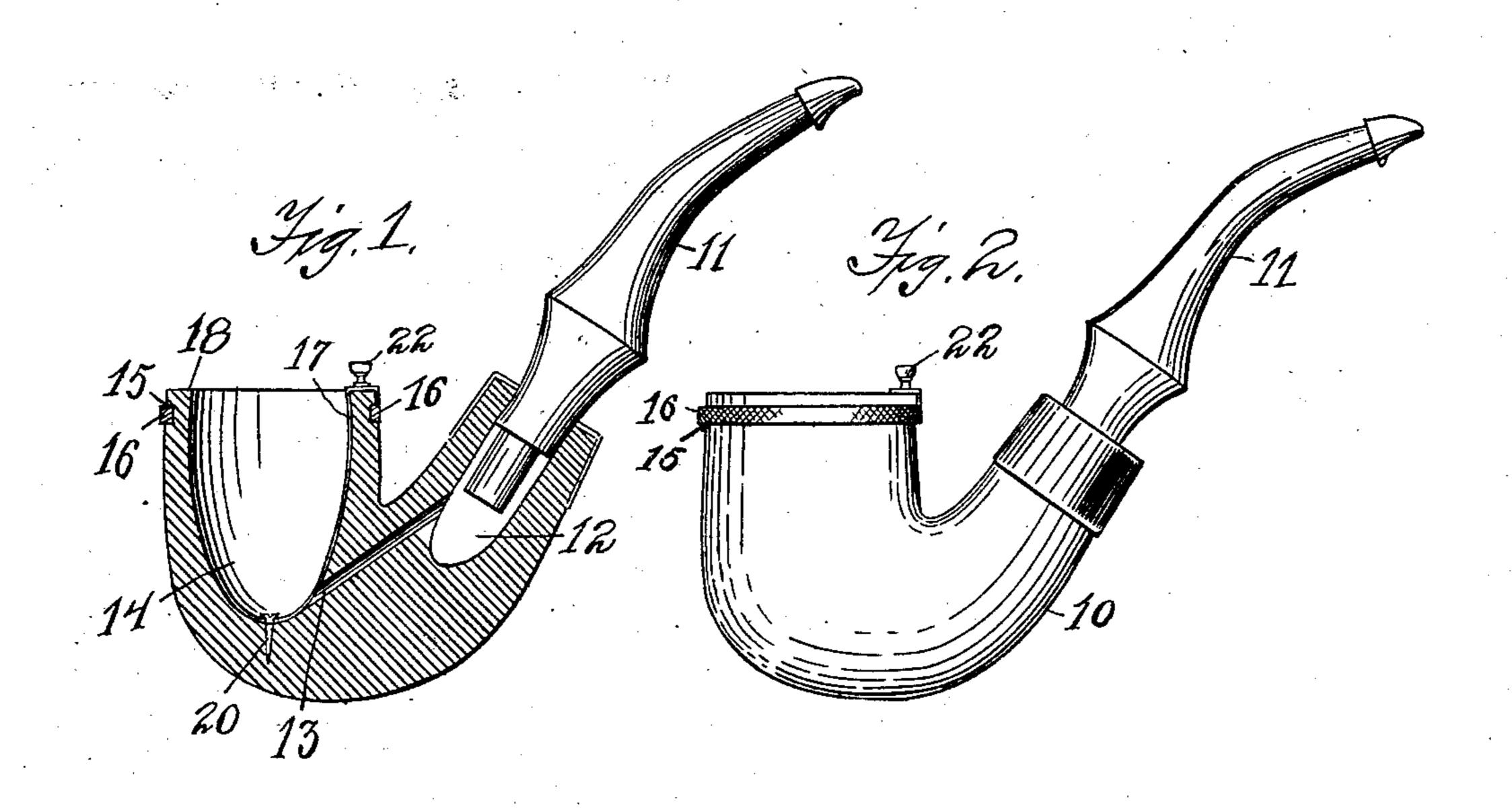
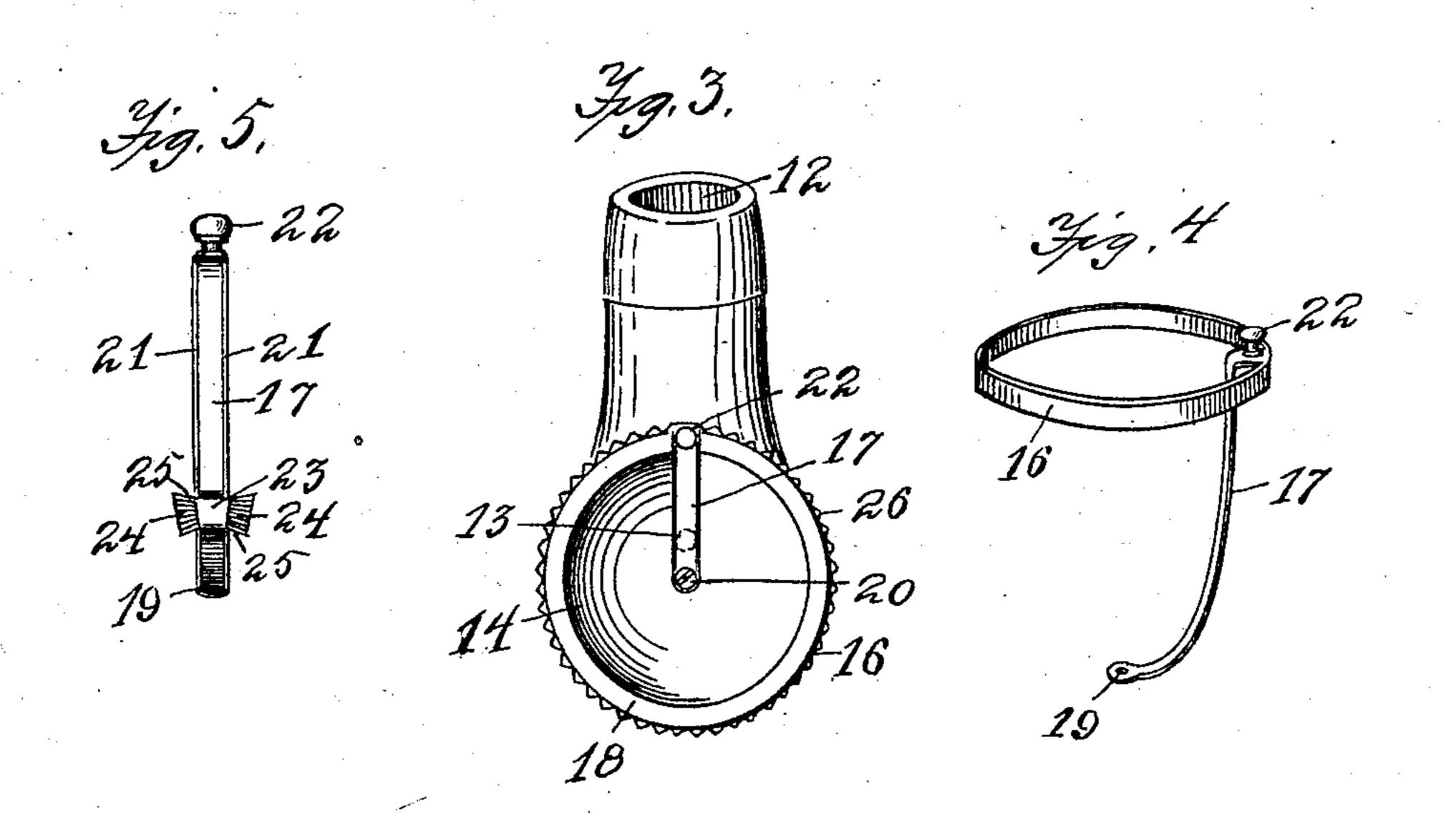
## A. B. WALLEN. TOBACCO PIPE CLEANER. APPLICATION FILED JAN. 20, 1908.





