

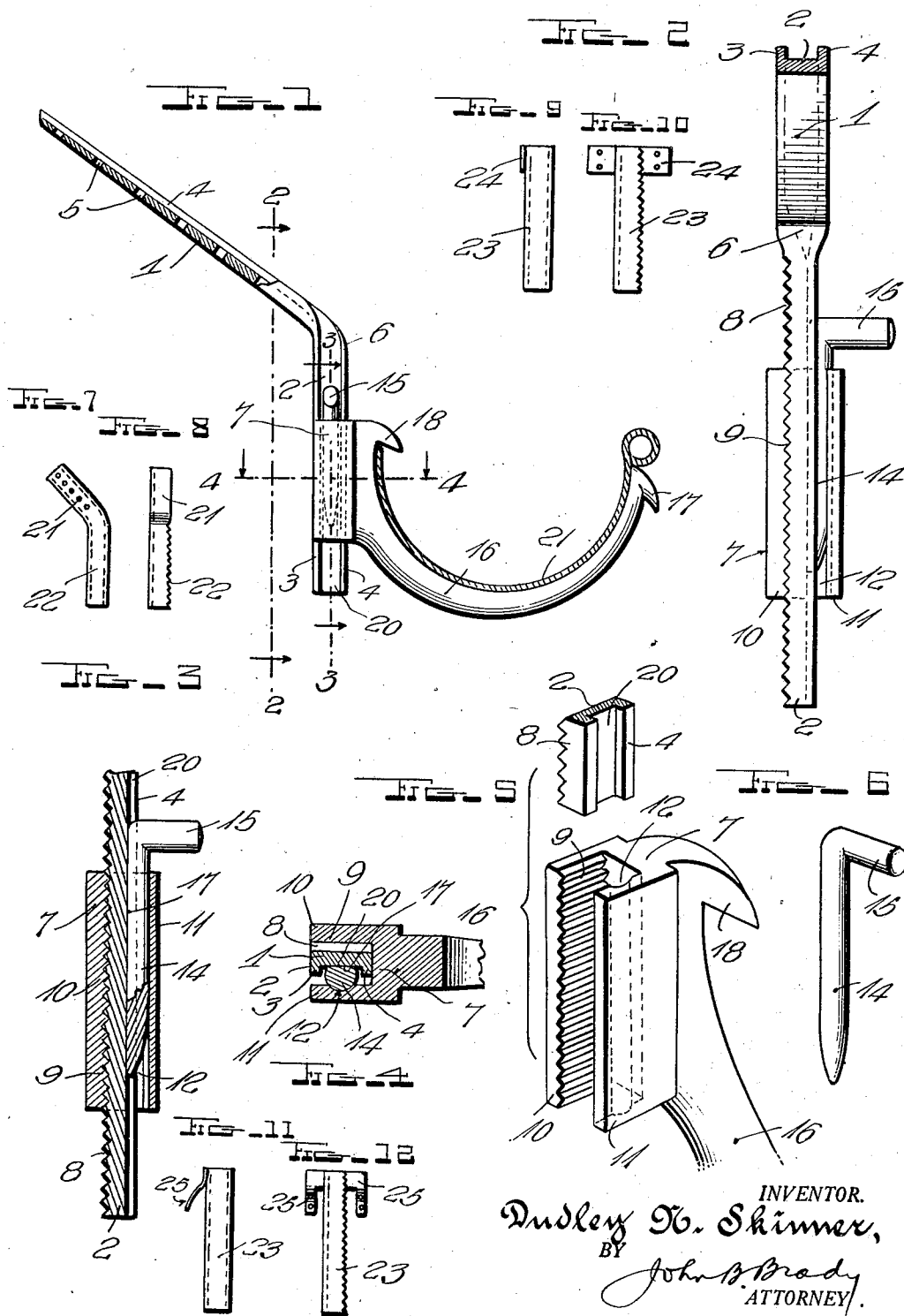
Nov. 11, 1930.

D. N. SKINNER

1,781,085

GUTTER SUPPORT

Filed June 22, 1929



INVENTOR.
Dudley N. Skinner,
BY John P. Brady
ATTORNEY.

