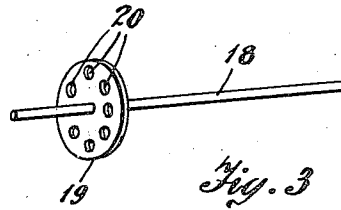
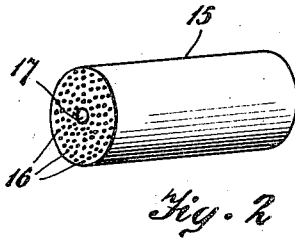
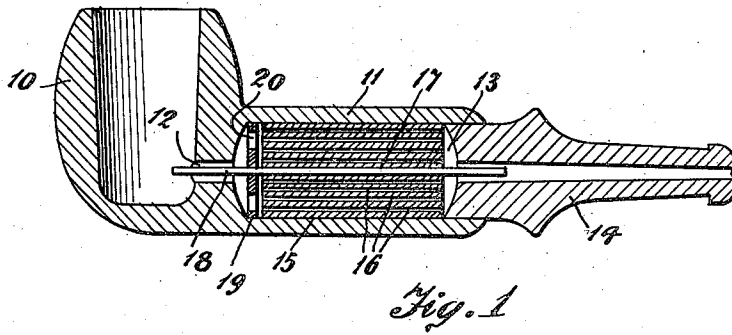


J. A. IRVING.
SMOKING PIPE.

APPLICATION FILED OCT. 16, 1916. RENEWED MAY 23, 1919.

1,310,404.

Patented July 15, 1919.



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SMOKING-PIPE.

1,310,404.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES A. IRVING, a citizen of the United States, and a resident of New York, county and State of New York, have invented a certain new and useful Improvement in Smoking-Pipes, of which the following is a full, clear, and exact specification.

This invention relates to a class of articles adapted to be used by tobacco smokers.

My invention has for its object primarily to provide a pipe whereby the oily and solid constituents, such as nicotin, pyridin, various salts together with free carbon contained in tobacco and with which the smoke thereof is more or less charged may be extracted sufficiently in a manner to prevent all "biting" and burning sensations of the tongue of a person when smoking, thereby making this form of tobacco use an enjoyable and pleasurable habit by overcoming this generally prevailing objection to pipe smoking. This is accomplished mainly by providing a bowl member for holding a quantity of smoking tobacco, and the bowl member has a chambered tubular stem for passage of smoke when the tobacco is ignited, while in the chamber is an absorbent percolator to cause the smoke to be divided into fine streams prior to delivery from the pipe as well as causing the oily and solid constituents of the tobacco in the smoke to be extracted by absorption in the percolator.

Other objects of the invention are to provide in the passage of the stem between the percolator and the interior of the bowl a separator serving to form the smoke flowing toward the percolator into a hollow stream; to provide a deflector for causing the stream of smoke to spread before entering the percolator; and to provide a smoking pipe which is susceptible of being made in various sizes and shapes so as to be easily cleaned, and which may be made of a compact and durable form.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, the said invention being more fully described hereinafter, and will then be pointed out in the claim at the end of the description.

In the drawing, Figure 1 is a longitudinal vertical section taken through one form of smoking pipe embodying my invention.

Fig. 2 is a perspective view of the percolator used in the pipe, and

Fig. 3 is a perspective view of the separator and deflector used in conjunction with the percolator.

The pipe has a bowl member 10 which may be of any desired shape and size, and projecting angularly from the lower part of the bowl member is a tubular stem 11 the passage 12 through which leads into the lower portion of the bowl. The stem 11 may be of any suitable length and shape, though the stem of this form of pipe is preferably made of a much larger diameter than the ordinary types of this class of articles, and the free end of the stem is longitudinally recessed, as at 13, for a greater part of its length, as shown. In the open end of the recess 13 of the stem is detachably fitted one end of a mouthpiece, as 14, in the form of a tube of a desired shape to allow the pipe to be smoked in the usual manner, and this closing of the recess 13 provides a chamber in the stem 11.

In the recess, or chamber 13 of the stem of the pipe is a percolator, as 15, which is adapted to be removed from the chamber so as to be replaced by a new percolator as occasion requires. The percolator 15 is preferably made of a block, or portion of the stem of a plant commonly known as palm, or reed which when deprived of its natural moisture is provided with a great number of spaced very small ducts, or passages, as 16, disposed longitudinally therethrough, and furthermore the texture of the stem of this plant is also very porous for serving according to this invention, as an effectual absorbent of the oily and solid constituents of tobacco which vaporize or pass off with the smoke when the tobacco is ignited. While I prefer to employ in conjunction with this form of pipe a percolator made of the stem of palm, it will be understood that any other suitable absorbent material adapted to divide the smoke into a plurality of continuous streams, or broken streams may be used instead thereof, and I have discovered that an efficient percolator may be provided by charging the chamber 13 with small particles of coffee, or

fine particles of tobacco. When employing a percolator made of the stem of palm, a portion is selected of a diameter to removably fit closely in the chamber of the pipe, and
 5 the stem is cut transversely to provide a block of a length somewhat shorter than the length of the chamber.

Longitudinally through the central part of the percolator 15 is an opening 17 which
 10 is in register with the passage through the stem 11 and with the passage through the mouthpiece 14. In order to cause the smoke flowing from the bowl of the pipe through the passage of the stem 11 to be formed into
 15 a hollow stream, in the opening 17 of the percolator is a separator, as 18, which is preferably in the form of a rod of a length so that one of its ends extends into the bowl of the pipe while its other end extends some
 20 distance into the passage of the mouthpiece, and this rod is smaller than the passages of the stem and of the mouthpiece to allow the smoke to flow freely through these passages around the stem.

25 Serving to also spread the smoke before entering the ducts 16 of the percolator 15, a deflector 19 is provided. The deflector 19 is preferably in the form of a disk, or plate of a shape corresponding to the periphery of the percolator as well as being
 30 of the same diameter as the percolator, and the central part of this disk is fixed on the rod, or separator 18 so as to abut against the end of the percolator opposed to the
 35 bowl of the pipe. Through the disk 19 are a number of orifices 20 arranged in spaced relation circumferentially of the rod 18 so that smoke from the ignited tobacco in the bowl of the pipe when smoked by a person
 40 will be drawn through the passage of the stem 11 around the separator 18 in the form of a hollow stream, and the stream of smoke

will then be spread by contact with the deflector 19, after which the smoke will flow through the percolator in a multiplicity of 45 finely divided streams. The oily and solid constituents, such as nicotin, pyridin, various salts as well as free carbon with which the smoke is charged will be absorbed, or collect in the percolator, and a perfect eradication of the "biting" and burning sensation to the tongue of the smoker will there- 50 by be accomplished.

In the foregoing description, I have embodied the preferred form of my invention, 55 but I do not wish to be understood as limiting myself thereto, as I am aware that modifications may be made therein without departing from the principle, or sacrificing any of the advantages of this invention, 60 therefore I reserve to myself the right to make such changes as fairly fall within the scope thereof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:— 65

In a smoking pipe having a bowl member with a chambered outlet for smoke, a percolator removably disposed in the chamber, composed of a block of the stem of a 70 plant having spaced small ducts there-through, said block being arranged whereby smoke when drawn from the bowl will pass through the ducts, and the block having a passage therethrough, a rod in the passage, 75 and an apertured plate on the rod disposed in the chamber between the percolator and the bowl member.

This specification signed and witnessed this 14 day of October, A. D. 1916.

JAMES A. IRVING.

Witnesses:

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 V. RUMPH.