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38 y S. Arthur Faldwin

## UNITED STATES PATENT OFFICE.

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## TOBACCO-PIPE CLEANER.

No. 884,057.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed January 20, 1908. Serial No. 411,650.

To all whom it may concern:
Be it known that I, Alfred B. Wallen, a citizen of the United States, residing at Falconer, in the county of Chautauqua and 5 State of New York, have invented new and useful Improvements in Tobacco-Pipe Cleaners, of which the following, taken in connection with the accompanying drawings, is a

full, clear, and exact description.

The invention relates to devices for cleaning the cavity of the bowl of tobacco pipes; and the object of my improvement is to provide a simple knife, rotatably attached to the bowl in such a manner as to scrape the 15 inner surface of the bowl when rotated and providing a projecting knob upon said knife to show the location of the same, and second, to provide a knife of sufficient width to cover the smoke hole to the pipe stem and thereby 20 prevent tobacco slugs from being drawn into the same.

In the drawings, Figure 1 is a sectional view of the bowl of the pipe showing my cleaner in position over the smoke hole of the pipe stem. Fig. 2 is a side elevation of a tobacco pipe having my improvement. Fig. 3 is a plan view of the bowl of the pipe with the cleaner in position over the smoke hole. Fig. 4 is a perspective view of the cleaner 30 knife and guide ring for the same separated from the pipe. Fig. 5 is a detail view of a modification of the cleaner knife.

Similar numerals refer to corresponding

parts in the several views.

The numeral 10 indicates the bowl of the pipe, and 11 the removable stem which is inserted in the opening 12 in the pipe, a smoke hole 13 extending from the cavity 14 within the bowl of the pipe to the opening 12, the 40 stem 11 having a suitable smoke hole therethrough as is common in all pipes.

The improvement consists in cutting a groove 15 around the outer side of the bowl of the pipe just below its rim and revolubly 45 mounting therein a ring 16, and attaching a knife 17 to the ring 16 at one side. Knife 17 hooks over the edge 18 of the pipe bowl and conforms to the curve of the cavity within the bowl, extending to the bottom of the 50 bowl where it is revolubly attached in hole 19 by means of a screw 20. A rivet extending

the purpose but not as well since the screw leaves the bottom of the bowl smooth and clamps the end of the knife closely to the 55 bottom of the bowl.

Both edges 21 of the knife 17 are beveled and sharpened so that the knife will cut in either direction. The knife 17 is made sufficiently broad to cover the smoke hole 13, 60 and a knob 22 is preferably placed upon the loop of knife when it passes over the edge 18 so that the position of the knife is always observable to the user. Thus the knob 22 should always stand mid-way of the bowl 65 toward the stem 11 so as to cover the hole 13. It has been usually found sufficient to make the knife of sufficient width for covering the hole, the small opening at each side being sufficient to give a free draw for the smoke and at 70 the same time preventing tobacco slugs or other foreign matter from entering the smoke hole 13.

The modification of the preferred form of the knife is shown in Fig. 5, in which the 75 knife is bent up as at 23 opposite the mouth of the hole 13 and scrapers 24 are provided on each side, which correspond to the bevel of the inner side of the pipe. This arrangement provides four openings 25 between the bent 80 up portion 23 of the knife and the wing 24 which gives a larger draft opening for the pipe.

The ring 16 is usually made smooth, the knob 22 being sufficiently strong to turn the 85 knife and cause it to scrape the inner side of the cavity 14, but it would not depart from my invention to make the periphery of the ring 16 rough with projections 26, as shown in Fig. 3, by means of which the user could 90 readily rotate the ring and knife without

knob 22.

I claim as new:—

- 1. In a tobacco pipe, a pipe having a bowl with a suitable smoke hole therefrom, a ring 95 rotatably mounted on the outer side of said bowl, a knife attached to said ring at one end and the other end pivotally attached to the bottom of the bowl, said knife sharpened on both edges and conforming to the inner side 100 of the bowl.
- 2. In a tobacco pipe cleaner, a pipe having a groove around the outer side of the bowl, a through the bottom of the pipe would serve I ring rotatably mounted in said groove, a

knife attached to said ring at one end and pivotally attached within the bottom of the bowl and conforming to the side of the cavity in the bowl, substantially as and for the pur-

5 pose specified.

3. In a tobacco pipe cleaner, a pipe having a groove around the outer side of the bowl, a ring rotatably mounted in said groove, a knife attached to said ring at one end and 10 pivotally attached within the bottom of the bowl and conforming to the side of the cavity in the bowl, and a knob on said knife to indicate the position of the same.

4. In a tobacco pipe cleaner, a pipe having a groove around the outer side of the bowl, a ring rotatably mounted in said groove, a knife attached to said ring at one end and pivotally attached within the bottom of the bowl and conforming to the side of the cavity 20 in the bowl, said ring roughened on its outer

surface and carrying a knob on said knife, substantially as and for the purpose specified.

5. In a tobacco pipe cleaner, a pipe bowl 10 having the cavity 14 therein and the smoke hole 13, said bowl having a groove 15 25 on its outer side, a ring 16 rotatably mounted in said groove, a double edged knife 17 attached to said ring and conforming to the curve of said cavity, said knife pivotally attached to said bowl at the bottom of said cav- 30 ity said knife of sufficient width adjacent said hole to cover the same, substantially as and as for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of 35

two subscribing witnesses.

ALFRED B. WALLEN.

Witnesses:

JOSEPH E. ANDERSON, I. A. Ellsworth.