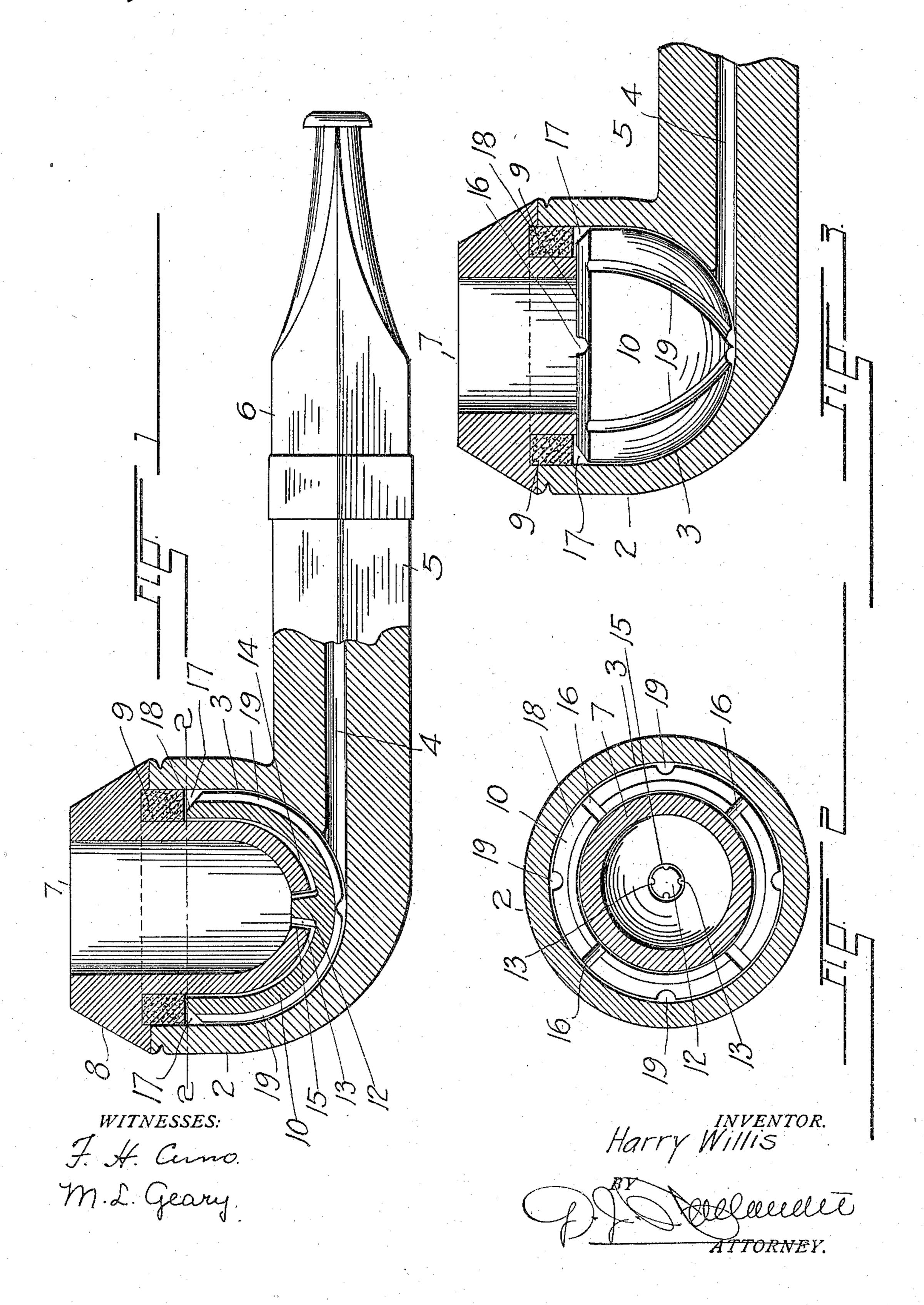
H. WILLIS.

TOBACCO PIPE.

APPLICATION FILED OCT. 27, 1909.

957,922.

Patented May 17, 1910.



## UNITED STATES PATENT OFFICE.

HARRY WILLIS, OF DENVER, COLORADO.

TOBACCO-PIPE.

957,922.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed October 27, 1909. Serial No. 524,909.

To all whom it may concern:

Be it known that I, Harry Willis, a citizen of the United States of America, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Tobacco-Pipes, of which the following is a specification.

My invention relates to certain new and useful improvements in tobacco pipes and nore particularly in the class of pipes in which an absorbent element is provided to collect the deleterious fluid that ordinarily

accumulates in its bowl and stem.

The present invention constitutes an im-15 provement over the construction shown and described in the United States Letters Patent No. 778,817 granted to me on the 27th day of December, 1904, and its object is to provide a tobacco pipe in which the bowl is 20 composed of two permanent members and an interposed absorbent member which may be readily replaced when saturated with nicotinic matter, in which the permanent parts are constructed without passages or 25 ducts liable to be obstructed and clogged, in which the absorbent member is designed to cause the smoke produced by the burning tobacco, to follow a circuitous course before it reaches the stem, and in which the action 30 of removing the absorbent bowl-member will clean the portions of the permanent members along which the smoke is conducted. I attain this object by the means illustrated in the accompanying drawings in the vari-35 ous views of which like parts are similarly designated and in which—

Figure 1, represents a sectional elevation of my improved tobacco pipe, Fig. 2, a section taken along the line 2—2 Fig. 1, and Fig. 3, a fragmentary view, similar to Fig. 1, in which the absorbent element has been

shown in elevation.

