(No Model.)

J. Y. SIMONS.

BLOCK FACING MACHINE.

No. 287,478. Patented Oct. 30, 1883.

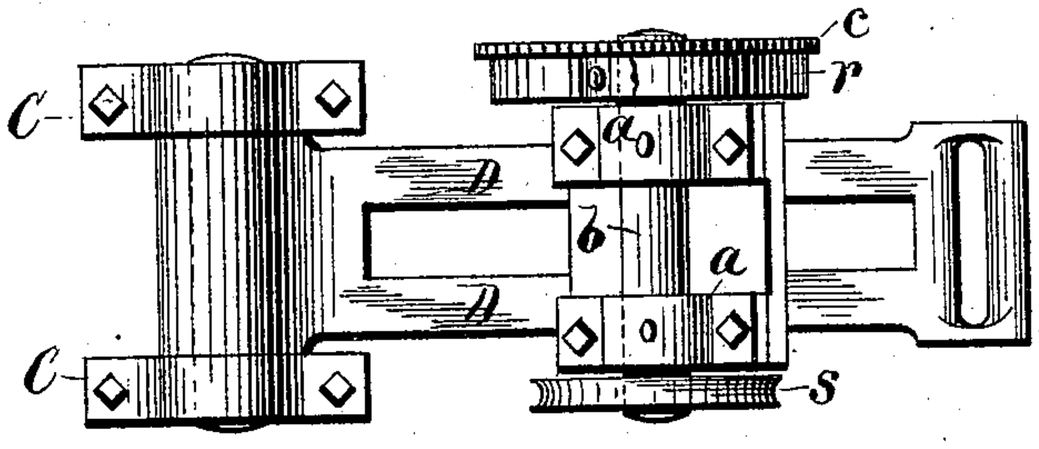


FIG. 2.

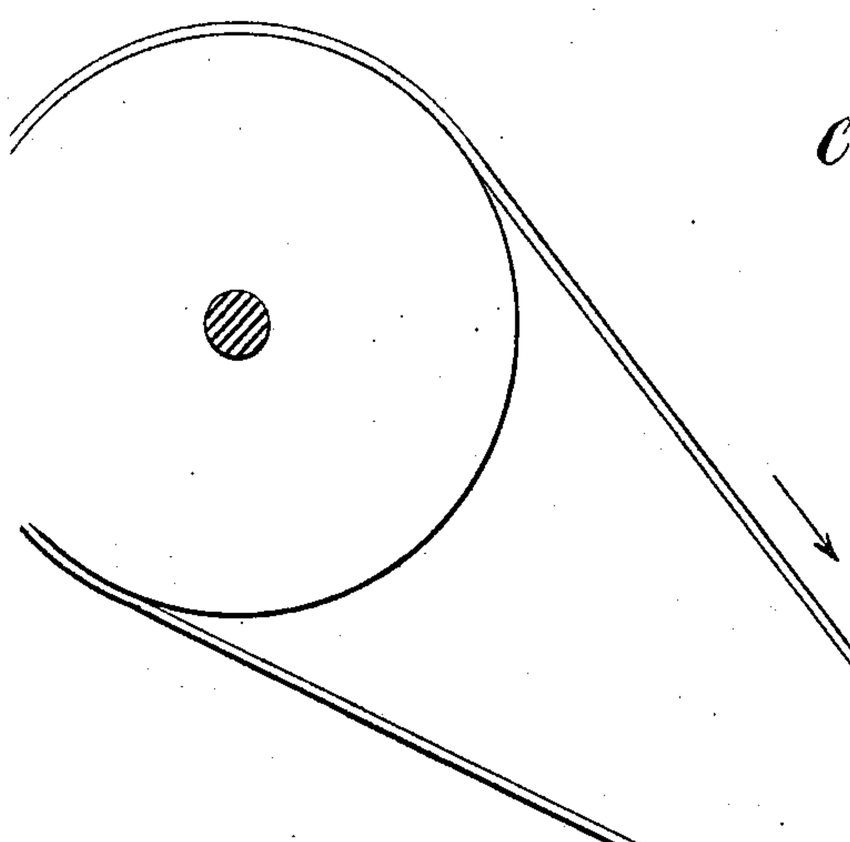


FIG. 1.

