

R. T. MORRIS.
SMOKER'S PIPE.

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1,025,639.

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Fig. 1

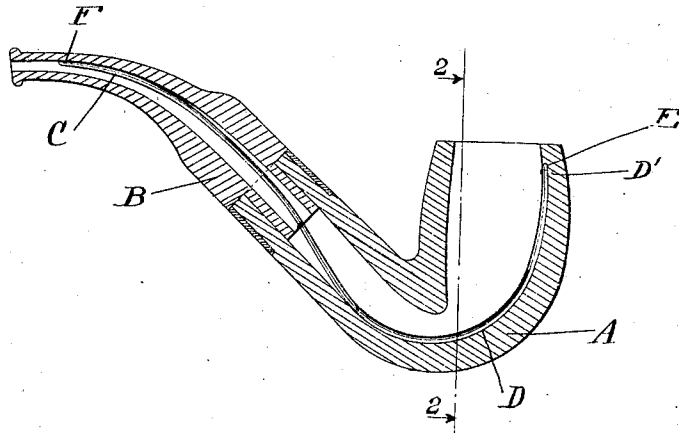
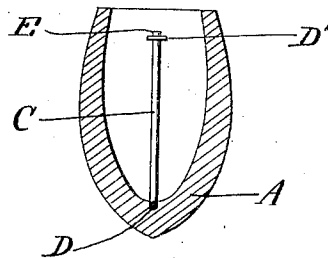


Fig. 2



Witnesses:
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ROBERT TUTTLE MORRIS, OF NEW YORK, N. Y.

SMOKER'S PIPE.

1,025,639.

Specification of Letters Patent.

Patented May 7, 1912.

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To all whom it may concern:

Be it known that I, ROBERT T. MORRIS, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Smokers' Pipes, of which the following is a specification, accompanied by drawings.

This invention relates to improvements in smokers' articles, more particularly to tobacco pipes, and the object of the invention is to avoid the abundant condensation of disagreeable tars and steam in the lumina of the bowl and stem, thus obtaining a comparatively dry pipe and obviating the necessity of frequently cleaning the pipe or blowing out the accumulated moisture.

To these ends the invention consists of the pipe, substantially as hereinafter fully described and claimed in this specification and shown in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional elevation of a pipe embodying the invention; and Fig. 2 is a transverse sectional view on the line 2—2 of Fig. 1 looking in the direction of the arrows.

When tobacco is burned in a pipe there is a destructive distillation in process. Steam from the water content of the tobacco, smoke, various tars, volatile products and nicotin combine to make a vapor which is drawn into the mouth of the smoker. In a pipe of ordinary construction, this vapor on leaving the hottest part of the pipe undergoes condensation in various degrees in the cooler tobacco beneath, and upon the cool walls of the bowl and stem. There is a greater degree of condensation upon the cooler parts of the interior of the stem. This condensed vapor is popularly believed to be saliva entering the stem from the mouth of the smoker, but I have discovered that in fact almost no saliva enters the stem. Efforts at disposing of the uncomfortable degree of moisture in pipes have been based upon a wrong conception, including this idea that the moisture comes from the mouth of the smoker. I have found, however, that this moisture practically all comes from condensation of steam in the cooler parts of the pipe at a distance from the burning point.

According to my invention, I limit the condensation of the products of combustion by abstracting heat from the zone of combustion, and distributing said heat through-

out the lumina of the bowl and stem, thus tending to maintain the vapors arising from combustion in vaporous form and thereby substantially avoiding the deposit of products of combustion. I conduct the heat from the hottest part of the pipe to the other parts of the pipe and maintain the walls of the lumina of the bowl and stem at a sufficient temperature to limit condensation to the desired degree. It is not desirable to have an absolutely dry pipe, for in that event the flavor imparted by sweet wood, as in the brier wood pipe, is lost.

Referring to the drawings A represents the bowl of a suitable pipe, and B is the stem which in this instance is shown as an ordinary push stem, although the invention may be used in connection with any pipe to which it is found applicable. In order to conduct the heat from the hottest part of the pipe, I provide a conductor C preferably in the form of a metallic wire of any suitable metal extending substantially throughout the bowl and stem. The bowl may be provided with a groove or depression D in which the conductor is laid and the conductor may be held in place by one or more staples D'. Preferably the conductor C terminates at E beneath the top of the bowl at one end and terminates at the other end F adjacent the mouth orifice of the stem. That small part of the stem between the end of the conductor F and the mouth orifice is kept warm by actual contact with the lips of the smoker. The conductor may be inserted at any convenient position in the bowl of the pipe and I am not to be limited to the location of the conductor shown in the drawings.

