

No. 726,037.

PATENTED APR. 21, 1903.

H. FERRÉ.
TUBULAR INHALER.

APPLICATION FILED JUNE 22, 1901. RENEWED MAR. 20, 1903.

NO MODEL.

Fig. 1

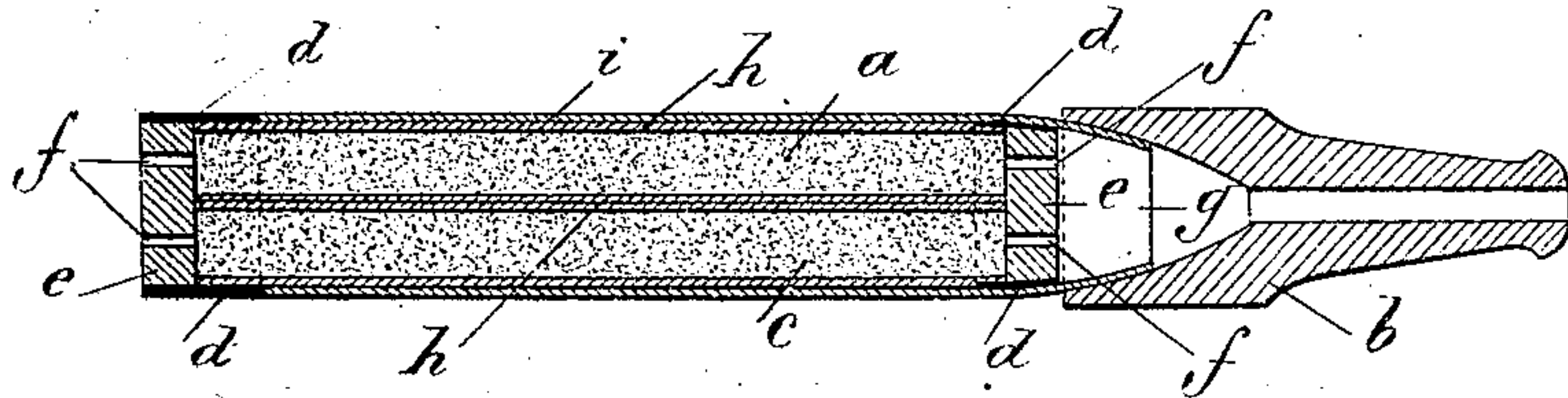
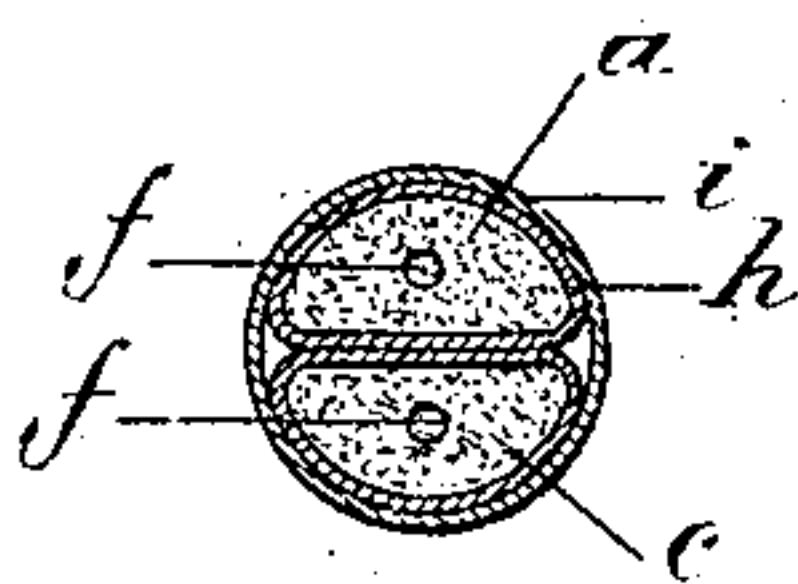


Fig. 2



Witnesses:-
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UNITED STATES PATENT OFFICE.

HENRY FERRÉ, OF PARIS, FRANCE.

TUBULAR INHALER.

SPECIFICATION forming part of Letters Patent No. 726,037, dated April 21, 1903.

Application filed June 22, 1901. Renewed March 20, 1903. Serial No. 148,795. (No model.)

