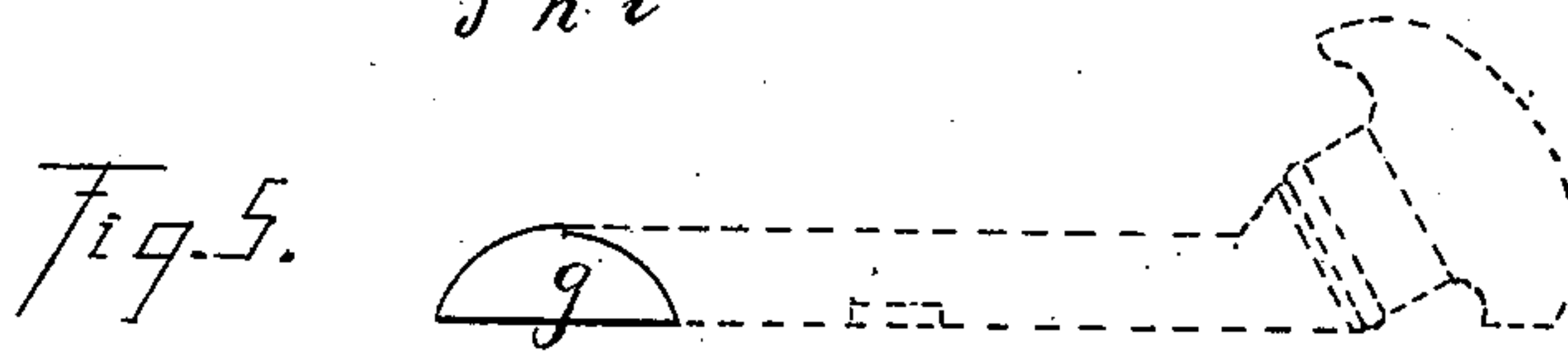
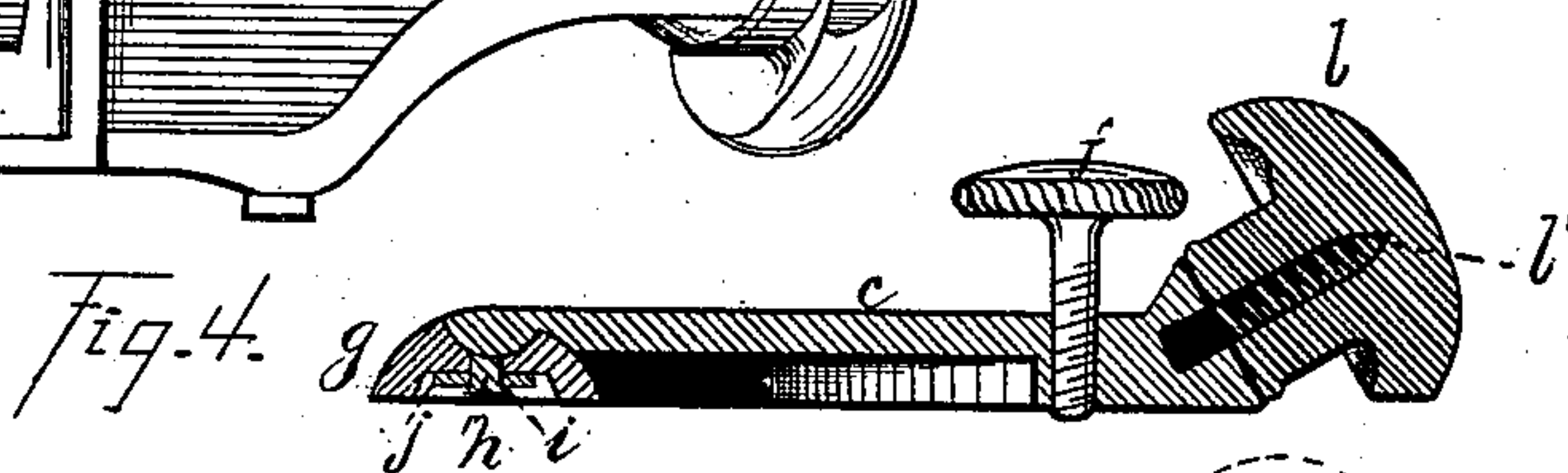
