(No Model.)

W. R. WILCOX.

EAVES TROUGH SUPPORT.

No. 334,831. Patented Jan. 26, 1886.

Fig. 1.

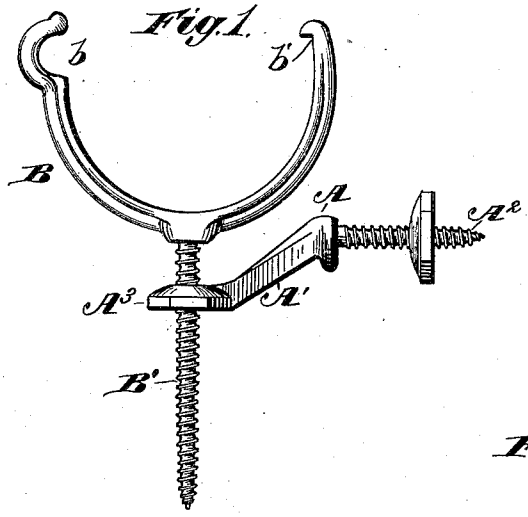


Fig. 4.

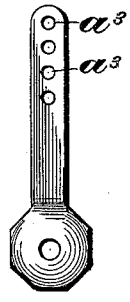
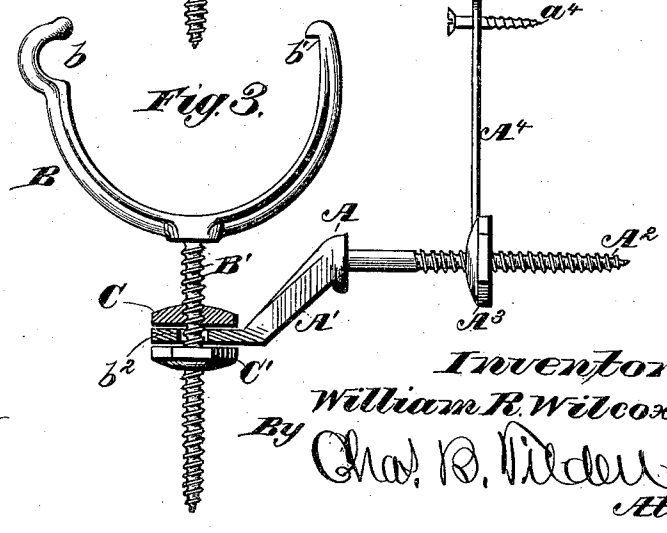


Fig. 2.

Fig. 3.



Witnesses.
Robert Everett,
Chas. F. Dyer.

Inventor:
William R. Wilcox,
By Chas. B. Wilder
Atty.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM R. WILCOX, OF NASHUA, NEW HAMPSHIRE.

EAVES-TROUGH SUPPORT.

SPECIFICATION forming part of Letters Patent No. 334,831, dated January 26, 1886.

Application filed March 28, 1884. Renewed September 21, 1885. Serial No. 177,775. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. WILCOX, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented new and useful Improvements in Eaves-Trough Supports, of which the following is a specification.

My invention relates to that class of devices which are used for supporting eaves-troughs; and the purpose thereof is to provide a trough-hook which shall have perfect vertical adjustability as well as an inward adjustability to a short-drip finish, and to diminish the cost, improve the form, employ a less number of parts, and give a strong, durable, and ornamental support.

To these ends my invention consists, first, in the combination, with a bracket attached to the finish, of a trough-hook having a vertical threaded spindle tapped through or engaging with a threaded support upon the outer end of said bracket, as hereinafter set forth and claimed, whereby the vertical adjustment of the hook and the "drop" of the trough are obtained.

My invention consists, secondly, in the combination, with a supporting-bracket having a threaded spindle which engages with the finish, of a trough-hook having a vertical threaded spindle engaging with threaded adjusting devices supported upon the end of said bracket, as hereinafter set forth and claimed.

My invention consists, finally, in the several features of construction and combinations of parts fully set forth hereinafter, and definitely pointed out in the claims.

