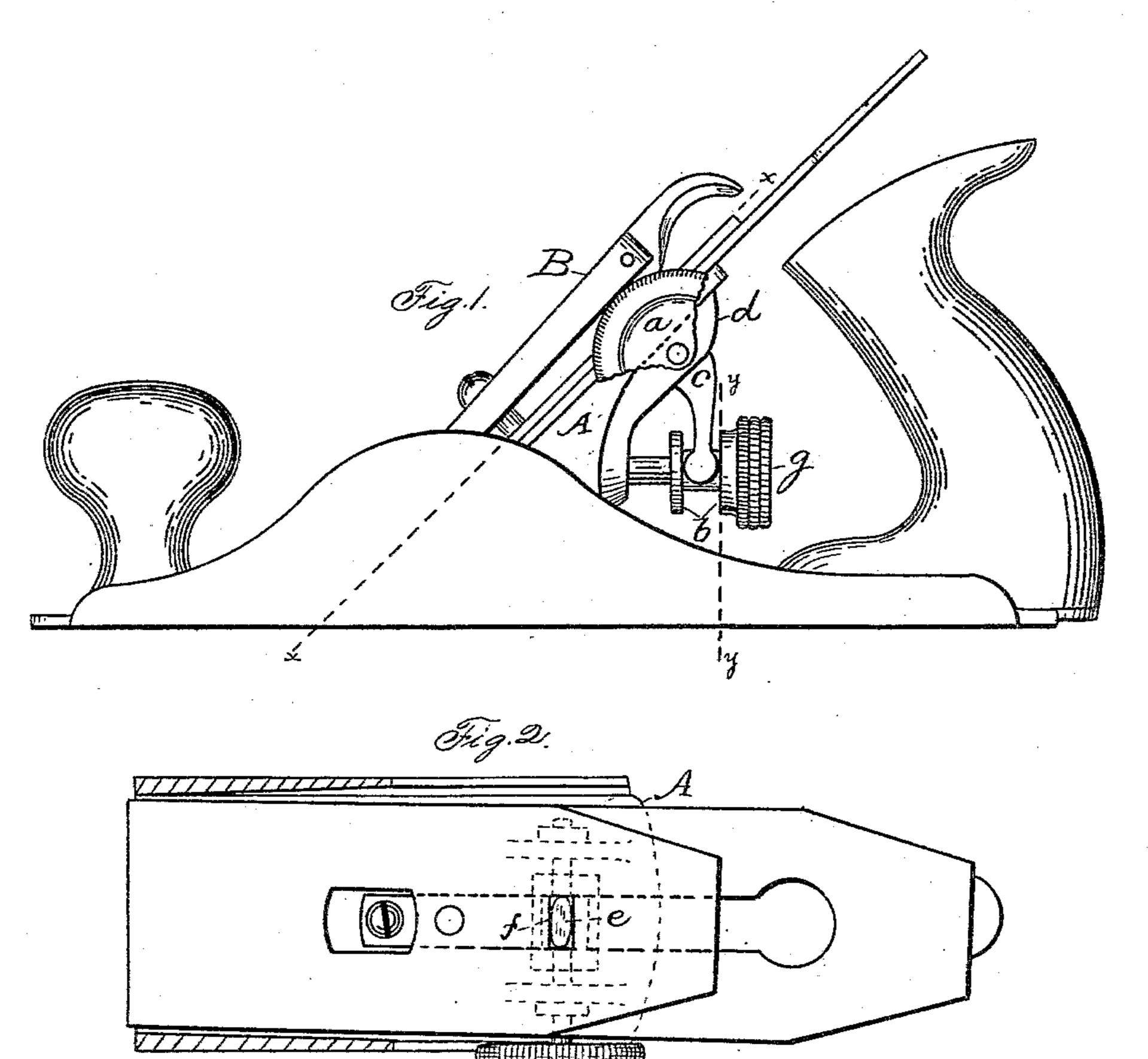
(Model.)

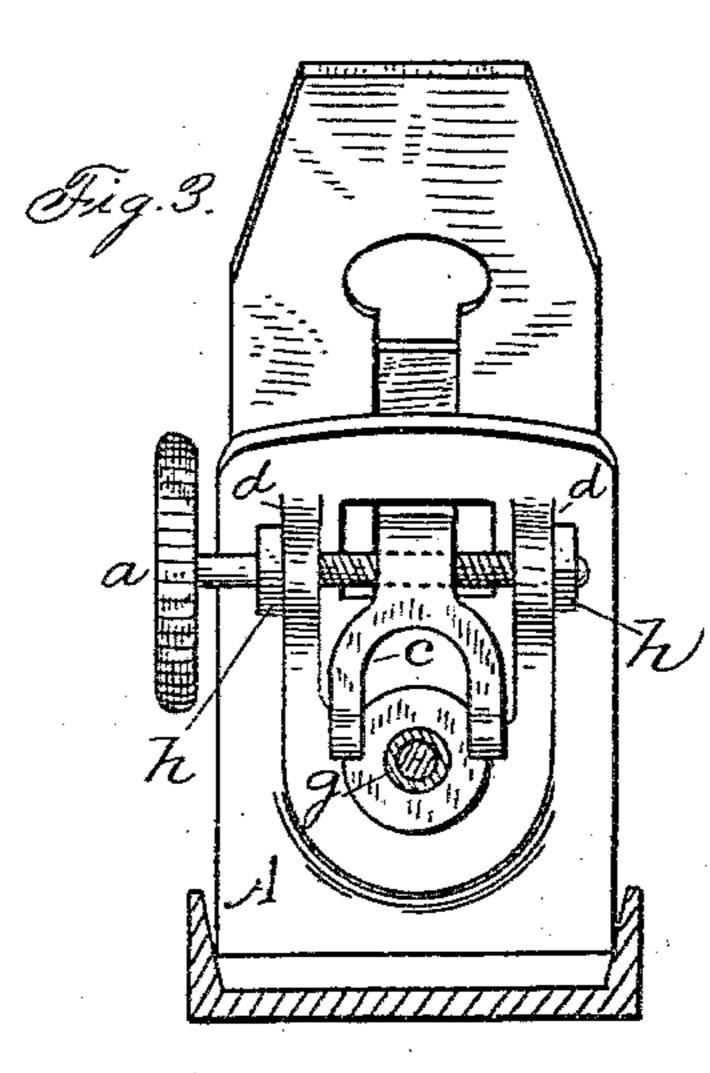
J. A. TRAUT.

