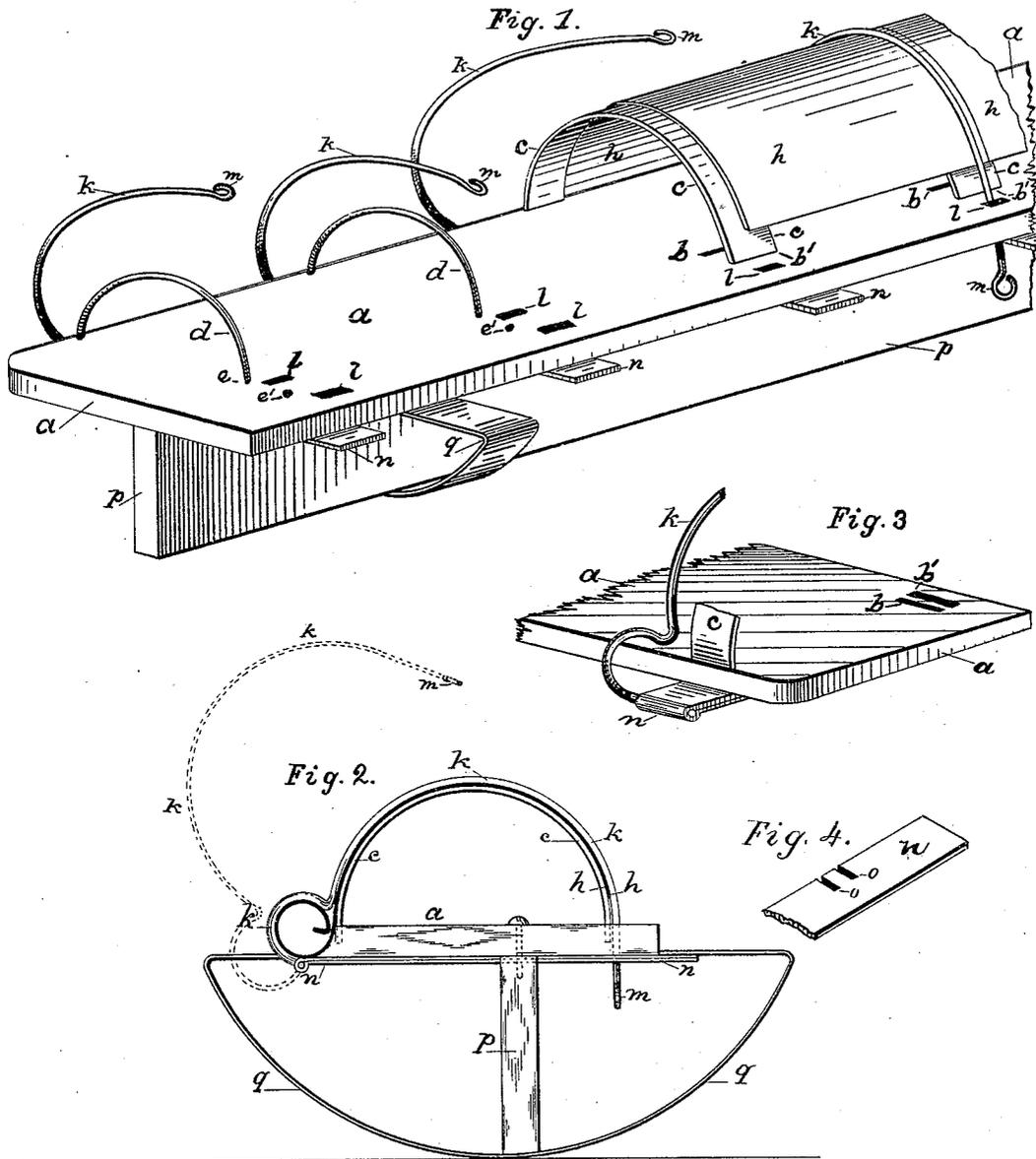


(No Model.)

W. E. BROWN.
GUTTER HOLDER.

No. 251,173.

Patented Dec. 20, 1881.



WITNESSES:
Thos. Houghton.
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UNITED STATES PATENT OFFICE.

WILLIAM E. BROWN, OF IRVING, KANSAS.

GUTTER-HOLDER.

SPECIFICATION forming part of Letters Patent No. 251,173, dated December 20, 1881.

