

*F. Jenney,
Planing Shingles.*

N^o 6,716.

Patented Sep. 18, 1849.

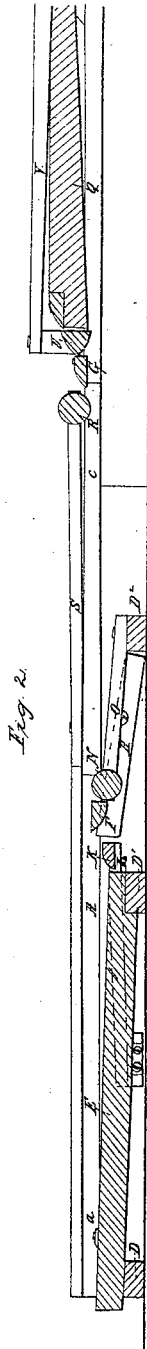


Fig. 2.

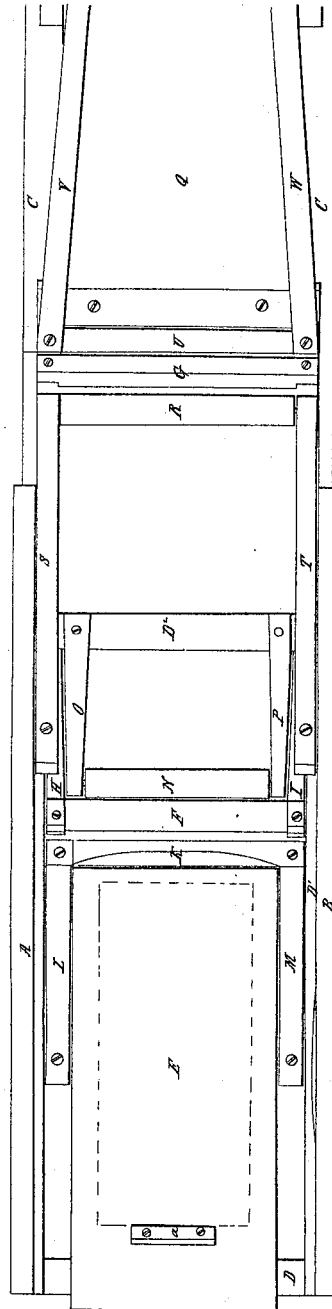


Fig. 1.

UNITED STATES PATENT OFFICE.

FRANKLIN JENNEY, OF NEW BEDFORD, MASSACHUSETTS.

MACHINERY FOR DRESSING SHINGLES.

Specification of Letters Patent No. 6,716, dated September 18, 1849.

To all whom it may concern:

Be it known that I, FRANKLIN JENNEY, of New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Machine for Planing Shingles or Reducing Boards to a Wedge Shape; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1 denotes a top view of my said machine, and Fig. 2 a central, vertical and longitudinal section of it.

In the said drawings, A and B are parallel and horizontal ways or rails, made in a suitable manner to support a movable carriage C, and to permit it to be moved, with a reciprocating rectilinear motion in longitudinal and horizontal directions. These rails or ways are to be connected or held together, or in position, by three or any other proper number of transverse bars D, D' D², arranged as seen in Figs. 1 and 2.

E is a stationary platform or bed, arranged midway between the ways A, B, and supported on the cross bars D or D', or in any other proper manner. The upper surface of this bed should have an angular inclination from the horizontal, equal to one-half of the angle made by the two sides of the shingle, or wedge to be made by the machine; and the said surface shall slope in a direction toward the stationary knife or plane F, to be hereinafter described. A small ledge *a*, should be placed on the said bed, and in a transverse direction, and should rise above it a short distance all as seen in Figs. 1 and 2. The object of this ledge is to serve as an abutment for the end of the shingle blank or board to rest against, while the upper side of it is being reduced or cut down by the action of the cutting knife G, which is attached to and moved by and with the movable carriage C.