Referring to the drawings by numerical reference characters, let the numeral 2 designate the body portion of the pipe which may be of any suitable design and in which is formed a concave chamber 3, which at its bottom, communicates with an axial duct 4 in the stem 5 upon whose extremity a mouth50 piece 6 is detachably secured.

A bowl 7 in which the tobacco is burned, is removably disposed within the chamber 3 in spaced relation to its wall, and is provided at its upper end with an enlarged head 8, the lower surface of which engages the edge

of the body-member 2.

A packing ring 9 which surrounds the bowl-member 7, in juxtaposition to the head 8, is composed of cork or other resilient material and is designed to fit tightly in the 60 upper portion of the chamber 3 for the purpose of rendering the joint between the parts air-tight.

The absorbent element which as stated hereinbefore is disposed within the space between the members 2 and 7, comprises a cup 10 made of clay or other suitable porous material, the outer surface of which conforms with that of the chamber 3 upon which it is supported while its inner surface 70 is spaced from the outer surface of the firebowl 7 and its upper edge engages the packing ring 9

ing ring 9. An integral stud 12 projecting axially within the cup 10, occupies a corresponding 75 central opening 15 in the member 7 and is provided in its circumferential surface with a number of longitudinal grooves 13 through which the smoke produced in the interior of the bowl 7 may pass into the space 14 be- 80 tween the latter and the inner surface of the member 10. The smoke, ascending in the space 14, passes, through a plurality of indents 16 in the upper edge of the absorbent member, into an annular space 17 formed 85 by an exterior chamfer 18 on the edge of the cup 10 and this space communicates with the duct 4 in the stem 5, by means of a number of grooves 19 which are formed in the outer surface of the said cup in between the in- 90 dents 16, to meet at the lowermost point thereof.

From the foregoing description, it will be readily understood that my improved construction of the tobacco pipe, will greatly 95 enhance the pleasure of smoking by conducting the smoke to the mouth of the user in a cool and dry condition, while the injurious features of the use of tobacco in this form, are eliminated to a great extent by 100 the absorption of the nicotinic fluid in the wall of the porous element.

It will be observed that the smoke drawn from the burning tobacco, through the grooves 13 into the space 14 and thence 105 through the indents 16 and the grooves 19, into the duct 4 of the stem 5, is consecutively brought in contact with the inner and outer surfaces of the element 10 which by reason of its absorbent qualities will collect the 110 fluid particles carried by the smoke as well as those accumulated in the stem, until satu-

rated when it is easily removed and replaced by another one.

By imparting a partial rotation to the cup 10, while it is being replaced, all adhesive 5 matter is, by the scraping action of the edges of the grooves 13 and 19, removed from the surfaces of the opening 15 and the chamber 3 while the crust usually formed at the bottom for the fire bowl is at the same time 10 carried away upon the stud 12.

Inasmuch as the permanent parts of the pipe have no ducts or passages, clogging of the pipe by an accumulation of the oily substances of the tobacco, is entirely avoided and the pipe may be cleaned and renewed at any time by merely replacing the inexpensive saturated cup 10 by another one.

Having thus described my invention what I claim and desire to secure by Letters Pat20 ent is:—

1. In a tobacco pipe, a body portion having a chamber and a therewith communicating duct, a fire-bowl spaced from the wall of said chamber and having a head engaging 25 the upper edge thereof, a packing ring fitted between the inner surface of said chamber and the said bowl, and an absorbent cup conforming with the interior surface of the said chamber and spaced from the exterior 30 surface of the bowl, with its edge engaging the ring, the said cup having in its interior, an exteriorly grooved stud occupying a corresponding opening in the bottom of the bowl, an exterior chamfer and therewith 35 connecting indents in its upper edge, and exterior grooves extending from said chamfer to a common point at the bottom of said cup.

2. In a tobacco pipe, a body portion having a chamber and a therewith communicating duct, a fire-bowl having an air tight connection within said chamber in spaced

·

relation to its wall, and an absorbent cup conforming with the interior surface of the said chamber within the said space, the said cup having in its interior a stud occupying a corresponding opening in the said bowl and provided with exterior grooves, and in its exterior, grooves communicating with the grooves in said stud and with a common point at the bottom of the said cup.

3. In a tobacco pipe, a body portion having a chamber and a therewith communicating duct, a fire-bowl having an air tight connection within said chamber in spaced relation to its wall, and an absorbent cup within the said space and having in its interior, a stud occupying a corresponding opening in the bottom of the bowl and provided with exterior grooves communicating with the said duct.

4. In a tobacco pipe, a body portion having a chamber and a therewith communicating duct, a fire-bowl having an air tight connection within said chamber in spaced relation to its wall, an absorbent cup conforming with the interior surface of the said chamber within said space in spaced relation to the exterior surface of the bowl, the said cup having in its interior, an exteriorly grooved stud, occupying a corresponding 70 opening in the fire-bowl, an exterior chamfer and therewith connected indents in its upper edge, and exterior grooves extending from said chamfer to a common point at the bottom of said cup.

In testimony whereof I have affixed my signature in presence of two witnesses.

## HARRY WILLIS.

Witnesses:

G. J. ROLLANDET, L. J. McKay.

·