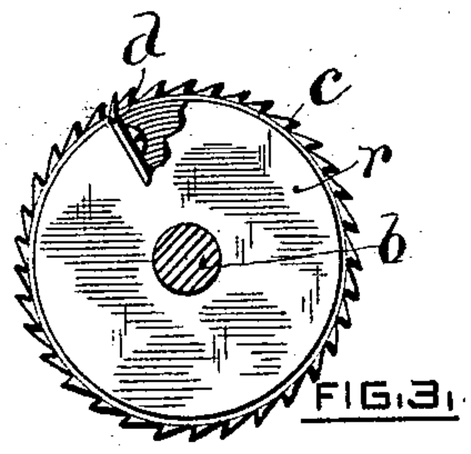


FIG. 3.

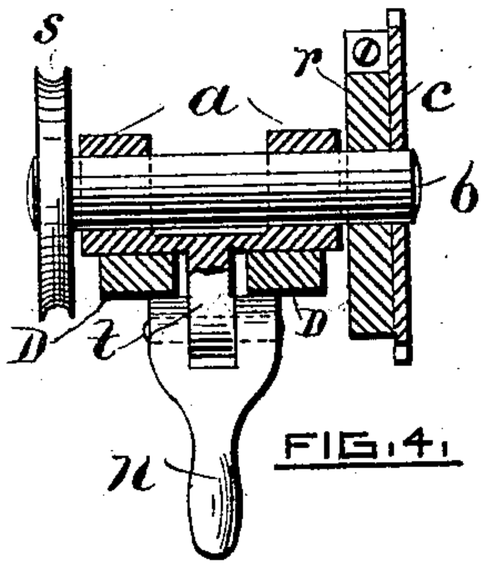
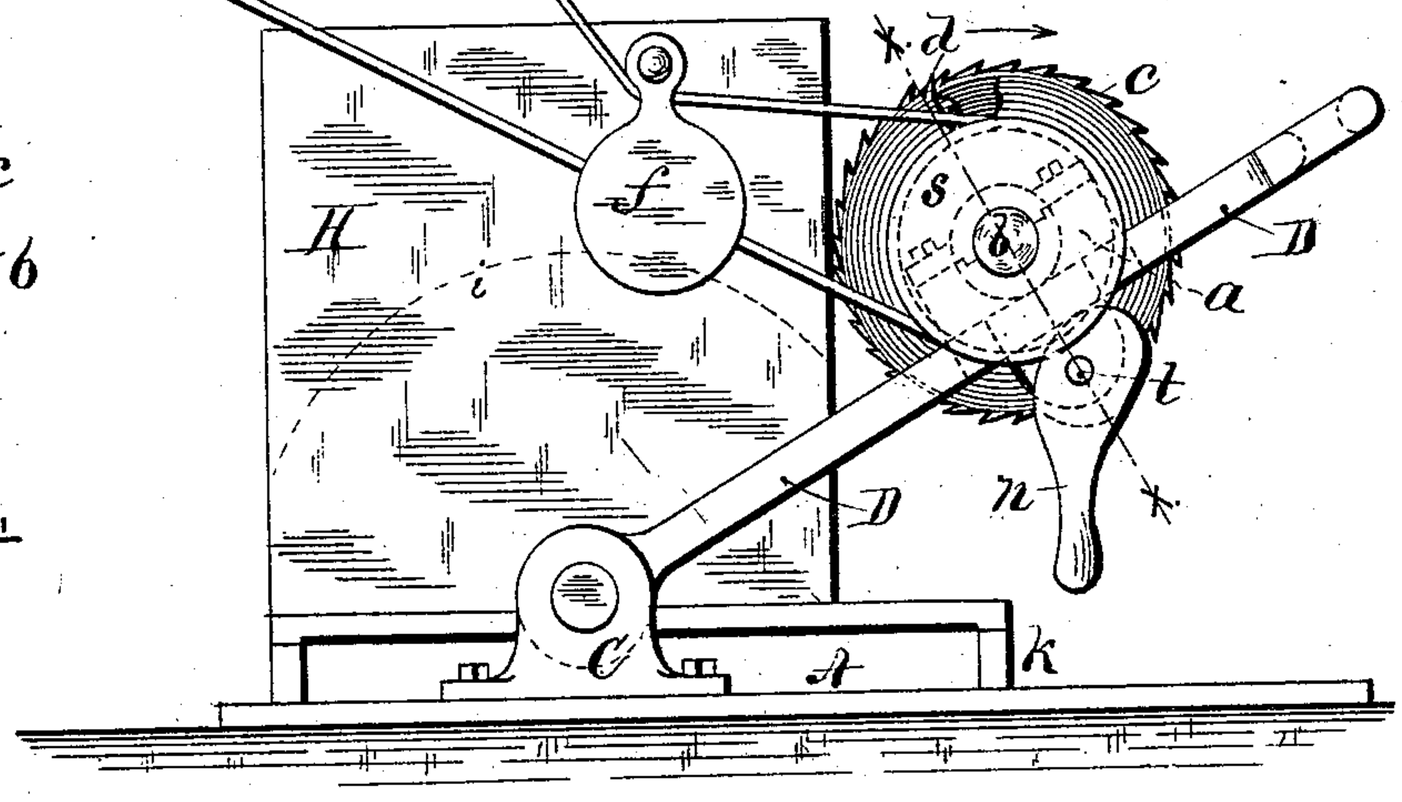


