

K. KENDALL & L. H. STARK.

Improvement in Blind-Slat Machines.

No. 118,023.

Patented August 15, 1871.

2 Sheets

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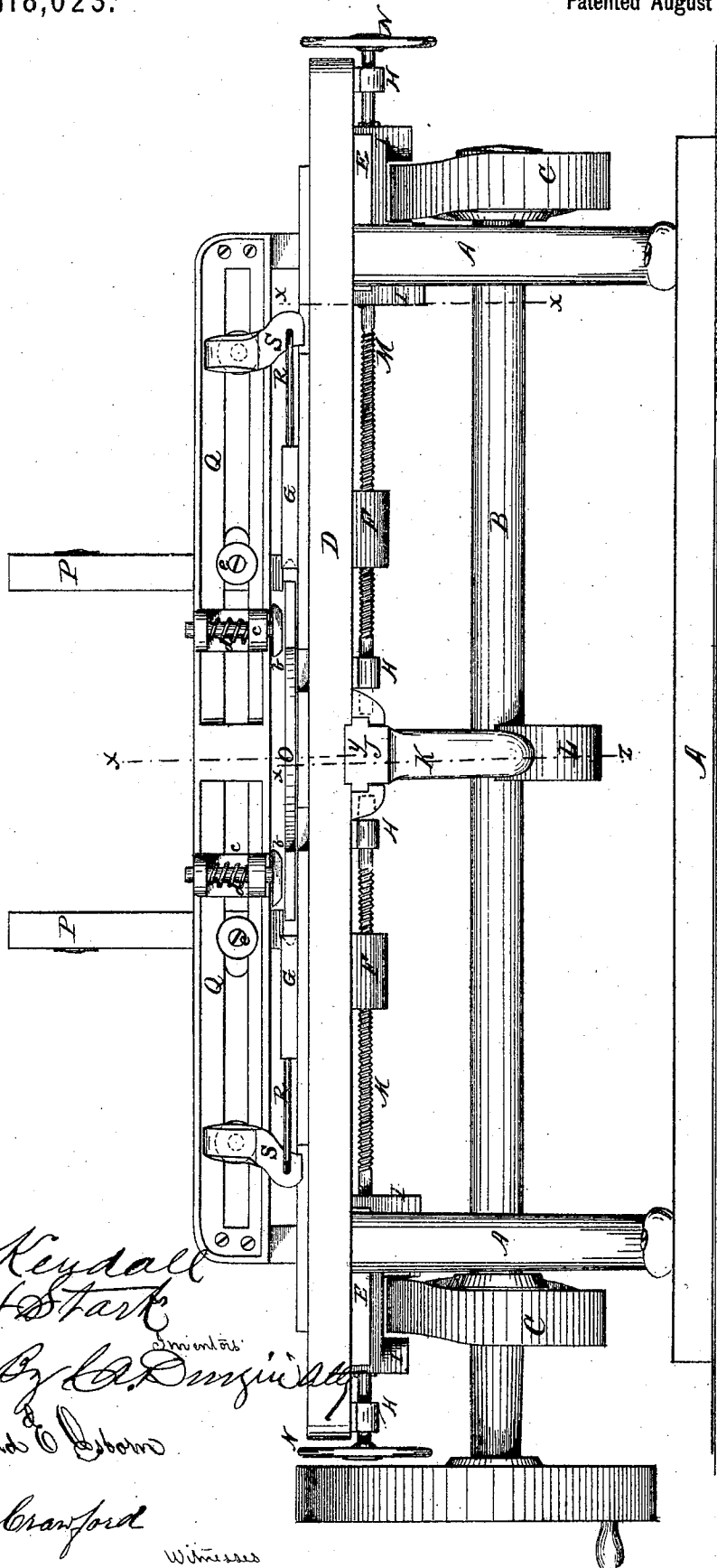


