M. SCHMITT.

GUTTER-HOLDER.

No. 191,616. Patented June 5, 1877.

Fig. 1.

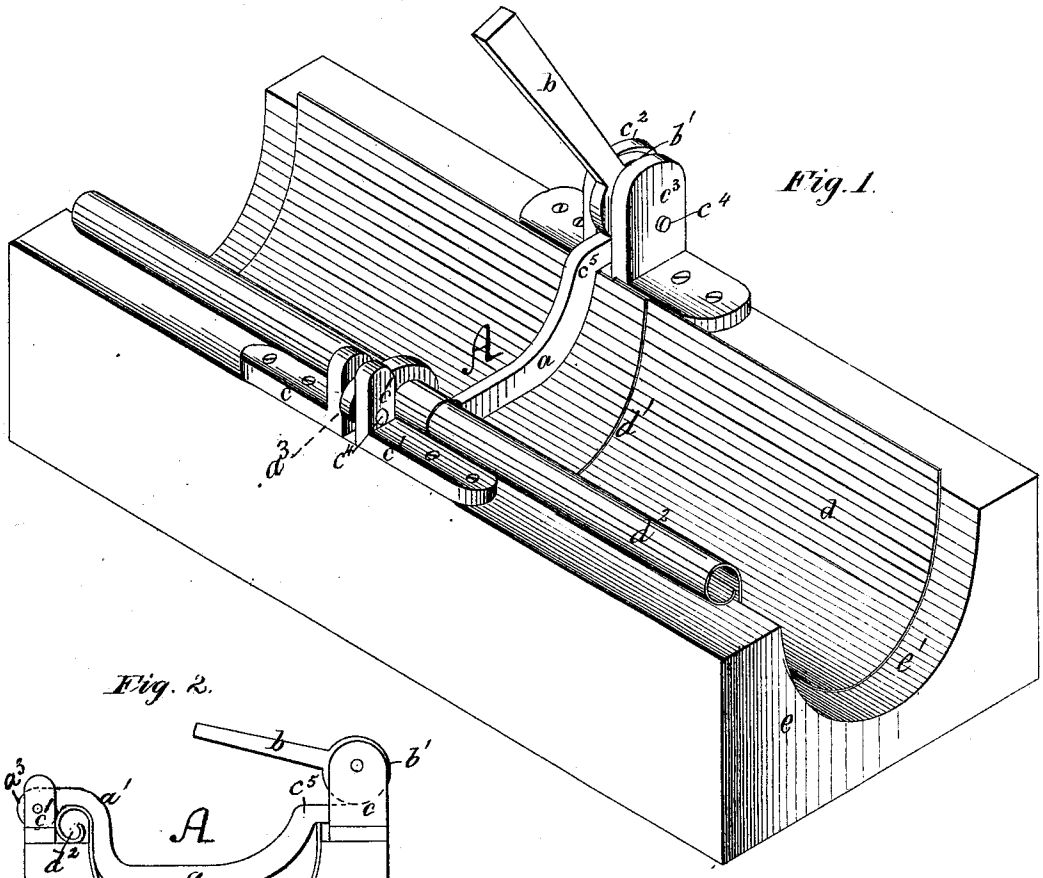


Fig. 2.

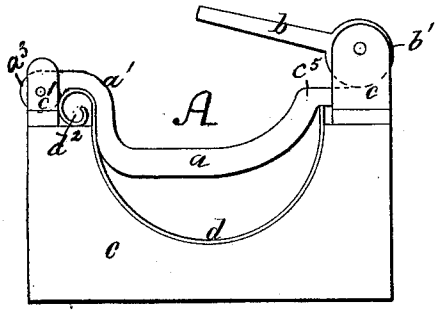


Fig. 3.

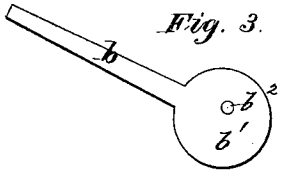


Fig. 4.

