

(No Model.)

J. E. POINDEXTER.
HAIR SINGER.

No. 405,502.

Patented June 18, 1889.

Fig. I

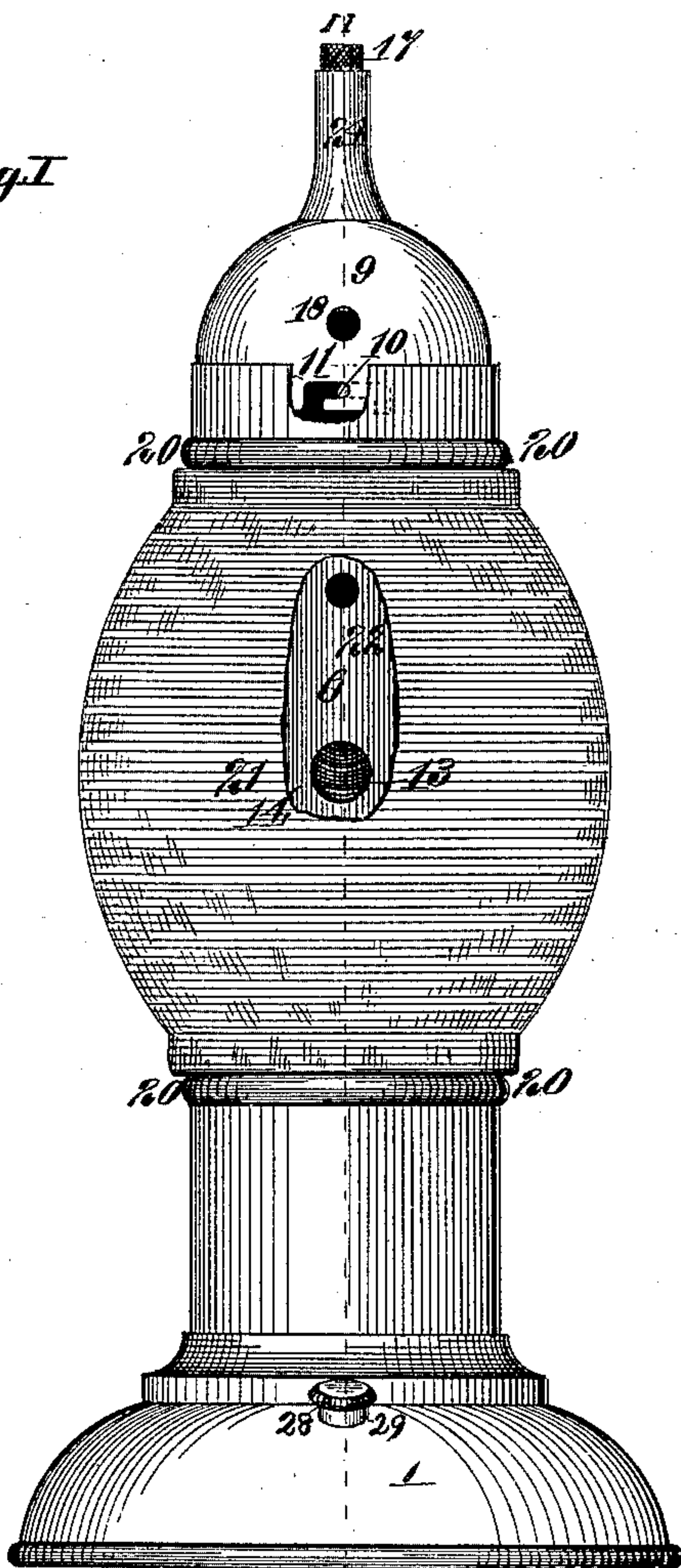


Fig. II.

