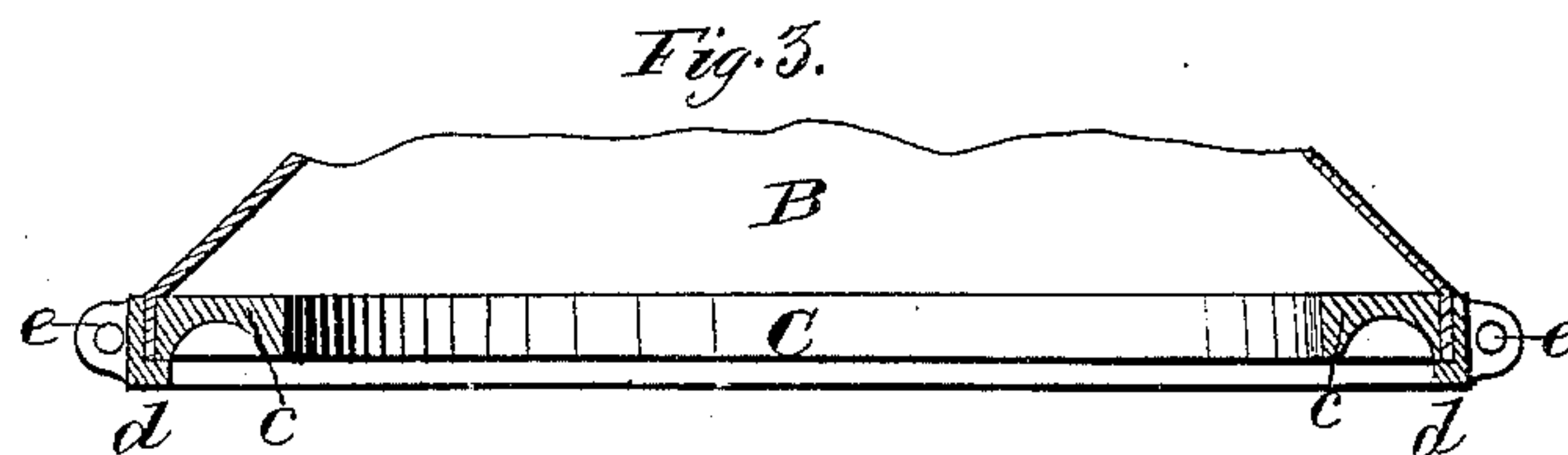
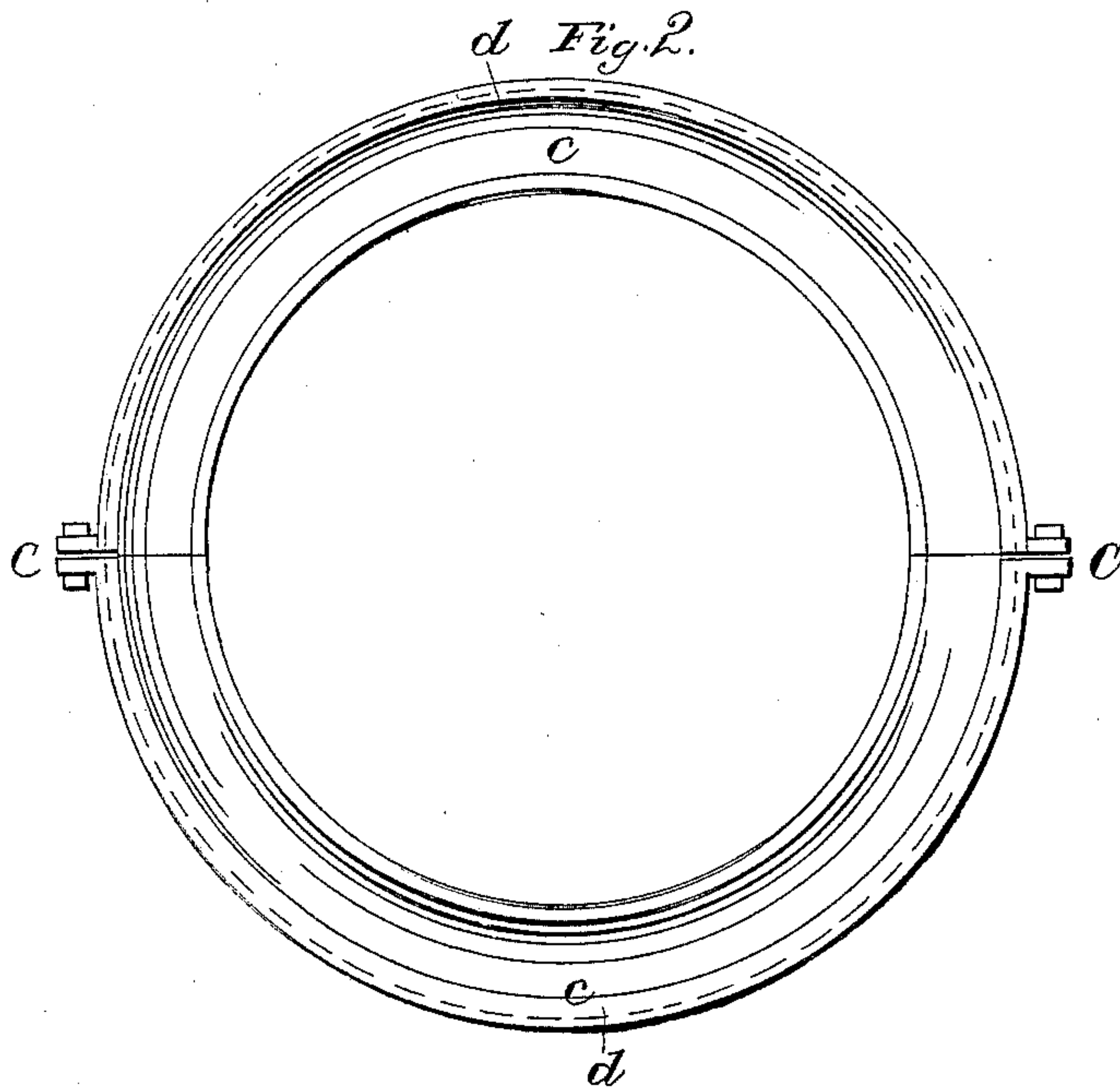
