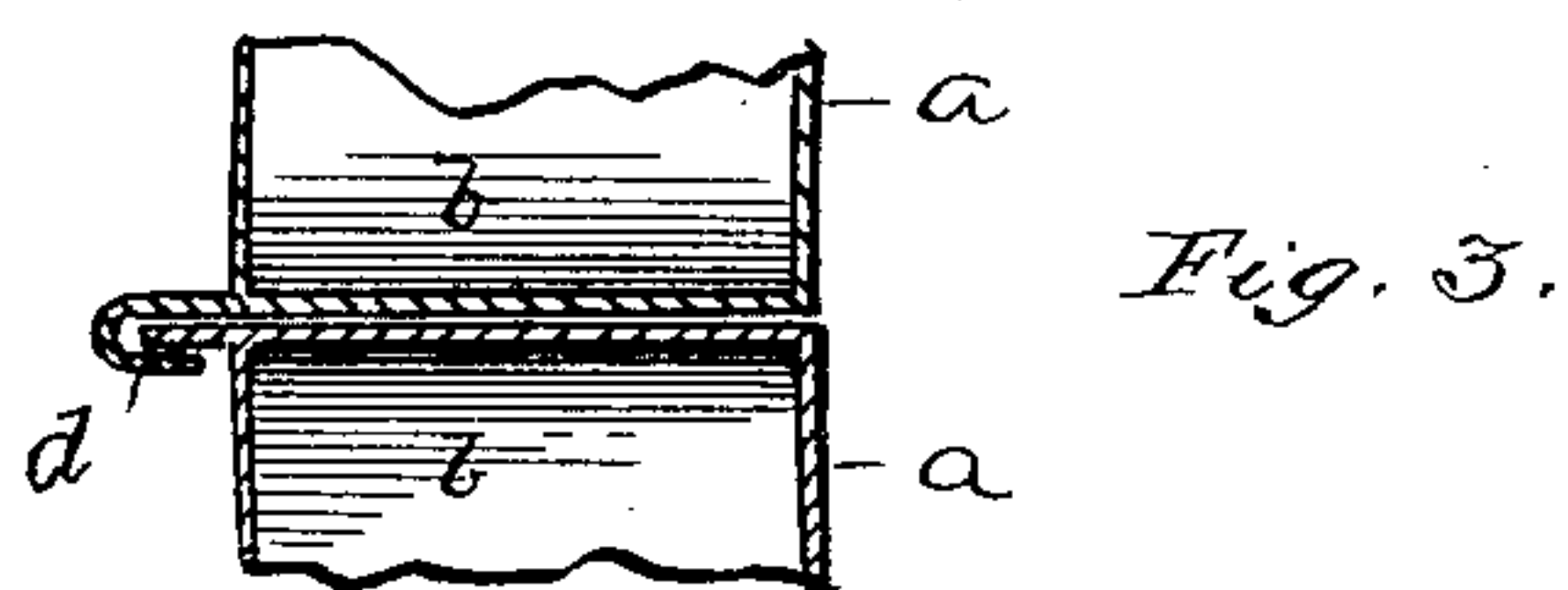
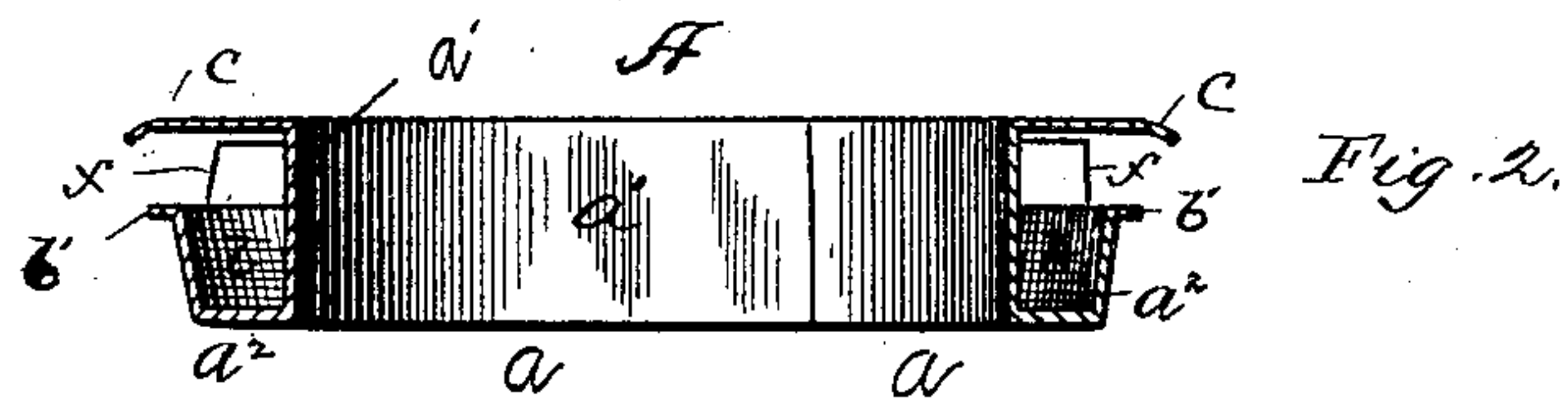