UNITED STATES PATENT OFFICE

DUDLEY N. SKINNER, OF LINWOOD, PENNSYLVANIA

GUTTER SUPPORT

Application filed June 22, 1929. Serial No. 372,967.

My invention relates broadly to supports and more particularly to a construction of bracket providing a support for a gutter.

One of the objects of my invention is to provide a construction of gutter support which may be readily applied to the overhanging edge of a roof and the gutter hung therefrom with minimum expenditure of time and in a manner wherein a rigid support of the gutter is assured.

Another object of my invention is to provide a construction of bracket for a gutter which may be applied to the overhanging edge of a roof with a minimum number of tools, where means are provided for accurately adjusting the position of the gutter with respect to the support.

A further object of my invention is to provide a construction of bracket support for mounting a gutter with respect to the overhanging edge of a roof in which the gutter support may be vertically positioned with respect to the bracket and held in a selected position to maintain the gutter in a particular position with respect to the bracket.

Other and further objects of my invention reside in the construction of bracket support and gutter mounting described in the specification hereinafter following by reference to the accompanying drawings, in which:

Figure 1 is a side elevation of the gutter support of my invention showing the bracket mounting partially broken away and illustrated in cross-section; Fig. 2 is a cross-sectional view taken on line 2—2 of Fig. 1 showing the parts of the bracket support in end elevation; Fig. 3 is a cross-sectional view taken through the bracket and gutter support on line 3—3 of Fig. 1; Fig. 4 is a lateral cross-sectional view taken through the bracket and gutter support on line 4—4 of Fig. 1; Fig. 5 is a fragmentary view illustrating parts of the bracket and gutter support in perspective; Fig. 6 is a perspective view of the pin or key which I employ in fixing the gutter

support in a selected adjusted position with respect to the bracket mounting; Figs. 7 and 8 show side and front elevations of a modified form of gutter support embodying my invention; Figs. 9 and 10 show a further modified construction of bracket used in the gutter support of my invention; and Figs. 11 and 12 show a further modification of bracket support which may be used in the construction of my invention.

Heretofore in the art when erecting gutters adjacent the overhanging edge of a roof, it has been necessary to drive spike-like members into the roof or wall adjacent thereto in a position where they would serve as supports for the gutter. In some instances, it has been proposed to provide an adjustable end and bolt connections between a bracket and a gutter support. However, the work of hanging a gutter is generally performed at such an altitude that the proper positioning of the gutter support with respect to the bracket is performed under conditions where the connectible parts are relatively inaccessible and difficulty is experienced in properly aligning the supporting members with respect to brackets.

I have considered constructions of brackets for gutter supports which have heretofore been available and have found many disadvantages and defects in such supports which I have overcome in the construction of gutter support set forth herein.

In my invention, I provide a bracket member which is readily secured to the overhanging edge of a roof with a depending extension on one side of which there is arranged a rack and on the other side of which there is provided a groove for a pin or key. The bracket member has portions lying at substantially an obtuse angle with respect to each other, one portion of which is secured to the overhanging edge of the roof, and the other portion of which contains the rack hereinbefore referred to. The support for the gutter is

a substantially semi-circular member arranged to embrace the gutter with a portion formed at one end of the member for embracing opposite sides of the depending portion of the bracket. In the end portion of the semi-circular member, rack teeth are formed on one of the interior walls and a keyway or groove is formed on the opposite interior wall. A pin or key is insertable between the grooves formed in the depending portion of the bracket and in the end portion of the semi-circular member, whereby the semi-circular member may be raised or lowered and fixed in a selected position by the wedge action of the pin. In this manner the gutter may be readily supported at a predetermined elevation and such elevation selectively fixed by simply removing the pin or key and sliding the end portion of the semi-circular member along the depending rack portion of the bracket to the desired position.

