

J. Henderson.
Attaching Hubs to Axles.

No. 12,946.
Fig. 1.

Patented May 29, 1855.

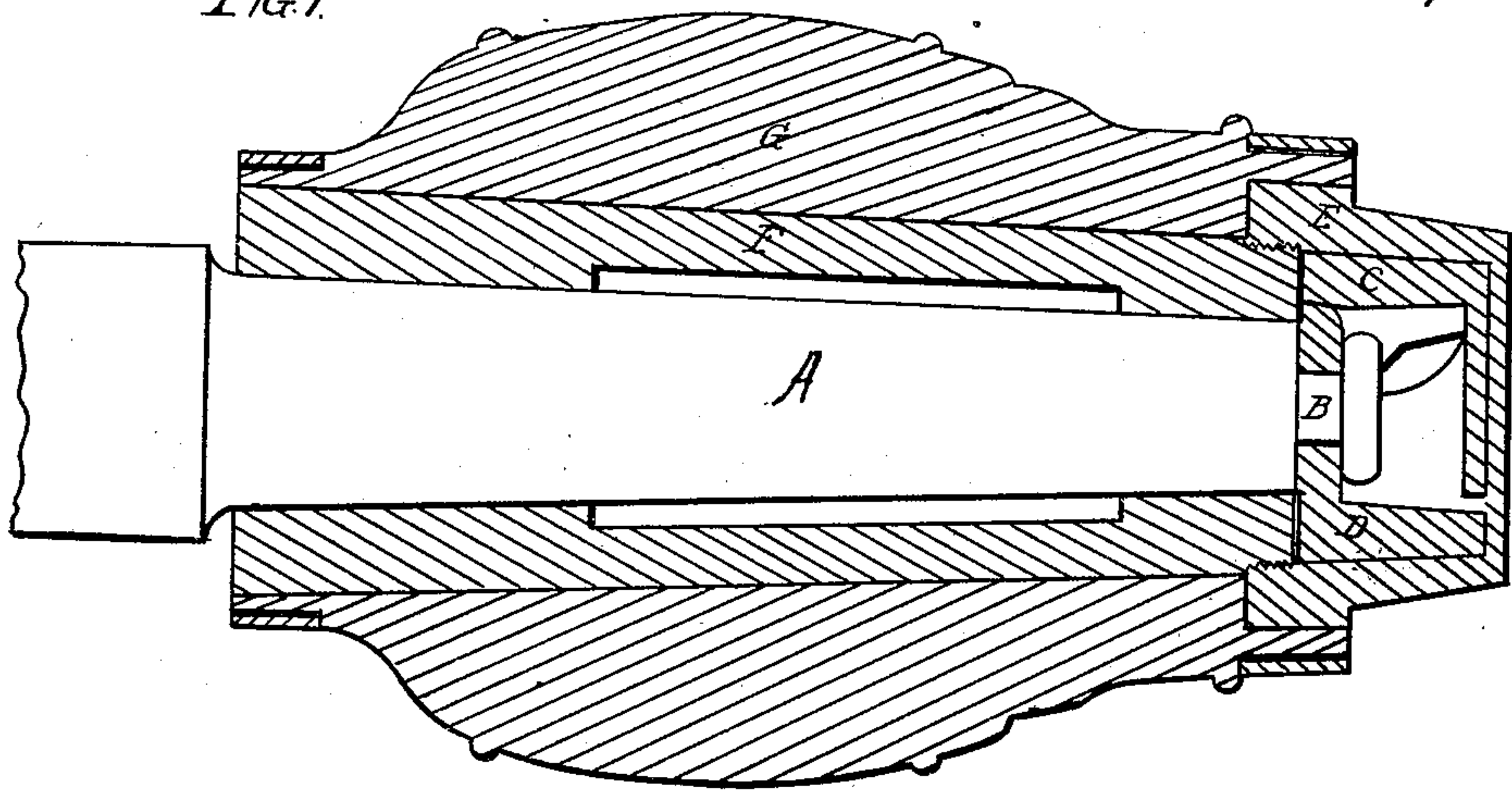


Fig. 4.

