

C. PARKINS.
MANHOLE COVER.

Patented Oct. 30, 1894.

Fig. 2. A top-down view of a circular device. It features a central hub (19) with eight surrounding segments (20). The segments are arranged in a circular pattern around the hub. The entire assembly is enclosed within a circular frame (10) that has a flange (14) on its outer edge. A horizontal line (1) passes through the center of the device.

Diagram illustrating a mechanical component, likely a pump or engine part, showing internal structure and components labeled 1 through 21. The diagram is signed "J. L. L." and "BY M. M.".

William Goebel.
H. B. Hutchinson

C. Parkins

BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES PARKINS, OF HOBOKEN, NEW JERSEY.

MANHOLE-COVER.

SPECIFICATION forming part of Letters Patent No. 528,387, dated October 30, 1894.

Application filed July 10, 1894. Serial No. 517,053. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PARKINS, of Hoboken, in the county of Hudson and State of New Jersey, have invented a new and Improved Manhole-Cover, of which the following is a full, clear, and exact description.

My invention relates to improvements in covers for manholes of sewers and other drains and outlets; and the object of my invention is to produce a manhole ring and cover which will cost no more than those in ordinary use, but which are constructed in such a way that the cover may be quickly placed in position and removed, yet when in position is held so securely that it cannot be accidentally displaced and cannot be moved except by first lifting it with a suitable tool and then turning it laterally.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a central vertical section on the line 1—1 of Fig. 2, of the ring and cover embodying my invention, the said parts being applied to the manhole of a sewer. Fig. 2 is a plan view of the ring and cover. Fig. 3 is a plan view of the ring with the cover removed; and Fig. 4 is a sectional elevation of the manhole ring and cover with the cover turned so as to show in side elevation one of the lug-receiving ways therein.

The manhole ring 10 is shown applied to a manhole 11 and it has the customary shoulder 12 on which the cover may rest and is like any manhole ring, except for the inwardly-projecting lugs 13 thereon, which lugs are near the top and are preferably placed on diametrically opposite sides, for being shown in the drawings, although it is of course evident that a greater or less number may be used.

The cover 14 of the manhole is adapted to rest in the usual way on the shoulder 12 of the ring, and it has the usual depending flange 15 which is made rather thicker than is usual and this flange has, on its outer side, inclined ways or grooves 16, there being as many grooves as there are lugs 13 on the ring 10; and the grooves incline upward from the lower edge of the flange 15, the grooves opening through the said lower edge so that they

may readily receive the lugs 13, and to further facilitate this action the bottom walls of the grooves are brought to an edge at the lower ends of the grooves, as shown at 17 in Fig. 4.

The arrangement above described is substantially similar to a bayonet joint, but the ways or grooves 16 terminate at their upper ends in vertical notches 18 which, when they register with the lugs 13, permit the cover 14 to drop so that the lugs 13 enter the notches 18 and the cover is thus prevented from being turned until it is first raised, so that the notches 18 are above the lugs.

To enable the cover to be raised conveniently, it is provided with holes 19 into which the point of a pick or other instrument may be inserted, and to facilitate its turning, the cover is provided, on opposite edges, with notches 20 which are also adapted to receive the point of any suitable instrument. The cover has also holes 21 leading downward from the grooves or ways 16, see Fig. 4, to provide for perfect drainage and prevent the cover from freezing up in cold weather. To place the cover in position, it is adjusted so that the lugs 13 register with the lower ends of the grooves or ways 16, and it is then turned laterally until it drops over the lugs 13, as specified above.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the manhole ring, having internal lugs, of the cover having a depending flange with inclined ways therein, and notches opening from the upper sides of the ways, substantially as described.

2. The combination, with the manhole ring having lugs on its inner side, of the cover having inclined ways or grooves on its sides to engage the lugs, the grooves or ways having notches in their upper walls, and holes in the cover top, substantially as described.

3. The combination, with the ring and lugs, of the cover having holes in its top, a depending flange to enter the ring, inclined grooves or ways in the flange to engage the lugs, and holes in the bottom walls of the ways, substantially as described.

CHARLES PARKINS.

Witnesses:

HENRY E. QUIDNY,
MICHAEL J. COYLE.