

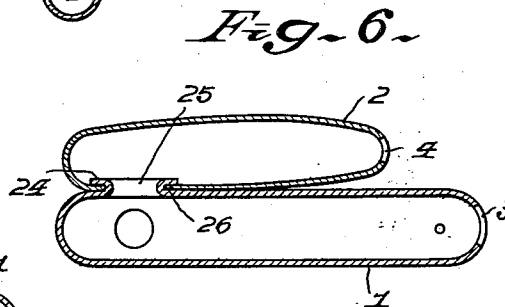
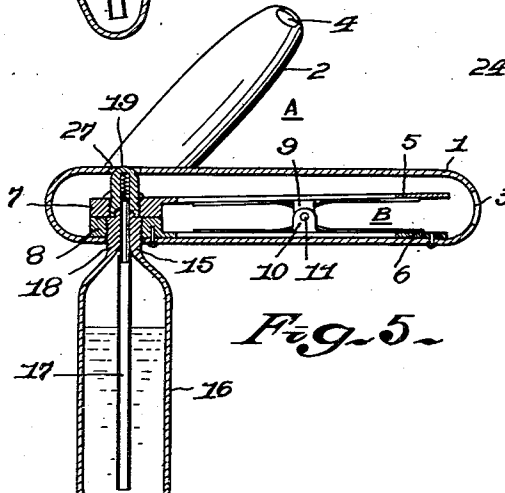
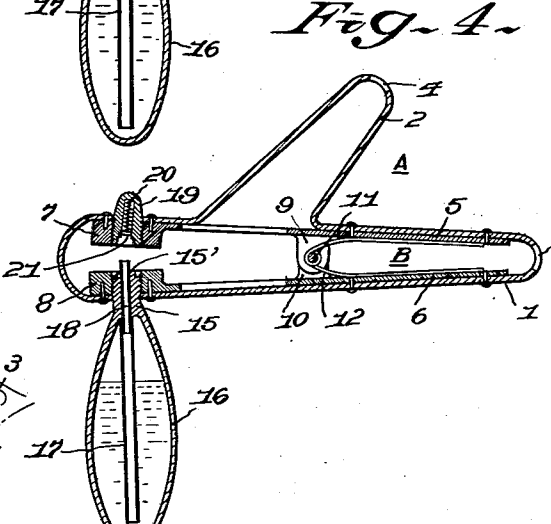
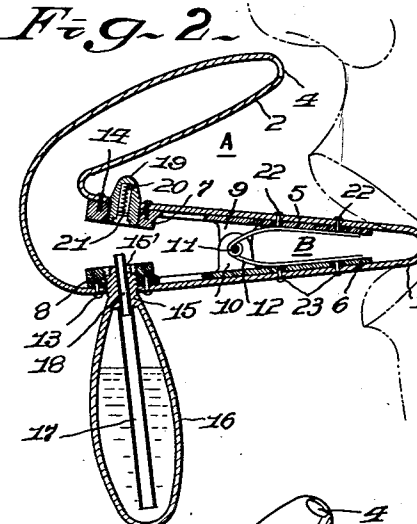
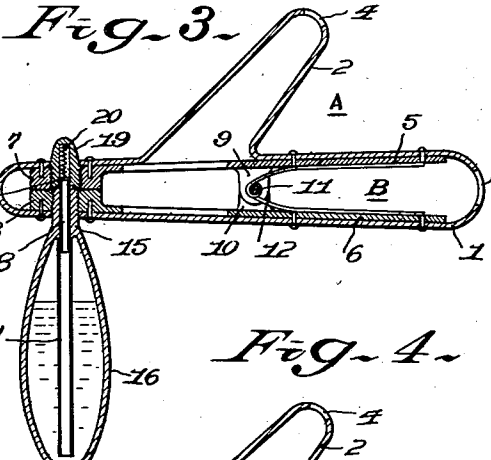
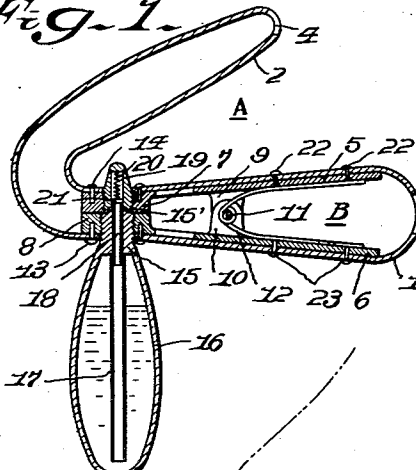
Oct. 15, 1957

HIROTADA MURAI

2,809,634

INHALING AND SNIFFING PIPE

Filed Aug. 7, 1956



1

2,809,634

INHALING AND SNIFFING PIPE

Hirotsada Murai, Setagaya-ku, Tokyo-to, Japan

Application August 7, 1956, Serial No. 602,598

3 Claims. (Cl. 128—195)

The present invention relates to an inhaling and sniffing pipe to be used as the substitute for a normal smoking pipe at any nonsmoking place such as theater, car, coal mine, oil fields, chemical factory, bus and the like.

