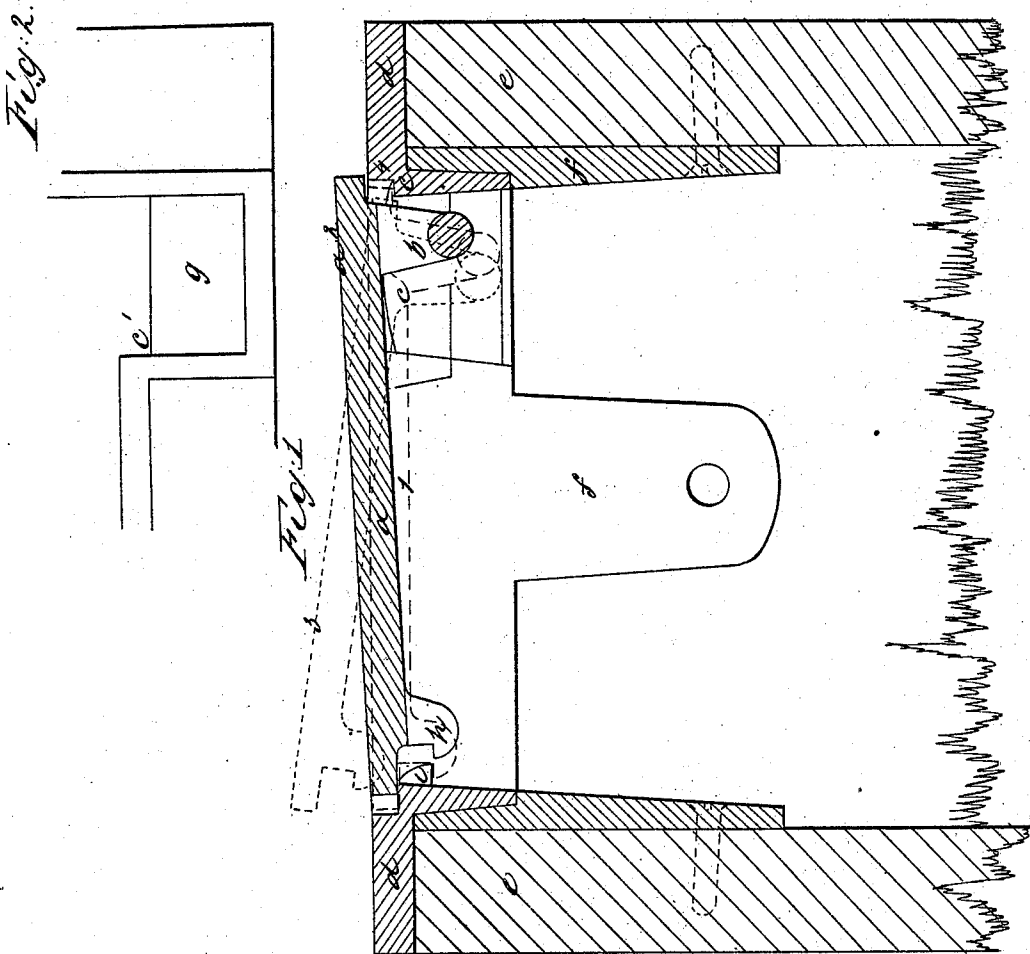


N. W. Speers,

Hydrant Box,

No 11,019,

Patented June 6, 1854.



Witnesses.

*Geo. Knight
O. Knight*

Inventor

N. W. Speers.

UNITED STATES PATENT OFFICE.

NOAH W. SPEERS, OF CINCINNATI, OHIO.

HYDRANT-CAP.

Specification of Letters Patent No. 11,019, dated June 6, 1854.

To all whom it may concern:

Be it known that I, NOAH W. SPEERS, of Cincinnati, Hamilton county, Ohio, have invented new and useful Improvements in Stop-Cock Boxes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification.

10 The object of my invention is to provide a remedy for the liability that the caps of stop cock boxes are at present subject to of being purloined or mislaid.

15 Anyone who will observe the stop boxes of our principal cities cannot but be made aware of their frequent exposure to dirt and weather owing to the absence of the covers, which being merely placed loosely upon the boxes, are subject to the depredations of 20 mischievous boys. In my own town of Cincinnati the yearly cost of replacing the missing covers of the gas and water mains is quite a formidable item. Boxes thus exposed, very soon become choked with mud 25 and dust; which not only increases the difficulty of manipulation; but, getting in among the joints, causes the wearing surfaces of the cocks to grind and finally to become leaky. The absence of any adequate 30 fastening in the usual stop-box covers, arises in part from the necessity which exists for extreme simplicity and absence of working joints in a fixture intended to occupy a dusty thoroughfare. In the plan here proposed (and now generally adopted by the 35 water works company and citizens of Cincinnati) the devices for fastening are all cast out, and form one piece with the cover.

40 In the accompanying drawings Figure 1 is a vertical longitudinal section near the midwidth of the box. Fig. 2 exhibits the under side of the notch.

45 The cap (*a*) I furnish near two of its adjacent corners with lugs (*b*), serving the part of pivots or gudgeons, upon which the cap turns in opening and shutting, and also as a means of preventing the displacement 50 of the cap, the upward range of the lugs being limited by the flanges (*g*). These

lugs or pivots (*b*) stand when the cap is on its seat at a distance below and clear of the flanges (*g*) greater than the depth of the rabbet in which the cap rests, for a purpose hereafter explained. Through the 55 flange (*c*) which serves as the slot of the cap I cut two notches or gaps (*c'*) of sufficient dimensions to permit the cap to be passed upward, with its front edge foremost, previous to the attachment of the 60 frame (*d*) to the wooden box or case (*e*) which surrounds and protects the cock. The lid or cap being thus passed upward and suffered to rest upon the flange (*e*), the frame is then secured to the box by wood- 65 screws passing through ears (*f*) projecting from the lower edge of the frame. At the lower side of the cap in front is a catch (*h*), which, when the cap is shut down, interlocks with the lug (*i*). The width of bearing of these catches exceeds the fore and 70 aft play of the cap within the rabbet.

A pointed instrument inserted under the front edge will fail to open the cover, because the rear edge of the cover is, by the 75 wall (4) of the rabbet, prevented from receding far enough for the catches to disengage, and the rear edge can only be lifted the short distance which intervenes between the upper side of the pivots (*b*) and 80 the under surface of the flanges (*g*).

In order to open the box, it is necessary with a pointed instrument to first raise the back edge of the cap to the position marked 85 (2) and so that the lower angle is clear of the rabbet, then having drawn the cover backward until the front edge is clear at the catches elevate the front edge and draw the cover forward again so as to drop the pivots 90 to their original position, after which the cover can be raised and folded clear back, the heel of the cover descending into the recess of the notches. To close the box, the above motions must of course be reversed. 95 These manipulations although somewhat lengthy to describe, will be but the work of an instant with a person accustomed to the work.

Although in the present illustration the apparatus is represented as applied to the 100

usual wooden case, I now prefer and commonly use an iron one.

I claim as new herein and desire to secure by Letters Patent—

- 5 The formation of the cap or cover of a stop cock box, with catch (*h*) of width exceeding the play of the cap within the rabbet, and with pivots (*b*), whose distance from their confining flanges (*g*) exceeds the

depth of the rabbet (or devices substantially 10 equivalent) for the objects described.

In testimony whereof, I hereunto set my hand before two subscribing witnesses.

N. W. SPEERS.

Witnesses:

GEO. H. KNIGHT,
O. KNIGHT.