

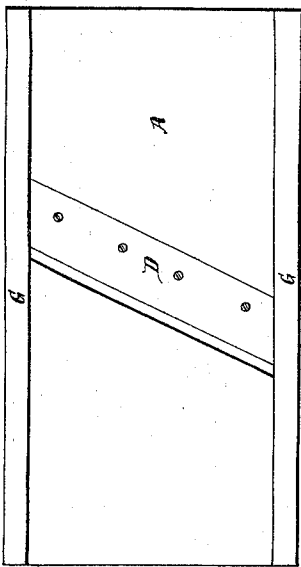
J. Bell,

Making Staves.

N^o 56,883.

Patented Aug. 7, 1866.

Fig. 2.



Witnesses.
Chas. M. Rogers

Fig. 3.

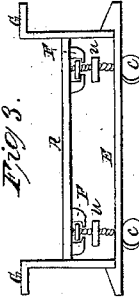
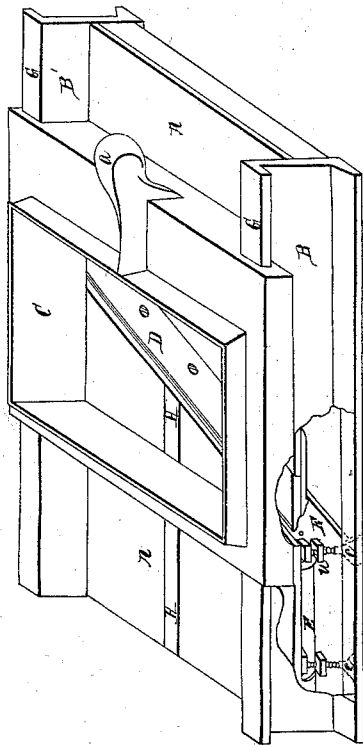


Fig. 1.



Inventor.
John Bell

UNITED STATES PATENT OFFICE.

JOHN BELL, OF LANCASTER, NEW YORK.

IMPROVEMENT IN STAVE-CUTTING MACHINES.

Specification forming part of Letters Patent No. 56,883, dated August 7, 1866.

To all whom it may concern:

Be it known that I, JOHN BELL, of the town of Lancaster, county of Erie, and State of New York, have invented a new and Improved Wood-Cutting Machine; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification.

The nature of my invention consists in constructing a knife or cutter, and so arranging it in a frame of suitable construction, as to slice thin sheets from bolts of wood of any desired thickness after the said bolts have been thoroughly steamed, and without causing or producing any fracture to the wood.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure I is a perspective view of my improved knife, showing its position in the frame. Fig. II is a bottom-plan view of same, showing the location of the knife or cutter in the frame. Fig. III is a transverse section, showing the set-screws and the manner in which they work to adjust the bed-plate.

A represents the bed-plate of my improved machine, and B B the sides of the bed-plate. D represents the knife or cutter, and is constructed with a slight bevel upon the upper or face side of the knife. The said knife being placed diagonally across the bed-plate A, and rigidly secured thereto, causes much less friction than if placed at right angles with the said bed-plate A.

C is a hopper, which is made to pass entirely over the knife or cutter while in operation. *a* is a lug rigidly secured to the hopper, and to which the pitman or connecting-rod is attached, and by which motion is communicated from any of the well-known powers.

H is a rib or bar placed longitudinally with the bed-plate, and only used when it is desired to cut shingles. C C' are set-screws, used for the purpose of adjusting the portion of the bed-plate in front of the knife or cutter, in order to vary the thickness of stuff to be cut.

F F are flanges or clamps, in which the nut of the set-screw works. *u u u u* are following-nuts, that hold the bed-plate in its position.

The operation consists, simply, in putting bolts of wood into the hopper, which is carried back and forth over the knife or cutter by the motion of the hopper, and a board is cut at each alternate motion of the hopper, each board being comparatively free from break or fracture.

It will here be observed that by reason of the slight bevel upon the face side of the knife it prevents the block or bolt of wood from sucking or drawing down upon the knife, as it forms or has most of its bearing upon the crown of the bevel on the face side instead of upon the edge, which is the case where knives are used of common construction, and which invariably causes fracture in the stuff cut by them and leave one edge thicker than the other; and to prevent this is the reason of my invention.

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

Forming the knife with a bevel on the upper side, and combining the knife, when so constructed, with the frame A and reciprocating bolt-hopper, substantially and for the purposes set forth.

JOHN BELL.

Witnesses:

C. ROGERS,
M. ROGERS.