Fig. 1

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Witnesses

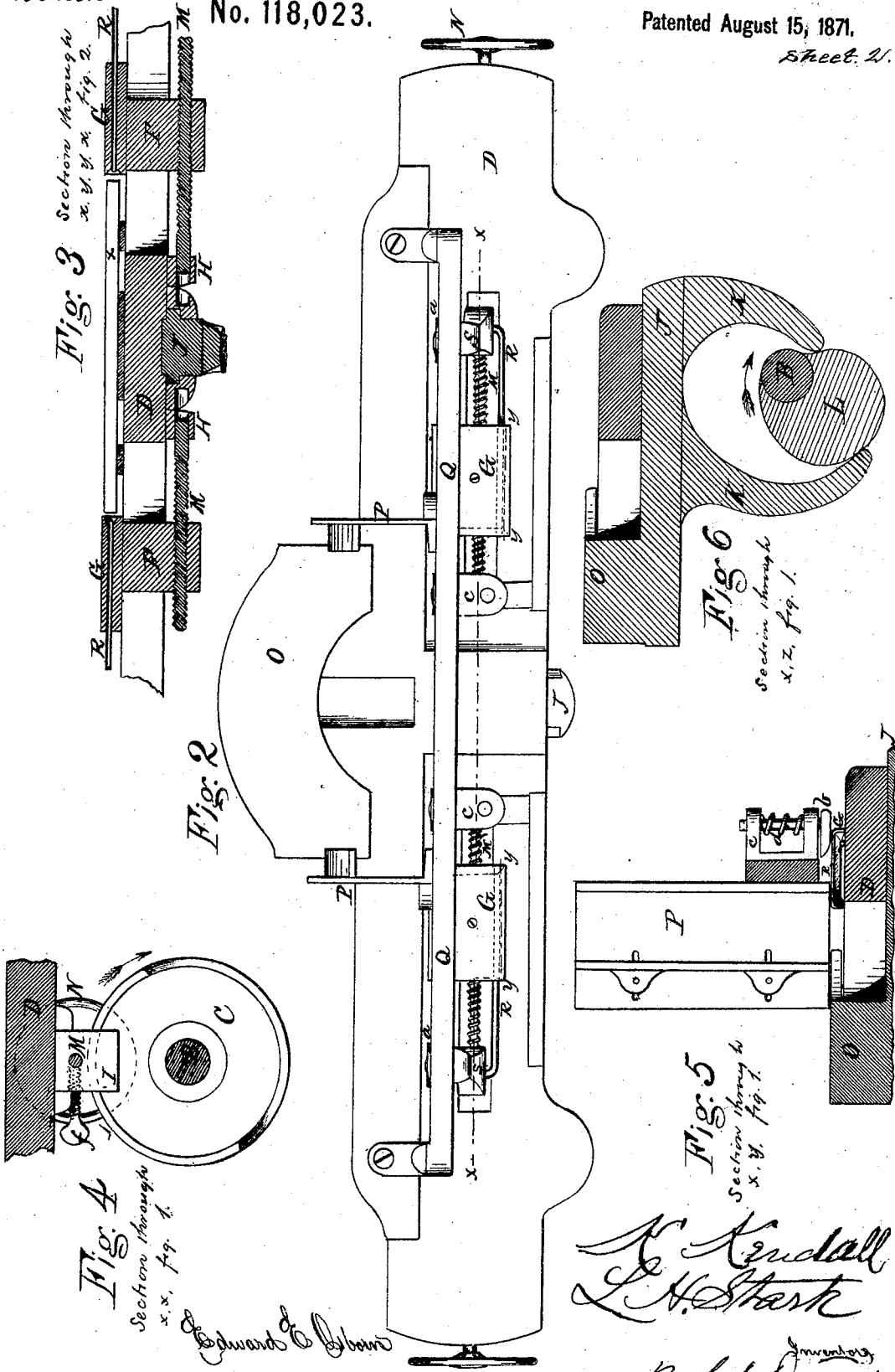
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Witness

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UNITED STATES PATENT OFFICE.

KENDRICK KENDAL AND LEWIS HENRY STARK, OF GOFFSTOWN, ASSIGNORS
TO SAMUEL C. FORSAITH, OF MANCHESTER, NEW HAMPSHIRE.

IMPROVEMENT IN BLIND-SLAT MACHINES.

