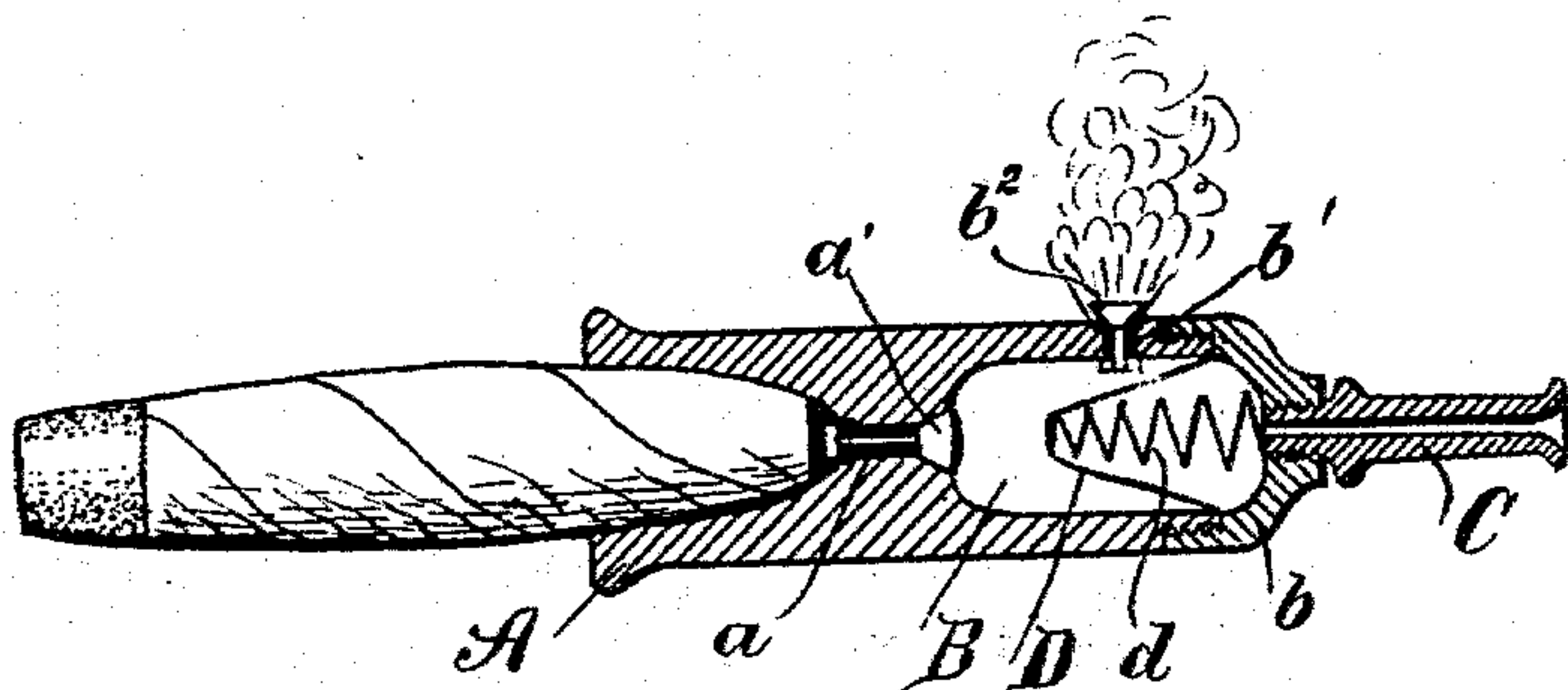


(No Model.)

R. D. GATES.
CIGAR HOLDER.

No. 515,825.

Patented Mar. 6, 1894.



Witnesses.

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UNITED STATES PATENT OFFICE.

RYERSON D. GATES, OF OAK PARK, ILLINOIS.

CIGAR-HOLDER.

SPECIFICATION forming part of Letters Patent No. 515,825, dated March 6, 1894.

Application filed August 21, 1893. Serial No. 483,646. (No model.)

To all whom it may concern:

Be it known that I, RYERSON D. GATES, a citizen of the United States, residing at Oak Park, Cook county, Illinois, have invented certain new and useful Improvements in Cigar-Holders, of which the following is a specification.

The object of my invention is to provide a cigar holder of such construction as will prevent the smoke, nicotine, and all deleterious elements from entering the mouth during the smoking of the cigar, and at the same time enabling the smoker to keep up the process of smoking and the cigar lighted; and it consists in the details of construction hereinafter described and claimed.

The drawing represents a longitudinal section of my improved cigar holder showing the cigar held in position.

In smoking a cigar, either with or without the ordinary cigar holder, such as now in common use, the smoker, in inhaling the smoke also draws into his mouth the nicotine and other deleterious substances, such as are injurious to health and makes the habit of smoking one to be discouraged. The principal enjoyment of smoking is generally considered to be the fragrance of the cigar while it is lighted and during the process of smoking.

