

No. 706,003.

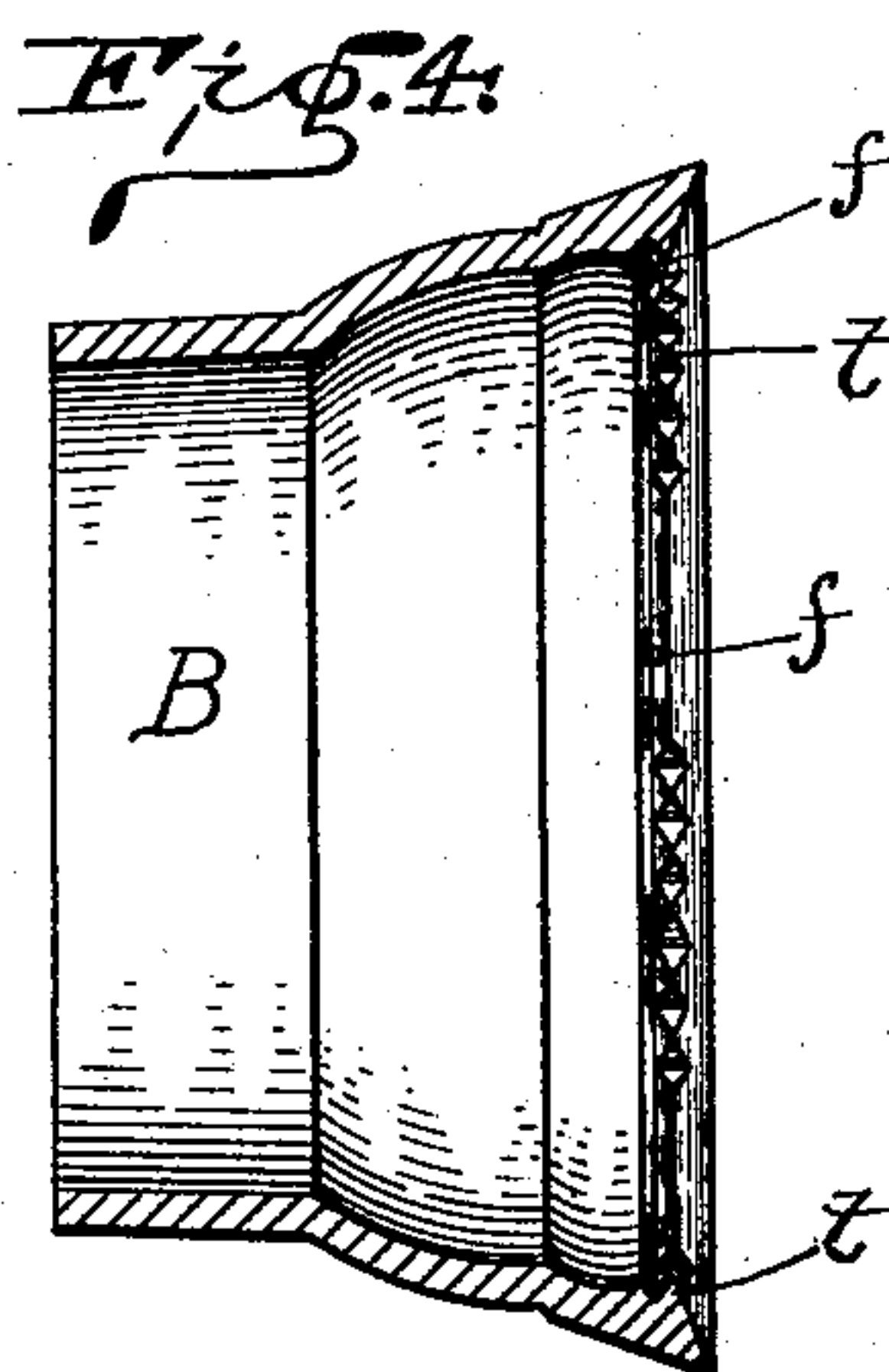
