

(No Model.)

A. G. OLSON & J. McFARLANE.

ATTACHMENT FOR SQUARES FOR BUILDERS' AND JOINERS' USE.

No. 302,767.

Patented July 29, 1884.

Fig. 1.

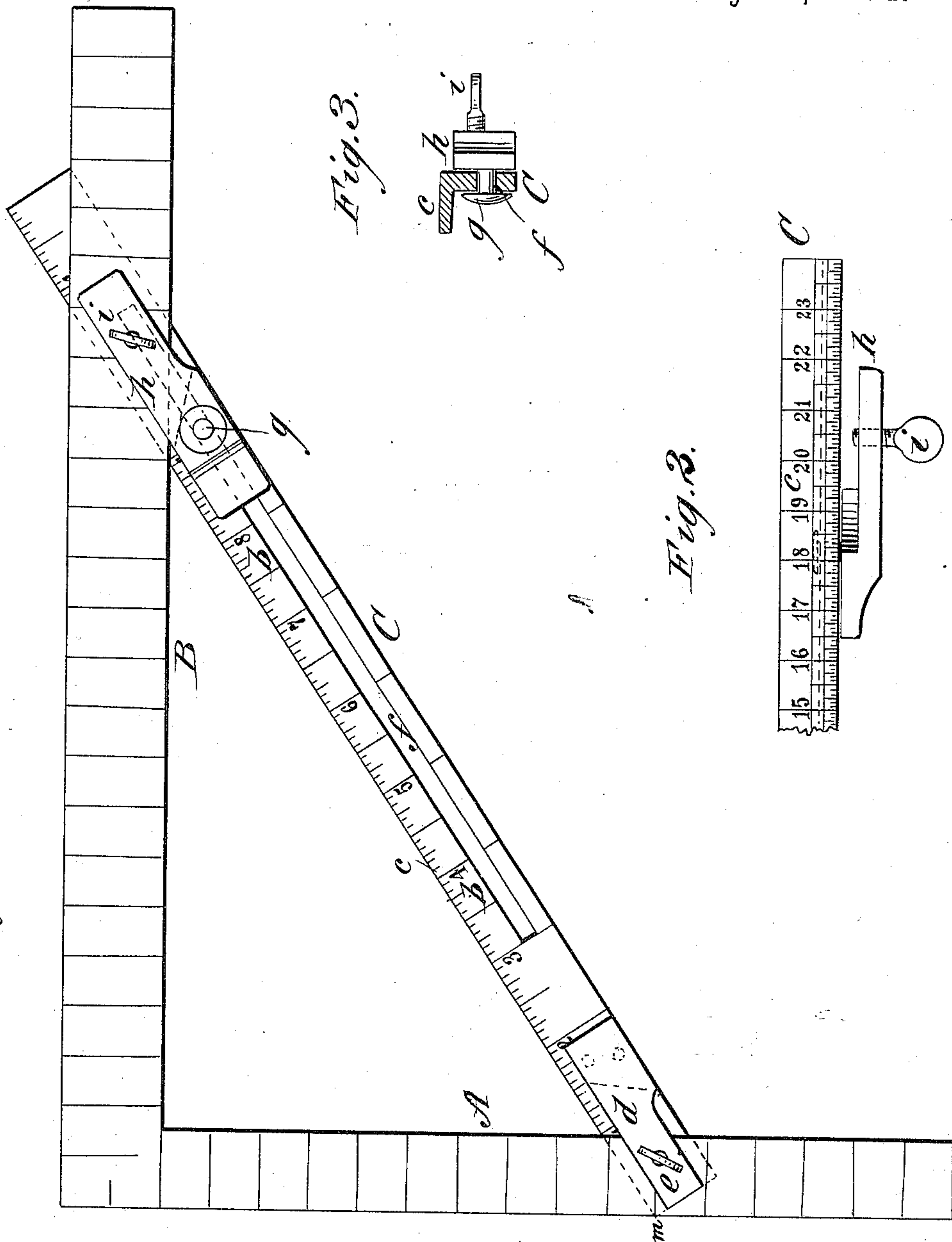


Fig. 3.

