W. A. KITTS.

SHINGLE PLANER.

No. 171,230. Patented Dec. 21, 1875.

Fig 1

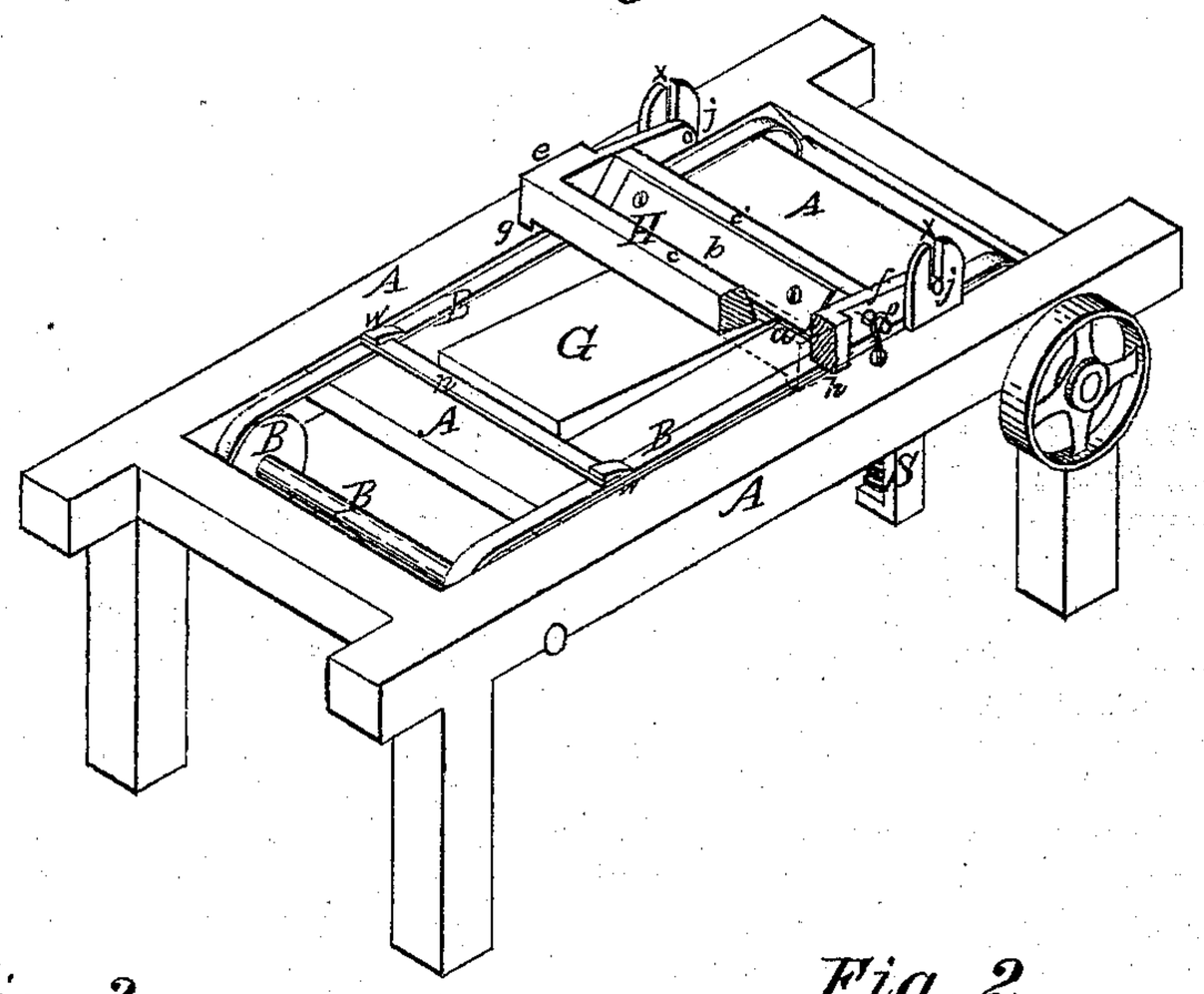


Fig 3

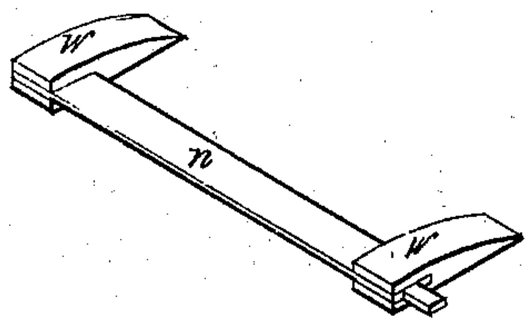
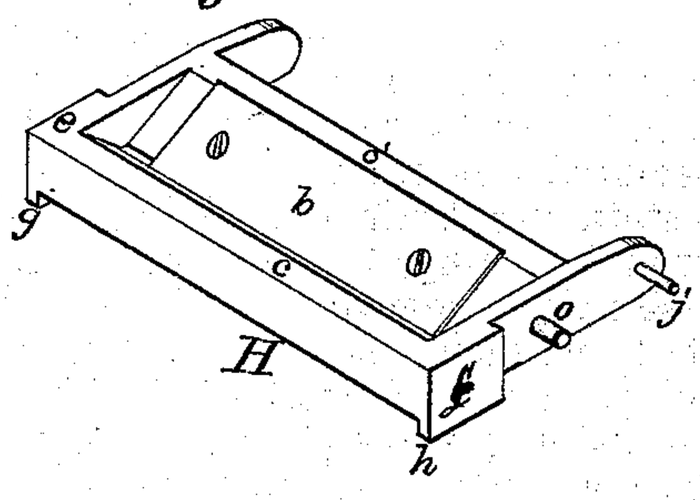


Fig 2.



Witnesses

N. B. Smith

C. W. Smith

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UNITED STATES PATENT OFFICE.

WILLARD A. KITTS, OF OSWEGO, NEW YORK.

IMPROVEMENT IN SHINGLE-PLANERS.

Specification forming part of Letters Patent No. **171,230**, dated December 21, 1875; application filed April 7, 1875.

To all whom it may concern:

Be it known that I, WILLARD A. KITTS, of the city of Oswego, in the State of New York, have invented an Improvement in Shingle-Planers, for planing sawed shingles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, in which—

Figure 1 represents a perspective view of the whole machine; Fig. 2, a detached view of the adjustable knife-head; Fig. 3, a perspective view of part of the carrying apparatus.

A is the frame or bed-piece, of suitable form for the purpose. B is the carrier, consisting of a belt or endless chain, shafts, and pulleys, substantially as shown. In the bed-piece A is a stationary knife, *a*, arranged with proper slots and openings to shave the under side of the shingle. Immediately above this is the knife *b*, provided also with proper slots and openings in the adjustable head H, to shave the upper side of the shingle. Instead of the knife *b*, a revolving cutter may be placed in the slot in the head H, in any ordinary manner. The head H consists of two cross-pieces, *c* and *c'*, and upon the