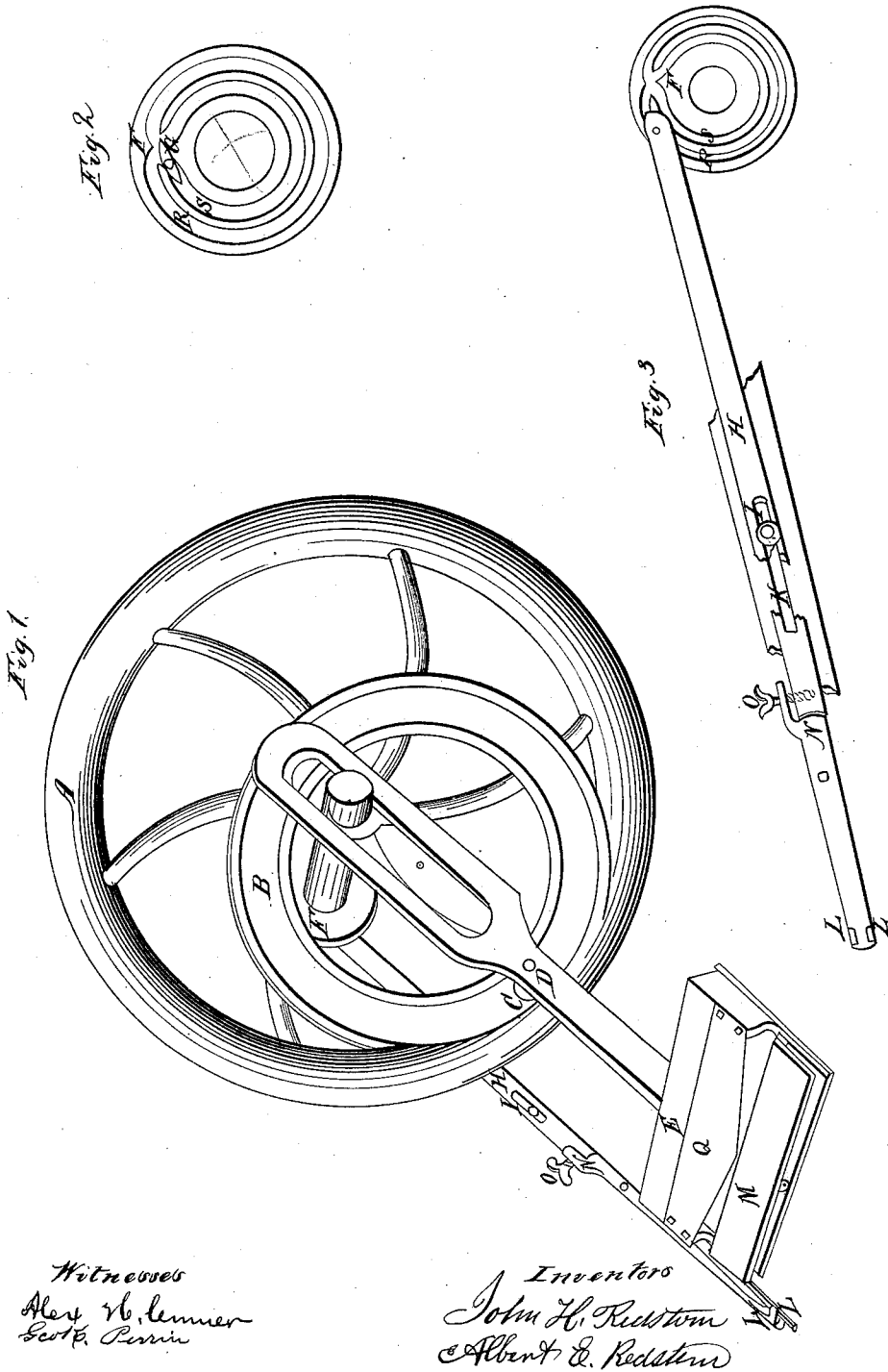


J.H. & A.E. Redstone,

Cutting Shingles,

No 27,309,

Patented Feb. 28, 1860.



Witnesses
Alex. H. Lemmer
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UNITED STATES PATENT OFFICE.

JOHN H. REDSTONE AND ALBERT E. REDSTONE, OF INDIANAPOLIS, INDIANA.

SHINGLE-MACHINE.

Specification of Letters Patent No. 27,309, dated February 28, 1860.

To all whom it may concern:

Be it known that we, JOHN H. REDSTONE and ALBERT E. REDSTONE, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Shingle-Machines, of which the following is an exact description, reference being had to the accompanying drawings and the letters marked thereon.

10 Figures 1, 2 and 3, are sectional views showing the construction and arrangement of the machine.

A is a cast iron wheel in which is the groove B, which is a true curve, and is 15 thrown or placed in the wheel A, so that its center is out from the center of the wheel A, a distance sufficient for the stroke of the knife.

C, is a friction roller, designed to traverse 20 the curve B, and is attached to the bar D, which is attached to the knife plate E. The object sought by this combination is cheapness of construction and durability.

F, is a cross grooved wheel which is placed 25 upon the same axle with the wheel A, and in which the follower G, (which is pivoted to the end of the lever H,) works for the purpose of raising and lowering (or vibrating) the lever H.

30 The table M is held vertically and slides between the ribs or projections L, L, which are upon the lever H. The slot I, which is in the lever H, and the slot K, (which is in the frame of the machine) in connection 35 with the bolt J, are designed to vary the vibration of the lower end of the lever H, which operates the table M. This is done by moving the bolt J, or fulcrum up or down. When the table M, (which is hinged 40 in the usual way in the center,) is raised or lowered for the purpose of varying the thickness of the shingle, the center of the vibration of the lever H, is thrown above or

below the center of the table M, thereby causing the knife to cull faster from one 45 end of the block than the other. This we avoid by hinging or joining the lever H, at N, and operating it by the set screw O. The great advantages of this arrangement can only be fully appreciated by actual ex- 50 periment as the shingle may be varied to any extent without stopping the machine for the purpose.

The following is the operation of the machine. The block being placed upon the 55 table M, which is placed at an angle of forty five degrees slides by its own weight against the standards or rests. As the wheel A, is revolved the knife Q, is brought in contact with the block. The lever H, holds the 60 table M, while the follower G, is passed by the groove R, and one revolution of the wheel A, is made and one shingle is cut from the block. The follower G, is then passed by (or passes) the crossing which 65 unite the grooves R, and S, when the table M, is vibrated or reversed. The follower G, remains in the groove S, while another revolution and another shingle is made. About the same effect may be had by casting the 70 groove B, separately from the wheel A, although the expense we find upon experiment to be greater.

What we claim and desire to secure by Letters Patent is—

75 The cross grooved wheel F, follower G, lever H when used in connection with the grooved cam B, the slotted bar D, knife plate E, and table or rest M, or their equivalent as set forth.

JOHN H. REDSTONE.
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Witnesses:

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