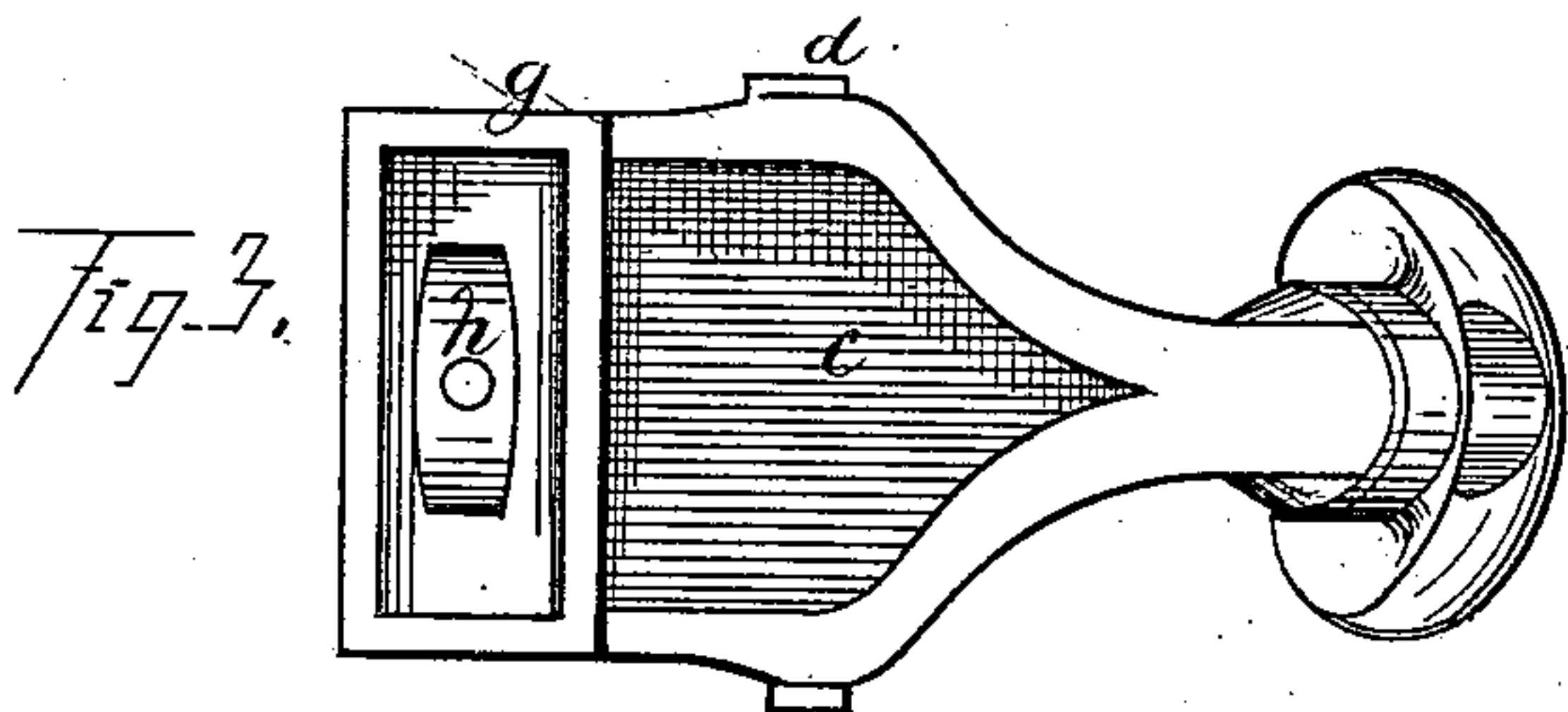