cross-piece *c'* the knife is secured by screws, or their equivalents. The head H also has two end pieces, *e* and *f*, with which the cross-pieces are properly connected. Each of the end pieces has supporting-pieces *g* and *h*, respectively, resting on the bed-piece, and extending below the bottom of the end pieces, and raising the knife-head H so that the knives will not come in contact. It also has two pins, *o o*, to receive the attachment of the spiral spring S, or a proper weight, to keep the upper knife pressed upon the shingle. It also has two journals, *j j*, which rest in sockets *x x*, and enable the head H to rock and lift.

The spiral spring S, which is arranged substantially as shown in the drawings, or an ordinary weight, may be hung at the proper point, so as to cause the upper knife to pass upon the top of the shingle, and adjust it to the inequalities in size.

The carrier is provided with a dog, *n*, which pushes the shingle G from the butt between the knives. At each end of the dog *n* there is a shoe, W, which operates to lift the head H, so that the dog *n* will pass between the knives without coming in contact with them.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In a shingle-planer, the combination of the endless belt or chain carrier B, provided with the lifting shoes or cams, and cross-bar *n* W, the stationary knife *a* on the frame A, and the downwardly-pressed and self-adjusting knife-head H, bearing the knife *b*, all arranged and operating substantially as herein specified.

WILLARD A. KITTS.

Witnesses:
N. B. SMITH,
C. W. SMITH.