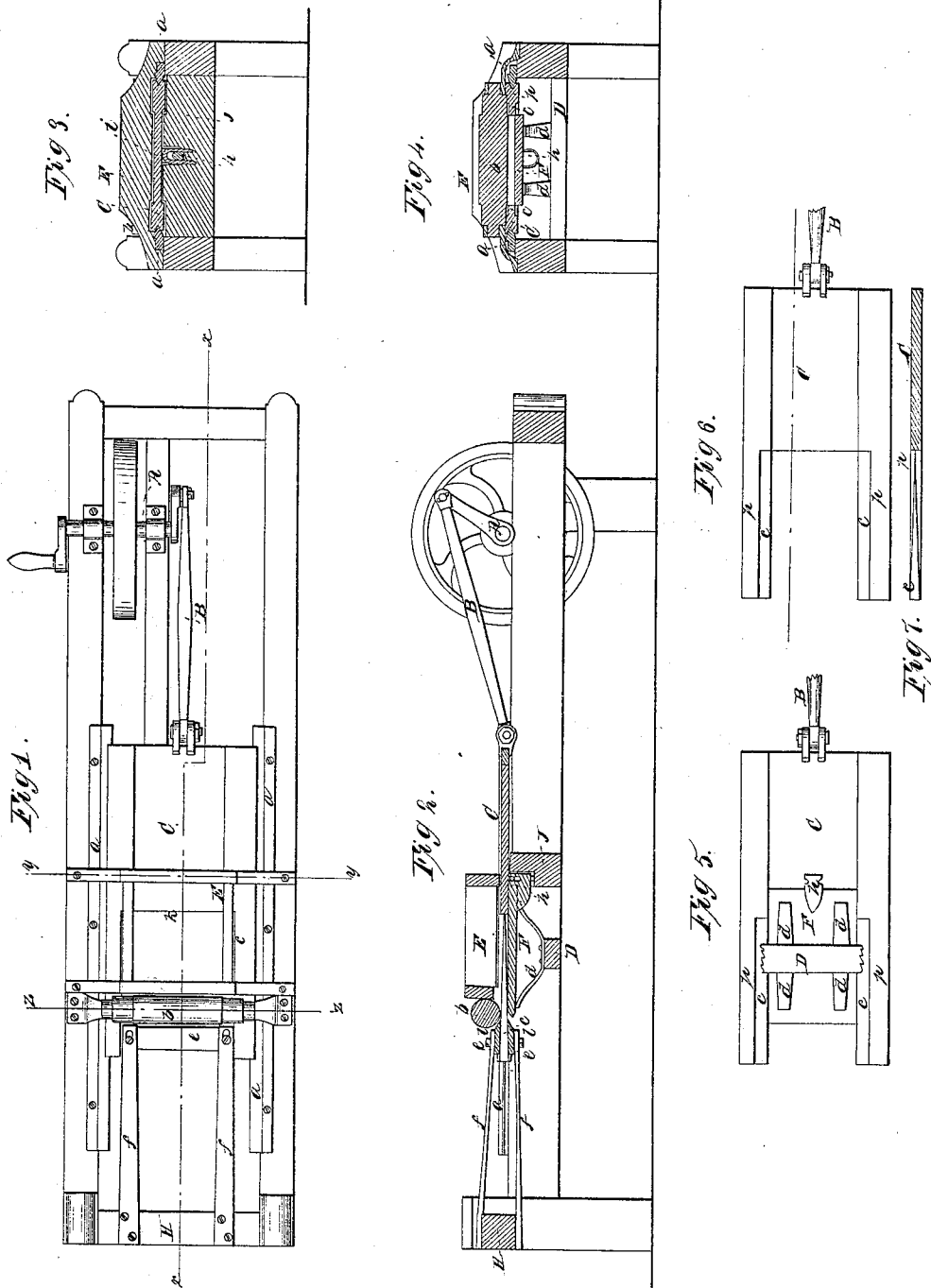


*A. Bradway,*  
*Cutting Shingles.*  
*N<sup>o</sup> 9,130.      Patented July 20, 1852.*



# UNITED STATES PATENT OFFICE.

ABEL BRADWAY, OF MONSON, MASSACHUSETTS.

## MACHINE FOR SHAVING SHINGLES.

Specification of Letters Patent No. 9,130, dated July 20, 1852.

