

No. 705,019.

Patented July 22, 1902.

E. C. H. BEHRENS.

PLANT PROTECTOR.

(Application filed Oct. 4, 1901.)

(No Model.)

Fig. 1.

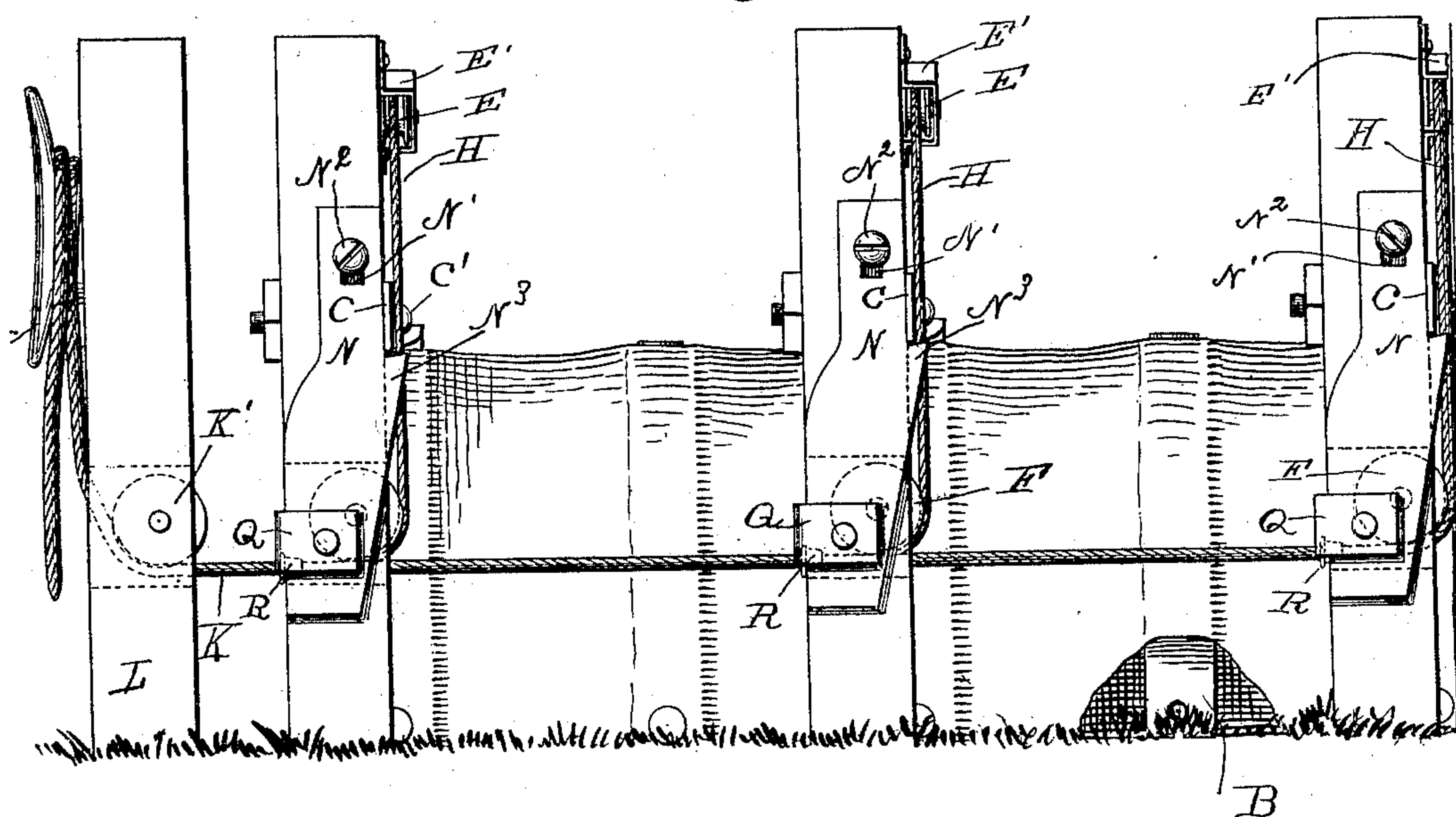
