

A. S. TENNANT & G. PRENDERGAST.

GRAPE TIE.

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997,022.

Patented July 4, 1911.

Fig. 1.

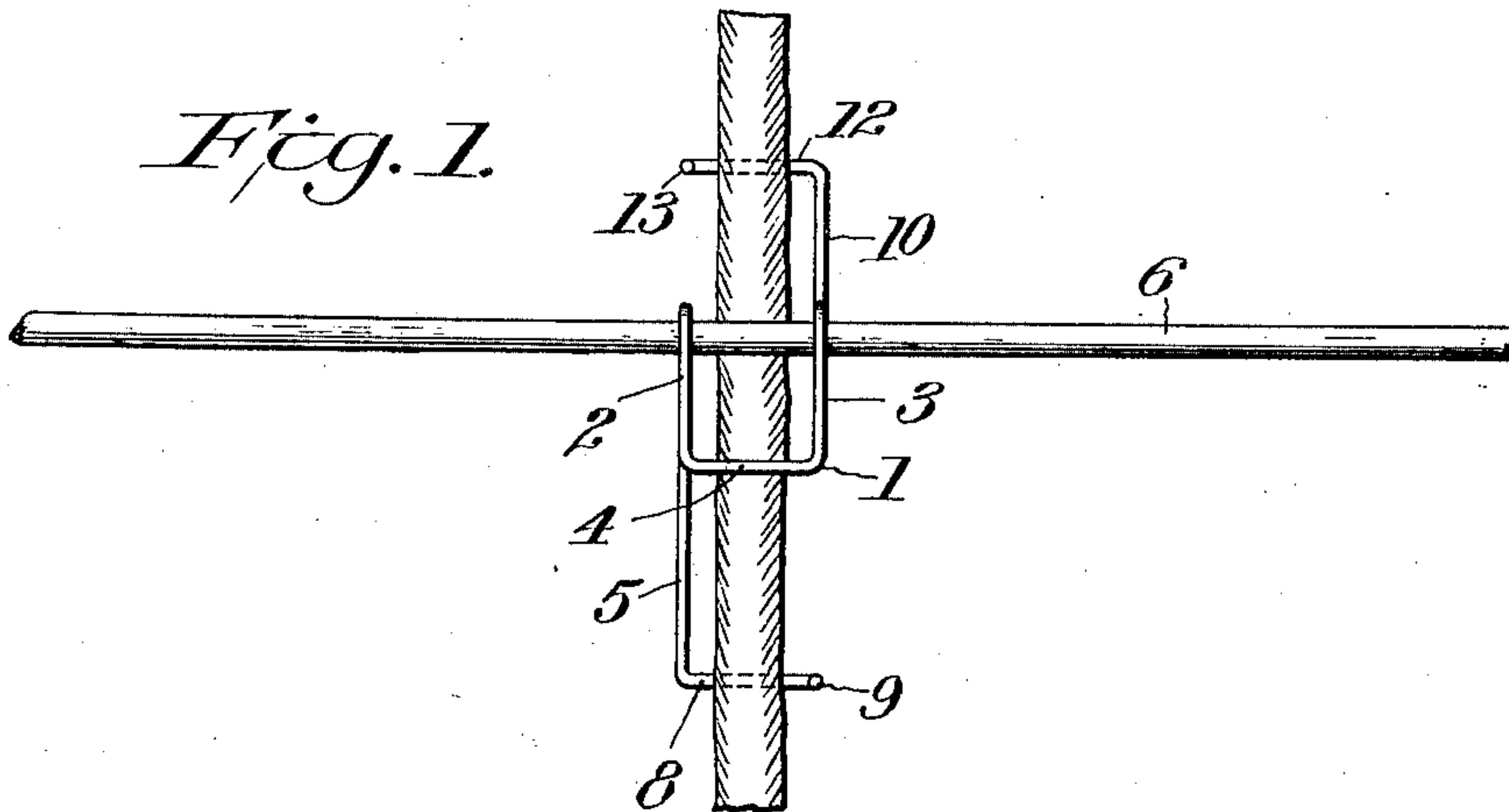


Fig. 2.

