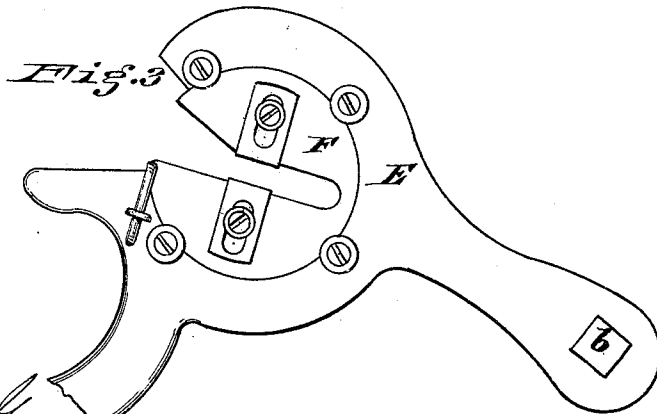
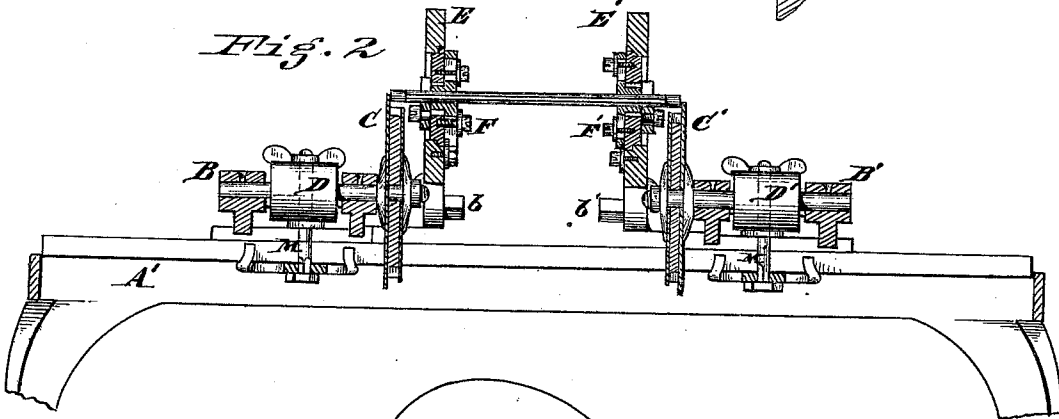
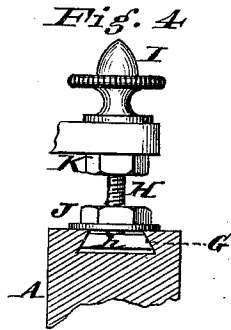
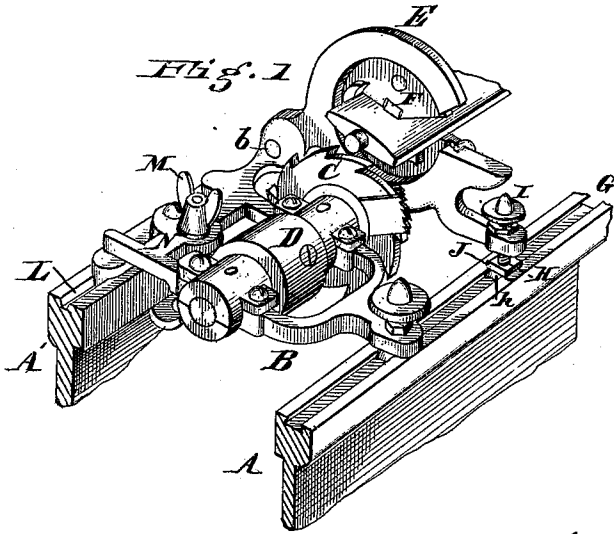


W. H. DOANE.

MACHINE FOR TENONING BLIND-SLATS.

No. 175,054.

Patented March 21, 1876.



