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Patented Dec. 5, 1899.

## L. W. SNOWDEN.

## HOOD FOR CACTUS BURNERS.

(Application filed Apr. 19, 1899.)

(No Model.)

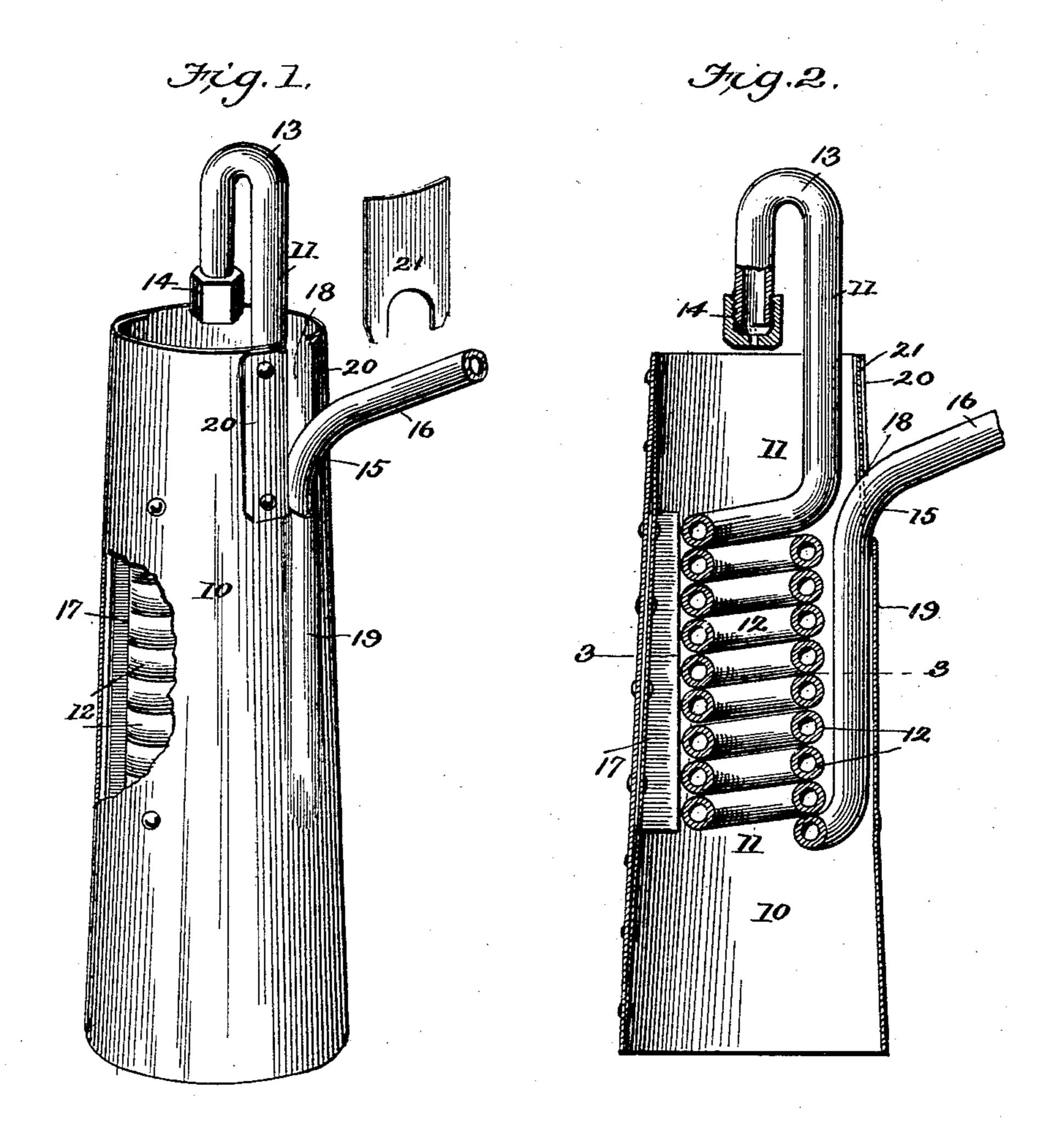
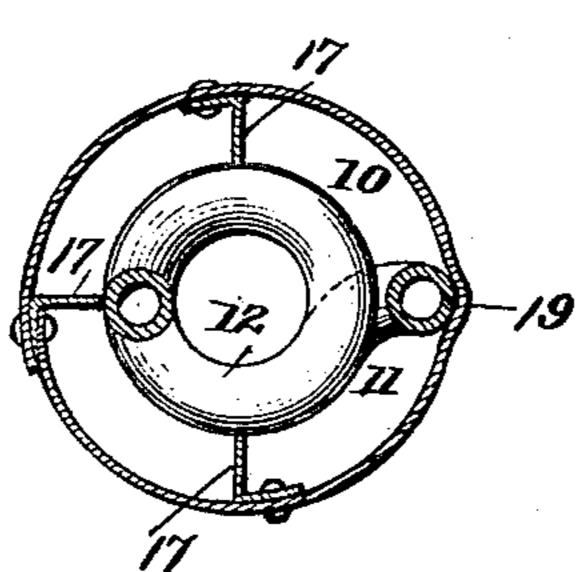


Fig. 3.