The stationary knife or plane F, which consists of a plate or bar of metal having a cutting edge on that part of it which is next adjacent to the stationary platform or bed E, is arranged at a short distance from the said bed. Its ends are or may be respectively supported on bars or levers H, I, so arranged and applied to the ways A, B, as to admit of the knife being adjusted, or raised and lowered in its position as occasion may require. Such contrivances for

sustaining and adjusting the knife are not however essential thereto, as various others may be adopted. The upper surface and cutting edge of the knife should be arranged in a horizontal plane, which should be elevated above that part of the surface of the stationary bed, which is at the junction of the upright and bearing edge of the ledge *a*, a distance equal to the elevation of such part of the bed, supposing the distance of the foot of the bed from the said bearing edge of the ledge to be equal to the length of the shingle blank to be reduced. Between the said knife F', and the bed is what may be termed the spring inclined plane or elevator which consists of a bar K, having its upper edge or part, an inclined plane or made curving, as seen in section in Fig. 2. The said bar is supported on the ends of two springs L, M, which are respectively fastened to the ways A, B. The object of the elevator or spring bar K, is to raise the butt or thickest end of the shingle or wedge up to the stationary cutting knife F which operation is effected whenever a shingle blank laid on the stationary bed is moved thereon in a direction toward and against the said knife or plane.

A pressure roller N, is arranged just in rear of the plane or stationary knife F. The journals of the said pressure roller are respectively supported on springs O, P, which are fastened to the cross bar D². The object of the pressure roller is to force or press the shingle blank close up to the under surface of the movable bed or platform Q which is fastened to the rear part or half of the carriage C and moves with said carriage. The lower plane surface of the bed Q slopes in a direction longitudinally as seen in Fig. 2, its angle of inclination to a horizontal plane being double that of the bed E, its front edge or lowest part of its surface being level with the lower surface or cutting edge of the movable knife G. The vertical distance between the two cutting edges of the two knives or planes F, and G should be made equal to the thickness of the shingle or wedge at its thinnest end. The said knife or plane G is fastened to and extends across the carriage C, in the position as seen in Figs. 1 and 2. Directly in front of it and across the frame or carriage C a pressure roller R is placed its journals being sustained by bearing springs S, T, fastened at their front ends to the car-

riage. The object of this pressure roller is to hold the board or shingle blank down upon the inferior bed E, while the plane G is in the act of reducing its upper surface.

5 Directly against the front end of the superior bed Q, is a spring catch bar U, which is attached to two springs V, W, projects somewhat below the front part of the under surface of the bed, and has its lower surface
10 curved as seen in Fig. 2.

Soon after the knife G enters the shingle block the curved under surface of the bar U, is brought against the rear end of the block, and in such manner as during the continu-
15 ance of the motion of the carriage, to elevate the bar, and allow it to move over the upper surface of the shingle blank. As soon as it passes by or beyond the front end of the blank, it is thrown or moved down-
20 ward by the retractive power of the springs V, W. When the carriage is next moved in an opposite direction, the spring bar U, will cause the shingle blank to move with the same, and to pass over the lower plane or
25 knife F, and be reduced thereby on its (the blank) lower side.

The shingle blank or board to be converted into a wedge shingle or frustrum of a wedge, is first laid on the inferior bed, and
30 so as to rest against the ledge thereof. This being done, the carriage is advanced and caused to pass entirely over it, and so as to carry the knife G, and the spring catch bar U, beyond it. The carriage is next to be

35 retracted so as to take or press back the shingle blank, and thereby cause it to mount the elevator K, and be cut by the knife F, and pressed up against the superior bed by the pressure roller N. This operation will
40 cause the board to be reduced to a shingle wedge or frustrum of a wedge. After passing backward by or beyond the cross bar D² the shingle will drop out of the machine.

Any proper machinery for moving the
45 carriage may be employed, my invention not being limited to the use of any particular kind.

What I claim as my invention is—

The combination of the following ele-
50 ments: 1, the inferior or stationary inclined bed E; 2, the elevator K; 3, the stationary plane or knife F; 4, the pressure roller N; 5, the movable carriage and its ways; 6, the
55 superior or reversed inclined bed Q, having an angular inclination to a horizontal plane of double that of the stationary bed; 7, the plane or knife G; 8, the spring catch bar U; 9, the pressure roller R; the whole being ar-
60 ranged, and made to operate together substantially in the manner as above specified.

In testimony whereof I have hereto set my signature this twenty-first day of December
A. D. 1848.

FRANKLIN JENNEY.

Witnesses:

HORATIO A. KEMPTON,
ALBERT P. JENNEY.