

June 19, 1923.

1,459,530

W. W. GROBE

THIMBLE CONSTRUCTION

Filed May 26 , 1922

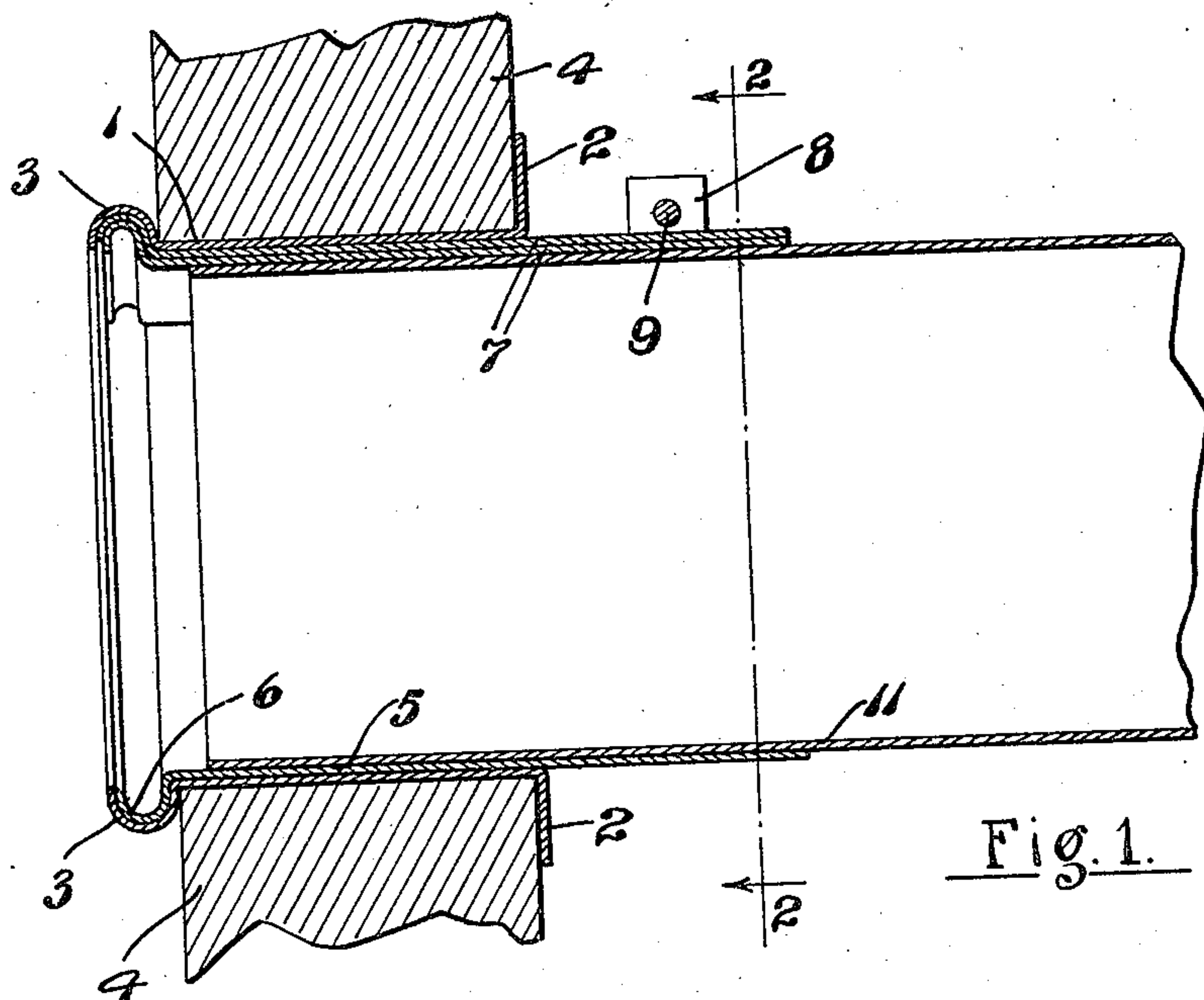


Fig. 1.

