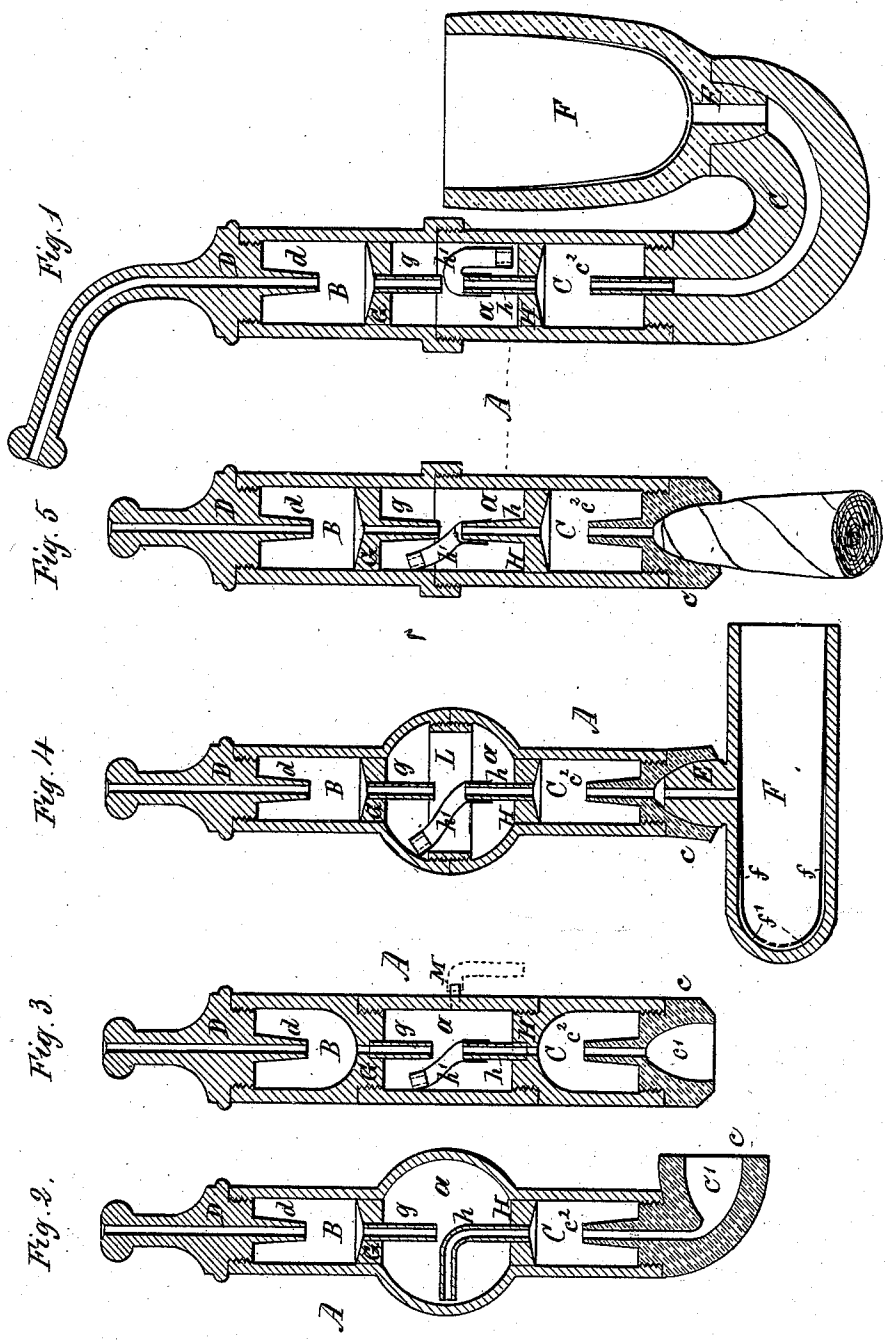
J. RIEDEL
Tobacco-Pipe.

No. 214,586. Patented April 22, 1879.



Witnesses.
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UNITED STATES PATENT OFFICE.

JULIUS RIEDEL, OF BERLIN, PRUSSIA, GERMANY.

IMPROVEMENT IN TOBACCO-PIPES.

Specification forming part of Letters Patent No. **214,586**, dated April 22, 1879; application filed November 25, 1878.

To all whom it may concern:

Be it known that I, JULIUS RIEDEL, of the city of Berlin, Prussia, in the Empire of Germany, have invented new Improvements in Tobacco-Pipes, of which the following is a specification.

My invention has for its object the construction of a tobacco-pipe stem or cigar-holder provided with means to conduct the smoke from the pipe or cigar before it reaches the smoker's mouth through a liquid, either water or other desirable liquid, to cool the smoke and eliminate therefrom as much of the contained nicotine as possible, and to so construct the stem or cigar-holder as to adapt it to be readily carried about by the smoker.

The idea of first conducting tobacco or opium smoke through a liquid bath is very old, especially in eastern countries; but, owing to the fact that all such pipes heretofore used, and commonly denominated by the name of "hookah" or "nargileh," are very cumbersome, and not adapted to be carried about in the pocket of the smoker, their use has been chiefly confined to those countries.

