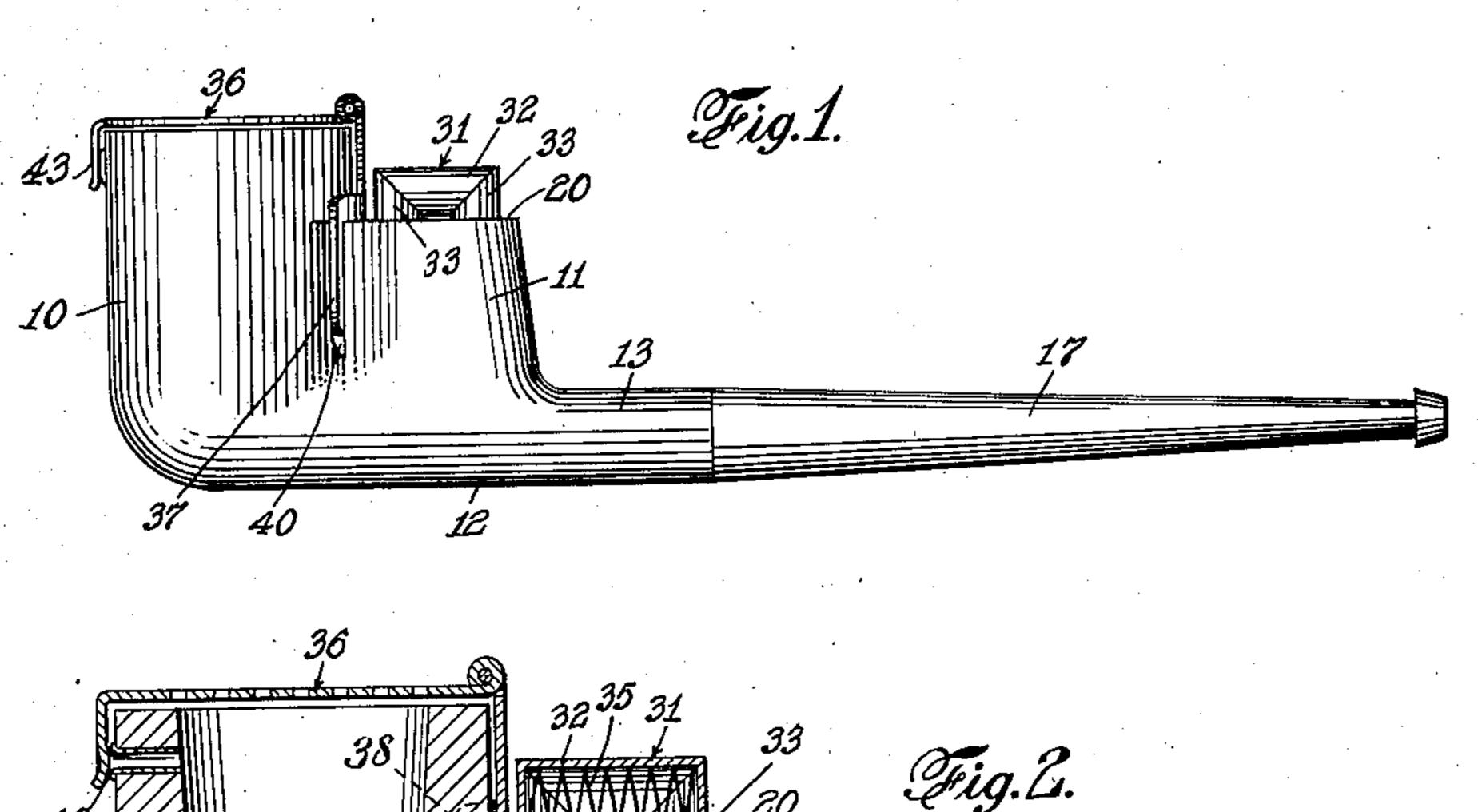