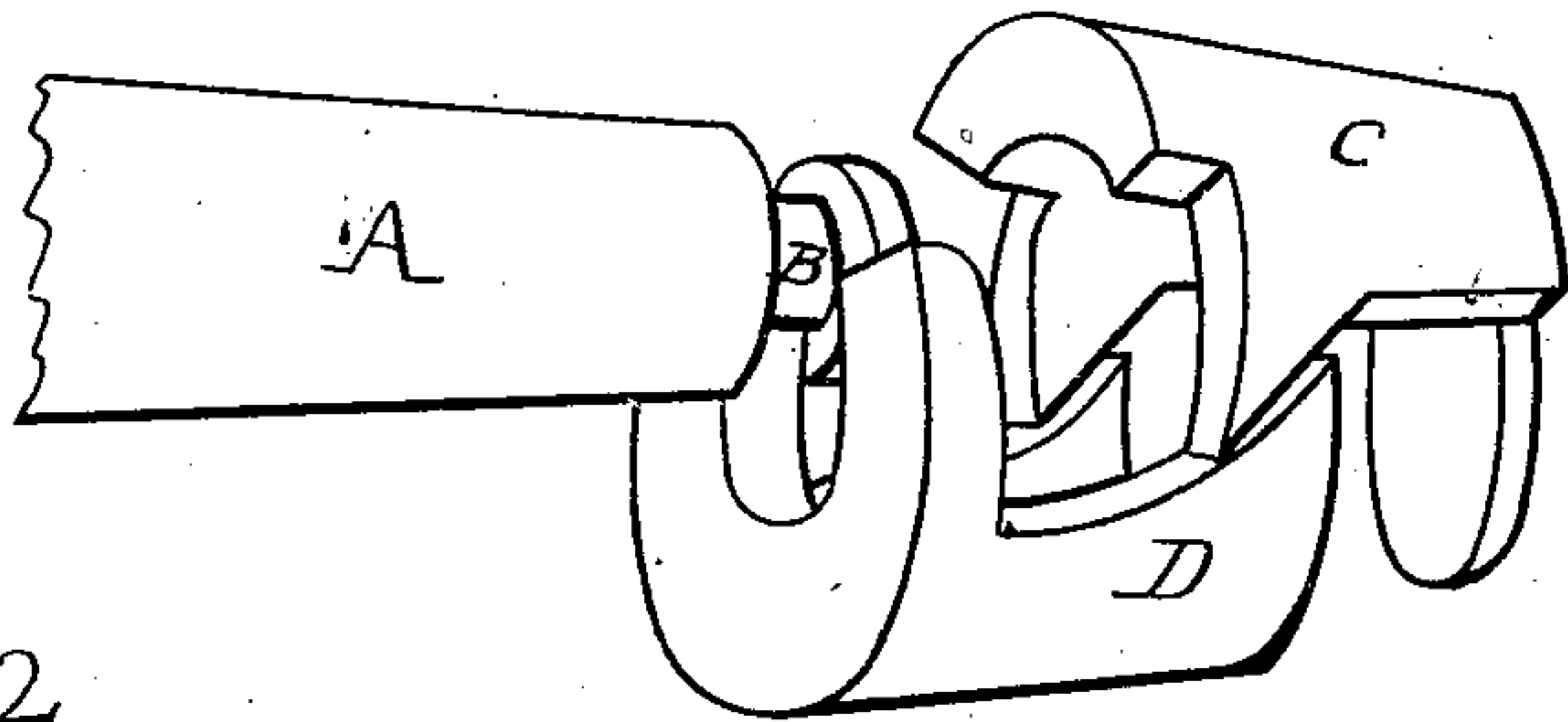


Fig. 2.