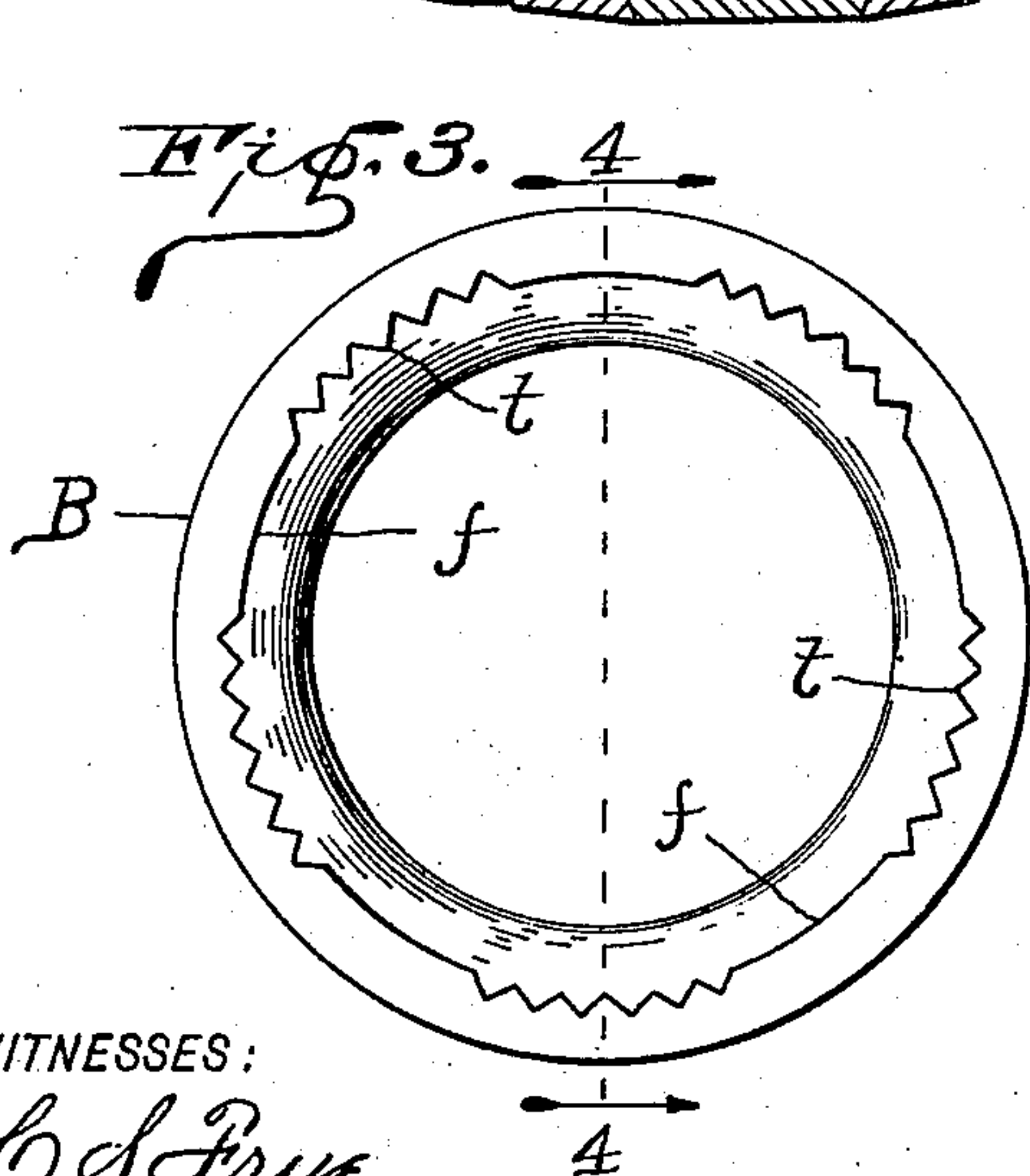
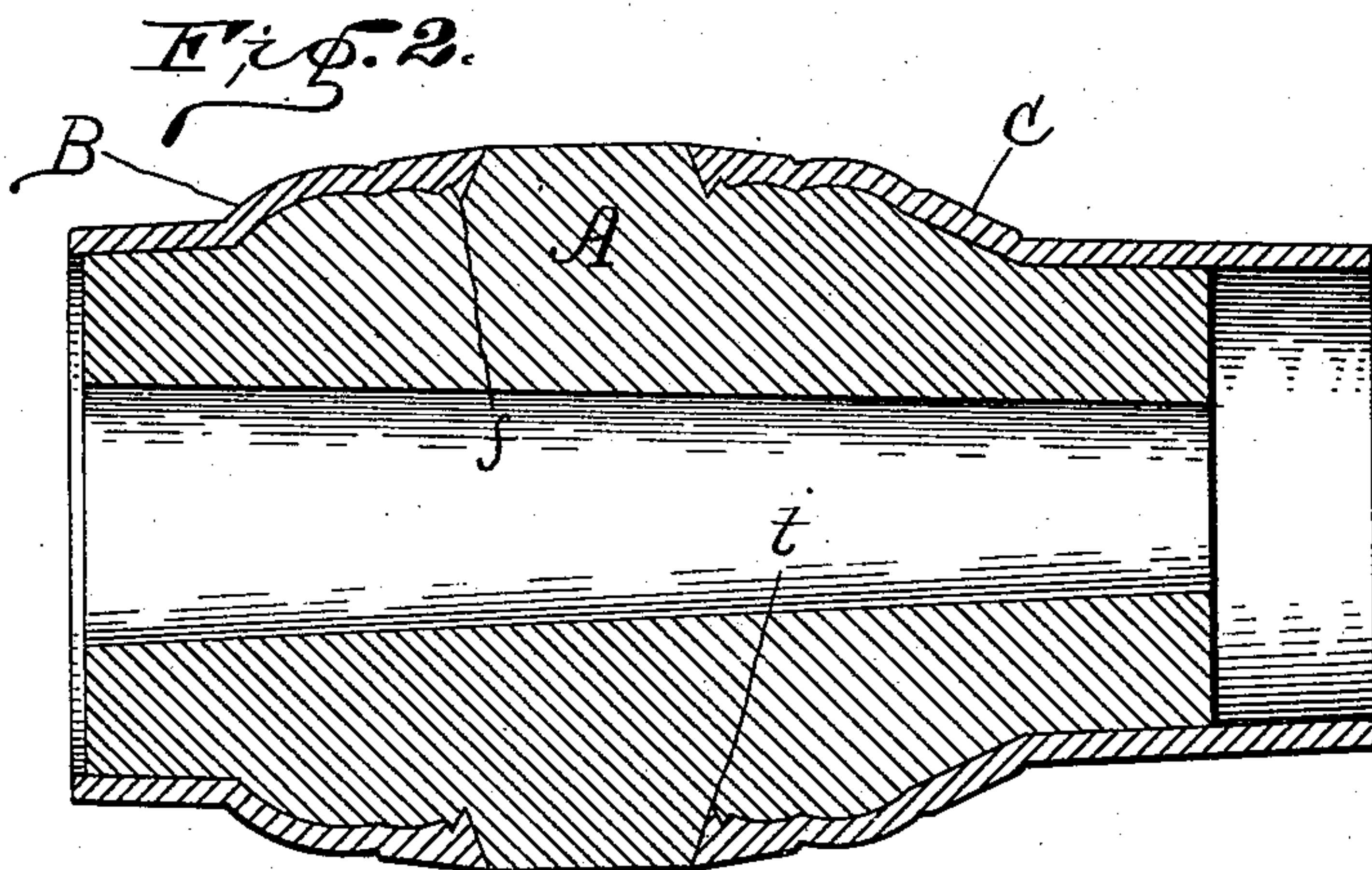