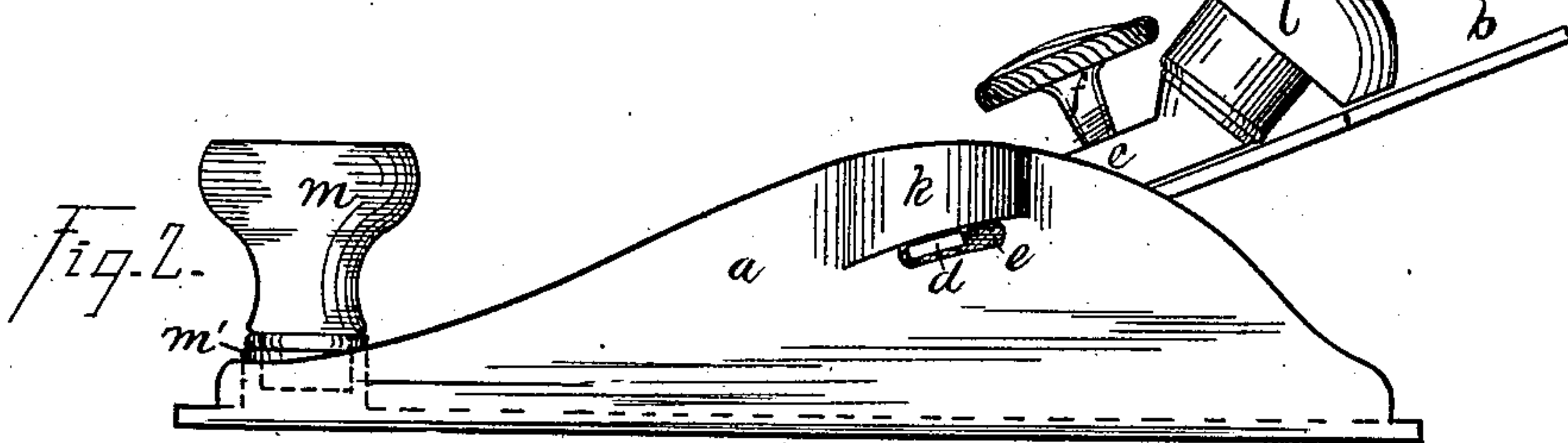
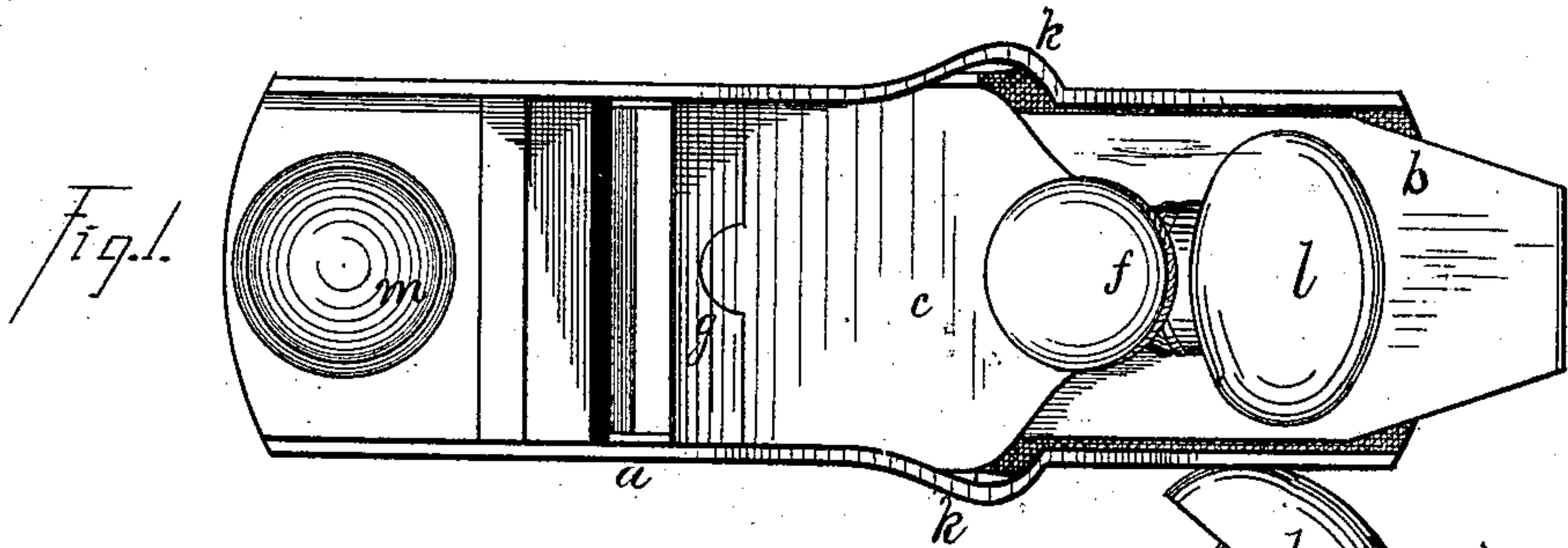


