No. 644,415. Patented Feb. 27, 1900.

H. C. FOLGER.

ROOF COLLAR.

(Application filed Nov. 27, 1899.)

(No Model.)

Fig. 1.

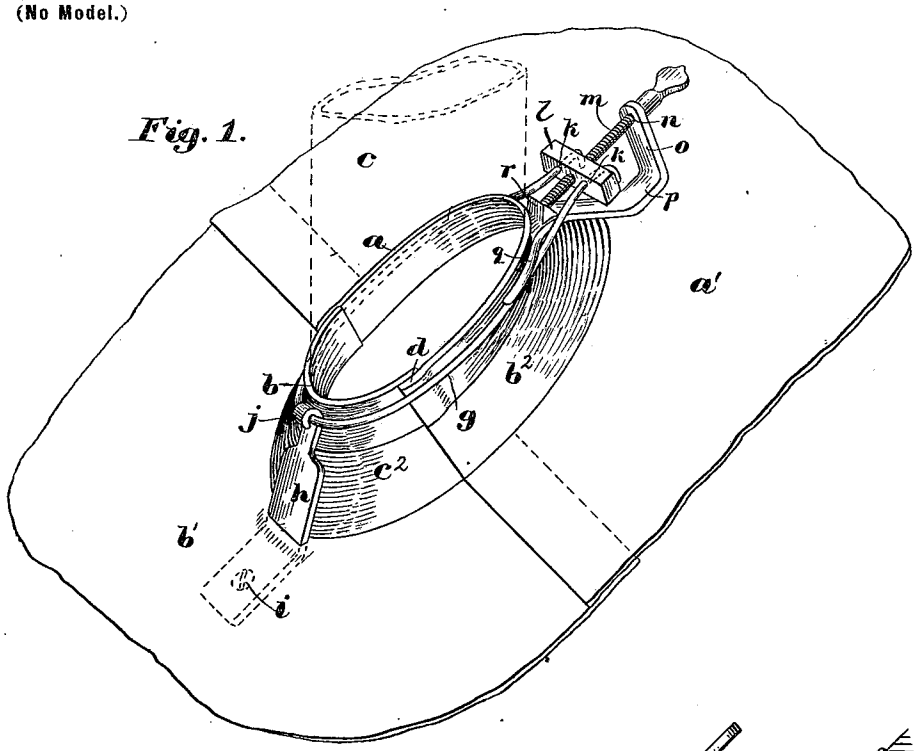


Fig. 2.

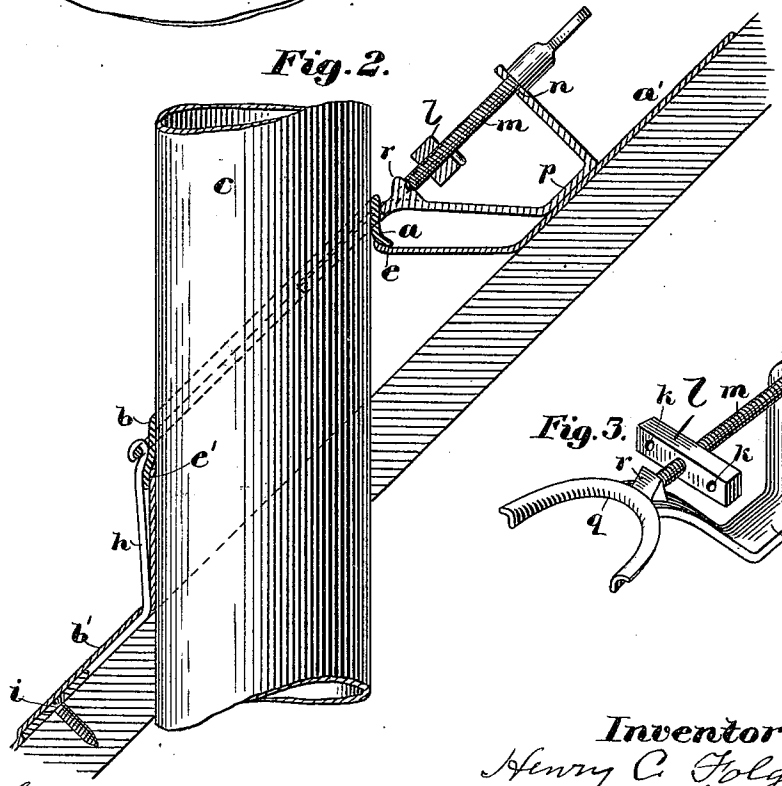


Fig. 3.

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UNITED STATES PATENT OFFICE.

HENRY C. FOLGER, OF SOMERVILLE, MASSACHUSETTS.

ROOF-COLLAR.

SPECIFICATION forming part of Letters Patent No. 644,415, dated February 27, 1900.

Application filed November 27, 1899. Serial No. 738,445. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. FOLGER, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Roof-Collars, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to make and use the same.

This invention relates to means for forming water-tight connections between a roof and a pipe passing therethrough, the said means being commonly called "roof-collars."

It is the object of the invention to provide a roof-collar which can readily be bent up or be shaped by the workman putting it in place, so as to accommodate itself to a roof of any pitch or angle with reference to the horizon, and which can be drawn up tight around the pipe and be calked to render it thoroughly waterproof on that line, as well as to secure the same results at the base of the collar through means of flashings of peculiar construction in connection with the collar.

Reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a perspective view of my improved two-part adjustable roof-collar, showing the manner of applying it to use. Fig. 2 is a vertical central sectional view showing the invention as applied to a pipe and roof, the latter being of quite steep pitch. Fig. 3 is a perspective view of the adjusting-yoke and its equipments.

