

L. S. EDLEBLUTE.
Vehicle-Wheel Hub.

No. 226,990.

Patented April 27, 1880.

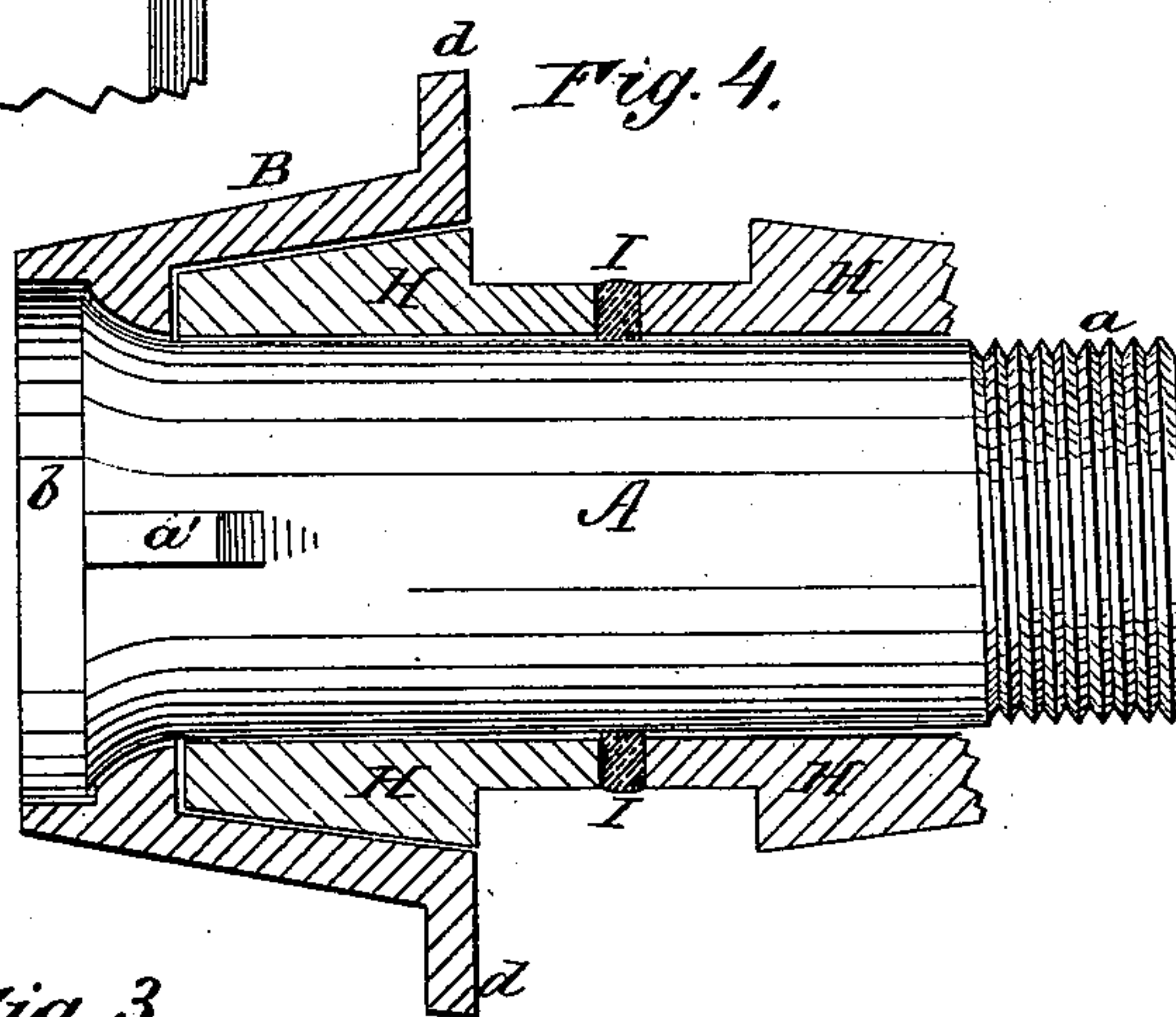
