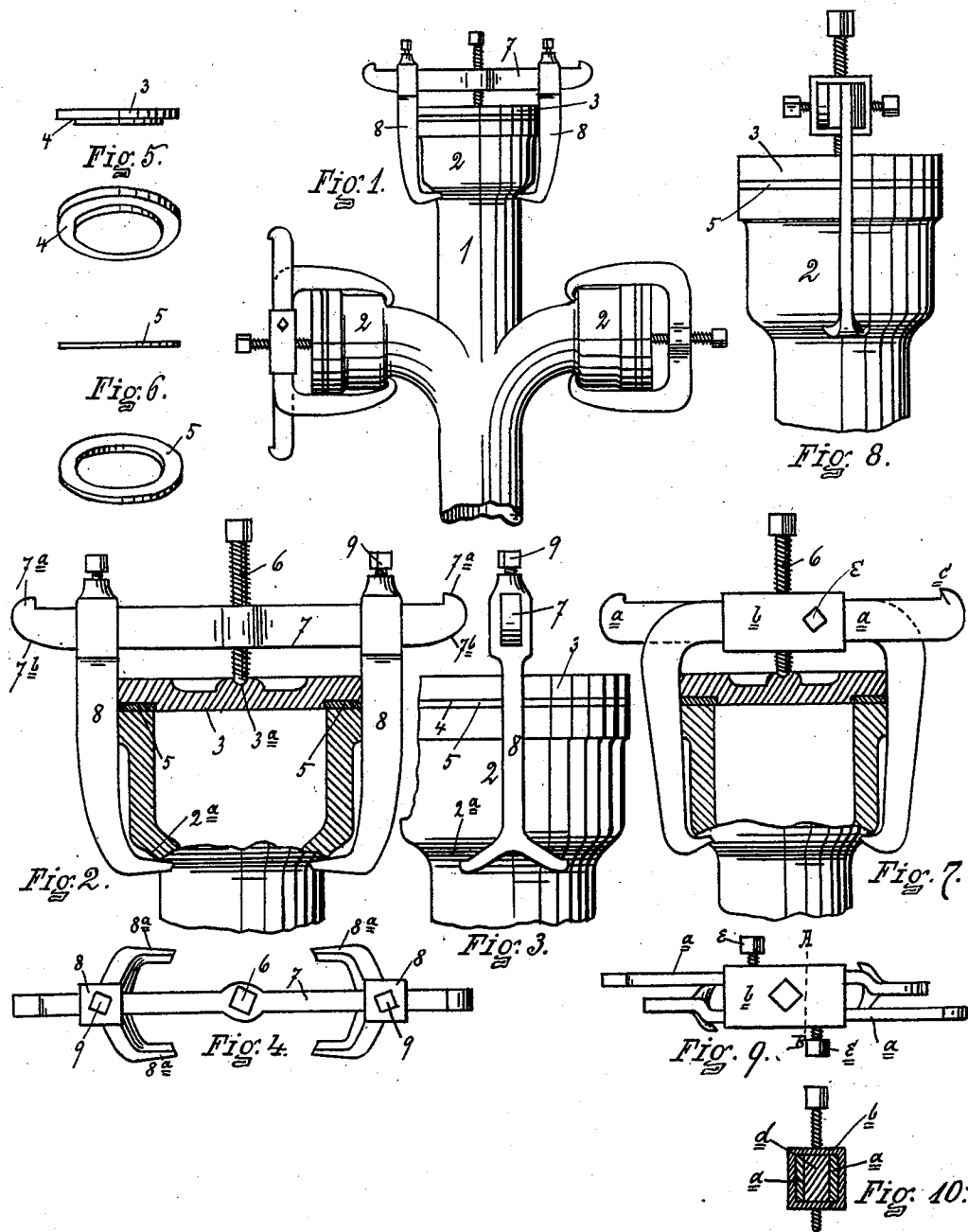


(No Model.)

P. J. CAHILL.
TESTING CAP AND CLAMP.

No. 602,281.

Patented Apr. 12, 1898.



WITNESSES.
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PATRICK J. CAHILL, OF UTICA, NEW YORK.