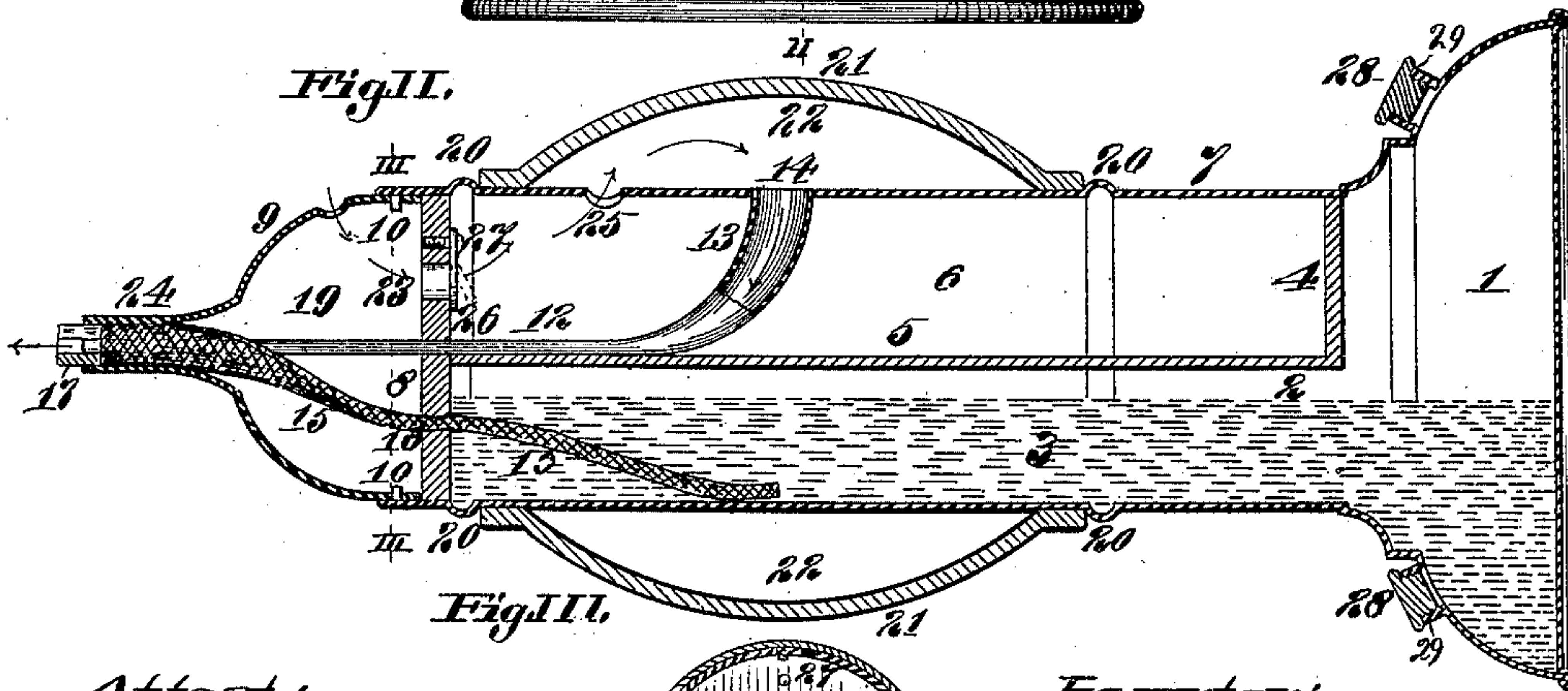
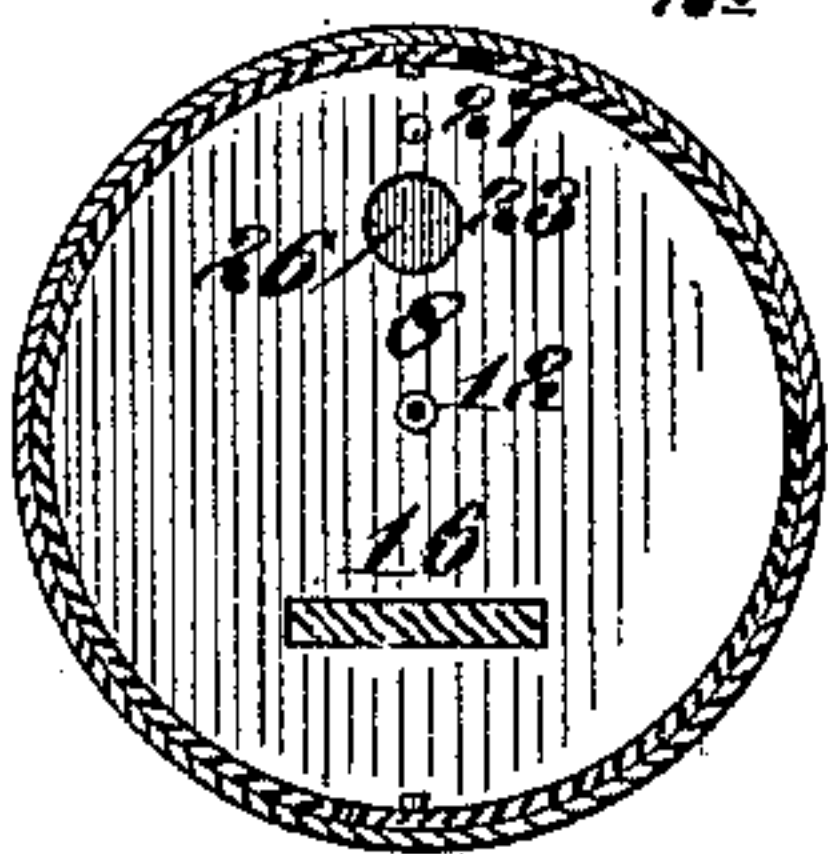


