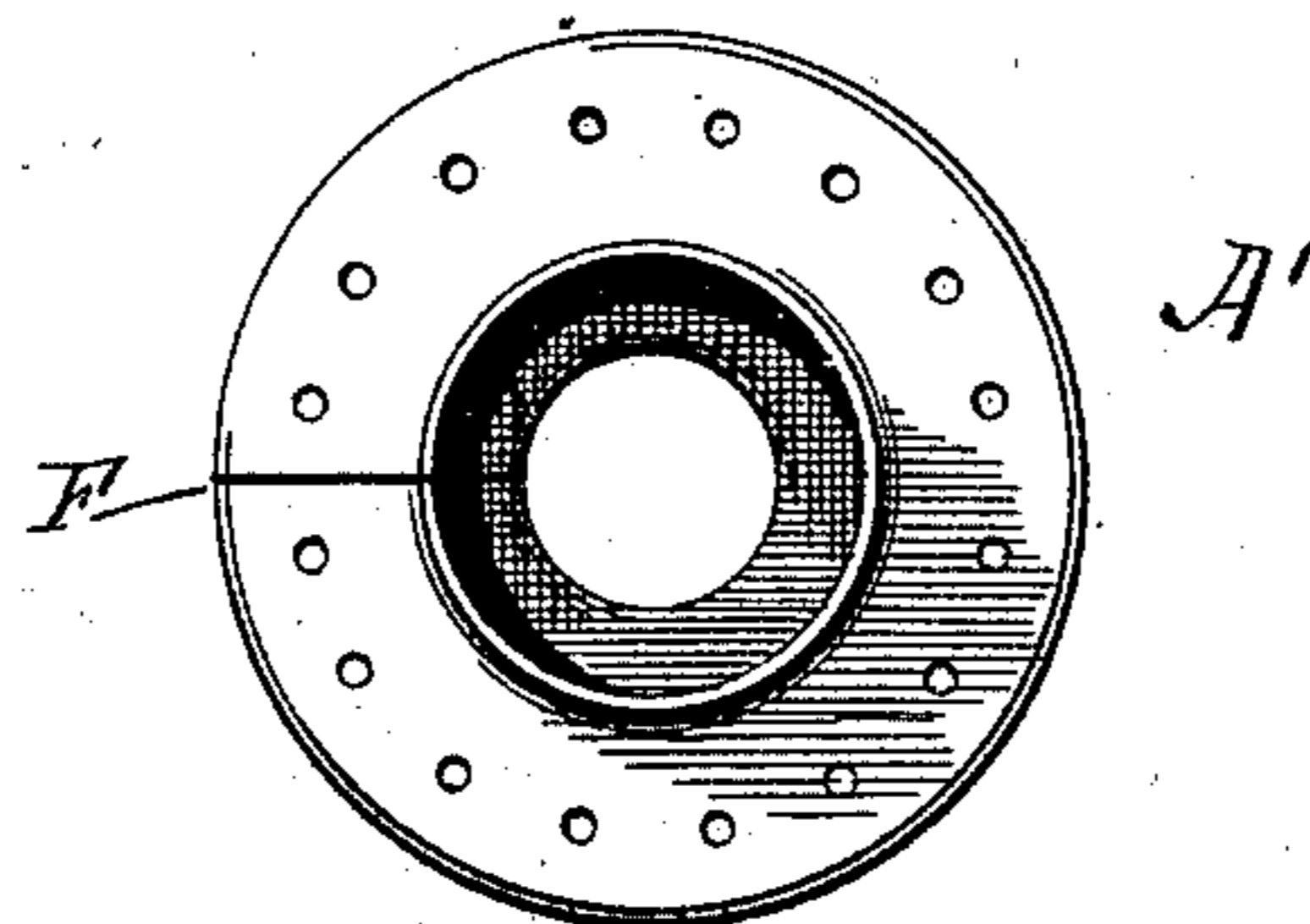
