## Saring Shingles.

J 41,156.

Patented Jan. 5, 1864.

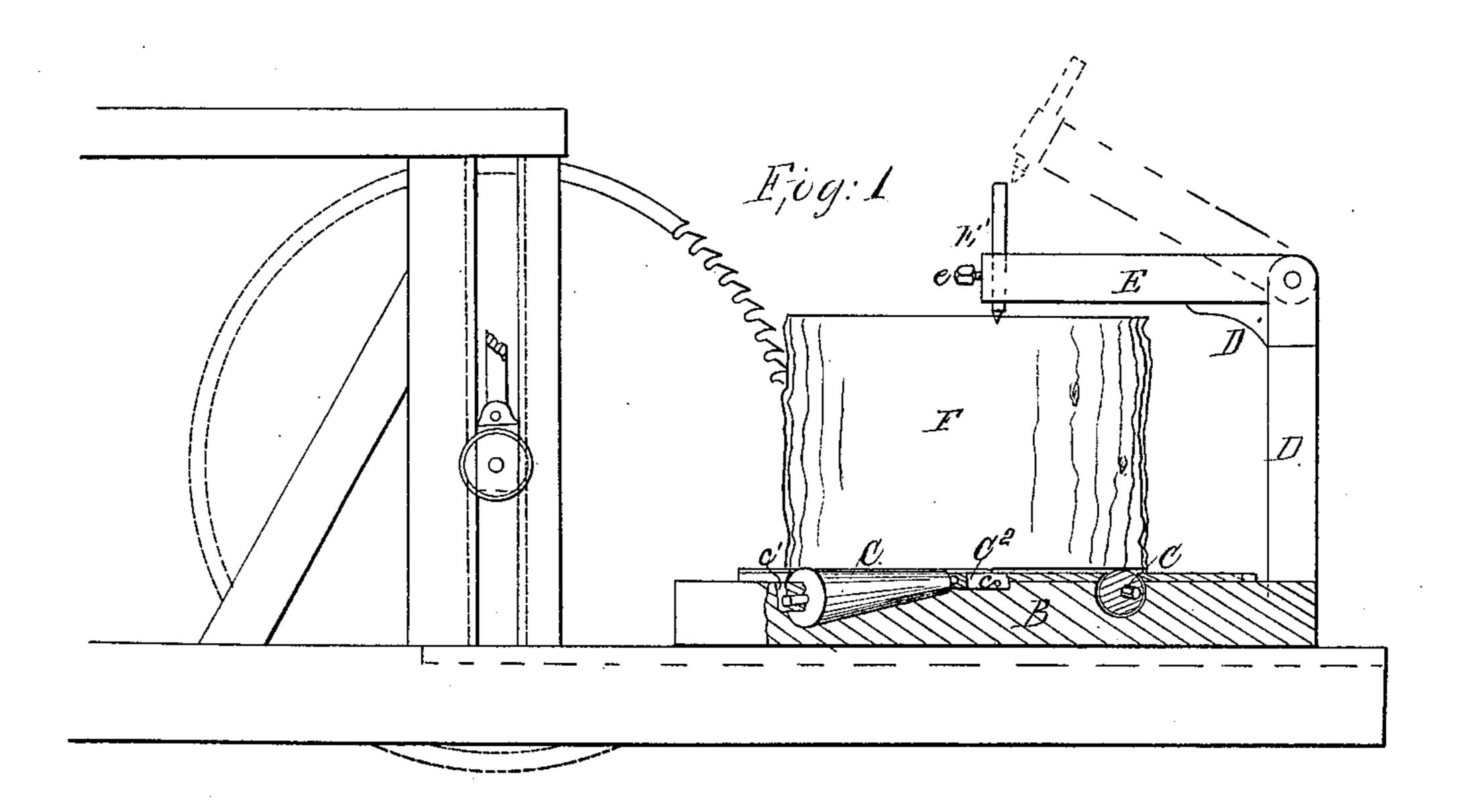


Fig. 8

Witnessess. Charles Dofnith James He Sidley Triventor. Dy Mynnees Millorneys

## United States Patent Office.

JOB. B HENDY, OF OLEAN, NEW YORK.

