INVENTOR
Joseph H. Doncourt

ATTORNEY
This invention relates to improvements in smoker’s utensils and more particularly to improvements in pipe cleaning devices and combinations of such devices with other smoker’s utensils providing receptacles for ashes and tobacco particles.

It is an object of the invention to provide a pipe cleaning device capable of removing ash and tobacco particles from pipes of various sizes expediently and without injuring the “cake” lining the bowls thereof, while at the same time insuring that dislodged particles of tobacco, ashes and carbonized tobacco will be discharged into the pipe cleaning receptacle provided for receiving them.

Prevention of the scattering of such particles is of considerable importance, eliminating a fire hazard as well as preventing soiling of the device generally or nearby furniture.

A further object of the invention is to provide such a device in combination with an ash tray or other smoker’s utensil adapted to stand upon a table or the like and to permit utilization of the device in its normal stationary position.

A further object of the invention is to provide such a device characterized by simplicity and ruggedness of its parts and hence adapted to mass production methods and not readily susceptible to damage in use.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts, and in the details of construction hereinafter described and claimed.

The preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Figure 1 is a vertical central section of a device, embodying the invention as applied to an ash tray; and

Figure 2 is a plan view of the device of Figure 1.

Referring to these figures, a receptacle in the form of an ash tray E is provided with a cleaning brush F surrounded by a guard tube G. The ash tray E may be of any usual design and may have the brush element F fixed thereto as by riveting.

I prefer, however, to attach this brush element to the ash tray removably and for this purpose the central part of the ash tray is upset vertically at 31 to form a recessed surface 32 having a circular cutout 33 to receive the brush holder.

The shaft 34 of brush F is mounted in a socket 35, the lower end 36 of which extends through the aperture 33 and is provided with a flange 37 which seats upon the recessed portion 32 of the ash tray. The lower part of the end 36 of shaft 34 is threaded and receives washer 38, lock washer 39 and nut 40. For compactness and simplicity of construction, the upset portion 31 of the ash tray may be made generally frusto-conical in shape and the washer 38 of such diameter as to seat against the inclined wall of the upset portion 31, as shown in Figure 1. The brush element and shaft may be constructed in a very simple and effective form, as illustrated, the shaft being formed of a pair of twisted stiff wires between the coils of which are gripped the bristles of the brush F, imparting to the latter a helical spindle shape and forming an upper bearing surface 41 which for convenience in manufacture may be composed of the ends of a pair of wires rather than being a single piece of metal. I have illustrated the guard tube G as rigidly attached to the ash tray E by means of feet 42 fixed thereto as by soldering or welding and the interior of the guard tube G communicates with the ash tray through spaces 43 at its bottom and between these feet 42. No vertical movement of the guard tube is provided for and this tube is made sufficiently large to permit reception therein of the largest pipe of the range of sizes for which the device is designed. The upper end of the tube G is advantageously belled as at 44 to prevent the scattering of ashes and injurious scraping of the stem of a pipe being cleaned.

I am aware that various attempts have herebefore been made to provide an ash tray, or the like, with a pipe cleaning device attached thereto, but these devices I have found generally unsatisfactory not only because of their failure to provide adequate means for preventing scattering of the ashes, but also because of their failure to provide certain other features of the present invention. In a device of this character it is of great importance that the pipe cleaning member F should be adapted to clean pipes of different sizes and this object is achieved by using a wire brush or similar resilient element. It is also of importance that the device should be usable while standing in a fixed position and this is achieved also by the use of a resilient cleaning element and more perfectly by the provision of the rigid top bearing surface 41 for such element. As a practical matter it is impossible or, at any rate, very difficult to rotate a pipe with the hand about a true vertical axis, so that the cleaning element of a device such as the present one must be adapted to cleaning the interior of a pipe when the pipe is rotated around it and at the same time is tilted axially with relation to it in various directions. For this purpose a resilient element,
such as a wire brush, is essential, as a rigid reamer or the like can operate only when rotated relative to the pipe about a fairly stationary axis. The rigid top surface 41 of the brush F serves to provide a stop for the pipe in proper position and also to provide a bearing surface about which the pipe is rotated, thus automatically insuring a reasonably accurate relationship between the pipe and the brush during cleaning. This top surface 41, particularly when irregular, also serves to pick up gummy particles from the restricted area of the pipe bowl at its extreme bottom and to keep this area clean.

What is claimed is:

A pipe smoker's utensil comprising an ash receptacle, a pipe cleaning brush mounted thereover, a guard tube surrounding said brush and mounted on said receptacle, said guard tube having apertures at its lower end communicating laterally with said receptacle.

JOSEPH H. DONCOURT.