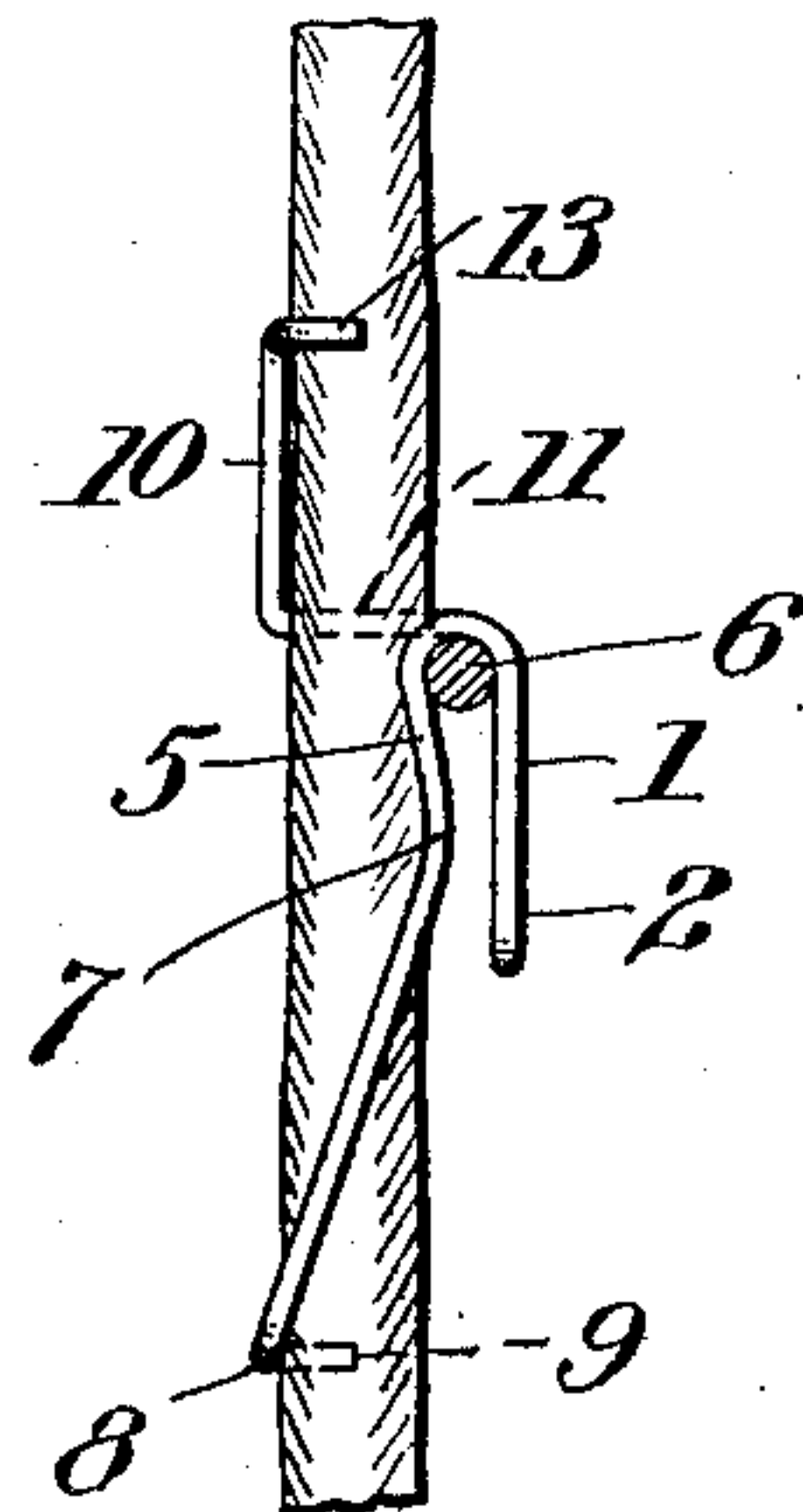
