

*W. Robinson,
Dressing Staves.*

N^o 29,997.

Patented Sep, 11, 1860.

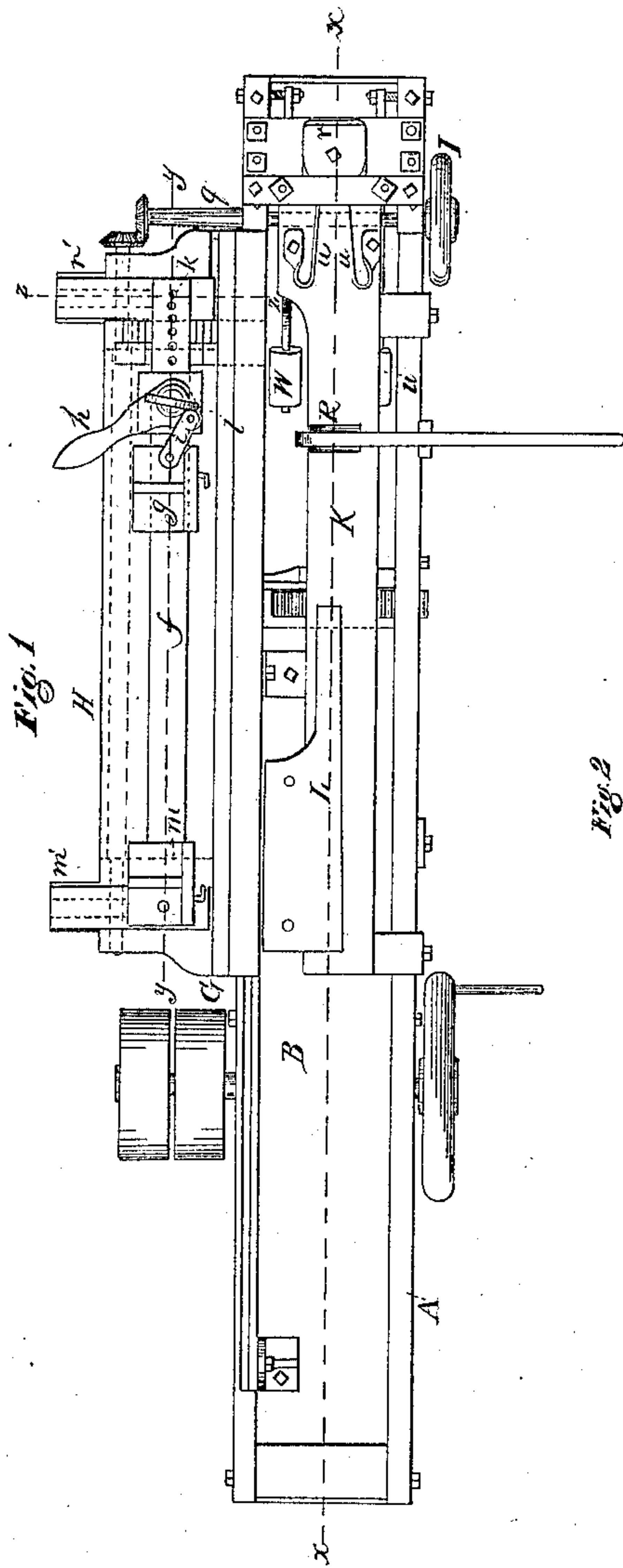


