925,946.

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SOIL PIPE FLASHING.

APPLICATION FILED FEB. 17, 1908.

Patented June 22, 1909.

Fig. 2.

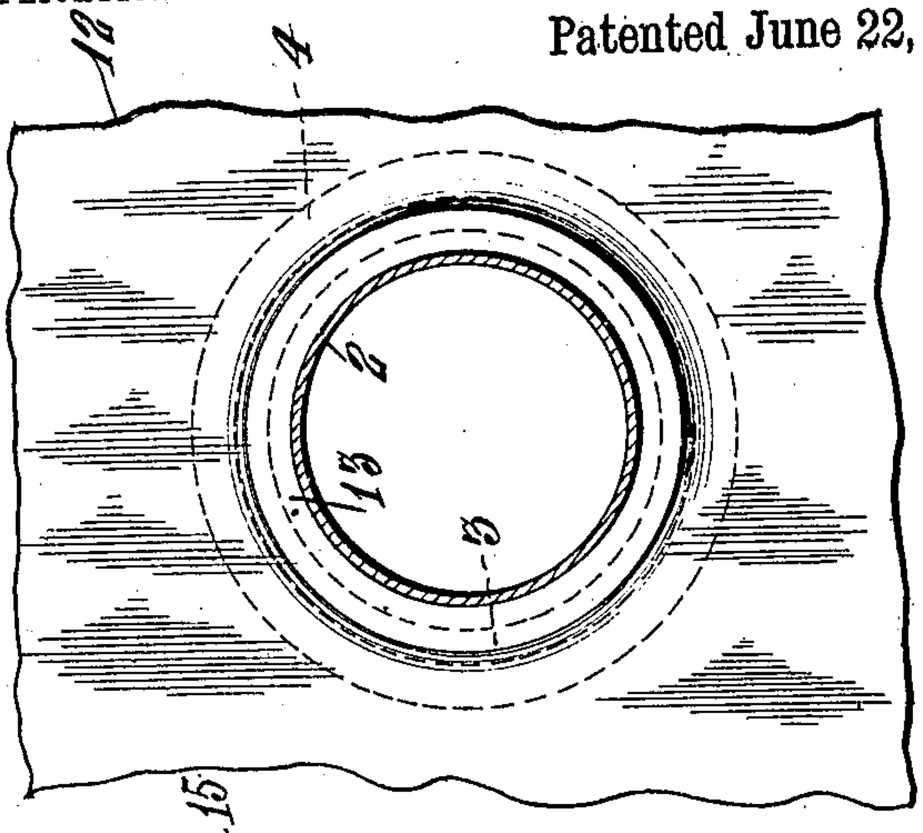


Fig. 3.

