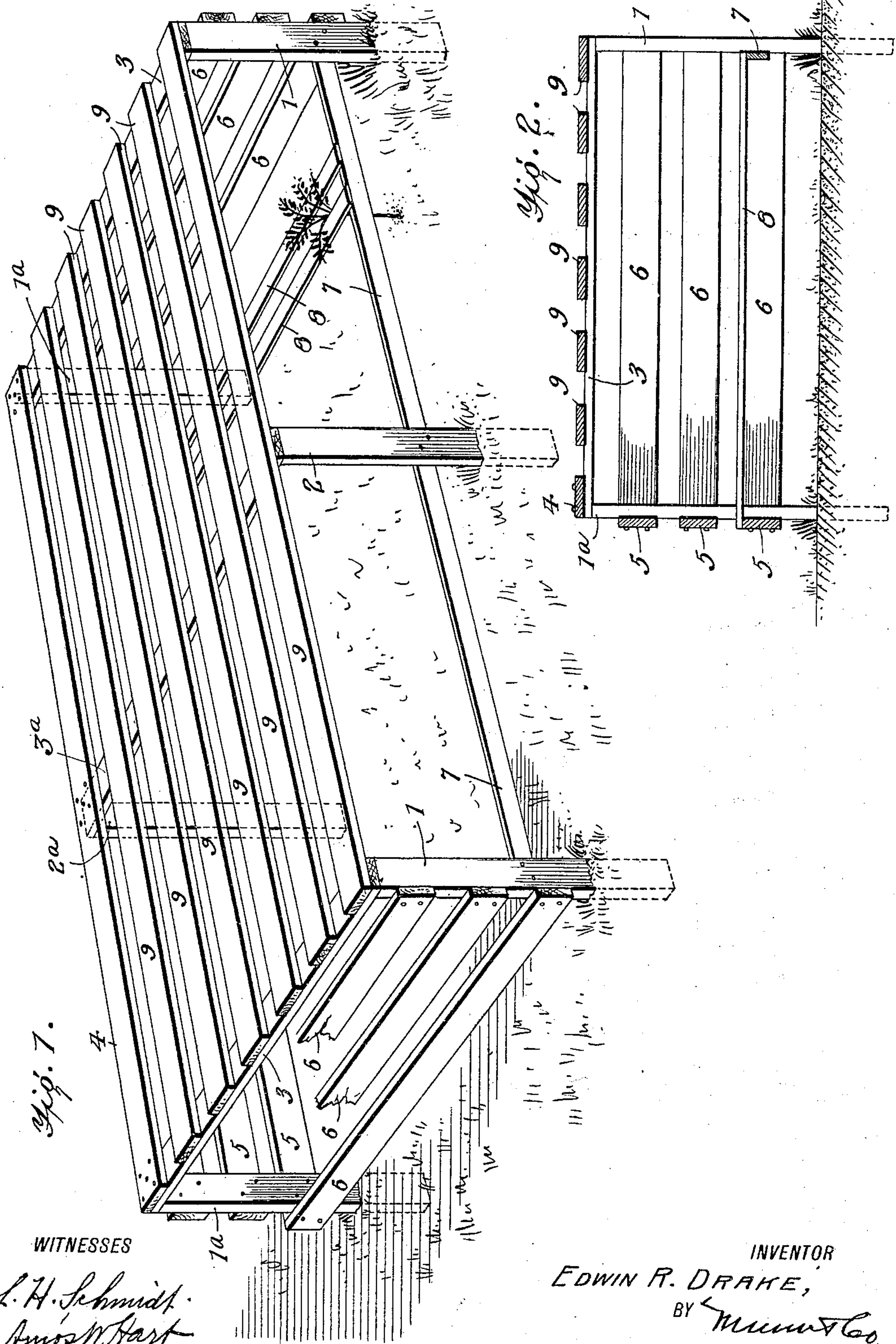


E. R. DRAKE.
PLANT PROTECTOR.
APPLICATION FILED APR. 7, 1909.

932,972.

Patented Aug. 31, 1909.



WITNESSES

L. H. Schmidt.
Amos Hart

INVENTOR
EDWIN R. DRAKE,
BY *Mum & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWIN R. DRAKE, OF DE LAND, FLORIDA.

PLANT-PROTECTOR.

932,972.

Specification of Letters Patent. Patented Aug. 31, 1909.

Application filed April 7, 1909. Serial No. 488,336.

To all whom it may concern:

Be it known that I, EDWIN R. DRAKE, a citizen of the United States, residing at De Land, in the county of Volusia, State of Florida, have invented an Improvement in Plant-Protectors, of which the following is a specification.