Referring to the drawings in more detail, reference character 1 designates the portion of the bracket which is secured by driven or screw threaded fastenings through apertures 5 to the overhanging edge of a roof. A depending portion 2 connects to the bracket 1 which is revolved or twisted as designated at 6 to a plane substantially parallel to the axis of the bracket portion 1. The depending portion of the bracket has a central channelway or groove 20 formed therein with projecting edge portions 3 and 4 extending throughout the length of the depending portion 2 and the securing portion 1 of the bracket. The gutter 21 is supported in the semi-circular member 16 having securing edges 17 and 18 for engaging the opposite edges of the gutter 21. The semi-circular member 16 terminates in an end portion 7 consisting of a pair of vertically extending wall members 10 and 11. The interior surface of wall member 10 is provided with rack teeth 9 formed therein. The interior surface of wall member 11 is provided with a vertically extending semi-circular groove 12 formed therein. The depending portion 2 of the bracket has rack teeth 8 formed thereon with which the rack teeth 9 on the interior surface of wall 10 of end portion 7 are adapted to engage. A pin or key 14 having an angularly bent upper end 15, a flattened side 17, and a tapered and rounded surface at 14 is insertable between the groove 12 of the end portion 7 and the longitudinally extending groove 20 of the depending portion 2 of the bracket.

In the assembly of the bracket support, the semi-circular member is presented to the depending portion 2 of the bracket 1 by movement in a plane coinciding with the axis of the bracket member by which the side walls 10 and 11 of the end portion of the bracket member are moved to a position in which they enclose the sides of the depending portion 2,

the rack teeth 9 of the end portion 7 riding on selected rack teeth 8 of the depending part 2 of the bracket. Pin 14 is inserted between the longitudinally extending channel 20 of the depending portion 2 of the bracket 1 and between the groove 12 of end portion 7 and driven to a position whereby switch action interlocks the bracket with the semi-circular member in a rigid manner, thereby providing a rigid support for the gutter. In this way, it is possible to bring about a difference in elevation of the gutter at the various points of support along the roof to secure the required pitch or drop in effecting proper draining in the gutter system.

By reason of the simplified method of assembly as described herein, the gutter is readily mounted at the overhanging edge of a roof in a convenient manner regardless of the altitude at which the gutter is hung, as the supporting process merely involves the manual insertion of pin 14 without the aid of tools.

In the bracket construction of Figs. 7 and 8 I have shown a structure which may be secured to one side of a rafter for supporting a gutter at the edge of a roof where the portion 21 may be fastened to the side of the rafter and the portion 22 used to secure the adjustable member 7 in position.

In Figs. 9 and 10 a bracket support adapted to be connected to a box cornice is shown where the depending portion 23 is secured to the box cornice by fastening transverse member 24 to the cornice.

In Figs. 11 and 12 I have shown the structure of the bracket of Figs. 9 and 10 modified for connection to a molding where transverse member 25 is shaped to conform with the contour of the molding for securing the bracket in position.

I have found the bracket support of my invention extremely practical in its construction and capable of quick assembly, and while I have described a preferred embodiment of my invention, I desire that it be understood that modifications may be made and that no limitations are intended other than are imposed by the scope of the appended claim.

What I claim as new and desire to secure by Letters Patent of the United States is as follows:

A gutter support comprising a bracket having a portion thereof arranged to be secured to the overhanging edge of a roof and a depending portion thereof extending in a substantially vertical plane, said depending portion having rack teeth formed on one face thereof and a groove disposed in the opposite face thereof, a semi-circular member providing a gutter support, said semi-circular member terminating in a pair of parallel extending walls at one end thereof providing a vertically disposed gap therebetween, the in-

terior surface of one of said walls having rack
teeth formed thereon and the interior surface
of the other of said walls having a longitudi-
nal groove formed therein, and a tapered pin
member insertable between the grooves on the
5 surface of said depending member and on the
interior face of one of the walls carried by
said semi-circular member for selectively se-
curing said semi-circular member in position
10 with respect to said bracket when said mem-
ber is moved laterally toward said depending
portion with the walls of said member em-
bracing opposite sides of the depending por-
tion of said bracket.

15 In testimony whereof I affix my signature.
DUDLEY N. SKINNER.

20

25

30

35

40

45

50

55

60

65