Fig. 2

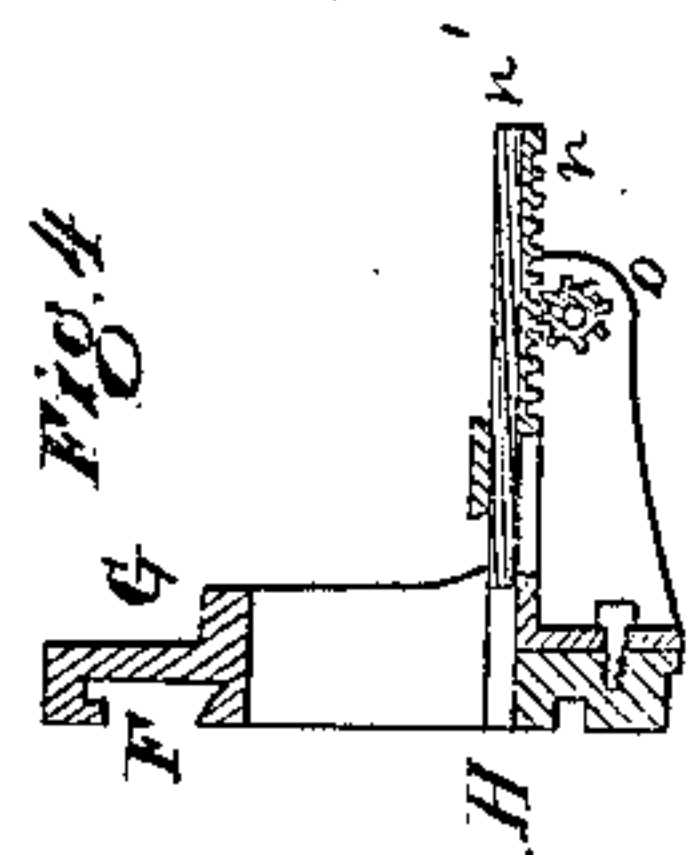
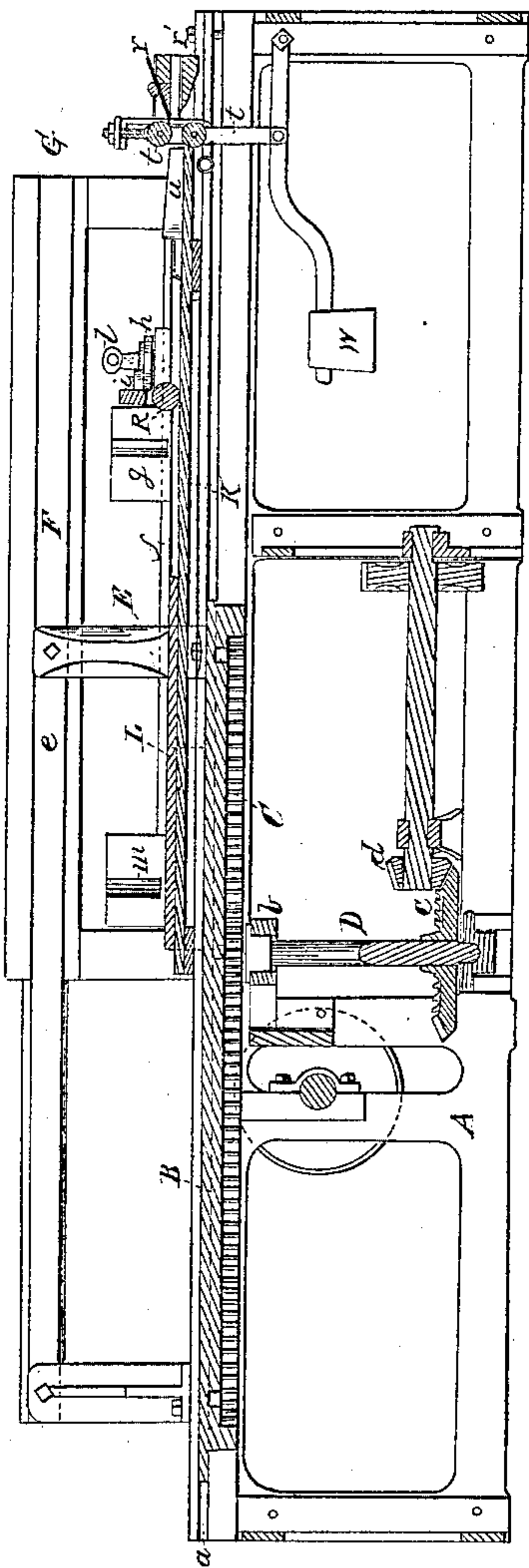


