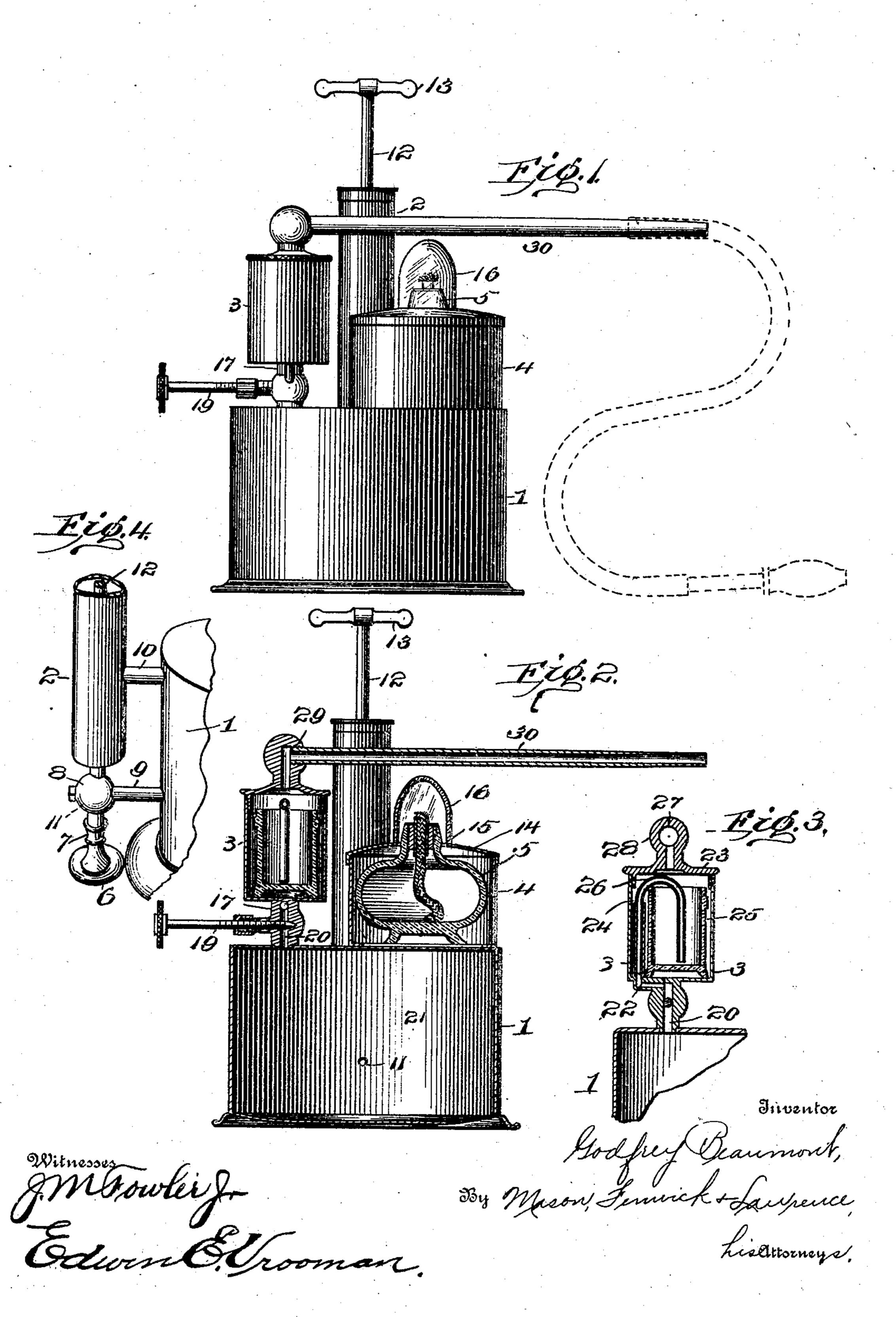
G. BEAUMONT. VAPORIZER. APPLICATION FILED 007. 3, 1904.



United States Patent Office.

GODFREY BEAUMONT, OF DALLAS, TEXAS.