Attest

Edgar J. Cross  
John C. Jones

Inventor

Wm. H. Doane  
By J. Millward  
Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM H. DOANE, OF CINCINNATI, OHIO, ASSIGNOR TO J. A. FAY & CO.,  
OF SAME PLACE.

## IMPROVEMENT IN MACHINES FOR TENONING BLIND-SLATS.

Specification forming part of Letters Patent No. **175,054**, dated March 21, 1876; application filed  
April 5, 1875.

*To all whom it may concern:*

Be it known that I, WILLIAM H. DOANE, of Cincinnati, Hamilton county, State of Ohio, have invented an Improvement in Machines for Tenoning Blind-Slats, of which the following is a specification:

This invention relates to that kind of machines for tenoning blind-slats in which the slat is held up to or presented to the revolving cutters by a pair of chucks, the members of which support the respective ends of the slat in close proximity to the cutters. These chucks, capable of being rotated on their axes, together with the slat, are supported each in a frame or arm pivoted at one end on the carriage of the machine, so that they may be swung back to give free access to the cutters for repairing or sharpening purposes. Heretofore these pivoted chuck-frames have been commonly constructed so as to rest loosely, when in position, upon the front side of the machine with their free ends, and when so constructed they were liable to jump under the operation of the cutters on the slat, which seriously interfered with the proper action of the machine. To avoid this difficulty, my improvement consists in the combination with these pivoted chuck-frames of means for securing them detachably to the front side of the machine, these means being such that they will permit the proper lateral adjustment of the chuck-frames with the cutter-carriages to accommodate different lengths of slats.

In the drawings illustrating my invention, and hereinafter more specifically explained, the front side or rail of the machine is provided with an undercut or dovetailed groove, and headed clamping-bolts and nuts are used for detachably connecting the chuck-frames.

I wish it to be understood that my invention is not confined to this specific means for accomplishing the end sought, as other equivalent means embodying the same general characteristics of those shown by me may be used without departing from my invention.

Figure 1 is a perspective view, showing the slat-chuck frame and the cutter-frame at one end of the machine, duplicates of these being provided also at the other end. Fig. 2 is a longitudinal section of the machine, showing the machine full length. Fig. 3 is

a side view of one of the slat-chucks. Fig. 4 is an enlarged view of the device which detachably connects the swinging slat-frame with the front side of the machine.

A A' represent the front and rear sides of the frame or bed of the machine. B B' are the frames which carry the cutter-heads C C', rotated in the ordinary way by the pulleys D D'. The frames E E', which carry the chucks F in which the slat is retained while said chucks and slats are being rotated by hand under the action of the cutters, are hinged to the frames B B' at *b*, in the ordinary way, to permit the frames E E' to be swung back, so that the cutters may be adjusted, repaired, sharpened, or changed. In order to properly sustain these frames E E' when in operation, I provide an undercut groove or dovetail, G, in the side A of the frame, into which I fit the head *h* of a bolt, H, which passes through an aperture in the frame, and is fitted above with a box-nut, I, milled so as to be turned by the finger. By the removal of this nut the frame can be swung back, and when it is in place it serves to hold the frame securely under the operation of the cutters, the groove G permitting adjustment for different length of slats. The nut J may be used to firmly hold the bolt H at any point of adjustment, and the nut K may be used to limit the descent of the swinging frame E, so that the tenons of the slats may be all alike and yet give means for changing the sizes of the tenons at will.

The frames B B' I prefer to hold on the front side by a similar bolt, H, the back part being held in V, groove L, by the screw-clamp M N.

I claim—

In a slat tenoning machine of the character stated, the combination, substantially as specified, of the pivoted chuck-frame, the fixed rail or bed, and the means, as described, for clamping or detachably securing the former to the latter.

In testimony of which invention I hereunto set my hand.

WILLIAM H. DOANE.

Witnesses:

EDGAR J. GROSS,  
WM. BATES.