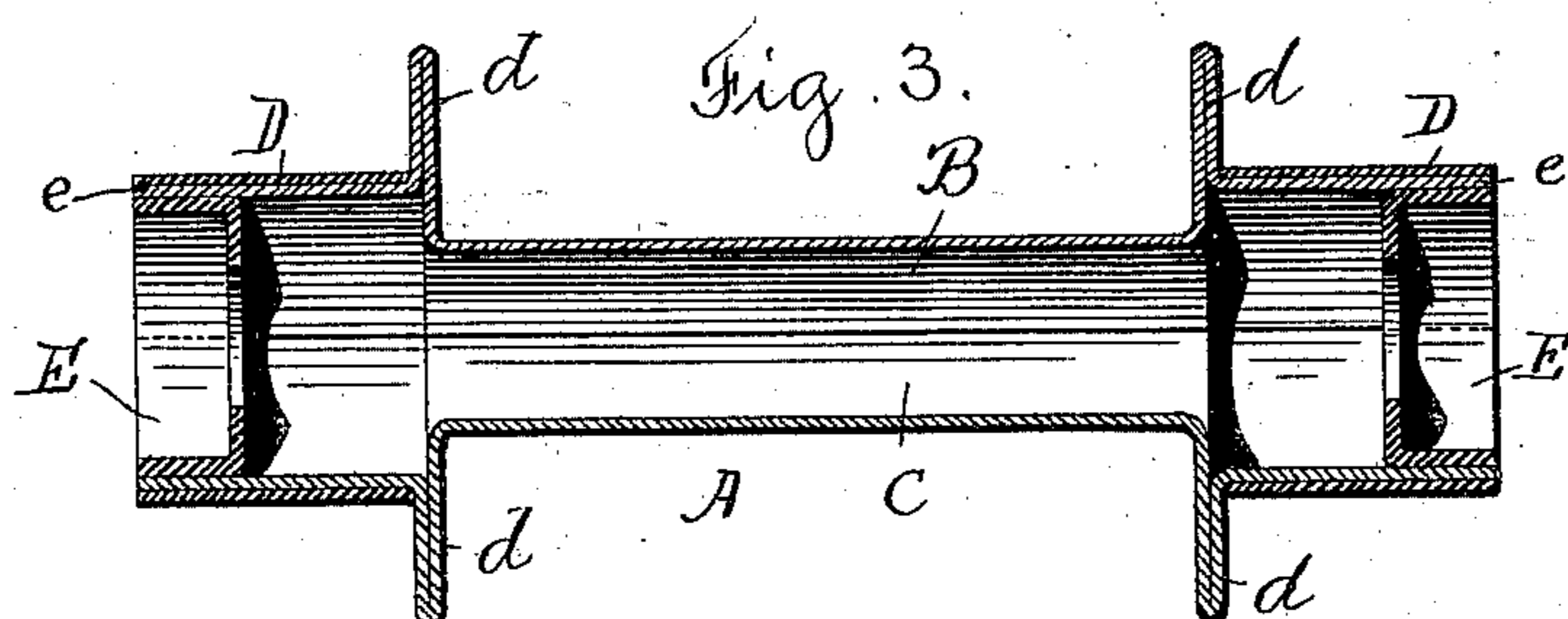
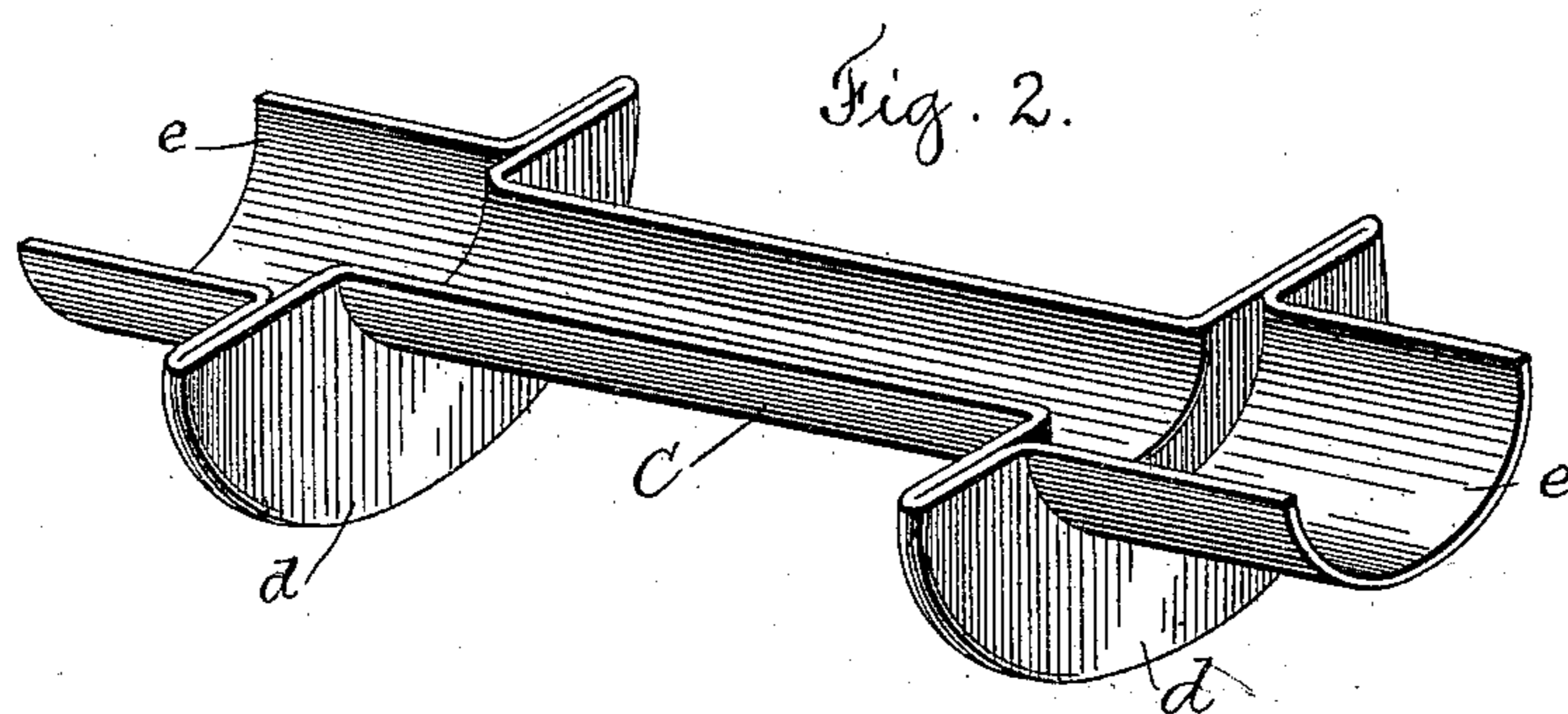
