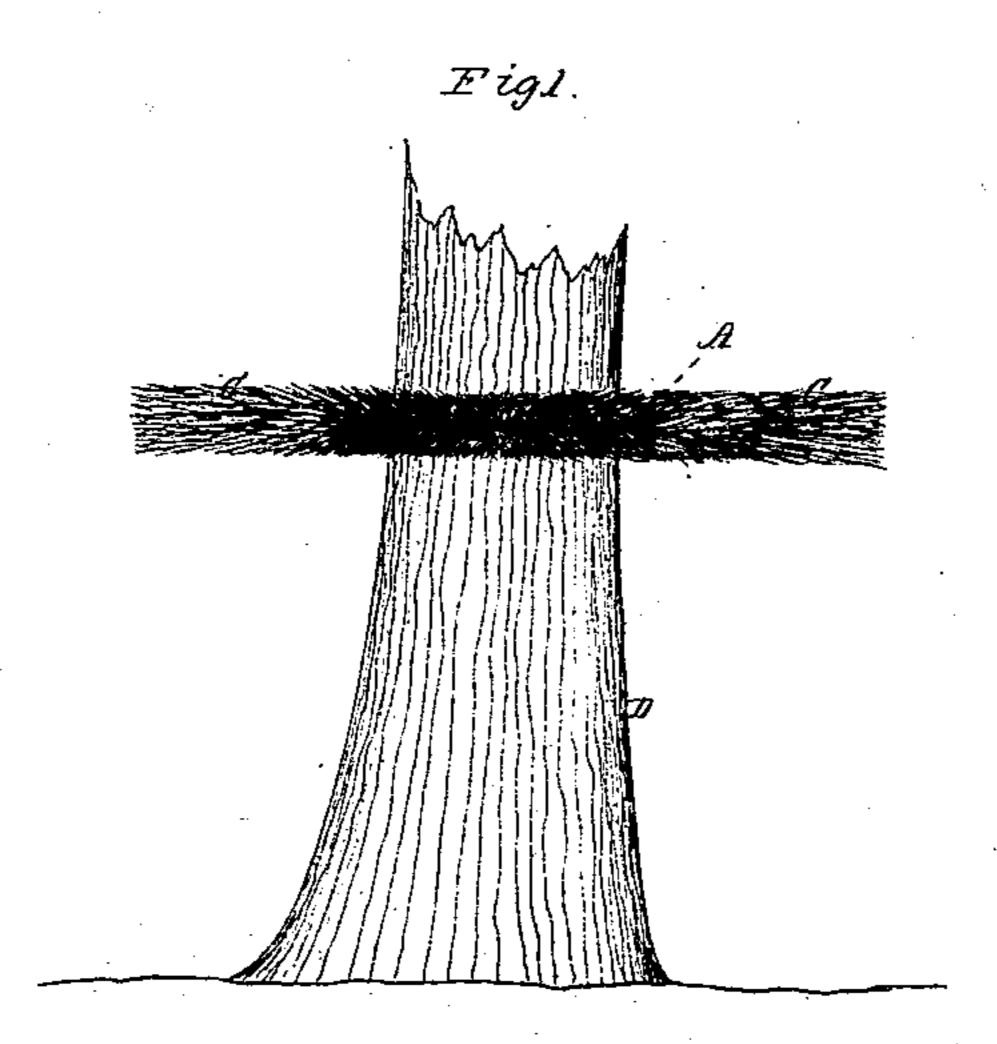
## ALLEY & SHAPLEIGH.

TREE PROTECTOR.

No. 109,859.

Patented Dec. 6, 1870.



