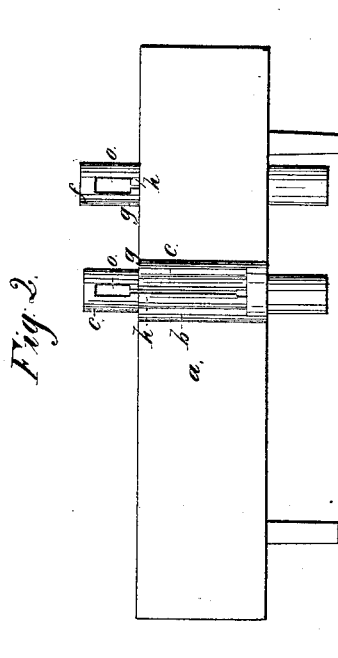


Fig. 2.

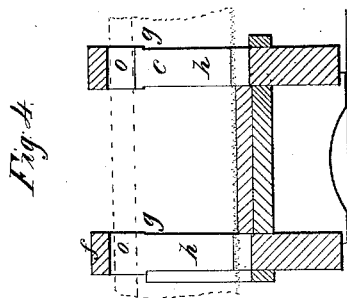


Fig. 4.



Fig. 5.

Witnesses:

*H. Gmel
P. B. Ridder*

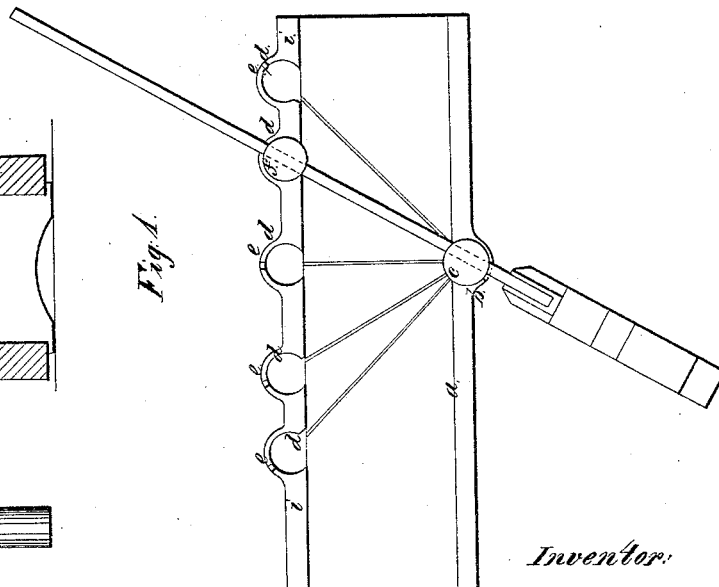


Fig. 1.

Inventor:

*L. W. Langdon
By his Atty
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UNITED STATES PATENT OFFICE.

L. W. LANGDON, OF NORTHAMPTON, MASSACHUSETTS.

IMPROVEMENT IN MITER-BOXES.

Specification forming part of Letters Patent No. 45,055, dated November 15, 1864.

To all whom it may concern:

Be it known that I, L. W. LANGDON, of Northampton, in the county of Hampshire and State of Massachusetts, have invented an Improved Miter-Box; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates to the construction of the well-known and common miter-box. Various methods have been employed to so guide a saw in a miter-box as to keep it in proper position with reference to the stock being cut, and to prevent the saw from cutting against the sides or bottom of the box.

My invention consists in constructing a miter-box with a series of open cylinders made integral with the box, and with rotary saw-guides applied to and removable from such cylinders.

A miter-box embodying my improvement is shown in top view in Figure 1 of the drawings, in side elevation in Fig. 2, in longitudinal section in Fig. 3, and in cross-section in Fig. 4, while Fig. 5 represents a view of one of the guides removed.

In the front side, *a*, of the box I make a centralizing open cylinder, *b*, into which I insert a saw-guide, *c*. In the opposite side, *i*, of the box, and integral with it, (as is also the cylinder *b* with the side *a*,) I make a series of cylinders or tubes, *d*, of corresponding diameter, and opening within the box toward the central

cylinder, *b*, while the outer side of each has a slit, *e*, in a line from the center of cylinder *b*, through which the saw slides. Each tube *d* is fitted by a saw-guide, *f*, (or by the guide *e*,) which is changed from one to the other, as may be required. The saw-guides slide and rotate freely in the cylinders, and they are both provided with an enlargement, *g*, at top, to prevent them from sinking too far in the box and with a slit, *h*, for the saw-blade, and an enlarged slot, *o*, for the heel of the saw, as in some other miter-boxes. By making the cylinder *d* integral with the side wall of the box the proper position and steadiness of the saw is much better maintained than if the cylinder or frame for the guide *f* were merely hung or pivoted to the box, while the construction of the guides so that they can be removed from their tubes enables me to use one guide for the whole series of tubes on the side *i* of the box.

I claim—

1. Constructing the miter-box with rotary saw-guides *c f* when such guides operate in cylinders or tubes *b d*, and are so constructed and applied that they may be changed from one set of cylinders to another, substantially as set forth.

2. Making the cylinders or tubes *d*, in which the guides operate, integral with the side of the box, as described.

L. W. LANGDON.

Witnesses:

DAVID E. GRUM,
CHARLES STRANG.