(No Model.)

T. C. ORNDORFF.

TOBACCO PIPE.

No. 507,241. Patented Oct. 24, 1893.

Fig. 1.

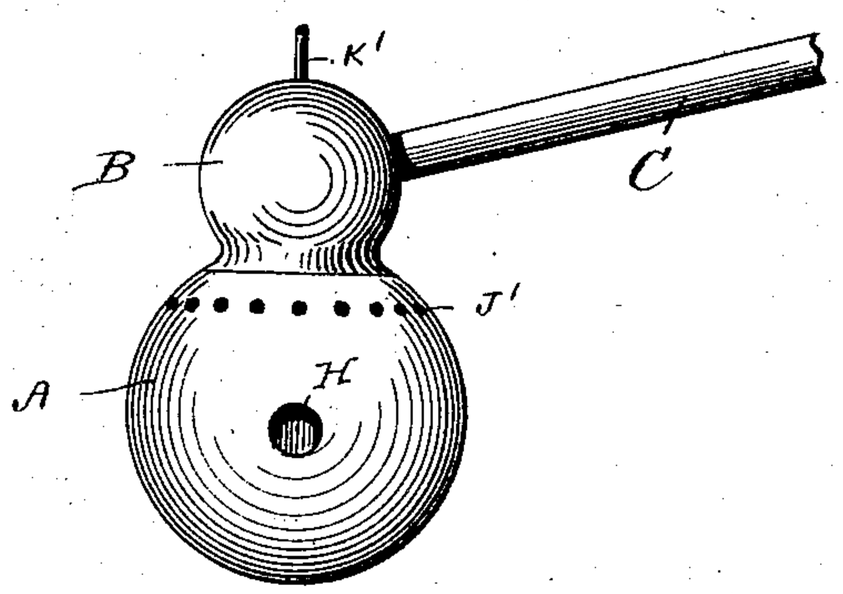


Fig. 2.

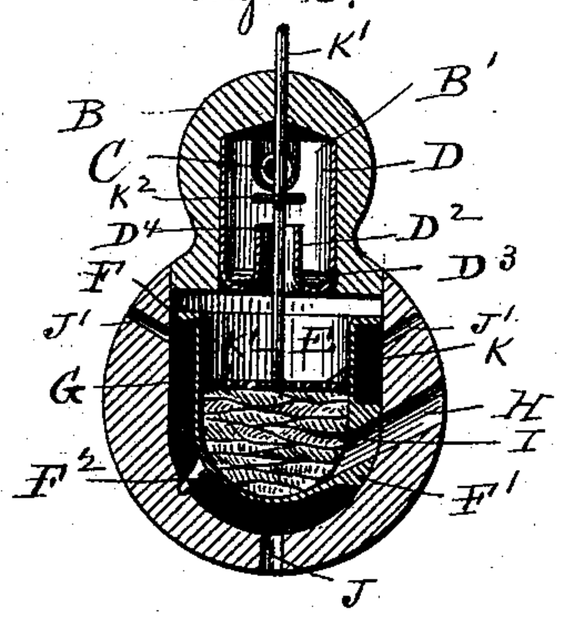
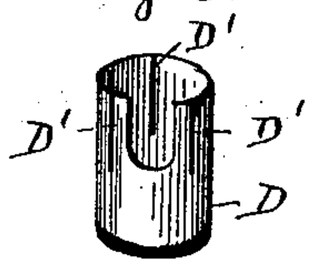


Fig. 3.



Witnesses
Chas. F. Schmelz
Emma Kester.

Inventor
Thomas C. Orndorff

By his Attorney
Rufus B. Fowler

UNITED STATES PATENT OFFICE.

THOMAS C. ORNDORFF, OF WORCESTER, MASSACHUSETTS.

TOBACCO-PIPE.

SPECIFICATION forming part of Letters Patent No. 507,241, dated October 24, 1893.

Application filed September 26, 1892. Serial No. 446,882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. ORNDORFF, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Tobacco-Pipes, of which the following is a specification, accompanied by drawings, forming a part of the same and representing a tobacco-pipe embodying my invention, and in which—

Figure 1 represents a side elevation. Fig. 2 is a vertical central sectional view and Fig. 3 is a detached view of the metal shell inclosed within the cover of the pipe and forming a trough, or cup to receive the drip from the pipe stem.

Similar letters refer to similar parts in the different figures.

My invention has for its object to provide a pipe, in which the several parts shall be so arranged as to form an upward draft, causing the combustion of the tobacco to take place at the bottom instead of the top and also to provide a trough, or receptacle to receive the drip from the stem and further to prevent the heating of the bowl by the combustion of the tobacco and to provide means by which the tobacco can be forced into a compact mass at the bottom of the bowl as combustion progresses and these several objects are attained by the pipe hereinafter described and represented in the accompanying drawings.

