

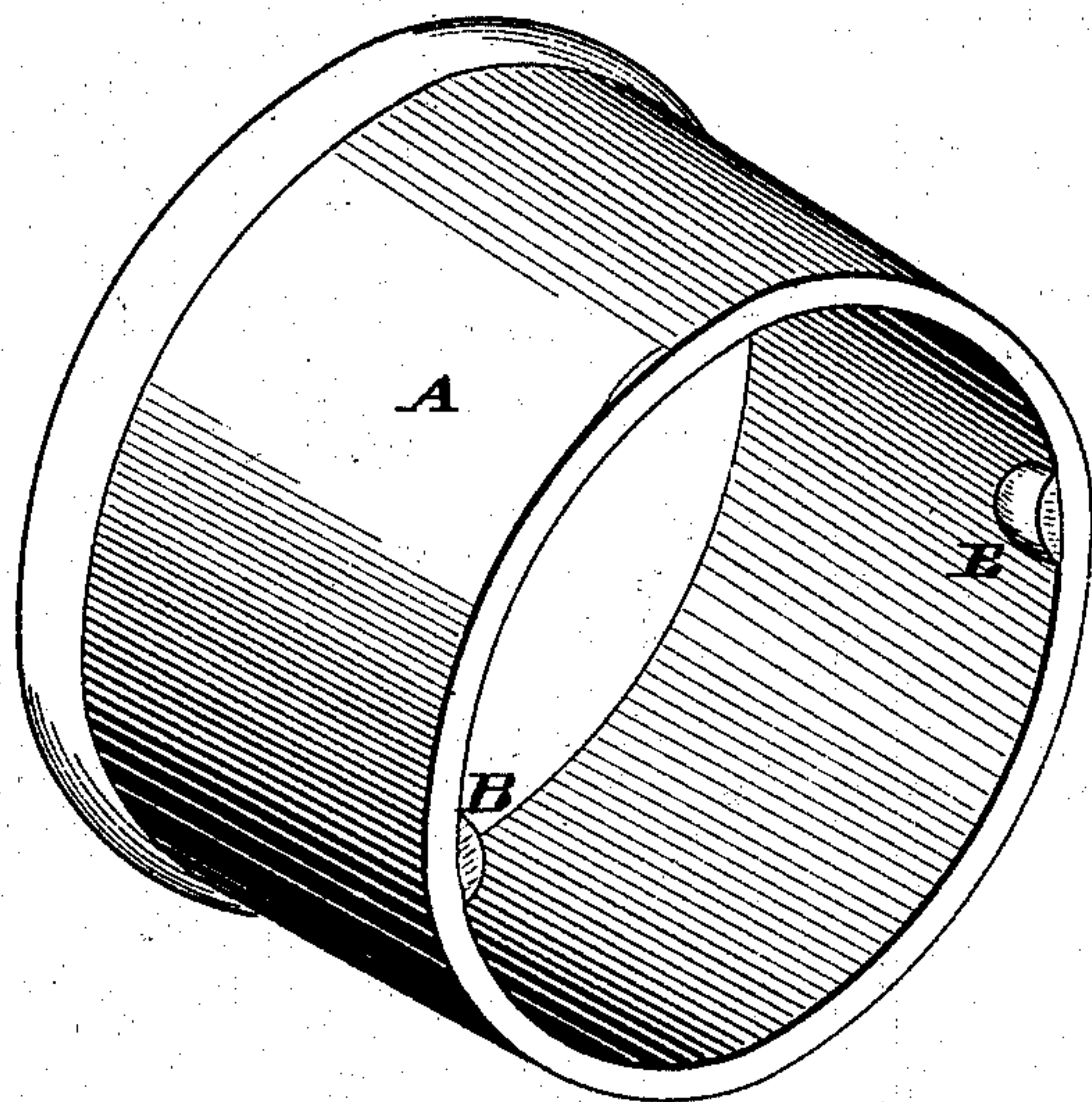
(No Model.)

