May 7, 1929. W. R. SCHINDLER 1,712,093

DEVICE FOR PLACING HOT CAPS OVER SEEDS AND PLANTS

Filed March 7, 1927

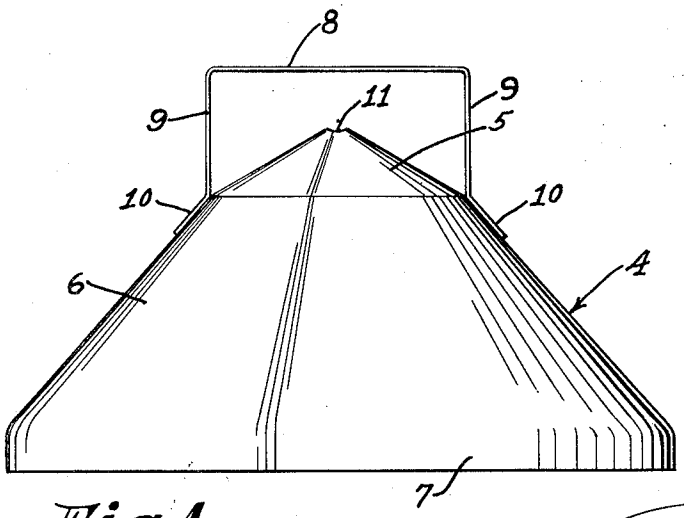


Fig. 1.

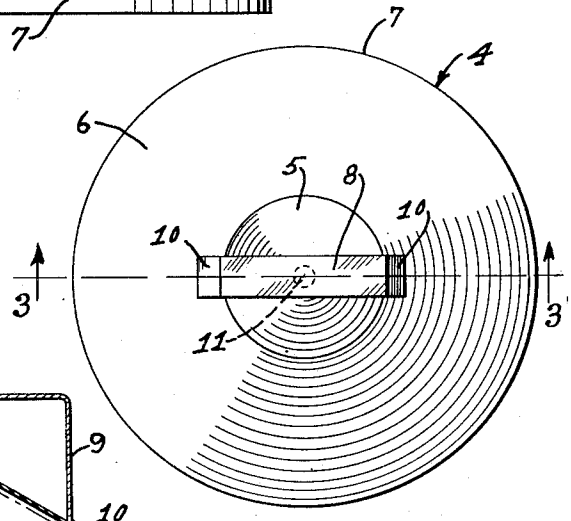
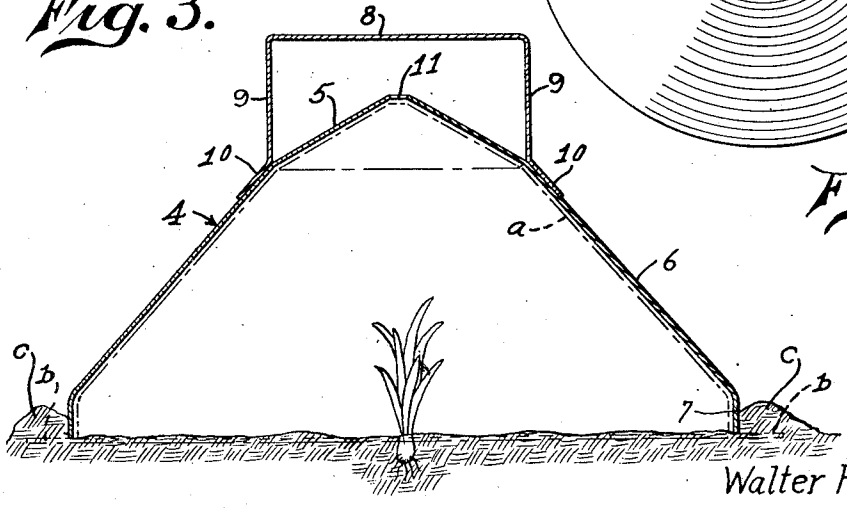


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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DEVICE FOR PLACING HOT CAPS OVER SEEDS AND PLANTS.

Application filed March 7, 1927. Serial No. 173,353.

