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W. LEIDEL

2,011,720

SMOKER'S TOOL

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Fig. 1.

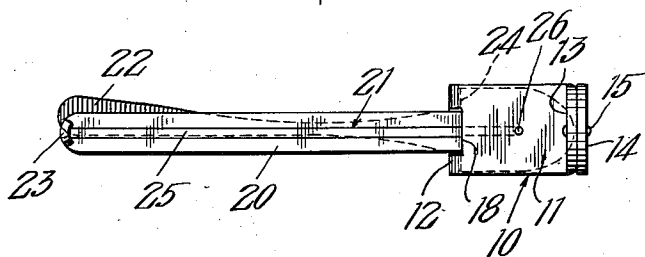


Fig. 2.

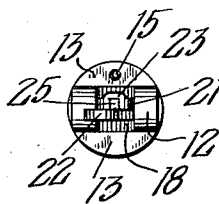


Fig. 3.

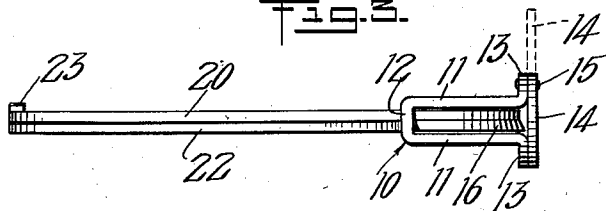


Fig. 4.

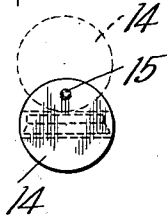


Fig. 5.

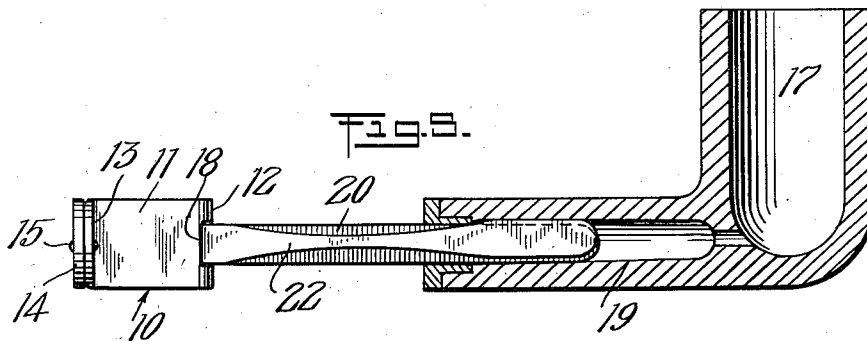


Fig. 6.

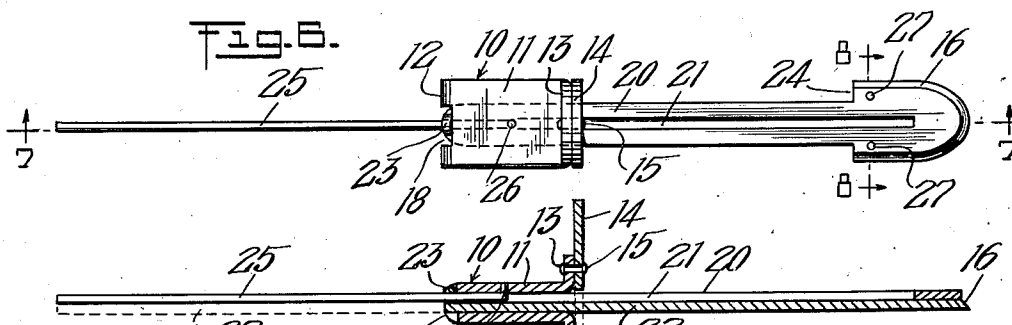
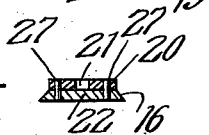


Fig. 7.

Fig. 8.



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2,011,720

SMOKER'S TOOL

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10 Claims. (Cl. 131—59)

Among the principal objects which the present invention has in view are: to provide an improved tool for cleaning articles, such as, tobacco pipes, cigarette and cigar holders; to provide means in the utilization of the tool whereby a tobacco pipe, cigarette and cigar holder may be cleaned in a simple and efficient manner; to provide a tool in compact form for cleaning the shank, stem and bowl of a tobacco pipe; to be enabled to utilize said tool to tamp down contents in the bowl of a tobacco pipe; to be enabled to use the tool in extended or distended condition; to comprise the tool in manufacture as a small and yet durable article when in distended condition so as to consume little space when not in use; to be enabled to easily disassemble the tool whereby damaged parts may be quickly replaced at a low cost; to manufacture the tool to be sold at a reasonable price; to secure simplicity of construction and operation; and to obtain other advantages and results as may be brought out in the following description.

