

T. H. CARTER.
Machines for Shaving Shingles.

No. 143,877.

Patented Oct. 21, 1873.

fig. 1

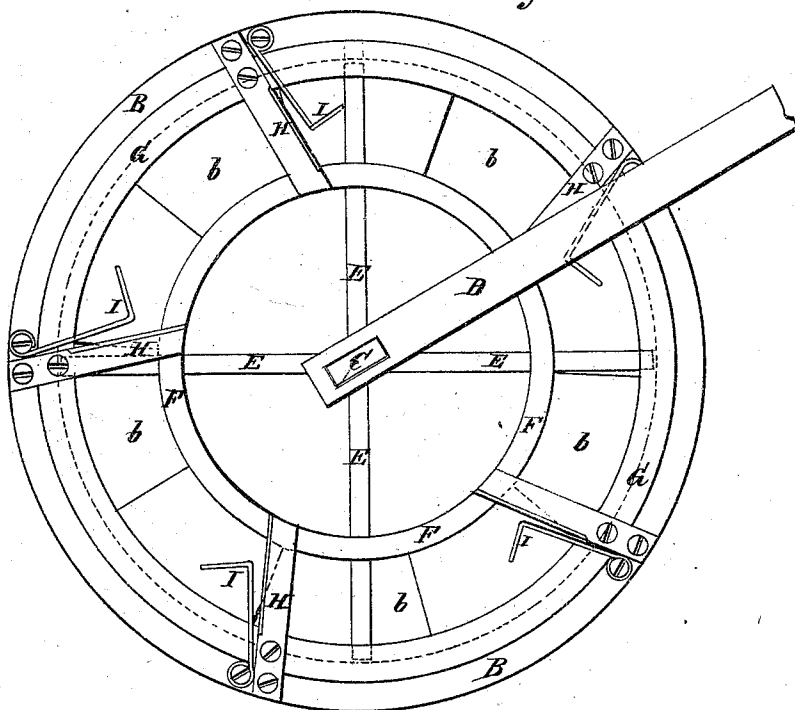
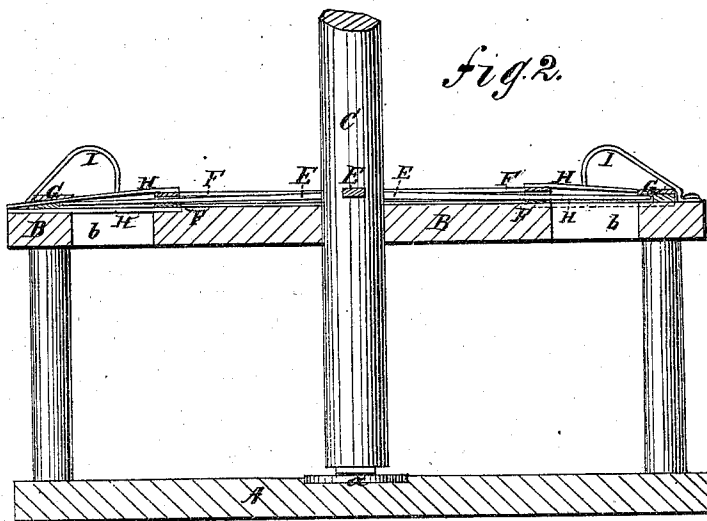


fig. 2.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN MACHINES FOR SHAVING SHINGLES.

Specification forming part of Letters Patent No. **143,877**, dated October 21, 1873; application filed September 11, 1873.

To all whom it may concern:

Be it known that I, THOMAS H. CARTER, of Bremen, in the county of Muhlenburg and State of Kentucky, have invented a new and Improved Machine for Shaving Shingles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a top view. Fig. 2 is a central vertical section.

The invention will be first fully described and then clearly pointed out in the claims.

A represents the bed-piece, from which rises the uprights, on which rests a table, B, and in the center of which is a bearing, *a*, for the end of a vertical shaft, C, passing through said table, and rotated by a sweep, D. Diametrically through the shaft C pass, and are fastened, bars which taper toward the ends, and form four shingle-drivers, E. These drivers are placed between flat rings F F, the top one of which is attached to the upper blade of the cutters, while the ends are made to travel between circular guides G G. H is a series of pairs of knives, five in number, and at equal distances apart, between which the shingle is to be forced, and by which each side is to be shaved and smoothed. The knives converge outwardly, and are not radial, but arranged in the direction of a chord a little less than the diameter of the circle in which the driver is rotated. I is a set of springs, one placed in front of each pair of knives, and over the table, so as to press the shingle firmly down as it enters between the blades. In rear of each pair of knives is a hole, *b*, through which the shingle drops on the bed below after it has been shaved.

The operation is as follows: An unshaved shingle is fed, by a workman standing near, in front of each of the five pairs of knives, under the ring F, and with its point between the guides G, while the drivers E are rotated by a horse that carries around the sweep. As there are a less number of drivers than of pairs of blades, and as drivers and blades are each spaced at uniform distances, no two shin-

gles can be operated on at the same time, but each comes necessarily in succession between the different pairs of blades. The blades not being radial, the butt of the shingle is operated on first, and a shear-cut thus obtained from butt to point. The spring I presses the shingle in the middle as it enters between the knives, while the ends are respectively held by the plates F G.

It will be perceived that this machine is entirely without cog-wheels, or any other mechanism liable to get out of order, requiring frequent repair, and creating delay as well as expense. The power required is very small indeed in proportion to the amount of work that may be accomplished. Of course, on the same principle, a large or small machine may be constructed, the number of knives and drivers, as well as other parts, being variable; but with one horse seventy-two thousand shingles may be shaved in a satisfactory manner in a working day of ten hours by careful and practiced workmen.

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

1. The combination described, with a supporting-table, B, of pairs of knives H, guides F G, spring I, and rotary drivers E, for the purpose specified.

2. The combination, as described, with a radial driver, E, of blades H set in the direction of chords less than the diameter of the circle in which the driver is rotated, to enable the blades to shave the shingle gradually from butt to point, as specified.

3. The combination, with table B, of a series of knives, H, and a series of drivers, E, the knives and drivers being each at uniform distances apart, but there being a less number of one than the other, as described, so that no two pairs of knives can operate simultaneously, but must act upon their respective shingles at different times.

THOMAS HUGH CARTER.

Witnesses:

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