

(No Model.)

J. DONALDSON.  
TREE BOX.

No. 361,351.

Patented Apr. 19, 1887.

Fig. 1

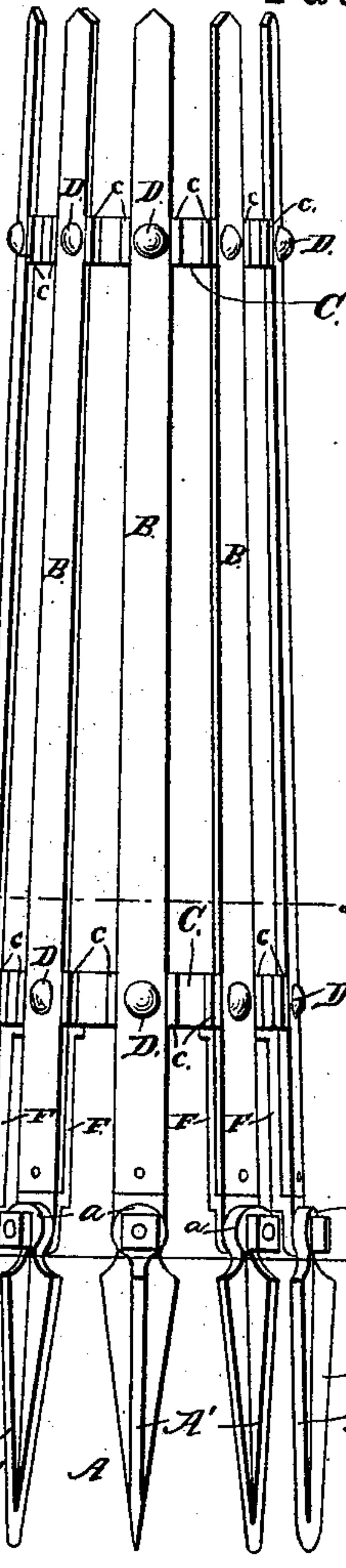


Fig. 5



Fig. 3

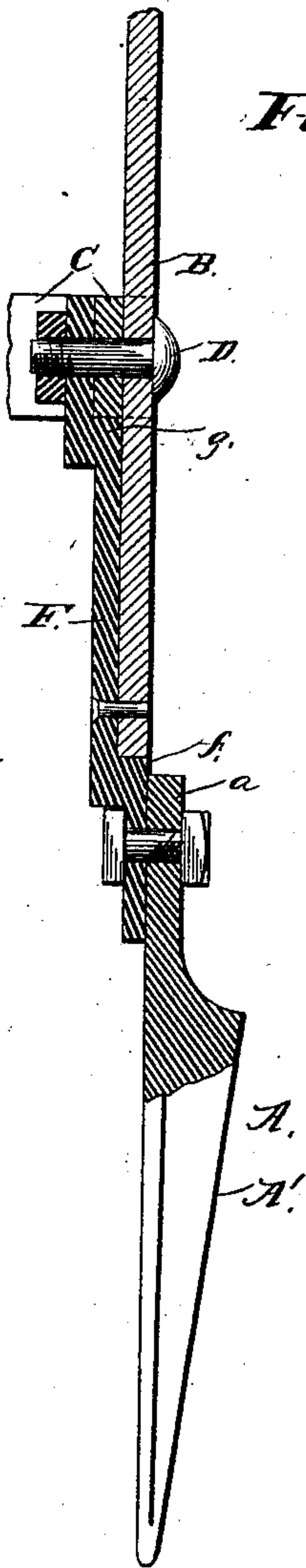


Fig. 4

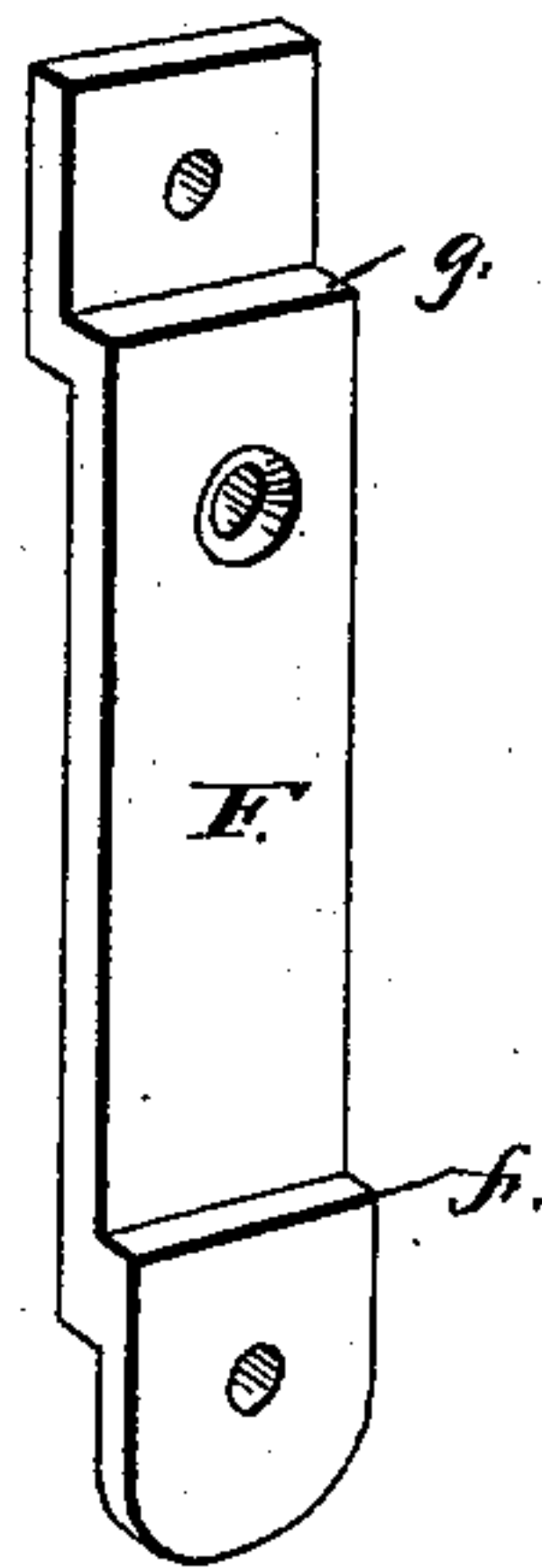