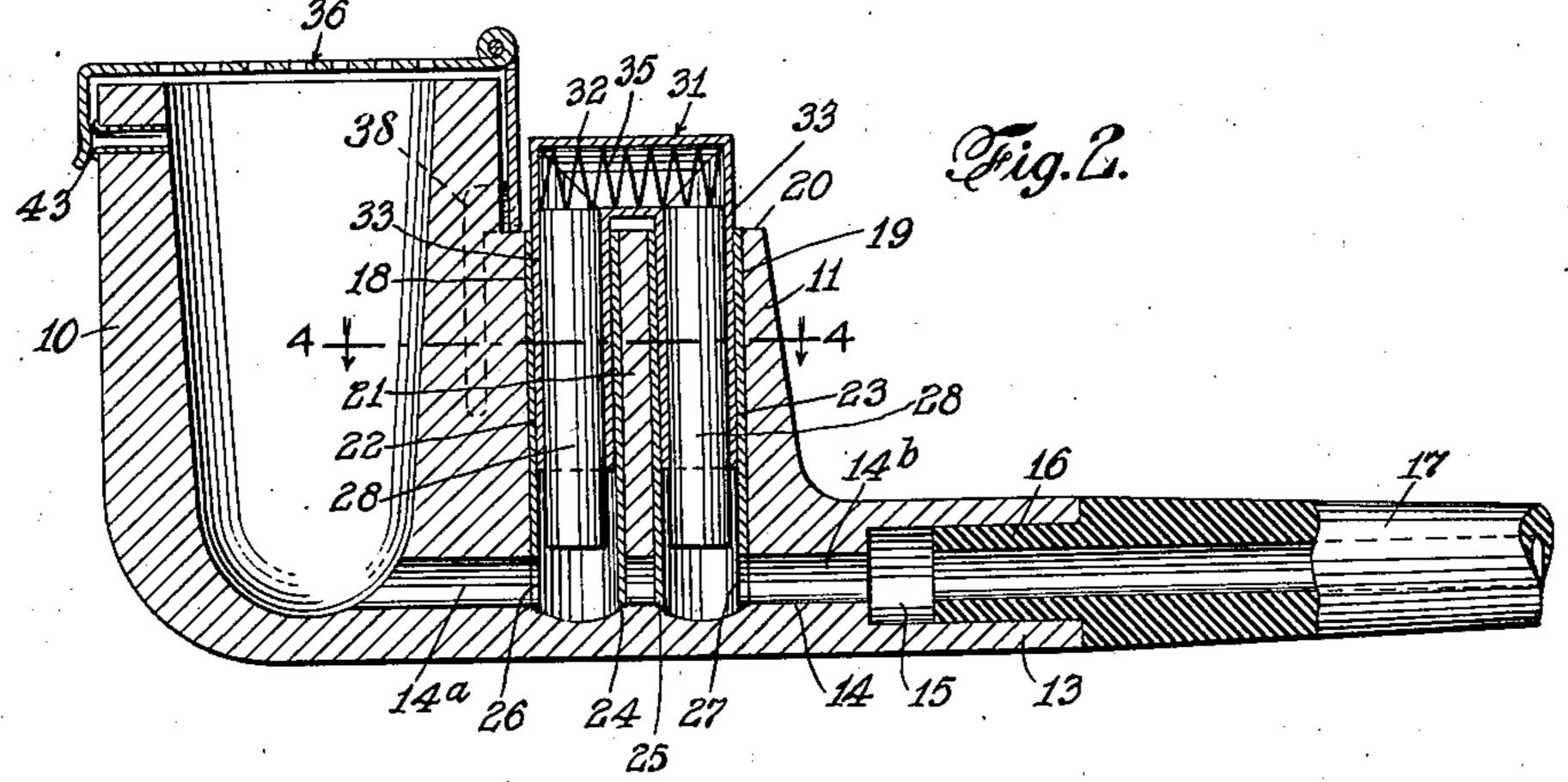