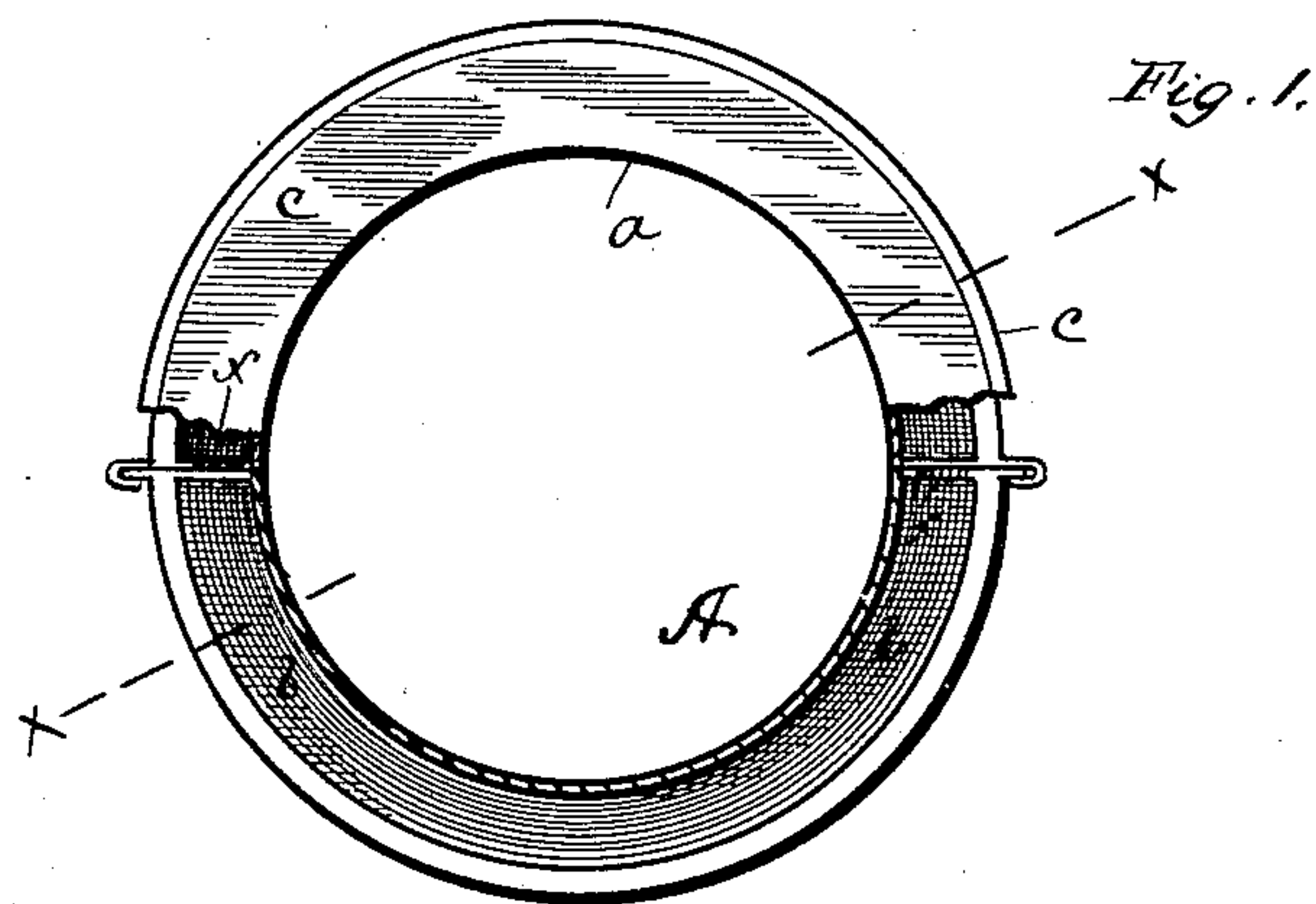