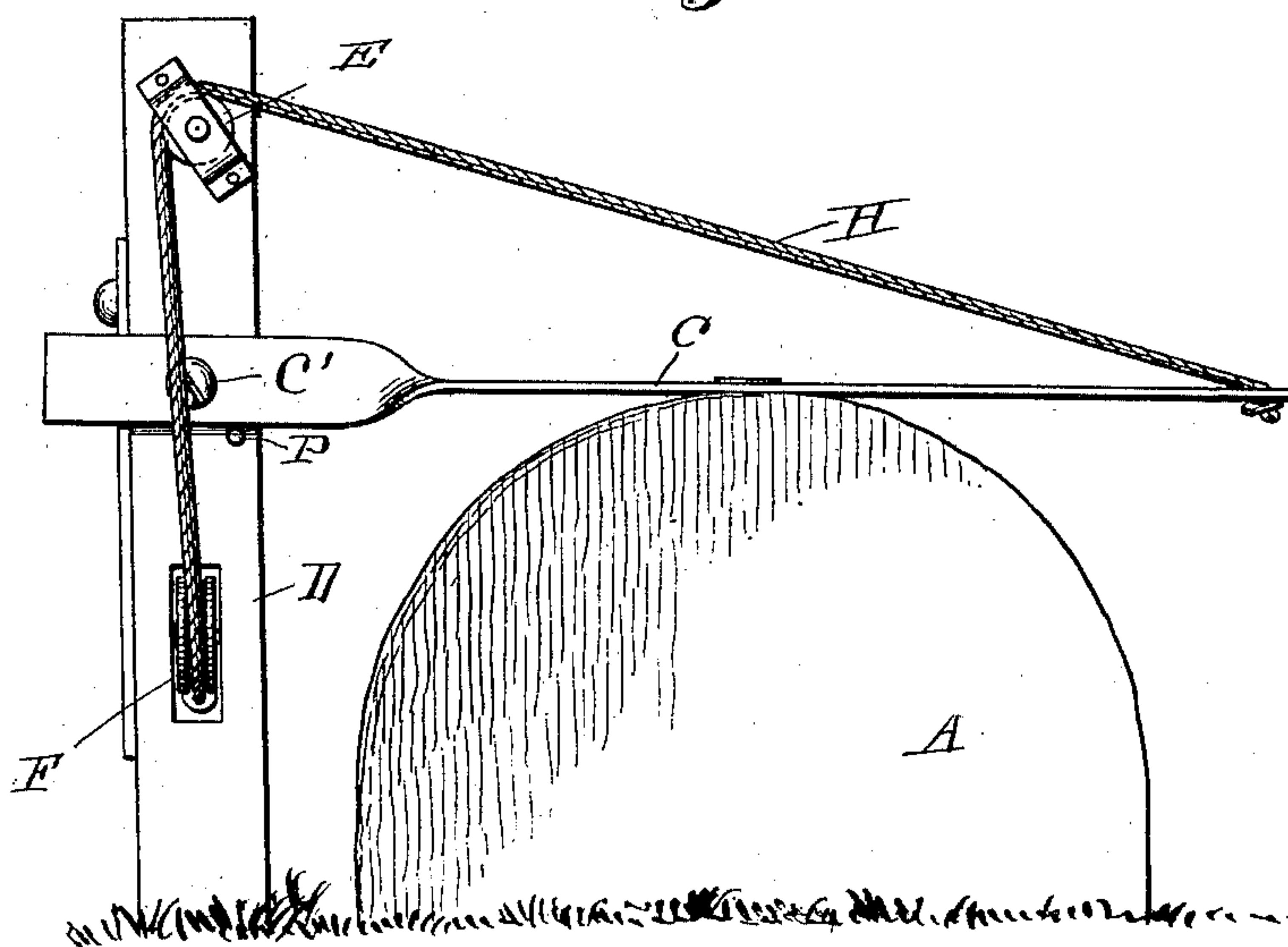


Fig. 2.



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EDWARD CARSTEN HENRY BEHRENS, OF CHARLESTON, SOUTH CAROLINA.

