May 19, 1931. J. D. GIBSON 1,806,453

VAPORIZING DEVICE FOR TREATING ASTHMA

Filed Jan. 20, 1930

Fig. 1.

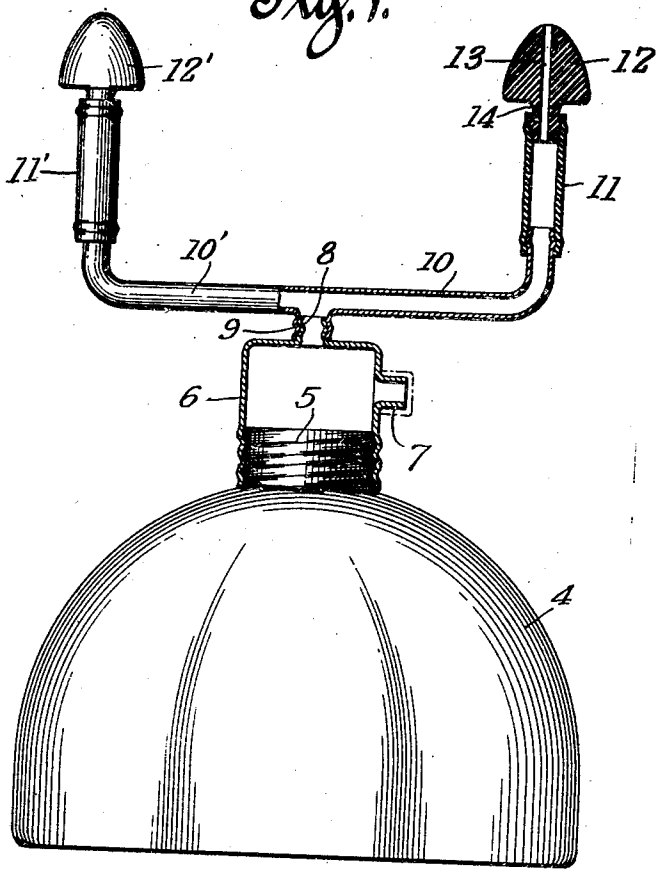


Fig. 2.

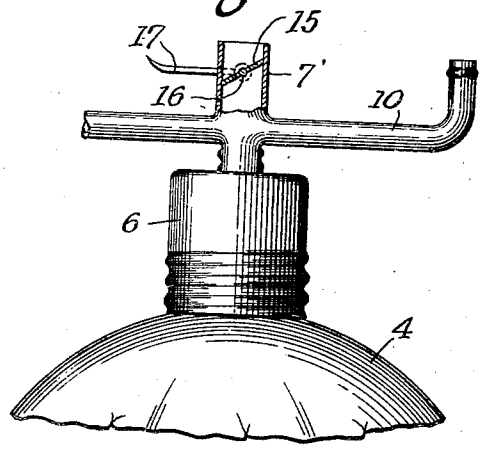
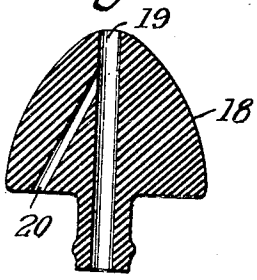


Fig. 3.



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VAPORIZING DEVICE FOR TREATING ASTHMA

Application filed January 20, 1930. Serial No. 422,076.

This invention relates to a device for inhaling fumes and vapors for the treatment of nasal and pulmonary disorders.

In the treatment of certain disorders such as asthma, bronchitis, and the like, it is essential that the vapor or fumes of the remedial compound penetrate deep into the parts of the body being treated. The usual vaporizing devices employ a bulb for forcing the compound through the nostrils; but such devices are objectionable in that they exert a dangerous pressure upon the delicate membranes of the nostrils, and are ineffective for forcing the compound into the lungs.

It is an object of this invention to provide an inhaling device by means of which remedial vapors or fumes may be drawn deep into the lungs by the respiratory actions of the person being treated.

A further object is the provision of an inhaling device which is simple in structure and inexpensive; and which may be conveniently manipulated.

These and other objects are attained by the novel construction, combination and arrangement of parts hereinafter described and shown in the accompanying drawings, constituting a material part of this disclosure, and in which:

Figure 1 is an elevational view of the preferred form of the device partly in section.

Figure 2 is an elevational view of a modified form partly in section.

Figure 3 is a sectional view of a modified form of nozzle adapted to be used in the device.

Referring to the drawings, in Figure 1 the inhaling device is shown to include a receptacle 4 for the remedial compound, which receptacle has an externally threaded mouth 5, adapted to accommodate the threaded portion a cap 6, the latter being provided with an outwardly projecting apertured lug 7 through which air may be drawn into the cap above the mouth 5. The cap 6 is also provided with a threaded projection 8 in engagement with a similar projection 9 integral with and intermediate the tubular members 10 and 10′, said tubular members having their free ends upturned and ribbed to accommodate the flexible tubes 11 and 11′, which flexible tubing may be of any convenient length. The nozzles 12 and 12′ are held in the tubes 11 and 11′ respectively, by means of the ribbed projections 14, and each nozzle has a central passage 13 communicating with the tubing.

In operation, the patient inserts the nozzles 12 and 12′ into his nostrils, and removes a cap (indicated in dotted lines in Fig. 1) from the apertured lug 7. He then inhales the vapor or fumes of the compound carried in the receptacle 4, which is advantageously mixed with the beneficial oxygen drawn through the apertured lug 7. It is seen that the transmission of the vapors is due to the respiratory actions of the patient, and consequently, such vapors or fumes will be drawn into the lungs and other members of the respiratory system.

In Figure 2 is shown a modified form of the device in which the air is admitted to the device by means of a short tube 7′ substantially in alinement with the projections 8 and 9. Fixed to a pin 16 journalled in the tube 7′ is a butterfly valve 15, which may be conveniently rotated to an open or closed position by means of an arm 17, also fixed to the pin 16.

In Figure 3 is shown a modified form of nozzle having a body 18 provided with the usual central passage 19. Communicating with passage 19 is an inclined passage 20 through which air may also be inhaled to be mixed with the vapors of the compound carried in receptacle 4.

The foregoing disclosure is to be regarded as descriptive and illustrative only, and not as restrictive or limitative of the invention, of which obviously an embodiment may be constructed including modifications without departing from the general scope herein indicated and denoted in the appended claim.

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

In an inhaling device, a receptacle, a cap, means for detachably connecting the cap with the receptacle, a tubular member, means for detachably connecting the tubular mem-

ber intermediate its length with the cap, a tube extending laterally from the tubular member in alinement with the cap, a butterfly valve carried in said tube, and means for controlling the position of the butterfly valve.

In testimony whereof I affix my signature.

JOSEPH D. GIBSON.