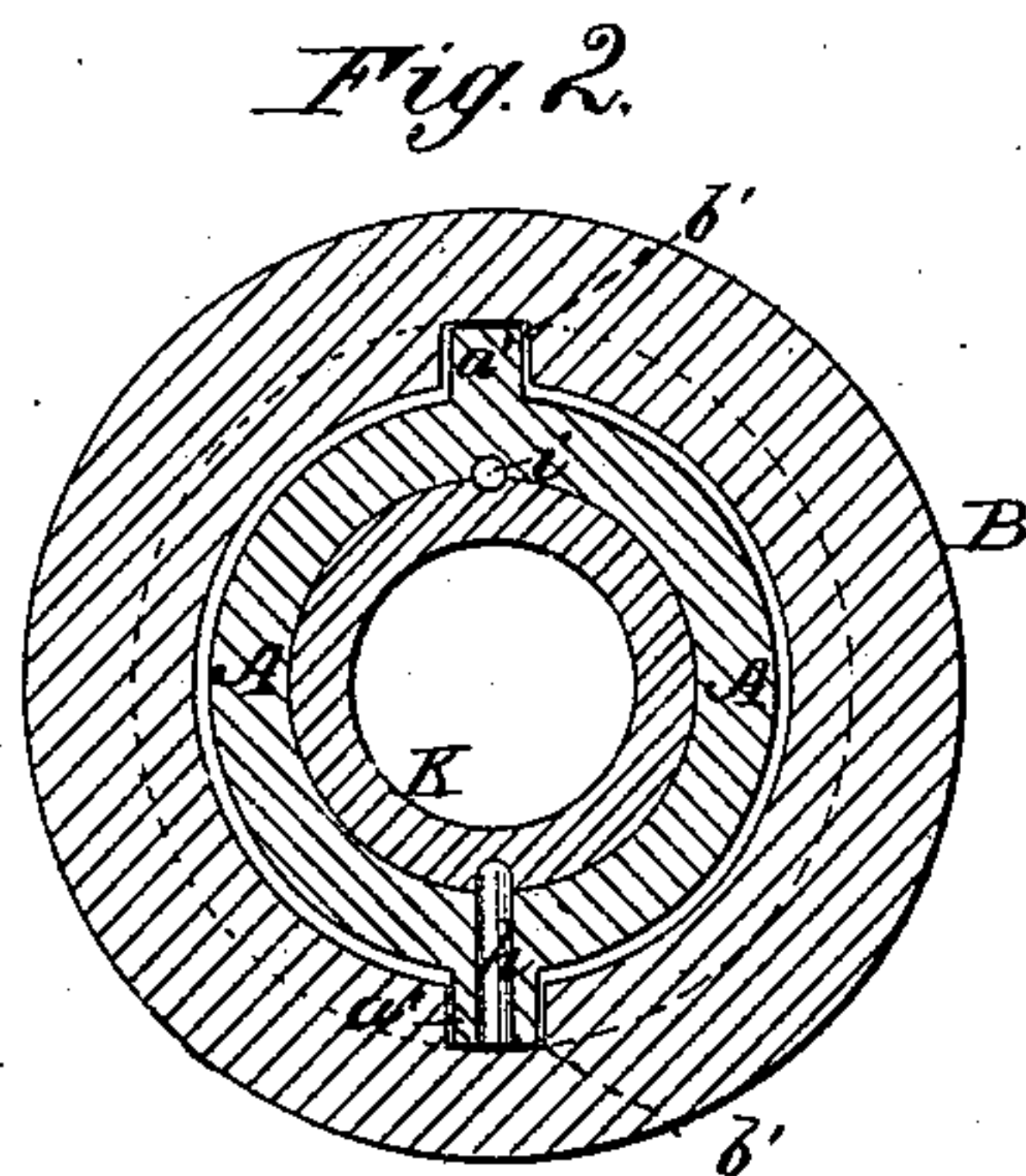
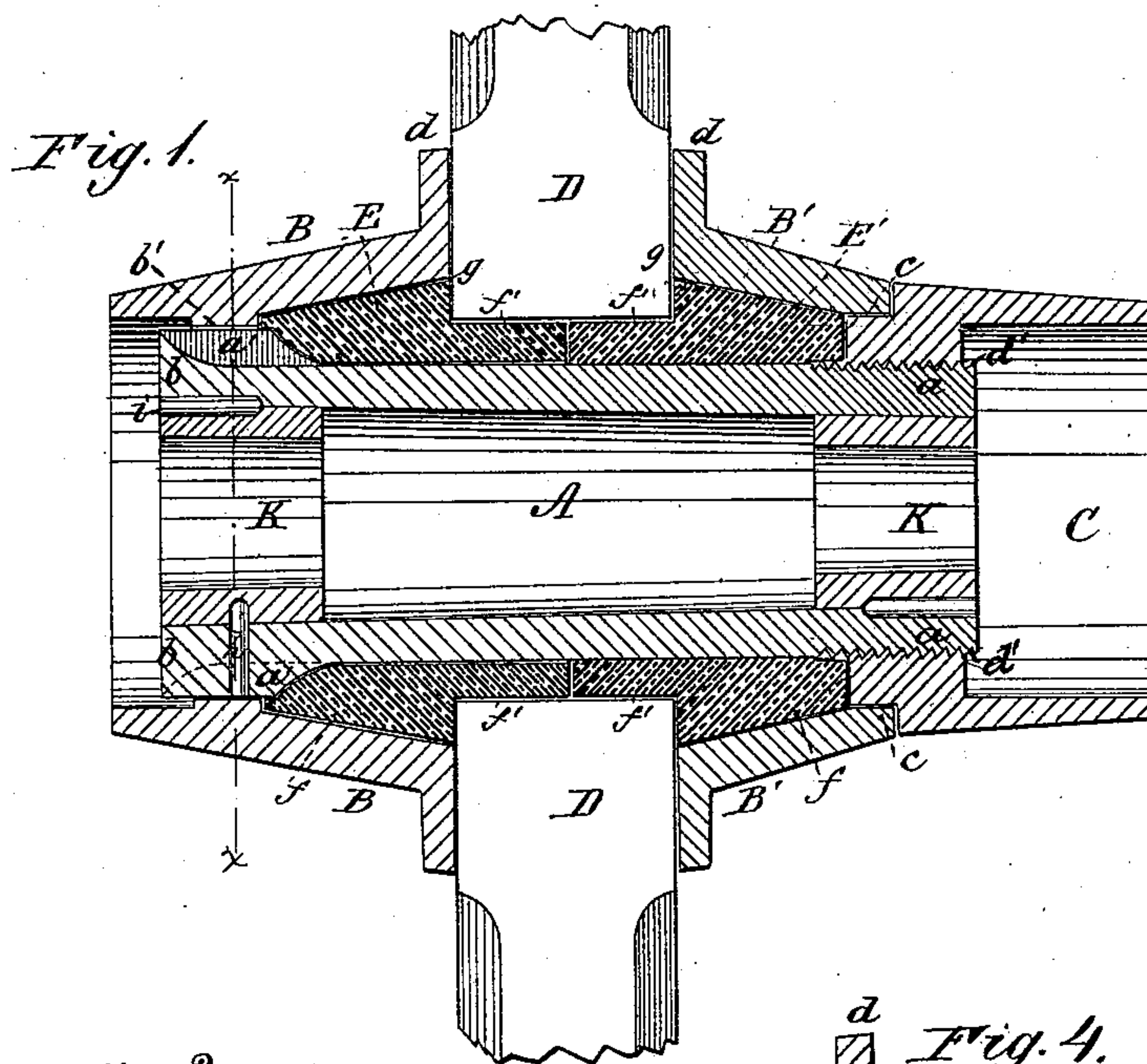
