JOHN J. MEYER, OF NEW YORK, N. Y.

FASTENING DEVICE FOR VENT-PIPES.


Application filed April 7, 1903. Serial No. 151,681. (No model)

To all whom it may concern:

Be it known that I, JOHN J. MEYER, a citizen of the United States of America, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Fastening Device for Vent-Pipes, of which the following is a full, clear, and exact description.

This invention relates to fastenings for pipes and similar structures; and it consists substantially in the features of construction, organization, and combinations of parts hereinafter described and claimed.

Though applicable to different purposes in the arts, my improvements have reference more especially to devices or means for fastening a vent or similar pipe in position at the opening therefor made in the roof of a house or other support, through which the said pipe may be inserted and caused to project in the ordinary way.

The principal object of the invention is to overcome numerous disadvantages and inconveniences frequently encountered in the use of other fastenings hitherto devised for a similar purpose and to provide a device of this kind which is both effective and reliable in use, besides possessing the capacity for long and continued service.

A further object is to provide a device of the character referred to which is simple in construction besides being comparatively inexpensive to manufacture and one also which is not liable to get out of order, besides being easily and readily applied and removed.

A still further object of the invention is to provide a fastening device for the purpose named which may be applied in a perfectly air and water tight manner and one which is capable of withstanding thermal changes and inclement conditions.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, in which:

Figure 1 is a sectional detail view in perspective, showing the manner of applying my improved device for the purpose of securing in position the upper portion of an ordinary vent-pipe passing upwardly through an opening therefor in a house-roof or other support. Fig. 2 is a detail view, in enlarged vertical sectional elevation, on the line x x of Fig. 4. Fig. 3 is a similar view to Fig. 2, showing a somewhat-different form of pipe to which my improved device is applied. Fig. 4 is an enlarged horizontal sectional view of the construction shown in Fig. 3, and Fig. 5 is a perspective view in detail of fragmentary portions of my device.

Before proceeding with a more detailed description it may be stated that my improved device may properly be denominated a "clamp," since the same is designed to embrace the vent or other pipe at and above the joint formed between the latter and the sides of the opening therefor in the roof, the said device or clamp being specially adapted for easy and ready application or fitting of the same in place, as will presently appear. The device or clamp is made of any suitable material for the purpose—as sheet-zinc, for instance—and is spun or otherwise formed into the desired shape, the said device being practically coiled upon itself, so as to tend to closely hug the pipe, as it were, yet being originally spring-like or elastic in character in all directions laterally.

Specific reference being had to the drawings by the designating characters thereon, 1 may represent a portion of the roof of an ordinary house having therein an opening 2, upwardly through which passes a vent or other pipe 3, said roof having thereon the usual metal covering 4, as shown.

My improved fastening device or clamp is designated in entirety at 5 and consists practically of a coil of zinc or other suitable material, preferably spun into shape and said preferably constructed of a straight portion 6 for fitting the sides of said pipe, and a flaring base portion 7, setting out some distance from the sides of the pipe all around, and the lower edge of which practically rests upon adjacent surface portions of the metal roof-covering 4, as shown. As indicated in Fig. 4, the device or clamp is placed around the pipe at the joint formed between the latter and the sides of the opening 2 in the roof, and the said device is preferably of such dimensions relatively to the diametrical dimensions of the pipe that when properly tightened in place and secured the inner and outer ends or extremities 8 and 9 thereof will be practically in
the same vertical plane, although it is apparent that this need not necessarily be the case. In such way, however, I am enabled to locate upon the outer surface of the device one of two members by which the fastening of the device is most securely effected. Thus I preferably permanently attach to the device, at or near the said outer end or extremity 9 thereof, a jaw 11, which may extend the full height of the device, the attachment thereof being made by means of rivets 12, passing through openings therefor in a flange of said jaw. (See Figs. 1 and 4.) In connection with said jaw 11 I employ substantially a duplicate jaw 12, which may be attached in place by means of similar rivets 13, also as shown. This latter jaw is attached to the device at such point of the outer surface thereof as will insure the proper clamping of the device in place by drawing the same up tightly about the pipe and securing the two jaws 11 and 12 together in any suitable way, as by means of screws 14 and nuts 15.

Preferably I provide the device or clamp in place I preferably insert or pour between adjacent surface portions of parts of the device itself a suitable cement 19, (shown in Fig. 2 as reaching from the lower edge of the device to the upper edge thereof,) while between the innermost surface portions of the device and the outer surface of the pipe I also insert or pour all around a similar cement 20, (shown as extending the height of the straight portion 6 only of the device,) and then after the parts of the device are drawn up tightly and secured, as already described, a most secure and stable support for the structure will be had.

In Fig. 3 the device or clamp 5 is in all respects substantially the same in construction, while the pipe 23 is shown as conical and enlarged at 24, the lower edge of the outwardly-bulging base portion 7 of the device being seated upon said enlargement 24 and soldered thereto at 25, as shown.

While I have herein illustrated and described a certain preferred embodiment of the device, it will be understood that I am not limited to the details thereof in practice, since immaterial changes therein may be resorted to coming within the scope of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a vent or similar pipe passing through an opening therefor, in a roof or the like, of a strip of metal spun into shape and surrounding the pipe, and formed with a straight portion and a flaring portion, the latter portion being soldered to the metal of the roof, a cement filling between adjacent surface portions of the said strip and between adjacent surface portions of the strip and the pipe, and means for securing the strip tightly around the pipe.

2. The combination with a vent or similar pipe passing through an opening therefor in a roof or the like, of a clamp formed of spun metal coiled upon itself and surrounding the pipe, jaws and bolts and nuts for securing the clamp tightly in place, the latter being soldered to the metal of the roof, and a cement filling between adjacent surface portions of the clamp itself and between adjacent surface portions of the clamp and the pipe.

3. The combination with a vent or similar pipe passing through an opening therefor in a roof or the like, of a clamp formed of spun metal coiled upon itself and surrounding the pipe, means for securing the clamp tightly in place, and a cement filling between adjacent surface portions of the clamp itself and between the adjacent surface portions of the clamp and the pipe.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN J. MEYER.

Witnesses:
W. WILLARD BABCOCK,
MAY E. McMANUS.