

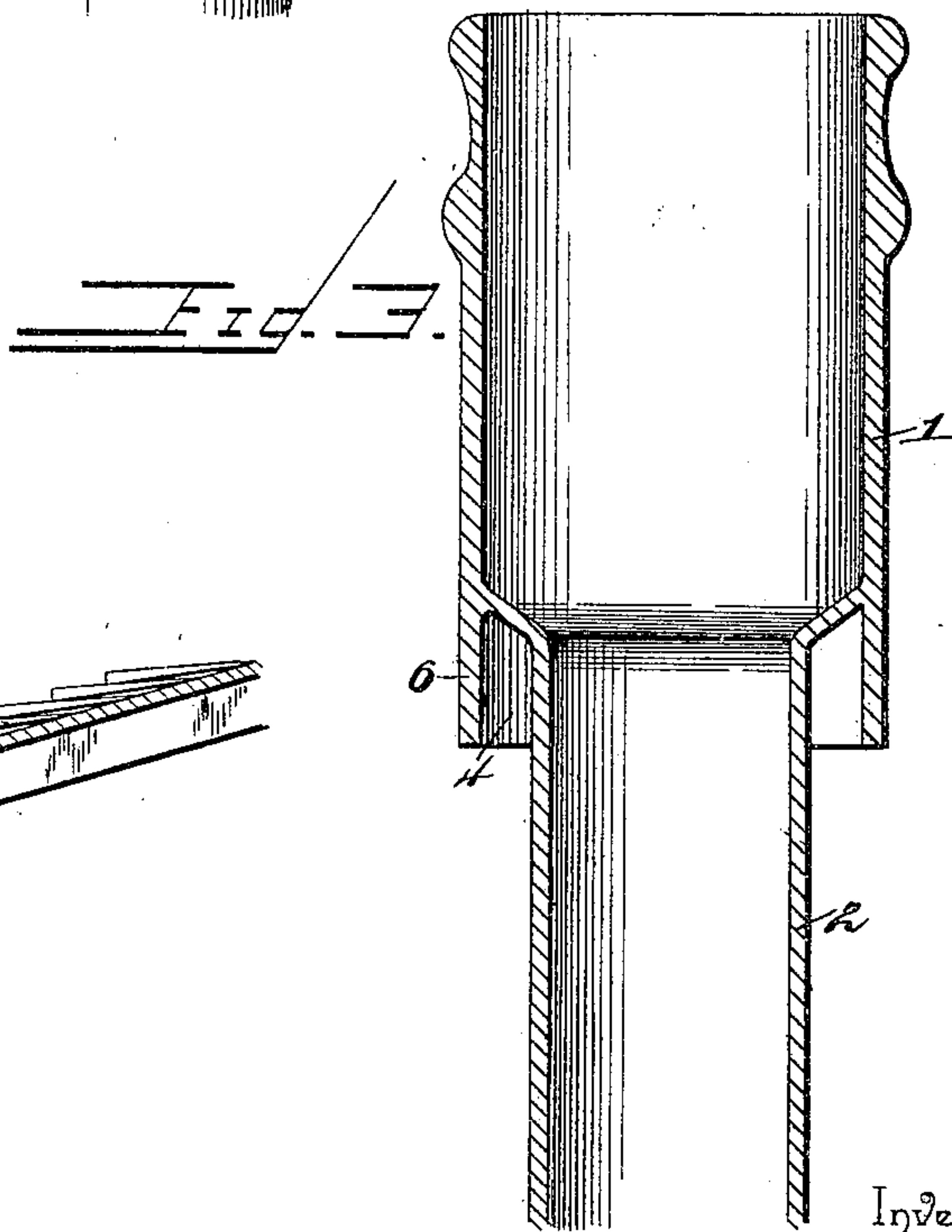