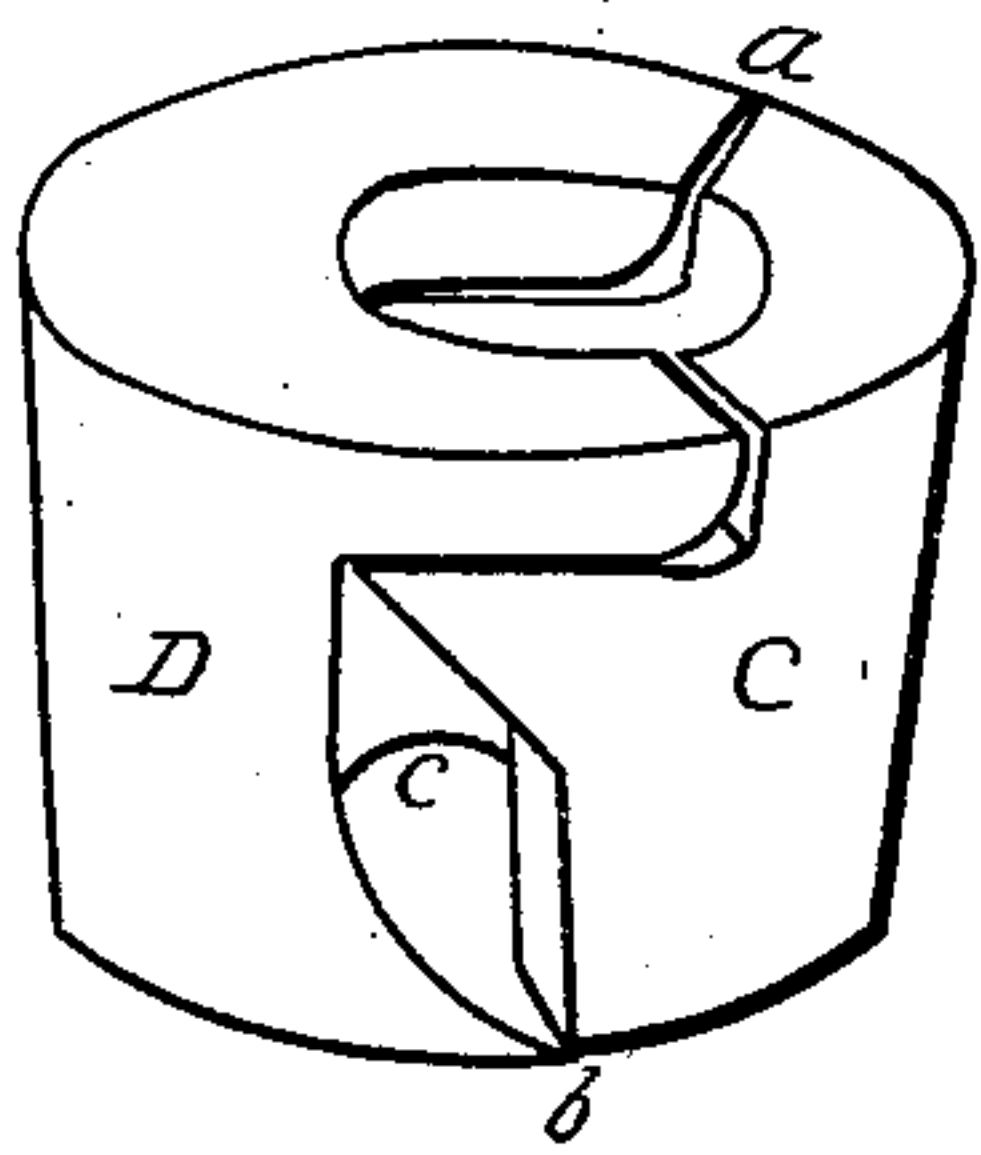


Fig. 5.