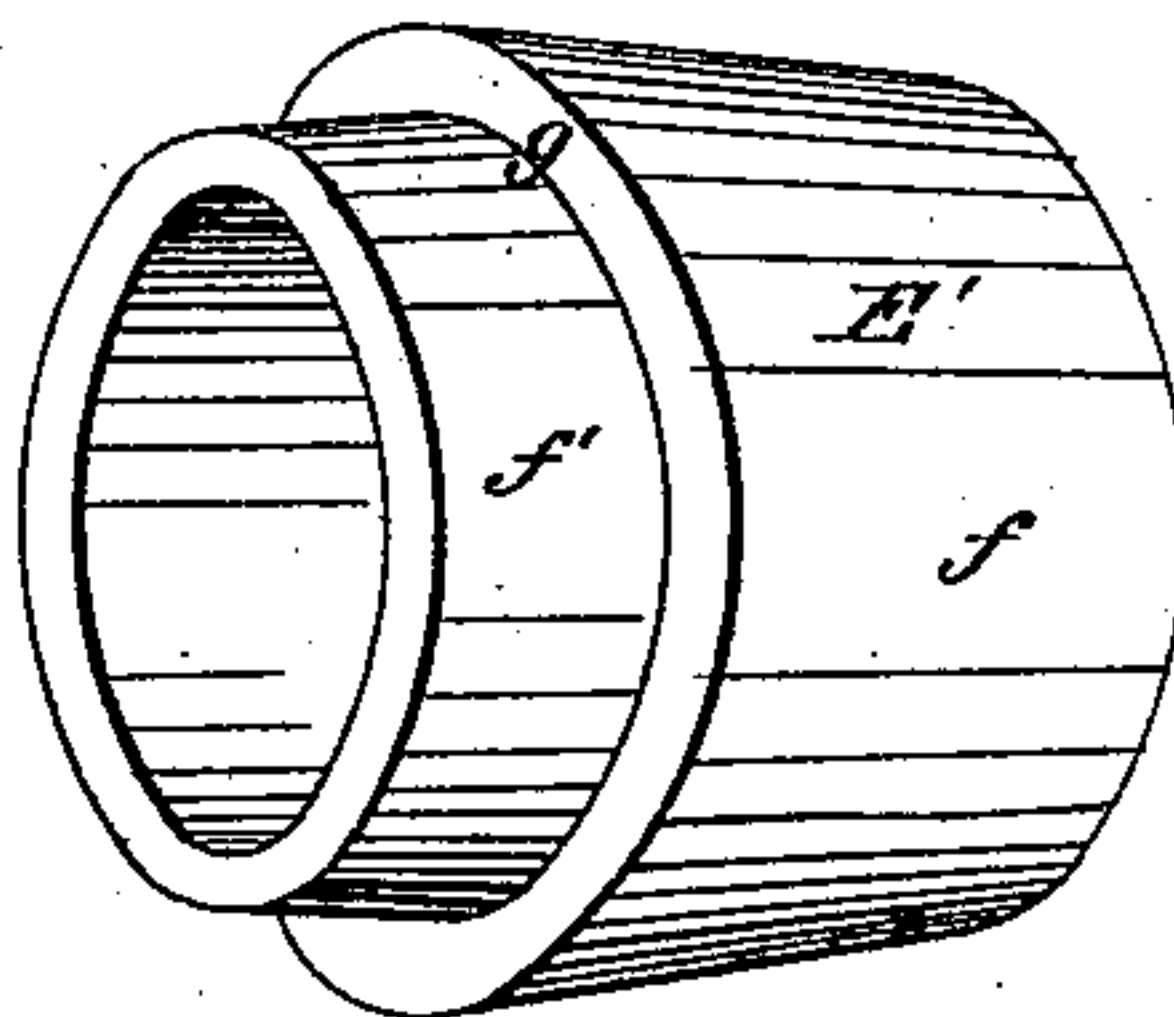


