

No Model.)

2 Sheets—Sheet 1.

M. J. KALLAHER & J. MULROONEY.

EXTENSION BOX AND KEY FOR STREET GAS OR WATER PLUGS.

No. 407,955.

Patented July 30, 1889.

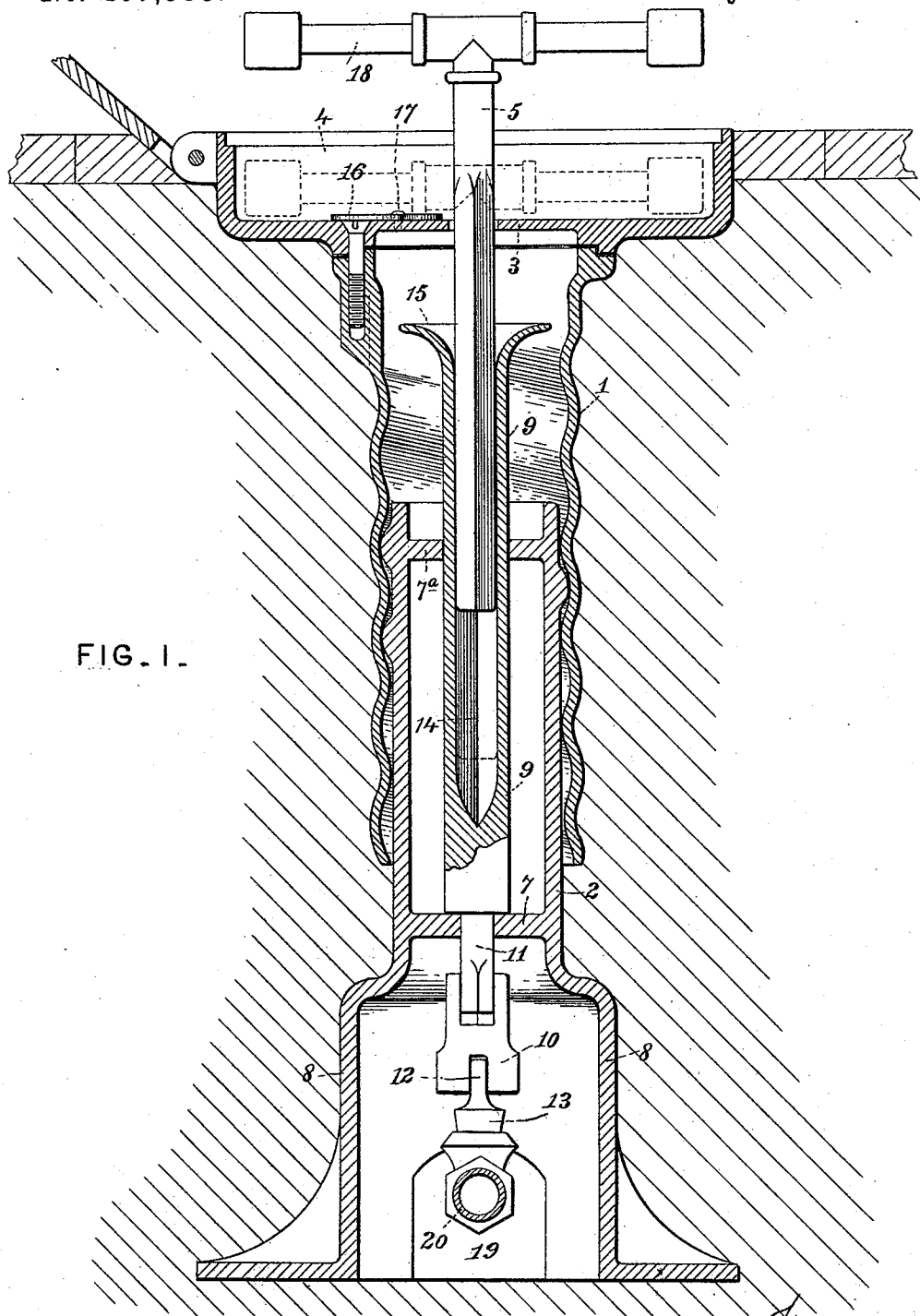


FIG. 1.