The object of this invention is to provide a novel inhaling and sniffing pipe which is suitable for inhalation of pure fragrance of tobacco and for smelling of fragrance of tobacco smoke and is very convenient for use at any nonsmoking place such as theater, movie-theater, car, coal mine, oil fields, chemical factory, bus and the like.

This invention is embodied in a pipe constructed so that the pure fragrance of tobacco and fragrance of tobacco smoke may be simultaneously inhaled and sniffed as a result of atomization of a compressed solution for use as an atomizing medium, said solution being a mixture of liquid gas such as Freon gas and a solution obtained by impregnating any volatile liquid such as drinking alcohol with wild or artificial tobacco or with a concentrated extract prepared by extracting the fragrance and vitality of tobacco or tobacco smoke with a solvent such as ether.

The main feature and objects of this invention will be clearly understood by reference to the following detailed description taken in connection with the accompanying drawings, wherein preferred embodiments of this invention are illustrated and the same parts in said embodiments are designated by the same numerals.

Fig. 1 is a sectional elevation of an example of this invention.

Fig. 2 is a view corresponding to Fig. 1, while the device is in use.

Fig. 3 is a sectional elevation of another example of this invention.

Fig. 4 is a view corresponding to Fig. 3, while in use.

Fig. 5 is a sectional elevation of a further example of this invention.

Fig. 6 is a sectional plan view of the pipe body of the device shown in Fig. 5.

In Figs. 1 and 2, the pipe consists of a pipe body A which is made of a flexible material such as synthetic resin and the like and consists of an acute-angled inhaling pipe member 1 provided with an inhaling aperture 3 and a sniffing pipe member 2 provided with a sniffing aperture 4, a container provided with an upper plug member 15 which has a center hole, an outer screw thread and a projected neck 15' having an outer screw thread, a clipper-shaped lever B enclosed in the inhaling pipe member 1, and a valve member.

The clipper-shaped lever B consists of two clipping members 5 and 6 which are pivoted by a pivot 11 at their lug pieces 9 and 10, head pieces 7 and 8 supported, respectively, by the members 5 and 6 at their front end portions, said head pieces 7 and 8 being interiorly threaded for the reception, respectively, of the valve member and the plug member 15, and a wire spring 12 wound on said pivot 11 at its central portion and contacted with said members 5 and 6 at both end portions thereof, said

2

spring being used for normally maintaining said head pieces in contact with each other.

The lever B is attached in the inhaling pipe member 1 by inserting said lever through the inhaling aperture 3 and then by fixing the head pieces 7 and 8 and the clipping members 5 and 6 to the pipe member 1 by screws 14, 13, 22 and 23. The plug 15 is detachably screwed in the head piece 8.

The container 16 is detachably screwed at its plug member 15 in the head piece 8 and filled with a mixture of liquid gas such as Freon gas and a solution obtained by impregnating any volatile liquid such as drinking alcohol with wild or artificial tobacco (or tobacco smoke) or with a concentrated extract prepared by extracting fragrance and vitality of tobacco or tobacco smoke with a suitable solvent such as ether.

In the center aperture of the plug member 15 is attached a jetting pipe 17, the lower opening of which communicates with the solution in the container 16 and the nozzle of which projects out of the plug 15.

The valve member consists of a valve cap 19 which is screwed at its outer screw thread in the head piece 7 and is screwed at its inside screw thread on the neck 15' of the plug 15, a valve piece 21, and a spiral spring 20 inserted between said valve piece 21 and the bottom of said valve cap 19, said valve member being positioned and constructed so that the nozzle 18 may be normally closed by the valve member as shown in Fig. 1 by the action of the spring 12.

Generally, the container 16 and valve member are combined as a unit such as shown in Fig. 1. Accordingly, for the attachment of said members to the pipe body, it is only necessary to screw said set in the inside screw threads of the head pieces 7 and 8. Said combination is very convenient for replacing the container 16 with a new set after solution in the container 16 is used up.

In the embodiment of Figs. 1 and 2, when the valve cap 19 is detached from the plug member 15 by rotating the cap 19 or plug member 15 so as to detach the cap from the neck 15' and then inhaling member 1 is bitten by one's teeth at its inhaling aperture 4, the clipping members 5 and 6 take such position against the force of the spring 12 as shown in Fig. 2 and the head piece 7 is detached from the other head piece 8, so that the solution in the container 16 is atomized from the nozzle 18 through the jetting pipe 17.

As a result of said atomization, one can inhale and sniff effectively the pure fragrance in the solution through the inhaling aperture 4 and the sniffing aperture 3. When the pipe is taken out of one's mouth, the head pieces 7 and 8 are automatically closed due to the force of the spring 12 and the nozzle 18 is closed by the valve member.

When solution in the container 16 is used up, said container may be exchanged for a new container filled with the compressed solution and provided with a screwed valve member.

In the pipe shown in Figs. 3 and 4, the sniffing pipe piece 2 of the pipe body A is attached with an acute-angle to the inhaling pipe member 1 at the intermediate portion of said member 1. Except for this difference, the example of Figs. 3 and 4 is the same as the example of Fig. 1 in its construction and operation.