FIG. 4.



WITNESSES.

H C Anderson.

S B L Arnold

INVENTOR.

James Y Simons

By Munn & Arnold Attys

UNITED STATES PATENT OFFICE.

JAMES Y. SIMONS, OF PAWTUCKET, RHODE ISLAND.

BLOCK-FACING MACHINE.

SPECIFICATION forming part of Letters Patent No. 287,478, dated October 30, 1883.

Application filed February 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES Y. SIMONS, of Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Machines for Facing Off Blocks, &c., of which the following is a full and correct description, reference being had to the accompanying drawings, making a part of this specification.

The object of my invention is to true off the end of a block of wood or a log easily, smoothly, and accurately, and this I attain by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is a top view of the main part of Fig. 1. Fig. 3 is a side elevation of the saw and block with the cutter. Fig. 4 is a cross-section of Fig. 1 through the line *x x*.

A is the bed or table of the machine, to which the block C is firmly secured.

D is a slide-frame, one end of which is fitted accurately between the bearings on the block C, and which swings on a short shaft passing through the bearings and the frame. A plate or carriage, *a*, is fitted to the top and sides of the frame D, so as to slide snugly thereon. This carriage *a* has a bearing on each end, into which the arbor *b* is fitted, which has the saw *c* and block *r* on one end and the driving-pulley S upon the other end.

A projection, *t*, extends down from the carriage *a* through an opening in the middle of the frame D. To the lower end of this projection is pivoted the forked cam-lever *n*, which bears on the frame D on each side of the opening when the handle is turned toward the outer end of the frame.

A circular saw, *c*, is fastened to the face of the block *r*, so as to be perfectly true, and a notch is cut in the block, to one side of which is fastened a cutter, *d*. The cutting-edge of *d* is set a little lower than the points of the saw-teeth, and is for the purpose of chipping off the wood outside of the saw-scarf, so that blocks of any size may be faced off by the use of a moderately-sized saw. A weight, *f*, is suspended on the driving-belt, to take up the slack when the frame D is raised in operating the machine.

In operation the block or log to be faced off is secured to the platform K, and, motion being given to the saw by means of the belt on the pulley S, the frame D is swung over across the end of the block by the handle at its outer end, making a cut across the face of the block, as shown by the curved line *i*. Then the carriage *a* is loosened by turning the handle of the lever *n*, and slid on the frame D, so as to take another cut across the block by tightening the carriage with the lever *n*, and again swinging the frame over, as before. This operation is continued until the whole of the block is faced off, and the accuracy of the work will depend on the good close fitting of the working parts of the machine. The operation of facing may commence at the top or bottom of the block, and more cutters may be inserted in the block *r*, if thought best.

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

The combination of the slide-frame D, swinging on bearings in the block C, attached to the bed A, with the carriage *a* sliding thereon, lever-cam *n*, arbor *b* in bearings on the carriage *a*, circular saw *c*, and block *r*, and cutter *d*, attached to the arbor *b*, substantially as and for the purpose set forth.

JAMES Y. SIMONS.

Witnesses:
J. F. BROWNING,
WM. H. HODGES.