

L. G. KIRKHAM.

Machines for Boring Blind Stiles.

No. 137,932.

Patented April 15, 1873.

fig. 1.

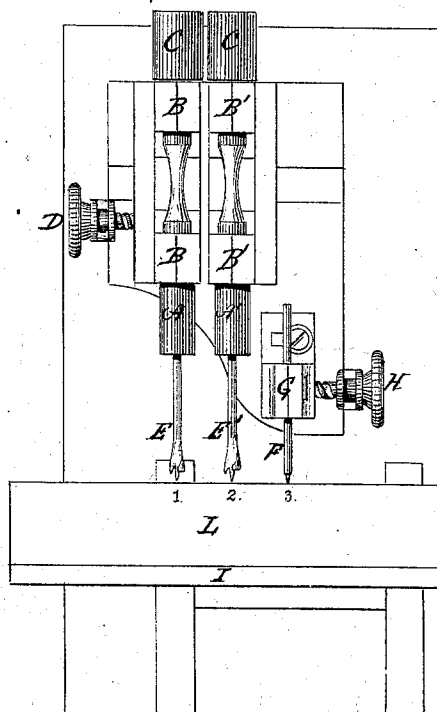


fig. 2.

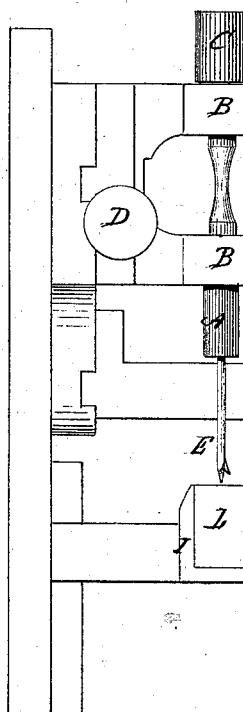
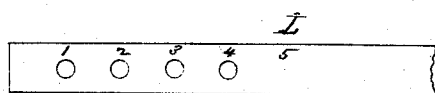


fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

LEVERETT G. KIRKHAM, OF DERBY, CONNECTICUT.

## IMPROVEMENT IN MACHINES FOR BORING BLIND-STILES.

Specification forming part of Letters Patent No. **137,932**, dated April 15, 1873; application filed May 22, 1872.

*To all whom it may concern:*

Be it known that I, LEVERETT G. KIRKHAM, of Derby, in the county of New Haven and State of Connecticut, have invented a new Improvement in Machine for Boring Window-Blind Stiles; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1, a front view; Fig. 2, a side view; and in Fig. 3 a diagram of a blind-stile to illustrate the operation of the machine.

This invention relates to an improvement in apparatus for boring blind-stiles to receive the pivot of the slat.

The usual practice in doing this work has been to set off the stile, marking the requisite divisions for each hole to be bored previous to introduction into the machine, the operator placing each mark beneath the bit for the boring of the hole, an automatic feed being impracticable because the length of blinds or the divisions are so variable.

The object of this invention is to overcome this difficulty by automatically spacing or defining the point where the holes are to be bored; and it consists in combining with one or more bits a punch or point, which, when one hole is bored, will indent the stile at the requisite distance from this hole to indicate where the next hole is to be bored.

I, by preference, use two bits, and so represent it in the illustration.

A A' are two mandrels, supported in independent bearings B B', and fitted with a pulley, C, so as to be rapidly revolved. The bearings of these mandrels are adjusted nearer to or further from each other by a set-screw, D, or equivalent device. Each mandrel is fitted with a bit, E E', of the size required for the hole to be bored in the stile. F is a punch or pivot, set in a suitable holder, G, in a line with the bits E E', and adjusted by a screw, H, so that the distance between the said punch and the first bit is equal to the distance from center to center of the hole to be bored in the stile, and the two bits the same distance from each other. I is the support or bed upon which rests the stile L to be bored, the said

support being made so as to be moved up and down to present the stile to the bits to be bored.

The distance between the holes having been determined, and the bits E E' having been set accordingly, and the support I also properly adjusted, the stile L is placed thereon. The position for the first hole having been determined, say, as at 1, Fig. 3, that point 1 is set beneath the bit E, then the stile pressed up, the bits revolving bore the holes 1 and 2, at the same time the punch will indent at the point where the third hole 3 is to be bored; then, the two first holes complete, the stile is moved along until the point which has been marked by the punch comes beneath the bit E; then the third and fourth holes are bored by the bits and the point 5 indicated by the next hole; and so on through the length of the stile, the punch marking every new position.

If a single bit be used the result is the same, but a single hole only would be bored, and the stile must be moved only the distance from one hole to the next. Again, if a greater number of bits be used, then the point indicated should be moved to the last bit, in which case as many holes will be bored as there are bits. I find, however, that two bits are the best for practical purposes.

The punch serves an additional purpose to that already named—that is, as a guide or stop to arrest the movement of the stile when the holes have been bored to the requisite depth, thus insuring the same depth for all the holes.

I do not broadly claim combining a guide with a bit which shall indicate the distance between the holes to be bored, as such may be seen in the patent of Smith and Lumis, January, 1, 1867.

I claim as my invention—

In combination with one or more bits, E, and a support, I, to hold and present the stile to the bits, the stationary punch or pointer F adjusted relatively to the bit, substantially as and for the purpose specified.

LEVERETT G. KIRKHAM.

Witnesses:

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G. M. KIRKHAM.