F. KRAMER.  
CAP FOR WHEEL HUBS.

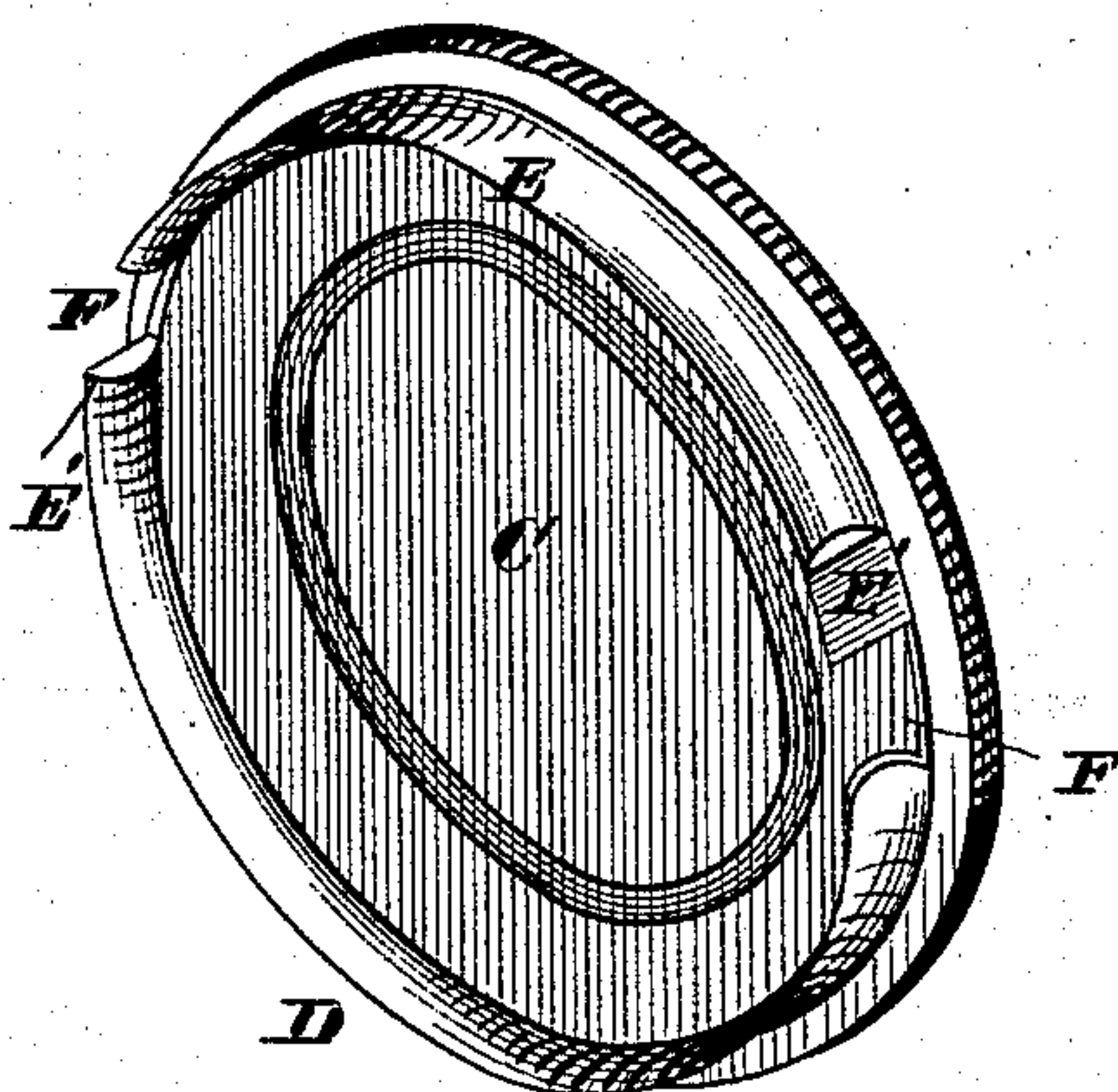
No. 291,361.

Patented Jan. 1, 1884.

