

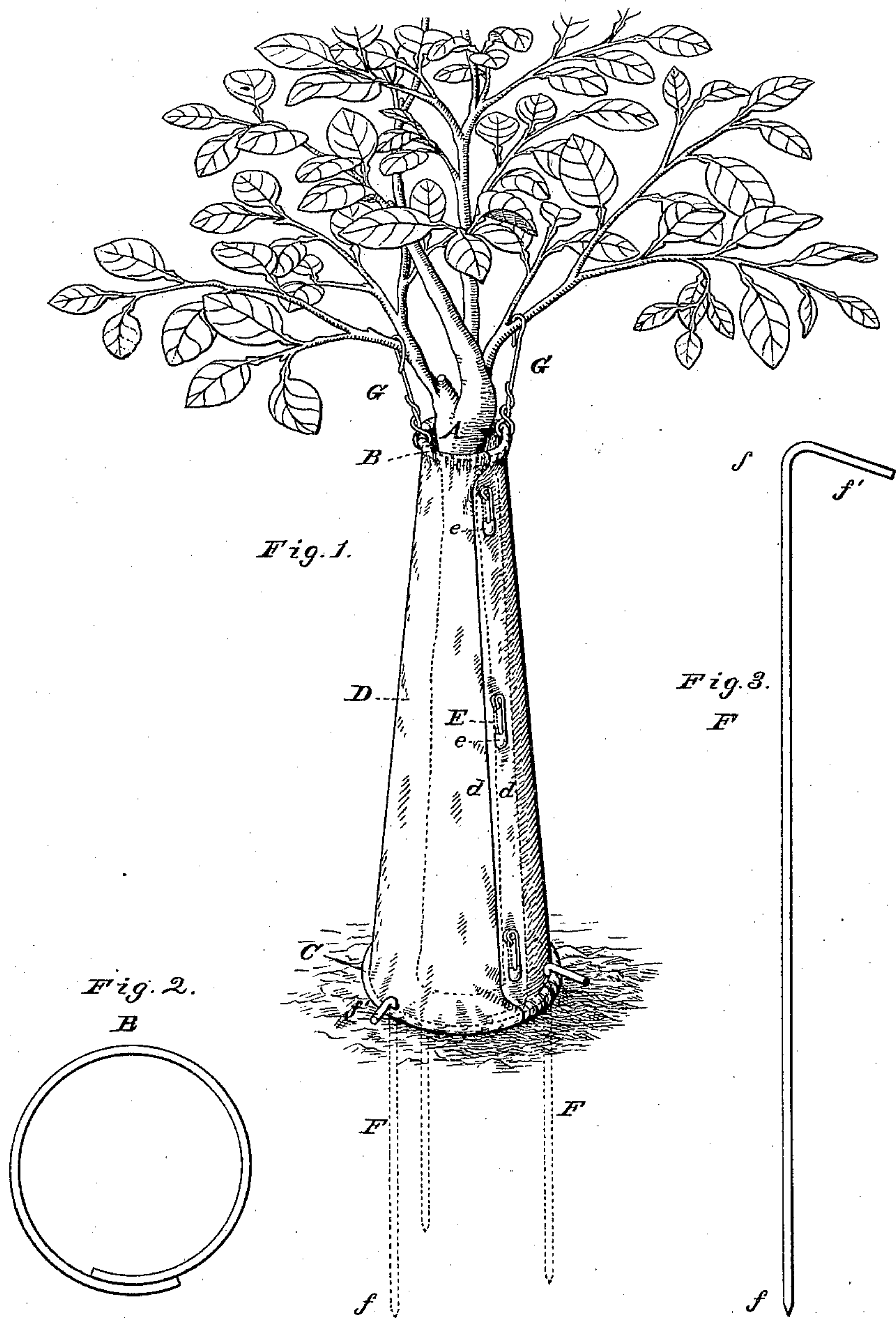
(No Model.)

E. ROWE & R. D. HETRICK.

TREE PROTECTOR.

No. 369,616.

Patented Sept. 6, 1887.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD ROWE AND RUSSELL DICK HETRICK, OF INDIANA,
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TREE-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 369,616, dated September 6, 1887.

Application filed May 14, 1887. Serial No. 238,255. (No model.)

To all whom it may concern:

Be it known that we, EDWARD ROWE and RUSSELL DICK HETRICK, citizens of the United States, and residents of Indiana, in the
5 county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Tree-Protectors; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable
10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

15 Figure 1 of the drawings is a perspective view of the device applied to a tree. Fig. 2 is a top view of one of the rings. Fig. 3 is a side view of one of the wire rods used for fastening the case to the ground.

20 This invention has reference to devices for protecting trees that grow in low latitudes, such as lemon and orange trees, from the effects of frost; and it consists in the construction and novel combination of parts, as herein-
25 after set forth.

Referring to the drawings, A designates the stem or trunk of a tree.

D is a sleeve or web of cotton cloth or other suitable material, secured at the ends to ad-
30 justable rings B C, that surround the stem of the tree. The rings are made of wire having unclosed rings, which are capable of sliding past each other, so that the rings will adjust themselves to the size of the trunk on which
35 the device is attached. The sleeve or web D, connecting the two rings, has its ends wrapped over the wire of the rings and secured thereto by stitching or otherwise in such manner that the rings move easily in their con-
40 nections therewith. The lower ring, C, is made larger than the ring B, more wire being allowed for it because of the greater diameter of the tree-trunk at the point upon which it rests. The free edges d d of the sleeve or web
45 are secured together by hooks and eyes, buttons and button-holes, or, preferably, by pins E, having their points protected or guarded by sheaths or keepers e , which can be readily removed and attached at other points.

50 F F are wires which have their lower ends

pointed at f , and the parts f' , adjacent to their upper ends, bent over, so that they form angles a little less than right angles with the stems of the wires.

When the rings B and C are in place on the tree-trunk and the edges d of the web secured
55 together by the pins or otherwise, the wires F are driven into the ground and the upper bent portions, f' , bear upon and hold down the lower ring, C, so that the lower part of the
60 stem A is entirely covered.

G G are wires that connect the upper ring, B, to the tree. The said wires have their lower ends bent around the wire, forming the ring
D, and their upper ends bent around or other-
65 wise secured to the limbs of the tree.

The device can be quickly attached to the young tree, as the wire rings can have their ends pulled apart and sprung on the stem, and the web then have its edges secured together
70 by means substantially as described.

The principal advantages of the device are its cheapness, its efficiency, and the ease with which it can be attached and detached, as it is only necessary to spring the rings B and C in
75 place and connect the edges of the web together to place it on the tree-trunk, and it can evidently be as easily and quickly removed.

The device protects the trunk both from frost (by which the bark might be chilled and
80 the tree killed) and prevents the rapid evaporation of moisture from the bark, which would probably cause the same to crack.

Having described our invention, we claim—

The combination, with the tree-protector
85 composed of the unclosed wire rings and the connecting-web, of the pins securing together the longitudinal edges of the web, the wires F, having bent upper portions to hold the lower wire ring to the ground, and the wire attach-
90 ing the upper wire ring to the upper part of the tree, substantially as specified.

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

EDWARD ROWE.

RUSSELL DICK HETRICK.

Witnesses:

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