To all whom it may concern:

Be it known that I, HENRY FERRÉ, pharmacist, a citizen of the Republic of France, and a resident of Paris, France, have invented an Improved Tubular Inhaler, of which the following is a specification, this invention having been patented in France November 28, 1900, No. 305,802; in England March 9, 1901, No. 5,050; in British India April 20, 1901, No. 170, and in Germany April 1, 1901, (not delivered.)

Certain vapors resulting from the combination of chemical elements are at times too unstable to enable them to be kept, while at others there is an advantage in utilizing them at the very moment of their generation, their action having at such moment a greater efficacy—as is the case, for instance, with certain reactions which are produced when the vapor is employed in the nascent state and do not take place under other conditions. Now my invention relates to an appliance whereby this generation of nascent vapor can be very readily effected.

It consists in the combination of two or more air-tight and impermeable receptacles, so disposed as to constitute a single article or appliance, through which a current of air is caused to pass either by suction or by forcing, and each of these receptacles contains the elements necessary for the generation by the passage of the current of air of a vapor, the combination of which forms on its exit the vapor which it is desired to utilize. For this purpose the impermeable receptacles are closed at their ends by a plug provided with openings, those at the outer end serving for the entry of air and those at the inner end for the outlet of the vapor produced by the passage of the air over the elements or materials contained in such receptacles. These vapors on issuing pass into a single chamber, wherein they combine to give a compound product suitable for immediate use either by continuing the suction or the forcing necessary to produce the passage of the air.

The annexed drawings show one application of my invention constituting at once an inhaling appliance and a toy.

Figure 1 is a longitudinal section, and Fig. 2 a transverse section, of the appliance fitted into a holder.

As shown, the device consists of two impermeable receptacles *a c*, each formed of a sheet of paper or a piece of textile material or of gold-beater's skin *h*, to which is gummed a sheet of gutta-percha or coated with gutta-percha size and then formed on a mandrel of suitable shape, the waterproofed surface being placed underneath. The interior of each receptacle is packed with cotton or with a porous material or body saturated with an aqueous solution of the bodies which it is desired to bring into existence. These receptacles are then firmly connected together—say by two rings or sleeves *d*—into which are inserted the closing plugs or stoppers *e*, having as many orifices *f* as there are distinct receptacles *a c*. These orifices, which are capable of being closed or opened, allow the production, by suction or by forcing, of a current of air, which acting on the cotton or the saturated porous material produces for each receptacle a distinct vapor, which on combining in the chamber *g*, formed in the inner end of the tube, produces the desired vapor, which can be immediately inhaled through the holder *b*. The appliance thus constituted may be covered with a sheet of paper or other suitable material *i*, so as to give it the appearance of a cigar. By saturating the cotton or the porous body in one of the receptacles, say, with weak hydrochloric acid and the cotton in the other receptacle with an aqueous solution of carbonate of ammonia to which polyatomic alcohol is added, and inhaling, two vapors are produced which combine and form ammonia hydrochlorate, which is disengaged or evolved in the form of an absolutely neutral and inoffensive white vapor, (provided the proportions have been properly effected,) thus giving a perfect imitation of smoke. In this way I constitute a tubular inhaler capable of forming a toy or a "surprise" and being at the same time capable of employment with any combinations of desired materials, and according to these combinations capable of use as an inhaler for various purposes.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A tubular inhaler comprising two air-

tight impermeable receptacles each independent of the other and arranged side by side, absorbent material in each receptacle, rings at the ends of the receptacles to hold them together, a covering over the said receptacles and over one of the rings with one end extended to form a chamber beyond the end of the receptacles, apertured plugs within said rings at the ends of the receptacles and a mouthpiece over the extended end of said covering and embracing said chamber, all substantially as shown and described.

2. An inhaler comprising a plurality of elongated receptacles for holding chemical agents, each of which is air-tight and imper-

meable located in juxtaposition to each other, closures for the ends of said receptacles, said closures having perforations to admit of the passage of an air-current therethrough, and a cap at one end of said receptacles and forming a chamber for the admixture of the separate gases emanating from the independent receptacles by independent passages, as set forth.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

HENRY FERRÉ.

Witnesses:

EDWARD P. MACLEAN,
 JULES FAYOLLET.