E. CATHER.

Machine for Boring Blind Stiles.

No. 204,534. Patented June 4, 1878.

Fig. 1.

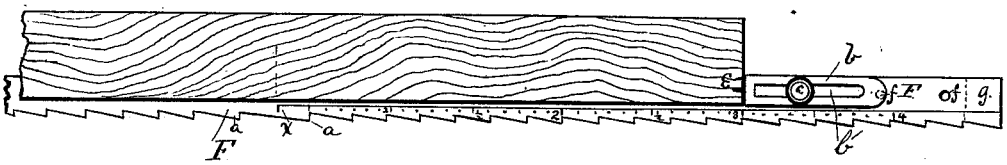
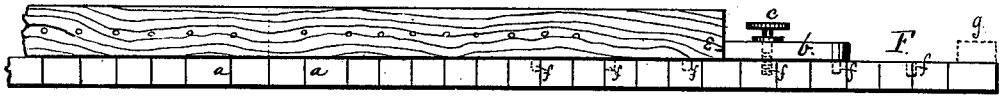


Fig. 2.



WITNESSES,

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EDWIN CATHER, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAS. R. TRIMBLE, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR BORING BLIND-STILES.

Specification forming part of Letters Patent No. **204,534**, dated June 4, 1878; application filed February 8, 1878.

To all whom it may concern:

Be it known that I, EDWIN CATHER, of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Machines for Boring Blind-Stiles; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which the subject of the invention is illustrated.

In Letters Patent of the United States granted to me December 26, 1876, is described in detail a machine for boring the slat pivot-holes in blind-stiles; and as the present invention is an improvement upon the said machine, I consider it necessary to here describe and show only the part of said machine with which my present improvement is connected, similar letters of reference indicating corresponding parts in the accompanying drawings and in those of the patent referred to.

In order that the scope of my present improvement may be understood without necessarily referring to the patent, I will briefly describe the operation and construction of the patented machine.

A continuously-revolving auger is caused to reciprocate horizontally, and its driving mechanism actuates a pawl, which engages with a ratchet-bar, such as is shown in the accompanying drawings, the said bar being moved horizontally in front of the reciprocating bit and at right angles thereto.

The blind-stile is placed upon the ratchet-bar, and as it is carried past the bit is bored at intervals corresponding to the steps upon the ratchet.

In the patented machine the ratchet-bar is shown provided with a stop, *g*, (shown in dotted lines in the accompanying drawings,) against which the stile abuts.

No fault can be found with the machine while at work upon a single variety of stile; but great loss of time and annoyance are caused when it becomes necessary to change the style of work.

Into the side of the blind-stile, and generally at its center, a mortise is cut for the reception of a tenon upon the end of the cross-bar, and unless the width of the cross-bar is such as to be evenly divided by the spaces between the holes it is necessary to stop the machine and slide the bar to the proper distance. This caused such a delay in working that I adopted the expedient of constructing a special ratchet-bar for each variety of work.

The present invention consists in adapting a device to the ratchet-bar whereby a single bar may be made to do all the varieties of work.

To this end, a mark, *x*, is made upon the bar, near its center, the steps *a a* on either side being made somewhat larger than the ordinary intervals, in order to economize time, since it is immaterial whether holes are bored at the point where the mortise comes or not; and an adjustable stop, *b*, in lieu of the fixed one *g*, is adapted to be secured to the bar F at any desired point.

As a preferred method of adjusting and securing the stop *b*, I cut a slot, *b'*, through it, and furnish the bar F with a series of threaded holes, *f*, as far apart as the length of the slot. A thumb-screw, *c*, passing through the stop and into the bar F, serves to secure it at any desired distance from the center mark *x*.

The bar F is preferably furnished with a scale, as shown, for convenience in adjusting the stop, which latter may be provided with one or more points, *e*, for holding the stile.

In order to set the machine for boring, say, a six-foot stile with center cross-bar, the stop is secured at the three-foot mark on the bar.

I consider my invention by no means limited to the particular form of adjustable stop I have shown, as other forms may be used, such, for instance, as a clamp sliding in a dovetail groove in the bar.

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

In a machine for boring blind-stiles, and in combination with its ratchet-bar having a zero-point or center-mark, *x*, for the stile, an adjustable stop, adapted to secure the stile at any desired point upon the ratchet-bar, substantially as described.

EDWIN CATHER.

Witnesses:
DAVID G. WEEMS,
EDWARD A. HEALY.