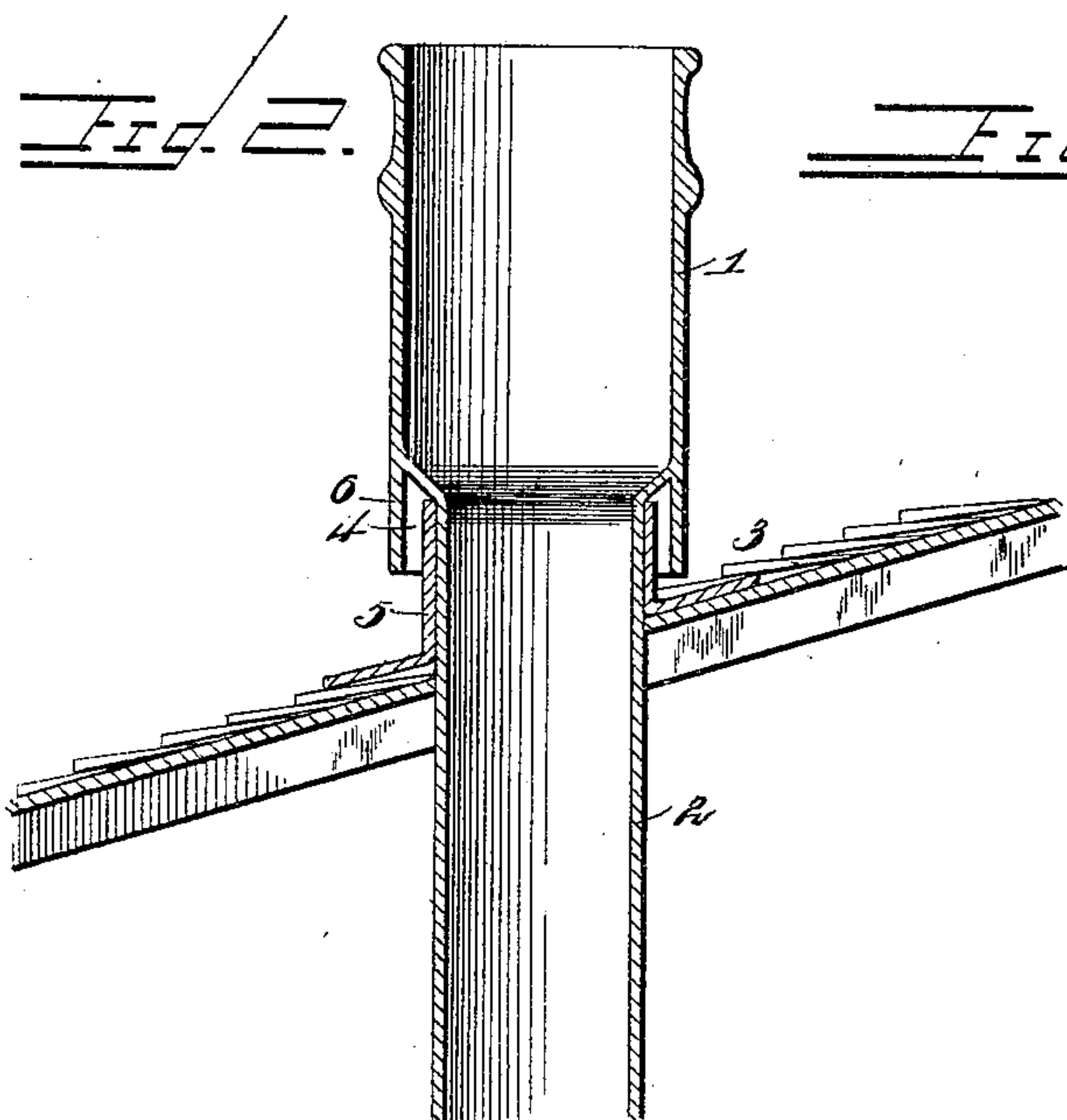