In growing some vegetables, and particularly tomatoes, and especially in southern latitudes, great care is necessary in controlling access of the sun's rays to the plants so as to graduate their effect to a certain non-injurious degree. I have devised an improved apparatus for this purpose, and the construction of the same is illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of the apparatus, and Fig. 2 a vertical cross section of the same.

The protector is formed of permanent and rigid parts and certain loose parts, as will now be described. Four posts, 1 and 1^a, are set firmly in the ground at the angles of an oblong rectangle, and two side posts, 2 and 2^a, are similarly set in the middle between the respective corner posts. Transverse bars 3 are nailed to the top of the corner posts and also the top of the side posts, so as to rigidly connect the two corner posts 1, 1^a and the two side posts 2, 2^a. The two pairs of corner posts 1, 1^a, are connected by cross bars 3, and the side posts 2, 2^a, are similarly connected by a transverse bar 3^a. A long bar 4 is nailed on these cross bars 3, 3^a, and the corner posts 1^a, 1^a. Thick slats, or narrow planks, 5, are nailed to the posts 1^a and 2^a, in horizontal position, and spaced apart; and similar slats or planks 6, are nailed to, and connect, the corner posts 1, 1^a. The frame is completed by a narrow bar or plank 7, which is nailed to the corner posts 1, 1, and side post 2, on the inner side of the same, a few inches from the ground. This completes the rigid, skeleton frame. It will be seen that the same is entirely open at the top, save where the bar or plank 4 is located, but is closed to a certain degree on one side and at the ends, while one side is left entirely open, save the longitudinal bar 7, which is necessary for supporting cross-slats 8 that serve to support the tops of the tomatoes, or other plants, which are in practice grown in transverse rows within the frame. These slats 8 and the boards or planks 9 that rest on the top bars 3 and 3^a, constitute the only loose portions of the pro-

tector. It is apparent that the rigid frame allows due circulation of air even on the three sides that are partially closed, and also admits the rays of the sun to a sufficient degree, but without permitting their full access to the plants, which would be injurious, and even destructive, in southern latitudes.

The loose boards or planks 9 are preferably made six inches in width, and separated by a space of five inches, while the slats 8, that support the tomatoes, are preferably one inch by three inches. The side and end planks 5 and 6 are preferably made six inches in width and separated by a vertical space of four inches. The corner posts are four feet long and of two inches by four inches stuff. The front bar which supports the slats 8 is preferably made one inch by three inches, and it is set twelve inches from the ground. It is apparent that the fixed or immovable portions of the protector constitute a strong, rigid, and durable frame which may be cheaply constructed. It is intended that the open side of this frame shall be toward the north; thus the left-hand end would be toward the east. In the morning, the sun will shine on the east end and with the day it will advance along the south side and finally shine on the west end, and, if allowed full and free access to the tomatoes, it would kill them. The slats or planks 5 and 6 on the ends and south side of the frame lessen the effect of the sun's rays on the plants or graduate the heat to a safe degree so that the growth of the plants is promoted. The tomatoes are set in rows about three feet apart, and the slats 8 keep the branches of the plants off the ground and support the fruit when maturing and by reflection increases the heat on the underside of the same.

Not only does the north side require no such protection as the others, but, being entirely open, it allows free access for setting the plants and for weeding, and otherwise tending them while growing. The longitudinal bar 7 which supports the cross slats 8, offers no serious hindrance to free access to the interior of the frame.

What I claim is:

1. The improved plant-protector consisting of the rigid skeleton frame comprising vertical posts located at the corners of a rectangle, narrow planks rigidly secured to the posts at the ends and on one side of the rectangle and spaced apart vertically, bars

connecting the posts transversely at the top, loose boards adapted to be laid and supported upon such cross bars and duly spaced apart, a cross bar 7 secured to the posts on the open side of the frame, at a short distance above the ground, and plant-supporting slats resting on said bar and an opposite side plank, as shown and described.

2. In a plant-protector of the type indicated, the rigid frame comprising vertical posts fixed at the corners of a rectangle, narrow planks secured in horizontal position to such posts on one side and at the

ends of the rectangle and spaced apart vertically, transverse bars connecting the tops of the posts, and a longitudinal bar 4 secured upon such cross bars and connecting the corner posts on one side of the rectangle, and a bar 7 secured to the front posts at a short distance from the ground, the space above the same being left free and unobstructed, as shown and described.

EDWIN R. DRAKE.

Witnesses:

CLAUDE S. TINGLEY,
S. B. WRIGHT, Jr.