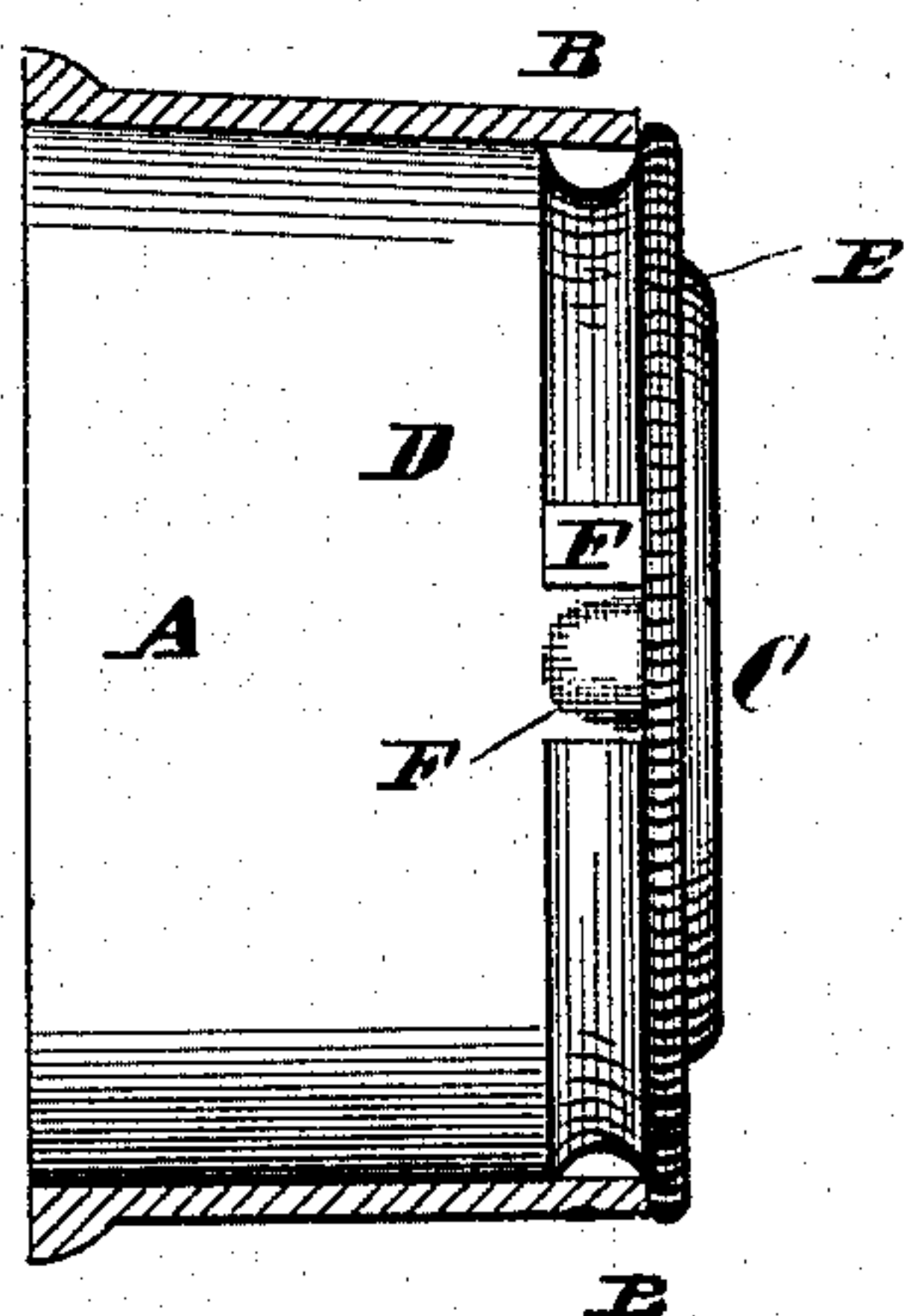
*Fig. 1.*



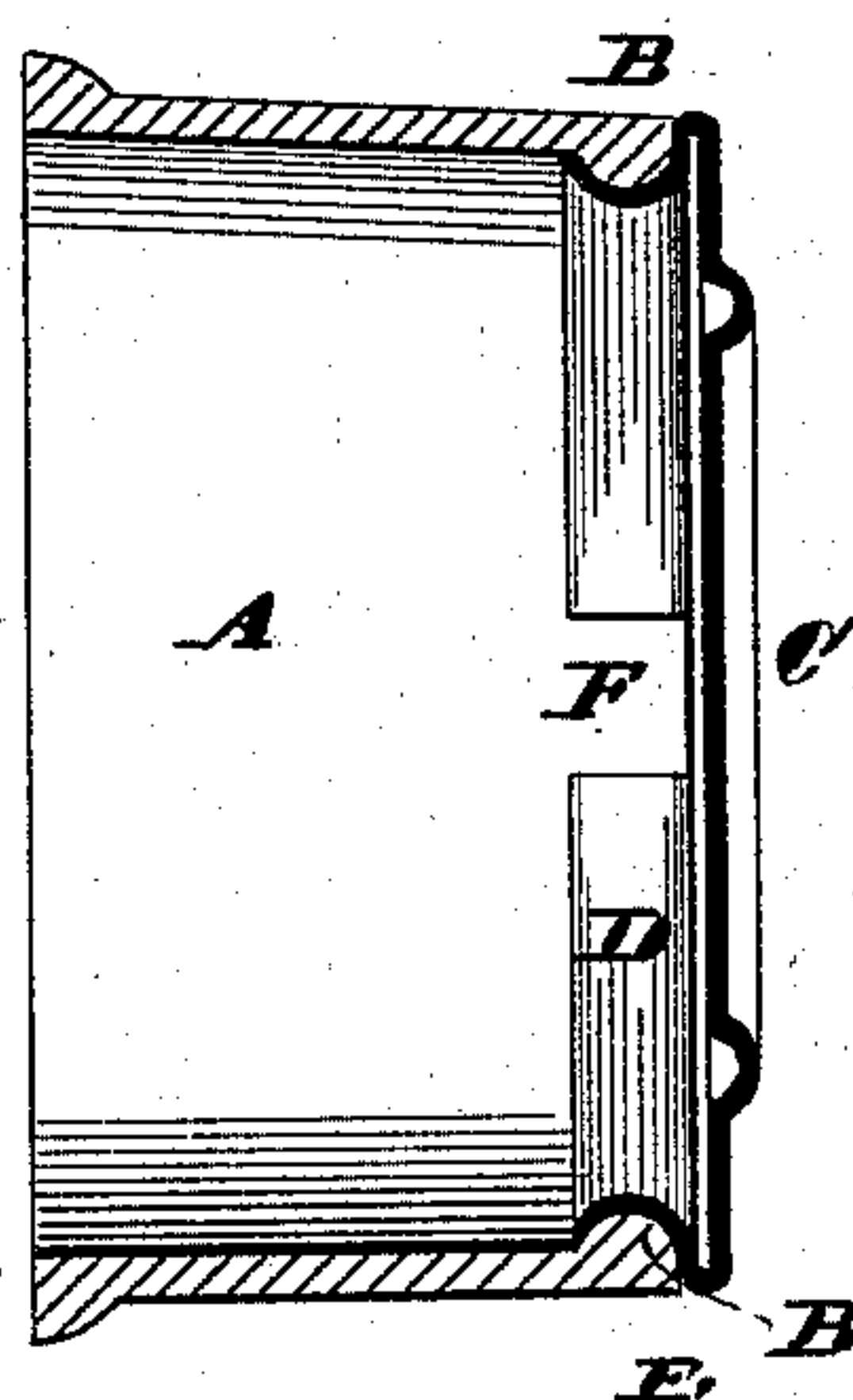
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Attest:*  
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# UNITED STATES PATENT OFFICE.

FRIEDRICH KRAMER, OF ST. LOUIS, MISSOURI.

## CAP FOR WHEEL-HUBS.

SPECIFICATION forming part of Letters Patent No. 291,361, dated January 1, 1884.

Application filed August 22, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEDRICH KRAMER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Caps for Vehicle-Wheels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view of the thimble or band of the outer end of a vehicle-hub, and Fig. 2 is a similar view of my improved dust-cap. Fig. 3 is a section through the thimble, showing the cap in edge view; and Fig. 4 is a section through both thimble and cap.

My invention relates to peculiar means for attaching dust-caps to vehicle-wheels; and my invention consists in points of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the outer thimble or band of a vehicle-wheel having lugs or teats B, provided with curved faces and formed upon or secured to its interior outer portion.

C represents the dust-cap having a flange, D, on its inner side or face. This flange is made with a groove, E, in which the teats B fit when the cap is put in place and turned, and it is also made quite thin, so as to spring, and its free edge somewhat larger in circumference than the diameter of the inside of the thimble, and can be inserted by placing one edge of the flange into the thimble first, and then pressing down on the cap, the other part of the flange will enter, and the free edge of the flange thus being larger than the interior

of the thimble, the cap is prevented from being turned by the action of the wheel and from rattling. The flange has notches F for the passage of the teats B when the cap is put on, and after the cap is put on it is turned, the teats on the interior of the thimble fitting in the grooved flange of the cap until the closed ends E' of the grooved flange come against the teats B, and then when the cap is to be removed it is simply turned back until the notches in the flange come opposite the teats and then pulled outward.

I do not wish to confine myself to putting the teats B on the inside of the thimble and the groove E in the outside of the flange, as they may be changed vice versa.

I claim as my invention—

1. The combination, with a thimble or band of a vehicle-wheel provided with one or more teats or lugs, of the dust-cap having a spring grooved flange in which the teats of the thimble fit, substantially as and for the purpose set forth.

2. The combination of thimble A, having teats B, and dust-cap C, having spring flange D, with groove E and notches F, substantially as shown and described, for the purpose set forth.

3. The combination of thimble A, having teats B, and cap C, having spring-flange D, with groove E, notches F, and stops E', substantially as shown and described, for the purpose set forth.

FRIEDRICH KRAMER.

Witnesses:

SAML. KNIGHT,  
GEO. H. KNIGHT.