H. A. FOSS.  
Bench-Plane.

No. 207,599.

Patented Sept. 3, 1878.



Witnesses:  
Robt F. Gaylord,  
M. F. Doolery

Inventor:  
H. A. Foss,  
By W. E. Simonds  
Atty

# UNITED STATES PATENT OFFICE.

HENRY A. FOSS, OF PINE MEADOW, CONNECTICUT, ASSIGNOR TO PHILIP E. CHAPIN, OF SAME PLACE.

## IMPROVEMENT IN BENCH-PLANES.

Specification forming part of Letters Patent No. **207,599**, dated September 3, 1878; application filed April 15, 1878.

*To all whom it may concern:*

Be it known that I, HENRY A. FOSS, of Pine Meadow, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements pertaining to a Carpenter's Plane, of which the following is a specification, reference being had to the accompanying drawings, where—

Figure 1 is a top view of a plane embodying my improvements. Fig. 2 is a side view of same. Fig. 3 is a bottom view of the fastening-lever. Fig. 4 is a view of the fastening-lever in central longitudinal section. Fig. 5 is a side view of the lower end of the fastening-lever.

The letter *a* denotes the body or stock of a metallic plane. *b* denotes the plane-iron, which may or may not be supplemented by a cap-iron lying on a proper bed and running down to the throat. The letter *c* denotes the fastening-lever, bearing on its sides the fulcrum-ears *d d*, resting in the fulcrum-mortises *e e*, which are made in the plane-stock, provided near the upper end with the tightening-screw *f*, and at the lower end with the rocking end *g*, which is pivoted to the fastening-lever in such shape as to allow it to rock and adjust itself to bear squarely and flatly on the plane-iron. To secure this rocking motion, the lower end of the fastening-lever is provided with the pivot-pin *h*, which runs through a corresponding pin-hole, *i*, in the rocking end, and is provided with a head on the under side. Preferably the spring *j* is also secured on this

pin, bearing against the under side of the rocking end.

The sides of the plane-body are provided with or shaped into the swells *k k*, and the fulcrum-mortises *e e* are made just underneath these swells. These swells allow the passage of the fulcrum-ears *d d* down to the fulcrum-mortises. Then, by sliding the fastening-lever slightly forward, the ears *d d* are carried to the forward ends of the mortises, which are inwardly shouldered, so that the ears lock under at this point. This construction not only allows the fulcrum-mortises to be cast, but the swells give a good gripe for the hand of the operator.

The letter *l* denotes a knob or handle, fastened to the fastening-lever *c* by having the screw *l'* cast in or projecting from the fastening-lever, and running into the knob. Another mode of fastening on this or such a knob is illustrated by the knob *m*, which is driven into the ring *m'*, cast on or projecting from the floor of the plane-stock.

I claim as my invention—

1. In combination with the plane-body and plane-iron, the fastening-lever *c*, provided with the rocking end *g*, substantially as described, and for the purpose set forth. -

2. The fastening-lever *c*, provided with the screw *l'*, and combined with the knob *l*.

HENRY A. FOSS.

Witnesses:

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O. T. HUNGERFORD.