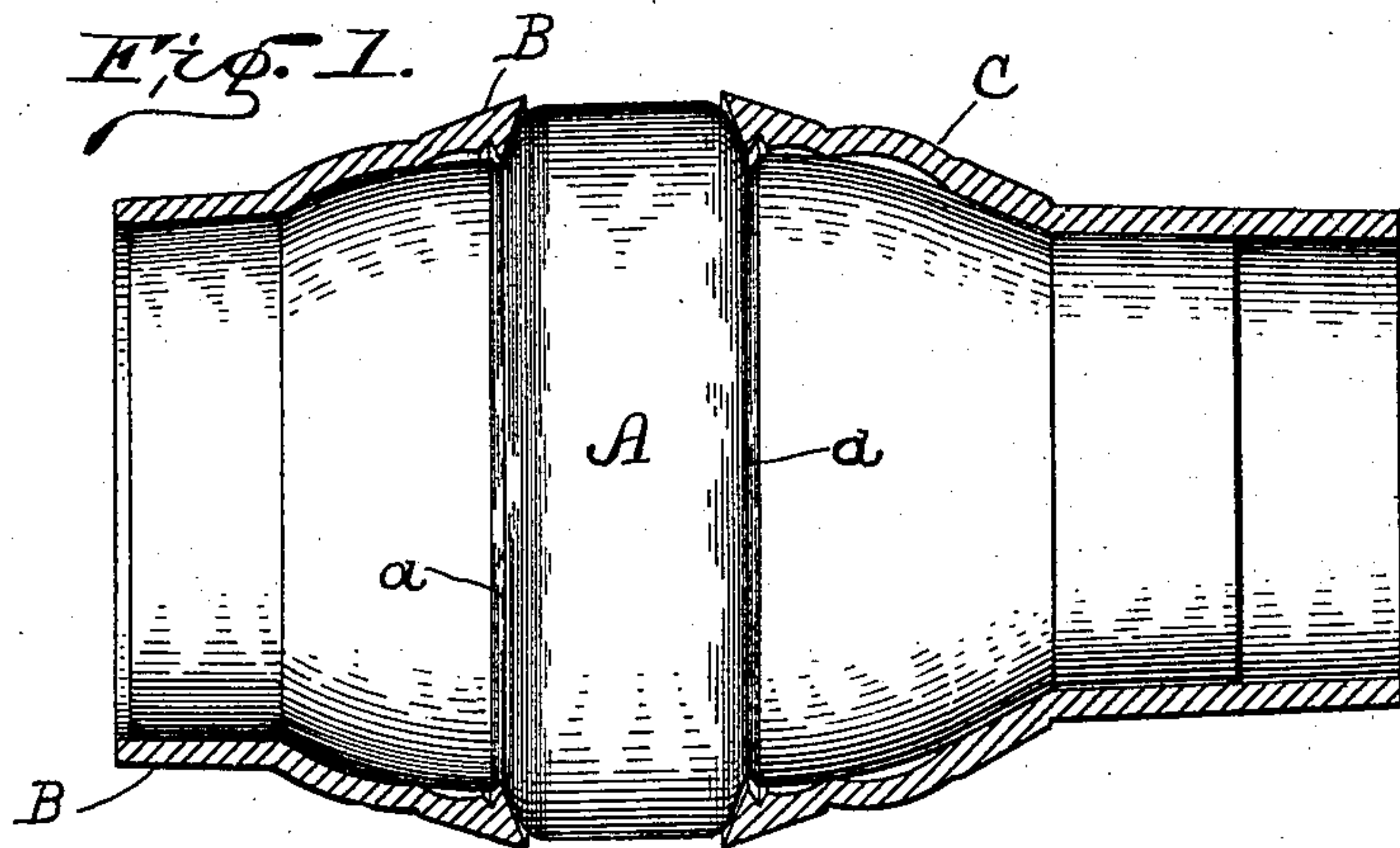
Patented Aug. 5, 1902.