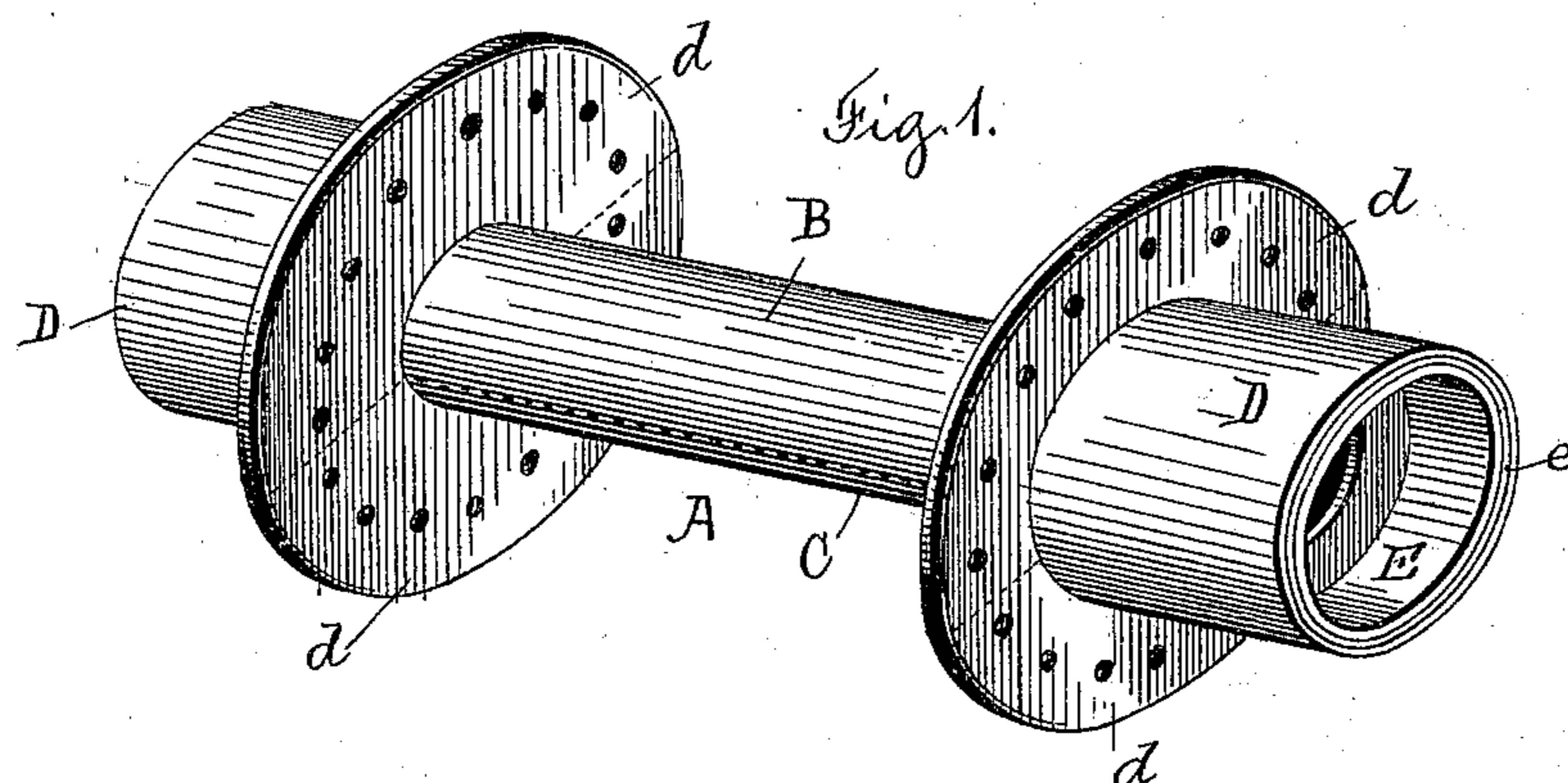


