

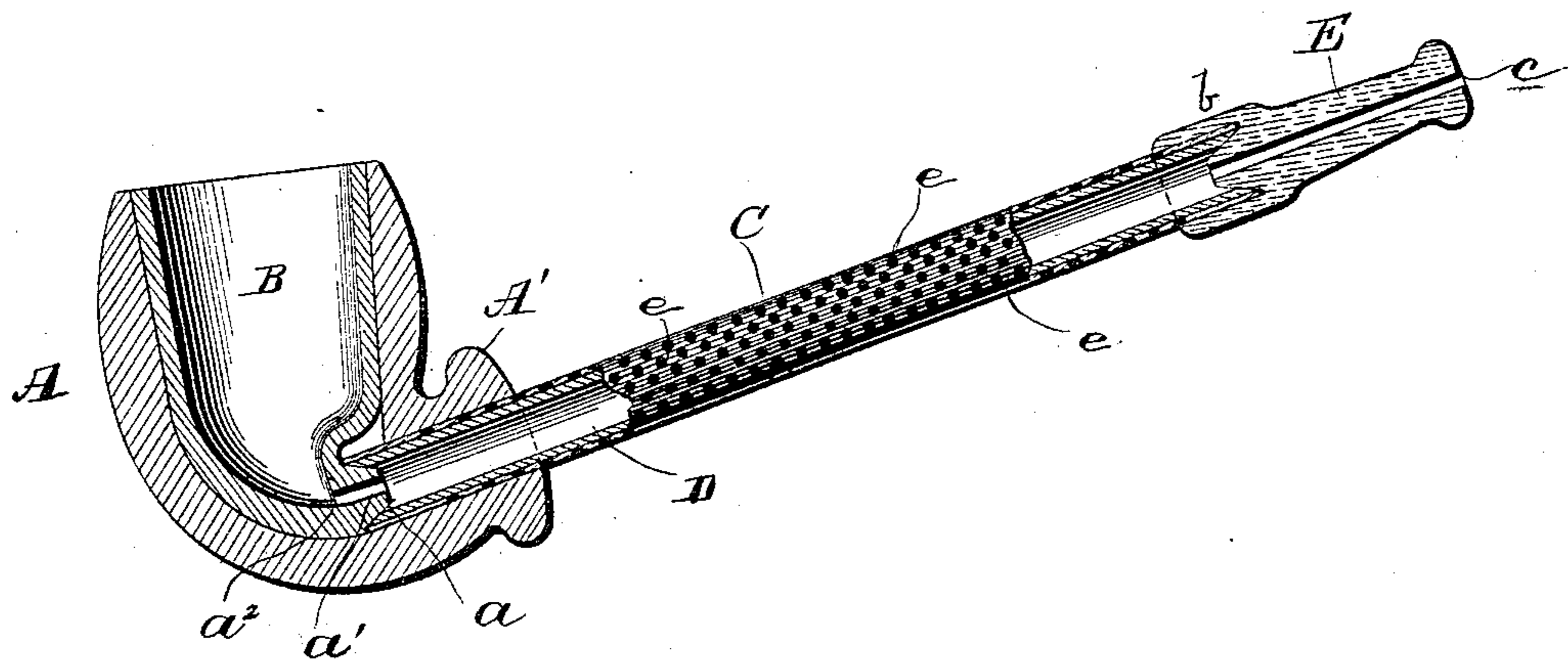
(No Model.)

J. F. MALLINCKRODT.

TOBACCO PIPE.

No. 379,585.

Patented Mar. 20, 1888.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN F. MALLINCKRODT, OF DENVER, COLORADO.

TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 379,585, dated March 20, 1888.

Application filed September 3, 1887. Serial No. 248,722. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. MALLINCKRODT, of Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Tobacco-Pipes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in pipes for smokers' use.

The object of my invention is to produce a tobacco-pipe that will, from its method of construction and materials employed in its manufacture, afford a means for the ready removal and renewal of parts that are liable to become impregnated with nicotine, so that a practically new pipe may thus be afforded at a trifling cost to the user.

A further object is to provide a tobacco-pipe with an absorbent lining throughout its bowl and stem, which is adapted to be removed when it becomes foul and a similar new lining introduced in place of the porous lining that has become saturated with nicotine, the stem locking the inserted bowl when both are in place for use.

A further object is to construct a tobacco-pipe having its stem composed of a perforated outer shell and a porous inner tubular lining, so that the latter will absorb the essential-oil of the consumed tobacco and allow it to escape by evaporation through the perforated outer shell of the pipe stem.

With these objects in view my invention consists in certain features of construction, novel combinations of parts, and the employment of a porous material, as will be hereinafter described and pointed out in the claims.

Referring to the drawing, which is represented in one figure, the bowl and lining are shown in sectional elevation and the stem partly in perspective, its end that is inserted into the bowl and the tip or mouth-piece being shown in section to expose interior constructive features.

