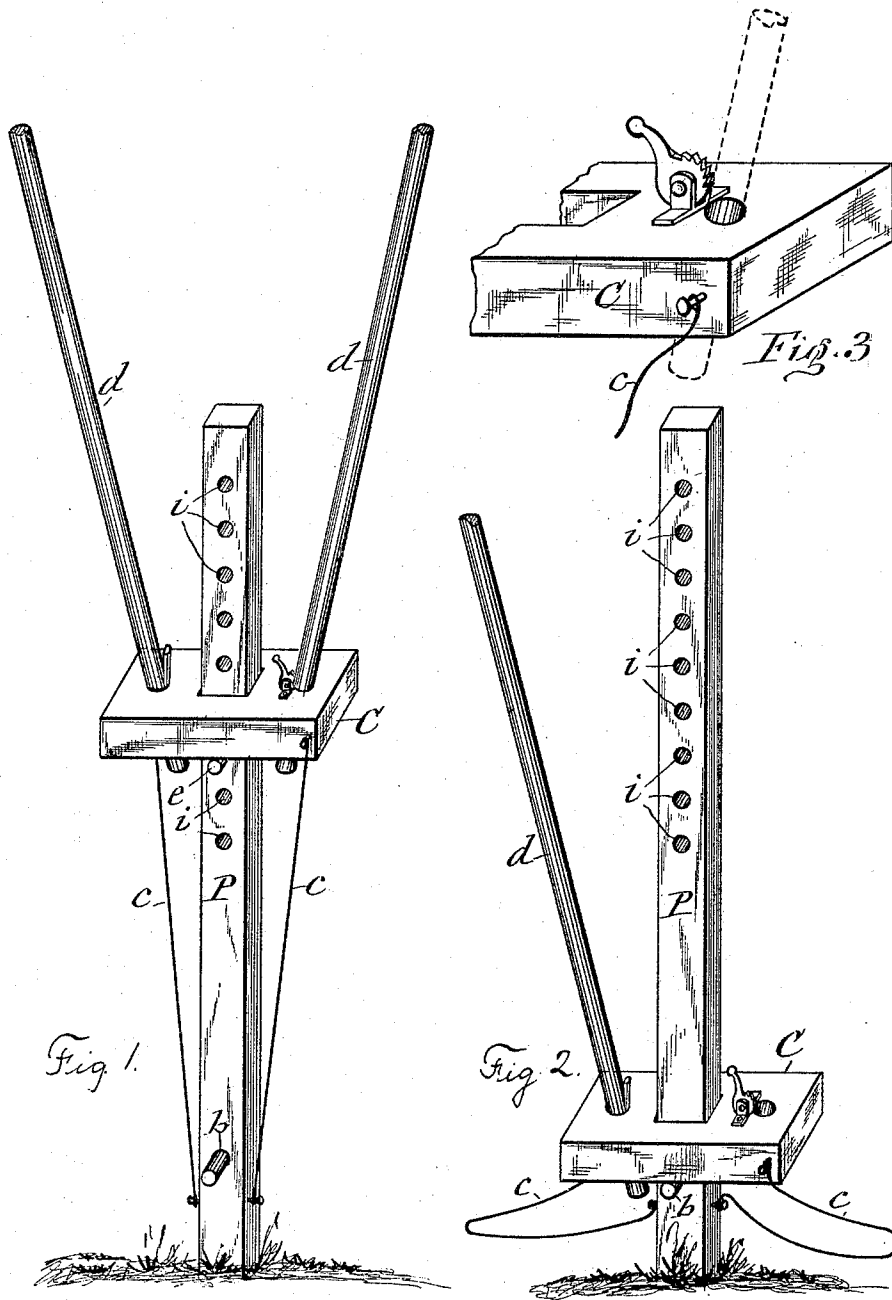


(No Model.)

A. S. HART.
VINE TRELLIS.

No. 495,673.

Patented Apr. 18, 1893.



WITNESSES:

C. L. Burdison
H. M. Seaman

INVENTOR

Andrew S. Hart
By Hull, Laass & Dull
his ATTORNEYS.

UNITED STATES PATENT OFFICE.

ANDREW S. HART, OF MORRISVILLE, NEW YORK.

VINE-TRELLIS.

SPECIFICATION forming part of Letters Patent No. 495,673, dated April 18, 1893.

Application filed August 1, 1892. Serial No. 441,809. (No model.)

To all whom it may concern:

Be it known that I, ANDREW S. HART, of Morrisville, in the county of Madison, in the State of New York, have invented new and useful Improvements in Vine-Trellises, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The object of this invention is to provide a trellis for training chiefly hop-vines, and which shall be permanently erected on the ground and adjustable to afford ready access to the uppermost parts of the vines. And to that end the invention consists essentially of a post, a cross-head connected vertically adjustable to said post, and vine trailers attached to said cross-head, all as hereinafter more fully described and set forth in the claims.

In the annexed drawings Figure 1 is an elevation of a trellis embodying my invention and showing the same in position for trailing the vines. Fig. 2 shows the same in position for removing the vines therefrom, and Fig. 3 is an enlarged perspective view of one of the devices for securing the poles to the cross-head.

Similar letters of reference indicate corresponding parts.

P—represents a post which is permanently erected on the ground in proximity to the vines to be trailed. To this post is connected a vertically movable cross head —C— which is adapted to slide from the upper end of the post to the base thereof and may be supported at the desired elevation by any suitable or well known means. I preferably perforate the post at intervals of its length, as shown at —i—i— for the reception of a pin —e— which is inserted in the perforation of the post directly under the cross-head and thus supports the cross-head at the desired elevation. A suitable stop —b— such as a fixed pin or shoulder on the post near the base thereof serves to limit the downward movement of the cross-head and arrest the same at a proper elevation above the ground for the purpose hereinafter explained.

At opposite sides of the post —P— the

cross-head —C— is provided with sockets in which are removably inserted the poles —d—d—, and from the ends of the cross-head to the base of the post are extended the wires or other suitable flexible trailers —c—c—.

In using the described trellis the cross-head is pushed up until the wires or flexible trailers —c—c— are nearly or quite taut, then the pin —e— is inserted in the perforation of the post immediately under the cross-head to retain the same in its elevated position. The poles —d—d— may be erected on the cross-head either before or after it has been elevated. The vines will run up on the wires or flexible trailers —c—c— and from thence pass onto the poles —d—d—.

For gathering the hops, the pin —e— is withdrawn from under the cross-head —C— which then slides down on the post —P— and is brought to rest on the stop —b—, then the vines are severed and the poles removed from the cross-head and carried with the hop-vine to the place where the hops are to be picked.

What I claim as new is—

1. The combination, with the post —P—, of the cross-head —C— connected to said post movably from the upper end to the base thereof and adjustably sustained in its position and provided with sockets at opposite sides of the post, poles set removably in said sockets, and flexible vine-trailers extending from the cross-head to the foot of the post and attached thereto.

2. The combination of the post —P— perforated at intervals of its length and provided with the stop —a— near its base, the cross-head —C— connected vertically movable to said post, the pin —b—, wires —c—c— extending from the cross-head to the base of the post, and the poles —d—d— detachably connected to the cross-head, substantially as set forth.

In testimony whereof I have hereunto signed my name this 27th day of July, 1892.

ANDREW S. HART. [L. S.]

Witnesses:

LOREN. W. PIERCE,
M. A. WILTSE.