

[54] **SELF-CLEANING PIPE TAMPER**

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[51] **Int. Cl.**..... A24f 9/08

[58] **Field of Search**..... 131/243, 245, 247

[56] **References Cited**

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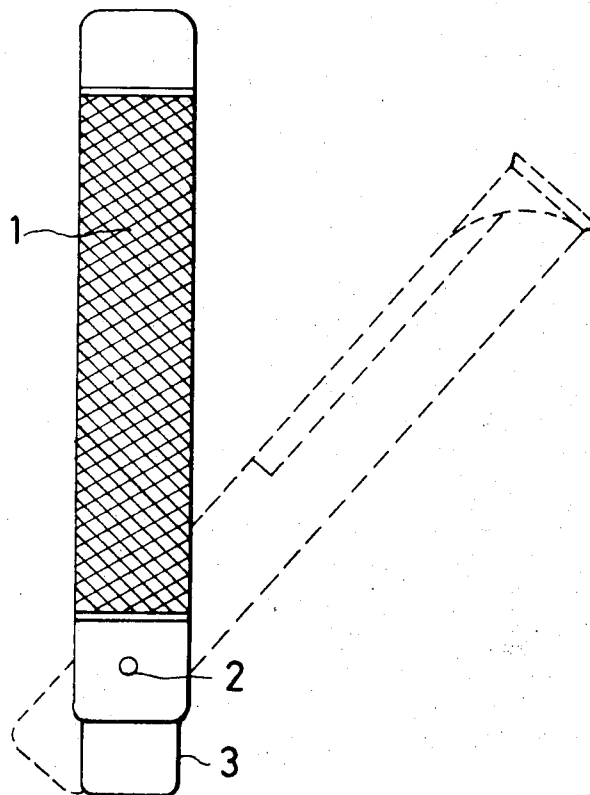
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[57]

ABSTRACT

A pipe tamper includes a tamper element having a tamper disc at the outer end thereof and being pivoted at the opposite end to a U-shaped yoke. The yoke includes a brush for wiping particles from the tamper disc. A pin and a scraper blade are also pivotally mounted relative to the tamper and yoke members. The tamper, pin and scraper blade form an enclosed unit when not in use.

7 Claims, 4 Drawing Figures



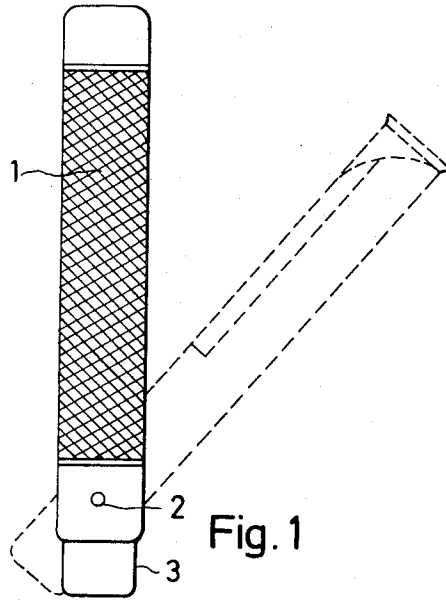


Fig. 1

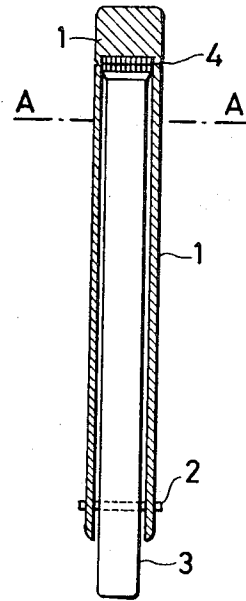


Fig. 2

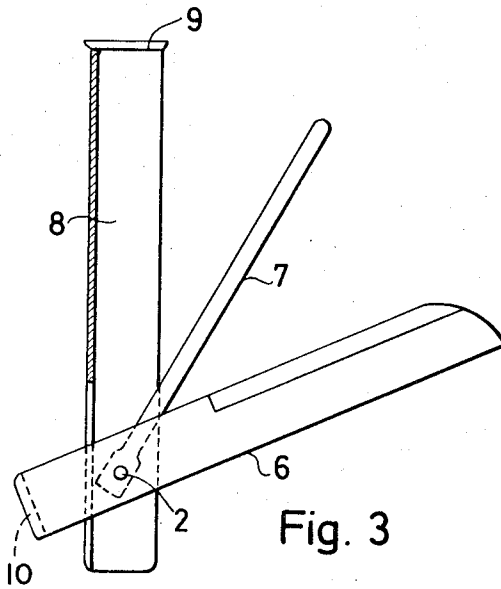


Fig. 3

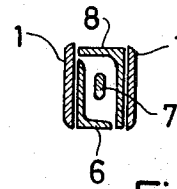


Fig. 4

SELF-CLEANING PIPE TAMPER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to pipe tampers or stoppers, and in particular to pipe stoppers having a wiper element for the removal of ash residues from the stopper plate after use of the utensil.

2. Description of the Prior Art

The prior art in this field includes a pipe stopper which includes a pivotable wiper lever which is movable over the stopper plate or disc and which carries wiper means in the form of a brush or other wiper element. This requires a fourth articulated element in addition to those standard parts of a pipe stopper: the stopper itself, the pin, and the scraper blade or scraper spoon. It renders the manipulation of the utensil more complicated, because four elements have to be separated from each other, in order to choose one of the four. Furthermore, the additional wiper lever requires a careful reciprocating movement over the stopper plate when the latter is to be cleaned.