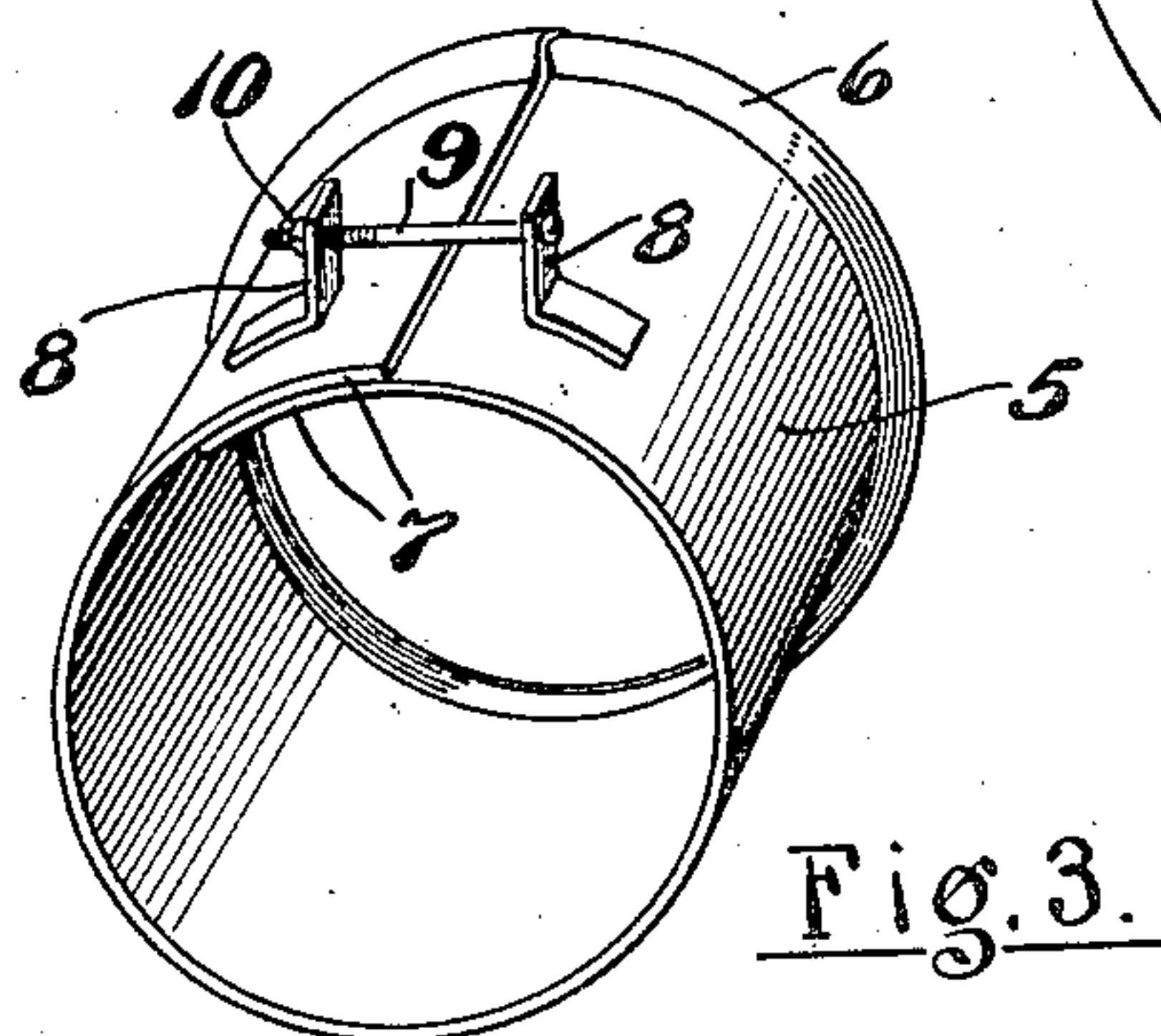