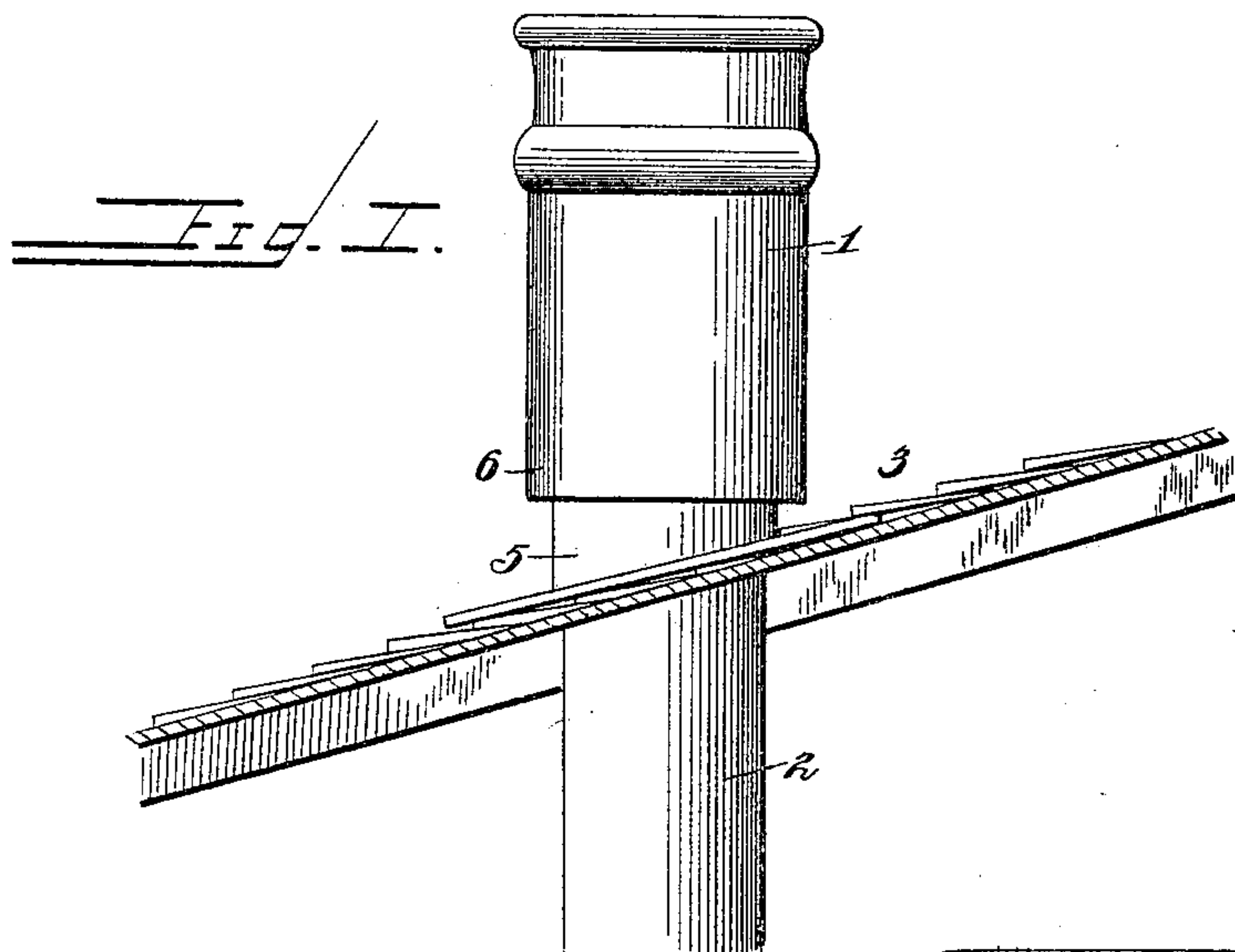
No. 621,320.

