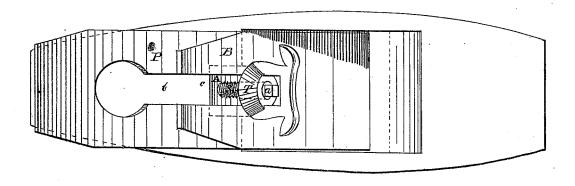
T. H. WALL. Bench-Plane.

No.164,350.

Patented June 8, 1875.

Fig: 1



Witnesses: Henry Sichling . G. S. Clarke, Inventor.
Thomas H. Wall.

By Fith Fith

His Allys

## UNITED STATES PATENT OFFICE.

THOMAS H. WALL, OF NEW BEDFORD, MASSACHUSETTS.

## IMPROVEMENT IN BENCH-PLANES.

Specification forming part of Letters Patent No. 164,350, dated June 8, 1875; application filed April 20, 1875.

To all whom it may concern:

Be it known that I, THOMAS H. WALL, of New Bedford, county of Bristol and State of Massachusetts, have invented an Improvement in Bench-Planes, of which the following is a specification, reference being had to the accompanying drawings forming part hereof.

My invention consists in a screw set in the bed of the plane, and extending upward in a line perpendicular to the surface of said bed, through a slot in the plane-iron and a slot in the break-iron, together with a thumb-nut arranged to turn down upon the screw, whereby the plane-iron, when adjusted, may be held securely in place.

Figure 1 is a plan of a plane embodying my invention.

A is the bed of the plane. S is the screw, made preferably with the post a at its upper end, by means of which it may, with a suitable key or wrench, be screwed securely into the bed A, as shown, so that it will extend upward in a line perpendicular to the surface of the bed. P is the plane-iron, formed with the slot b. B is the break-iron, which I make with the slot c in its upper end, as shown. When the plane-iron and break-iron are adjusted in place upon the bed A the screw S will project through the slot b in the former and slot c in the latter, the line of its axis being at right angles with, and perpendicular to, the surface of the irons. T is a thumbnut, arranged to turn down upon the screw S until it presses tightly against the upper surface of the break-iron, as shown.

Now, it is evident that by means of these devices, as shown, the plane-iron may be readily and conveniently adjusted and held securely in position.

I am aware that a patent has been heretofore granted to J. B. Tarr, No. 82,450, for an improvement in bench-planes, in which are shown and described two screws with squared heads, working in the plane-stock, and operating to alter the pitch and set of the planeiron, and also a thumb-screw working through a nut adjusted in the slot of the plane-iron, and having a bearing at its lower or inner end in a plate fixed in the plane-stock, and operating between the two other screws, to tighten the plane-iron as set by the other screws. I disclaim the devices shown and claimed in this patent, intending to limit my claim to the exact and specific devices shown in my specification, namely, a screw set in the wood of the plane-stock, and arranged to project through the slot in the plane iron, together with a thumb-nut, whereby the plane-iron may be fastened securely to its bed in the plane stock.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The combination, as a plane-iron fastener, of the screw S, set in the bed A, the planeiron P, and the thumb nut T, as described.

## THOMAS HENRY WALL.

Witnesses:

O. S. PAIGE,

T. M. MITCHELL.