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LEWIS W. SNOWDEN, OF TILDEN, TEXAS.

## HOOD FOR CACTUS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 638,650, dated December 5, 1899.

Application filed April 19, 1899. Serial No. 713,601. (No model.)

To all whom it may concern:

Be it known that I, LEWIS W. SNOWDEN, of Tilden, in the county of McMullen and State of Texas, have invented a new and useful Improvement in Hoods for Cactus-Burners, of which the following is a specification.

My invention relates to devices for burning the thorns of the cactus-plant, whereby the plant may be used for food for cattle; and it to has for its object a hood for cactus-burners, whereby the flame may be concentrated at any desired point and will be protected from the wind and otherwise rendered thoroughly efficient, as hereinafter set forth.

The invention consists in certain details of construction and combination of the parts, which I shall first describe, and then point out in the appended claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which like characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of my improved hood attached to a vaporizing-coil. Fig. 2 is a vertical section of the same, and Fig. 3 is a horizontal section on the line 3 of Fig. 2.

My improved hood 10 consists, preferably, of a section of sheet metal bent into tubular and 30 tapering form, with its meeting edges overlapping and united together. In the hood the vaporizing-coil 11 is adapted to fit, the latter consisting of the coil proper, 12, whose upper end has extending therefrom a gooseneck 13, 35 formed with a burner 14 at its extremity. From the lower end of the coil proper the tube forming the same extends upwardly close against the coil and the full length of the same, and when it reaches the upper end bends out-40 wardly, as at 15, and forms the arm 16, to which the manipulating-handle and supplyreceptacle (not shown) are adapted to be connected.

I wish it understood that the vaporizingcoil here described forms no part of my present invention.

In using this burner above described for burning the thorns on cactus-plants a great waste of fuel has been occasioned by the wind blowing the flame in different directions and for the reason that the heat from the burner

is dissipated to some extent when it leaves the latter before reaching the plant. It is the object of my hood to overcome these difficulties, and with this end in view I secure ribs 55 17, preferably three in number, to the inside of the hood. The said ribs are angular in cross-section, having one side riveted or otherwise suitably attached to the wall of the hood, and they extend in the direction of the length 60 of the hood a distance equal to the height of the coil used. Two of the ribs are diametrically opposite, and the third rib is located half way between the other two and is preferably secured to the hood by being held between the 65 overlapping edges of the latter by the same rivets used to secure said edges together. It is important that the flame-opening of the burner be located just a slight distance above the upper open end of the hood, and for this 7c purpose I provide a recess 18 in the said upper end, the said recess terminating at such a point in the hood that the inner end of the arm 16, when the hood is fitted over the coil, will abut against the lower wall of the recess 75 and prevent further movement of the coil in the hood. When the parts are in this position, as shown in Fig. 1, the flame-opening of the burner will come just a little above the upper end of the hood, and as this upper end 80 is entirely open and unobstructed it will permit a very free circulation of air into the hood.

The ribs 17 hold the hood securely but detachably in place and space the coil from the hood on three sides. On the fourth side, 85 which is that side against which the upward bend of the coil is located, no rib occurs, the coil proper being spaced from the hood by such upwardly extending portion, and the hood is formed with a tapering bulge 19 to 90 accommodate the upwardly extending portion of the coil.

Guide - plates 20 are secured to the hood along the side walls of the recess 18, and a closure 21 is inserted in the said plates to 95 close the recess when the coil is in place, thus preventing the current of air from passing down into the hood except through the upper end of the same.

It will be seen that I have provided a hood 100 especially adapted for use on a cactus-burner of the character described, in which the flame

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will be concentrated to any point desired and which can be securely held on the vaporizing-coil and yet very easily detached therefrom

when desired.

It should be noted that the ribs increase in width from their upper to their lower ends, so that they contact with the coil the full length of the same, and that the hood extends some distance beyond the lower end of the coil and forms a very hot furnace when the device is used.

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

ters Patent, is—

15 1. The combination in a cactus-burner, with the coil and the angular arm adapted for connection with a fuel-supply, of the hood of sheet metal, the said hood being of tubular and tapering form and provided with a longitudinal recessing its upper end, longitudinally extending ribs secured to the inside of said hood, the said ribs being angular in cross-section whereby one side thereof extends outwardly from said inner wall to hold the coil spaced from the hood, which latter has its angular arm extending out through the recess in the hood, guide-plates secured to said hood along the sides of said recess, and a closure for the recess, said closure being adapted to

slide between said plates and close the same 30 on the arm, as and for the purpose set forth.

2. In a cactus-burner, the combination with the coil consisting of the coil proper having an upward extension from its lower end extending close along the coil and terminat- 35 ing in an outwardly-bent arm at its upper end, and the upper end of the coil being formed with a gooseneck terminating in a burner, of a hood of tubular and tapering. form having a recess in its upper end through 40 which the arm of the coil is inserted and with a tapering bulge leading from said recess whereby to accommodate the upward extension of the coil, the recess being of such depth that the burner will come about the 45 upper end of the hood when the arm reaches the lower edge of the recess, angular ribs secured to the inside of the hood and extending longitudinally of the hood the length of the coil, the said ribs holding the coil away 50 from the walls of hood, and a closure for said recess whereby to close the latter over the arm, as and for the purpose set forth.

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Witnesses:
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