

J. BROPSON.
 ROOF JOINT.
 APPLICATION FILED FEB. 17, 1916.

1,276,321.

Patented Aug. 20, 1918.

Fig. 1

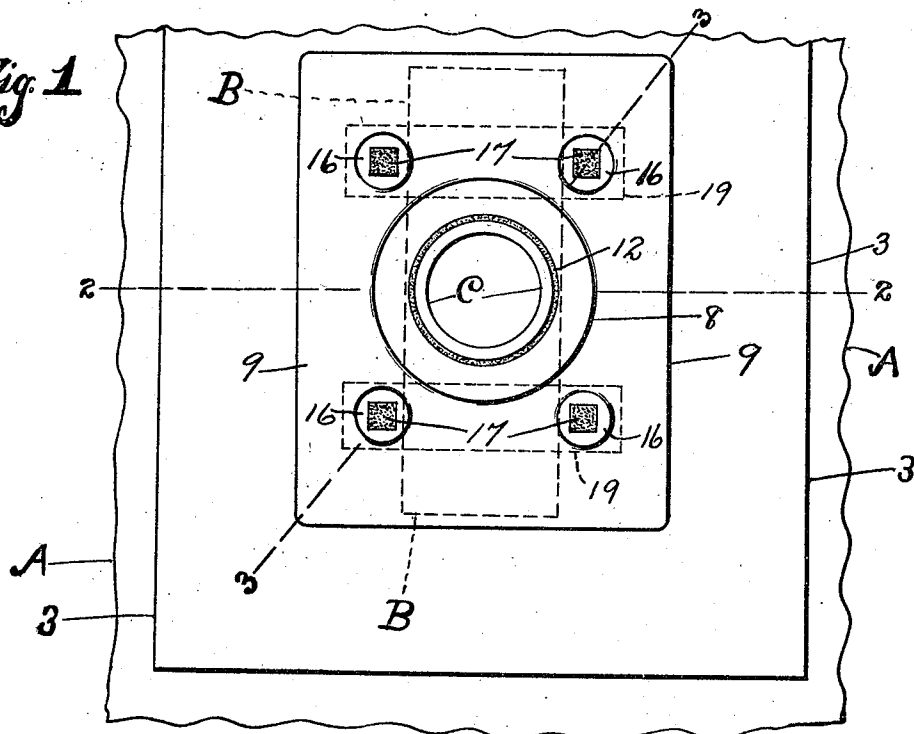


Fig. 2.

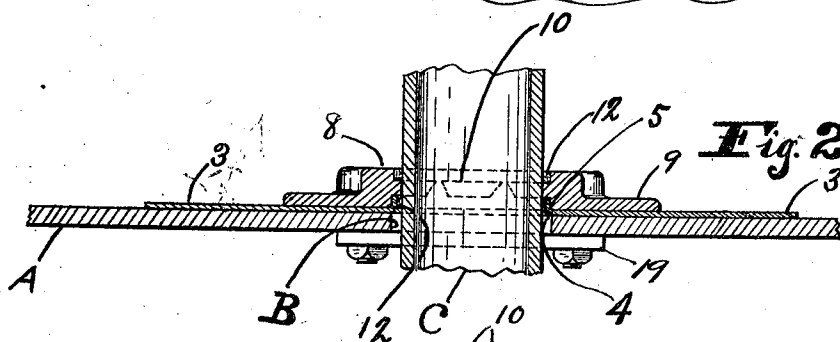
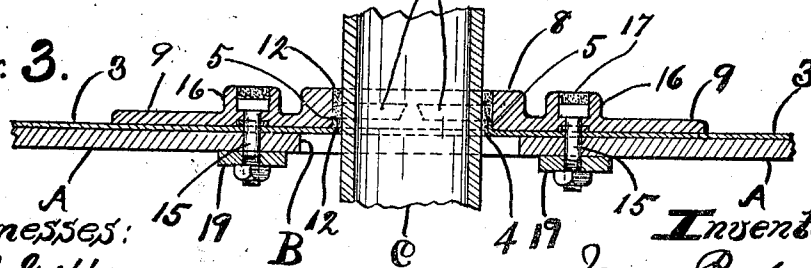


Fig. 3.



Witnesses:
H. J. Gettins.
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Inventor:
James Bropson
by Lynch & Horner
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UNITED STATES PATENT OFFICE.

JAMES BROPSON, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO JAMES J. BROPSON, JR., OF CLEVELAND, OHIO.

ROOF-JOINT.

1,276,321.

Specification of Letters Patent.

Patented Aug. 20, 1918.

