

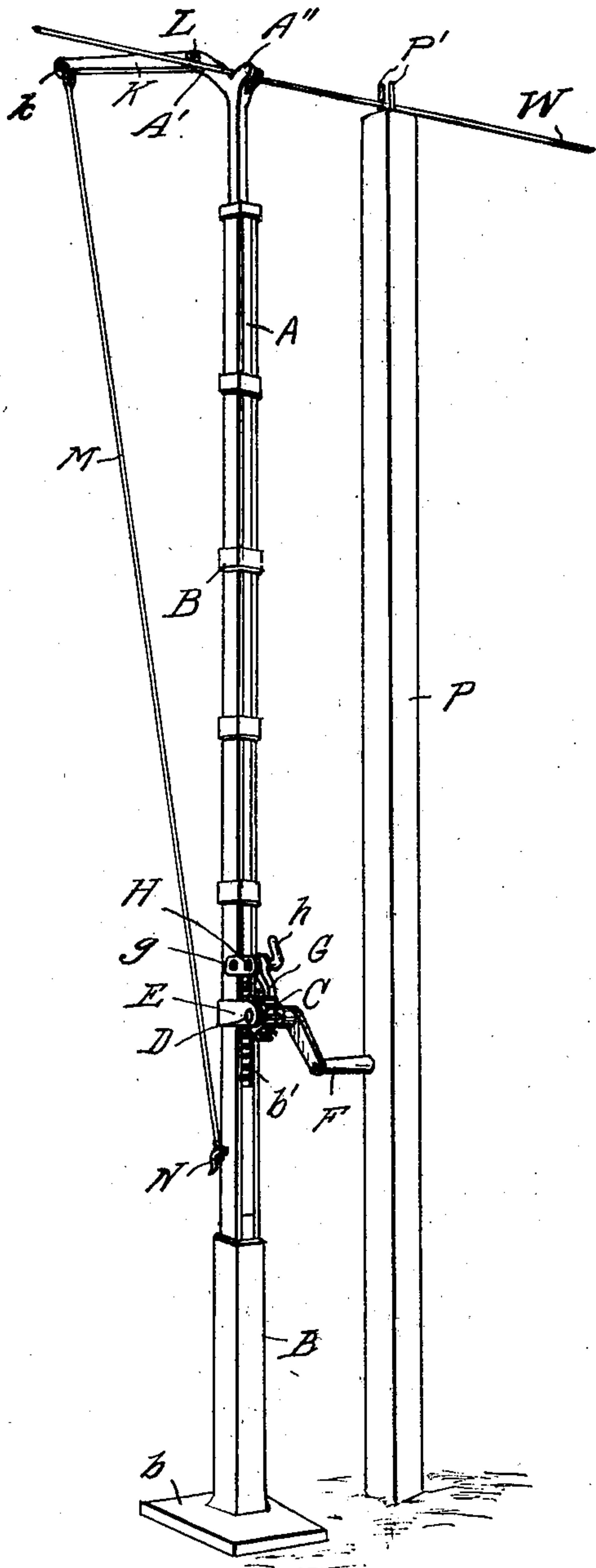
No. 898,010.

PATENTED SEPT. 8, 1908.

J. C. SEELAND.

WIRE LIFTER.

APPLICATION FILED NOV. 7, 1907.



WITNESSES:

*Horace Barnes.*  
*Norman Gullock.*

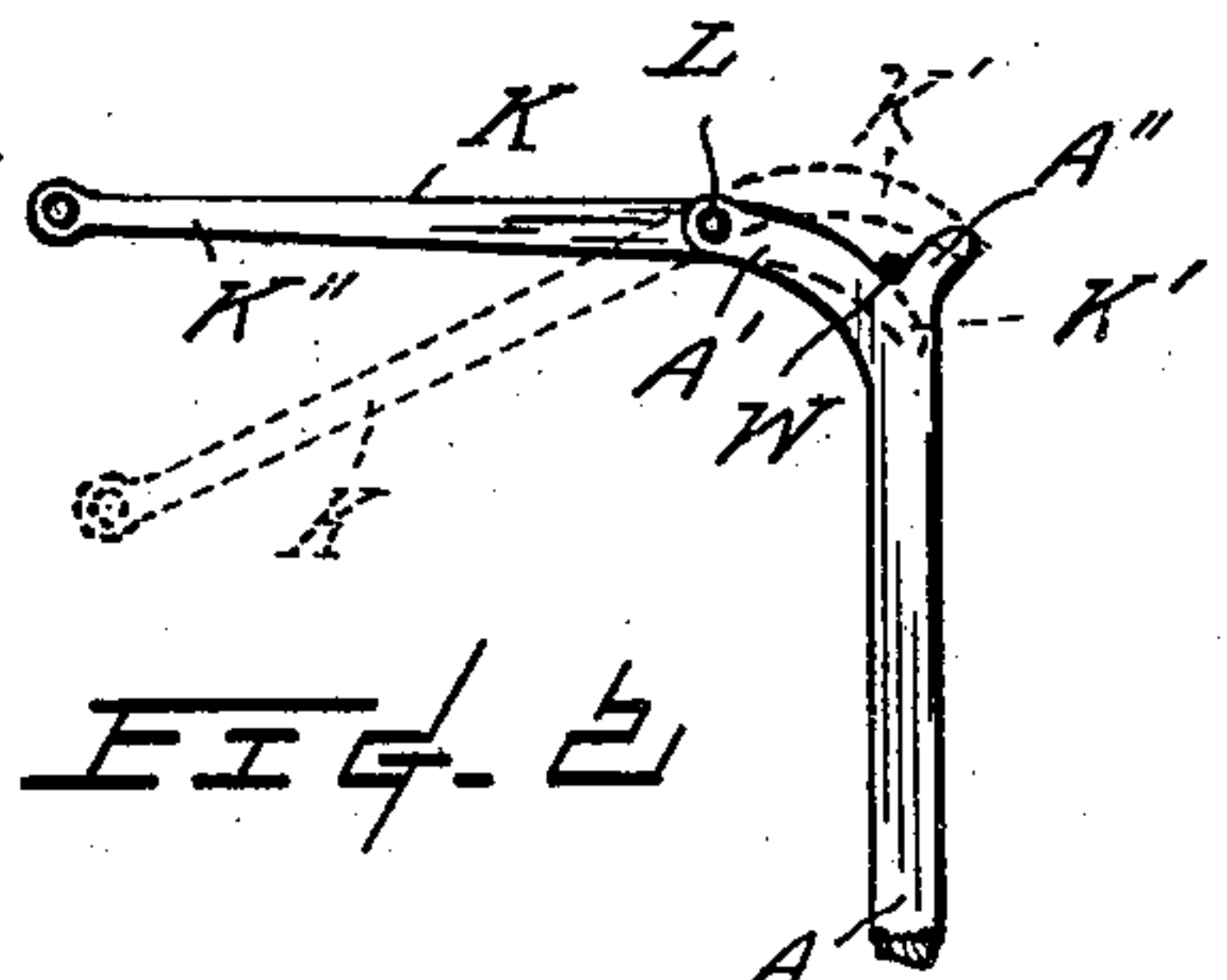


FIG. 2

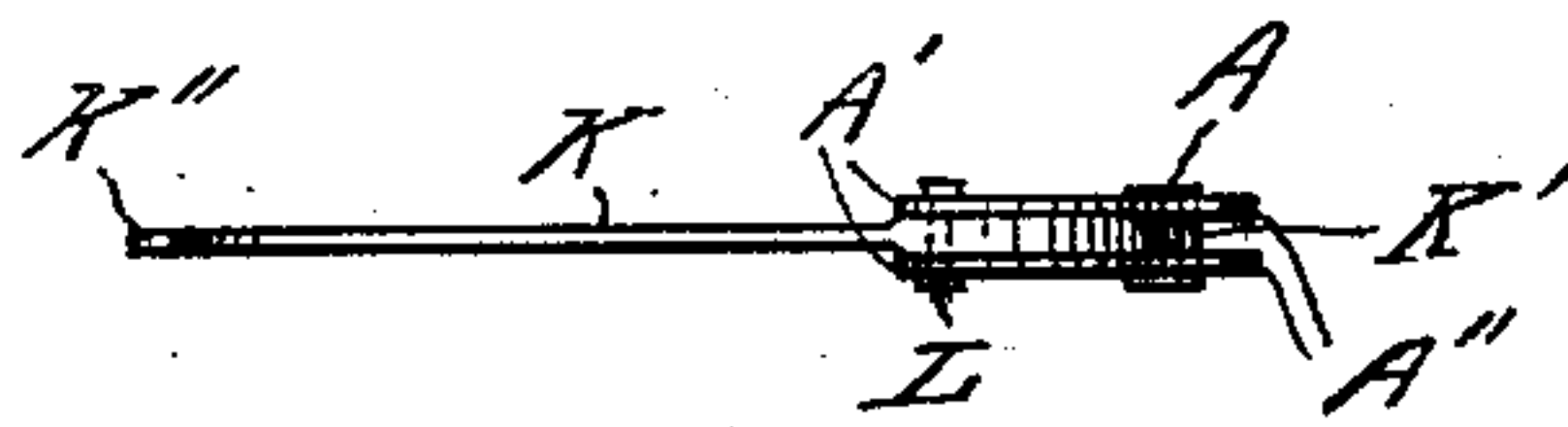


FIG. 3

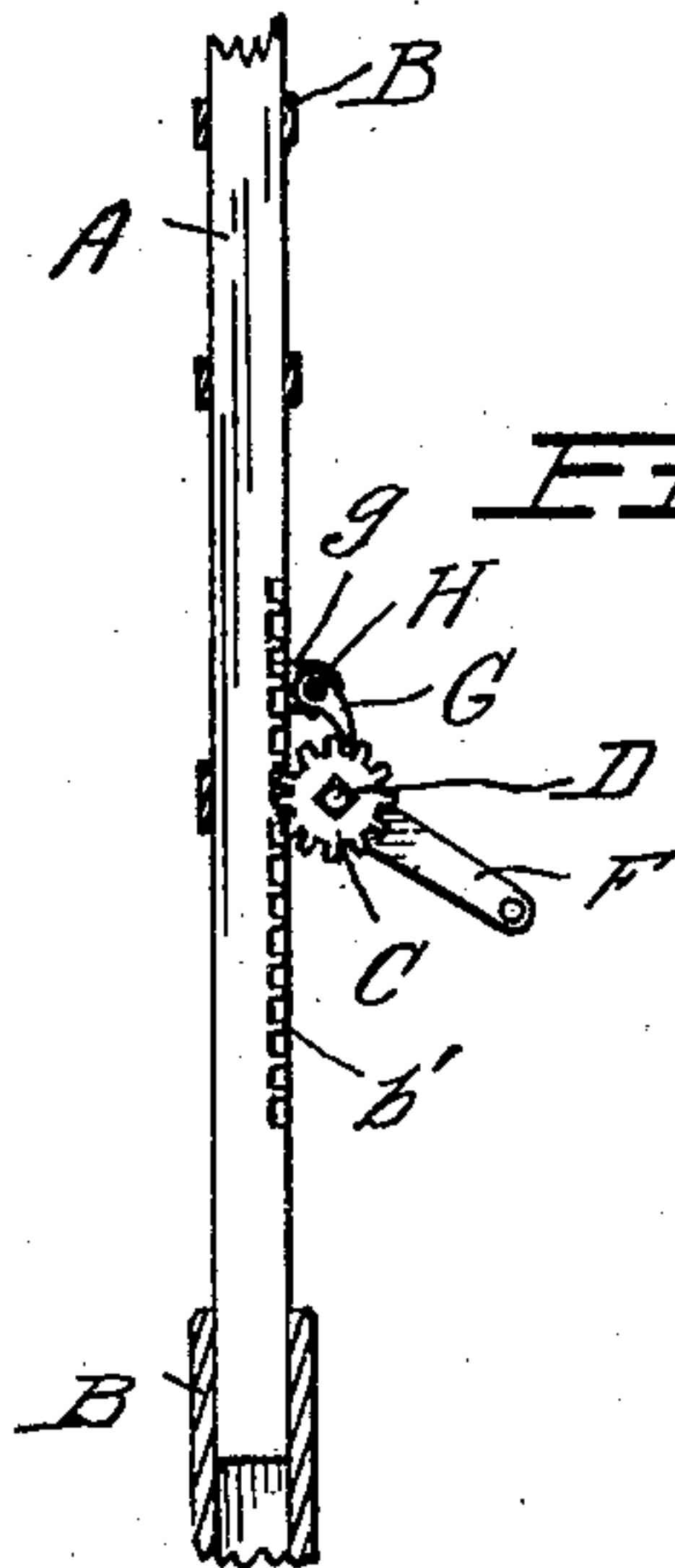


FIG. 4

INVENTOR

*John C. Seeland*

BY

*Henry Barnes*

ATTORNEY



# UNITED STATES PATENT OFFICE.

JOHN C. SEELAND, OF ENUMCLAW, WASHINGTON.

## WIRE-LIFTER.

No. 898,010.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed November 7, 1907. Serial No. 401,150.

*To all whom it may concern:*

Be it known that I, JOHN C. SEELAND, a citizen of the United States, residing at Enumclaw, in the county of King and State of Washington, have invented certain new and useful Improvements in Wire-Lifters, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to devices employed for removing from the supporting posts the line-wires such as are now being extensively adopted by farmers for sustaining hop-vines, and, more particularly, when it is desired to  
15 lower the vines to render the same within convenient reach of the pickers.

The object of the invention is to provide means whereby the wires are readily and conveniently raised out of the notches, or  
20 equivalent devices, upon the tops of the wire supports and thence divert the wire so that it will fall clear of such supports.

The invention consists of the novel construction and combination of devices, as will  
25 be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of apparatus embodying my invention, together with a portion of a line wire and the post-support therefor. Figs. 2 and 3 are re-  
30 spectively a side elevation and a plan view of the upper portion of the hoisting pole together with the attached lever. Fig. 4 is a fragmentary view in side elevation of the device with the casing thereof in section.