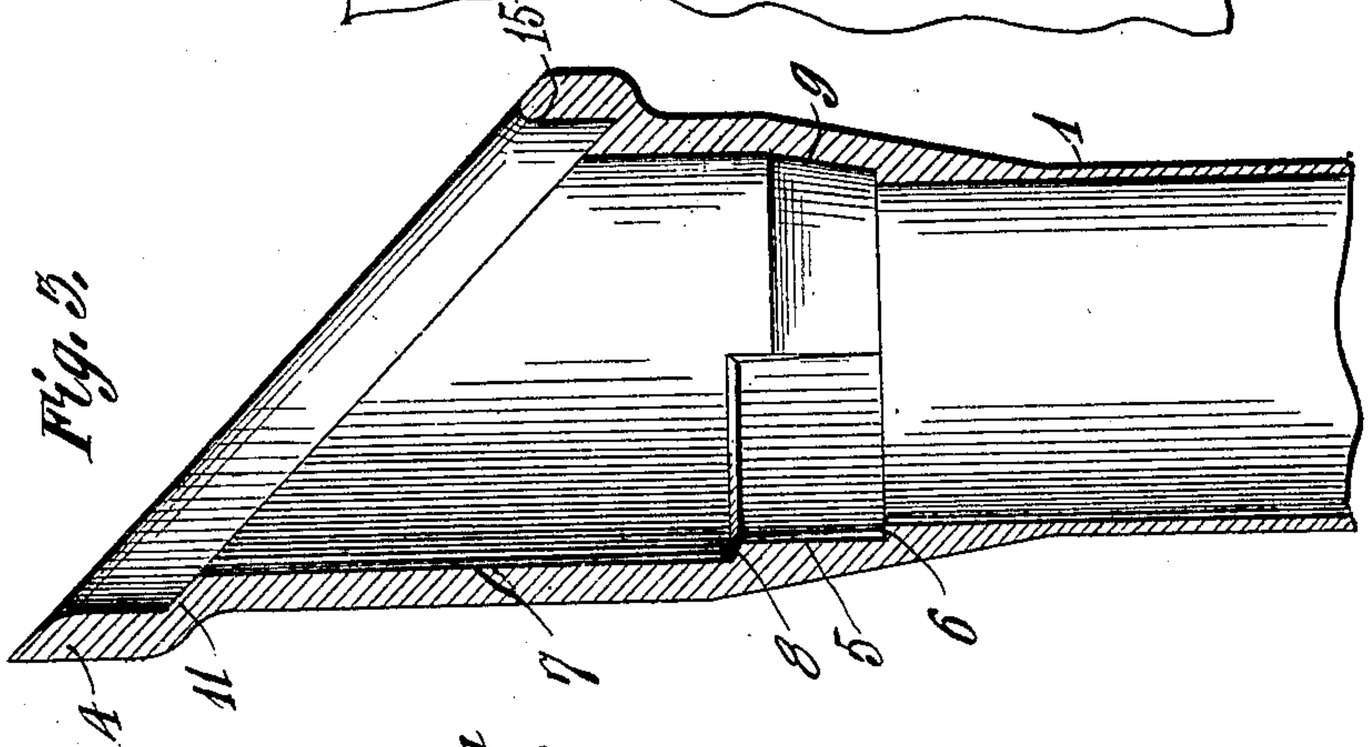
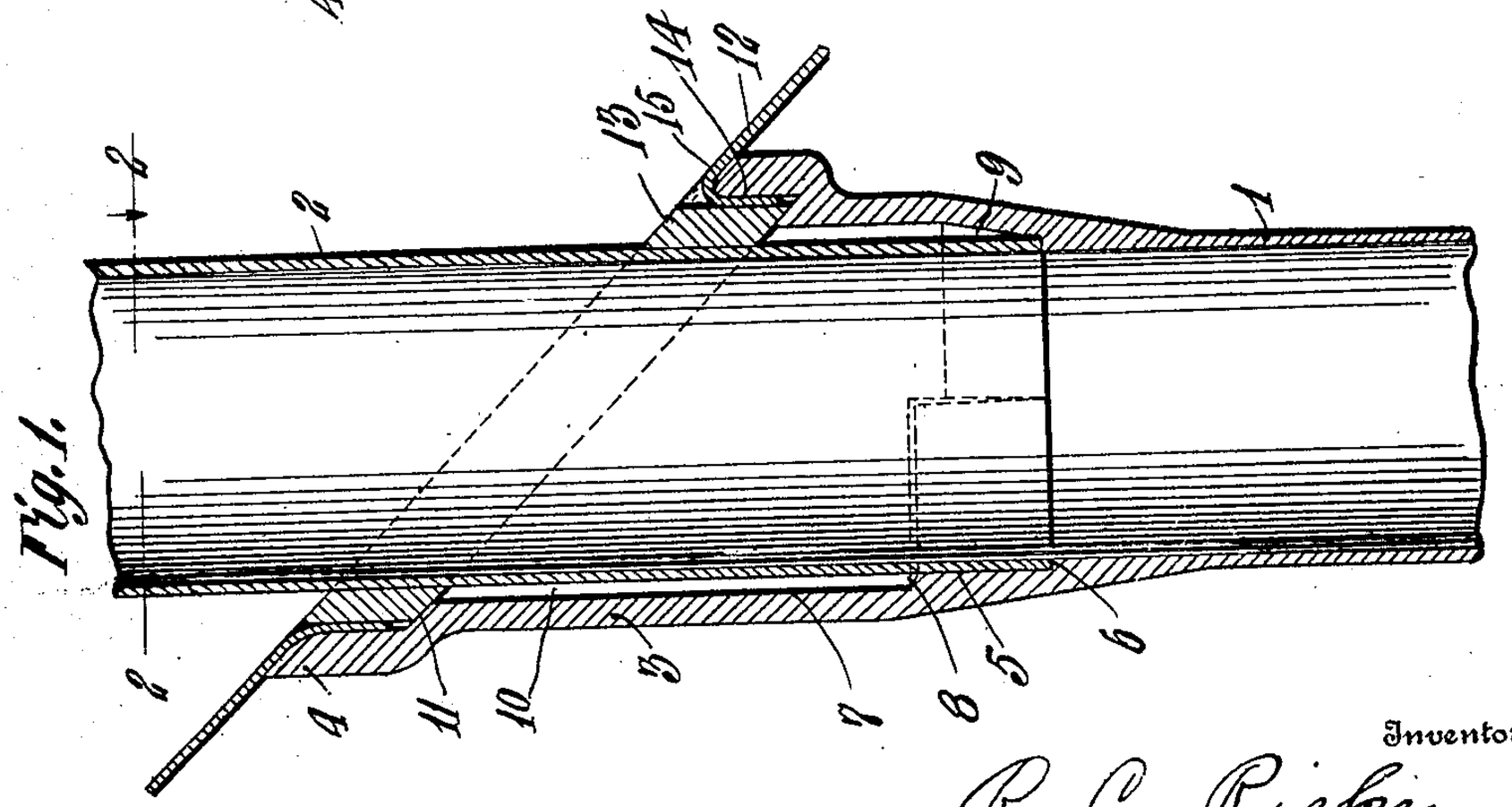