Referring to the drawings forming part of this application, Figure 1 is a side elevation illustrating my invention in one form of construction. Fig. 2 is a side elevation showing a modification. Fig. 3 is a side elevation showing the same substantial parts with a variation in the manner of arranging the parts by which the hook receives vertical adjustment. Fig. 4 is a detail view illustrating the lock-nut carried by the bracket-spindle.

In the said drawings, the reference-letter A indicates the supporting-bracket, which is set in the finish, and substantially in the same line of the finish throughout the whole series. This bracket consists of a body, A′, which may, if desired, have a downward pitch at a greater or less angle; or it may be made straight. Upon one end of this body portion is formed a screw-spindle, A^2, having a gimlet-point, to enable it to readily enter the wood-work, and upon the other extremity is formed a horizontal nut, A^3, having a female thread cut centrally therein.

B indicates the trough-hook, which is made of the usual form—that is, having a loop, *b*, to receive the roll of the trough, and a notch, *b′*, upon the opposite arm, to confine its edge. Upon this hook and at or near its lower central point is formed or attached a vertical spindle, B′, which is threaded to engage with the female thread in the nut A^3. This spindle is of such length as to represent the total declination or drop of the trough throughout a single line of troughing, and the required adjustment is made by rotating the spindle B′ in the threaded end of the bracket.

Instead of threading the aperture in the bracket, I may cut an opening, b^2, as shown in Fig. 3, which will allow the hook-spindle to pass freely, and upon one or both sides of the bracket end I may place a nut, C, through which said spindle is tapped. If one nut only is used, it should rest upon the upper face of the bracket end; but I may place a second nut, C′, below, which will operate as a jam-nut and hold the spindle from turning. This is not, however, absolutely essential, since the hook, when it is once engaged with the trough, prevents all rotary movement of the spindle B′. Again, the bracket end may be forked, as shown in Fig. 2, giving an upper and lower plate, *a′* and a^2, between which is placed a nut, D, through which the spindle B′ is tapped, apertures *d d′* being formed in the upper and lower plates, *a′* and a^2, to permit the passage of the hook-spindle.

Upon the threaded spindle A^2 of the bracket may be turned a nut, A^3, of any suitable form or construction. The function of this nut is to give support to the spindle against sagging and to stiffen and support it in its place in the finish. If desired, a strap, A^4, may be formed upon said nut and having one or more apertures, a^3, to receive a screw or nail, a^4, which enters the finish and locks the nut against rotation. In practice when the bracket-spindle

A^2 is turned into place in the finish, the nut A^3 is turned up against the face of the finish, giving a strong and rigid support to the screw-spindle.

The vertical adjustment of the trough-hook is effected by rotating either the spindle or the nut with which it engages until the hook is raised or dropped to its proper point. The combination of parts shown is extremely simple, strong, and effective, may be cheaply manufactured, is ornamental in appearance, and as durable in use as any form of trough-support now in use.

It should be noted that the range of vertical adjustment may be increased by rotating or turning the bracket A upon its spindle A^2 one-half of a revolution. This will give ample range for the necessary drop upon long lines of trough.

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

1. An eaves-trough support consisting of a bracket having a threaded attaching-spindle at one end and a flat perforated plate at the other, a trough-hook having a threaded spindle which depends from its central portion and passes through said perforated plate, and nuts which are screwed upon the spindle and engage with said plate, substantially as specified.

2. In an eaves-trough support, the combination, with a reversible bracket having a threaded spindle, a body portion formed at an angle therewith, and one or more perforated flat plates upon its outer end, said plates being parallel with the axis of the spindle, of a trough-hook having a threaded spindle dropping from its central portion and entering the perforation in the end of the bracket, and nuts turned upon said spindle and supported by the flat end or plates of the bracket, substantially as specified.

3. The combination, with the reversible bracket A, having a spindle, A^2, and a body, A', formed at an angle with said spindle, and provided with the flat parallel plates a' and a^2, of the hook B, having a threaded spindle, B', which enters a perforation in said plates, and a nut, D, lying between said plates, substantially as specified.

4. In an eaves-trough support, the combination, with a bracket having a threaded spindle which engages with the finish, of a bracing-nut having a strap which carries a screw engaging with the finish and preventing the rotation of the nut, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM R. WILCOX.

Witnesses:
JOHN J. FLOOD,
B. B. WHITTEMORE.