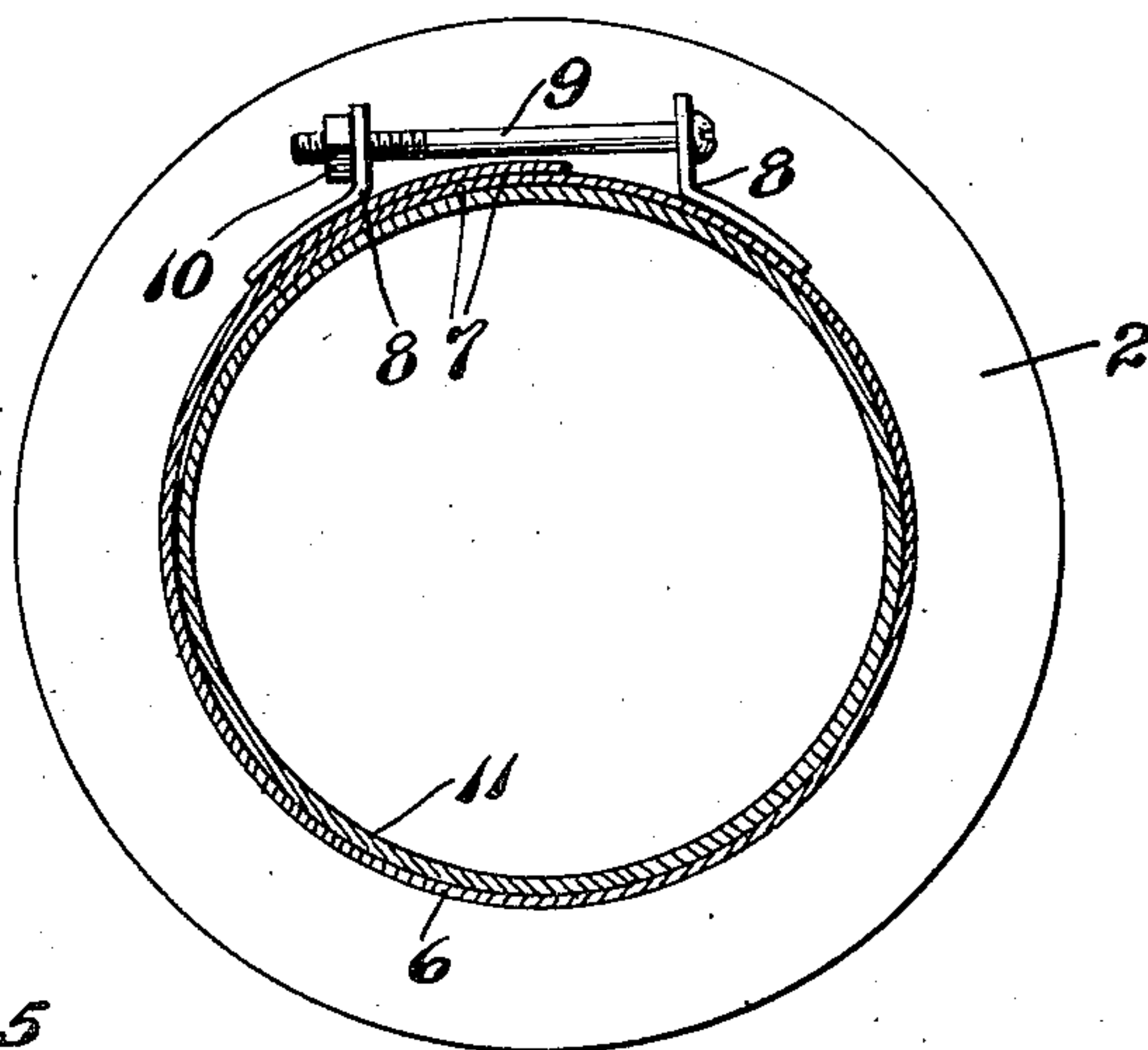