## IMPROVEMENT IN BOLTING SHINGLE-BLOCKS.

Specification forming part of Letters Patent No. 41,156, dated January 5, 1864.

To all whom it may concern:

Beitknown that I, Job B. Hendy, of Olean, in the county of Cattaraugus, State of New York, have invented a new and Improved Machine for Bolting Shingle-Blocks; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical section of my improved machine, representing the same as being used in connection with a circular saw, the blue mark in Fig. 2 indicating the line in which the section is taken. Fig. 2 is a plan of the same.

Similar letters of reference indicate corre-

sponding parts in the several views.

It is well known that the heart of pine, oak, and other timber of which shingles are most commonly made, is usually unfit for the manufacture of shingles; also, that the winding of the grain or the presence of knots frequently renders it impossible to split the logs or cuts into bolts adapted to be sawed up into shingles by machinery without waste. From these causes the sawing of shingles from bolts split in the manner hitherto practiced is usually attended with waste of material and imperfection of the manufactured article.

The object of my invention is to produce a machine by means of which the logs or cuts may be sawed up into bolts of convenient dimensions, the disadvantages of cross or winding grain avoided, knotty and decayed parts rejected and waste of material avoided.

To these ends the invention consists in the combination, with a stationary bed-plate of suitable construction, of a pivoted arm supported upon a standard, and having on its end an adjustable centering-pin, all as will be hereinafter fully described.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A represents a circular bed-plate secured upon a table, B, by means of screws a, or in any other suitable manner.

C represents a series of conical or conoidal metallic rollers projecting somewhat above the upper bed-plate, A, through corresponding slots formed therein. These rollers are set

radially and journaled at their outer and larger ends in boxes C', formed on the under side of the bed-plate A, near the periphery thereof, and at their inner and smaller ends in bearings c, formed in a circular box,  $C^2$ , on the under side and at the center of the bed-plate A.

a' represents a slot extending from the center of the bed-plate A to the edge of the table B, and designed to admit of the passage of a circular saw, to be hereinafter referred to.

D represents a standard rising from the table B, and having formed near its upper end

a bracket, D'.

E is an arm pivoted on the upper end of the standard D, and provided on its outer end with a pointed pin, E', which pin, when the arm E is turned down upon the bracket D', is in a position directly over the center of the bed-plate A. This pin may be made adjustable in height by the use of a thumb-screw, e, so as to conform to the height of any block which may be placed upon the bed-plate A.

F represents a block or cut placed upon the bed-plate A and centered by the pin E.

Operation: The table B is designed to be placed upon or constitute the body of a feeding carriage, and to be presented to the action of a circular saw, as shown in the drawings. A log or cut is placed upon the bed-plate A and centered in the heart by the pin E'—that is to say, the log or cut is so adjusted and secured in position upon the bed-plate that the heart of the timber will constitute the axis upon which the log is to be turned—and this mode of centering will always be most economical, whether the heart of the timber be located at the center thereof or at a point in greater or less proximity with the same. The log or cut having been thus secured in the machine, the latter is advanced until the saw has penetrated to the heart of the timber, when the table B is retracted and again advanced after the block has been turned a suitable distance upon the bed-plate A. In this manner bolts of any desired dimensions may be shaped or cut out with great rapidity, and knots or other parts of the material which would produce defective shingles may be quickly separated from the bolts. The table B having been thus advanced and retracted until the block is converted into the required number of bolts, said block may beremoved and the bolts severed in any manner from the useless material composing the heart. Shingle-bolts may thus be produced which may be converted into shingles without the least waste of material.

The radial rollers C allow the logs to be turned upon the bed-plate A with great ease, they by preference being made of tapering form and arranged with their larger ends outward to compensate for the greater velocity with which the outer part of the log revolves; but I wish it distinctly understood that I do not limit myself to any particular form, size, number, or position of these rollers, but propose to vary the same as experience may prove desirable.

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

A machine constructed with a bed-plate, A, rollers, C, standard, D, and pivoted arm, E, substantially as described, for centering logs or cuts to be sawed into bolts for shingle-machines.

The above specification of my improved maching for bolting shingle-blocks signed this 25th day of September, 1863.

JOB B. HENDY.

Witnesses:

OCTAVIUS KNIGHT, CHARLES D. SMITH.