March 17, 1936. I. FLORMAN 2,034,337

PIPE REAMER

Filed Aug. 22, 1932

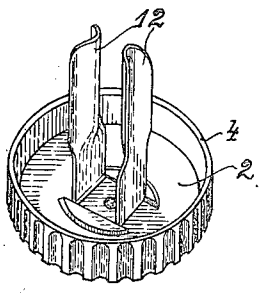


Fig. 1.

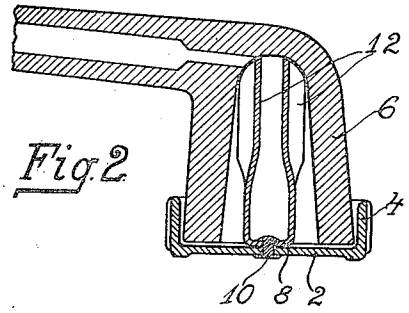


Fig. 2.

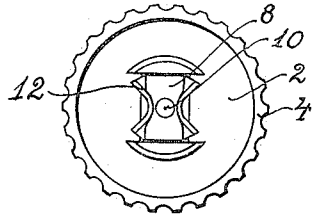


Fig. 3.

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PIPE REAMER

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4 Claims. (Cl. 131—13)

My invention relates to pipe reamers of a simple and inexpensive type.

The primary object of my invention is to provide a device for reaming or cleaning tobacco pipes with a cup which will catch the "cake" removed by the reamer and keep it from falling and thus soiling the fingers and dirtying the room. In addition, the reamer effectively removes the "cake" so that it is unnecessary to strike the pipe to shake out the cuttings. Any danger of chipping or breaking the bowl is thus avoided. A further object of my invention is to provide a reamer which may be used as a cover for the pipe when the same is not being used. Another object of my invention is to provide a reamer which may be carried within the pipe when the pipe is not being used thus overcoming the bulkiness of the reamer when being carried in the pocket of the smoker. Finally, I wish to provide a very simple and inexpensive construction for accomplishing these objects.

Other objects and advantages of the invention will appear more fully from the following description when taken in conjunction with the accompanying drawing which forms a part thereof.

In the drawing:

Fig. 1 shows in perspective a reamer embodying my invention.

Fig. 2 is a cross section through a pipe with the reamer in use therein.

Fig. 3 is a cross section on the line 3—3 of Fig. 2.

The reamer consists of a substantially circular base 2 having around its periphery an annular flange 4 upstanding from one face of the base and forming a cup. The inside diameter of the flange is slightly larger than the outside diameter of the upper edge of the pipe bowl 6 to be reamed. The reaming means is located on the same side of the base as the flange and consists of a strip of metal bent in U-shape, the closed end 8 of the U being fixedly and non-rotatably secured to the center of the base 2 by a rivet 10 or other suitable means. The legs 12 of the U are formed as reaming fingers perpendicular to the base and may take any suitable shape.

The operation and use of the device are self-evident. The fingers are inserted in a pipe bowl to clean the same. By turning the base, the fingers will ream and clean the "cake" from the inside of the bowl. The cup thus acts as a handle, while at the same time the flange, fitting over the edge of the bowl, serves to guide the fingers. The reamings fall into the cup and are retained until the operation is completed, when they may be disposed of in any suitable fashion. The dirt usually incident to such cleaning is thus avoided by a simple device.

When the pipe is not being used, the device may be used as a cover for the pipe bowl. When thus used, the reaming fingers will exert a pressure laterally against the inside wall of the pipe bowl thereby holding the cover on the pipe bowl.

It is obvious that the reaming fingers can be replaced by other types of reaming means, and that the reaming means can be secured to the base in any suitable fashion.

While I have described herein one embodiment of my invention, I wish it to be understood that I do not intend to limit myself thereby except within the scope of the appended claims.

I claim:

1. A pipe reamer comprising a substantially circular cup having a chamber great enough to collect material removed by the reamer from a pipe bowl, said cup having an annular wall perpendicular to the base of said cup, said cup serving as a handle for the operation of the device, and reaming means comprising a strip of metal of U shape, the closed end of said U being rigidly secured to the base of said cup substantially centrally thereof, the legs of the U forming reaming fingers and extending substantially perpendicularly to said base, said legs being of substantially smaller cross-section than said cup, said cup being dimensioned so as to serve as a guide for the pipe bowl.

2. A pipe reamer comprising a substantially circular cup having a chamber great enough to collect material removed by the reamer from a pipe bowl, said cup having an annular wall perpendicular to the base of said cup, said cup serving as a handle for the operation of the device, and reaming means comprising a strip of metal of U shape, the closed end of said U being rigidly secured to the base of said cup substantially centrally thereof, the legs of the U forming reaming fingers and extending substantially perpendicularly to said base, said legs being of substantially smaller cross-section than said cup and having rounded ends so as to conform substantially to the inner contour of the bowl of a pipe, said cup being dimensioned so as to serve as a guide for the pipe bowl.

3. In combination, a pipe cover and reamer, comprising a cover forming a substantially circular cup, said cup having a wall substantially perpendicular to its base, and reaming fingers non-rotatably secured to the inside of said cup

substantially centrally thereof, said fingers being of substantially smaller cross-section than said cup, whereby said cup acts to collect material removed by said reaming fingers and serves as a handle for the operation thereof, said reaming fingers being adapted to secure said cover to the pipe when the same is not being used.

4. In combination, a pipe cover and reamer, said cover comprising a base, a substantially closed flange upstanding from one surface of the base and perpendicularly thereto to form a cup for receiving material removed by the reamer from a pipe bowl, the diameter of the inner surface of the walls of said cup being large enough to closely surround the pipe bowl so as to act as guide means for said reamer during rotation thereof, and reaming means of substantially smaller cross-section than said cup fixedly secured to said base on the same side as said flange whereby said base and flange serve as a handle for the operation of said reaming means, said reaming means being adapted to secure said cover to the pipe bowl when the same is not being used.

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