Fig. III.



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UNITED STATES PATENT OFFICE.

JOHN E. POINDEXTER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD
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HAIR-SINGER.

SPECIFICATION forming part of Letters Patent No. 405,502, dated June 18, 1889.

Application filed January 31, 1889. Serial No. 298,241. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. POINDEXTER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Hair-Singers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an instrument for producing a sudden flash to singe and thus stop the tubular pores of fresh-cut hair to prevent wastage and weakening of its roots; and the invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is an elevation of my singeing-instrument. Fig. II is a vertical section taken on line II II, Fig. I, and shows the instrument in the position for using, and also shows the air-chamber, the pneumatic valve, air-tube that supplies the draft for the flash, and the elastic rubber bulb that controls the air-vent to the burner; and Fig. III is a vertical section taken on line III III, Fig. II, and shows the air-port to the valve, the air-tube that supplies the burner, and the aperture through which the wick is passed.

Referring to the drawings, 1 represents the pedestal base, in which and in the tubular extension 2 the tank is located that holds the alcohol 3. A transverse partition-wall 4 and longitudinal one 5 separate the alcohol-tank from the air-chamber 6, and the tank and air-chamber together are inclosed in a tubular column 7, which has an air and spirit tight connection with the pedestal. At the forward end of the longitudinal partition 5 a transverse disk 8 closes in both the alcohol-tank and the air-chamber.

9 represents a dome-cap, whose inner edge fits within the upper or forward end of the tubular column that projects beyond the transverse disk 8. Two pins 10, that project inwardly from opposite edges of the said extension of the tubular column, enter the angle-slot 11 in the dome-cap when said cap is seated, and when the cap is slightly turned said pins enter the angle-extension of the slot, so that the pins and angle-slots form together tight bayonet-joints that safely hold

the dome-cap to its seat. The dome-cap is surmounted by the elongated burner-tube 24, the flaring base of which is securely attached to or may be made integral with the dome-cap from which it rises.

12 represents a draft-tube, whose flaring curved mouth 13 is secured within the perforation 14 in the side of the tubular column, and whose outlet discharges on line with the outlet of the burner-tube.

All parts of the structure above described are composed of brass or any other suitable material.

15 represents the flat wick that passes through the slot 16 in the disk 8 into the alcohol-tank, and in front or above is curved around the draft-tube 12, as it (the wick) is elevated and comes in contact between the same and the burner-tube that surrounds it, the curved flaring base of which guides the wick in its ascent and conducts it around said tube, so that as it rises or projects from the burner-tube the part that carries the flame is in a circular or tubular form 17, within which the draft-tube discharges the air for the effecting of the flash.

18 represents an open port in the dome-cap for the entrance of air into the initial air-chamber 19 within the dome-cap.

20 represents two corrugations that project outward from respectively near the base, or somewhat removed therefrom, and from near the top of the tubular column, and between said corrugations around said column is seated the expanded hollow rubber bulb 21, the said corrugations holding the said bulb to its working position on the tubular column, between which and the expanded rubber bulb is an operative air-chamber 22, from which by pressure upon said bulb a draft of air is forced through the tube 12 to revivify the flame on the burner to effect a sudden flash. The said air-supply for this purpose enters in through the open port 18 into the initial air-chamber within the dome-cap, and from that passes through the flutter-valve port 23 into the secondary air-chamber 6, from which it passes through the open port 25 into the third or operative air-chamber 22.

26 is the flutter-valve, that closes the port 23 when by the pressure of the operator's

hand on the rubber bulb there is effected a reactionary movement of the draft at said port, and 27 is the screw that attaches said flutter-valve to the transverse disk 8. The
 5 flutter-valve is shown in full lines closed on said port in Fig. II at the time of the pressure of said bulb and in broken lines in said figure in its inoperative position. When the pressure having been removed from said bulb,
 10 the bulb expands to its normal position, the valve opens, and the current of air freely pours or is drawn by suction through the open ports into the succeeding air-chambers.