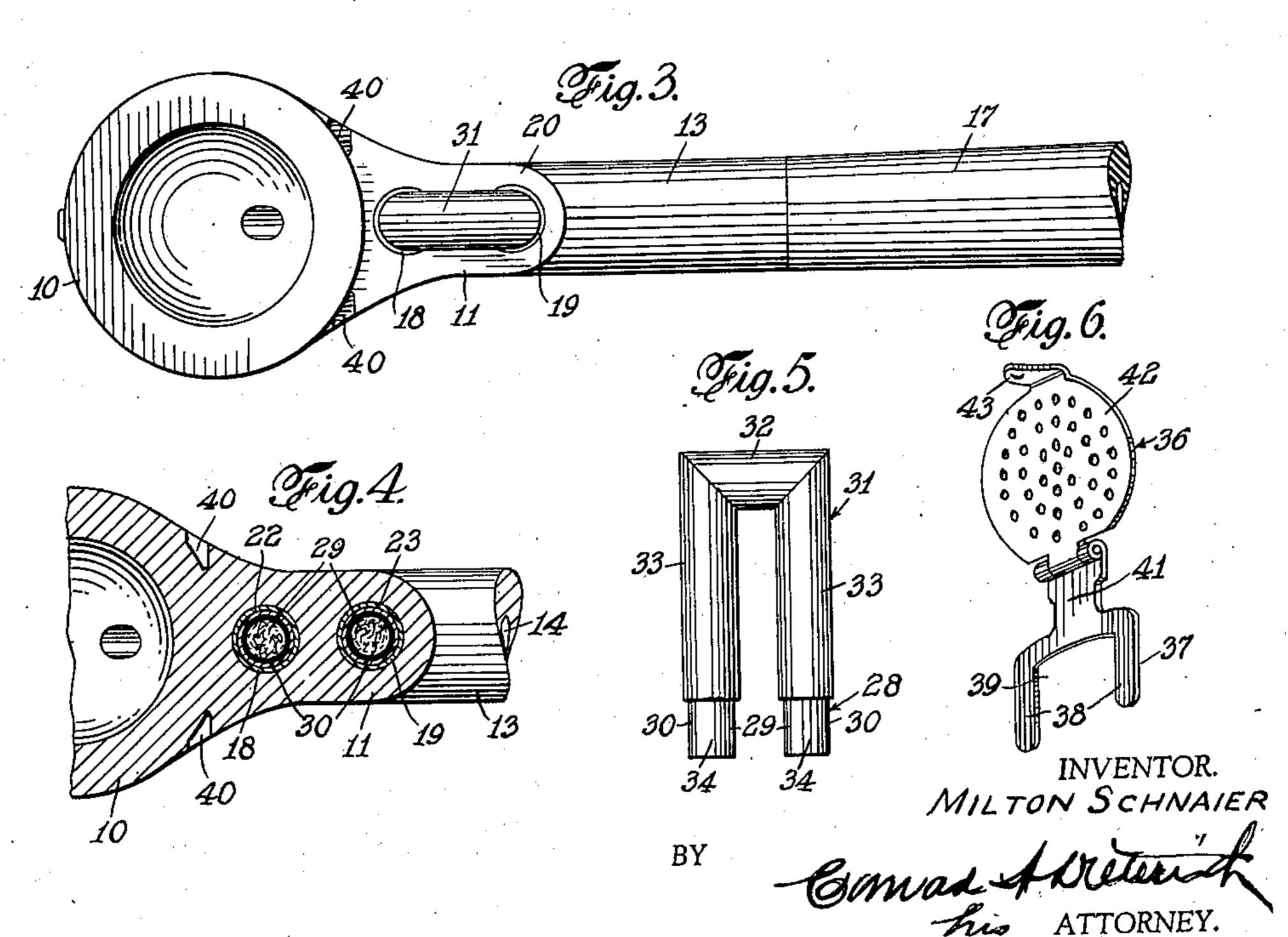
SMOKING PIPE