Drawing

Figure 1 is a plan of my improved smoker's tool embodying features of the invention, the article being shown in distended condition;

Figure 2 is an end view of the same shown as looking to the right of Figure 1;

Figure 3 is a front elevation of the same;

Figure 4 is a view similar to Figure 2 and looking to the left of Figure 3;

Figure 5 is a view similar to Figure 1 and showing the tool as applied in use in one part of a tobacco pipe;

Figure 6 is a view similar to Figure 1 and showing the same in fully extended condition;

Figure 7 is a longitudinal section, shown as taken on the line 7—7 of Figure 6; and

Figure 8 is a transverse sectional view shown as taken on the line 8—8 of Figure 6.

Description

As will be seen in the drawing, the tool is to be considered as comprising a body portion 10 preferably of strip material bent upon transverse lines into a U-shape thereby providing a pair of parallel sides 11, 11, a cross portion 12 and free ends to the sides which are bent outwardly forming lips 13, 13 in a common plane normal to the planes of the said sides. Preferably the outer edges of these lips are arcuate with a common center of curvature. Flatwise with respect to said lips is mounted an end plate 14 which also is preferably provided with a curved

outer edge such that the plate may be juxtaposed upon both lips simultaneously and have portions of its edge in registration with the arcuate edges of the lips. When the plate is thus juxtaposed upon the lips, the parts described constitute a convenient tool for tamping tobacco in a smoker's pipe.

Said plate 14 preferably has an eccentrically disposed pivot 15 through it and through one of the lips by virtue of which the plate may be swung in its own plane to open the space between the sides 11, 11 to the end exposure.

An edge tool or curved blade 16 of appropriate contour for cleaning a pipe bowl 17 is normally within and protected by the said parallel sides 11, 11 of the body 10. This edge tool has a shank forming part thereof, and this shank passes through an opening 18 in the cross portion 12 of the body portion. The shank thus will project either way from the body portion depending upon which way it is moved in use. When the edge tool 16 is desired, the shank is slid to project the shank and tool from the open end of the body portion, and when desired to return the edge tool to its normal or retracted position, the shank is slid to project from the end of the body portion having the opening 18.

The shank above described furthermore constitutes a tool for cleaning pipe-shanks 19, and for this purpose is of a laminated structure. One lamination 20 is longitudinally slotted, as at 21, down the middle, and lies flatwise with respect to another lamination 22 of spring material and sprung to normally project next its outer end to one side of the slotted lamination 20 as shown in Figure 1. Thus, the projecting end of this shank opposite from the edge tool 16 may be sprung so that the laminations coincide when inserted in a pipe shank particularly of the "drinkless pipe" construction, cigar or cigarette holder for scraping the same as shown in Figure 5. It may here be noted that while the slot 21 in lamination 20 extends to the outer end of the lamination, it is bridged, as at 23, at the outer end of the shank, said bridge being offset from the plane of the lamination away from the other lamination so as to constitute a stop for preventing the shank from entire withdrawal through the body portion. Similarly, the edge tool is shouldered, as at 24 to provide a stop for limiting retraction in that direction.

The tool furthermore provides a reamer 25 fixed to the body portion and projecting therefrom through said opening 18 in the same direction as the shank. This reamer is aligned with

said slot 21 of the shank, so that the shank virtually rides upon the reamer when being slid, and swinging of the reamer is prevented by virtue of its position in the slot. The inner end of the reamer is bent laterally and the lateral end 26 thereof engages within a suitable hole in one of the sides 11 of the body portion. Displacement of this lateral end from the hole is prevented by the presence of the under lamination 22 engaging the longitudinal part of the reamer next the lateral end at all times. The longitudinal portion of the reamer passes under said bridge 23, which accordingly introduces no interference to sliding of the shank. When the edge tool is retracted entirely, the shank and reamer project in a common direction with the bridge and under lamination including the end part of the reamer therebetween thus preventing it from being caught and bent out of place. The reamer is preferably and substantially square in cross-section and will constitute a convenient tool for cleaning small holes, and for conveniently dislodging any tobacco obstructions, such as in stems of smokers' pipes, cigar and cigarette holders.