Specification forming part of Letters Patent No. 118,023, dated August 15, 1871.

To all whom it may concern:

Be it known that we, KENDRICK KENDAL and LEWIS HENRY STARK, both of Goffstown, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Machines for Crimping or Compressing the Ends of Blind-Slats, of which the following is a specification:

Before the date of our invention, so far as we know, the crimping-dies in machines of this class were bolted to the bed of the machine, and much time was lost and considerable care required in setting the dies properly to crimp slats of different lengths. Our invention for obviating this difficulty consists in a novel combination and arrangement of parts for quickly adjusting the machine to operate upon slats of different lengths, and regulating the dies to obtain the amount of crimping desired, as will be fully set forth.

Figure 1 is an elevation of the front of our improved machine. Fig. 2 is a top view of the bed of our machine. Fig. 3 is a longitudinal vertical section through the lines of section *x y y x*, Fig. 2. Fig. 4 is a vertical section through the line *x y*, Fig. 1. Fig. 5 is a vertical section through the line *x y*, Fig. 1. Fig. 6 is a vertical section through the line *x z*, Fig. 1.

A represents the frame of the machine; it supports the bed D, and has bearings for the driving-shaft B, by which the working parts of the machine are operated. The cams C C on the ends of the shaft give the motion to the crimping-dies G, and the one (L) on the center of the shaft beneath the bed operates the mechanism for feeding the slats to the dies. The die-blocks F F, to which the crimping-dies G G are secured, work in slots cut in the bed D, and are screw-threaded, and move upon the rods M M whenever the latter are turned. The under side of the bed has bearings H H E E for the rods M M and the blocks I I. The cam-wheels C work in grooves in the blocks I, and give them a reciprocating motion, which is imparted to the crimping-dies through the rods M and the die-blocks F. The connection of these parts with each other is plainly shown in Figs. 1 and 3. A thumb-screw, *f*, Fig. 4, in each block I, bears against the rod M and prevents it from turning; but when it is loosened the rod may be turned by the hand-wheel N, and the die-block F be caused to move any desired distance on the rod. By this arrangement the distance the dies are

required to approach each other can be quickly and accurately regulated. O represents a feeding-plate, operating to push the slats forward to be acted upon by the dies. It is secured to the slide J, and is moved by the cam L acting upon the tappet-fingers K, as shown in Fig. 6.

The slats to be crimped are placed in a pile between the guides P P, and the lowest one is caught by the feeding-plate in its forward movement and fed to the dies. *x*, Fig. 3, represents the position of the slat. When the feeding-plate is moved backward the next slat in the pile drops in front of it and is fed to the dies when the plate O moves forward. As the slat approaches the dies it pushes the crimped slat previously acted upon by the dies out of the way, and off the front of the machine into a receiver or onto the floor. The crimping-dies slide upon adjustable rods R R, which pass through holes in the dies, as shown in Figs. 1 and 3, and are secured to the slides S S held by the set-screws *a a* in the frame Q. When the dies move back, after crimping the slat, the ends of the rods R R bear against the slat and force the ends out of the dies and prevent them from sticking in the beveled faces of the dies. The pressure-guides *b b*, held in the adjustable bearings *c c* on the frame Q, bear against the upper surface of the slat between the dies, and keep it in place during the action of the dies. The guides P P, between which the slats to be crimped are piled, are adjustable on the frame Q by means of the set-screws *e e*, so that they can be readily altered to receive slats of any length and width.

It will be seen that the different parts of this machine are capable of quick and accurate adjustment to receive and act upon slats of any size, and that, when so adjusted, the parts are not liable to become deranged or loosened while the machine is in operation.

The shape of the face of the dies which give the form to the ends of the slats is clearly shown in Figs. 1, 2, 3, and 5 of the drawing.

We claim as our invention—

The combination of the dies G G operated by the cams C C, with the adjusting screw-shafts M M, substantially as and for the purpose set forth and specified.

KENDRICK KENDAL.

Witnesses: LEWIS HENRY STARK.
GRANVILLE P. WARREN,
ALFRED STORY.