Fig. 3.

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UNITED STATES PATENT OFFICE.

WALTER WILLIAM GROBE, OF HAMILTON, OHIO.

THIMBLE CONSTRUCTION.

Application filed May 26, 1922. Serial No. 563,957.

To all whom it may concern:

Be it known that I, WALTER WILLIAM GROBE, a citizen of the United States of America, residing at Hamilton, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Thimble Constructions; and I do 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 appertains to make and use the same.

This invention relates to a thimble construction for use in connecting the end of a furnace or stove pipe with the smoke flue of a chimney. It is a primary object and purpose of the present invention to make a thimble of this character of sheet metal, having few parts all of which are easily produced and assembled, and with which the smoke pipe of the stove or furnace may be very quickly and easily associated and thereafter clamped in place, the length of the pipe being capable of considerable variation, as the thimble provides for such variation. Various other objects and purposes together with novel constructions for attaining the same will appear as understanding of the invention is had from the following description, taken in connection with the accompanying drawing, in which,

Fig. 1 is a central longitudinal section through the thimble, showing the same in operative position in association with a flue and smoke pipe leading thereto.

Fig. 2 is a transverse vertical section, substantially on the plane of line 2—2, of Fig. 1, and looking in the direction indicated by the arrows, and

Fig. 3 is a perspective view of one of the members of the thimble construction.

In the construction of the thimble, a cylindrical member 1 of sheet metal is used, at one end being formed with an annular flange 2 and at the opposite end with an outwardly extending bead 3, as shown. This member is adapted to be placed through an opening in a wall 4 of the chimney, the flange 2 bearing against the outer side of the wall, and the bead 3 coming against an inner side. In placing the member in position, the opening through the wall is made large enough for the passage of the bead 3 and after the member is in place, the space around the same is filled with cement or other suitable material

to completely fill the space and permanently secure the member in place.

Within the outer member, a second member of substantially cylindrical form is placed. This member, indicated at 5 is also formed from sheet metal rolled into form and having a bead 6 at its inner end adapted to fit within the bead 3 of the first member and with overlapping edge portions 7, as shown, whereby the member may be compressed to reduce its size when put through the first member 1, expanding when released to completely fill the same. The bead 6 interlocked with bead 3 serves to hold the second member from disconnection with the first member, as is evident.

Two sheet metal ears 8 are permanently secured to the member 5, one at each side of the longitudinal separation line thereof, the same projecting outwardly. A bolt 9, having a head at one end and threaded at the other is passed through the ears, a nut 10 threading on to the screw threaded end of the bolt. By use of a screw driver engaged with the head of the bolt, the ears may be drawn toward each other to any desired position within the limits prescribed by the distance apart of the ears and the length of the bolt.

With a thimble as thus constructed, the end of a stove or furnace smoke pipe 11 may be inserted into the outer end of the inner member 5 of the thimble and adjusted to the required position, after which the bolt and nut may be actuated to clamp said inner member against the pipe. A sure and positive connection is made but one that may be readily released at any time if it is desired to take the pipe down, as for cleaning.

This construction has many advantages over the usual construction of thimble employed. Particularly, a relatively long support for the end of the smoke pipe is provided and there is no necessity for cutting the last length of pipe to any exact dimension, nor is there any danger that the pipe will disconnect from the thimble, a sure and positive connection being made. The construction is manufactured at low cost and is durable, efficient, and satisfactory in every way.

I claim:

1. A thimble construction comprising an outer cylindrical sleeve formed with an outwardly extending annular flange at one end

with a bead having a concaved annular recess on its inner side at the other end, a sheet metal member having overlapping edge portions located within the said sleeve and
5 formed with a bead at one end for entrance into the recess of the bead on the first member, said member being longer than the sleeve, ears connected to said sheet metal member one at each side of the longitudinal
10 division line of the member, a bolt passing through the ears, and a nut threaded on to one end of the bolt, substantially as and for the purposes described.

2. A thimble construction, comprising an
15 outer cylindrical sleeve having means at

each end to secure it in and through an opening in a chimney wall, a cylindrical sheet metal inner member longer than the sleeve inserted in said sleeve and having overlapping edge portions whereby the member may
20 be compressed, interengaging means on the sleeve and said inner member at their inner ends for detachably connecting the same together, and means on the inner member for
25 compressing and reducing the size thereof to clamp the same against a smoke pipe, substantially as described.

In testimony whereof I affix my signature.

WALTER WILLIAM GROBE.