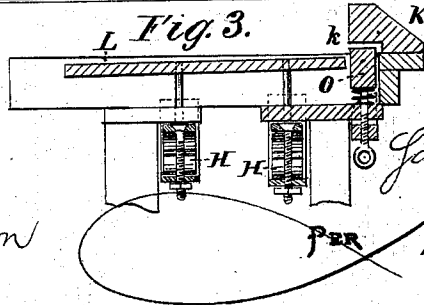
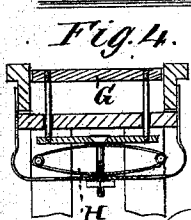
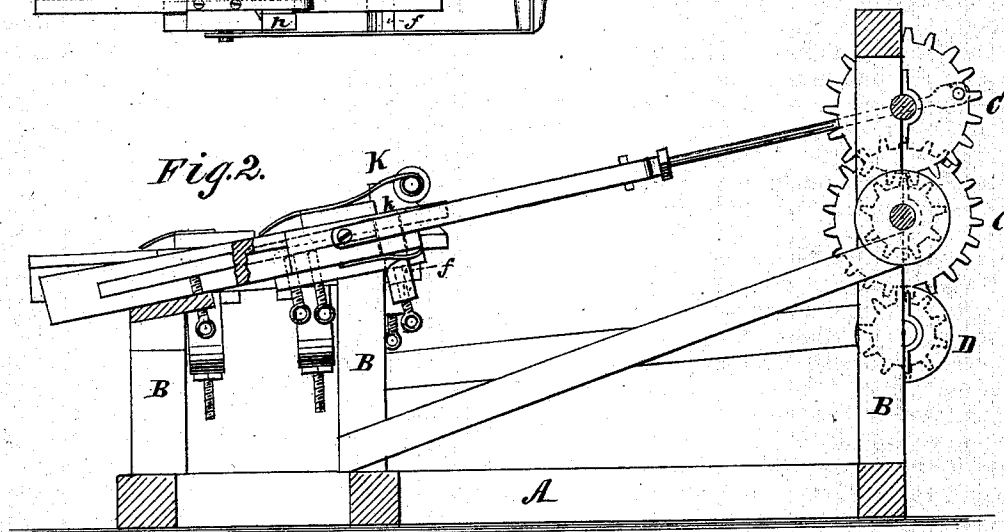
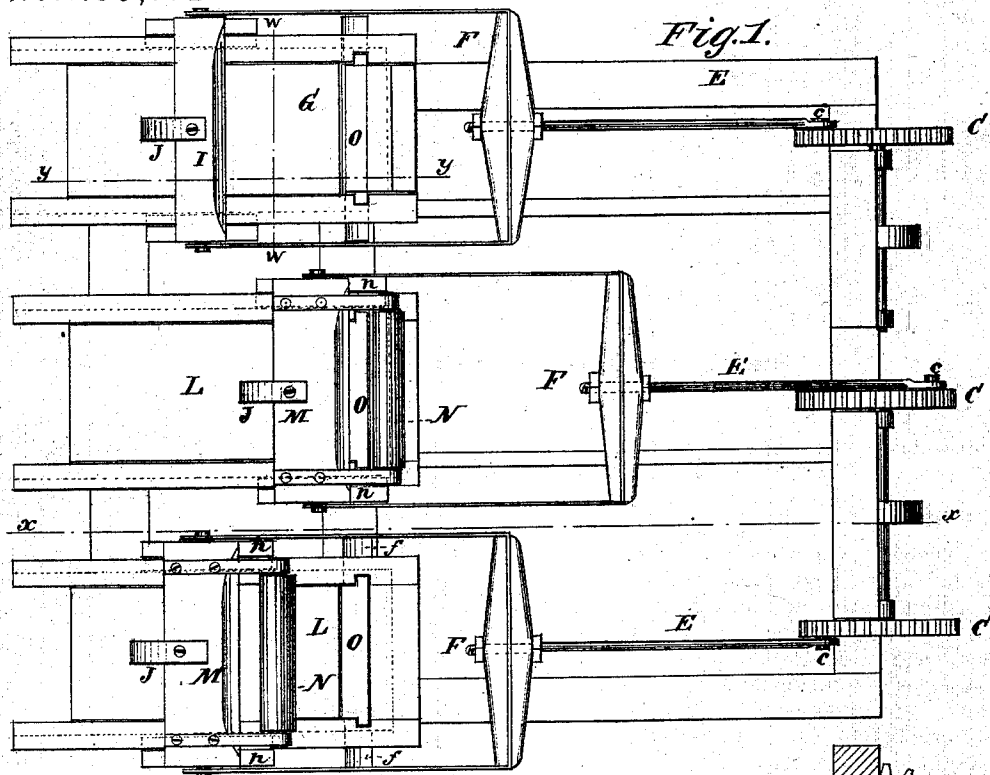


S. M. KING.
Shingle-Machines.

No. 139,162.

Patented May 20, 1873.



Witnesses:

G. Mather

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UNITED STATES PATENT OFFICE.

SAMUEL M. KING, OF LANCASTER, PENNSYLVANIA.

IMPROVEMENT IN SHINGLE-MACHINES.

Specification forming part of Letters Patent No. **139,162**, dated May 20, 1873; application filed December 19, 1872.

To all whom it may concern:

Be it known that I, SAMUEL M. KING, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented an Improvement in Shingle-Machines, of which the following is a specification:

The invention consists in the improvement of shingle-machines, as hereinafter described and pointed out in the claim.

In the drawing, Figure 1 is a top view. Fig. 2 is a vertical longitudinal section through line *xx* of Fig. 1. Fig. 3 is a longitudinal vertical section through line *yy* of Fig. 1, and Fig. 4 is a cross-section through line *ww* of Fig. 1.

A represents the bed-frame; B, the uprights; C C C, a series of spur-wheels, having each a crank-pin, *c*; and D D, a corresponding series of drive-pinions, which rotate the spur-wheels. E E E are pitmen, attached at one end to crank-pins *c*, and at the other to sliding frames F F F. G is an adjustable bed, on which rests the bolt-block while the shingles are being cut therefrom; and H, the subjacent springs, which make said bed to yield when the knife comes in contact with a knot or other imperfection in the wood. On a sliding frame, F, is placed the transverse bolt-cutter I, and on the rear thereof is located the backwardly-pointing pawl or shingle-carrier J. K is the rest, against which the bolt is held by an attendant, and is cut away at *k* to allow the cutter-edge to pass thereunder. L L are two rigid adjustable tables, which are placed in an oblique position, to correspond with form of shingle.

MM are sliding planers, in front of which are placed rolls N N to hold down the shingle while being planed and smoothed off on each side; and O O are spring-rests, placed at the head of tables to hold the shingles, but caused by cams *nn* and *ff* to be depressed when the knife is near the end of the shingle.

The operation is as follows: An attendant stands at the head of the bolt-bed and holds the bolt until cut up. After a single blank is cut off, the pawl carries it to the rear, where it is taken by the workman who has charge of the middle table. He holds the shingle against the spring-rest O until the cutter reaches near the end of the shingle, when the rest is depressed to allow the knife to pass over its edge. This being done, the pawl seizes the shingle and carries it to the rear, where it is taken by the attendant at the third table, turned over, and, in the same manner, planed on the opposite side.

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

The combination, on a shingle-planer, of the rest K, having recess *k* thereunder, and the spring-support O, arranged with respect to each other, the table, and the knife, as and for the purpose set forth.

SAML. M. KING.

Witnesses:

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