Q. RICE

Bench-Planes.

No. 148,090. Patented March 3, 1874.

Fig. 1.

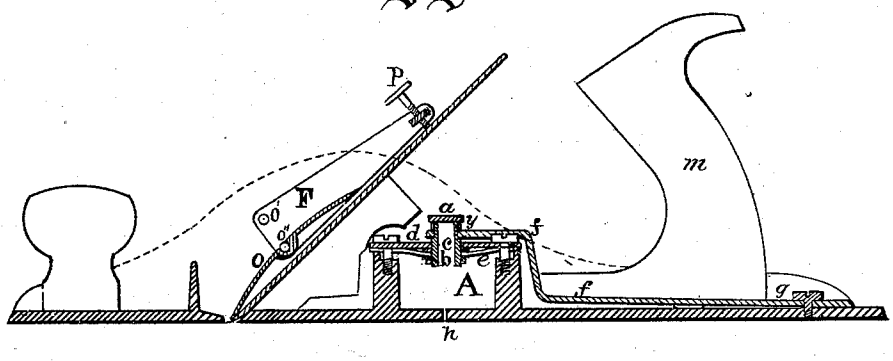
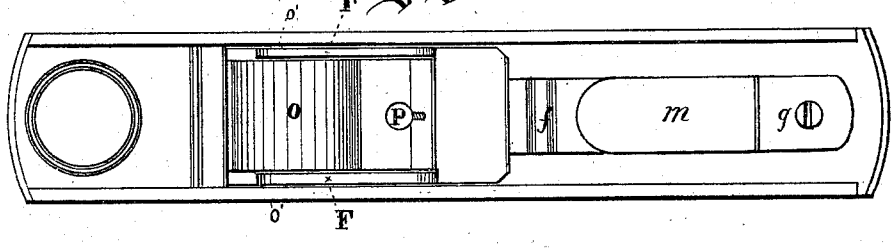


Fig. 2.



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QUARTUS RICE, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN BENCH-PLANES.

Specification forming part of Letters Patent No. **148,090**, dated March 3, 1874; application filed August 20, 1873.

To all whom it may concern:

Be it known that I, QUARTUS RICE, of Washington, District of Columbia, have invented an Improvement in Bench-Planes, of which the following is a specification:

Figure 1 is a vertical longitudinal section of a carpenter's or wood-worker's bench-plane. Fig. 2 is a plan view of the same.

The nature of this invention consists, first, in the combination of an oil-vessel with the plane, to be operated automatically by the working of the plane; and, secondly, in a presser and cap in one device, constructed and operated as hereinafter more particularly described.

A is a vessel to hold oil. The oil-vessel A has two covers, represented, respectively, by the letters *d* and *e*. *d* is of rigid material. *e* is elastic, and capable of vibration. *f* is an iron strap, to which the handle of the plane is fastened, and which is also made fast to the plane at *g*, and is so constructed that the end *y* has a slight vibration by pressure on the handle *m*. *b* is a tube, through which oil is poured into the vessel A. It is also connected at *c* with the cover *e*, and made to slip freely through the cover *d*, and connect with the strap *f* at *y*, so that the vibration of the strap *f* is communicated to the cover *e*, and thus the vessel A is alternately contracted and enlarged, and, as the vessel keeps filled with air, the contraction forces the oil out through the aperture at *h* to the face of the plane, as desired. *a* is a stopple for the tube *b*. O is a presser, to hold the cutting-bit firmly in place, and also serves as a cap for the cutting-bit. P is a thumb-screw, for regulating the distance of the cap from the edge of the cutter, by which the frame F, carrying the presser-cap O, is turned upon its pivots *o' o'* in the sides of the plane, while the cap also moves upon the pivots *o'' o''*, by which it is hung to the frame F, and is adjusted to the cutting-bit, so as to press firmly thereon, while the distance from the cutting-edge is also adjusted.

I am aware that there are pressers similar to this, but am not aware of any which act as cap and presser, and regulated in the manner herein described.

I claim as my invention—

1. An oil-vessel, in combination with carpenter's or wood-worker's bench-planes, so constructed, in connection with other parts of the plane, that by working the plane the oil will be forced to the face of the plane, substantially as and by the means described.

2. The presser-cap O, constructed as and for the purposes described.

QUARTUS RICE.

Witnesses:

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