SPECIFICATION forming part of Letters Patent No. 788,345, dated April 25, 1905.

Application filed October 3, 1904. Serial No. 227,053.

To all whom it may concern:

Be it known that I, Godfrey Beaumont, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, 5 have invented certain new and useful Improvements in Vaporizers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains 10 to make and use the same.

This invention relates to improvements in medical apparatus, and particularly to that class of improvements set forth in my Letters Patent No. 741,996, issued October 20, 1903, 15 of which this application is an improvement.

The object of the present invention is the provision of means for producing medicinal vapor under pressure and at any desired tem-

perature.

Another object of the invention is to improve the construction of a simple and durable apparatus which comprises a minimum number of parts, such parts being so assembled as to produce an inexpensive and efficient 25 construction.

With these and other object in view the invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described, illustrated 30 in the accompanying drawings, and more particularly pointed out in the claims hereto ap-

pended.

In the drawings, Figure 1 is a view in side elevation of an apparatus constructed in ac-35 cordance with the present invention. Fig. 2 is a vertical central sectional view of the apparatus depicted in Fig. 1 with the cannula removed therefrom. Fig. 3 is a fragmentary sectional view of the apparatus at right an-40 gles to the section in which Fig. 2 is taken of the medicine-containing compartment. Fig. 4 is a fragmentary sectional view of the apparatus, showing the base portion of the pump and the means whereby the same is secured to 45 the compressed-air reservoir.

Referring to the drawings by referencenumerals, 1 designates a compressed-air tank or reservoir forming the base of the appara-

tus and to which is secured a pump 2. Secured above the compressed-air tank 1 is a 50 medicine-casing 3, which is carried upon the tank in parallel position with a cylindrical casing 4, within which is removably positioned a

lamp 5 of ordinary construction.

While the compressed-air tank or reservoir 55 is preferably cylindrical in construction, it will be obvious that other modifications may be resorted to within the scope of the present invention. The pressure in the compressedair tank 1 is designed to be retained at any 60 suitable height by means of the pump. The pump 2 is provided with a support or base which comprises a base member 6, which is secured to the compressed-air tank 1, and rising from said base member 6 is a vertical 65 standard 7, which is enlarged at 8 and is secured to the base of the cylindrical casing of the pump. Secured the spherical enlargement 8 of the standard 7 and connected with the compressed-air tank 1 is a horizontal tub- 7° ing 9. A connecting member 10 is secured in parallel position to tubing 9, to the pump 2, and tank 1. A right-angled air-passage 11 is formed in the standard 7 and tubing 9, as is shown by broken lines, Fig. 4. A plunger 75 12, which is provided with a handle 13, is removably secured by ordinary means within the cylindrical casing of the pump. The compressed air is forced from the pump 2 into the tank 1 through the air-passage 11.

The auxiliary casing 4, which is secured above the compressed-air tank 1, is provided with a removable cover 14. The cover 14 is provided with a central opening 15, through which the wick and neck portion of lamp 5 ex- 85 tend when the lamp is positioned within the auxiliary casing and the cover is placed thereon. For the purpose of extinguishing the wick when the same is ignited a removable cap 16, preferably formed of glass or analogous 90 material, is positioned upon the cover 14.

An integral tubular extension 17 is formed at a right angle upon the upper portion of the compressed-air tank 1, to which is secured the medicine-casing 3, which is preferably 95 constructed cylindrical in shape. A valve