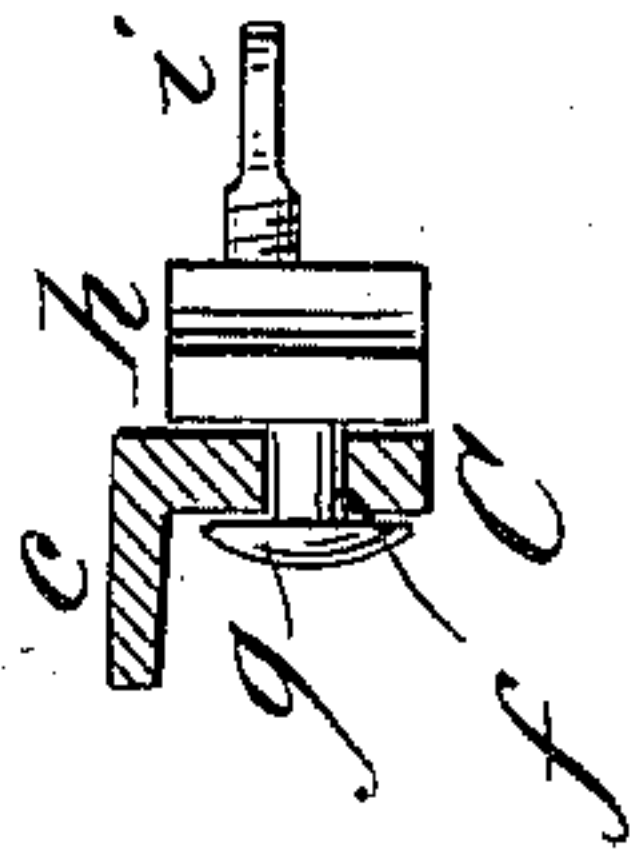
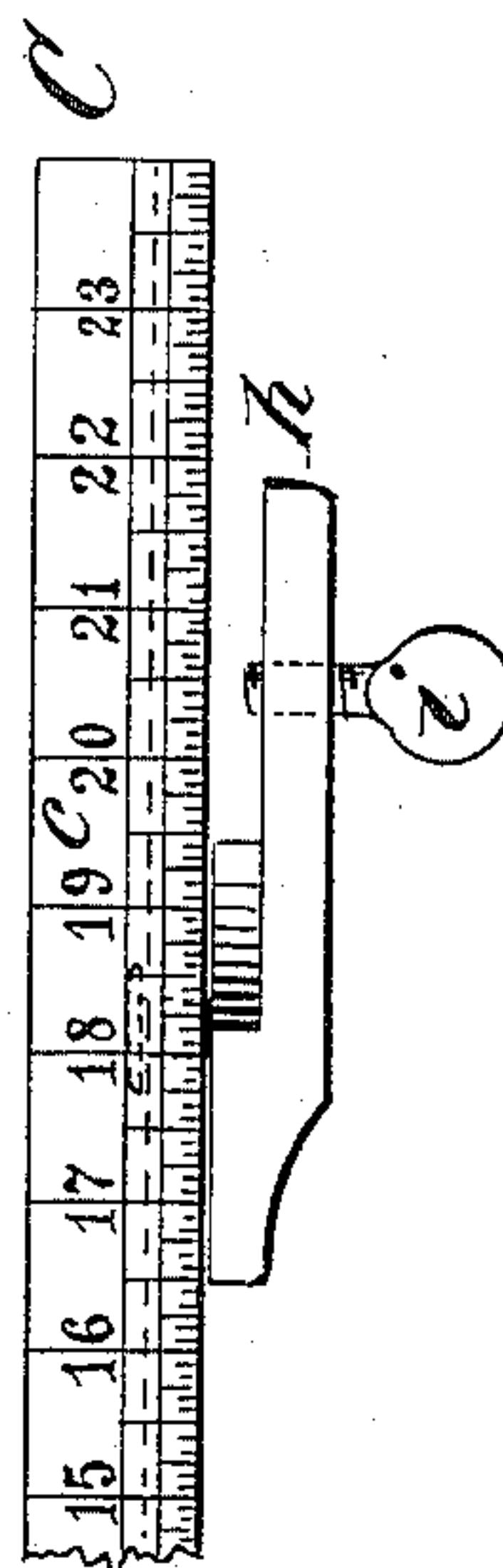


Fig. 2.



