T. J. LITTLE, JR.

MANTLE FITTER'S TOOL.

APPLICATION FILED JULY 20, 1910.

986,638.

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Fig. 1

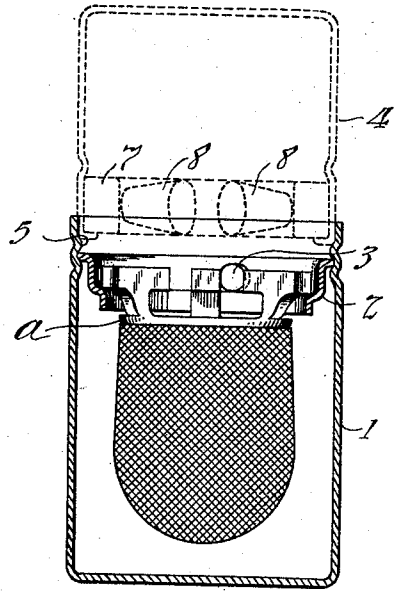


Fig. 5

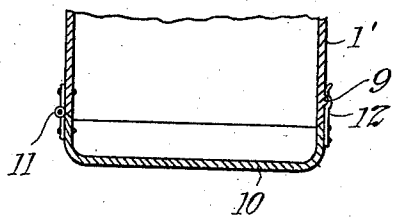


Fig. 3

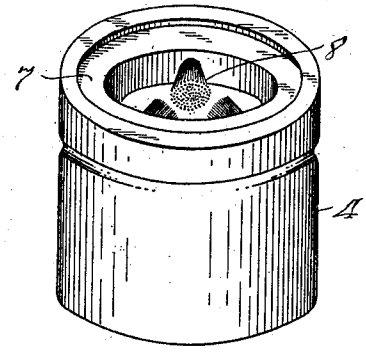


Fig. 2

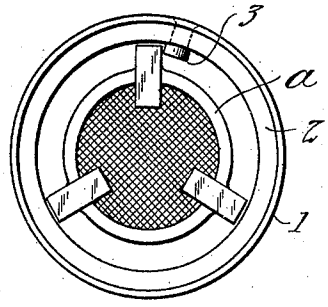
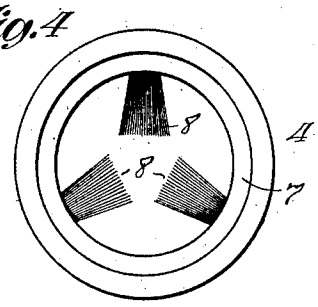


Fig. 4



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UNITED STATES PATENT OFFICE.

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MANTLE-FITTER'S TOOL.

986,638. Specification of Letters Patent. **Patented Mar. 14, 1911.**

Application filed July 20, 1910. Serial No. 572,797.

To all whom it may concern:

Be it known that I, THOMAS J. LITLE, JR., a citizen of the United States, and a resident of Woodbury, in the county of Gloucester and State of New Jersey, have made a certain new and useful Invention in Mantle-Fitters' Tools, of which the following is a description.

As is well known, incandescent mantles are of a delicate and fragile nature and frequently become broken or used up by long continued service so that renewals are necessary. It is ordinarily rather a difficult matter to remove such a mantle especially of the inverted type from the burner without dropping or scattering some of the particles thereof. After the mantle has been removed, one usually finds a more or less heavy deposit of carbon upon the end of the gas tube which it is likewise difficult to remove in a cleanly manner. After this has been done one must take great care in handling and mounting the new mantle in order to avoid breakage.

My invention has for its object the provision of a novel means for obviating the difficulties mentioned and for readily dismounting a worn out mantle and removing the carbon deposit, retaining the particles thereof in a closed receptacle, thereby avoiding all chance of dropping the same upon the floor or objects beneath the fixture. Said means may also be employed for avoiding the danger of breakage in the mounting of new mantles.