(No Model.)

A. B. SMITH.
FRUIT TREE PROTECTOR.

No. 481,311.

Patented Aug. 23, 1892.



Witnesses:
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UNITED STATES PATENT OFFICE.

ABIA B. SMITH, OF PITTSBURG, PENNSYLVANIA.

FRUIT-TREE PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 481,311, dated August 23, 1892.

Application filed January 7, 1891. Serial No. 377,031. (No model.)

To all whom it may concern:

Be it known that I, ABIA B. SMITH, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Fruit-Tree Protectors; and I do hereby 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to fruit-tree protectors; and it consists in the peculiar construction thereof, substantially as hereinafter described and claimed.

Tree-protectors employing troughs to contain a liquid and a water-shed have heretofore been constructed; but all of such devices have proved objectionable, owing to their complicated construction and consequent high cost.

The object of my invention, therefore, is to simplify the construction and cheapen the cost of fruit-tree protectors of the class referred to, and at the same time provide one which will be equally as effective as the comparatively complicated and expensive ones heretofore proposed. This object is accomplished by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a plan view, partly in section, of a fruit-tree protector constructed in accordance with my invention. Fig. 2 is a sectional elevation of the same, taken on the line $x x$ of Fig. 1. Fig. 3 is an enlarged sectional plan view of a part of the device, showing the manner of securing the sections together.

A designates my improved protector, which is annular in shape and made of the two sections $a a$. Each of these sections a comprises the rear part a' , which extends vertically from top to bottom thereof, the outwardly and upwardly extending piece a^2 forming a channel or trough b , surrounding the lower outer end of said part a' , said channel or trough being about one-half the height of said part a' and having at its top an outwardly-extending rim or flange b' . An over-

hanging water-shed c extends horizontally outward from the top of said part a' over the trough b , and preferably having its outer end slightly bent to conduct the water downward, said water-shed terminating above the channel or trough b , and vertical pieces f , which extend from near the top to the bottom of the device—that is to say, from near the water-shed c to the bottom of the channel or trough b —and that part lying opposite said channel or trough also extending outward beyond the same, those d on one section a greater distance than those d' on the other and being bent to form channels to receive said shorter ones d' . Thus said pieces f serve, first, to close the ends of the troughs b and by extending above the same; second, to prevent the insects from crossing the space between the sections and getting from one section to the other and by extending horizontally outward beyond the troughs those on one section a greater distance than those on the other and bent; third, to form an extremely efficient and simple means of fastening the sections together, which will satisfactorily hold the sections together when engaged, and at the same time permit ready and easy disengagement thereof.

The manner of using my device will be obvious from the above description, and it is only necessary to say in further explanation thereof that the intervening space between the tree and the inner wall a' should be packed with cotton, straw, or other like material.

Having now described my invention, what I believe to be new, and desire to secure by Letters Patent, is—

The herein-described tree-protector, comprising the sections a , each consisting of the inner vertical piece a' , extending from top to bottom of the device, the outwardly and upwardly extending pieces a^2 , the inner edge of the horizontal portion of which is secured to the lower edge of said part a' , thereby forming an outwardly-extending trough surrounding the lower end of said part a' , a horizontal water-shed c , extending from the top of said part a' over the trough b and terminating above said trough, and the vertical pieces f , secured to each end of each

section and extending vertically above and horizontally beyond the same, the horizontally-projecting portions on one section being of greater length than those on the other and
5 bent to inclose the ends of the same, all substantially as described, and for the purposes set forth.

In testimony that I claim the foregoing I hereunto affix my signature this 8th day of December, A. D. 1890.

ABIA B. SMITH. [L. s.]

In presence of—

M. E. HARRISON,
CHARLES LARGE.