Filed July 16, 1937







UNITED STATES PATENT OFFICE

2,183,658

SMOKING PIPE

Milton Schnaier, New York, N. Y. Application July 16, 1937, Serial No. 153,933

3 Claims. (Cl. 131—213)

My invention relates to improvements in smoking pipes, and the same has for its object to provide a simple and efficient pipe which affords a dry, cool, pleasant smoke, and which is sanitary and clean in use.

Further, said invention has for its object to provide a pipe which includes means serving to abstract or remove from the smoke the oils or distillates produced before the smoke reaches the mouth piece of the pipe and to prevent the entrance of saliva into the bowl.

Further, said invention has for its object to provide a pipe which includes means for positioning a fluid absorbing element or cartridge within the smoke duct of the pipe, and for facilitating the removal, replacement or renewal of said absorbing element or elements as the same become saturated with noxious fluids.

Further, said invention has for its object to provide a pipe in which the absorbent element or elements are carried or held by means capable of being readily removed and replaced to facilitate the insertion and the removal of the absorbent cartridges or elements into and from position within the smoke conducting passage of the pipe.

Further, said invention has for its object to provide a pipe in which the cartridge carrier or holder serves as a part of the smoke conducting passage of the pipe.

Further, said invention has for its object to provide a pipe in which the smoke conducting passage or duct includes a plurality or succession of chambers serving as sockets for receiving the holder for the cartridges or absorbent elements.

Further, said invention has for its object to provide a pipe in which the cartridge receiving chambers or sockets thereof are provided with metal linings capable of being readily cleaned, and serving to prevent absorption of the fluids by the wall of said chambers in order to maintain the sockets free of deposits liable to interfere with the insertion of the holder or carrier into said sockets.

Further, said invention has for its object to provide a pipe in which said linings serve as barriers intermediate the entrance and discharge portions of the longitudinal run or bore of the smoke duct in order to by-pass the smoke through the fluid absorbing chambers and filters for delivery to the mouth piece.

Further, said invention has for its object to provide a pipe in which the cartridge carrier or holder is formed as a tubular bridging member having legs disposed in said sockets or smoke

absorbing chambers and serving to close the outer ends thereof and complete the smoke passage.

Further, said invention has for its object to provide a pipe in which said holder or carrier has 5 means therein for positioning the cartridges or absorbent elements therein in spaced relation to the intermediate bridging portion thereof so as to provide free passage through the cartridges and the carrier for the smoke.

Further, said invention has for its object to provide a pipe in which the cover for screening the top of the bowl thereof is readily removable when it is not desired to use the same.

Other objects will in part be obvious and in 15 part be pointed out hereinafter.

To the attainment of the aforesaid objects and ends my invention consists in the novel features of construction, and in the combination, connection and arrangement of parts hereinafter 20 more fully described and then pointed out in the claims.

In the accompanying drawing—

Figure 1 is a side elevation of one form of pipe constructed according to and embodying my 25 said invention;

Fig. 2 is a longitudinal section thereof; Fig. 3 is a plan thereof with the cover removed; Fig. 4 is a cross-section thereof on the line 4— 4 of Fig. 2;

Fig. 5 is an elevation of the carrier or holder for the absorbent element or cartridge, and

Fig. 6 is a detail perspective view of the removable cover and securing means therefor.

Referring to the drawing the pipe includes the 35 bowl 10 of suitable shape, for example, substantially cylindrical in outline and having a rounded base. The wall of the bowl at the rear thereof is extended or enlarged to provide the relatively narrow body portion or extension 11 having the 40 lower edge 12 thereof aligned with the base of the bowl and extending upwardly therefrom. The extension or body II terminates in a stem 13. The lower portion of the body 11, and the aligned stem 13, are provided with a bore 14 45 therethrough constituting the longitudinal run of the smoke conducting passage or duct of the pipe, as hereinafter more fully described. The bore 14 extends from the interior of the bowl 10 substantially at the base thereof straight through 50 the base of the portion 11 and stem 13, the portion of the bore 14 within the stem 13 being enlarged to form a socket 15 into which is fitted the reduced end 16 of the mouth piece or bit 17. The extension body II has longitudinally 55