SUMMARY OF THE INVENTION

It is a primary objective of the present invention to propose a pipe stopper with wiping means in which the above-mentioned shortcomings are eliminated.

The invention proposes to attain the above objective by providing a pipe stopper comprising a stopper element, a pin, and a scraper blade or scraper spoon, including a wiper device which, according to the invention, is articulated at the pivot point of the utensil and has the form of a yoke or handle in whose end portion is arranged a wiper brush or other suitable wiper means which cleans the stopper plate when it passes over the latter.

The invention further provides that the pivot point of the utensil be shifted in the direction of the working ends of the elements in such a way that the opposite end of the utensil presents a short, stem-like handle or shaft which serves for the opening of the utensil by pressing against this handle portion, while the utensil itself is seized on the wiper yoke.

This makes possible a considerably simplified manipulation of the wiper brush, the latter being fixedly arranged inside the yoke which surrounds the three elements as an assembly and which therefore cannot be shifted laterally relative to the stopper plate. This novel solution also eliminates the undesirable reciprocating movement which was necessary in connection with the previously provided, thin-walled wiper lever as disclosed by the prior art.

A preferred embodiment of the invention further provides that the scraper blade and the stopper have oppositely oriented L-shaped angular profiles, so arranged that the short leg of the L substantially covers the sides of the other two elements. In this way the stopper and the scraper form a neat, closed package when they are joined together.

BRIEF DESCRIPTION OF THE DRAWING

Further special features and advantages of the invention will become apparent from the description following below, when taken together with the accompanying drawing which illustrates, by way of example, an em-

bodiment of the invention, represented in the various figures as follows:

FIG. 1 is an elevational side view of a closed pipe stopper embodying the invention, a partially open position being shown in dotted lines;

FIG. 2 is a partially cross-sectioned elevational side view of the pipe stopper of FIG. 1;

FIG. 3 is an elevational view of the opened elements of the pipe stopper of FIG. 1, with the yoke removed and a portion of the tamper being shown in section; and

FIG. 4 is a horizontal cross section through the pipe stopper of FIGS. 1 and 2 along line A—A of FIG. 2.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In the drawing is shown a pipe stopper with three working elements, a scraper blade 6, a pin 7, and a stopper or tamper 8 (FIG. 3). The member 8 has a tamping disc 9 appearing at the upper end of FIG. 3. The three elements are linked together by a pivot 2 and are surrounded by a yoke 1 which is likewise articulated at pivot 2. Yoke 1 is U-shaped and has a wiper brush 4 which cooperates with the tamping disc 9 so as to wipe any ash residues therefrom, when closed by the same.

The scraper blade 6 and member 8 are preferably L-shaped in profile and so arranged relative to one another that their oppositely oriented L-shapes take the form shown in FIG. 4 when the elements are in closed position. This arrangement has the advantage that it protects the pipe stopper from becoming tangled up with other utensils because it presents no cavities or recesses inside in which other objects might get caught. As can be seen from FIG. 4, the short legs of the oppositely facing L-profiles form outer end faces for the closed utensil which are slightly recessed relative to the surrounding yoke 1. This arrangement has the additional advantage that any residue which may have remained on pin 7 cannot fall into the pocket of the user, but remains inside the closed pipe stopper.

The L-shaped profiles of the stopper and scraper elements have the additional advantage in that they present a practical and convenient cleaning and poking utensil which is easier to seize with the fingers than a flat scraper blade or stopper element alone.

As can be seen in FIGS. 1 and 2, the lower ends of the stopper 8 and scraper blade 6 protrude downwardly below the lower end of yoke 1 in the form of a stem 3 which is arranged to serve as a handle extension for swiveling the stopper elements out of the closed position into the open position shown in FIG. 1 by dotted lines.

It is further possible, if desired, to arrange an end plate seen in dotted lines 10 in FIG. 3 at the end of scraper blade 6 opposite the stopper plate 9, in which case the three pipe stopper elements, when closed under yoke 1, present flat faces on everyone of its three exposed sides.

What is claimed is:

1. A pipe tamper comprising in combination:
 - a tamper element having an inner end and an outer end;
 - a tamping disc at the outer end of the tamper element;
 - a pivot near the inner end of the tamper element;

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a yoke pivotable about said pivot and having means adapted to receive the tamper element therewithin; and

means on said tamper for wiping particles off the tamping disc.

2. A pipe tamper as defined in claim 1, wherein the wiping means is a brush.

3. A pipe tamper as defined in claim 1, wherein the yoke has an outer portion covering the tamping disc in the closed position; and the wiping means is arranged on the side of said portion which faces the tamping disc.

4. A pipe tamper as defined in claim 4, further comprising:

a scraper element having an outer end and an inner end pivotable about said pivot; and wherein the tamper element and scraper element are generally L-shaped, the elements facing each other so as

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to form an enclosed assembly when the two elements are closed against one another.

5. A pipe tamper as defined in claim 4, further comprising:

a transverse end plate at the inner end of the scraper element.

6. A pipe tamper as defined in claim 3, wherein the tamper element includes at its inner end a handle extension which protrudes beyond the inner end of the yoke.

7. A pipe tamper as defined in claim 3, further comprising:

at least one additional element pivotable about said pivot; and wherein

at least one of the elements includes a handle extension which protrudes beyond the inner end of the yoke.

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