In the pipe illustrated in Figs. 5 and 6, the inhaling pipe member and sniffing pipe member 2 are made as separate bodies and attached in the manner shown in Fig. 6. The inhaling pipe member 1 is provided with a circular flange 24 having an opening 25 at its side face and the sniffing pipe member 2 is provided with a hole and the side face of the inhaling pipe member so that said

3

piece 2 may be rotated to a suitable acute-angled position such as shown in Fig. 5. In this example, clipping member 5 is not fixed to the inhaling pipe member 1, so that the valve cap 19 can protrude from the hole 27 of said pipe member 1 when the lever B is bitten.

Except for these differences described above, the illustration in Figs. 5 and 6 is exactly the same as the example shown in Figs. 1 and 3.

The parts or members exposed to the atomization liquid should be made of a suitable material not susceptible to corrosion by said liquid.

The pipe constructed in accordance with the present invention, as is clear from the above description, is very convenient for use at any place such as theater, car, coal mine, oil fields, chemical factory, bus and the like, wherein smoking is prohibited, because it may be used as an excellent substitute for a normal smoking pipe owing to its small and portable nature and to its suitability for sniffing and inhaling pure fragrance of tobacco or tobacco smoke.

While I have shown particular embodiments of my invention and described particular operations, it will, of course, be understood that I do not wish to be limited thereto, since many modifications may be made and I, therefore, contemplate by the appended claims to cover all such modifications as fall within the true spirit and scope of my invention.

I claim as my invention:

1. An inhaling and sniffing pipe comprising a pipe body composed of an inhaling pipe member and a sniffing pipe member, said members communicating interiorly and having, respectively, an inhaling aperture and a sniffing aperture, being arranged in acute-angled positions, and at least the inhaling pipe member being made of a flexible material, a clipper-shaped lever enclosed in said inhaling pipe member, said lever consisting of two clipping members which are provided, respectively, with head pieces and are pivoted at their intermediate portions so that said head pieces may be normally brought in contact by spring action, a container having an upper plug member detachably attached to the inhaling pipe member at one head piece of said lever, said container being filled with a mixture of liquid gas and solution having the fragrance and vitality of tobacco or tobacco smoke, a jetting pipe of which lower opening communicates with the solution in said container and having a nozzle projecting out of the head piece of one clipping member into the interior of said pipe member, and a valve member detachably attached to the head piece of the other clipping member, said valve member being positioned so as to close said nozzle mouth in the normal condition of said lever and to open said mouth when the inhaling pipe member is bitten by one's teeth at its inhaling aperture.

2. An inhaling and sniffing pipe comprising a pipe body composed of an inhaling pipe member and a sniffing pipe member, said members communicating interiorly and having, respectively, an inhaling aperture and a sniffing aperture, being arranged in acute-angled positions, and at least the inhaling pipe member being made of flexible

4

material, a clipper-shaped lever enclosed in said inhaling pipe member, said lever consisting of two clipping members provided, respectively, with head pieces pivoted at their intermediate portions so that said head pieces may be normally brought in contact by spring force, a container having an upper plug member detachably attached to the inhaling pipe member at one head piece of said lever, said detachable connection being made by screwing said plug in one head piece of said lever and said container being filled with a mixture of liquid gas and solution having the fragrance and vitality of tobacco or tobacco smoke, a jetting pipe having a lower opening communicating with the solution in said container and a nozzle projecting out of said plug into the interior of said pipe member, and a valve member detachably connected to the head piece of the other clipping member, said valve member consisting of a valve cap, a valve piece and a spring inserted between said valve piece and bottom of said cap and being positioned so as to shut out said nozzle mouth in the normal condition of said lever and to open said mouth when the inhaling pipe member is bitten by one's teeth at its inhaling aperture.

3. An inhaling and sniffing pipe comprising a pipe body composed of an inhaling pipe member and a sniffing pipe member, said members communicating interiorly and having, respectively, an inhaling aperture and a sniffing aperture, arranged side by side so as to communicate interiorly and adapted to be adjusted in their relative angle positions, and at least the inhaling pipe member being made of flexible material, a clipper-shaped lever enclosed in said inhaling pipe member, said lever consisting of two clipping members which are provided, respectively, with head pieces and are pivoted at their intermediate portions so that said head pieces may be normally brought in contact by spring force, a container having an upper plug member detachably connected to the inhaling pipe member at one head piece, said detachable connection being made by screwing said plug in one head piece of said lever, said container being filled with a mixture of liquid gas and solution having the fragrance and vitality of tobacco or tobacco smoke, a jetting pipe having a lower opening communicating with the solution in said container and a nozzle projecting out of said plug into the interior of said pipe member, and a valve member detachably connected to the head piece of the other clipping member, said valve member consisting of a valve cap, a valve piece and a spring inserted between said valve piece and bottom of said cap and being positioned so as to close said nozzle mouth in the normal condition of said lever and to open said mouth when the inhaling pipe member is bitten by one's mouth at its inhaling aperture.

References Cited in the file of this patent

UNITED STATES PATENTS

2,205,785	Benner	June 25, 1940
2,470,297	Fields	May 17, 1949
2,764,154	Murai	Sept. 25, 1956