A is the outer bowl of the pipe, made of any preferred suitable substance and pressed or molded into form, or may be carved into shape if wood is utilized as a material for its manu-

facture. The hollow chamber of the bowl A is somewhat larger in diameter at the upper end, this cavity being tapered conically, as shown.

The shell B is made to fit into the cavity of the bowl A, and has a conical nipple, *a*, formed on one side at its lower end. The nipple *a* does not project outward beyond the outer surface of the inclined wall of the shell B; hence it will offer no impediment to the free insertion of said shell into place in the cavity provided for its reception in the bowl of the pipe. A proper-sized perforation, *a'*, is made in the vertex of the cone *a*, which extends centrally through the cone till the hollow space or chamber of the shell B is intersected by it at the point *a''*.

Upon the bowl A the usual integral branch-piece, A', is formed for the attachment of the stem to the bowl.

The shell B is composed of any suitable absorbent material; but preference is given to paper-pulp molded into form and dried to produce a substantial wall or shell, its porous nature rendering it capable of taking up by capillary action the nicotine resulting from the burning of the tobacco in it.

The branch piece A' of the bowl A has an axial perforation that is of proper diameter to receive the stem of the pipe. This stem is composed of an outer metallic tube, C, which is numerously perforated at spaced intervals throughout its surface.

The metal tube C is provided with a removable porous sleeve, D, having a longitudinal orifice extending through it for the passage of smoke from the tobacco contained in shell B when the pipe is in use.

A tip or mouth-piece, E, is recessed at one end to receive the free extremity of the pipe-stem C D, and a conical joint, *b*, is made integral with the material of the mouth-piece E, the usual small smoke-passage axially perforating the mouth-piece and conical joint made in it.

The metallic stem C and its porous lining-sleeve D are cut squarely off at each end, and the longitudinal hole through the sleeve is of such a relative size to the conical joints *ab* that when the stem is forced into the branch A' of the pipe-bowl A and the mouth-piece E simi-

larly connected to the stem C D a continuous air-passage will be afforded and no leakage of air will be permitted at the points of attachment just named.

5 In operation, the pipe being connected as shown, the act of smoking ignited tobacco placed in the shell B will discharge smoke through the small orifice *a'* into the larger bore of the porous sleeve D of the stem, and the smoke
10 will move comparatively slowly through the stem and deposit the nicotine it is pervaded with on the absorbent sleeve D, which acts as a sponge and becomes saturated with this essential-oil vapor, the heat of the pipe driving
15 it to the outer surface of the porous shell and causing considerable of its volume to pass off through the perforations *e* of the metallic tubular stem C. When the shell B and stem C D are connected, as shown in the figure, the yielding nature of the porous sleeve D will allow
20 its engaged end to be slightly compressed by the cone-joint *a*, and the metal tube portion C of the stem will project over the body of the cone *a* in a manner to hold the shell B locked
25 fast in its seat, and thus render it a stable fixture with regard to location in the bowl A. It is apparent that a removal of the stem C D will release the shell B, and it may then be dislodged by a slight tap of the bowl A upon any
30 rigid substance.

The porous sleeve D may be easily pushed out of the metal stem C and both the shell and sleeve be renewed as frequently as may be desired, thus providing a new absorbent surface,
35 and in effect a new pipe.

When proper provision for extensive manufacture is made, the absorbent portions of my improved pipe may be made cheaply and afforded for general use at a low cost to the consumer, so that a cheap, compact, neat pipe,
40 devoid of objectionable features incident to ordinary pipes, is thus afforded.

Having fully described my invention, what I claim as new, and desire to secure by Letters
45 Patent, is—

1. In a tobacco-pipe, the combination, with a bowl and an inner removable shell, of a stem passing through the bowl and attached to a nipple or projection on the shell.

2. The combination, with a mouth-piece and 50 a bowl provided with a shell, the latter having a perforated nipple, of a stem one end of which passes through the bowl and engages the nipple or projection on the shell, and a mouth-piece having a recess for the reception 55 of the other end of the stem, substantially as set forth.

3. In a tobacco-pipe, the combination, with a bowl having a conical chamber, of a porous shell made to fit the conical chamber of the 60 bowl, and provided with a cone-joint at one side of its lower end, which is perforated to furnish a smoke-passage from the cavity of the shell, substantially as set forth.

4. In a tobacco-pipe, the combination, with 65 a tubular metallic stem and an internal porous lining, of a longitudinally-perforated mouth-piece having a conical projection made integral with the body of this mouth-piece, and adapted to enter said lining and lock the 70 mouth-piece thereto and also lock the lining within the stem, substantially as set forth.

5. In a tobacco-pipe, the combination, with a pipe-bowl, a porous shell, and an integral 75 perforated nipple that projects from one side of the shell, of a foraminated tubular stem having a porous lining, and a mouth-piece provided with a cone-seat, both cone-seats being adapted to engage the ends of the porous lining to render the pipe-stem air-tight at its 80 points of connection with the shell and mouth-piece, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN F. MALLINCKRODT.

Witnesses:

CHAS. M. WATERS,
R. W. SPEER.