

(No Model.)

W. M. & J. E. HOWLAND.

BENCH DOG.

No. 258,067.

Patented May 16, 1882.

Fig. 1.

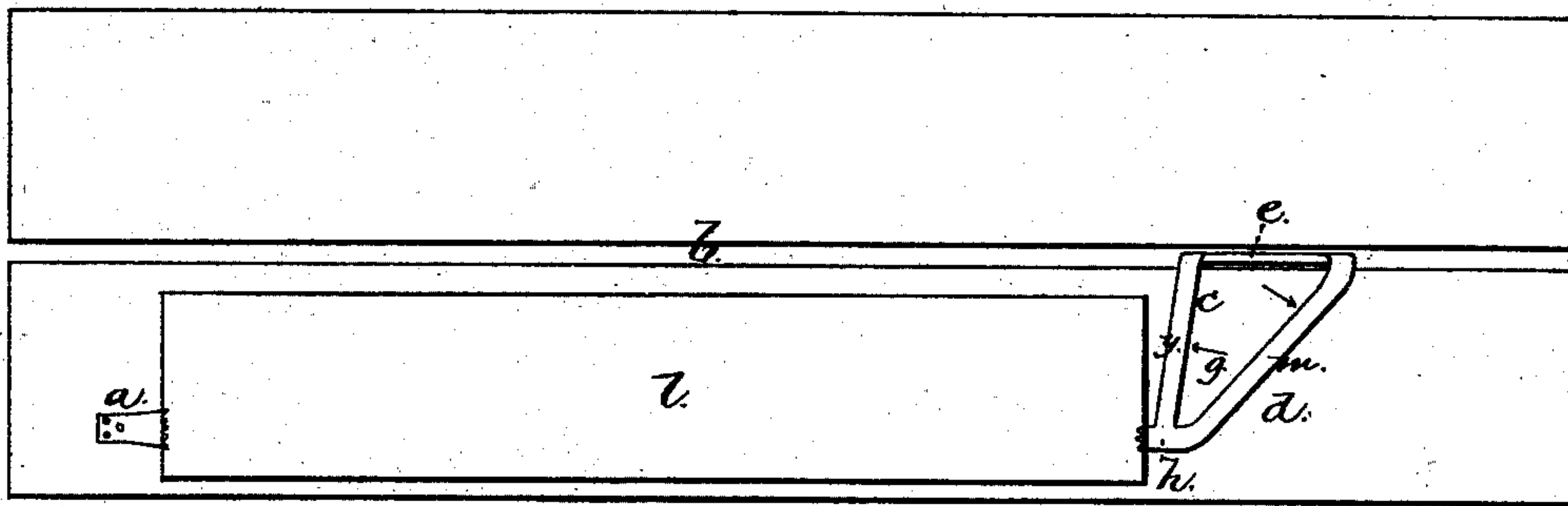


Fig. 2.

