

(No Model.)

W. B. WATSON.
TREE BOX.

No. 601,691.

Patented Apr. 5, 1898.

Fig. 1.

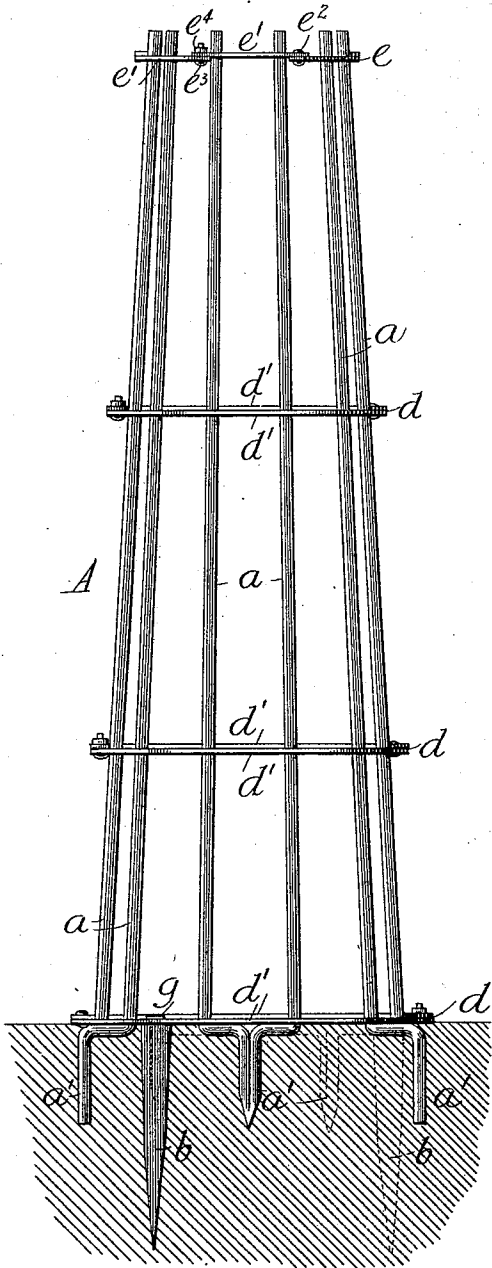


Fig. 2.

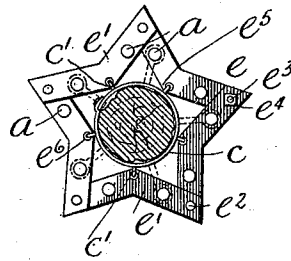
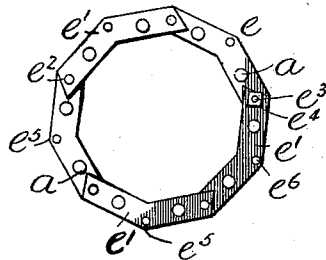


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM B. WATSON, OF RICHMOND, INDIANA, ASSIGNOR OF ONE-HALF
TO SETH F. WATSON, OF SAME PLACE.

TREE-BOX.

SPECIFICATION forming part of Letters Patent No. 601,691, dated April 5, 1898.

Application filed September 8, 1897. Serial No. 650,896. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. WATSON, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Tree-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention is directed to improvements in tree-boxes, and has for its object the production of a simple construction of box possessing advantages in point of efficiency in that provision is made both for supporting and protecting the tree, also in point of adjustment, means being provided for the conformation of the box to the tree regardless of the diameter of the latter.

Another advantage possessed by my improved box is that of durability, the construction being such as precludes disorder of the parts, and, moreover, the material employed is proof against the action of the elements.

The nature of my invention will be readily understood from the following description, which is directed to the details of construction and which is to be read in connection with the accompanying drawings.

In the said drawings, Figure 1 is an elevation of my improved tree-box. Fig. 2 is a plan view of the upper end of the same when employed for a tree of small diameter; and Fig. 3 is a view similar to that shown in Fig. 2, with the parts adjusted to conform to a tree of more mature growth.