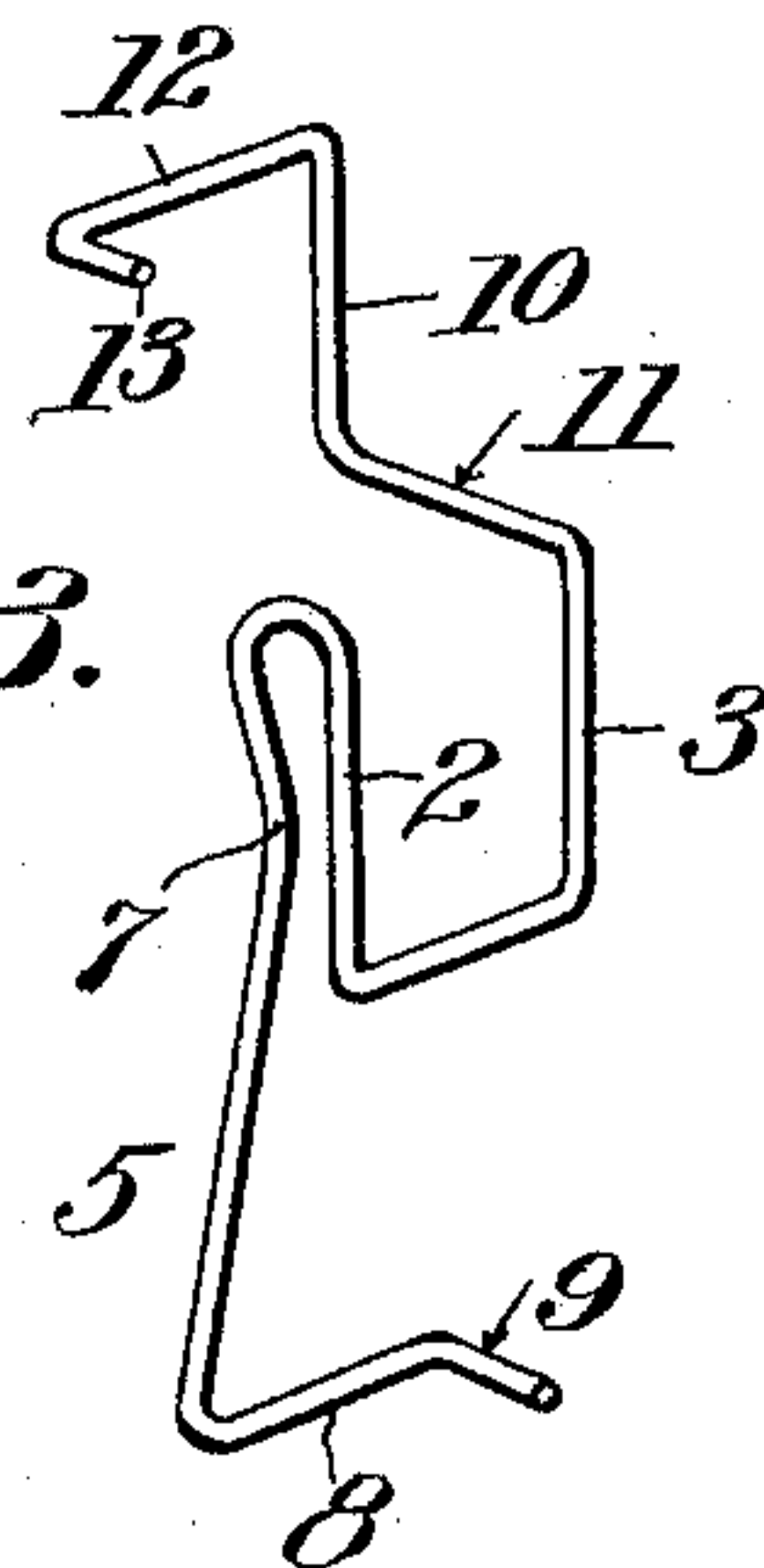