28 are the screw-stoppers, that close the supply-ports 29, through which the alcohol-tank is replenished.

Now, if there is a supply of alcohol in the tank and the wick at the nozzle of the burner is lighted, (the blaze of which in its normal condition is but a faint glimmer,) then by pressure of
 20 the hand of the operator on the rubber bulb the current of air is forced backward and immediately closes the flutter-valve of the port 23, so as to utilize a requisite portion of the volume of air that is stored in the operative air-chamber within the bulb to project a current
 25 through the mouth 13 of the tube 12 and said tube 12 to and through the nozzle of the burner, thereby effecting a quick revivification of the previously glimmering blaze, thus producing
 30 a sudden flash, which is as quickly withdrawn when the pressure of the operator's hand on the bulb is removed.

Now I will describe the useful functions of the instrument. Hair is no exception to the
 35 rule that everything that lives and grows (whether animal or vegetable) is supplied with tubular and porous channels, through which the nutritious elements that support life and minister to its growth are supplied
 40 to the farthestmost extremities of its being. Now, as each hair is a tube having the above-named recuperating functions, which nature carefully guards (as she does all things well)
 45 by hermetically sealing the ends of said tubes, and whereas each time the hair of the head is cut its hermetically-sealed terminals are decapitated and each hair terminates in an open tube, which, by the exuding of its nutritious supplies, is too great a draw on the
 50 physical energies of the root, until in course of time nature again steps in and again seals the tubulous pores through which the waste is incurred. In the meantime the loss
 55 of energy to the roots is very large, and men, the hair of whose heads is more frequently cut than is that of women, are much more subject to baldness in consequence. This prelude appears necessary to a right understanding of the functions of my hair-singer. During the active part of the day in the barber-shop the lamp of the instrument may be continuously lighted, as there is but a glimmer of light at the burner, and therefore but
 60 a minimum of waste, until the light is revived by the forced draft as the operator

presses the rubber bulb and forces the air through the tube 12, which discharges at the burner, revivifies the blaze, and produces the required sudden flash. After the hair is cut
 70 and placed in a suitable condition to operate on, the operator holds the instrument in about the position shown in Fig. II, with the lighted burner at the nozzle in a suitable position to the hair on which it is to operate;
 75 then by the pressure of the operator's hand, as described, on the rubber bulb, and the consequent instantaneous flash that it produces, the tubulous terminals of the hair are slightly singed, and thus contracted, so as to
 80 hermetically seal the tubes and immediately stay the waste that would otherwise ensue.

I claim as my invention—

1. In a hair-singer, the combination of the tubular burner, the draft-tube that discharges
 85 at the nozzle of said burner, the wick that projects from between said tube and tubulous burner, and the operative rubber bulb that enforces the discharge of air through the draft-tube to revivify the blaze at the
 90 burner and produce an instantaneous flash, substantially as and for the purpose set forth.

2. In a hair-singer, the combination of the tubular column having corrugations, the transverse and longitudinal partitions, the
 95 transverse disk having a wick-slot, the dome-cap having tubulous burner, the draft-tube, and the rubber operative bulb, substantially as and for the purpose set forth.

3. In a hair-singer, the combination of the
 100 tubular column, the transverse and longitudinal partitions, and transverse disk 8 within said column that, with the surrounding column, inclose and separate the alcohol-tank and secondary air-chamber, the dome-
 105 cap 9, that incloses the initial air-chamber, the bayonet-fastening that secures said dome-cap to the tubular column, the corrugations 20, that project from said column, the rubber operative bulb that is seated between said
 110 corrugations around the tubular column and incloses the operative air-chamber, between which and the secondary air-chamber is provided an open port 25, the burner-tube 24, the draft-tube with its flaring mouth, through
 115 which the air is discharged from the operative air-chamber to the nozzle of the burner to revivify the blaze, the dome-cap being provided with an open supply air-port, the transverse disk 8 being provided with a flutter-valve port that communicates between
 120 the initial and the secondary air-chambers, the flutter-valve that operates to open and close said port, the feed-ports through which the tank is replenished, and the screw-stop-
 125 pers that close said ports, substantially as described, and for the purpose set forth.

JOHN E. POINDEXTER.

In presence of—

BENJN. A. KNIGHT,
 SAM'L. KNIGHT.