Attest { Geo. T. Smallwood.
f. A. Hopkin.

Inventor
Michael J. Kallagher
John Mulrooney
By Knight Bros. atty.

(No Model.)

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FIG. II.

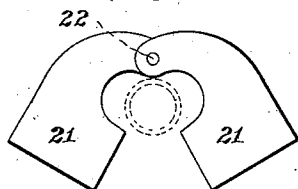


FIG. III.

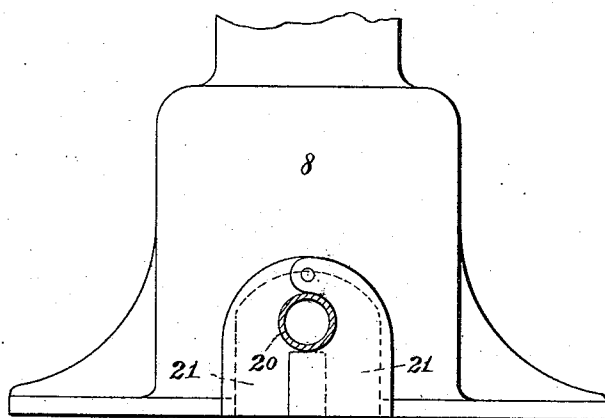
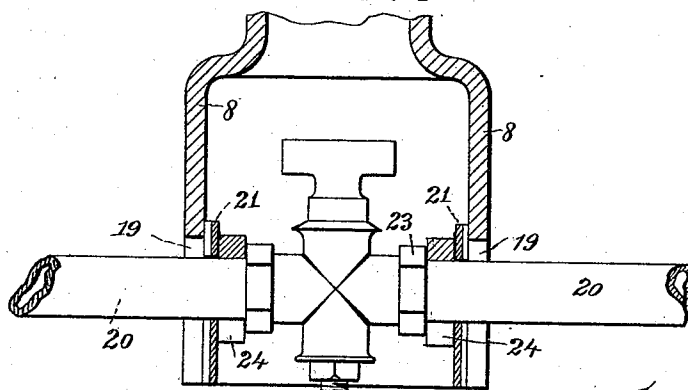


FIG. IV.



Attest:
Geo. T. Smallwood,
F. A. St. Pierre.

Inventor:
Michael J. Kallahan
John Mulrooney
By Knight Bros. attys.

UNITED STATES PATENT OFFICE.

MICHAEL J. KALLAHER AND JOHN MULROONEY, OF MEMPHIS, TENNESSEE.

EXTENSION BOX AND KEY FOR STREET GAS OR WATER PLUGS.

SPECIFICATION forming part of Letters Patent No. 407,955, dated July 30, 1889.

Application filed September 26, 1888. Serial No. 286,409. (No model.)

To all whom it may concern:

Be it known that we, MICHAEL J. KALLAHER and JOHN MULROONEY, citizens of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Extension Boxes and Keys for Street Gas or Water Plugs, of which the following is a specification.

10 Our invention consists of certain features of novelty which will first be fully described with reference to the accompanying drawings, and then specifically pointed out in the claims hereto annexed.

15 In said drawings, Figure I is a vertical section of our improved box and key, taken transversely through the supply-pipe. Fig. II is an enlarged detail view of the dust-shutters hereinafter described. Fig. III is a side
20 elevation of a portion of the lower section of the box, showing the dust-shutters in position. Fig. IV is a vertical section of a portion of the lower section of the box, taken longitudinally of the supply-pipe, showing the dust-shutters located inside of the box.

25 In carrying out the invention we employ any suitable form of extensible box having its upper and lower sections 1 2 telescoped together, but preferably the form shown in the
30 drawings, in which the two sections are secured together and adjusted by means of a thread cast upon one and a complementary groove cast in the other. These sections, however, unlike the usual form, are provided
35 with perforated diaphragms or internal flanges. In the section 1 the flange or diaphragm 3 is preferably arranged so as to form the bottom of the upper chamber or box 4, with its small aperture or perforation for the
40 admission of the key 5, disposed centrally, while in the lower and internal section 2 the diaphragms are at any convenient places, so long as the lower one 7 is near the foot 8 and the upper one 7^a is sufficiently far from it to
45 afford a proper bearing for a handle 9. This handle 9 is the handle or an extension of the wrench 10, with which it is connected by means of an attenuated journal 11, made integral with the handle.