spaced cylindrical chambers 18 and 19 formed therein and extending in parallel relation vertically therethrough from the top of the extension 11 into the bore 14. The chambers 18 and 19 con-5 stitute ascending and descending portions of the smoke conducting passage or duct 14 and are disposed transversely or angularly relative to the longitudinal run of said duct. The chambers 18 and 19 are open at the top 20 of the extension 11 10 and serve as means for receiving suitable elements for absorbing the deleterious or obnoxious liquid constituents in the smoke. The relatively flattened extension | thus provided may serve, if so desired, as a grip for holding the pipe, and 15 the surfaces thereof may serve for the attachment of monograms, emblems or other ornamental devices by means extending through the portion 21 of the extension intermediate said chambers 18 and 19.

The chambers 18 and 19 are provided with tubular metallic linings 22 and 23 coextensive with the length thereof and which project at the lower ends 24 and 25 thereof into the bore 14 to form barriers between the inlet portions 14a of the 25 bore and the discharge portions 14b thereof. The tube or lining 22 has an inlet opening 26 therein aligned with the bore portion 14a for the passage of the smoke into the chambers 18 and 19, and the tube 23 has an outlet opening 27 therein 30 aligned with the bore portion 14b for the discharge of smoke into the bit 17. The metallic linings 22 and 23 serve to prevent the absorption of the liquids by the walls of the chambers 18 and 19, and to provide interior surfaces which may

35 be readily cleaned. Cylindrical filtering or absorbing elements or cartridges 28 are disposed within the chambers 18 and 19 to abstract from the smoke any obnoxious or deleterious matter carried thereby. These elements preferably comprise a body 29 of gauze, fibre or other suitable liquid absorbing material, and an impervious open-ended enclosure 30 of a paper, cellophane or similar material for retaining the elements to shape and permitting the same to be handled with cleanliness. The elements or cartridges 28 are preferably carried or held by a separate member 31 of tubular formation adapted to be inserted into the chambers 18 and 19 at the open upper ends 20 thereof to close said open ends and form a bridging connection between the chambers 18 and 19 to establish communication therebetween. The tubular member or holder 21 is preferably substantially of U-shape form, and includes the transverse portion 32 and the angularly related tubular, open-ended leg portions 33 of a length slightly less than that of the chambers 18 and 19 and of corresponding shape to closely fit the chambers. The cylindrical absorbing cartridges or elements 28 are inserted into and closely fit within the open ends of the portions 33 in position to project a short distance beyond the ends thereof, as indicated at 34 to provide portions adapted to be gripped in removing the cartridge from the holder. Entry of the cartridges or elements 28 into the transverse portion 32 of the carrier or holder 3! is prevented by an open spacer 35, illustrated as being composed of a coiled wire or spring located within and substantially filling the 70 space within the portion 33. The cartridges 28 and the legs 33 are relatively dimensioned in length so that the lower ends 34 of the cartridges will not project over the openings 26 and 27 in the sleeves or linings 22 and 23 thereby to block 75 or close the same. The structure or arrangement

thus provided leaves the ends of the laterally enclosed cartridges 28 fully open for the free passage of the smoke therethrough, and prevents obstruction of the smoke passage by the impervious walls of the cartridges particularly at the entrance and discharge ends 14a and 14b and at the bridging member 31.