Referring to the said drawings by letter, A denotes my improved box. *bb* represent pegs by which the box is firmly anchored to the ground, and *c* is a band which is adapted to surround the upper end of a tree-trunk of small diameter and to be secured to the box to preserve the central position of the tree.

The box comprises a number of metallic rods *a a*, which are arranged vertically and disposed at equidistant points in a circle by

the employment of metallic rings *d d*, which rings decrease in diameter from the base upwardly to impart to the box the tapering form shown. The rings may be circular in form, but are preferably polygonal in shape, and each ring is made up of a number of sections *d' d'*, two or more in number, and riveted or otherwise secured together in a manner to be opened at will. The rods are passed through perforations in the rings, and any suitable means may be employed for temporarily securing the rings vertically on the rods, such as providing the latter with notches in which a portion of a ring is upset to cause a fixed engagement.

At the upper end of the box is a ring *e*, made up of sections *e' e'*, pivotally secured together by rivets *e² e²* except at one point, where there are provided a threaded bolt *e³* and a nut *e⁴*, by which arrangement the ring may be opened or closed at will. The sections are each perforated to receive one or more of the rods loosely. Each section is of angular form or approximately V-shaped, and by reason of such construction the sections may be manipulated to form a ring of star form, as shown in Fig. 2, or of polygonal form, as shown in Fig. 3. The ring when adjusted to the star form is of comparatively small diameter, and such form is used when the box is employed for young trees. By giving the ring the form of a polygon its diameter is largely increased, and the box is thereby rendered suitable for trees of larger diameter. These adjustments of the ring are obtained by removing the bolt and nut and by manipulating the sections to present the apex *e⁵* of a section toward the tree, to give the ring its star form, or away from the tree to give the ring the form of a polygon. It will be understood that the former arrangement of the ring is employed in the case of a young tree and that after such tree has assumed a certain growth the ring is then manipulated to give it a polygonal form and consequently a larger diameter.

At the apex *e⁵* of each section is a perforation *e⁶*, which is engaged by a downwardly-projecting tongue *c* on the band *c* for centering and supporting said band and the tree which it surrounds. Any number of tongues

c' may be employed, and the engagement is such as will enable the band to be readily disengaged when adjustment of the band is found necessary.

5 The box is firmly anchored to the ground to support the tree, the means employed consisting of the pegs *b b*, which are adapted to be driven into the ground and are provided in their upper ends with threaded sockets to
10 receive screws or bolts *g g*, which are first passed through perforations in the lowermost ring *d*. As a further means of strengthening the ground connection the ends of the rods
15 *a a* are extended below the ring either separately or, as shown, are brought together to form points *a'*, which readily pass into the ground. In this way the box is firmly held in an upright position and affords an efficient support for the tree. Moreover, the rods are
20 arranged sufficiently near each other to prevent access to the tree therethrough, and, if desired, the whole structure or a part thereof may be covered with wire-netting.

I claim as my invention—

25 1. A metallic tree-box comprising a number of rods arranged at intervals in circular form, and a ring at the upper end of said rods formed of angular sections pivoted together

and adapted to be manipulated in the manner for the purpose substantially as described. 30

2. A metallic tree-box comprising a number of rods arranged in circular form by the employment of attached rings, a ring at the upper end of said rods formed of angular perforated sections pivoted together, and a band 35 for the tree-trunk having tongues for engaging the perforations in the sections, substantially as described.

3. A metallic tree-box comprising a number of rods arranged in circular form by the employment of rings, a ring at the upper end of said rods formed of angular sections pivoted together, a band for the tree-trunk having tongues for engaging perforations in the upper ring, and means for anchoring the box 45 to the ground consisting of points on the box, and pegs adapted for insertion in the ground and having bolt connection with the lowermost ring.

In testimony whereof I affix my signature 50 in presence of two witnesses.

WILLIAM B. WATSON.

Witnesses:

CHARLES H. DAUGHERTY,
CHARLES E. LURING.