Dec. 19, 1933. W. R. SCHINDLER 1,940,020

HOTCAP

Filed March 1, 1930

Fig. 1

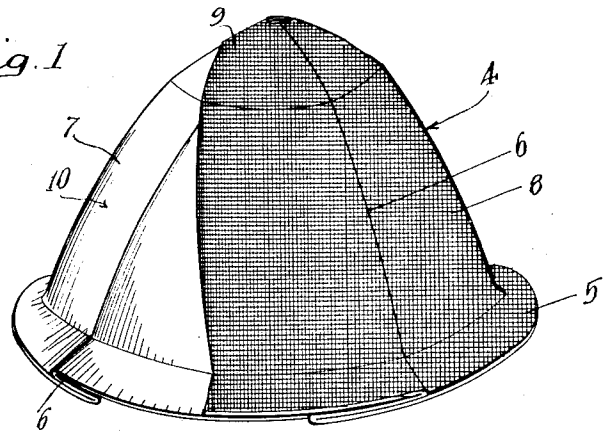


Fig. 2

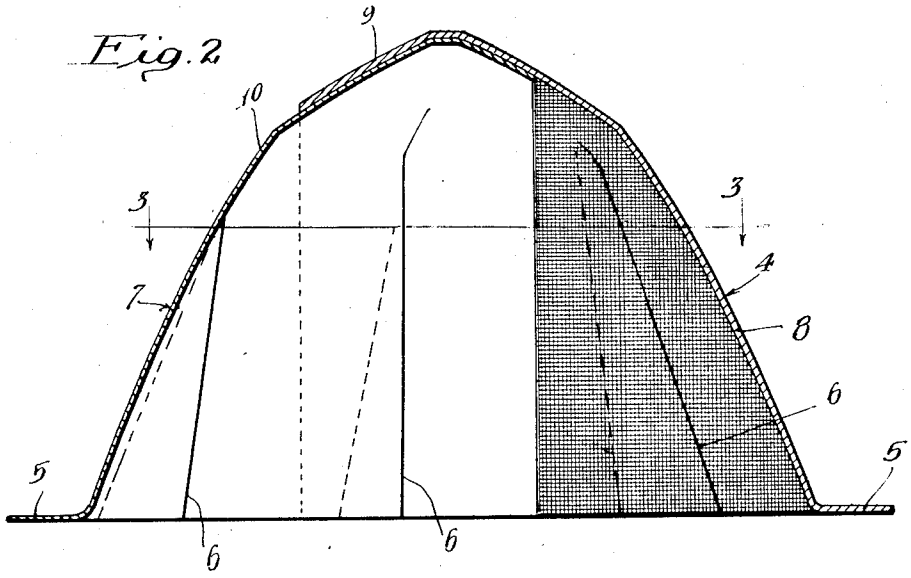
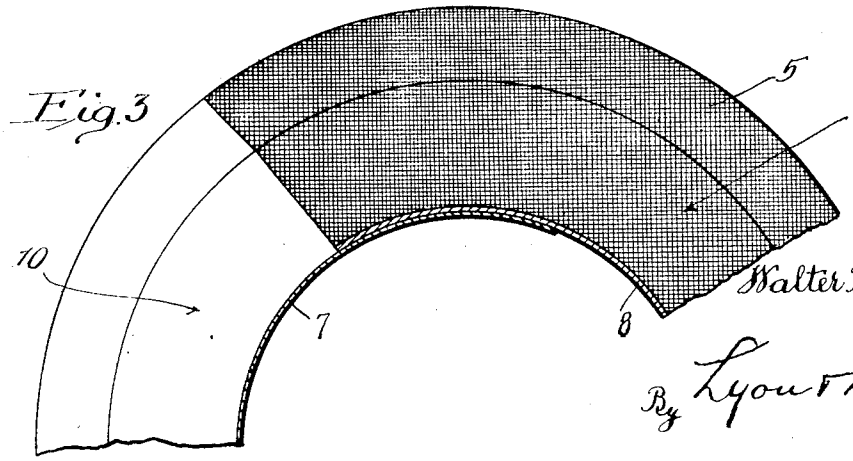


Fig. 3



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HOTCAP

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6 Claims. (Cl. 47—29)

This invention relates to hotcaps, and is an improvement on the disclosure of Patent No. 1,701,797, granted to me on February 12, 1929, for hotcap.