To overcome the objections which I have enumerated and to enable a person smoking to enjoy the fragrance of the cigar, are the principal objects of my invention.

In making my improved cigar holder I use a holder, A, provided at one end with the usual longitudinal opening for the insertion of a cigar and at the opposite end with a smoke chamber B, which may be closed by having a piece *b* screwed on the end of the holder or secured to it in any convenient manner. I provide the cigar holder with the usual mouth piece or stem C, formed of amber or any desired material. A channel *a* extends through the cigar holder and connects the cigar opening with the smoke chamber. I provide this channel with a valve *a'*, intended to normally close the channel.

The cigar holder is provided preferably at the top with an opening *b'*, into which is fitted easily a gravity valve, *b²*, to normally close the opening against the entering of atmospheric

air. I provide the smoke chamber with an elastic diaphragm, D, preferably formed of rubber, firmly clamped in position between the holder and the end piece *b*, and held in a distended position by means of a spiral spring, *d*, which acts as an internal bellows in drawing in the smoke and expelling it from the smoke chamber.

It is not necessary that the spring, *d*, should be used in my improved cigar holder for holding the elastic diaphragm in a distended condition, or to resist atmospheric pressure. When the spring, *d*, is dispensed with, the elastic diaphragm will be made in the form of a thimble with the lower edge clamped in position between the cigar holder proper and the end piece, *b*. It will be understood of course that the normal condition of the diaphragm will be thimble-shaped, and it must be of sufficient strength to return to its normal condition after it has been drawn inwardly toward the stem end of the cigar holder by the suction of air through the stem, which creates a vacuum in the thimble-shaped diaphragm, and the atmospheric pressure on the outside asserts itself. The function performed by this diaphragm is the creation of a partial vacuum in the smoke chamber, B, so that the smoke from the cigar is forced through the capillary tubes of the cigar into the smoke chamber, and, when the air is allowed to enter the recess of the thimble-shaped diaphragm, the diaphragm will regain its normal position and expel the smoke out through the opening, *b'*, into the open air.

The process of smoking, when using my improved cigar holder, is as follows: The cigar holder is inserted in the mouth in the usual manner, with that portion of it containing the gravity or check valve *b²* upward. Inhaling through the mouth, the elastic diaphragm D is drawn inwardly, and the valve *b²* closes the opening in the upper portion of the smoke chamber, and the atmospheric pressure draws the valves *a'* inwardly and opens the channel between the cigar chamber and the smoke chamber, thus allowing the smoke to be forced through the cigar and enter the smoke chamber. Expelling the air from the mouth or allowing it to enter through the mouth, the stem against the elastic dia-

phragm, the spiral spring *d* pushes the diaphragm into that position shown in the drawings, this act closing the valve in the channel between the cigar chamber and the smoke chamber and opening the valve at the top of the smoke chamber, and at the same time expelling the smoke, so that the fragrance of the same may be enjoyed by the smoker.

While I have described my invention as preferably used in connection with a cigar holder, I do not desire to be limited entirely to cigar holders, as the invention is capable of being used, with slight mechanical changes, in connection with a pipe, as well as with a cigar holder, nor do I desire to be limited to my description unduly any more than is pointed out in the claims; on the contrary, I contemplate changes in form, construction, arrangement and the use of equivalents as occasion may warrant or necessity demand.

I claim—

1. In cigar holders, the combination of a cigar holder adapted to be held in the mouth, and provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers and an opening communicating with the smoke chamber and the outer air, a valve located in the channel between the smoke chamber and the cigar chamber, a valve located in the opening between the smoke chamber and the outer air, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom to the outer air, substantially as described.

2. In cigar holders, the combination of a holder adapted to be held in the mouth and provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers, and an opening communicating with the smoke chamber and outer air, a valve located in the channel between the smoke chamber and the cigar chamber, a valve located in the opening between the smoke chamber and the outer air, an elastic diaphragm in the smoke chamber,

and a spring to return the elastic diaphragm to its distended position, substantially as described.

3. In cigar holders, the combination of a cigar holder adapted to be held in the mouth provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers, an opening communicating with the smoke chamber and the outer air, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom to the outer air, substantially as described.

4. In cigar holders, the combination of a cigar holder adapted to be held in the mouth provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers, an opening communicating with the smoke chamber and the outer air, a valve located in the opening between the smoke chamber and the outer air, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom to the outer air, substantially as described.

5. In cigar holders, the combination of a cigar holder adapted to be held in the mouth provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers, and an opening communicating with the smoke chamber and the outer air, a valve located in the channel between the smoke chamber and the cigar chamber, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom to the outer air, substantially as described.

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Witnesses:

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