In the drawings, *a* designates one part or member of the improved roof-collar, and *b* the other part or member. As is herein shown, the part *a* is made the upper and the part *b* the lower part. The two parts are made of a size sufficient when they are brought together to more than surround the pipe *c* which they embrace—that is, so that their edges will overlap, as indicated at *d* in Fig. 1. The lower edge of each part has secured to it a flashing consisting of a sheet of copper or other suitable material extending out from the collar and adapted to be secured to the shingles or roof in a water-tight manner.

The construction of my improved collar in two parts is an important matter in the invention, as will hereinafter more fully appear, and in all instances the upper part and its flashing *a'* will overlap and overlie the lower part and its flashing *b'*.

The collar proper, *a* and *b*, will be made of lead and the flashings of the respective parts will be soldered thereto. It is proposed to bend the flashings adjacent to the collars upward, as at b^2 and c^2, so that they will extend on an incline from their main or flat portions up to the collar proper, as at *e*, where they are soldered thereto.

h designates an angular stay-piece which passes through the lower part or member, the end portion thereof being secured to the roof or shingles by means of a screw or otherwise, as at *i*, and the upper part extending up to the portion *b* of the collar, where its upper end is bent over in the form of a hook, as designated at *j*. Where the stay-piece *h* extends through the flashing *b'*, it will be soldered so as to make it waterproof. The hook portion *j* is provided to receive the clamping wire or yoke *g*, which is placed therein and extends around and embraces both portions of the collar *a* and *b*, as shown in the drawings, the ends of the wire passing through holes *k* in the ends of a cross-bar *l* having a screw-threaded connection with a thumb-screw *m*. The shank of the thumb-screw passes through a hole *n* in the upright part *o* of a bracket or bearing *p* connected with a yoke *q*, which bears against the divided part *a* of the collar. The ends of the wire *g* which pass through the holes *k* are bent over at an angle to their body portions or otherwise connected with the bar *l*. The inner end of the thumb-screw *m* bears against a lug *r* on the yoke, and near its outer end the said thumb-screw is formed with a shoulder to bear against the upright *o* of the bracket, so that when the ends of the wire *g* are secured to the cross-bar and the yoke is adjusted in position against the part *a* of the collar by turning up the said thumb-screw the two parts of the collar may be tightly drawn together around the pipe *c* through the medium of the wire *g* and yoke *q*, clamping the collar quite as securely as may be around the pipe. It will be understood that in this clamping action one

divided part of the collar and its flashing will slide upon the other, and that after the clamping is effected the collar will be bent up, if necessary, to suit the angularity of the roof and the position of the pipe, and that the lead, of which the upper part of the collar is composed, will be tamped in around the pipe to secure a perfectly water-tight joint or connection.

By the means described the collar can readily be suited to different angularities or pitches of roof, which is a matter of great importance, be quickly and efficiently secured in position, and be made relatively economic of construction. It is also adapted for use on flat roofs as well as roofs of varying pitch. The illustration given in Fig. 1 is sufficient to show how it may be applied to flat roofs as well as pitch-roofs.

Of course the yoke and its equipments, as well as the stay-piece *h*, may be varied in form without substantially varying the mode of operation or spirit of the invention.

As before intimated, I attach great importance to the fact that my roof-collar is made in two parts, so that I may adjust one upon the other, and thus tightly fit it to pipes of varying surfaces and, as aforesaid, suit it to flat roofs or roofs of varying pitch.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. The combination with a two-part roof-collar; of clamping means comprising a member taking around one part of the collar so as to draw upon the same and extending around to the far side of the other part of the collar, and a tightening device operating against that side of the collar and engaged with the first-named member of the clamping means.

2. The combination with a flashing and roof-collar in a plurality of overlapping parts; of clamping means comprising a yoke embracing the collar and a tightening device connected with said yoke and working against one section of the collar whereby it may operate to draw together the several sections, substantially as and for the purpose described.

3. The combination with a flashing and roof-collar in a plurality of overlapping parts; of clamping means comprising a yoke embracing the collar and a tightening-screw engaging the yoke and working against one section of the collar, substantially as and for the purpose described.

4. The combination with a flashing and roof-collar in a plurality of overlapping sections; of clamping means comprising a yoke embracing the collar and a tightening-screw engaging the yoke, together with a bearing for said screw having an abutment for its end to work against and a yoke compounded therewith and bearing against one section of the collar.

5. The combination with a two-part roof-collar and a stay-piece extending upwardly along one part of the same and designed for attachment to the roof; of a clamping-wire engaged with said stay-piece and embracing one part of the collar, and a tightening device arranged to operate against the other part of the collar and engaging the clamping-wire, substantially as described.

6. The combination with a two-part roof-collar; of a clamping-wire embracing one part of the same, a cross-piece joining the ends of said wire on the far side of the other part of the collar, a bracket having a yoke engaging that side of the collar, and a screw having a bearing in said bracket and being tapped through the cross-piece of the clamping-wire, its end bearing against a part of the bracket in rear of the yoke, substantially as described.

7. The combination with a two-part roof-collar and a stay-piece extending upwardly along one part of the same and designed for attachment to the roof; of a clamping-wire engaged with said stay-piece and embracing one part of the collar, a cross-piece joining the ends of said wire on the far side of the other part of the collar, a bracket having a yoke engaging that side of the latter, and a screw having a bearing in the said bracket and being tapped through the cross-piece of the clamping-wire, its end bearing against a part of the bracket in rear of the yoke, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 23d day of November, A. D. 1899.

HENRY C. FOLGER.

Witnesses:
ARTHUR W. CROSSLEY,
ANNIE J. DAILEY.