Should either laminations 20 or 22 become distorted or damaged through mishandling or otherwise, replacement of the damaged part may be conveniently made without much delay or expensive cost for parts. To this end the respective laminations adjacent the tool edge 16 are riveted together as by rivets 27, 27 passing through holes provided in each of the members 20 and 22. The parts may be readily disassembled by using slight pressure against the upper or lower ends of the rivets thereby pushing the rivets out entirely, after which they may again be reused after replacing a damaged part with a new one.

I claim:

1. A tool as characterized comprising a body portion and a laminated shank, said laminated shank being slidable with respect to the body portion and adapted to be slid to project from the body portion at either end thereby selectively presenting either end of the laminated shank for use as a smoker's tool.

2. A tool as characterized comprising a body portion and a laminated shank, at one end of which the laminations are sprung with one resiliently projecting from the side of the other, said laminated shank being slidable with respect to the body portion and adapted to be slid to project from the body portion at either end thereby selectively presenting either end of the shank for use as a smoker's tool.

3. A tool as characterized comprising a body portion, a shank slidable through said body portion adapted to project from either end thereof, and a movable plate at one end of the body portion in a plane normal to the length of the shank and movable in said plane into and out of position to overlie the end of the shank next thereto when the opposite end of the shank is fully protruded from the end of the body portion furthest from said plate thereby when moved to its position overlying the shank maintaining said shank protruded at the other end of the body portion.

4. A tool as characterized comprising a body portion, a shank slidable through said body portion adapted to project from either end thereof, and a plate pivoted to the body portion at one end thereof in a plane normal to the length of the shank and movable to overlie the end of the shank next thereto when the opposite end of

the shank is fully protruded from the end of the body portion furthest from said plate thereby preventing retraction of the shank through the body portion.

5. A tool as characterized comprising a body portion, a laminated shank slidable in said body portion, and adapted to project from either end thereof, one of said laminations having a longitudinal slot to the end thereof, and a reamer having a lateral end secured in the body portion and with the length of the reamer aligned with said slot and positioned entirely therein when the said shank is slid to its position in which the outer open end of said slot is furthest from said body portion.

6. A tool as characterized comprising a body portion, a laminated shank slidable in said body portion, and adapted to project from either end thereof, one of said laminations having a longitudinal slot to the end thereof, and a reamer having a lateral end secured in the body portion and with the length of the reamer aligned with said slot and positioned entirely therein when the said shank is slid to its position in which the outer open end of said slot is furthest from said body portion, said outer end of the slotted lamination having a bridge over the slot and confining the reamer between the bridge and the other lamination for protecting the outer end of the reamer when the shank is slid with the bridge at the outer end of the reamer.

7. A tool as characterized comprising a body portion, a laminated shank slidable therethrough, said shank having a head at one end thereof wider than the shank with one lamination of the head projecting beyond the edge of the other lamination at the sides and end thereof for providing a scraping tool at the end of the shank.

8. A tool as characterized comprising a body portion, a laminated shank slidable therethrough, said shank having a head at one end thereof wider than the shank with one lamination of the head projecting beyond the edge of the other lamination at the sides and end thereof for providing a scraping tool at the end of the shank, the head providing shoulders projecting laterally from the shank constituting stops for limiting movement of the head in one direction with respect to the body portion.

9. A tool as characterized comprising a body portion, a laminated shank slidable therethrough, said shank having a head at one end thereof wider than the shank with one lamination of the head projecting beyond the edge of the other lamination at the sides and end thereof for providing a scraping tool at the end of the shank, the head providing shoulders projecting laterally from the shank constituting stops for limiting movement of the head in one direction with respect to the body portion, and means on the end of the shank furthest from the head providing a stop for preventing displacement of the shank from the body portion when moved in the opposite direction.

10. A tool as characterized comprising a body portion, a laminated shank slidable therethrough of which one lamination is movable laterally while juxtaposed to another relatively immovable lamination for increasing the effective width of the shank, and a reamer mounted to lie juxtaposed to said relatively immovable lamination for avoiding bending of the reamer, said shank being slidable longitudinally with respect to said reamer for exposing the reamer for use.

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