

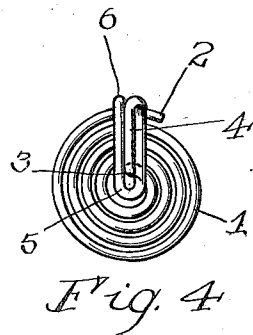
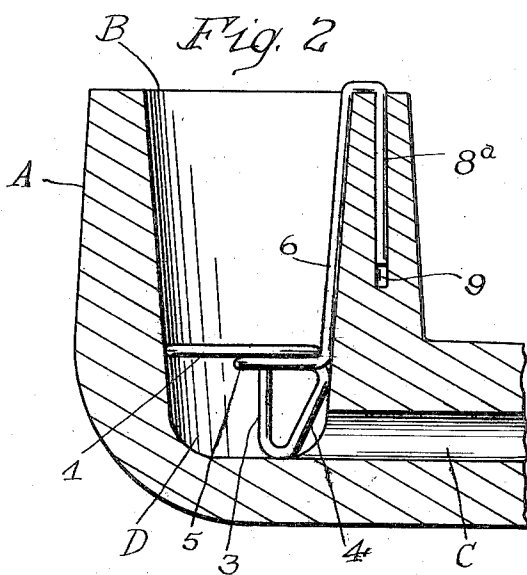
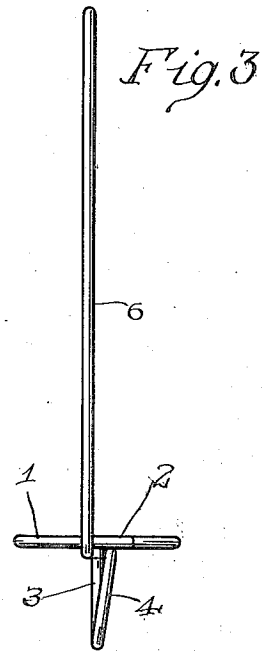
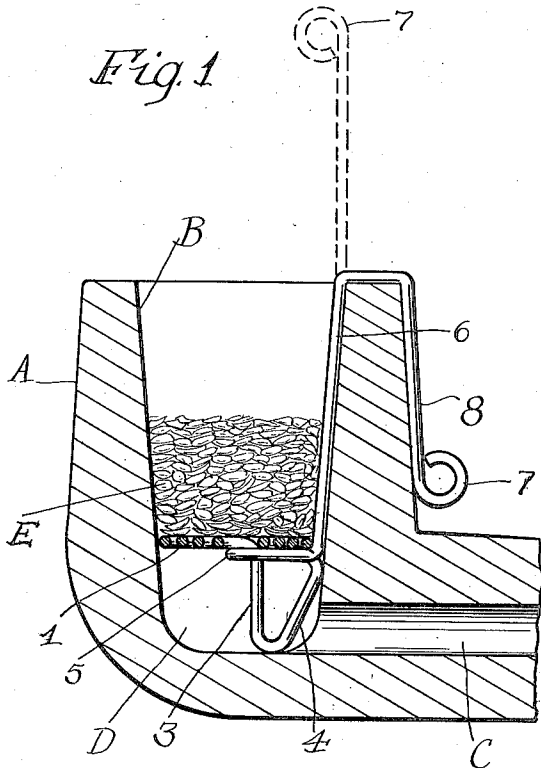
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2,052,237

ATTACHMENT FOR SMOKING PIPES

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ATTACHMENT FOR SMOKING PIPES

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5 Claims. (Cl. 131—12)

My present invention relates to smoking pipes, and it has for its object to provide a simple, removable and replaceable attachment therefor that can be manufactured in quantity at low cost and when applied to a pipe bowl will insure a free, cool burning of the charge of tobacco; will prevent the bowl from fouling in the region of the junction with the bore of the stem and will serve as a ready means for completely emptying the contents of the bowl for recharging. The improvements are directed in part toward the provision of means for supporting a grate in proper position near the bottom of the bowl and means for temporarily or detachably securing it to the pipe, by which same means the device may be manipulated by the user without soiling the hands.

To these and other ends, the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of this specification.

In the drawing:

Fig. 1 is a vertical central section through the bowl of a smoking pipe showing in position therein a grate attachment construction in accordance with and illustrating one embodiment of my invention, the grate element itself being also shown in section;

Fig. 2 is a similar view of a slightly modified form of the device;

Fig. 3 is a rear view of the device in the form in which it is distributed, and

Fig. 4 is a bottom plan view.

All of the views are slightly enlarged.

Similar reference numerals throughout the several views indicate the same parts.

Referring more particularly to the drawing, A indicates generally a pipe bowl, B the tobacco holding cavity thereof, and C the bore communicating with the bottom of the latter from the stem portion. I prefer to construct my attachment of a continuous length of spring wire, as shown, and will, therefore, confine this description to such a mode of construction, although the invention has broader aspects admitting of other mechanical designs. One end of the wire is wound into a loose spiral coil 1 with the free tip 2 on the outer convolution thereof, while the intermediate portion thereof proceeds downwardly centrally from the inner convolution at 3, thence upwardly at 4 and inwardly in a loop 5 that encircles the vertical portion 3. This loop, proceeding from the center of the spiral, radially, is next extended upwardly almost at right angles

to form a stem 6 that terminates in a loop or coil 7.