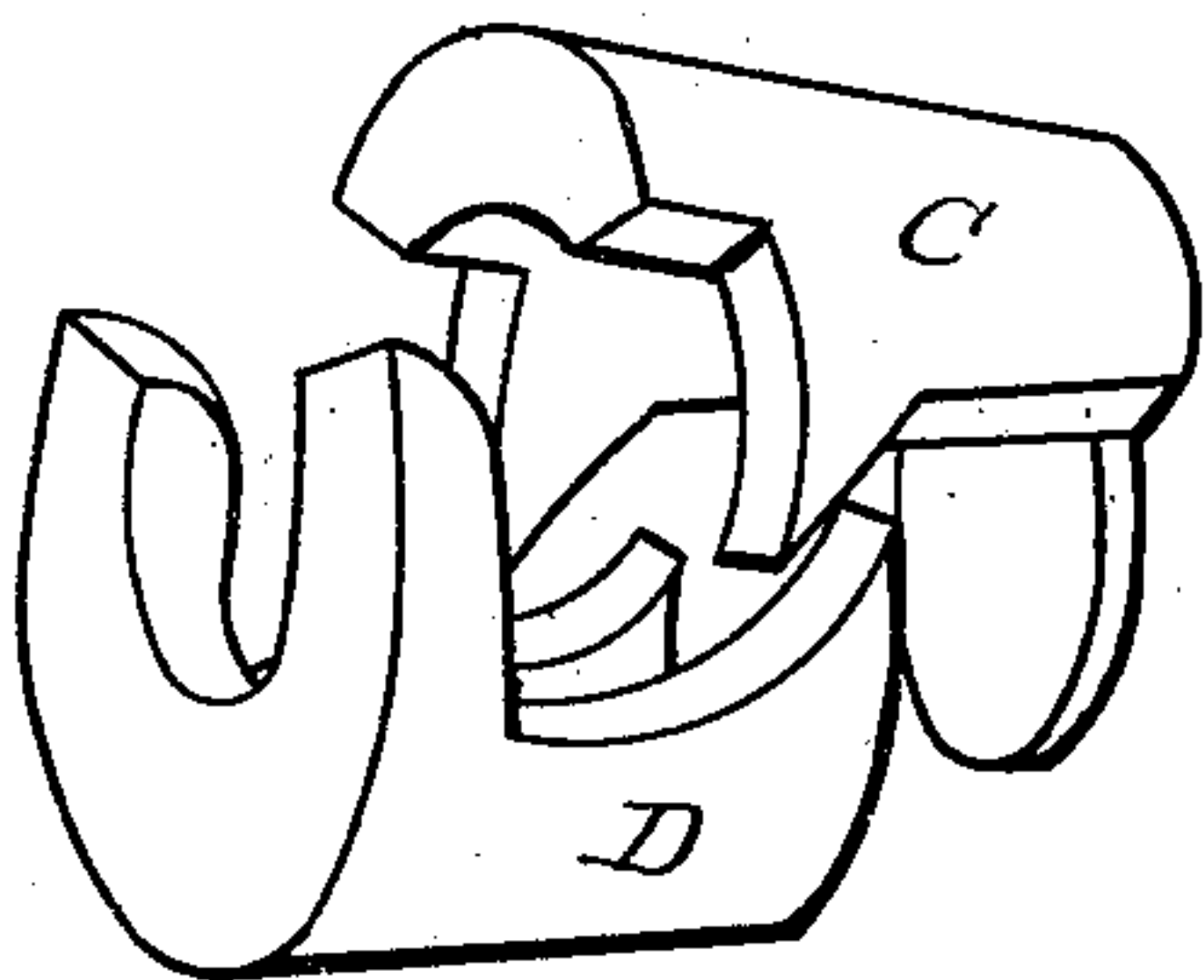
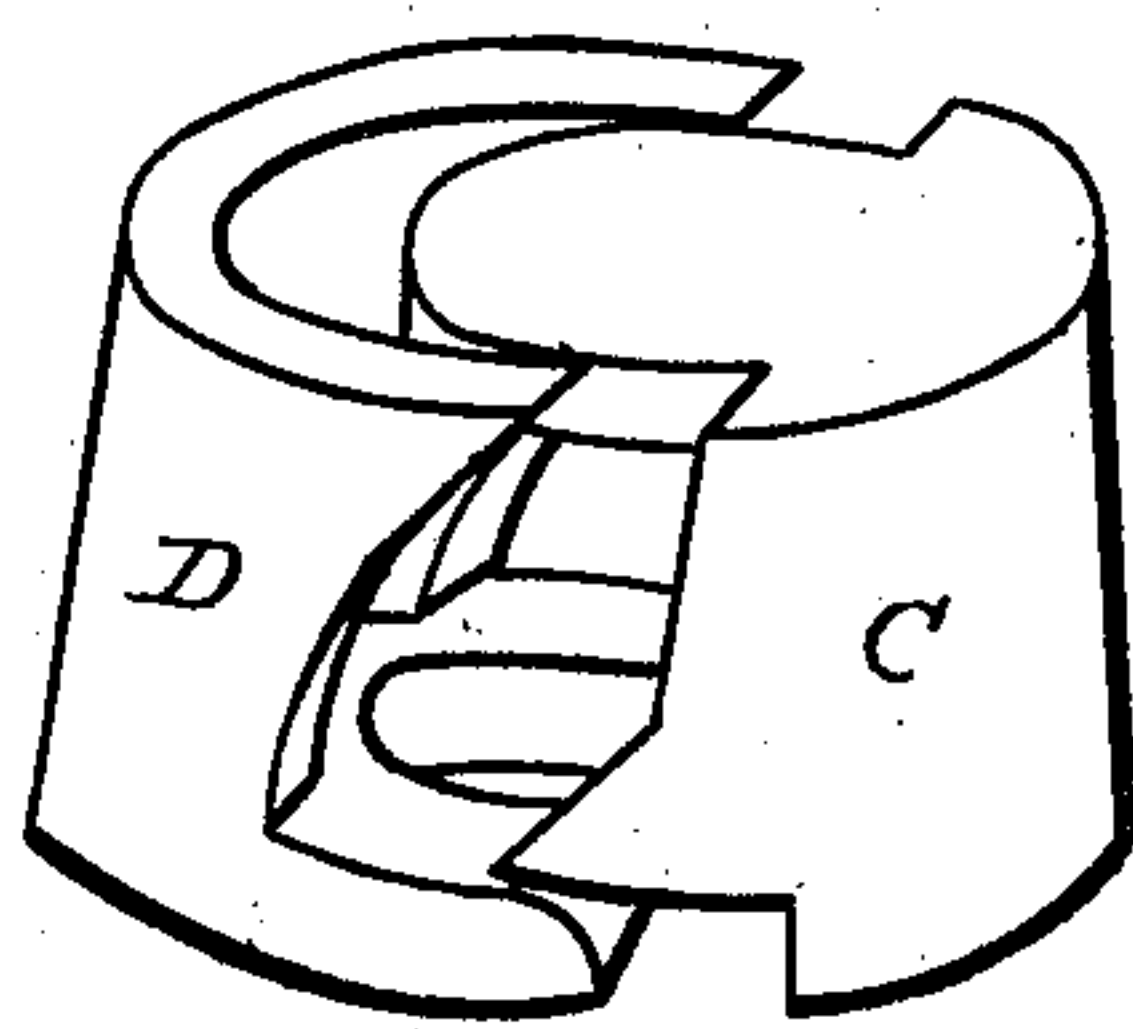