device 19 is formed upon tubular extension 17 for the purpose of controlling the supply of atmosphere through passage 20 from the compressed-air reservoir 21 of tank 1 of the 5 medicine-containing compartment formed in casing 3. The air-passage 20 communicates with a right-angled air-passage 22, formed in the bottom of casing 3. The casing 3 is preferably cylindrically shaped and is provided 10 with a removable cover 23. Positioned within the casing 3 and secured integrally thereto is a tubing 24. The tubing 24 is positioned so as to communicate with the air-passage 22, formed in casing 3 and extension 20, and the 15 passage 20, formed in extension 17. A removable receptable 25 is positioned within the casing 3, said receptacle being provided for the reception of liquids. An approximately U-shaped tube 26 is removably positioned 20 within the vertical tubing 24 and receptacle 25. The approximately inverted - U - shaped member 26 is provided for the purpose of conducting atmosphere from the reservoir 21 of tank 1 into and discharging the same near 25 the bottom of the liquid-containing receptacle 25, so that when medicine is deposited in the receptacle 25 and atmosphere is discharged near the bottom of said receptacle it will be necessary for the atmosphere to pass through 30 the liquids contained in the receptacle before the same is permitted to pass from the receptacle to the outer atmosphere. The cover or cap 23 is provided with a right-angled passage 27, formed in a spherical extension 28. 35 The passage 27 is provided with a screwthreaded surface 29, which is formed for the purpose of removably retaining a horizontal tubing 30 in an assembled position with the cover 23. The tubing 30 is adapted to be se-4° cured above the lamp 5, so that the same may be heated when desired for the purpose of heating the medicated vapors, which are adapted to be passed therethrough. The tubing 30 is tapered near its outer end for the pur-45 pose of facilitating the positioning of the cannula thereon, which is shown in broken lines, Fig. 1.

The equalizing-valve 19 is provided for controlling the degree of pressure passing through

In operation the cannula is positioned upon the end of tubing 30, the upper end of the wick, which is positioned in lamp 5, is lighted, the said cannula placed to the nostrils or other parts to be treated, and valve 19 opened to a desired degree, a suitable supply of medicine having been previously introduced into the receptacle 25 and the desired quantity of compressed air forced into the compartment 66 21 of compressed-air tank 1 by means of pump

2. When the valve 19 is thus opened, the air within the compartment 21 of tank 1 will rise and passing through passages 20 and 22

and tubing 26, thence through the medicine contained in receptacle 25, thence through the 65 passage 27 of cover 22, passing through tubing 30, which is heated by lamp 5, is discharged out of the cannula on the end of the tube. The medicated vapors are heated, by means of the lamp, to a desired degree before 70 they are discharged from the cannula.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. In a vaporizer, the combination with a 75 base constituting an air-reservoir and means for compressing air therein, of a casing upon said base, valved means for supporting the casing upon the base and for establishing communication between it and the base, a detachable receptacle within the casing, a crooked air-conducting means extending from the valved means to the interior of the receptacle, and an outlet-tube extending through the casing.

2. In a vaporizer, the combination with a base constituting an air-reservoir and means for compressing air therein, of a casing upon the base, valved means for supporting the casing upon the base and for establishing compunication between said casing and base, a detachable receptacle within the casing, a crooked air-conducting means extending from the valved means to the interior of the receptacle, an outlet-tube extending through the 95 casing, and detachable heating means upon the

asse and below the tube.

3. In a vaporizer, the combination with a base constituting an air-reservoir, of a compressing device at one side and communicating with the base, a supporting-stand for said compressing device, a casing upon the base, valved means connecting said casing with the reservoir and adapted to establish communication therebetween, a detachable receptacle within the casing, a detachable crooked air-conveyer extending from the valved means into the receptacle, an outlet-tube detachably connected to the casing, and a detachable heating device upon the base and below the tube.

4. In a vaporizer, the combination with a base constituting an air-reservoir and air-compressing means communicating with the base, of a casing, valved means for supporting the casing upon the base, said means serving to establish communication between the base and casing, a removable receptacle within the casing, a device for conducting air from the valved means to the interior of the receptacle, a heating device upon the base and an outlet-tube movably mounted upon the casing and adapted to be moved into position above the heating device.

5. In a vaporizer, the combination with a base constituting an air-reservoir and air-com- 125 pressing means communicating with the base,

of a casing, valved means for supporting the casing upon the base, said means serving to establish communication between the base and casing, a removable receptacle within the casing, a removable crooked air-conveyer extending from the valved means and into the receptacle, a heating device upon the base and an outlet-tube movably mounted upon the casing

and adapted to be moved into position above the heating device.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

GODFREY BEAUMONT.

Witnesses:

G. G. Dreier,

R. L. McCreight.