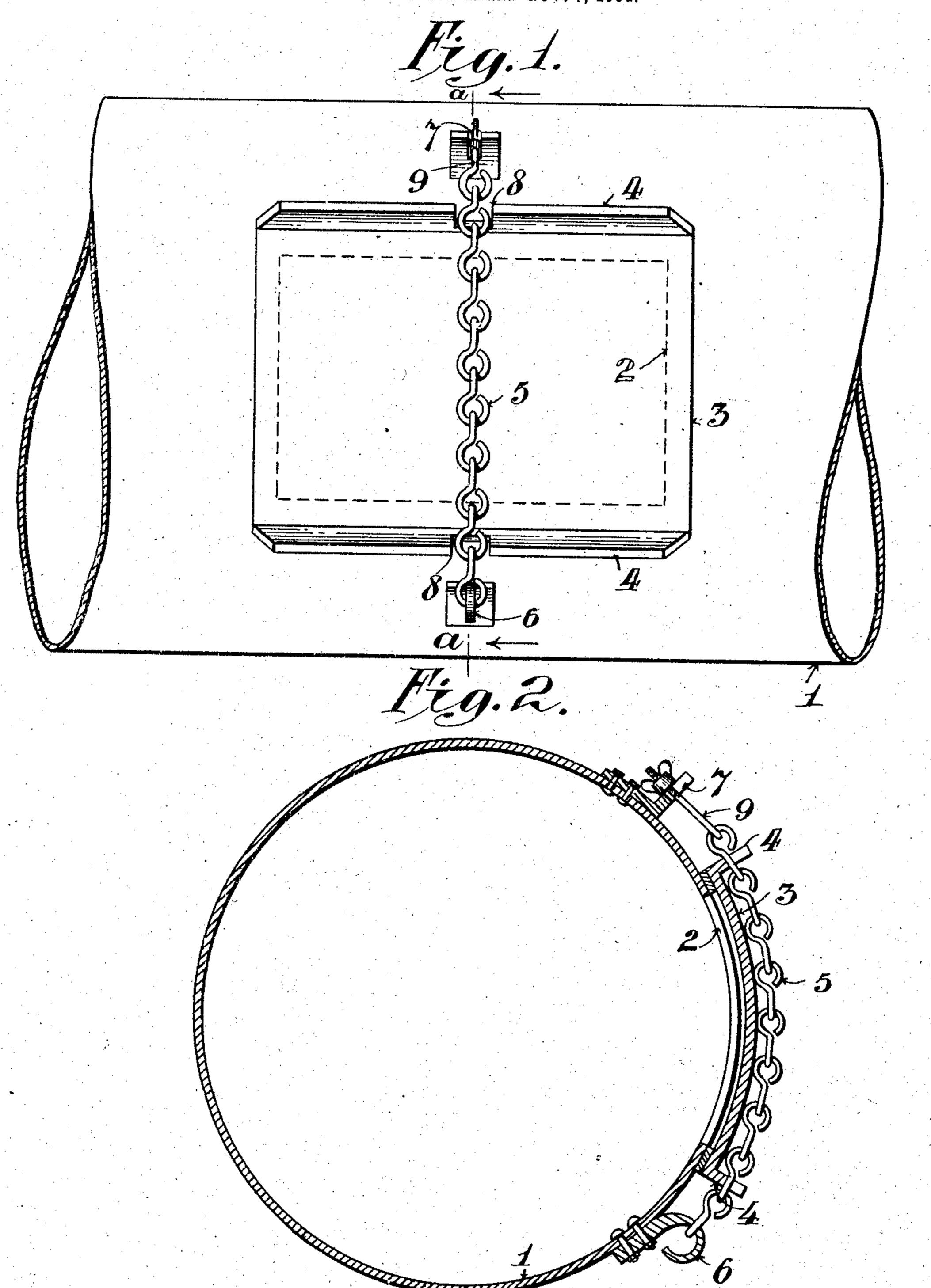
A. C. LYNCH.
HAND HOLE COVERING.
APPLICATION FILED NOV. 7, 1904.



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## United States Patent Office.

ARTHUR C. LYNCH, OF RICHMOND HILL, NEW YORK.

## HAND-HOLE COVERING.

SPECIFICATION forming part of Letters Patent No. 781,080, dated January 31, 1905.

Application filed November 7, 1904. Serial No. 231,643.

To all whom it may concern:

Be it known that I, ARTHUR C. LYNCH, a citizen of the United States, residing at Richmond Hill, county of Queens, State of New York, (whose post-office address is the same,) have invented certain new and useful Improvements in Hand-Hole Coverings, of which the following is a full, clear, and concise specification.

This invention relates to hand-hole covers for pipes, and more particularly to coverings of cheap and durable structure, simple and convenient in operation, which will form substantially leak-tight joints with the pipe or pipe-section to which they are applied.

Referring to the accompanying drawings, forming a part hereof, Figure 1 is a side elevation of a device embodying my invention, and Fig. 2 is a transverse sectional elevation of the same on the line a a.

The reference-numeral 1 indicates a section of a cylindrical pipe provided with an aperture or hand-hole 2, which is shown as rectangular, but may of course be of other shapes.

The covering consists of a plate 3, curved 25 concentrically with the pipe-section and provided on its straight sides with upturned flanges 4. The latter members serve to provide convenient seats for the clamping means about to be described; but with the construc-30 tion shown in the drawings, in which the plate is formed of sheet metal, they subserve the reinforcement or stiffening of the same, so that the pressure of the said clamping means is distributed more evenly throughout the 35 area of contact between the covering-plate and the margin of the hand-hole. A gasket or packing of felt or other suitable material is disposed between the plate and the margin of the hand-hole, this packing being permanently 40 attached to the plate, so that it will not be disturbed by operations carried on through the hole.

The clamping means consists of a strap, chain, or other flexible connection 5, attached at one end to an ear or hook 6, riveted to the pipe, as shown in Fig. 2, and removably connected at its other end with an open-slotted ear 7, similarly riveted to the pipe. This strap or chain passes over the plate 3, being seated

and held thereon by reason of its location 5° within the notches 8, and the adjustable connection is formed by means of a link 9, having a threaded shank and thumb-nut held by the ear 7. With this construction it will be apparent that the chain may be readily loosened and disconnected from the ear 7 and, if need be, removed entirely from the pipe by disengaging it from the hook 6. The notches 8 above mentioned are preferably of such depth that the chain will also have a bearing 6° upon the central portion of the plate between the flanges.

Having described my invention, what I claim, and desire to secure by United States Letters Patent, is—

1. The combination of a cylindrical pipe or pipe-section having a hand-hole opening therein, a concentrically-curved plate covering said opening, a notched flange on said plate, and an adjustable binding-strap seated in said notch 7° and attached at each side thereof to the pipe-section, substantially as described.

2. The combination of a cylindrical pipe or pipe-section having a hand-hole opening therein, a concentrically-curved sheet-metal plate 75 covering said hand-hole and provided with upturned flanges on its straight edges, and an adjustable binding-strap crossing said flanges and secured on opposite sides thereof to the pipe-section, substantially as described.

3. The combination of a cylindrical pipe or pipe-section having a hand-hole opening therein, a concentrically-curved sheet-metal plate covering said hand-hole and provided with upturned flanges on its straight edges, ears disposed upon said pipe-section on opposite sides of said plate, and a binding-strap secured to one of said ears and having adjustable and removable connection with the other, substantially as described.

In testimony whereof I have signed my name to the specification in the presence of two subscribing witnesses.

ARTHUR C. LYNCH.

Witnesses:

OSCAR W. JEFFERY, H. G. KIMBALL.