35 According to my invention, I employ a bar A which is slidably mounted in an upright position in a frame or casing B having an enlarged base *b*. Said bar is, intermediate its length, provided with rack-teeth *b'* adapted for engagement with a toothed pinion C  
40 fixedly mounted upon a rotary spindle D which is journaled in bracket supports E rigidly secured to said casing.

45 F is a crank handle affixed to a protruding end of the spindle for actuating the pinion in effecting the raising or lowering of the bar.

A pawl G is provided to secure the pinion against being rotated by the weight exerted by the bar; and this pawl may engage with a  
50 ratchet wheel provided upon said spindle, or as illustrated, be arranged to engage directly with the pinion teeth.

Bracket pieces *g* are provided on the casing to accommodate a pivotal pin H which carries said pawl and, to facilitate the tilting of  
55 the latter for disengagement with the pinion,

the pin H has a bent end *h* to serve as a handle.

At the top, the bar A is provided with branches A' and A'' disposed in such relation  
60 as to form with the bar proper a Y, and such branches are themselves bifurcated for the reception of a lever K between the branch parts. This lever is fulcrumed by a pin L  
65 to the branch A', and has its shorter arm K' curved downwardly and of such a length as to extend into the slot between the branch parts A''. The longer arm K'' of the lever  
has near its outer extremity an eye *k* to afford means for connection with a line or  
70 rod M whereby the lever K is manipulated for dislodging the wire, as will be explained. Upon said bar and within convenient reach  
of the operator is a hook N, or an equivalent, wherewith the lower end of the rod M may  
75 be connected for maintaining the lever in its position whereat the shorter said arm is sheathed between the branch parts A''.

P represents a post provided at its top with a pair of pegs, or nails, P', as common, for re-  
80 taining a line-wire W therebetween.

The operation of the invention may be described as follows: Assuming that the hop vines are supported from the line-wire W and  
85 intermediate of the posts, such as P, then to lower the wire to height from the ground so as to be within reach of the pickers, the wire has to be first elevated above the tops of the  
90 pegs P' and then moved laterally so as to clear the post when the wire is released for falling. To effect these results the apparatus is positioned beneath the wire in prox-  
95 imity of a post and arranged in such relation with the wire that the branches of the bar A will be directed transversely thereto.

By manipulating the cranked pin H to properly rotate the pinion C, the bar is caused to ascend and engage the wire within the  
100 crotch formed between the bar branches and above the short arm K' of the lever, and by continuing this upward movement of the bar it is obvious that the wire will be correspond-  
ingly raised to withdraw it from its seat between the pegs. When the wire has been  
105 thus raised it is held in its elevated position through the pawl G restraining the pinion C which controls the movements of the bar A now acting to support the wire and the latter  
may be dislodged from its position between  
110 the bar branches by pulling downwardly upon the rod M to cause the shorter arm K' of the lever to swing upwardly and raise the



wire to a height above that of the bar branch A' and in so doing and by reason of the convex shape of the lever presented the wire is swerved in a transverse direction to beyond  
5 such branch whereupon it is free to fall.

What I claim, is—

1. A wire lifter comprising a frame, a bar movably supported in said frame, said bar being provided at its upper end with diverg-  
10 ing branches, both of said branches being bifurcated, a lever tiltably connected to one of said branches and having the shorter arm thereof projecting into the other bifurcated branch, the longer arm of said lever normally  
15 lying in a substantially horizontal position, said lever having the shorter arm thereof which is positioned between the extremities of the bar branches curved and with its upper face convex, a rod or its equivalent con-  
20 nected to the outer end of the longer arm of said lever, and means carried by said frame whereby the bar may be raised or lowered as desired and with respect to the frame.

2. A wire lifter of the class described, com-  
25 prising a frame, a bar provided with rack teeth and having at its upper end bifurcated branches, a lever fulcrumed to one of said

branches and adapted to have one of its arms enter the space between the parts of the other branch, means for actuating said lever to  
30 swing said arm up or down, a pinion carried by the frame and in mesh with said rack teeth of the bar, means for rotating said pinion, and disengageable means for securing  
35 the pinion against rotation in one direction.

3. A wire lifter of the class described, comprising a bar having a forked upper end, a lever fulcrumed to one of the branches of  
40 such end, said lever having the arm thereof which is positioned between the extremities of the bar branches curved and with its top edge convex, a rod or an equivalent connected  
45 with the other arm of said lever, a casing for said bar, a pinion carried by the casing and engaging with rack-teeth provided in said bar, means for rotating said pinion to effect  
the raising or lowering of the bar, and a pawl adapted to engage with said pinion.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN C. SEELAND.

Witnesses:

C. L. STONE,  
P. J. STONE.