This invention relates to devices for placing hot caps over seeds and plants and an important object of the invention is to provide a construction that will simplify the placing of hot caps.

Other objects are simplicity and inexpensiveness.

A further object is to hold the hot cap in shape while applying the same to the ground.

A still further object is to provide a construction that will guard the hot cap against the deposit of earth on the sloping sides of the cap. This is important as, if dirt is deposited on the sloping sides of the hot cap, the sides will afterwards be caused to sag inwardly if the walls become dampened.

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

The accompanying drawings illustrate the invention.

Figure 1 is a side elevation of a device for placing hot caps over seeds and plants and constructed in accordance with the provisions of this invention.

Figure 2 is a reduced plan view of Figure 1.

Figure 3 is an enlarged vertical section on the line indicated by 3—3, Figure 2, a hot cap and the surface of the earth being indicated in broken lines.

In Patent No. 1,340,631 granted to me May 18, 1920, is disclosed a cap adapted to be placed over a seed or plant by use of the present invention which, in this instance, is constructed to closely fit the cap disclosed in said patent. While it is important that the device closely fit the cap, it is to be understood that the device may be of other shapes than disclosed in order to fit hot caps of other shapes than that illustrated in the above mentioned patent.

There is provided a hollow metal body which is indicated in general by the character 4. This body 4 is spun, or produced otherwise in any other suitable manner, from sheet metal. Preferably the metal employed will be more or less rust resisting.

The hot cap illustrated has its body 4 comprising a cone-shaped top section 5, a frusto-conical section 6 below the top section, and a vertical rim section 7 below the frusto-conical section. Though it is preferable to make the body 4 of sheet metal, it is to be understood that it can be made of any stiff material suitable to the purpose for which it is intended. Secured to the body 4 is a handle comprising a horizontal top member 8, vertical end members 9 connected with the ends of the member 8, and attaching members 10 joined to the lower ends of the members 9. In this instance, the attaching members 10 extend aslant downwardly and outwardly to fit the upper portion of the frusto-conical section 6 just below the top section 5. The attaching members 10 are firmly fixed to the body 4 by welds, not shown, or any other suitable well known fastening means.

The body 4 is provided with an opening 11 which, in this instance, is in the tip of the cone-shaped top section 5. The purposes of the opening 11 will appear hereinafter.

The invention operates as follows: The gardener, having planted a seed or small plant, will grasp the handle and place a hot cap, indicated at *a* in Figure 3, of the type disclosed, for example, in the above mentioned patent, inside of the body 4, air escaping through the opening 11 so as to permit of the body 4 closely fitting the hot cap. The gardener grasps the handle and places the body 4 carefully over the seed or plant that is to be protected, with the seed or plant in position substantially at the vertical axis of the body 4. If the ground is uneven, the rim 7 will be forced downwardly sufficiently to penetrate the higher portions of the soil until the flange *b* of the paper cap substantially touches the earth around its entire circumference.

Then the gardener will push loose soil, indicated at *c*, upon the cap flange *b* so as to hold the cap in place against the force of winds and he will then lift the body 4 off of the cap, sufficient air entering the opening 11 to prevent the tendency to the formation of a partial vacuum which would hold the cap in the body and interfere with free removal of the body from the cap. If the earth *c* has risen above the lower end of the frusto-conical section 4 and has toppled inwardly upon said frusto-conical section, pulling of the body 4 upwardly will throw the soil outwardly from the frusto-conical portion so as to preclude any of the soil lying upon the inwardly sloping face of the frusto-conical cap section. Thus, when dews or rain somewhat dampen the cap *a*, there will be no soil upon

the frusto-conical section to weight said section and cause it to sag inwardly against the growing plant beneath the cap.

I claim:

The combination with a hot cap having a frusto-conical portion of a hollow metal body provided with a frusto-conical portion to fit the frusto-conical portion of the cap, said body serving as a means for placing said hot cap over a seed or plant, and a handle secured to said body.

Signed at Los Angeles this 1st day of March, 1927.

WALTER R. SCHINDLER.