PLANT-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 705,019, dated July 22, 1902.

Application filed October 4, 1901. Serial No. 77,810. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CARSTEN HENRY BEHRENS, of Charleston, county of Charleston, and State of South Carolina, have
5 invented an Improvement in Plant-Protectors, of which the following is a specification.

This invention relates to new and useful improvements in plant-protecting devices, comprising a hood to which are connected
10 pivotal arms whereby the hood is suspended and means for raising said pivotal arms and automatically holding the same at a given height.

The invention consists, further, in various
15 details of construction and combinations of parts, as will be hereinafter fully described and then specifically defined in the appended claims.

My invention is clearly illustrated in the
20 accompanying drawings, in which—

Figure 1 is a side elevation of my improved plant-protecting device. Fig. 2 is an end view.

Reference now being had to the details of
25 the drawings by letter, A designates a hood, which is held in semicylindrical shape by means of metallic ribs B, spaced apart, and to alternate ribs are fastened the pivotal arms C, the ends of which arms project beyond the
30 diameter of said hood. Posts D are provided at suitable locations, to each of which is pivoted an arm C by means of a pivotal pin C'. Each post also carries a pulley E, mounted in a suitable bracket E', and also a second
35 pulley F, mounted in an aperture in the lower portion of the post. Ropes H each have an end secured to an arm C and pass over a pulley E and F and are then spliced to the main operating-rope K, which may be secured as
40 shown at the left of Fig. 1. Adjustably held on each post is a locking-plate N, preferably of metal, having an elongated slot N', through which a screw N² passes. A portion of said plate projects, as at N³, laterally to form a stop
45 for the under edge of the pivotal end of arm C to prevent the said arm being raised above a substantially horizontal position, hence preventing the hood from being lifted higher without first withdrawing said plates out of
50 the path of said arms. Riveted or otherwise secured to the lower portion of each locking-plate N is a bracket-plate Q, and R design-

ates flanged collars secured to the main operating-rope, the flanges of which are adapted to strike against the rear portions of said
55 plates Q as the main operating-rope is drawn toward the post L, and as said flanges come in contact with the plates and the rope is further pulled the plates N will be thrown toward the post L and the projecting portions
60 N³ will be thrown out of the path of the rear ends of the arms C and the latter will be allowed to rise above a horizontal position, which will cause the hood to be lifted from
65 the ground. A pin P is fastened to each post D and provided for the purpose of forming a stop to prevent arm C from falling below a horizontal position.

Having thus fully described my invention, what I claim as new, and desire to secure by
70 Letters Patent, is—

1. A plant-protecting device comprising a hood, a series of posts, pivotal arms mounted, one on each post and each fastened to the
75 hood, a rope fastened to the end of each arm and passing about suitable pulleys, locking means, and means for automatically operating the same, as set forth.

2. A plant-protecting device comprising a hood, a series of posts, an arm pivoted to each
80 post and fastened to the hood, a rope passing about suitable pulleys on the post and connected at one end to said arm, a pivoted locking-plate mounted on each post, and having a
85 projecting portion on one edge thereof, and means for throwing said plates out of the path of the rear ends of said arms, as set forth.

3. A plant-protecting device comprising a hood, posts, a pivotal arm carried by each
90 post and fastened to the hood, a rope fastened to the outer end of each arm and passing about pulleys on the post, an adjustable plate pivotally mounted on each post and having a
95 projecting portion adapted to form a stop to prevent the arm being thrown above a horizontal position, and means for throwing said plates out of the path of the rear ends of the arms as the ropes are drawn upon, as set
100 forth.

4. A plant-protecting device comprising a hood, a series of ribs spaced apart, posts, an arm pivoted to each post, a rope fastened at
one end to the said arm and passing about

pulleys on the post, a plate pivoted to each post, a main operating-rope secured to each of said ropes which pass about said pulleys, collars on said main operating-rope, bracket-plates secured to the locking-plates, and
5 against which bracket-plates said collars adapted to strike to throw the locking-plates

so that projecting portions thereof will be out of the path of the pivotal ends of the arms, as set forth.

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