If so desired, the pipe may be provided with means 36 for closing the open end of the bowl 10 to prevent the escape of sparks and ash when the 10pipe is in use. The bowl closing means 36 is preferably made readily attachable to the pipe, and detachable therefrom when the use of the device is not desired. For this purpose, the closing means 36 comprises a bifurcated attaching mem- 15 ber 37 adapted to straddle the relatively narrow extension portion II of the pipe adjacent the bowl with the edge portions 38 of the slot 39 engaged in the vertical grooves or slots 40 on the pipe at opposite sides thereof located substantial- 20 ly at the juncture of the portion !! with the bowl 10. The member 37 frictionally interlocks with the grooves 40, and is thus secured to the pipe with the bridging portion 41 of the attachment located substantially on a plane with the top of 25 the bowl 10. The top of the bowl 10 is closed by means of a perforated cover plate 42 hinged or pivoted at 43 to the upper end of the member 37. After the cover device 36 is applied to the pipe the cover plate 42 may be readily swung down 30; against the top of the bowl and secured in closed position by the catch 43 carried thereby. Upon the detachment or removal of the device 36 from the pipe, the parts 37 and 42 may be folded together to render the same compact. The device 35 36 when folded may be readily carried about in the pocket, and readily applied to and detached from the pipe, as desired.

In operation, the cartridges 28 may be readily inserted into the carrier or holder 31 in position 40 as shown in Fig. 5. The member 31 may then be readily inserted into the metal lined socket chambers 18 and 19 to complete the smoke conducting passage and position the cartridges therein. The smoke in being drawn through the 45. pipe traverses the succession of filtering or absorbing elements which remove the distillates, oils and other liquids from the smoke, thereby freeing the smoke from undesirable constituents for delivery in a dry, clean state to the mouth. When 50. the absorbing elements become saturated or otherwise unfit for use the member 31 may be readily withdrawn and the cartridges therein replaced without requiring disconnection or separation of other portions of the pipe, such as the 55 bit or mouth piece. The pipe is also fully operative for smoking with either or both of the absorbent elements omitted.

The metallic linings or tubular members 22 and 23 provide surfaces for the interior of the sockets 60 capable of being readily cleaned and prevent absorption of the fluids by the walls of the chambers, thereby rendering the pipe less odorous. A good sliding contact between the sockets 18 and 19 and the cooperating holder 31 is thus provided as and maintained. In the present invention the lower ends of said tubular linings 22 and 23 serve as means for blocking the longitudinal bore 14 to prevent the direct passage of the smoke therethrough.

By my invention I am able to obtain a substantially dry smoke without impairing the normal operation of the pipe or unduly complicating the structure thereof. By the provision of the plurality of cartridge receiving chambers formed in 75

the extension II, as described, the absorbent path is substantially extended or lengthened, without unduly increasing the size of the pipe, and thus insure full withdrawal of the deleterious or obnoxious fluids from the smoke.

Having thus described my said invention what I claim and desire to secure by Letters Patent is:

1. A smoking pipe comprising a bowl having an extended wall portion, a smoke conducting passage in said extended wall portion including transverse passage portions open at the outer ends thereof, and a tubular bridging member including depending legs extending into said passage portions and an intermediate portion, an open spacer within said intermediate portion, and absorbent elements within said legs engaging said spacer at the inner ends thereof.

2. A smoking pipe comprising a bowl having an extended wall portion, a stem, a smoke conducting passage including a portion in said stem and ascending and descending portions in said extended wall portion open at the outer ends to provide sockets, a tubular bridging member including an intermediate portion and depending end portions removably disposed in said sockets for communicatively connecting said ascending and descending portions, said end portions serv-

ing to removably receive absorbent elements, and means for maintaining the inner ends of the absorbent elements spaced from the opposing wall of the intermediate portion.

3. A smoking pipe comprising a bowl having 5 an extended wall portion, a stem, a smoke conducting passage including a longitudinal portion in said stem and ascending and descending portions in said extended wall portion open at the outer ends, a tubular bridging member having an 10 intermediate portion and depending end portions of a length shorter than that of said ascending and descending portions and removably disposed therein to establish communication therebetween, absorbent elements having impervious open- 15 ended casings removably received within said depending end portions and projecting beyond the free ends of said depending end portions and into the ascending and descending portions of said smoke conducting passage, and means for main- 20 taining the absorbent elements at the inner ends thereof spaced from the opposing wall of the intermediate portion and in position allowing the free passage of the products of combustion therethrough.

MILTON SCHNAIER.