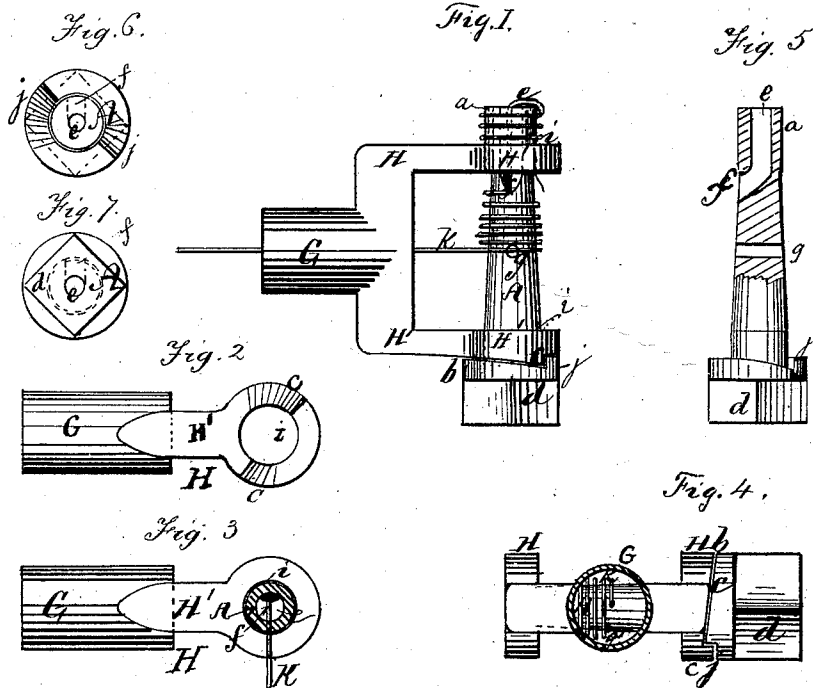


T. S. SEABURY.
GRAPE-VINE TRELLIS.

No. 170,025.

Patented Nov. 16, 1875.



Witnesses:
Franklin Barrett
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UNITED STATES PATENT OFFICE.

THOMAS S. SEABURY, OF ST. JAMES, NEW YORK.

IMPROVEMENT IN GRAPE-VINE TRELLISES.

Specification forming part of Letters Patent No. **170,025**, dated November 16, 1875; application filed April 21, 1875.

To all whom it may concern:

Be it known that I, THOMAS S. SEABURY, of St. James, Suffolk county, State of New York, have invented certain Improvements in Fastenings for Grape-Vine-Trellis Wires, of which the following is a specification:

The object of my invention is to provide for improved adjustable fastenings for the ends of grape-vine-trellis wires, by aid of which the wires can be given the required tension, and any slack occasioned by shrinking of the trellises or expansion of the wires can at once be taken up.

My invention consists in constructing an adjustable windlass, around which one end of the grape-vine-trellis wire is wound. The windlass is supported in a forked frame, the stem of which is hollow, and is inserted into a hole cut through the trellis-post. The windlass consists of a round shaft, having a shoulder and square crank-stem on one end. The other end of the shaft is hollow, communicating with another hole cut through the side of the shaft. In the ends of the forks of the frame are cut holes, in which the shaft is placed, and in which it revolves by aid of a wrench. Ratchet-stops are provided for on the inside shoulder of the shaft, and on the outside end of the fork, near to the shoulder, by aid of which the shaft is held stationary after being turned. The trellis-wire is first adjusted firmly to the outside trellis-post, and is then passed through holes in the intermediate posts, and lastly through the hole in the stem of the windlass-frame. It is then passed downward through the hole in the side of the shaft, thence to the outer end of the same. The end of the wire is then bent around the end of the windlass-shaft, thereby firmly holding the ratchets together, and preventing the windlass-shaft from becoming accidentally detached from its seats; but that my invention may be fully understood I will describe the same in detail by reference to the accompanying drawings, which form part of this specification.

Figure 1 represents a plan, Figs. 2 and 3 opposite side views, and Fig. 4 a back view, of a grape-vine-trellis windlass constructed according to my invention. Fig. 5 is a plan view, partially in section, and Figs. 6 and 7

opposite end views, of the windlass-shaft A separately.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

H represents a frame, having arms H' H' formed on the end of a hollow stem, G, which is adapted to be inserted into a hole cut in a trellis-post, and thereby support the device, while at the same time the passage *g* through the stem G forms a guide for the wire K. A represents the windlass-shaft, which is supported with capability of revolving in bearings *ii* in the arms H' H'. *c* are ratchet-stops, formed on the exterior of one of the arms H', adapted to engage with corresponding ratchet stops or teeth, *j*, formed on the internal surface of the square head *d*, at one extremity of the windlass-shaft A. *f* represents a hole formed in the periphery of the windlass-shaft A, for the passage of the end of the wire K. This hole *f* is connected with a horizontal hole, *e*, extending from the lower end of the hole *f* to the extremity of the shaft A, as shown by Figs. 3 and 5.

The operation of the device is as follows: The trellis-wire K having been firmly affixed at one end to a trellis-post, and conducted along through holes in the remainder of the series, it is finally conducted through the hollow stem G, which is supported in a hole in the last post. The other end of the wire K is then passed through the holes *f* and *e* to the extremity of the shaft A, when it is bent or turned over, as shown by Figs. 1 and 3. The shaft A is then revolved until the slack of the wire K has been taken up, and the same properly distended. The ratchets *c* and *j* will then engage one with the other, and hold the wire firmly distended.

The end of the wire, after being passed through the holes *f* and *e*, as shown by Figs. 1 and 3, may be bent round the end *a* of the shaft A, as shown by Fig. 1, thereby firmly holding the ratchets *c* and *j* together, and preventing the revolution of the shaft A, and consequent slackening of the wire K.

Having thus described my invention, I would have it understood that I do not claim, broadly, a wire-stretcher, constructed with a revolving windlass-shaft retained in position

by ratchets; nor do I claim a wire-stretcher having a frame provided with a groove and clutch, and spindle, such as described in the specification of Letters Patent granted to Albert Byington, dated February 21, 1871, No. 111,905; but

What I do claim, and desire to secure by Letters Patent, is—

In a trellis-wire stretcher, the combination, with a forked framing, H, constructed with arms H' H', having bearings *i i* and ratchets *j*, and supported by a hollow stem, G, of the wind-

lass-shaft A, formed with ratchets *c*, square end *d*, and holes *e* and *f*, leading from the periphery of the windlass-shaft A to the extremity *a* thereof, all constructed and operating substantially as and for the purpose described.

This specification signed this 5th day of April, 1875.

THOS. S. SEABURY.

Witnesses:

ANTON C. CRONDAL,
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