Fig. 3.



Witnesses:

Inventor:

John Henderson.

UNITED STATES PATENT OFFICE.

JOHN HENDERSON, OF HORSEHEADS, NEW YORK.

IMPROVEMENT IN HUB AND AXLE FASTENINGS.

Specification forming part of Letters Patent No. **12,946**, dated May 29, 1855.

To all whom it may concern:

Be it known that I, JOHN HENDERSON, of Horseheads, in the county of Chemung and State of New York, have invented a new and Improved Method of Fastening Wheels to Carriages; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a section of the hub and fastening.

A is the axle, having a grooved neck turned upon it at B. C and D are the upper and lower parts of the frustum-box fastening, in which the peculiarity of my invention chiefly consists. E is the cap, which screws on the box F of the hub G and completes the fastening. The fastening is a frustum-shaped box divided into two nearly equal parts, as shown at Fig. 2, by an irregular line from *a* to *b*, and a portion removed at *c*. The neck of the axle is dropped into a hollow in the base or larger end of the lower section, as at Fig. 4, where the upper section is placed in its proper position and the cap E, Fig. 1, is screwed on, the two parts of

the box being firmly compressed by it, and rendering the fastening secure until the cap is again removed, and forming a tight receptacle for oil or grease, and completely excluding dust, &c., from entering the axle-box. The upper and lower parts of the box are divided in such a manner as to permit the lower one to slide forward sufficiently to connect or disconnect with the axle, Figs. 4 and 5, without removing the other part from the cap, which may be either fastened to the cap immovably, as in the model, or secured by a pin and slot, so as to slide a part of the way out of the cap and facilitate its connection with the axle.

The construction of the frustum-box is shown in various positions in Figs. 2, 3, 4, and 5, and its position to the axle, hub, and cap in Fig. 1.

What I claim as my invention, and desire to secure by Letter Patent, is—

The peculiar form of the frustum-box fastening, operating in the manner and for the purpose herein described.

JOHN HENDERSON.

Witnesses:

TH. MAXWELL,
STEPHEN L. DERRY.