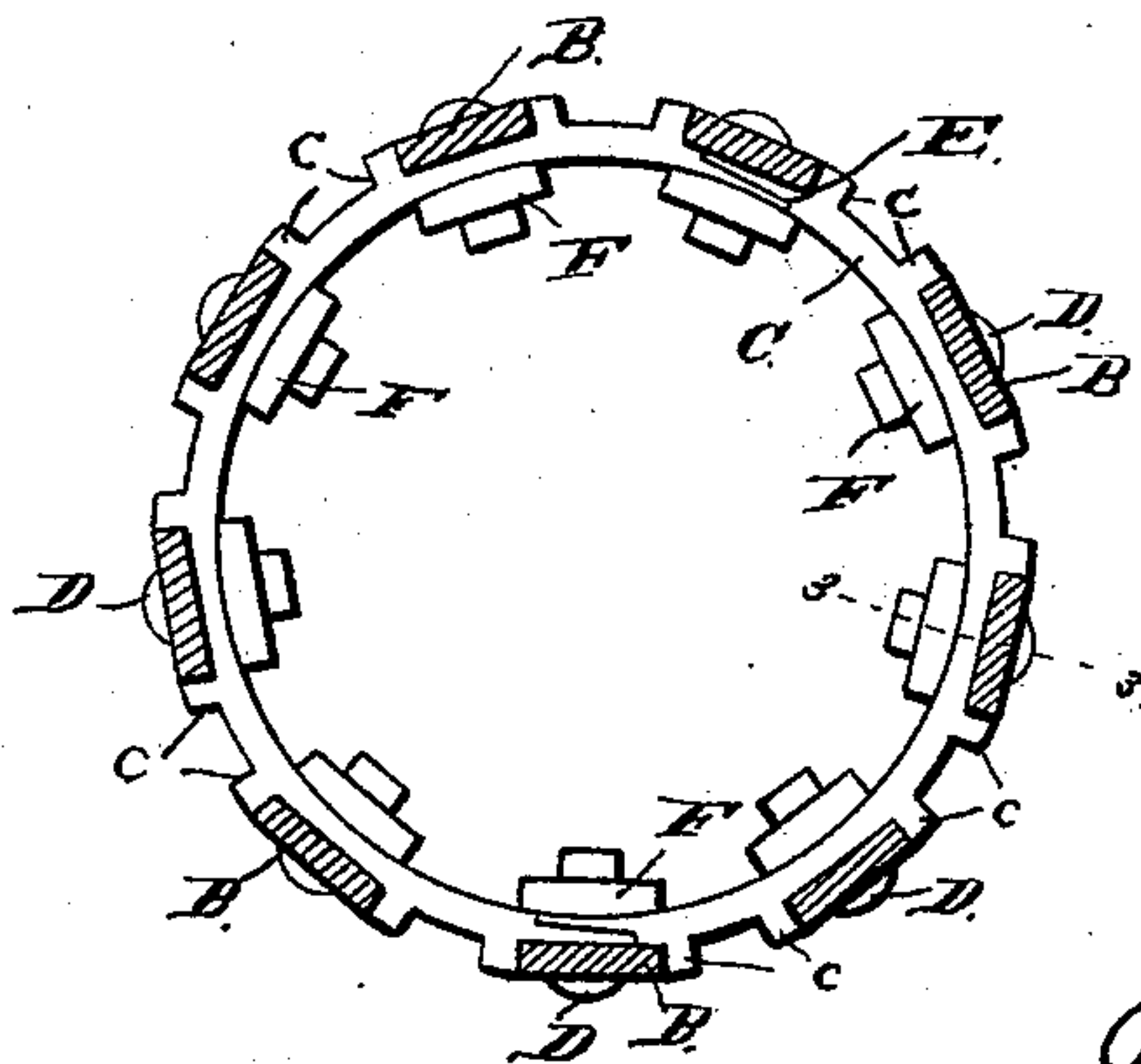


Fig. 2



Witnesses  
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By his Attorneys

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# UNITED STATES PATENT OFFICE.