A denotes the bowl of the pipe open at its upper end to receive the charge of tobacco and closed by a cover B, in which the stem C is inserted. The cover B is inserted in the open end of the bowl A and held by friction, or the cover and bowl can be provided with a screw thread, or other known form of locking device by which the two can be attached. The cover B is hollow inclosing a cylindrical chamber B′ open at the lower end of the cover and containing a cylindrical metal shell D, preferably slightly larger than the chamber B′ and provided with slits D′, allowing the shell to be compressed and forced into the cover B. The shell D has its bottom turned inwardly, as shown at D^2, Fig. 2 forming an annular trough D^3 to catch the saliva, which dripping from the stem C will flow down the inner side of the shell D. The bottom of the shell D is provided with a hole D^4 in its center, allowing the smoke to pass upward from the bowl A through the shell D and stem C.

The bowl A contains an interior cup-shaped shell E, provided with a circular flange F turned outwardly to fill the interior of the bowl and form an inclosed air space, or chamber G between the inner surface of the bowl A and the outer surface of the shell E. Upon one side of the shell E is a boss F′, thick enough to extend across the chamber G and rest against the inner surface of the bowl A and upon the opposite side of the shell E is a prong F^2 entering a slight depression in the bowl A and serving for the boss F′ to hold the shell E concentrically with the bowl.

A hole H extends through the side of the bowl A and boss F′ communicating with the interior of the shell D, through which flame is admitted to ignite the tobacco I. The hole H is inclined downwardly as it passes into the pipe to prevent the ashes from falling out by gravity when the bowl is in an upright position. The hole J is made in the bottom of the bowl communicating with the chamber G and a series of small holes J′ extend through the bowl A and communicate with the upper portion of the chamber G, in order to provide for the free circulation of air through the chamber G and prevent the heat imparted by the burning tobacco to the shell E from being communicated to the bowl A. The perforated disk K rests upon the tobacco I and is provided with a spindle K′ extending upward through a hole in the cover B with the end of the spindle K′ projecting outside the cover to enable the disk K to be pushed downward and crowd the tobacco into a compact mass into the bottom of the shell E. The spindle K′ is provided with a collar K^2, which projects over the central opening in the shell D, so that shell D can be withdrawn from the cover B by means of the spindle K′, to allow the shell D to be cleaned.

The pipe shown in the accompanying drawings has its bowl formed of wood with a metallic shell E contained therein, but if desired the bowl A can be formed of metal and the inner shell E be made of clay, or other material, which will not readily absorb heat.

The spindle K′ preferably fits loosely in the hole formed in the top of the cover B so as to allow a small annular opening for the intro-

duction of fresh air for the volume of smoke as it passes through the shell D and stem C.

I am aware that it is not new to place the stem of a tobacco pipe at the upper end of the bowl and to provide means to the lower end of the bowl for igniting the tobacco; I am also aware that it is not new to place an inner bowl, or tobacco receptacle, within an outer bowl with a ventilated air space between them, also that it is not new to provide means for collecting saliva from the stem and prevent its access to the tobacco within the bowl and I do not therefore claim these features broadly.

In the tobacco pipe which forms the subject of my present invention, I not only provide an interior shell, to receive the tobacco with an air chamber G, but I provide means by which the position of the interior shell is determined with reference to the hole H, through which the tobacco is ignited and I also close the outer bowl to the admission of air, except through a large opening J at the bottom and directly beneath the lower end of the interior shell and the small holes J′ at the top of the bowl, by which arrangement I secure not only access of air to the chamber G, but a circulation of air through the chamber, for the air inclosed within the chamber G, as it becomes heated will rise and pass out through the small openings J′ and cause a current of cool air to enter the larger opening J at the bottom of the bowl and striking against the lower end of the interior shell will pass up and around the outer surface of the shell and the inner surface of the bowl. I also provide means for igniting the tobacco by an inclined hole H, which allows the frame to pass through, with the inward current of air produced by suction at the stem and at the same time prevents ashes from falling out by gravity; I also provide a detachable cup for the collection of saliva, which can be readily removed and cleaned by withdrawing the cover B from the bowl A and removing the metal shell D by means of the spindle K′ and collar K^2.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a tobacco pipe, the combination with a bowl A, and a hollow covering fitting the upper end of said bowl and provided with a stem, of a metal cup D forming the interior of said cover and provided with slits D′ by which its sides are made elastic, said cup having a central hole in its bottom with an upturned flange D^2 forming an annular trough D^3, substantially as described.

2. In a tobacco pipe, the combination of a bowl A, provided with a hole H, for the ignition of the tobacco contained in the bowl, an interior shell E inserted in said bowl and provided with a boss F′, having a hole in alignment with the hole H in the bowl and also with a prong F^2 engaging the inner surface of the bowl, whereby the position of said interior shell is determined, substantially as described.

3. The combination of the bowl A, hollow cover B, stem C held in said hollow cover, metal shell D held in said cover and provided with a hole through its bottom and having an upturned flange forming an annular trough D^3, a spindle K′ passing through said cover and said metal shell and having a perforated disk K and a collar K^2 attached to said spindle and inclosed within said metal shell, substantially as described.

Dated this 20th day of September, 1892.

THOMAS C. ORNDORFF.

Witnesses:
RUFUS B. FOWLER,
EMMA KESTER.