The device is furnished in the form so described and shown in Fig. 3 and partially in dotted lines in Fig. 1. In applying it to the pipe, it is inserted and positioned in the bowl cavity B, as shown in Fig. 1. The coil 1, being expansible and contractible, adjusts itself to and closely fits the cavity forming a draft transmitting grate in the manner of the fire pot of a furnace, which grate lies above the bore C and divides the cavity, so that a chamber D is created below it in communication with the bore of the stem. Its position is defined by the loop 3—4, which acts as a leg supporting the grate in this relationship. The stem 6 hugs the wall of the cavity proceeding to the exterior above the rim of the bowl. Preferably, it is then bent down from the dotted line position of Fig. 1 after the device has been established according to the depth of the cavity in the manner shown in full lines in the same figure, whereby it constitutes a spring clip at 8, engaging the exterior of the bowl with the finger piece loop 7 conveniently accessible for relieving the tension and releasing the attachment and for manipulating it generally without soiling the fingers in applying it to and removing it from the pipe. The charge of tobacco, indicated at E, rests directly on the grate 1 and the smoke is drawn through the clear chamber D and into the stem without danger of particles of tobacco being also drawn through to any substantial extent and fouling and caking the chamber D or the bore C. Saliva or the tarry products of combustion that may collect in chamber D are easily dislodged when the pipe is dumped and do not gum up with particles of tobacco or ash to be drawn through the bore in a manner so disagreeable to the smoker with ordinary equipment.

When it is desired to dump the ashes or the tobacco charge in general, the withdrawal of the device carries them out on the grate 1 in the manner of a ram which traverses the walls of the cavity and removes the particles of soft partially burned tobacco which would otherwise adhere thereto and ultimately form the baked accumulation commonly referred to as the "cake". With the emptied mass goes, of course, the soggy lump of tobacco at the bottom next to the grate, if unconsumed, that is called the "heel" and the pipe is left free and clear and ready for the next charge when the device is restored to position therein. In this clearing operation, the loop 5 acts as a reinforcement for the grate coil and prevents the latter from being unduly distorted.

It is contemplated that the grate coil 1 be initially of relatively large diameter to fit the larger cavities B and while the device is in this respect self-adjusting within certain limits, for considerably smaller bowl cavities the tip 2 may be nipped off back an appropriate length on the outer convolution so that a lesser diameter is obtained, the opportunity for which advantage is obtained because of the fact that the stem attachment proceeds from the center. After so reducing the diameter of the grate, the stem is brought close to the perimeter thereof again by simply pinching together the elements 3 and 4 constituting the leg loop.

In the modification of Fig. 2, the clip portion, indicated at 8^a, takes a form in which the finger piece loop 7 is omitted and the end of the wire takes into a hole bored vertically at 9 in the pipe bowl. The first described form of the device is designed for general applicability to pipes of various sizes, the user himself forming the clip by bending the stem with his fingers to fit his particular bowl, but the form of Fig. 2 is somewhat neater in appearance and may be resorted to when the pipe is sold with a grate made especially therefor and fitted thereto.

Another function of the supporting loop 5 and the general formation is to prevent the devices from becoming tangled when they are packed in bulk. Were there a space between the stem 6 and the grate 1, the stems of companion devices would slip between and become interlocked, resulting in the inconvenience and loss of time in separating the articles.

I claim as my invention:

1. A removable attachment for smoking pipes embodying a draft transmitting grate adapted to approximately fit the bottom of the bowl of the pipe and support the charge of tobacco, and a manipulating stem extending upwardly therefrom to engage the rim of said bowl, said grate consisting of a multiple spiral coil of spring wire with the stem proceeding from the inner convolution and the free end of which terminates with the outer convolution.

2. A removable attachment for smoking pipes

embodying a single piece of spring wire having one end coiled in a spiral to constitute a draft grate adapted to approximately fit the bottom of the bowl of the pipe and support the charge of tobacco and the other end extending upwardly therefrom to constitute a stem having a clip and finger portion engageable over the rim of the pipe, the intermediate portion of the wire being extended downwardly from the inner convolution of the grate and doubled upon itself to form a leg spacing the latter from the bottom of the bowl.

3. A removable attachment for smoking pipes embodying a single piece of spring wire having one end coiled in a spiral to constitute a draft grate adapted to approximately fit the bottom of the bowl of the pipe and support the charge of tobacco and the other end extending upwardly therefrom to constitute a stem having a clip and finger portion engageable over the rim of the pipe, the intermediate portion of the wire being extended downwardly from the inner convolution of the grate and doubled upon itself to form a leg spacing the latter from the bottom of the bowl and the leg and stem being joined by a radial loop supporting the grate from beneath.

4. The combination with a pipe bowl having a vertical cavity therein opening on the rim, of a removable grate in the bowl for supporting the charge of tobacco, said grate being provided with a stem extending upwardly within the bowl to the rim and thence downwardly within the cavity.

5. A removable attachment for smoking pipes embodying a draft transmitting grate adapted to approximately fit the bottom of the bowl of the pipe and support the charge of tobacco, and a manipulating stem extending upwardly therefrom to engage the rim of said bowl, said grate consisting of a spiral coil of spring wire, the inner end of which is extended from the central convolution thereof beneath and in supporting contact with the grate and said inner end extended radially to connect with the stem and to act as a stiffening support for the grate.

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