Fig. 3.



WITNESSES:

W. W. Hollingsworth
Amos W. Hart

INVENTOR:

L. S. Edleblute
BY *Wm. D. L.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

LUCIUS S. EDLEBLUTE, OF CINCINNATI, OHIO.

VEHICLE-WHEEL HUB.

SPECIFICATION forming part of Letters Patent No. 226,990, dated April 27, 1880.

Application filed January 2, 1880.

To all whom it may concern:

Be it known that I, LUCIUS S. EDLEBLUTE, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Vehicle-Wheel Hub and Journal-Box; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in the class of vehicle-wheel hubs having an elastic band or annular portion which surrounds the journal-box and on which the butts of the spokes rest, so that the wheel is rendered elastic and more durable, also comparatively noiseless when running on stony pavements, roads, or streets.

The construction embodying my invention is as hereinafter described, and shown in accompanying drawings, in which—

Figure 1 is a longitudinal central section of the hub. Fig. 2 is a vertical cross-section on line *x x*, Fig. 1. Fig. 3 is a perspective view of one portion of the elastic filling. Fig. 4 is a sectional view, which includes a modification, of the elastic filling.

The journal-box A is screw-threaded at one end, *a*, and provided with a beveled flange or collar, *b*, at the other end. The collar has lugs *a'*, which enter corresponding cavities *b'* in the hub-section B, so that the journal-box A is prevented from turning in the latter.

The cap C is provided with a shoulder, *c*, and screw-thread *d'* at its inner end to adapt it to form the required joint with the outer hub-section, B', and for screwing on the journal-box A, as shown in Fig. 1. Said hub-sections B B' have the form of truncated portions of hollow cones provided with a flanged base.

The flanges *d* of the sections are in contact with the faces of the spoke-tenons D, and support the spokes laterally, as usual in this class of metallic wheel-hubs.

By screwing the cap-nut C on the journal-box the hub-sections are clamped between it and the flange *b* of the journal-box, so that the spoke-tenons are firmly clamped between the flanges of the hub-sections B B'.

E E' indicate an elastic filling for the hub-sections B B', which constitutes, also, the elastic portion of the hub that encircles the central portion of the journal-box A and forms an

elastic bed for the butts of the spoke-tenons D. Said filling is composed of two parts having like form and dimensions, and constructed of caoutchouc or soft rubber. One portion, *f*, of each filling-piece has the form of a truncated cone with a cylindrical bore; but the inner portion, *f'*, of the same is cylindrical, and also reduced in thickness, so as to form a deep shoulder, *g*, where it joins the conical part *f*. The two pieces E E' are placed on the journal-box A with their cylindrical parts *f' f'* abutting and shoulders *g g* opposite each other, while the hub-sections B B' fit snugly on the outer conical portions, *f*, as shown in Fig. 1, so that their flanges are flush or in radial line with the shoulders *g*. The butts of the spoke-tenons D converge and rest on the elastic bed formed by the cylindrical parts *f' f'* of the elastic filling. This construction and combination of parts give the desired degree of elasticity to the wheel as a whole, so that it runs comparatively noiseless on stony pavements, streets, or roads, and is also more durable.

In place of the rubber filling E E', above described, I may employ a filling, H, of wood, as shown in Fig. 4. Such filling has the same form as the rubber filling; but to compensate in part for its want of equal elasticity, I interpose a rubber ring, I, between the cylindrical ends *f f'* of said pieces H.

I show in Figs. 1, 2 boxes or bushings K, which are preferably constructed of brass, and inserted in the ends of the journal-box A, for the purpose of taking the wear incident to the revolution of the wheel. Said bushings are prevented from endwise movement by means of a pin or key, *h*, inserted through the lug *a'*, and from rotary movement independently of the journal-box by means of a pin or key, *i*, inserted between the bushings and journal-box endwise.

I am aware that a wooden hub having conical ends and mortises to receive spoke-tenons has been incased or inserted in a metallic flanged shell; but this I do not claim.

What I claim is—

1. The combination, with the cylindrical journal-box and the hub-sections having the tapered form shown, of the elastic filling com-

posed of two separable parts having correspondingly tapered portions, substantially as and for the purpose specified.

2. The combination, with the spoke-tenons, 5 the hub-sections, and journal-box, of the separable elastic filling having the cylindrical portion f' , on which the butts of the spokes rest, as specified.

3. The wooden filling-pieces having tapered 10 truncated conical ends and the cylindrical re-

duced middle portion, with the rubber ring interposed between the latter, as shown and described.

4. The elastic filling-pieces having conical ends and the cylindrical reduced middle portion, as shown and described. 15

LUCIUS S. EDLEBLUTE.

Witnesses:

JAMES T. BROWN,
W. T. MATTHEWS.