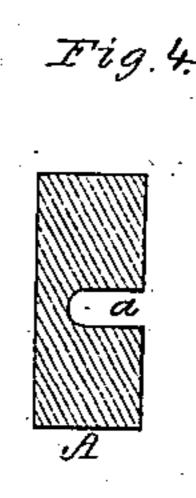


Fig.2

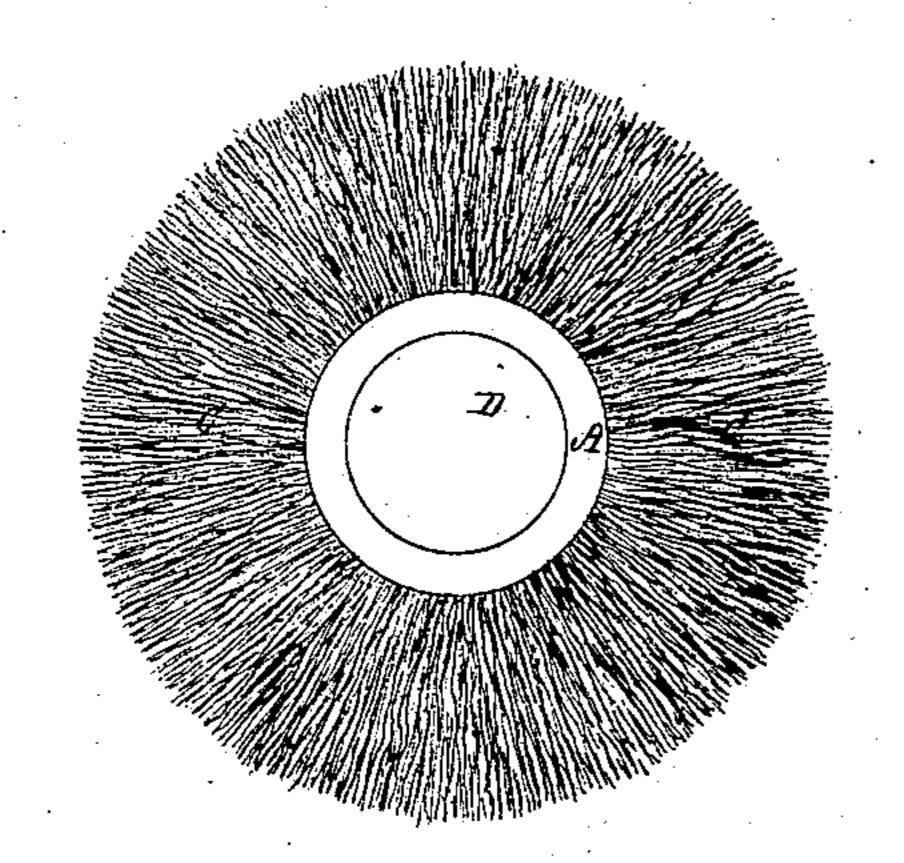
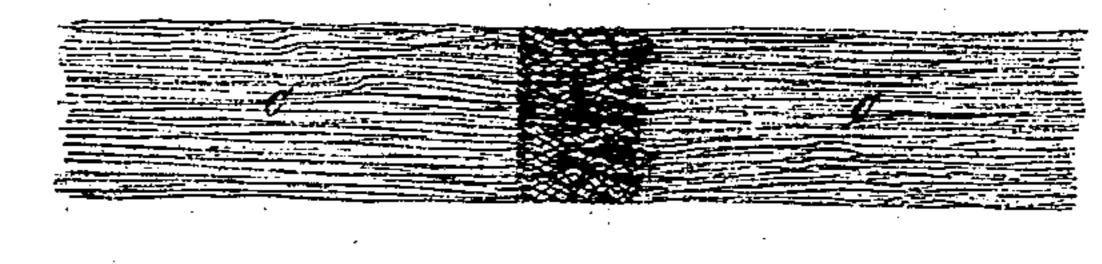


Fig.3.



Witnesses

d. N. Gepen

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BL. Alley and TW Shapleigh.

by their attorney

Meddy

## Anited States Patent Office.

BLANEY L. ALLEY, OF SALEM, AND THOMAS W. SHAPLEIGH, OF CAM-BRIDGEPORT, MASSACHUSETTS.

Letters Patent No. 109,859, dated December 6, 1870.

## IMPROVEMENT IN TREE-PROTECTORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that we, Blaney L. Alley, of Salem, of the county of Essex and State of Massachusetts, and Thomas W. Shapleigh, of Cambridgeport, of the county of Middlesex, of the said State, have invented a new and useful or Improved Tree-Protector; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, in which—

Figure 1 is a side elevation, and

Figure 2 a top view of it as applied to the trunk of a tree.

Figure 3 is a top view of a portion of the double-fringed strip of hair-cloth, and

Figure 4 is a transverse section of the grooved band or flexible strip used with the double-fringed strip of hair-cloth in making the protector.

In carrying out our invention we take a thick belt or band of leather, of sufficient length to go around the trunk of the tree, and plow or form in it, lengthwise, a deep groove, having parallel or about parallel sides, the same being as shown at a in fig. 4, wherein the band is shown at A.

Next we have woven a narrow strip, B, of haircloth, from whose opposite edges the filling hairs are to extend so as to form fringes, as shown at C C.

This strip of fringed hair-cloth we lay upon the grooved surface of the band A, with the middle of the strip ranging over or upon the mouth of the groove a, after which we, by means of thread and a needle, or other proper tool or tools, sew through the strip and the band so as to draw the strip closely into the groove, and, in so doing, double or fold the strip in a manner to bring the two fringes nearly if not quite in contact, one lapping on the other.

The tree-protector so made is to be drawn closely around the trunk of a tree, and to be fastened thereto by nails, so as to cause the hairs of the fringes to radiate from the tree, or to be arranged therewith in manner as exhibited in figs. 1 and 2, in which

D denotes the tree, or a portion of the trunk thereof;

A, the band; and

C C, the fringes or hairs composing them.

We have found it very difficult, if not impossible,

for a worm or grub to pass the obstacle presented by the hairs of the prongs, as whenever one may have ascended the tree to and attempted to crawl around the fringe, he invariably would lose hold of it and drop from it to the ground.

The tree-protector may be made by sewing a broad piece of hair-cloth along the middle, and to the leather belt, so as to draw the cloth into the groove thereof, and the halves of the strip together, and afterward drawing the warp hairs outside of the belt from the filling hairs; but as this would be an expensive way of making the protector in comparison to that of forming it in part of a double fringed band, as described, we prefer the latter.

We are aware that a tree-protector has been composed of a layer of straw, and a circumscribing layer of cloth bound to a tree, and having rings of wire arranged around the body of the tree, close up under the ends of the layers, so as to expand or throw them out, all being as described in the forfeited application of Isaac A. Clark for a patent.

We make no claim to such, it differing materially from our invention, although in some respects analogous, for in the making of our tree-protector we employ a groove, a, in the strip A, and we make use of a band, B, with fringes C O on its opposite edges, such band being drawn into the groove by sewing, and doubled by such and the groove, each making a merchantable or marketable article or manufacture very different in construction from the tree-protector of the said Clark.

We are enabled to make our protector and sell it in quantities to purchasers, who can cut it to the lengths required for use and readily apply it to trees.

We therefore claim as our invention—

The new manufacture of tree-protector, as described, composed of the strip A grooved as explained, and the double-fringed belt B arranged therewith in manner and fixed thereto by means substantially as specified.

B. L. ALLEY. THOMAS W. SHAPLEIGH.

Witnesses:

R. H. Eddy, S. N. Piper.