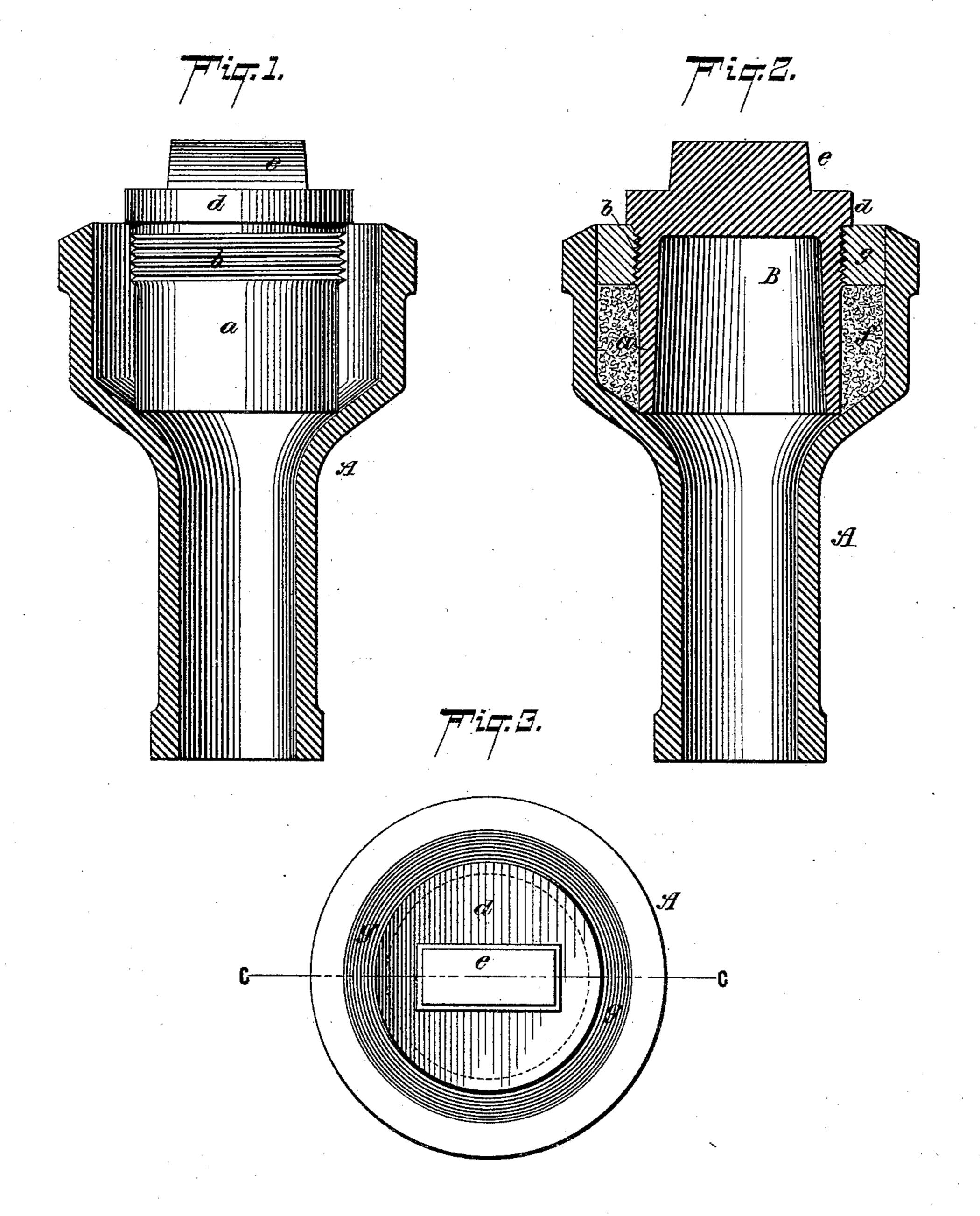
(No Model.)

A. L. FINCH.
PLUG FOR CLOSING WATER PIPES, &c.

No. 427,677.

Patented May 13, 1890.



WITNESSES:

Lie ATTORNEYS.

## United States Patent Office.

ARTHUR L. FINCH, OF NEW YORK, N. Y., ASSIGNOR TO PATRICK CASSIDY AND I. RICHARD ADLER, OF SAME PLACE.

## PLUG FOR CLOSING WATER-PIPES, &c.

SPECIFICATION forming part of Letters Patent No. 427,677, dated May 13, 1890.

Application filed March 24, 1890. Serial No. 345,059. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR L. FINCH, a resident of the city of New York, in the county and State of New York, have invented an Improvement in Plugs for Closing Waste-Pipes and the Like, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, wherein—

Figure 1 shows a central longitudinal section of a piece of waste-pipe with my plug therein but not yet secured, the plug being shown in side view. Fig. 2 is a similar section of the waste-pipe, showing the plug also in section and firmly secured. Fig. 3 is an end view of the plug inserted in the pipe.

This invention relates to a new arrangement of plug for provisionally closing exposed ends of waste-pipes in houses, &c., so as to thoroughly seal said waste-pipes, but yet permit their being connected, whenever desired, to a basin, bath, or other vessel.

The invention consists in combining with the exposed end of the waste-pipe a partially-cylindrical and partially-threaded plug having an upper flange and a grip-piece above said flange, and an oakum packing surrounding the smooth part of the plug and a lead packing surrounding the threaded part of the plug, the diameter of the lead packing being larger than that of the flange of the plug, as hereinafter more fully described.

In the accompanying drawings, the letter A represents a piece of waste-pipe.

35 B is the plug for closing the enlarged end of the pipe A. This plug is of cylindrical form and quite smooth at its lower part a, its upper part b being screw-threaded. Above the threaded portion the plug has a flange d, and above this is a grip-piece e for applying a wrench or the like. When this plug is in-

serted into the pipe A, it is adapted to rest upon the flaring portion of said pipe, as in Fig. 1, and is surrounded by the enlarged mouth of said pipe, which extends up to the 45 level about of the lower side of the flange d. The plug being in this position, oakum packing f is packed around it, so as to completely embrace the smooth cylindrical portion a, and after that lead g is poured into the remaining 50 space between the plug and the mouth of the pipe A, so as to engage with the threaded portion of the plug. This makes a complete seal for the pipe A, the lead serving to hold the plug in place.

It will be seen that the flange d laps partly over the lead, but does not extend to the walls of the mouth of the pipe A. Said flange, therefore, does not prevent the pouring in of the lead after the plug has been inserted.

In order to remove the plug when a connection is to be made with the pipe A, it is only necessary to slightly hammer it at the edge of the flange d until it becomes loosened in the lead g, whereupon it can be easily un- 65 screwed.

Having now described my invention, what I claim is—

The combination of the pipe A with the plug B, having cylindrical lower portion a, 70 threaded portion b, flange d, and grip-piece e, and with the oakum packing f, surrounding the smooth part a of the plug, and with the lead packing g, surrounding the threaded portion b of the plug, the flange d being of less 75 diameter than the exterior diameter of the lead g, substantially as and for the purpose herein shown and described.

ARTHUR L. FINCH.

Witnesses:

HARRY M. TURK, LIVINGSTON EMERY.