JOHN DONALDSON, OF ST. LOUIS, MISSOURI.

## TREE-BOX.

SPECIFICATION forming part of Letters Patent No. 361,351, dated April 19, 1887.

Application filed January 10, 1887. Serial No. 223,920. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DONALDSON, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Tree-Boxes, of which the following is a specification.

My invention relates to improvements in tree-boxes, and aims to provide a strong, durable, and cheap box, which can be easily and quickly placed around a tree and as readily removed therefrom.

The invention consists in certain novel features, which will be hereinafter first fully described, and then pointed out in the claims.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a side elevation of a tree-box provided with my improvements. Fig. 2 is a horizontal sectional view on the line 2 2, Fig. 1. Fig. 3 is a vertical detail sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a detail view of the brace which serves to connect the feet of the box to the slats. Fig. 5 is a detail section through the rings or bands to show the shape more clearly.

Referring to the drawings by letter, A indicates the feet, which are T-shaped in cross-section, being provided with longitudinal ribs A' on their outer faces, so that when the feet are driven in the ground they will be held against movement in all directions. The feet are also provided with the circular perforated heads a, and they are connected to the tree-box by bolts passed through the perforations in these heads and the ends of the braces, hereinafter referred to.

B designates the slats of the tree-box, which are secured to and held in their relative positions by the divided rings C C. These rings or bands are two in number, one being provided near the top and one near the bottom of the box, as shown. The outer face of the rings is slightly beveled to suit the taper of the box, and over this beveled outer face of the rings are secured the slats B. The inner faces of the rings are perpendicular, so as to draw well out of the sand in casting them. They are provided at proper intervals around their outer faces with the spaced lugs c, extending entirely across the same. The slats B fit between the lugs c, and are held against lateral movement

thereby. They are rigidly secured to the bands and held against any movement radial to the bands by bolts D, passed through the slats and the said bands. The rings or bands are each made in two sections, connected by lap-joints E, as shown in Fig. 2. These lap-joints are arranged so as to come directly behind two of the slats, in order that the same bolt that secures the slat to the ring may also serve to join the two parts of the band. The outside or external appearance of the rings is thus made to resemble a continuous ring, as the joints are not discernible from the outside. By forming the rings in sections the box can be easily and conveniently secured in place around the tree, and can be quickly removed, if necessary. The rings are preferably made of cast metal, as they can be made in that manner very rapidly without loss of strength or imperfections in regard to size, &c.

F are braces or metallic connection-plates, which serve to secure the box to the feet A, as will be presently described. They are of the same width as the slats and extend from the lower ring or band, C, to a short distance below the lower end of the box. It is constructed with a shoulder, f, near its lower end, upon which the lower end of the slat rests. The end of the brace also is bent out of the main line, so as to depend from the shoulder f in line with the slat of the box, and is provided with an opening or perforation, through which the fastening-bolt is passed. The brace is provided at or near its upper end with a shoulder, g, which abuts against the lower edge of the band or ring C, and above this shoulder g the end of the brace bears against the rear side of the ring, and is provided with a perforation, through which the securing-bolt is passed. It will be observed upon reference to Fig. 3 that the same bolt which secures the slats to the ring also serves to secure the upper end of the brace. A small wood-screw is inserted through the brace from its rear side into the slat, to more effectually secure the brace thereto and prevent its moving from place; but this screw may be dispensed with, as the shoulders f g will ordinarily be sufficient to prevent the movement of the brace by impinging against the under edge of the band C and the lower end of the slat.



In building my tree-boxes I drive the feet into the ground at the proper points around the base of the tree, and form the two sections of the box as before described. The two sections are then made to encircle the tree in such position that the perforations in the lower ends of the braces will be in alignment with the perforations in the upper ends of the feet, and securing-bolts are then inserted through these aligned openings and tightened, as will be understood.

The braces, it will be readily seen, re-enforce and strengthen the ends of the slats. Any number of feet and braces may be used; but three are generally sufficient, and I usually employ that number. My device is cheap, simple, compact, and durable, and may be readily operated.

Having thus described my invention, what I

claim, and desire to secure by Letters Patent, is—

1. The combination of the rings, the feet, the slats, and the braces connecting the feet and slats, substantially as set forth.

2. The hereinbefore described and shown tree-box, comprising the feet, the slats, the braces connecting the slats to the feet, and the divided rings uniting the slats, and provided with lugs between which the slats fit and are secured to the rings, all arranged and combined substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN DONALDSON.

Witnesses:

PHILIP H. ZWICKER,  
GEORGE ROGERS.