Fig. 4

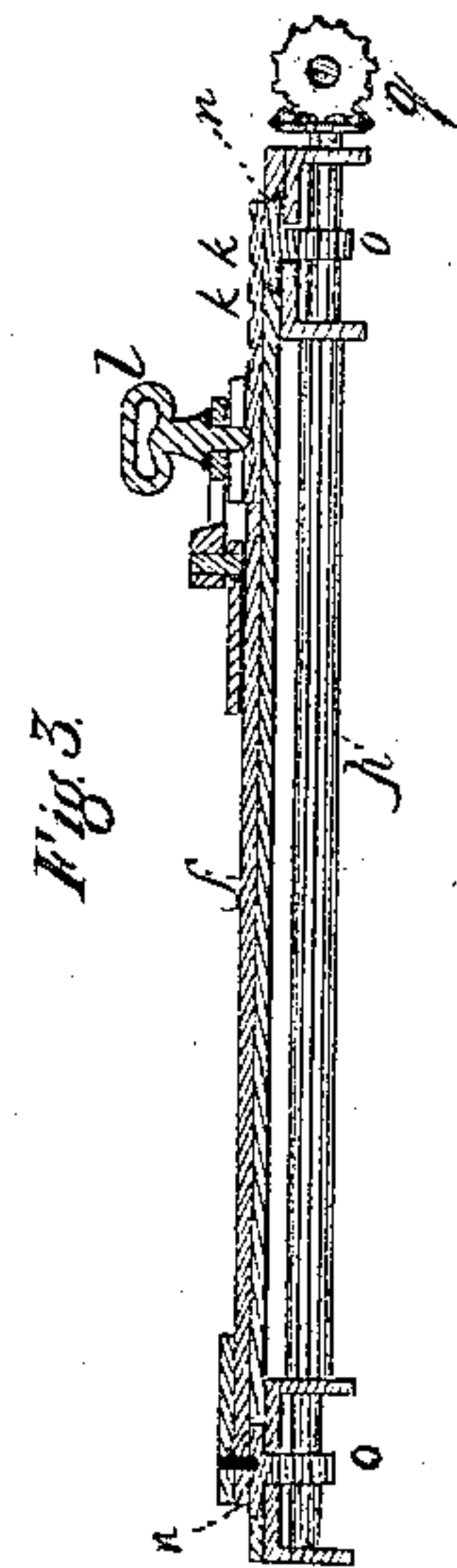


Fig. 3

*Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM ROBINSON, OF AUGUSTA, GEORGIA.

MACHINE FOR RIVING AND DRESSING STAVES.

Specification of Letters Patent No. 29,997, dated September 11, 1860.

To all whom it may concern:

Be it known that I, WM. ROBINSON, of Augusta, in the county of Richmond and State of Georgia, have invented a new and
5 useful Improvement in Stave-Cutting Machinery; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1 is a top view of the machine. Fig. 2 is a vertical section on $x x$. Fig. 3 is
15 a vertical section on $y y$. Fig. 4 is a vertical section on $z z$.

The nature of my invention consists in the combination of certain devices hereinafter set forth, for cutting and dressing staves; the details of construction and operation being as follows.

In the drawing A is the frame in grooves a of which slides the longitudinally moving bed B; reciprocated by connection of rack
25 C and pinion b , on oscillating shaft D; driven by bevel bear $c d$. To this bed is attached the lower extremity of the riving knife E. The upper extremity of which is secured to the slide e moving in guide F of
30 dog frame G, so that as the said bed is moved the knife is carried with it.

The dogging mechanism consists of a longitudinal bar f , on which is the sliding dog g connected with movable lever h by rod
35 i , so that said slide lever being secured at any of the situations k , by the screw l , the turning of the lever secures the bolt between the movable dog g and fixed dog m , the position of slide lever being determined
40 by the length of the bolt.

The bar f , has two arms $m' n'$ movable in guides in bolt bed H by reason of racks $n n$ on under side of said arms meshing with
45 pinions $o o$ on shaft p , (Figs. 3 and 4), said shaft being turned by power applied to wheel I on shaft q , the turning of which

thus gives the required set forward of bolt for the thickness of a stave.

Secured to the main frame is a permanent bed K, over which slides the driver L, connected with reciprocating bed B, for forcing the stave through the dressing cutters
50 $r r'$. In front of these cutters are the stationary roller t and yielding pressure roller t' held down by weights w . 55

Upon the bed are the spring guides u , and over the bed is the roller R at the extremity of a lever, which serves to keep the stave firm upon the bed while being dressed.

The operation of the machine is as follows:—The bolt is secured between the dogs, as above described, and the requisite protrusion given by turning wheel I. The movement of the carriage or bed B draws the knife through the bolt and rives off the
60 stave, the connection of bolt carriage with the bed H being such as to allow the bolt to have a free lateral movement as the knife follows the grain of the wood. When the piece is separated from the block, it is laid
65 on the bed K in front of driver L and under roller R. The return movement of bed B forces the stave through the dressing knives which give it the required form. The rear edge of knife (which is sharpened) trims
70 the face of the block, which is set up for the next cut previous to its being reached by the knife. 75

What I claim, and desire to secure by Letters Patent, is— 80

The laterally adjustable dogging carriage in combination with the reciprocating bed B carrying the riving knife E, and the arrangement of these parts with the dressing mechanism substantially as set forth. 85

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

WM. ROBINSON.

Witnesses:

GEO. P. ATTEN,
W. S. CLAY.