The device I have described accomplishes the objects of this invention in a practical manner. The heat from the hottest part of the pipe at the zone of combustion is conducted through the conductor C to the cooler parts of the pipe and distributed throughout the lumina of the bowl and stem, thereby maintaining a vaporous condition of the steam, smoke and the various volatile products of combustion. I have found by actual demonstration and test that the conductor does actually take up the heat at the hottest part of the pipe, and conduct said heat throughout the length of the lumina of the bowl and stem. The vapor in the pipe is actually maintained in a vaporous state, thus limiting the condensation to such a degree

that a practically dry pipe is obtained. The pipe is therefore less disagreeable in odor, and combustion is more complete in the tobacco, because the wetting of the tobacco in the cooler parts of the bowl by condensing vapor is avoided. The bowl of the pipe is rendered somewhat cooler, owing to the distribution of that portion of the heat conducted along the conductor. The effect of the vapor in the mouth of the smoker is to give the impression of a somewhat cooler smoke, for the reason that this vapor contains so much moisture maintained in a vaporous state.

The conductor C is at all times in contact with the hottest portion of tobacco undergoing combustion, and distributes the heat from the hottest part by conduction through the rest of the pipe, thus tending to maintain the vaporous condition of products of combustion until they have reached the mouth of the smoker. Since the conductor distributes the heat throughout the course followed by the vapor, the effect is to keep the vapor at a degree of tension which practically avoids condensation of the vapor in the cooler parts of the pipe. The smoke on reaching the mouth, seems sweeter and less pungent, because of its high moisture content and because it carries in vaporous form various fragrant products of combustion, which in pipes of ordinary construction are precipitated by condensation upon the cool walls of the lumina of the bowl and stem, and upon the cool tobacco in the bottom of the bowl.

In accordance with my invention, so little tar and nicotin is deposited in the pipe that cleansing is largely done away with. I concentrate the heat as far as possible within the pipe itself in order to maintain the vapors in vaporous condition, and the conductor is arranged wholly within the pipe, thus distributing the heat within the pipe. My invention has been found to operate satisfactorily and well.

I claim and desire to obtain by Letters Patent the following:

1. A smoking pipe, comprising in combination with the bowl and stem, of means for conducting heat from the hottest part of the pipe and distributing it throughout the rest of the pipe, thereby affording means for

maintaining the vapors arising from combustion under a sufficient degree of tension to limit condensation and substantially avoiding the deposit of products of combustion.

2. A smoking pipe, comprising in combination with the bowl and stem, of means located within the lumina of bowl and stem for conducting heat from the zone of combustion and distributing it throughout the rest of the pipe, thus tending to maintain the vaporous condition of the products of combustion until they have reached the mouth orifice of the stem.

3. A smoking pipe, comprising in combination with the bowl and stem, of a heat conductor extending throughout the bowl and stem and adapted to distribute the heat throughout the lumina of bowl and stem, thus maintaining a vaporous condition of the steam and volatile products of combustion and limiting the precipitation of said products in the bowl and stem.

4. A smoking pipe provided with a conductor of heat in the lumina of the bowl and stem and extending into the zone of combustion, thus limiting condensation of the vapors arising from combustion and maintaining the bowl and stem substantially free from deposited products of combustion.

5. A smoking pipe, comprising in combination with the bowl and stem of a heat conductor located wholly within the pipe and extending from substantially the top of the bowl to substantially the end of the stem, said conductor being adapted to conduct the heat from the hottest part of the pipe at the zone of combustion and concentrate and distribute said heat within the pipe throughout the lumina of the bowl and stem, thus tending to maintain the vapors laden with products of combustion at a sufficient degree of tension to limit condensation and substantially avoid the accumulation of deposits in the lumina of the bowl and stem.

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

ROBERT TUTTLE MORRIS.

Witnesses:

JOHN HAHN FREER,
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