(No Model.)

A. B. CURTIS.  
HUB FOR WHEELS.

No. 555,932.

Patented Mar. 10, 1896.



Witnesses.

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# UNITED STATES PATENT OFFICE.

ALBERT B. CURTIS, OF WORCESTER, MASSACHUSETTS.

## HUB FOR WHEELS.

SPECIFICATION forming part of Letters Patent No. 555,932, dated March 10, 1896.

Application filed January 14, 1895. Serial No. 534,876. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT B. CURTIS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Hubs for Wheels, of which the following is a specification.

The object of my invention is to improve the construction of hubs for wheels.

To this end my invention consists of the parts and combinations of parts, as hereinafter described and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view of a hub constructed according to my invention. Fig. 2 is a perspective view of one of the longitudinal sections which may be used to form the body portion of the hub, and Fig. 3 is a longitudinal sectional view of a hub.

Referring to the drawings and in detail, A designates a cylindrical sheet-metal body portion, which is made up or formed from two similar longitudinal sheet-metal sections B and C. As shown most clearly in Fig. 2, the sheet-metal sections are provided near their ends with integral semicircular flanges *d*, which are formed by a fold or double thickness of the sheet metal. The outer ends *e* of the two similar longitudinal sections are preferably of a somewhat larger diameter than the central portion. The two similar longitudinal sections B and C, as thus constructed, are brazed together at their edges, and in practice I preferably provide reinforcing collars D, which are shrunk or brazed upon the ends of the two similar sections, thus firmly securing or clamping the parts together. Fitting into and brazed in place in the ends of the hub as thus constructed I preferably provide suitable ball-casings E, as most clearly shown in Fig. 3.

In the completed hub the semicircular flanges *d* of the longitudinal sections B and C unite to form circular spoke-receiving flanges, which may be perforated to receive the spokes of the wheel, or the spokes may be fastened to the same in any of the ordinary or approved manners.

It is to be noted that as thus constructed the spoke-flanges are each formed from a fold or double thickness of sheet metal, and I con-

sider this a feature of great importance, since the flanges as thus formed will have the requisite degree of strength to resist the strains which may be placed upon them, while at the same time the cylindrical body portion of the hub will contain comparatively little stock and will be very light and strong.

While my improved hub has been especially designed for use in connection with bicycles, it is obvious that it may be employed with advantage in any construction in which a light, strong and durable hub may be desired.

I am aware that changes may be made in the construction of my improved hub for wheels by those who are skilled in the art, and I do not wish, therefore, to be limited to the construction which I have shown and described; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. A hub for wheels comprising a cylindrical body portion formed from two similar longitudinal sections stamped out from sheet metal, brazed together at their edges, and having integral spoke-flanges formed from a fold or double thickness of metal, substantially as described.

2. A hub for wheels, comprising a cylindrical body portion formed from two similar longitudinal sections stamped up from sheet metal brazed together at their edges, and having integral spoke-flanges formed from a fold or double thickness of metal, and reinforcing-collars fitting onto the ends of said body portion, substantially as described.

3. A hub for wheels comprising a cylindrical body portion A formed from two similar longitudinal sections B and C, stamped up from sheet metal, brazed together at their edges, and having integral extending spoke-flanges *d*, reinforcing-collars D fitting onto the ends of said body portion, and ball-sockets E secured in said body portion, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALBERT B. CURTIS.

Witnesses:

LOUIS W. SOUTHGATE,  
PHILIP W. SOUTHGATE.