Fig. 1.



Witnesses

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UNITED STATES PATENT OFFICE.

REUBEN C. RICKER, OF CANAL DOVER, OHIO, ASSIGNOR OF ONE-THIRD TO HENRY A. HARGER, OF CANAL DOVER, OHIO.

SOIL-PIPE FLASHING.

No. 925,946. Specification of Letters Patent. Patented June 22, 1909.

Application filed February 17, 1909. Serial No. 478,439.

To all whom it may concern:

Be it known that I, REUBEN C. RICKER, a citizen of the United States, residing at Canal Dover, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Soil-Pipe Flashings, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in soil pipe flashings or thimbles for providing water tight joints at the points where such pipes project through the roof of a house or building.

The object of the invention is to provide a device of this character which will provide an effective water or fluid tight joint, and dispense with the necessity of using oakum or the like as a packing, which may be quickly produced without the use of melted lead or solder and which will be exceedingly strong, rigid and durable.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section through the preferred embodiment of the invention; Fig. 2 is a horizontal section taken on the plane indicated by the line 2—2 in Fig. 1; and Fig. 3 is a sectional view through the lower pipe section which projects through the roof.

In the drawings 1 and 2 denote two sections of a soil pipe or the like, the lower section 1 being adapted to project through an opening in the roof and to receive the upper section 2 which projects above the roof. The upper end of the pipe section 1 is enlarged, as shown at 3, and when it is adapted to be used in a slanting roof, said enlarged upper end is formed with a bell or hub 4 disposed at an inclined or slanting position, as illustrated. The enlarged or thickened portion 3 of the pipe 1 has the lower portion 5 of its bore of greater diameter than the bore of the pipe section 1 to provide a horizontal annular shoulder 6 and the upper portion 7 of the bore of said enlargement 3 is further enlarged to provide a horizontal shoulder 8 which extends approximately half way around the pipe section. Approximately half of the portion 5 of the bore opposite and below the shoulder 8 is inclined downwardly and inwardly to the shoulder 6, as indicated at 9.

