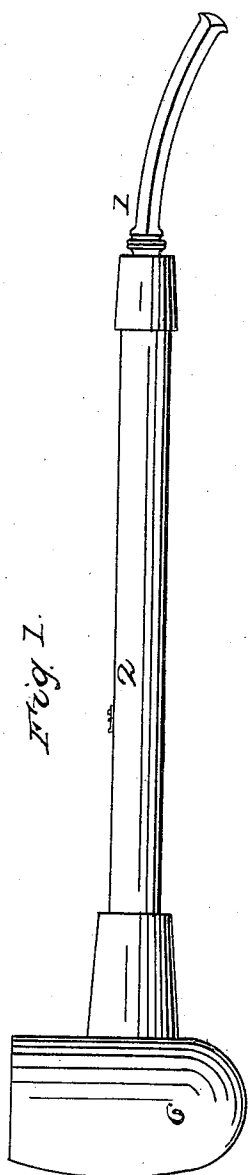


A. D. MILNE.

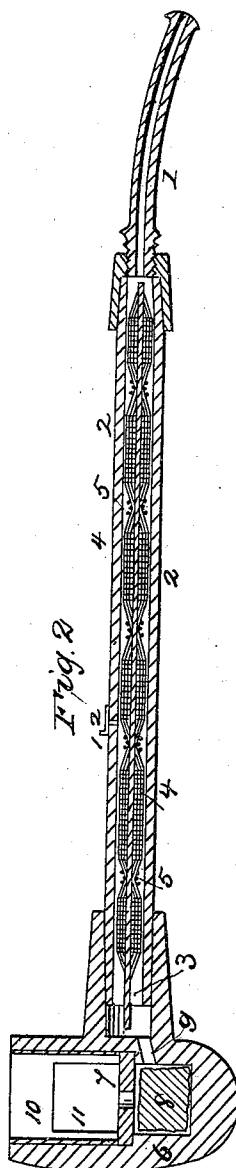
Tobacco Pipe.

No. 34,585.

Patented March 4, 1862.



Witnesses
Nelson Sizer
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UNITED STATES PATENT OFFICE.

ANDREW D. MILNE, OF TIVERTON, RHODE ISLAND.

IMPROVEMENT IN TOBACCO-PIPES.

Specification forming part of Letters Patent No. 34,585, dated March 4, 1862.

To all whom it may concern:

Be it known that I, A. D. MILNE, of Tiverton, in the county of Newport and State of Rhode Island, have invented certain Improvements in Tobacco-Pipes, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skillful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in, first, providing the stem of a tobacco-pipe with a removable metallic condenser, substantially as hereinafter described, for the purpose of cooling the smoke and condensing the essential oil of tobacco therefrom as the smoke passes through the stem; second, providing the bowl of the pipe with a removable lining constructed in the manner hereinafter described, in combination with a removable partition in said bowl, as set forth; third, providing the stem with a valve which may be opened to admit atmospheric air or closed at the pleasure of the user, the same being constructed and arranged as described, and operating in the manner set forth.

The accompanying drawings illustrate my invention as follows: Figure 1 is a side elevation of my improved pipe. Fig. 2 is a vertical longitudinal section showing the parts which lie beyond the center.

1 is the mouth piece or tube, which is constructed in any of the ordinary ways in which these are usually constructed. 2 is the main portion of the stem of the pipe. This is made with a large bore to receive the condenser, which is made of iron wire, the straight wire 3 forming the center, and being surrounded by the fine wire-gauze 4. The wire 3 extends the whole length of the body or main portion of the stem, and furnishes a convenient means of withdrawing the whole of the condenser when desired. The gauze is formed around it in such a manner as to present cylindrical sections sufficiently large to nearly or quite fill the bore of the stem, as shown, the warp of this cylindrical gauze being returned at intervals upon the wire 3, as shown at 5 5, and secured to the said central wire by winding fine wire around it. By this arrangement the smoke is partially deflected alternately to and from the center between each two contiguous

sections, and the more effective operation of the condenser thereby secured, the convergence and divergence of the warp between the sections of gauze having a tendency to produce this effect. 6 is the bowl of the pipe. The upper section or portion of the cavity is represented as being made cylindrical, this form being preferred, though other forms may be used, if desired. About two-thirds of the way down to the bottom the cavity is abruptly diminished in size, so as to form a shoulder to support the partition 7. This partition is perforated to allow the smoke to pass through it. The portion of this cavity below the partition may be filled with a sponge, 8, to absorb the impurities and a portion of the oil from the tobacco; or a wad of cotton might answer the same purpose less perfectly. The aperture 9, through which the smoke passes into the stem of the pipe, enters the bowl near the top of the sponge, but so arranged that the smoke passes through the sponge in its egress from the bowl.

To prevent the sides of the pipe becoming coated by use, so as to interfere with the removal of the partition 7, I provide the upper part of the bowl with a removable metallic lining, 10, which extends down to the partition. It will be observed that a considerable opening is made in the side of this lining at 11, and the construction is the same upon the side opposite. This, while it furnishes a convenient means of getting hold of this lining for the purpose of removing it, also furnishes a means of cleaning the sides of the pipe by turning the lining around within it, the edges so formed scraping off the coating which may have adhered to the bowl. The narrow strips which form the lower portion of this lining may be extended down by the sides of the partition and returned a short distance under it to furnish a convenient means of removing the partition, if deemed preferable. 12 is a valve attached to the stem of the pipe, and opening into it, to enable the user to modify the strength of the smoke and increase the effect of the condenser by admitting atmospheric air. At the time of lighting the pipe, or at any other time when preferred, this valve may be closed either wholly or partially, as the user may desire. This valve turns on a pivot at 13.

It is obvious that the details of construction

may be varied while the essential features of these improvements remain—as, for example, the condenser may be made of a simple coil of wire or of several coils; but the construction I have above described I consider the best.

I am aware that a pipe has been previously known in which a cell has been made below the bowl of the pipe to collect the oil of tobacco, and that this cell has been made capable of being emptied by means of a cup removably attached to the bottom of it, and forming a part thereof. It is obvious that this arrangement is very objectionable, from the fact that it involves the necessity of a perfectly-fitting joint between this removable cup and the bowl; and, even if so constructed, it involves great trouble and inconvenience in keeping such a joint clean, while in my arrangement no close fitting of the partition is required, and the outside of the pipe is not

smearred by the leaking or smearing of the joint between the partition and the bowl. My arrangement is also in other respects much more simple and available.

Having thus fully described my said invention, I claim—

1. Providing the stem of a tobacco-pipe with a removable metallic condenser, substantially as and for the purpose set forth.
2. Providing the bowl with a removable lining constructed as described, in combination with the removable partition, substantially as and for the purpose set forth.
3. Providing the stem with a valve which may be opened and closed at pleasure, as set forth.

ANDREW D. MILNE.

Witnesses:

ANDREW D. BULLOCK,
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