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To all whom it may concern:

Be it known that I, JAMES BROPSON, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Roof-Joints; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to new and useful improvements in roof-joints or flashings for ventilating stacks and other pipes which project through the roof of a house.

The object of the invention is to provide a roof-joint which will be absolutely water tight and which will be very permanent and can be readily applied.

A further object of my invention is to provide a joint of this description which can be applied to or mounted on the outside of a roof before the stack is set up and then completed from the inside of the building after the stack is set in position, thereby enabling the roofers to proceed with the roof-covering without having to wait for the installation of the plumbing fixtures.

With these objects in view, and with the intention of securing other advantages which will hereinafter appear, my invention consists in the features of construction and the combination of parts hereinafter described in the specification, pointed out in the claims and illustrated in the accompanying drawings.

In the accompanying drawings, Figure 1 shows a top plan of my improved joint applied to a roof. Fig. 2 is a section on line 2—2, Fig. 1. Fig. 3 is a section on line 3—3, Fig. 1.

Again referring to the drawings, A represents the roof-boards and B represents a rectangular-shaped opening formed therein to permit of the passage of the stack or pipe C through the roof. On the outside of the roof is arranged a plate 3, preferably of lead, and in said plate 3 is formed a circular opening or aperture 4 which can be made to register with the opening in the roof boards. The said opening 4 is made of sufficient size to permit the stack or pipe C to pass loosely therethrough. The said plate 3 is provided around said opening 4 with an upwardly extending flange 5. On top of the plate 3 is

arranged a collar 8 which is provided with a rectangular shaped base or flange 9 adapted to rest on top of the plate 3. The opening in the collar 8 is made large enough to snugly receive the flange 5 on the plate 3. The collar 8 is provided with a number of circumferentially extending centrally arranged locking ribs 10. The ends of the ribs 10 are beveled downwardly so that there is an inverted V-shaped space between the adjacent ends of the ribs. The space within the collar above said ribs is adapted to receive the calking material, shown at 12, which is applied from the outside, and the space within the collar below said ribs is adapted to receive the aforementioned flange 5 and the calking material which is applied from within the building. The inverted V-shaped grooves permit the juncture of the calking applied above and below the ribs so that the two applications of the calking material are locked together and also locked in the collar. In the base plate 9 of the collar 8 are formed openings for bolts 15 which pass through the roof boards and secure the collar in position. Around each bolt opening is formed a circular flange 16 which is adapted to receive lead or other calking material, shown at 17. Clamping bars 19 are preferably arranged on the inside of the roof boards and the bolts 15 are passed through these bars before the nuts are applied on the ends thereof. The said bars 19 reinforce the roof boards at the point where the opening has been cut and assist in supporting the strain incidental to the application of the collar 8.

When applying my improved joint to a roof before the stack has been erected the plate or flashing 3 and the collar are placed together with the flange of the flashing extending up into the collar and the calking material arranged above and below the ribs in the collar. The bolts 15 are also passed through the flange 9 of the collar and through the flashing or plate 3 and lead or other calking material is placed over the heads of the bolts to prevent the entrance of water through the bolt holes. The flashing is then bent around the collar and the collar and flashing are passed up through the rectangular shaped opening B and adjusted on the roof so that the bolts will extend down through the bolt-holes in the roof, after which the bars 19 are placed on the

inner ends of the bolts and secured thereon by means of the nuts. The flashing is then spread out flat on the roof so that the roof-covering may be placed thereover. After
5 the stack has been placed in position the calking material already in the collar is tamped down with any suitable instrument to make a calk joint in the usual manner. Also if it is desired the joint may be calked
10 from the outside. It will therefore be seen that my improved joint can be installed completely from the inside of a house thereby saving considerable time and expense and also making it more accessible in
15 case it should be necessary to recalk the same.

What I claim is:—

1. A roof joint, comprising a plate having an opening for a pipe and provided with an
20 upwardly extending flange around said opening, a collar arranged to rest on said plate and having a recess in its under side to receive said flange, the upper part of the collar having a shoulder projecting inwardly
25 around the margin of the opening therein

and the flange being spaced from the pipe to permit the insertion of calking material from below, into the space between the flange and the pipe and against the under
side of said shoulder.

2. A roof joint, comprising a plate hav-
30 ing an opening adapted to receive a pipe and provided with an upwardly extending flange, a collar resting on said plate and having a recess on its under side to receive
35 said flange and segmental ribs projecting inwardly over the edge of said flange, said ribs being spaced apart at their ends to form vertical grooves therebetween, and
40 calking material filling the space between the flange and the pipe and also between the ribs and the pipe and the said grooves.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

JAMES BROPSON.

Witnesses:

VICTOR C. LYNCH,
B. C. BROWN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."