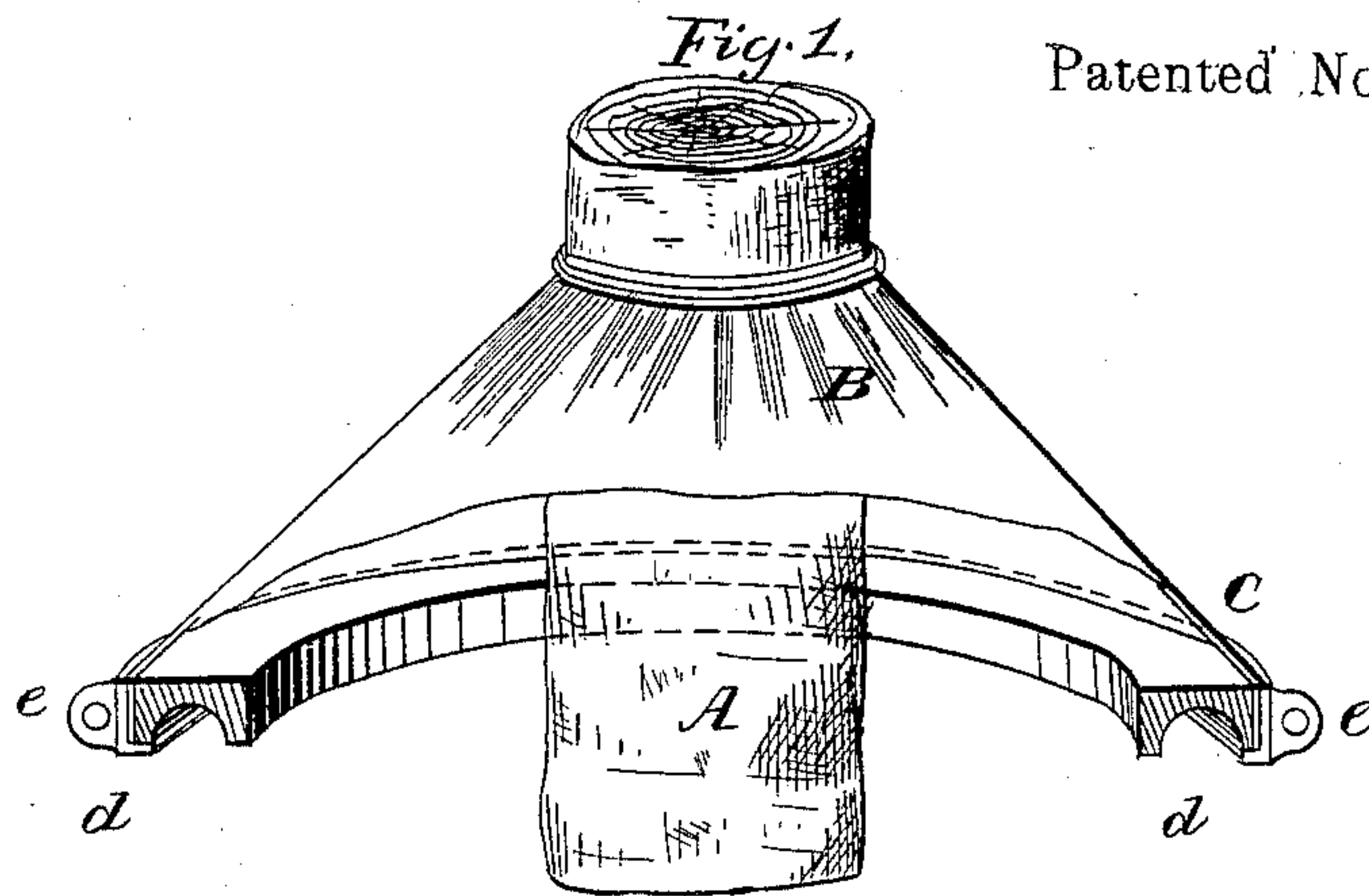


