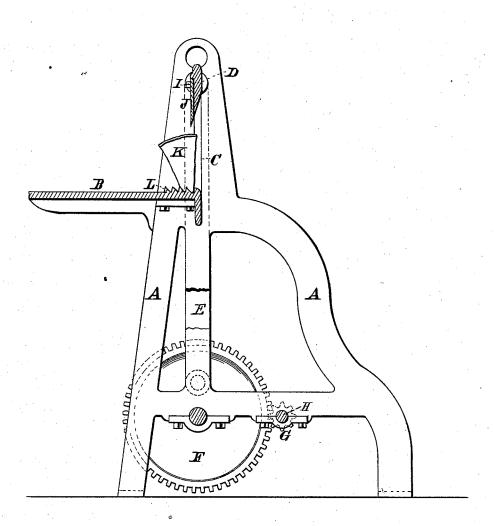
J. C. KINGSTON. Machine for Trimming Last-Blocks.

No. 203,840.

Patented May 21, 1878.



Witnesses: Brank überseh

Inventor:

## UNITED STATES PATENT OFFICE.

JOHN C. KINGSTON, OF BUFFALO, NEW YORK.

## IMPROVEMENT IN MACHINES FOR TRIMMING LAST-BLOCKS.

Specification forming part of Letters Patent No. 203,840, dated May 21, 1878; application filed April 20, 1878.

To all whom it may concern:

Be it known that I, John C. Kingston, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on a Machine for Trimming Last-Blocks; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying drawing, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has special reference to a machine for trimming last-blocks; and it consists in the peculiar arrangement of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claim.

The drawing heretofore mentioned represents a longitudinal sectional elevation.

The object of this machine is to enable me to rapidly and economically trim the rough last-blocks into a perfect shape previous to seasoning them. These last-blocks, which are usually of hard maple, and are delivered by the farmers and woodsmen to the market in prismatic blocks having the bark still left, and of a size sometimes considerably larger than required for making a last, I take to my machine, and split them into a size suitable for making a last on the variety turning-lathes used for that purpose by trimming the sides of the prismatic blocks while still green, and then pile them up for seasoning.

With the bark left the blocks will soon rot, while, when removed, and the blocks trimmed to nearly the size required for a perfect last, these blocks will season in less time than otherwise, and be far more preferable than those not being so trimmed.

Heretofore last-blocks were chopped lengthwise with an ax by hand or machine power. Such splitting is, however, very objectionable, because in knotty and checked wood there is considerable waste, from blocks splitting contrary to expectations, in such manner as to render the block too small for use. To avoid this, I place the blocks horizontally upon my machine, and the knife or cutter, operating in a vertical plane, trims these blocks longitudi-

without fear of the knife following the grain, and therefore save more blocks than could be made available were these blocks split with the grain of the wood. I can by this method of trimming also readily trim them to better advantage by removing more or less wood on one or the other side, thus removing most where knots and checks are found, and less where nice and clear wood exists, and be always positive that the knife will remove no more wood than is just desired.

A are two standards, placed a suitable distance apart to admit a sufficiently long lastblock between them upon a table, B, which table serves as a rest or support for these blocks, and at the same time as a connection between the standards to keep them in proper position. The upper extremity of these standards is slotted at C to admit the cutter-bar D, and serve as a guide for the same. This cutter-bar, which projects over the standards, has connecting-rods E, by means of which it is operated from the crank-disks F. These crank-disks have teeth or cogs on their periphery, and they are revolved by the pinions G upon the drive-shaft H. This shaft H is rotated by any of the well-known means.

Upon the table B are provided a series of **V**-shaped projections, L, which serve to retain the blocks K to be operated upon in proper

To the knife-bar D is secured a cutter, J, by the bolts I. This knife has a perfectly flat surface toward the operator and the block K to be trimmed, and to produce the cutting-edge it is beveled on the rear side, as clearly illustrated in Figure 1.

The operation for trimming the last-blocks is as follows: The machine being continuously rotated at the proper speed, the block K is placed upon the bed-plate B in such manner that one of its edges will rest against one of the projections L, the workman readily deter-mining which one he shall take by the size of the block in operation. Now he advances the upper part of the block toward the cutter, and thus takes a shaving or as many shavings off the same as he finds necessary to properly true up this side. He then reverses the block and trims the opposite, and finally the third nally. In this manner I can trim the blocks | and fourth, side, which operation in all requires less time to perform than it takes to describe the same.

By the aid of this machine one workman is able to trim more than twice the number of blocks that he could do with an ax operated by machine, and four times or more the num-

ber trimmed by hand.

It will be readily observed that the blocks K are prismatic in contour, and that one of the sides is very narrow. Now, for a large last, the workman will rest the block against one of the V-shaped projections farther away from the knife than he would in trimming a small block, and thus, by varying the size of the narrowest side and trimming the block accordingly, produces the various sizes for the lasts.

Having thus described my invention, I

claim—

The machine for trimming last-blocks hereinbefore described, consisting, essentially, of the standards A, table B, cutter-bar D, and cutter J, said table B being provided with the V-shaped projections L, serving as a means for gaging the blocks to be trimmed, and at the same time to retain them in position, substantially as and for the object specified.

In testimony that I claim the foregoing as my invention I have hereto set my hand and affixed my seal in the presence of two sub-

scribing witnesses.

JOHN C. KINGSTON. [L. s.]

Attest:

MICHAEL J. STARK, FRANK HIRSCH.