TESTING-CAP AND CLAMP.

SPECIFICATION forming part of Letters Patent No. 602,281, dated April 12, 1898.

Application filed January 12, 1894. Serial No. 496,624. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. CAHILL, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Testing-Caps and Clamps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

My invention relates to an improvement in pipe caps and clamps particularly intended for use by inspectors in testing plumbers' work.

In the drawings which accompany and form a part of this specification and in which similar letters and figures of reference refer to corresponding parts in the several views, Figure 1 shows a section of pipe commonly known as "soil-pipe," having two branches with three forms of construction of cap and clamp applied. Fig. 2 shows one of the forms of construction of clamp in connection with the cap and packing and end of soil-pipe, the cap end of soil-pipe being shown in section. Fig. 3 shows same parts shown in Fig. 2 from the end of the clamp. Fig. 4 shows a plan view of the clamping device shown in Figs. 2 and 3. Fig. 5 shows a plain edge and partially perspective views of the cap used in connection with the clamp. Fig. 6 shows a plain edge and partially perspective views of the elastic packing ring or gasket used in connection with the device. Fig. 7 shows a modified form of construction of clamp from the side in connection with the cap-packing and section of soil-pipe. Fig. 8 shows the same as Fig. 7 on end view of the clamp. Fig. 9 shows a plan view of this clamp. Fig. 10 shows a cross-section thereof on line A B of Fig. 9.

Referring more particularly to the reference-numerals, 1 indicates a section of soil-pipe with enlarged ends 2 on its straightaway portion and on each of the branches shown in the usual manner of soil-pipes. For each size of end 2 I provide a testing-cap 3, having

a circumferential rabbet 4 for the reception of the packing ring or gasket 5. The top of the cap is provided with an indentation 3^a for the reception of the end of the set-screw. The set-screw 6 is provided, as shown in Figs. 2 and 3, in central enlargement of cross-bar 7. On either side of the enlargement are adjustably mounted the hooked arms 8 of a length to extend to and each provided with a pair of hooked fingers 8^a, adapted to engage under the shoulder 2^a of the enlarged end of the pipe. The clamping-arms 8 are secured on the bar 7 by having the same passed through an opening in the head-like end of the arm, which is provided with a set-screw 9 for securing it in adjusted position on the bar. The ends of the bar 7 are provided with a shoulder or stop 7^a for preventing the arms from becoming detached from the cross-bar unless the set-screw 9 is let up to a considerable degree, when the arms can be turned over the end on account of the lower side 7^b thereof being rounded, as shown. As before stated, the clamp can be adjusted to any desired size of end of pipe within the range of the clamp by loosening set-screws 9 and securing them at a proper distance from the central set-screw 6. When set up, the set-screw 9 causes the arms 8 to project rigidly from the cross-bar 7, which is necessary on account of the shoulder 2^a being inclined and tending to throw off the hooks 8^a. By the provision of two hooks, as 8^a, a better hold or grip is obtained upon the shoulder of the pipe.

Various sizes of caps 3, each with a gasket 4, are provided for the various sizes to which the clamp may be adjusted.

In the modified form of construction shown in Figs. 7, 8, 9, and 10 the main bar *b* instead of being made solid, as in the previously-described construction, is provided with tubular openings to receive the upper horizontal portion *a* of the hooked arms of this modified form of construction. The hooked arms of this modified form of construction are secured by set-screws *c* to the main bar *b*, and the main set-screw 6 is threaded into the middle of the main bar *b* in the same manner as when a solid bar is used.

What I claim as new, and desire to secure by Letters Patent, is—

5 The combination in a clamp for securing a testing-cap, of a main bar, hooked arms adapted to engage under the shoulder of a soil-pipe and adjustable on the main bar, set-screws for securing the arms in adjusted position on the main bar, and a main set-screw threaded

into the middle of the main bar and adapted to press upon the cap, substantially as set forth. 10

In witness whereof I have affixed my signature in presence of two witnesses.

PATRICK J. CAHILL.

Witnesses:

THOMAS C. BEVAN,

WILLIAM H. CAHILL.