Application filed September 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. BROWN, of Irving, in the county of Marshall and State of Kansas, have invented a new and useful Improvement in Gutter-Holders; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved gutter-holder. Fig. 2 is an end view of the same; and Figs. 3 and 4 are detail views.

My invention relates to improvements in gutter-holders; and it consists in the peculiar construction and arrangement of the parts, whereby the sections of a gutter are clamped together and held straight and even while being soldered, and the holder adapted to clamp gutter-sections of different diameters, as hereinafter more fully set forth.

In the accompanying drawings, *a* represents a board for the support of the gutter-sections, provided with a series of slits, *b*, parallel to the longitudinal sides of the board *a*, into each one of which slits *b* is inserted one end of a metallic band or flat strip, *c*, of arched form, the opposite end of the band being secured to one of the longitudinal edges of the board, or inserted in one of a row of slits parallel to the row of slits *b*. By this construction a series of parallel flat metallic arches, *c*, are formed for the support of the gutter-sections while being soldered together to form a gutter. A second row of slits, *b'*, parallel to the slits *b*, and lying between the first row of slits and the edge of the board *a*, is formed in the board *a* for the insertion of the ends of a series of semicircular or arched bands of greater diameter than the arches *c*, for the support of gutter-sections of greater diameter than the arches *c*, so that a series of arches of greater or less diameter may be employed to suit gutter-sections of different sizes or diameters.

In lieu of the flat strips *c* of metal, rods of metal, *d*, bent into an arched form, may be employed, the ends of the arched rods *d* springing from holes *e* made in the board *a* and parallel to its longitudinal sides, and rows of holes *e'*, parallel to the others, may be employed for the reception of arched rods of greater or less

diameter than the arched rods *d*, to support gutter-sections of different diameters. I prefer the flat strips of metal, however, for arches to the wire rods.

h h represent the gutter-sections resting on the arches and supported thereby during the soldering of their edges. The gutter-sections *h* are of the usual construction, each having a bead at one side, the end of the bead of one gutter-section being adapted to fit into the end of the bead of the adjacent gutter-section.

k k represent a series of curved clamps, preferably one for each arched band *c*. The curved clamps *k* are arched to conform to the gutter-sections, and are arranged to pass over the upper surfaces of the gutter-sections and clamp them in place on the arches *c* while being soldered. One end of each clamp *k* passes through one of a series or row of slots, *l*, parallel to the slits *b*, and lying between them and the longitudinal side or edge of the board *a*, and is provided with a loop or handle, *m*. The opposite end of each clamp *k* is bent at a right angle to the plane of the clamp, and is inserted in the opening at the end of a metallic strap, *n*, bent over on itself and secured transversely to the under face of the board *a*. A number of these parallel transverse straps, *n*, are employed, there being one for each clamp. By this construction each clamp is hinged to a metallic strap, *n*. The longitudinal edge of each metallic strap *n* is provided with catches or notches *o*, for the insertion of the wire-rod clamps *k*, whereby the gutter-sections are held securely in place on the arched bands *c*.

p represents a board, secured to the board *a* along its central longitudinal line, and at right angles thereto. The function of the board *p* is to keep the board *a* level and straight. *q q* represent rockers, the planes of which are perpendicular to the boards *a* and *p*. The ends of the rockers are secured to the board *a*, and the rockers pass under the lower edge of the board *p* and are secured thereto. The function of the rockers is to facilitate the operation of the device by readily moving it from side to side. By this construction the gutter-sections can readily be arranged on the arches with their edges overlapping each other and clamped to the arches straight and even while being

soldered, and the device is adapted to soldering together gutter-sections of different diameters.

I claim as my invention—

5 1. The combination, with the board *a*, provided with the parallel rows of slits *b b'* or parallel rows of holes *e e'*, adapted to receive the ends of arches of different diameters, of the arches *c* or *d*, substantially as described, and
10 for the purpose set forth.

2. The combination, with the board *a*, provided with the slots *l* and the parallel rows of slits *b b'*, of the arches *c*, straps *n*, provided with the recesses *o*, and clamps *k*, pivoted to the straps, substantially as described, and for
15 the purpose set forth.

WILLIAM E. BROWN.

Witnesses:

JOHN L. MACARTNEY,
CHARLES G. PARKER.