BENCH PLANE.

No. 319,039.

Patented June 2, 1885.





Witnesses. John Edwards Js. Eddy N. Smith Justus A. Frant. James Shepardi Att

United States Patent Office.

JUSTUS A. TRAUT, OF NEW BRITAIN, CONNECTICUT.

BENCH-PLANE.

SPECIFICATION forming part of Letters Patent No. 319,039, dated June 2, 1885.

Application filed June 16, 1884. (Model.)

To all whom it may concern:

Be it known that I, Justus A. Traut, a citizen of the United States, residing at New Britain, in the county of Hartford and State 5 of Connecticut, have invented certain new and useful Improvements in Bench-Planes, of which the following is a specification.

My invention relates to improvements in bench-planes of the class patented to Leonard 10 Bailey, August 6, 1867, No. 67,398, and my object is to effect the lateral and endwise adjustments of the cutting-bit by two different movements of a single lever, and I accomplish this object by the construction illustrated in 15 the accompanying drawings, in which—

Figure 1 is a side elevation of my improved plane. Fig. 2 is a sectional view, partly in elevation, on line x x of Fig. 1, and Fig. 3 is a vertical sectional view, partly in elevation, on

20 line y of Fig. 1.

With the exception of certain changes and additions hereinafter described, my improved plane is the same as the Bailey planes now in the market. The adjusting-nut g is the same 25 as heretofore made, except in that its shoulders b b are wider. The prongs of the bifurcated lever c are spread far enough apart to allow a lateral movement of said lever bodily without disengaging the shoulders of the adjust-30 ing-nut. The lugs dd are placed upon the under side of the frog or plane seat A, somewhat farther apart than in said prior planes, and are provided with smooth-bored holes for the insertion of the adjusting-screw a, which $_{35}$ screw also constitutes the axle for the lever c. This lever c is furnished with a screw-threaded hole, within which the adjusting-screw a is fitted. As in prior planes, the upper end, e, of the lever c enters a slot, f, in the cap-iron, 40 which slot is made shorter than formerly, and of a size which the end e of the lever c will substantially fill in both directions, so that a movement of said end either laterally or up and down will carry the cap-iron with it. 45 Upon the adjusting-screw a, I have placed the nuts hh, which allow the free rotation of the adjusting-screw upon its axis, but which will not permit of any longitudinal movement. The bit and cap-iron of the plane are set in

their places upon the frog or plane-seat in the 50 ordinary manner. The holding-cap B is then put into its proper place, and clamps the bit and cap-iron firmly against the frog or planeseat, said holding-cap pressing them at each end. The point of pressure at the lower end 55 of the cap is the point where the bit or cutter will pivot when its upper end is moved edgewise. The bit is adjusted up or down the same as heretofore.

To adjust the cutting-bit or cutter edgewise 6c to square its cutting-edge with the stock, I have only to turn the adjusting-screw a one way or the other, as may be desired, which movement of the adjusting-screw acts upon the screw-thread of the bifurcated lever, and 65 causes said lever to move bodily to the right or left, and thus move the cap-iron and bit or cutter with which it is engaged, and thereby give the required adjustment.

I am aware that prior devices have been in- 70 vented to adjust the bit edgewise to bring its cutting-edge square with the stock, and therefore I do not claim the same, broadly.

I claim as my invention—

In combination, in a suitable supporting- 75 frame, a bit having a central longitudinal slot, a cap-iron secured to said bit by a screw passing through said slot and engaging said cap-iron, a holding-iron for clamping the bit in place, and an adjusting lever pivotally secured 80 upon a horizontal screw-shaft which passes through lugs upon the under side of the upper end of said supporting-frame, and is secured against horizontal movement and capable of rotary movement only, the upper end of which 85 lever passes through said frame and engages with a slot or mortise in the cap-iron, the said lever so secured having an up and down movement by an adjusting-nut located under said frame, and a lateral movement by a thumb- 90 piece or similar operating-handle on the end of said screw-shaft, all being substantially as herein described, and for the object specified.

JUSTUS A. TRAUT.

Witnesses: H. S. WALTER, HENRY C. HINE.