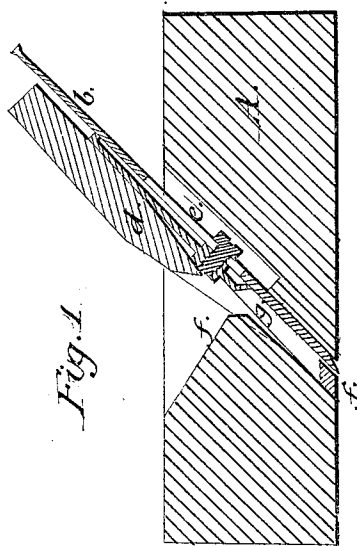
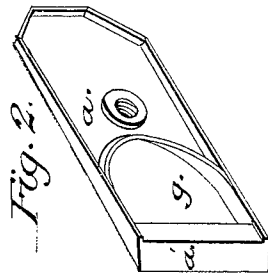


B.T. Shelabarger,

Bench Plane.

No. 5486.

Patented Mar. 28. 1848.



UNITED STATES PATENT OFFICE.

BENJ. F. SHELABARGER, OF MIFFLINTOWN, PENNSYLVANIA.

JOINER'S PLANE.

Specification of Letters Patent No. 5,486, dated March 28, 1848.

To all whom it may concern:

Be it known that I, BENJ. F. SHELABARGER, of Mifflintown, in the county of Juniata and State of Pennsylvania, have invented a new and useful Improvement in Planes for Working Lumber; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

The nature of my invention consists in combining an adjustable metallic throat piece, with a plane iron and stock, in such a manner that the discharging aperture for the shavings will not be rendered imperfect or enlarged by the wearing away of the plane stock.

In the accompanying drawings Figure 1, is a vertical longitudinal section of a plane having my improved adjustable throat piece, combined with the same, and Fig. 2, is a perspective view of the throat piece detached.

A, is the plane stock.

a is the adjustable throat piece.

b, is the plane iron.

c, is a set screw, securing the plane iron to the throat piece.

e, is a slot in the plane iron, through which the screw c, passes.

d, is the tightening wedge, which secures the plane iron and throat piece within the plane stock.

The throat piece has a bearing surface *a'* at its lower end, between which and the front side of the plane iron there is a space for the shavings to pass between, and out through the aperture *g*, in the throat piece, into the enlarged discharging throat *f*, in the plane stock. The enlarged discharging throat *f*, descends to about one half the depth of the stock; from the bottom of this enlarged throat, there is carried down to the base of the plane, a mortise with parallel sides, just large enough to receive the adjust-

able throat piece with the plane iron attached to it. It will readily be perceived therefore, that the bearing surface of the throat piece in front of the cutting edge of the plane iron, can be adjusted, as the stock wears away, so as to be always on a line with the face of the plane stock. The aperture between the bearing surface *a'*, of the throat piece, and the plane iron,—for the passage of shavings,—will remain perfect and of the same size till the plane stock is worn out; when the throat piece may be placed in a new stock. The advantage of having a perfect shaped discharging aperture in planes for the escape of the shavings, is so apparent, and so well known by all who are familiar with the use of this tool, that it is not necessary to dwell upon the subject. With planes, as now constructed, the discharging aperture for shavings, immediately in front of the plane irons, is constantly increasing in size, by the wearing away of the base of the plane stock. My adjustable metallic throat piece perfectly obviates this difficulty. My adjustable throat pieces I intend to apply to planes of all shapes and descriptions; the bearing surface of the throat piece, in all cases to correspond with the face of the planes. The aperture *g*, in the throat piece, extends upward a sufficient distance to allow the shavings to escape freely into the space *f*.

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

The combination of an adjustable metallic throat piece, with the irons and stocks of planes of all descriptions, substantially in the manner and for the purpose herein set forth.

BENJAMIN F. SHELABARGER.

Witnesses:

R. BARNARD,
SAML. C. FORREY.