In the accompanying drawings I have shown in section several forms of my improved pipe-stems or cigar-holders, in which—

A is the stem, made of any suitable, usual, or preferred material, provided at or near its center with a liquid-chamber, *a*, adapted to contain water or some other desirable liquid, or a filtering material, such as a porous substance impregnated with a liquid or in a dry state. This chamber may be formed in the material employed for the manufacture of the stem, or it may be made of some other material, such as glass or metal, and is of any preferred or convenient shape, either cylindrical or spherical, as shown, or of any other shape.

The stem A is further provided with two chambers, B C, on opposite sides, and in communication with the chamber *a*. To the former chamber is secured the mouth-piece D, which may be curved, as shown in Figure 1, to adapt it for holding the stem A in a vertical position, or straight, as shown in Figs. 2, 3, 4, and 5, to adapt it to hold the said stem in a horizontal position while smoking either a pipe or a cigar.

The outer end of the chamber C is closed by a plug, *c*, having a conical recess, *c'*, which may, if desired, be screw-threaded upon its interior surface, to receive the connecting arm or plug of a pipe-bowl or the end of a cigar. This plug *c* may be semicircular in form, as shown in Fig. 1, or bent at right angles to the stem, as shown in Fig. 2, or straight, as shown in Figs. 3, 4, and 5, to receive a cigar or a pipe-bowl.

When a stem provided with a straight mouth-piece and plug, *c*, is employed in conjunction with a pipe-bowl, the latter should be so constructed as to adapt it to be connected with the plug in such a manner that the bowl of the pipe will be at right angles with the stem, and to make such pipe more compact I arrange the connecting-arm E of the bowl F upon the center of its longer axis.

To insure the combustion of the tobacco below the connecting-arm, I provide the pipe-bowl F with an interior jacket, *f*, having a perforated bottom, and attach said jacket either detachably or permanently at some point above the connecting-plug within the bowl F to form a draft-chamber, *f'*. The arm or plug E is of such a shape as to fit the conical recess c^1 of the plug *c*, and may be screw-threaded to fit the thread of the recess, or covered with some yielding or flexible material, such as rubber or cork, to secure it tightly within the recess.

The mouth-piece D is provided with an eduction-tube, *d*, projecting some distance into the chamber B, which serves to collect any liquid which may accidentally flow from the chamber *a* into said chamber B, the tube *d* preventing its flow into the mouth-piece D.

The plug *c* is also provided with an induction-tube, c^2, projecting some distance into chamber C, which, like chamber B, serves to collect any liquid that may flow back into said chamber, the induction-tube preventing such liquid from flowing to the cigar end or into the bowl of the pipe.

The chamber *a* is separated from chambers B C by the diaphragms or partitions G H, each being provided upon their proximate faces, the latter with an induction-tube, *h*, and the former with an eduction-tube, *g*, both projecting some distance within the chamber *a*, above the level of the liquid contained therein, to prevent its flow into the chambers B C, respectively.

In order to conduct the smoke from the pipe

or cigar through said liquid, the induction-tube *h* may be curved, as shown in Fig. 2, to maintain its outlet-orifice below the level of the liquid, though I prefer to attach a flexible tube, *h'*, to the induction-tube *h*, the outer end of which is weighted, by means of a perforated glass bead or otherwise, to maintain it below the level of the liquid, as shown in Figs. 2, 3, 4, and 5.

The face of the partitions G H within the chambers B C is slightly funnel-shaped, as shown, to permit the liquid which may have penetrated these chambers from the chamber *a* to run back into the latter readily.

In the accompanying drawings I have shown several methods for connecting the various parts together by means of screw-threads and otherwise, to permit the cleaning out of the chambers and the replenishing of the chamber *a*. This filling or replenishing of the chamber *a* may be effected by introducing the liquid through either of the funnel-shaped ducts, or the chamber may be formed in two sections adapted to be screwed together or screwed upon an interior ring or cylinder, L, as shown.

The chamber *a* may also be provided with a small induction nipple or tube, by means of which the chamber may be replenished by suction, by immersing the nipple into the liquid and closing the orifice of the pipe-bowl or that of the plug *c;* or a small suction-tube may be connected with the nipple M, as shown in Fig. 4, for the purpose. After the chamber *a* has been filled the nipple may be hermetically closed by a cap or other suitable means.

Many attempts have been made to bring into general use pipes or cigar-holders made chiefly or wholly of glass; but, owing to the fact that such could not be made to conduct the smoke to the mouth-piece sufficiently cool to make it pleasant to the smoker without making such pipes or cigar-holders very cumbersome and fragile, all such attempts have resulted in failure. By means of the improved construction of stems or cigar-holders above described, these may be made chiefly or wholly of glass without making them cumbersome or very fragile, while the smoke is thoroughly cooled before it reaches the mouth-piece.

Having now described my invention, what I claim is—

A pipe-stem or cigar-holder composed of a mouth-piece, D, provided with an eduction-tube, *d*, an end plug, *c*, provided with an induction-tube, c^2, and the intermediate stem having the chambers B *a* C, the chamber *a* being provided with induction and eduction tubes *h g*, all arranged, constructed, and operating substantially as and for the purposes described.

In witness that I claim the foregoing I have hereunto set my hand this 18th day of September, 1878.

JULIUS RIEDEL.

Witnesses:
GEORGE LOUBIER,
BERTHOLD ROI.