Fig. 3.



WITNESSES

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GRAPE-TIE.

997,022.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed November 22, 1910. Serial No. 593,704.

To all whom it may concern:

Be it known that we, ARTHUR S. TENNANT and GEORGE PRENDERGAST, citizens of the United States, both residing at Buffalo, in the county of Erie, State of New York, have invented certain new and useful Improvements in Grape-Ties, of which the following is a description, reference being had to the accompanying drawing, and to the letters and figures of reference marked thereon.

The invention relates to new and useful improvements in metal ties for holding vines or plants to trellises or the like, and more especially to ties for securing grape vines to the usual supporting wires therefor.

An object of the invention is to provide a tie in which there are no two points of contact opposing each other, so as to retard the growth of the vine; also to provide a tie in which the vine is engaged at points both above and below the wire, so as to hold the vine snugly against the wire, and again, to provide a tie with a supporting hook to engage the wire, which hook is constructed with means for locking the same to the wire.

In the drawings which show by way of illustration one embodiment of the invention: Figure 1 is a rear view showing our improved tie, the supporting wire, and the vine held by the tie; Fig. 2 is a side view of the same; Fig. 3 is a perspective view of our improved tie.

In carrying out our invention, we preferably form our improved tie of wire and said wire is shaped so as to form a supporting hook 1, which hook has spaced downwardly projecting parts 2 and 3, which are connected by a member 4. Also projecting downwardly from the hook 1 is an arm 5 which is spaced from the portion 2 of the hook, as clearly shown in Fig. 2, so as to receive the supporting wire 6 to which the vines are to be attached. Said arm 5 at a point slightly below the upper end of the hook, is bent so as to form a shoulder 7. The shoulder 7 projecting toward the portion 2 of the hook, forms a contracted mouth for the hook, so that the supporting wire, after being forced through the contracted mouth will be held by said shoulder or hump 7 from displacement, and thus the grape tie is in a manner locked or securely held on the supporting wire.

The arm 5 below the shoulder 7 is bent away from the portion 2 to a certain extent,

and at its lower end is bent at right angles to form a member 8, which is adapted to engage the opposite side of the vine or cane, to be supported from that engaged by the supporting wire 6. The extreme outer end of the member 8 is also bent laterally as at 9, to provide a retaining shoulder to hold the member 8 in contact with the vine or cane. Projecting upwardly from the hook 1 is a second arm 10. This arm 10 at the upper end of the hook 1 extends laterally as at 11 to form a shoulder which rests on the supporting wire 6, thus completing the base of the hook on the portion 3 thereof, which corresponds with the supporting part of the hook formed by the connection between the arm 5 and the portion 2 of said hook. Said laterally bent portion 11 is substantially the width of the ordinary cane to be supported by our improved tie and the arm 10 projects upwardly from the outer end thereof.

At the upper end of the arm 10, a laterally projecting portion 12 engages the cane or vine on the same side as the member 8 of the arm 5, and on the side opposite that engaged by the supporting wire 6. At the extreme outer end of the laterally projecting portion 12 is a second laterally projecting portion 13, which serves to hold the cane or vine in contact with the portion 12 of the tie.

In the operation of our device, the hook 1 is slipped on to the supporting wire, the cane to be supported is then placed against one of the supporting arms and the other one may be quickly sprung into engagement with the cane in the manner shown in the drawing. It will readily be seen that by our improved tie, wherein the arms extend above and below the grape wire, the vine will be held firmly in position against the wire and at the same time no two points of contact will be directly opposite each other so as to retard in any way the growth of the vine. Furthermore, by our construction of hook, which widely spaces the branches thereof, and the arms which project from the sides of the hook, we have formed a tie in which there is space between the arms for the free growth of the vine. Then again, by providing the hook with a hump or shoulder, the tie will be securely held to the wire.

It is obvious that minor changes in the details of construction may be made without

departing from the spirit of our invention, as set forth in the appended claims.

Having thus particularly described the invention, what we claim as new and desire to secure by Letters Patent, is:—

1. A grape tie consisting of a metal strip or wire, having a hook portion for engaging the supporting member, an arm extending upwardly substantially parallel with the vine and having a portion bent laterally to engage the vine on the opposite side of the supporting member, and a second arm extending downwardly substantially parallel with the vine, and having a portion engaging the vine on the same side as said first named arm.

2. A wire grape tie consisting of a hook portion, a retaining shoulder for holding said hook portion on the supporting wire, a downwardly projecting arm having a laterally extending portion to engage the vine on the opposite side thereof from said supporting wire, and an upwardly extending arm having a laterally extending portion

to engage the vine on the same side thereof, as said first named arm. 25

3. A wire grape tie consisting of a hook portion formed with laterally spaced portions, one of which is bent downwardly and formed with a retaining shoulder for holding the hook on the supporting wire, and then is bent laterally to form a portion for engaging the vine on the opposite side thereof from said supporting wire, and the other portion of said hook is bent laterally to form a supporting shoulder resting on the supporting wire and then upwardly and laterally to form a portion extending above the wire for engaging the vine on the side thereof of opposite said supporting wire. 30 35 40

In testimony whereof we affix our signatures, in presence of two witnesses.

ARTHUR S. TENNANT.
GEORGE PRENDERGAST.

Witnesses:

AUGUSTA AICKMAN,
LENA M. PRENDERGAST.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."