An important object of this invention is the absorbing and holding of the heat of the sun by the hotcap so that the growth of the plant, over which the hotcap is positioned, is materially aided.

Another important object is to make it possible to employ exceedingly thin paper so that the sun's rays can readily pass through said paper into the interior of the hotcap.

Other objects and advantages will appear in the subjoined detailed description.

The accompanying drawing illustrates the invention:

Figure 1 is a perspective view of a hotcap constructed in accordance with the provisions of this invention.

Figure 2 is a vertical section of the hotcap.

Figure 3 is a fragmental plan view, partly in section, on the line indicated by 3—3, Fig. 2.

Referring to the drawing, the hotcap comprises a hollow conical member 4 provided with a horizontally extending flange 5 over which the soil is pushed by a suitable tool so as to anchor the hotcap in place over the seed or plant that is to be protected.

The hotcap may be manufactured from any suitably shaped blank as, for example, an octagonal blank, as described in the above mentioned patent. The hotcap may be pressed with suitably shaped dies so as to produce a number of tapered pleats 6 in the member 4. The pleats 6 expand downwardly from the top of the member 4 to the bottom thereof, thence outwardly to the outer edge of the flange 5.

It is to be understood that the exact shape of the member 4 is immaterial, in so far as this invention is concerned, but one of the important features of construction is that a section 7 of the member 4 is of relatively thin translucent material while another section 8 of the member 4 is of relatively thick material. For example, the sections 7, 8 may be constructed of paper of different thicknesses. Preferably the section 7 will be made of such material as thin paraffin waxed paper, while the section 8 is also preferably made of paraffin waxed paper of a much heavier or thicker grade so as to serve as a support for the dome-shaped member 4, even though the hotcap should be moistened by rain or dew. One of the sections overlaps the other and, in this instance, the section 8 overlaps the section 7. The sections are of approximately the same size, although in the drawing section 8 has been shown slightly larger than section 7, and it will be seen that the band 9, where the overlap occurs, passes across the middle of the member 4 so as to act to further stiffen this portion of the member 4 to aid in maintaining the same in fully expanded position. That portion of the thinner section 7 that is not covered by the section 8 constitutes a window 10 through which a relatively large amount of sun-heat can readily pass into the interior of the hotcap.

Another important feature of the construction is that the section 8, or at least some portion of it, is constructed to be highly absorbent and retentive of heat and, for this purpose, said section 8, or at least a portion thereof, is colored or blackened, as indicated by the network of lines in said Fig. 1.

To use the invention hereinbefore described, the hotcap will be placed over the seed or plant and the flange 5 will be weighted with soil so as to prevent the hotcap from being displaced by the wind. Preferably, the hotcap will be positioned with the window 10 facing that portion of the heavens that is traversed by the sun so that the direct rays of the sun will pass through the window and warm the earth beneath the hotcap. This heat will not so readily radiate through the hotcap because of the blackened or colored portion thereof. Furthermore, whatever direct rays of the sun strike the blackened portion, the heat will be more readily absorbed and retained thereby so as to maintain the temperature within the hotcap somewhat higher than the external temperature.

I claim:

1. A hotcap comprising a hollow sectional member, one section being of light-transmitting material and being thinner than the other section, and said other section being blackened.

2. A hotcap comprising a hollow sectional member, the sections constructed of different thicknesses of paper, one section overlapping the other across the middle of the member to form a stiffening band.

3. A hotcap comprising a hollow sectional member, the sections being of waxed paper of different thicknesses, and the thicker section being colored.

4. A hotcap comprising a member shaped to cover and enclose a plant, said member having walls of flexible translucent material, substantial areas of the wall being sufficiently thick to be

substantially opaque and another area of said wall being so thin as to be relatively transparent.

5. A hotcap comprising a member shaped to cover and enclose a plant, said member having walls of waxed paper, substantial areas of the wall being of thicker paper than other areas, whereby radiant heat impinging on the thin portions of the cap will be transmitted therethrough and radiant heat impinging on other portions of said cap will be absorbed, thereby heating said cap.

6. A hotcap comprising a hollow inverted cup shape sectional member, the sections constructed of paper, one section overlapping the other completely across the middle of the member to form a stiffening band.

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