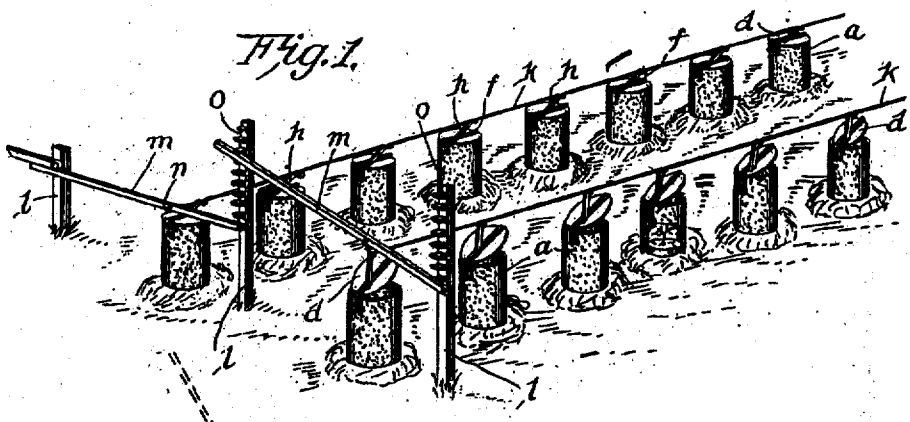
J. H. HALEY.

CONCRETE PLANT PROTECTOR.

APPLICATION FILED FEB. 28, 1908.

924,549. Patented June 8, 1909.

Fig. 1.



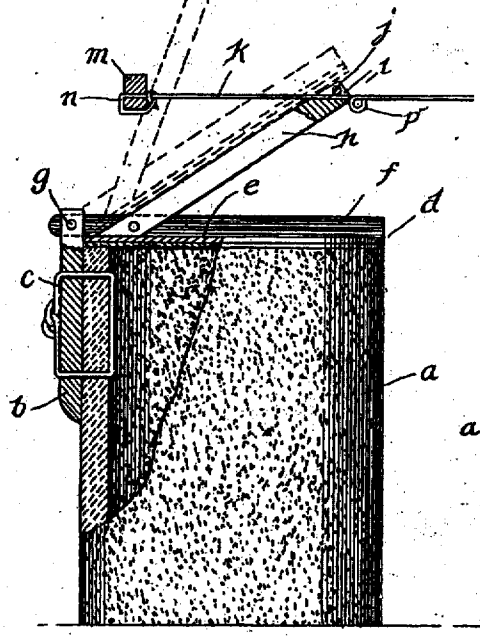


Fig. 2.

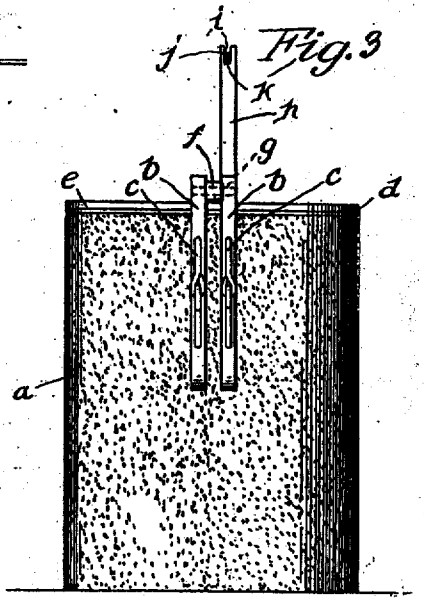


Fig. 3.

Witnesses

C. E. Smith.

E. P. Bumgey

Inventor

James H. Haley,

By Victor J. Evans

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES H. HALEY, OF MUNITH, MICHIGAN.

CONCRETE PLANT-PROTECTOR.

No. 924,549. Specification of Letters Patent. Patented June 8, 1909.

Application filed February 28, 1908. Serial No. 418,305.

To all whom it may concern:

Be it known that I, JAMES H. HALEY, a citizen of the United States of America, residing at Munith, in the county of Jackson and State of Michigan, have invented new and useful Improvements in Concrete Plant-Protectors, of which the following is a specification.

This invention relates to concrete plant protectors, and one of the principal objects of the same is to provide a plant protector comprising a hollow cylindrical molded concrete protector provided with a hinged top or door and means for opening and closing the doors of a series of protectors by means of a single lever.

Another object of my invention is to provide protectors for young plants, like tomatoes, so that they may be set out earlier or before the frost leaves the ground, and during the day the tops or covers may be opened to let in the sun and in the evening the tops or covers may be closed down, thus permitting the plants to grow and to mature considerably earlier than would otherwise be the case. After danger of frost the covers may be removed entirely, and eventually the protectors may be removed, thus leaving the plants in the ground very much advanced in growth.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which,—

Figure 1 is a perspective view showing a series of plant protectors made in accordance with my invention and showing the means for opening and closing the tops or covers. Fig. 2 is a side view and partial section of one of the plant protectors enlarged. Fig. 3 is a similar view taken at right angles to Fig. 2.

Referring to the drawing, the plant protectors are shown as consisting of the hollow tubular concrete cylinders *a*, each having secured to the side thereof a pair of wooden bars *b*, said bars being secured to the body portion of the plant protector by means of suitable wire staples *c*, said bars being secured to the protectors *a* before the concrete material has thoroughly dried, thus facilitating the attachment of the bars *b* by punching holes with the wire staples *c* through the body of the protector and thus connecting the bars *b* thereto. The covers each consist of the wooden disk *d* lined with a layer of tar paper *e*. Secured to the top of the cover *d* is a strip *f* which is pivoted at *g* between the bars *b* and through the strip *f*. Secured to one side of the strip *f* is an inclined bar *h*, and in the outer end of said bar is a slot *i* and a cross pin *j*.

The plants are set out in rows, and the protectors are placed over the plants. A line wire *k* passing through the slot *i* and under the pins *j* at the top of the bar *h*, and an upright *l* is driven into the ground at one end of the row, and a lever *m* is pivoted to the upright *l*, and the wire *k* is connected to said lever, as shown at *n*. There is an upright *l* for each row, and these uprights are provided with racks *o* to hold the levers *m* in adjusted positions. By this means all the tops or covers of a row of protectors are opened and closed simultaneously by the movement of the lever *m*. Loops or eyes *p* are formed in the wire *k* at suitable distances apart to operate as stops for engaging the tops of the bars *h*, so that by drawing upward upon the wire by means of the lever *m* all the tops or covers are opened or closed simultaneously.

From the foregoing it will be obvious that a plant protector made in accordance with my invention is simple in construction, can be quickly applied for use, and the doors can be readily adjusted at any time by moving the lever *m*, and that the body portions of the protectors can be produced at slight cost.

Having thus described the invention, what is claimed as new, is:—

1. The combination of a series of hollow concrete plant protectors, a cover hinged to each of said protectors, an inclined bar rigidly secured to each cover, said bar provided with a slot and a cross pin, an upright, a lever pivoted thereto, a line wire passing through the slots in the inclined bars and connected to said lever, and stops on the wire.

2. A series of concrete plant protectors, a cover hinged to each of said protectors, an inclined bar rigidly secured to each of the covers, a wire connected to each cover, and a lever connected to said wire for operating all of the covers simultaneously.

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

JAMES H. HALEY.

Witnesses:
JOHN SCHUBERT,
JOHN A. WELCH.