*To all whom it may concern:*

Be it known that I, ABEL BRADWAY, of Monson, in the county of Hampden and State of Massachusetts, have invented a new and Improved Machine for Dressing Riven Shingles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a plan of my improved machine for dressing shingles; Fig. 2, a longitudinal vertical section thereof, in the line *x, x*, of Fig. 1; Fig. 3, a transverse vertical section of the same, in the line *y, y*, of Fig. 1; Fig. 4, a transverse vertical section, in the line *z, z*, of Fig. 1; and Figs. 5, 6 and 7 are views of portions of the machine detached.

Like letters refer to corresponding parts in all the figures.

The movements of my improved machine for dressing riven shingles, are placed in an oblong frame constructed in any usual manner. A bottomless rectangular box E, for the reception of the riven shingles to be operated upon, is secured to the top of the frame, a little one side of its center. When placed in the said box E, the riven shingles rest upon an elastic bed F, which is supported by two or more springs *d, d*, that are secured to, and rise above the cross piece D. A lug *h*, of the shape shown in Fig. 2, projects from the rear end of the said bed F, into a mortise in the cross piece J, and is embraced by a loop *i*, rising from the bottom of the said mortise—or other equivalent fastening, which will allow the bed to rise and fall freely, and prevent it from being drawn lengthwise from the same. A sliding plate C, having grooves in its edges, is supported by the ledges or ways *a, a*, which are secured to the side beams of the frame, and is reciprocated by the pitman B, connected to a crank on the shaft A. The plate C, passes immediately below the lower edges of the sides of the shingle-box E. A recess is cut out of the front end of the plate C, of a little greater width, and somewhat greater length, than the elastic bed F. The inner edges of the legs *p, p*, formed by cutting the recess out of the plate C, are on a line with the inner sides of the box E; and the end *k*, of the said plate C, between the legs *p, p*,

when the plate is drawn back to its extreme limit of motion—is in a line with the inner side of the rear end of the said box. Consequently, the front end of the bed F, will be forced by its springs a short distance up between the legs *p, p*. The rear end of the said bed F, will be prevented from being forced up between the legs *p, p*, by the projection of the lug *h*, beyond the end *k*, of the sliding plate C, when the said plate is drawn back to its extreme limit of motion.

Tapering patterns *c, c*, corresponding with the size and shape of the longitudinal section of a shingle, are formed on the upper and lower sides of the inner edges of the aforesaid legs *p, p*, which project forward from the sliding platform C. The said shingle patterns *c, c*, are embraced by two knives *e, e*, placed opposite to each other, and secured to elastic arms *f, f*, which are secured, to and project from the cross piece H, of the frame. The said knives *e, e*, are secured to their arms *f, f*, by means of slots formed in the arms and set screws passing through the same into the knives. A roller *b*, is placed between the upper knife *e*, and the front end of the box E, to bear upon the shingles while being operated upon, and to form the mouth piece to the said knife.

The front end of the bed F, bears upward against the shingles just in front of the lower knife *e*, and forms the mouth piece to the said knife. The opening between the lower edge of the front end of the shingle box, and the elastic bed F, must be of sufficient depth to allow the thickest shingle to pass through it to the roller *b*; but not of sufficient depth to allow the passage at the same time of two thin shingles through the same.

The thickness of the end *k*, of the sliding plate C, should be less than the thinnest shingle, so that as it is forced forward, it will never act upon more than one shingle at a time.

The operation of my machine is as follows: Shingles having been placed in the box E, and motion imparted to the driving shaft A, the bottom shingle in the said box, will be carried forward by the end *k*, of the sliding plate C, and brought in contact with the knives *e, e*; the said knives being governed in their positions by the patterns *c, c*, and the inward pressure exerted by their

elastic arms *f, f*, will shave the shingle, as it is pressed against them, to the proper tapering shape, and discharge the same at the open space between the knife arms *f, f*.  
5 Should a riven shingle be too thin to be acted upon by the knives at its thickest part, in shingle machines of the usual construction, the upward pressure of the bed *F*, in my machine, will in all cases insure a perfect  
10 finish to the upper side of a shingle by bringing the same into close contact with the roller *b*, and the upper knife.

Having thus fully described my improved machine for dressing riven shingles, what

I claim therein as new and desire to secure 15 by Letters Patent, is—

The combination and arrangement of the yielding knives *e, e*, the sliding shingle patterns *c, c*, the roller *b*, the elastic bed *F*, the plate *C*, and the box *E*,—substantially in the 20 manner and for the purpose as herein set forth.

The above specification of my invention signed this first day of May, 1852.

ABEL BRADWAY.

Witnesses:

I. A. HALL,  
LEWIS MERRICK.