C. ANDEREGG.

WHEEL HUB.

(Application filed Dec. 21, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT - OFFICE.

CHRISTIAN ANDEREGG, OF INDIANAPOLIS, INDIANA.

WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 706,003, dated August 5, 1902.

Application filed December 21, 1901. Serial No. 86,830. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN ANDEREGG, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wheel-Hubs, of which the following is a specification.

The object of my said invention is to produce a combined wood and metal hub for vehicle-wheels in which there shall be a minimum number of parts and in which the parts shall be firmly connected and inseparable under any strains or conditions of use likely to be encountered.

Said invention will be first fully described, and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a longitudinal sectional view of the hub when the parts are first assembled before being compressed into final form; Fig. 2, a similar view after the compressing or finishing operation has taken place; Fig. 3, an end elevation of the inner end of one of the metal shells forming the exterior of the hub; and Fig. 4, a sectional view thereof showing the same in the condition it appears in Fig. 1, but with the wooden portion removed, so that the inner surface of said metal shell is visible.

The hub is composed of the wooden central portion A and the two metal shells B and C. The central or wooden portion A is, or may be, substantially of the usual or any desired form, except that preferably two small grooves *a* should be turned therein to receive the inner flanges and teeth on the metal portions when compressed without tearing the grain of the wood. These grooves or cuts should, however, be slight or narrow, as the purpose is not to remove sufficient wood to equal the size of the flanges and teeth which are to be caused to embed themselves under the pressure applied, but simply to separate the fiber sufficiently at the point where said flanges and teeth are to enter to prevent the tearing thereof.

The metal shells B and C are of a form and size designed to incase the greater portion of the hub, and the inner ends of said flanges preferably come close to the portion of the wooden hub which is to be mortised to receive the

spokes. At or near their adjacent ends they are each provided with an inwardly-projecting portion adapted to be forced into the wood, and this is preferably divided into several flanges *f* and sets of teeth *t*, as best shown in Figs. 3 and 4. This formation of the flange is designed to secure such a hold upon the wood as to make the parts substantially inseparable. While both forms to a very material extent prevent movement in both directions, the flanges *f* more especially prevent the metal shells from pulling off the hub endwise, and the teeth or serrations *t* more especially prevent said shells from any tendency to move revolubly on said wooden hub. In forming the flange and teeth I prefer to turn the groove which forms their rear side. In compressing the metal the wood forces up into this groove and assists in holding the parts together.

In the making of hubs embodying my invention the shells are first driven onto the wooden portion to the proper point, being then in the form and condition shown in Fig. 1. They are then subjected to a heavy pressure, and the metal is compressed to the form shown in Fig. 2, driving the flanges and teeth into the wood and also compressing the wood itself somewhat. The effect is to produce a hub the parts of which are so united as to be practically inseparable.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wheel-hub composed of a wooden center and two metal shells extending over the same, said shells being provided with interior inwardly-extending serrated flanges and composed of compressible metal which is compressed in finishing the hub, substantially as set forth.

2. The combination in a wheel-hub, of the wooden center A, and the metal shells B and C, said shells being provided with the inwardly-extending flanges and teeth *f* and *t*, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 17th day of December, A. D. 1901

CHRISTIAN ANDEREGG. [L. S.]

Witnesses:

CHESTER BRADFORD,
ALBERT F. ZEARING.