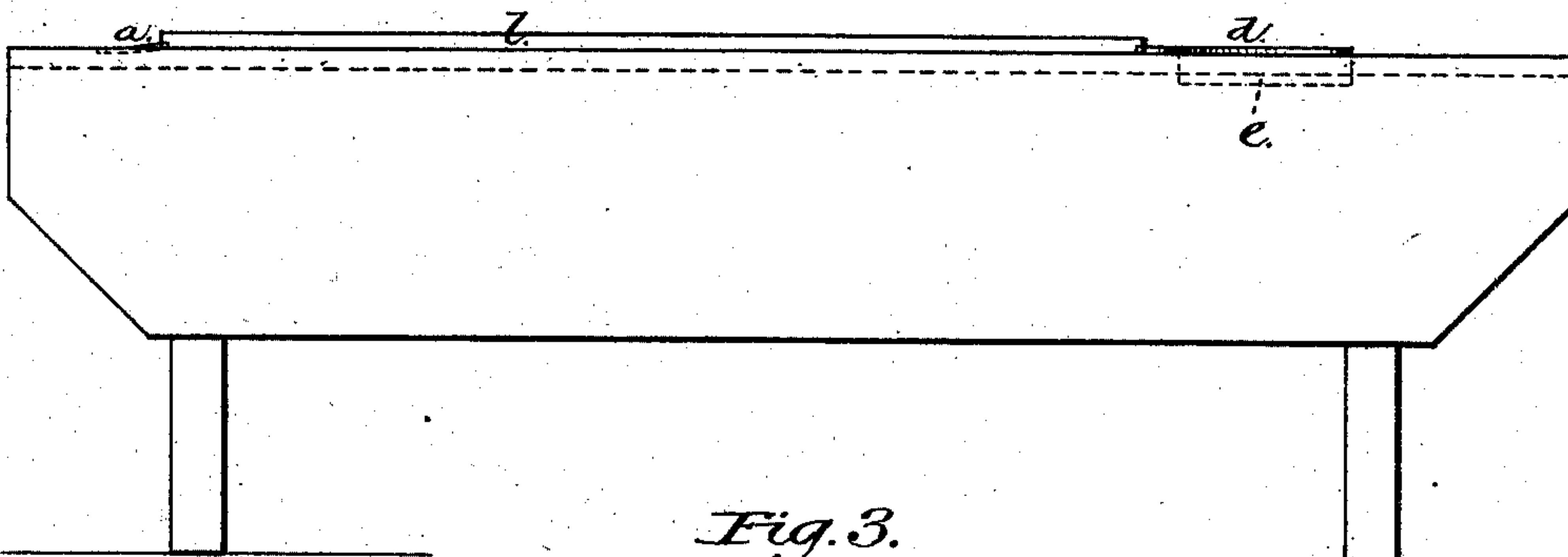
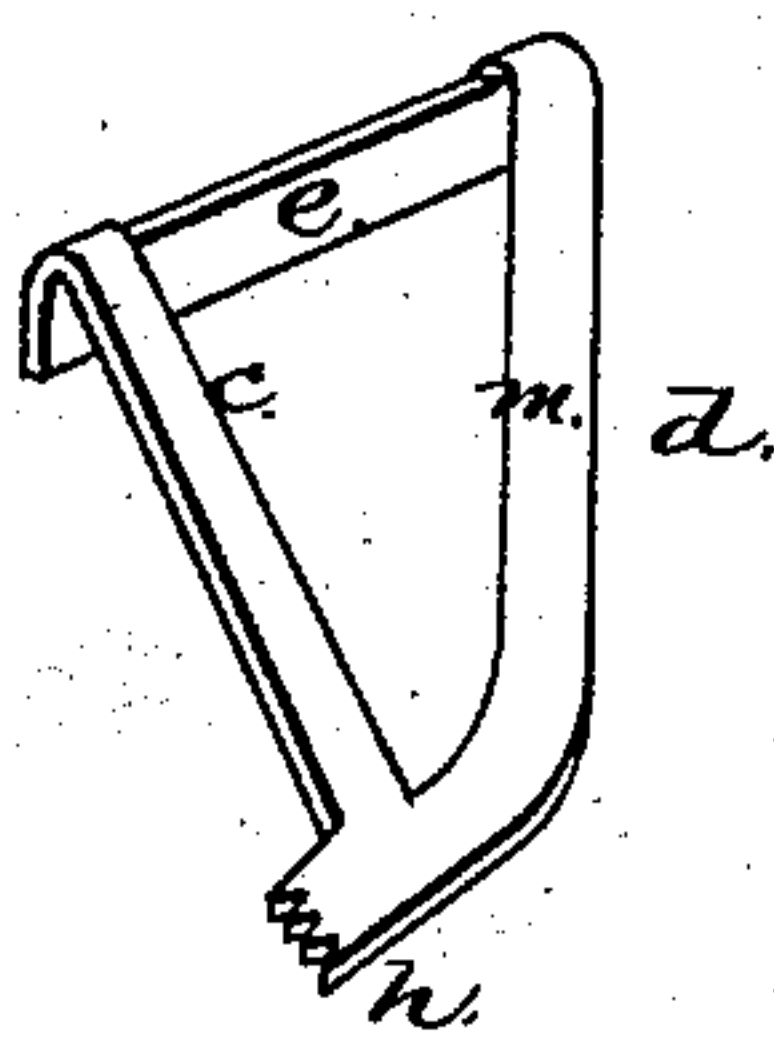


Fig. 3.



WITNESSES

John A. Ellis.
Philip C. Masi.

INVENTORS

W. M. Howland
J. E. Howland,
by Anderson & Smith
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM M. HOWLAND AND JAMES E. HOWLAND, OF TOPSHAM, MAINE.

BENCH-DOG.

SPECIFICATION forming part of Letters Patent No. 258,067, dated May 16, 1882.

Application filed February 7, 1882. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM M. HOWLAND and JAMES E. HOWLAND, both citizens of the United States, and residents of Topsham, in the State of Maine, have invented a new and valuable Improvement in Bench-Dog Hooks; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of our device. Fig. 2 is a side elevation, and Fig. 3 is a perspective detail.

This invention has relation to bench-clamps for the use of carpenters and joiners; and it consists in the construction and novel arrangement of the right-angular body-piece having at one end a lateral biting-lug and at the other a holding-flange extending downward and designed to work in a slide-groove, all as hereinafter set forth.

In the accompanying drawings, the letter *a* designates the ordinary fixed bench-clamp, and *b* indicates a straight slot in the bench, or in a plate attached to the bench.

d represents the sliding dog-clamp, consisting of the right-angular body-piece, *c*, having the end flange, *e*, extending downward into the slot or slide-groove *b* of the bench. The body of the dog is flat, so as to lie near the bench-surface, and is usually made triangular in form and open in its middle portion, as at *g*. At the end of the dog which is farthest from the flanged head *e* is formed the laterally-

projecting biting-lug *h*, which is designed to engage the work *l* when the dog is moved up against the same, the fixed clamp *a* being on the opposite end of the work, as indicated in the drawings.

In order to cause the adjustable dog to engage the work after it has been pushed up in contact therewith, a light blow is struck on the dog near the biting-lug, as indicated by the arrow at *y*.

To loosen the dog a blow is given in the opposite direction on the outer portion, *m*, of the body near the slide-flange, causing a disengagement of the latter from its bearings in the slide-groove.

An adjustable bench-dog having spurs adapted to be driven into the lumber and also into the bench-surface is not new, and is not claimed hereinafter.

Having described this invention, what we claim, and desire to secure by Letters Patent, is—

The right-angular adjustable bench-dog having the laterally-projecting biting-lug *h* at one end and the downwardly-extending flange *e* at the other end, in combination with a bench having slide-groove *b*, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

WILLIAM M. HOWLAND.

JAMES E. HOWLAND.

Witnesses:

LUCIEN H. WHITE,
ROLAND H. WHITE.