

W. C. BROCKUS & C. H. BARNUM.

PLANING-MACHINE.

No. 183,632.

Patented Oct. 24, 1876.

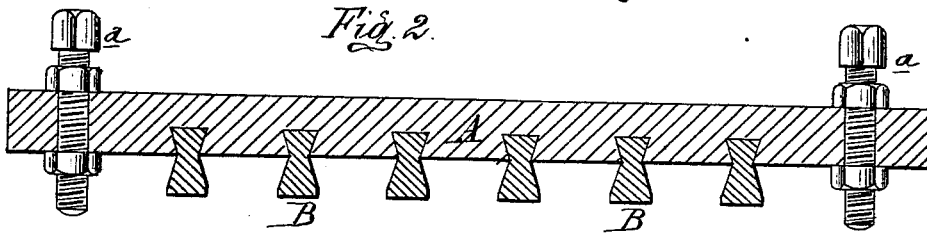
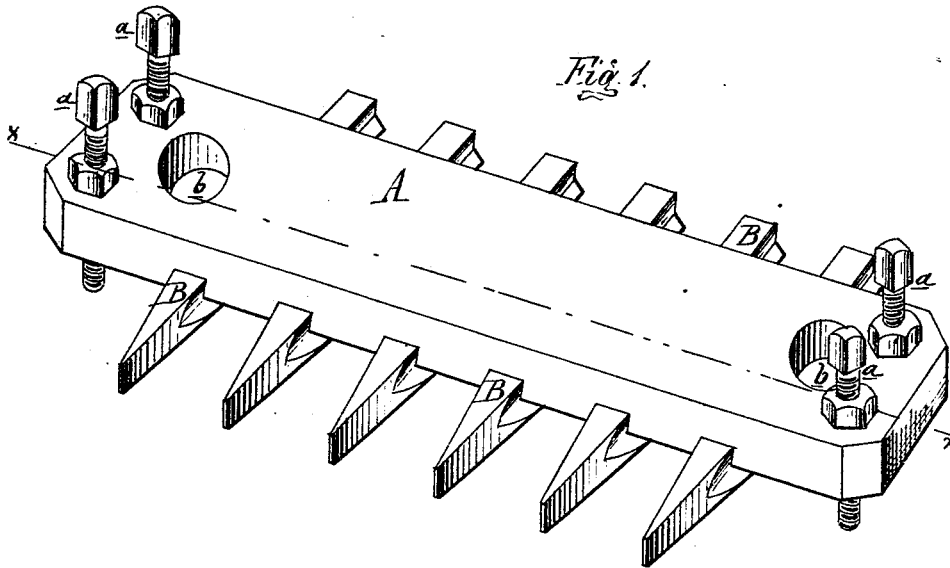


Fig. 3.



Attest:  
Edward Barthel.  
Charles J. Hunt

Inventors:  
W. C. Brockus  
C. H. Barnum  
B. J. Atty  
Thos. S. Sprague

# UNITED STATES PATENT OFFICE.

WILLIAM C. BROCKUS AND CHARLES H. BARNUM, OF SPRING LAKE, MICH.

## IMPROVEMENT IN PLANING-MACHINES.

Specification forming part of Letters Patent No. 183,632, dated October 24, 1876; application filed August 25, 1876.

*To all whom it may concern:*

Be it known that we, WILLIAM C. BROCKUS and CHARLES H. BARNUM, of Spring Lake, in the county of Ottawa and State of Michigan, have invented an Improvement in Pressure-Bars for Planing-Machines, of which the following is a specification:

The nature of our invention relates to an improvement in pressure-bars of that class which are rigid from end to end, and so mounted, either with springs or weights, as within certain limits to yield to the varying inequalities of lumber passing through the planing-machine.

The object of our improvement is to afford a more extended bearing-surface upon the lumber longitudinally of the bed without creating undue friction, and to enable all chips and shavings to pass out with the lumber without being embedded in its surface by passing under the bearing-surface of the pressure-bar. To this end our invention consists in dovetailing a series of fingers into the under surface of the pressure-bar, with spaces between them for the passage of chips and shavings, as more fully hereinafter set forth.

Figure 1 is a perspective view. Fig. 2 is a longitudinal section at *x x*. Fig. 3 is a perspective view of a detached finger.

In the drawing, A represents a rigid pressure-bar, having the usual bolts *a a* at each end, for adjusting its plane above the bed to

the thickness of lumber being planed, and also a hole, *b*, through which its guide-rod, at each side, passes. Into the lower surface dovetail grooves are cut, which grooves are wedge-shaped or narrower at the rear than at the front end next the cutter-head. In each is inserted a dovetail finger, B, tapered slightly, so as to wedge fast in its groove when pressed back by the advancing lumber, and projecting both to the front and rear of the pressure-bar. Its bottom face is flat and parallel with the bed, and its front end is pointed and rounded up, so as not to catch in the work, while its pointed end parts or directs chips and shavings, so that they will pass at one side, and not be carried under the finger-body to be pressed into the planed face of the lumber.

The extended bearing-surface of the fingers tends to keep or press down a warped or uneven spot firmly to a true bearing upon the bed, and in close proximity to the cutters where there is the greatest tendency to lift knots, shakes, and slivers.

What we claim as our invention is—

The pressure-bar A, having the projecting fingers B dovetailed into its under surface, substantially as described.

WILLIAM C. BROCKUS.  
CHARLES H. BARNUM.

Witnesses:

ROBERT DERR,  
CHANCEY STUCK.