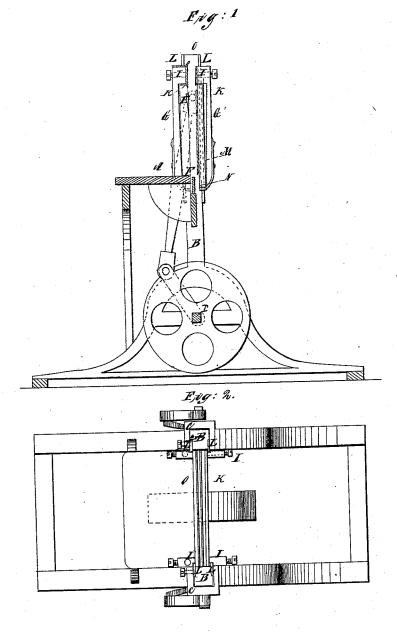
## 0. I. Williams. Shingle Machine.

Nº 107,429.

Patented Sept. 13, 1870.



Witnesses:

Short Brooks

Inventor: O Tetvilliams, Minnsko

## United States Patent Office.

## O. T. WILLIAMS, OF SMITHLAND, KENTUCKY.

Letters Patent No. 107,429, dated September 13, 1870.

## IMPROVEMENT IN SHINGLE-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, O. T. WILLIAMS, of Smithland, in the county of Livingston and State of Kentucky, have invented a new and improved Shingle-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying draw-

ing forming part of this specification.

This invention relates to improvements in shinglemachines designed to provide a simple and efficient machine capable of riving the shingles, shaving them on both sides, and reducing them to the required taper

simultaneously.

It consists in the arrangement, upon a verticallyreciprocating gate, of a riving and two shaving and tapering-knives, operating in conjunction with a holding-table and shingle-blank support, all as hereinafter more fully specified.

Figure 1 represents a sectional elevation of my im-

proved machine, and

Figure 2 represents a plan view thereof.

Similar letters of reference indicate corresponding

A represents a holding-table for the bolt, which is placed thereon upon one end, to be fed up to the

knives by the operator.

This table is arranged in front of two posts, B. which serve for the supporting of a gate or pair of slides, for supporting and operating the knives, reciprocating motion being imparted thereto by connectingrods from a crank-shaft, D, at the bottom.

These slides C support a riving-knife, E, working in straight lines, and cutting past the edge F of the holding-table. They also each support two auxiliary knife-holders, G G', connected thereto at H, and rising up to the top of the said slides, where they have ledges, I, projecting toward the vertical plane of the driving-shaft, and supporting the shaving and tapering-knives K face to face.

These ends of the said knife-supports are capable

of moving to or from each other; and the ends of the knives K, which they support, project behind guides, L, fixed to the posts B, and so arranged as to draw the said knives toward each other as they descend. When they rise, they are moved in the opposite direction by the said guides.

M represents a gauge, connected to the slides, and moving with them, against which the bolt is pressed in feeding up, and which governs the thickness of the

shingles.

N represents a rest for the shingle after it has been

severed from the bolt.

From the foregoing description, it will be seen that the shingles are first rived by the knife E, and then shaved and tapered by the two knives K, which follow the riving-knife, and take the blanks between them, drawing closer together as they move toward the point of the shingle, which is supported, after being severed from the block or bolt, on the rest N.

The knives K pass sufficiently below the rest N, to allow the finished shingle to fall over them to the rear for discharging; and to facilitate discharging them in that direction, a deflecting-spring, O, is placed above the front knife K, and adapted to discharge the shav-

ings also.

By removing the knives K, my improved machine is adapted for riving shingles, staves, or other articles having parallel sides, and I, therefore, propose to so connect the said knives as to permit them to be readily detached.

Having thus described my invention,

I claim as new and desire to secure by Letters Pat-

The arrangement, herein described, of the supporting-table, riving-cutter, and two shaving and taperingknives, and rest N, when constructed and operating in the manner and for the purpose set forth.

O. T. WILLIAMS.

Witnesses:

GORDON C. WILLIAMS. JOHN G. ANDERSON, Jr.