WITNESSES:

David Twitchell.
C. Sedgwick

INVENTOR:

A. G. Olson
J. McFarlane
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ANDREW G. OLSON AND JOHN McFARLANE, OF DULUTH, MINNESOTA.

ATTACHMENT FOR SQUARES FOR BUILDERS' AND JOINERS' USE.

SPECIFICATION forming part of Letters Patent No. 302,767, dated July 29, 1884.

Application filed April 23, 1884. (No model.)

To all whom it may concern:

Be it known that we, ANDREW G. OLSON and JOHN McFARLANE, both of Duluth, in the county of St. Louis and State of Minnesota, have invented a new and Improved Attachment for Squares for Builders' and Joiners' Use, of which the following is a full, clear, and exact description.

This invention consists in an adjustable scale or divided measuring attachment for squares for builders' or carpenters' and joiners' use, whereby increased facilities are afforded for measuring or laying out rafters; also for beveling the toes and heels thereof, likewise for laying out stairs and other purposes or uses, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a face view of a square with our improved attachment applied. Fig. 2 is a side view of the attachment in part, and Fig. 3 a transverse section of said attachment.

The tongue A and blade B of the square have the usual measurements or divisions on them.

C is the attachment, which consists of a flat bar or rule having inch-measurements on its face *b*, with the necessary subdivisions, and a scale of half-inch to the inch on its side, which is constructed to form a fence, *c*. At the one end of this bar, on the face *b* thereof, is a fixed elongated open-ended jaw, *d*, provided with a set-screw, *e*, and adjustable on and along or over the face of said bar by means of a longitudinal slot, *f*, in the bar, and a sliding stud or rivet, *g*, is another elongated open-ended jaw, *h*, having a set-screw, *i*.

To use the attachment for making a rafter-pattern, take as many inches on the tongue A of the square as will correspond by scale to the elevation of the roof of the building, and "even" or set the corner *m* of the attachment to such measurement on the outer longitudinal margin of the tongue, as shown in Fig. 1, the tongue of the square lying in be-

tween the bar and its fixed jaw *d*. Then take as many inches on the blade B of the square, which passes in between the bar and its adjustable jaw *h*, as will correspond by scale to one-half the width of the building, and screw down the set-screws *e i*. This will give the length of the rafter on the face *b* of the attachment at the point where it and the square intersect. The bevels for the toe and heel cuts will be given by placing the square on the rafter with the attachment by the fence *c* against its face side.

For laying out a brace-pattern, the attachment and square are used in the same way; but for short braces and rafters the scale on the attachment should be one foot for every two inches, to provide for which the scale of two inches to the foot is arranged on the one side.

The device may also be used for laying out the elevation of stairs by taking one inch on the tongue of the square for every inch in height of the rise, then taking as many inches on the blade as there are in the width of the step, and a perfect templet is obtained, far superior to a board, and the trouble of making such avoided.

The attachment can be used on all kinds of bevel-work, and in its combination with an ordinary square will be found far superior to a bevel-square.

The ordinary length of the attachment will be twenty-four inches. It may be made of steel, iron, brass, or other suitable material, and of any required thickness.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The within-described attachment for a right-angled square, having graduations on its tongue and blade, the same consisting of a measuring bar or rule, C, formed with a fence, *c*, along one edge, provided with a fixed open-ended jaw, *d*, at its one end, and an adjustable or sliding open-ended jaw, *h*, and means applied to said jaws for securing the attachment when set on the square, substantially as and for the purposes specified.

2. The longitudinally-slotted measuring-bar
C, constructed with a fence, *c*, along its one
edge or side, and having different scales on
its slotted face and fence side, in combina-
5 tion with the fixed open-ended jaw *d*, at the
one end of its face, provided with a set-screw,
e, and the longitudinally-adjustable or sliding
open-ended jaw *h*, having a set-screw, *i*, the

whole being adapted for use in connection with
a carpenter's and builder's or other like square, to
essentially as described.

ANDREW G. OLSON.

JOHN MCFARLANE.

Witnesses:

ERICK W. OLSON,

DANL. G. CASH.