Patented Mar. 21, 1899.

J. W. BROWN.
SOIL PIPE AND ROOF CONNECTION.

(Application filed Dec. 3, 1897.)

(No Model.)



Inventor

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES W. BROWN, OF BROCKTON, MASSACHUSETTS.

SOIL-PIPE AND ROOF CONNECTION.

SPECIFICATION forming part of Letters Patent No. 621,320, dated March 21, 1899.

Application filed December 3, 1897. Serial No. 660,701. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. BROWN, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented a new and useful Soil-Pipe and Roof Connection, of which the following is a specification.

This invention relates to means for securing a weatherproof joint between the roofing of houses or buildings and the soil pipe, stack, or other flue providing an escape or vent, and which will obviate a molten, putty, or like joint, and which will not be affected by contraction and expansion and fulfil the requirements presently to be referred to.

Certain requirements provide that the projecting portion of the soil pipe or stack above the roof shall be of larger diameter than the inner or main portion, and to meet these conditions different sizes of pipe are generally employed and require a molten or like joint between them. A purpose of this invention is to have the inner and outer portions of the pipe of different diameters and integrally formed, thereby obviating the necessity for the usual joint and simplifying the construction and materially reducing the cost. The lower portion of the enlarged section of the pipe encircles the upper portion of the smaller section and overlaps the upper end of the roof-flanges, which latter is snugly received into the space surrounded by the depending portion of the upper or enlarged section, as will be described at length farther on.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is an elevation of the upper length of a soil pipe, stack, or flue constructed in accordance with this invention, showing it in operative relation. Fig. 2 is a vertical central section. Fig. 3 is a detail section thereof, on a larger scale, and disassociated from the roof-flange and other parts.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference characters.

The pipe, stack, or flue is composed of parts 1 and 2, the part 1 being of larger diameter than the part 2 and being the upper or outer element. The part 2 is the inner or lower element because it does not project beyond the roof 3 and is of less diameter than the upper part 1. These parts 1 and 2 are integrally formed, and the lower portion of the outer part 1 surrounds the upper or contiguous portion of the part 2, inclosing a space 4, which receives the upper end of the roof-flange 5, the latter being of ordinary construction and having its base secured to the sheathing and overlapped by the shingles or slates in the usual manner. The pendent portion 6 surrounds the roof-flange 5 at its upper end and excludes rain and provides a weather-tight joint without requiring the use of putty, calking, or other material, and the parts can contract and expand without danger of starting or opening seams and causing leaks. The upper part 1 may be suitably ornamented, thereby giving a finished appearance to the projecting portion of the pipe.

The base of the roof-flange may be straight or angling, according to the pitch of the roof, and in metal roofing it may be a collar soldered at its lower end to the metal covering. This pipe does not require any special fitting to the roof and can be placed in position by the carpenter, tinner, or roofer, thereby obviating the necessity for the plumber to go upon the roof when placing the soil pipe or stack in position.

At this point it is to be observed that the space confined between the pendent flange 6 and the lower pipe-section 2 is formed by providing the upper end of said lower pipe-section with an upwardly-inclined and outwardly-deflected web, which is joined to the larger pipe-section 1 near the lower end of the latter, and by reason of having the said web upwardly inclined and disposed adjacent to the lower end of the larger pipe-section the roof-flange 5 is permitted to snugly embrace the lower pipe-section 2 and also to have its upper end rest against the said inclined outwardly-deflected web, thereby in-

surings a proper support of the soil-pipe on the roof-flange and a thoroughly weather-tight connection between these parts.

Having thus described the invention, what
5 is claimed as new is—

1. A soil-pipe having separate upper and lower concentric sections, respectively, of different diameters, and the lower section provided at its upper end with an upwardly-in-
10 clined and outwardly-deflected web joined to the larger upper pipe-section near the lower end of the latter and forming an intervening space between the contiguous ends of the two sections, said lower pipe-section being adapt-
15 ed to snugly register within a roof-flange, and the intervening space between said sections permitting the roof-flange to extend to a point

with its upper end resting against said deflected web, substantially as described.

2. In a soil pipe, stack or flue, a length com- 20
prising upper and lower parts integrally formed and of different diameters, the upper part being the larger and having its lower portion surrounding the upper portion of the lower part and forming a space to receive the 25
upper end of a roof-flange, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES W. BROWN.

Witnesses:

GEO. A. GRANT,
B. L. CASWELL.