The upper pipe section 2 is adapted to rest upon the shoulder 6 and it is of such diameter that when it is inserted in the portion 5 of the bore of the enlargement 3, it will be wedged laterally to a slight extent by its engagement with the incline 9 in said portion of the bore and thereby produce an effective fluid tight joint without the necessity of packing the connection with oakum or the like. If desired, however, such packing may be placed in the space 10 between the pipe section 2 and the enlarged upper portion 7 of the bore of the enlargement 3, said portion 7 of the bore, however, is made comparatively long to give the upper pipe section 2 a substantial bearing and also to permit of the vertical adjustment of said pipe section.

The bell flange 4 has its bore of greater diameter than the bore of the upper portion of the enlargement 3 so as to provide an inclined or slanting annular shoulder 11. Said bore of the bell end 4 is adapted to receive a flashing or sheet metal plate 12 and a packing ring 13 to provide an effective water and air tight connection and also to effectively and rigidly secure the upper pipe section in the lower one. The flashing 12 is in the form of a piece of sheet metal adapted to be suitably secured in or to the roof and having an opening to receive the pipe 2, the edges of said opening being bent into the bore of the bell end 4, as shown at 14. In order to prevent such edges or flanges 14 from being cut, the upper edge of the bore of the bell end 4 is rounded, as shown at 15.

The packing ring 13 is preferably molded of lead and it is of such size and shape that when it is driven into the bell end 4 between the pipe section 2 and the flanges 14 of the flashing, it will effectively hold said parts together and also calk them to provide a fluid tight connection.

By constructing the coupling or joint in this manner and employing the molded ring 3 of lead or the like, it will be seen that the use of the invention dispenses with the necessity of carrying melted lead or solder up to the roof and thereby enables the joint to be quickly and easily made.

Having thus described the invention what is claimed is:

1. A joint or connection of the character described, comprising an upper pipe section, a lower pipe section having an enlarged upper portion and a bell end, said enlarged upper portion having an enlarged bore forming an annular shoulder, a portion of said bore above said shoulder being inclined downwardly and inwardly toward the same, whereby the upper pipe section when inserted in the lower one will be wedged into engagement with the wall or bore of the lower pipe section and upon said annular shoulder, said bell end of the lower pipe section having an enlarged bore to provide an annular shoulder, the edge of the bore of said bell end being rounded, a flashing having an opening to receive the upper pipe section and having the edges of its opening turned into the bell end of the lower pipe section and a packing ring of pliable metal surrounding the upper pipe section and inserted in the bore of the bell and between the inturned edge or flange of the flashing and said upper pipe section, whereby the latter will be retained in the lower pipe section and a fluid tight joint will be provided.

2. A joint or connection of the character described, comprising two pipe sections, one having an enlarged bore to receive the other and to form a shoulder for the same, a portion of said enlargement of the bore being inclined downwardly and inwardly toward the shoulder, whereby the other pipe section will be wedged into engagement with the bore and shoulder to provide a fluid tight joint.

3. A joint or connection of the character described, comprising two pipe sections, one having an enlarged bore to receive the other and to form a shoulder for the same, a portion of said enlargement of the bore being inclined downwardly and inwardly toward the shoulder, whereby the other pipe section will be wedged into engagement with the bore and shoulder to provide a fluid tight joint, and means for retaining the inserted pipe section in the other one.

4. A joint or connection of the character described, comprising two pipe sections, one having an enlarged bore to receive the other and to form a shoulder for the same, a portion of said enlargement of the bore being inclined downwardly and inwardly toward the shoulder, whereby the other pipe section will be wedged into engagement with the bore and shoulder to provide a fluid tight joint, and a packing ring of pliable metal driven between said pipe sections to fasten them together and provide a fluid tight connection.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

REUBEN C. RICKER.

Witnesses:
H. H. PRINCE,
CHAS. H. KRANTZ.