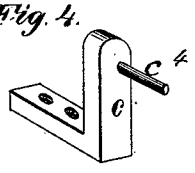
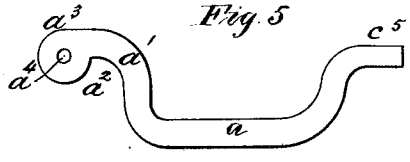


Fig. 5



Witnesses;

Alvah Johnson

Robt. P. Johnson.

Inventor

Martin Schmitt.

Colborne Brookes

attorney.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MARTIN SCHMITT, OF EVANSVILLE, INDIANA.

IMPROVEMENT IN GUTTER-HOLDERS.

Specification forming part of Letters Patent No. **191,616**, dated June 5, 1877; application filed April 13, 1877.

To all whom it may concern:

Be it known that I, MARTIN SCHMITT, of Evansville, in the county of Vanderburg and State of Indiana, have invented a new and useful Improvement in Gutter-Holders, which improvement is fully set forth in the following specification:

My invention relates to improvements in gutter-holders, the nature of which will be fully explained by reference to the accompanying drawings, which form part of this specification, and in which—

Figure 1 represents a perspective view, and Fig. 2 a transverse sectional view, of a gutter-holder constructed according to my invention. Figs. 3, 4, and 5 represent detail views of the same.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

The object of my invention is to furnish a device by which the various sheets of tin or other metal employed to form gutters or eaves-troughs may be held firmly and securely together while being soldered.

In the drawings, A represents my improved holder, which is composed of a brace, *a*, brace-bearings *c* c^1, a lever-arm, *b*, the lower end of which is formed with an eccentric enlargement, b^1, and the lever-bearings c^2 c^3, to which the eccentric enlargement of the lever *b* is pivoted, as hereinafter more fully explained. *e* represents an ordinary wooden trough, such as usually employed in the manufacture of gutters or eaves-troughs. This trough *e* is formed with a curved or other suitable channel, *e'*, in which the sheets of metal *d d* are placed, as shown by Figs. 1 and 2, preparatory to being soldered together at d^1 in order to form a gutter or eaves-trough.

The brace *a* at a^1 is bent upward, and so formed as to leave a recess, a^2, for the reception of the head d^2 of the gutter *d*, while its central portion is bent downward, so as to pass within and hold the sections of the gutter together. The rear end of the brace *a* is formed with a circular extension, a^3, having a hole, a^4, in its center, by means of which the brace *a* is pivoted to the bearings *c* c^1. The bearing *c* is formed with a fixed stud or axis, c^4, adapted, when the bearing c^1 has been screwed into position, as shown by Fig. 1, to be placed through the hole a^4 in the rear of the brace *a*, and into a corresponding hole in the bearing c^1, thereby causing the brace *a* (when the bearing c^1 has been screwed to the block *e*, as shown by Fig. 1) to hold the brace *a* correctly in position with capability of turning freely on the pin or axis c^4.

The forward end of the brace *a* is formed with a lateral extension, a^5, adapted to be received beneath the eccentric enlargement b^1 of the lever *b*, and, when such enlargement is turned on its axis by means of the lever *b*, of being securely locked down upon the gutter *d*.

The bearings c^2 c^3 are formed in exactly similar manner to the bearings *c* c^1, the bearing c^2 being formed with a pin or axis, c^4, adapted to pass through the hole b^2 in the eccentric *b*, and into the bearing c^3, thereby holding the eccentric b^1 and lever *b* firmly in position with capability of movement on the axis c^4.

Having thus described my invention I would have it understood that I do not claim, broadly, a clamp or holder for retaining sheets of tin or other metal in position while being soldered into gutters or eaves-troughs, as devices for this purpose have previously been used; but

What I do claim, and desire to secure by Letters Patent, is—

The combination, with a trough, *e*, of a gutter-holder, A, having a brace, *a*, constructed as described, removable bearings *c* c^1 c^2 c^3, and a lever-arm, *b*, formed with an eccentric, b^1, adapted to operate on the extension c^5 of the brace *a*, the whole being constructed and operating substantially as described.

MARTIN SCHMITT.

Witnesses:

ALVAH JOHNSON,

ROBT. P. JOHNSON.