B. MERRITT, Jr.

Tree-Protector.

No. 45,065.

Patented Nov. 15. 1864



Witnesses:

W. B. Crosby
Frank Gould

Inventor.

Benjamin Merritt

UNITED STATES PATENT OFFICE.

BENJAMIN MERRITT, JR., OF NEWTON CORNER, MASSACHUSETTS.

IMPROVEMENT IN TREE-PROTECTORS.

Specification forming part of Letters Patent No. 45,065, dated November 15, 1864.

To all whom it may concern:

Be it known that I, BENJAMIN MERRITT, Jr., of Newton Corner, in the county of Middlesex and State of Massachusetts, have invented a new Tree-Protector; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

To prevent trees from being injured by the ravages of those insects which are produced from the larvæ which crawl up the tree-trunks, by rendering such ascent impossible, is the object of my invention. This consists in an apparatus which embodies the following elements: The first is a complete circle made up of two or more segments of hard polished material, preferably of glass or earthen or stone ware, as being cheap and not liable to roughen on exposure to the weather, and having therein from its lower surface a groove or groove substantially concentric with the circle; secondly, a band or ring, which is also made in segments, and which is adapted to contain the first-named segments and to receive and clamp between them and itself a suspensory, which constitutes the third element of my apparatus, and may be made of any suitable web-like material—as cloth or rubber, for example.

My invention is clearly shown in the accompanying drawings, of which Figure 1 is a perspective view of the whole apparatus as applied in practical usage, and with a sufficient portion of the parts represented as removed or broken or torn away to show construction. Fig. 2 represents a reverse plan of the segmental ring and its supporting band or clamp. Fig. 3 is a vertical cross-section taken through all the parts, which are also shown in elevation beyond.

A represents the tree-trunk; B, the cone-like web; C, the segmental ring, of suitable hard material having a polished surface. *d* repre-

sents the clamping-ring, provided with ears *e*, by which and by screws or bolts the parts of the ring *d* are united.

In Fig. 1 it will be plainly seen how the apparatus is applied to a tree. The cord *f* there shown may be elastic to prevent cutting the trunk as it enlarges in diameter, or the trunk may be wound with soft material before the web is tied or nailed thereunto; and it may here be observed that the web must be cut open in order to get it upon the trunk, and that the opening is best closed by sewing or by cement before it is clamped between *d* and *e*. It will be obvious that the passage of the larvæ directly up the trunk will be effectually stopped by the cone-like web, and that they will, in obedience to their instinct, attempt to pass around the segmental ring *c*, in doing which their bodies will be inverted so that, as they attempt to pass the groove in the ring the smooth hard surface will not afford them sufficient hold, and most of them will fall off. By oiling the surface of this groove none of the larvæ will be able to pass it, and where the material is of glass or other suitable smooth hard substance but little oil will be required, and none of it will be absorbed. One diameter or size of the ring *c* may be made to fit quite a range of diameters of trunks, the flexible web B being easily made to accommodate any size of trunk less than the inner diameter of *c*. The ring *e*, if of glass or other fragile material, is fully protected from fracture by the web B and the ring *d*, and the presence of the yielding material of B between the rings *c* and *d* prevents the breaking of *c* by the act of clamping it in *d*.

I claim—

The apparatus having a construction substantially as and for the purpose specified.

BENJ. MERRITT, JR.

Witnesses:

J. B. CROSBY,
F. GOULD.