In order that the invention may be more fully understood, reference is hereby made to the accompanying drawings, of which—

Figure 1 is an axial section of the device, the mantle remover being in full lines and containing a mantle and a carbon remover in dotted lines. Fig. 2 is a plan view of the mantle remover with mantle. Fig. 3 is a perspective view and Fig. 4 a plan of the carbon remover. Fig. 5 is a vertical section of a modification.

The device shown is composed of two cylindrical cups which combine to form a closed receptacle. The larger cup 1 is provided with an internal flange 2 adapted to receive and support the lugs of the mantle carrier *a*. A stop 3 is provided for limiting the rotary movement of the mantle carrier with respect to the cup for the purpose to be hereinafter described. The smaller cup 4 is of a size adapted to fit closely within the open end of the cup 1 so as to be held thereby, its inward movement being limited by the bead 5 formed in the wall of the cup 1. A brush holder 7 is applied to the interior of the cup 4 at its open end and carries a plurality of inwardly extending brushes 8.

The cups 1 and 4 may be cheaply and conveniently made by spinning from metal such as aluminum. Other materials may be used, for instance, transparent glass is desirable since it enables the mantle fitter to see what takes place within the device. In case glass is used the cup 1, stop 3 and flange 2 may be molded in one integral piece. The brush holder 7 may be cemented to the cup 4, when the latter is of glass.

If desired, either of the cups 1 or 4 may be provided with a lid hinged thereto to facilitate the removal of its contents. For instance in the device of Fig. 5, the bottom of the cup 1′ is formed of a separate piece 10 which is hinged thereto at 11 and is normally held in its closed position by a spring catch 12 which engages a boss 9 formed on the member 1′.

The device may be used as follows: The mantle fitter after removing the globe from the fixture to be trimmed, separates the cups 1 and 4 and places the former immediately below the defective mantle. He then raises the same until the flange 2 lifts the lugs of the mantle carrier from their support upon the burner. He then rotates the cup 1 whereby the stop encounters one of the said lugs and causes the mantle carrier to be turned sufficiently to be disengaged from the burner, whereupon the fitter moves the cup downward with the mantle carried and all particles of the mantle securely held therein. The mantle fitter then takes the cup 4 and uses it for cleaning the end of the gas tube, the cup being moved vertically and in a rotary manner until all of the loose or detachable particles of carbon have been brushed off from the tube and deposited within the cup 4. The two cups are then placed together as indicated in Fig. 1, and all dirt and debris connected with the renewal of the mantle is within the closed receptacle formed by the two coöperating cups, and as there is no need for opening the receptacle until the mantle fitter has left the apartment there will be no chance of scatter-

ing any dirt upon the floor or upon objects in the room. After the cleaning operation, the new mantle may be applied in the usual manner, and if desired the mantle fitter may have a duplicate of the cup 1 for the purpose of applying the new mantle. This is an operation which is simply the reverse of the operation for removing the mantle. The mantle carrier is supported by the flange 2, so that the same may be raised into proper position, and rotated in the usual manner, so that its lugs engage the support carried by the burner.

Having now described my invention, what I claim is:

1. As an article of manufacture, a mantle fitter's tool comprising a cup, a support therein near its mouth for an inverted incandescent gas mantle, and a cover for said cup containing near its open end a row of inwardly extending brushes for cleaning a gas burner, said cup and its cover forming a closed receptacle to contain the debris and dirt resulting from the renewal of a mantle.

2. As an article of manufacture, a mantle fitter's tool comprising a cup, a support therein near its mouth for an inverted incandescent gas mantle, and a stud or pin projecting inwardly from said support, and a relatively deep slip cover for said cup containing near its open end, an annular brush for cleaning a gas burner, said cup and its closure together forming a tight receptacle to contain the debris and dirt resulting from the renewal of a mantle.

3. As an article of manufacture, a mantle fitter's tool comprising a cup and its cover, said cup containing a support for incandescent gas mantles, and means for rotating the same, the cover being provided with an annular brush for cleaning a gas burner, said cup and its cover together forming a tight receptacle.

This specification signed and witnessed this 18th day of July 1910.

THOMAS JAMES LITTLE, JR.

Witnesses:
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