50 The lower end of the handle rests upon the

flange or diaphragm 7, while the attenuated portion 11 projects through the perforation in this diaphragm, and is secured to the wrench-shank by any suitable means, preferably by prismatic tenon and socket, as
55 shown, the tenon being driven snugly into the socket, so that the wrench will not drop off before it is put in place upon the key of the cock. There is a slight space left between the wrench-shank and diaphragm, so
60 as to allow a slight vertical movement of the wrench in order that the latter may adjust or fully seat itself upon the prismatic key 12 of the plug 13.

The handle 9 is provided with an elongated
65 prismatic key-socket 14, terminating at its upper end in a flaring mouth-piece 15, and the handle being journaled axially within the lower section, this key-socket 14 is of
70 course directly under the perforation in the diaphragm 3.

The removable key 5 is composed of a prismatic rod complementary in shape to the key-socket 14, and may be inserted through the aperture in the diaphragm 3, when it will strike
75 the flaring mouth-piece 15 and be guided into the key-socket.

The diaphragm 3 is provided with a small shutter 16, pivoted thereto at 17, which may be turned to cover the aperture in the diaphragm to prevent dust or dirt from entering
80 the box when the key is removed; or, if desired, the key may be allowed to drop down into the socket, with the handle 18 resting upon the bottom of the chamber 4 and the
85 lid of said chamber closed down, as shown in dotted lines. Thus the key will always be at the plug ready for use and there will not be the difficulty heretofore existing of not being able to get at the key-socket or key-post, or
90 as the case may be, by reason of the upper box or chamber having become filled with dirt and overgrown with grass.

The foot 8 is provided with the usual apertures or slots 19 for the passage of the pipe 20; but these slots are frequently much larger than
95 the pipe, and thereby permit a great quantity of dirt to enter the box and collect around the plug or cock, and thus render the latter difficult of operation. In order to avoid this, we pro- 100

vide shutters, which are placed around the pipe 20 against the foot, either on the outside, as shown in Fig. III, or on the inside, as shown in Fig. IV. These shutters are each composed of two leaves or shutters 21, having semicircular opening for the passage of the pipe, which are pivoted together at their upper ends, as shown in Fig. II, by means of a pivot 22. When they are placed on the outside, the pressure of the earth will hold them in place against the foot 8, and when placed on the inside they are held in place by being inserted between the foot and the ends of the housing 23 of the plug or cock, when such housing is of sufficient length, and when it is otherwise, as shown in the drawings, blocks or washers 24 may be interposed to fill up the intervening space. These washers consist simply of a wooden or other block with a slot for the reception of the pipe.

We are aware that it is not new to provide devices of this nature with extensible keys; but we are not aware that the combinations hereinafter pointed out are old.

Having thus described our device, the following is what we claim as new therein and desire to secure by Letters Patent:

1. In a box for street-plugs, the combination, with the lower section 2 and the plug-key 12, of a wrench adapted to engage the plug-key 12, a round handle for turning said wrench having an elongated prismatic key-socket, a flaring mouth on said handle for

guiding an elongated prismatic key into said socket, and a collar in said section for restricting the vertical movement of said handle, as set forth.

2. In a box for street-plugs, the combination, with the upper and lower sections of the telescopic box and the plug-key 12, of a wrench for engaging the plug-key 12, a handle for turning said wrench journaled in the lower section and having an elongated prismatic key-socket, the perforated diaphragm of the upper section, a removable prismatic key, and a flaring mouth on said handle for guiding said key to said socket, as set forth.

3. In a box for street-plugs, the combination, with the upper and lower sections 1 2 and the plug-key 12, of the wrench, the upper and lower internal flanges or diaphragms in said lower section, the round handle projecting through the upper diaphragm and resting upon the lower diaphragm, the attenuated journal projecting through the lower flange and being secured to the wrench, said handle having an elongated prismatic key-socket with a flaring mouth, and a prismatic key for fitting in said socket, as set forth.

M. J. KALLAHER.
JOHN MULROONEY.

Witnesses:

A. GARIBALDI,
J. C. CARLTON.