

(No Model.)

O. B. BANNISTER.
WHEEL HUB.

No. 362,701.

Patented May 10, 1887.

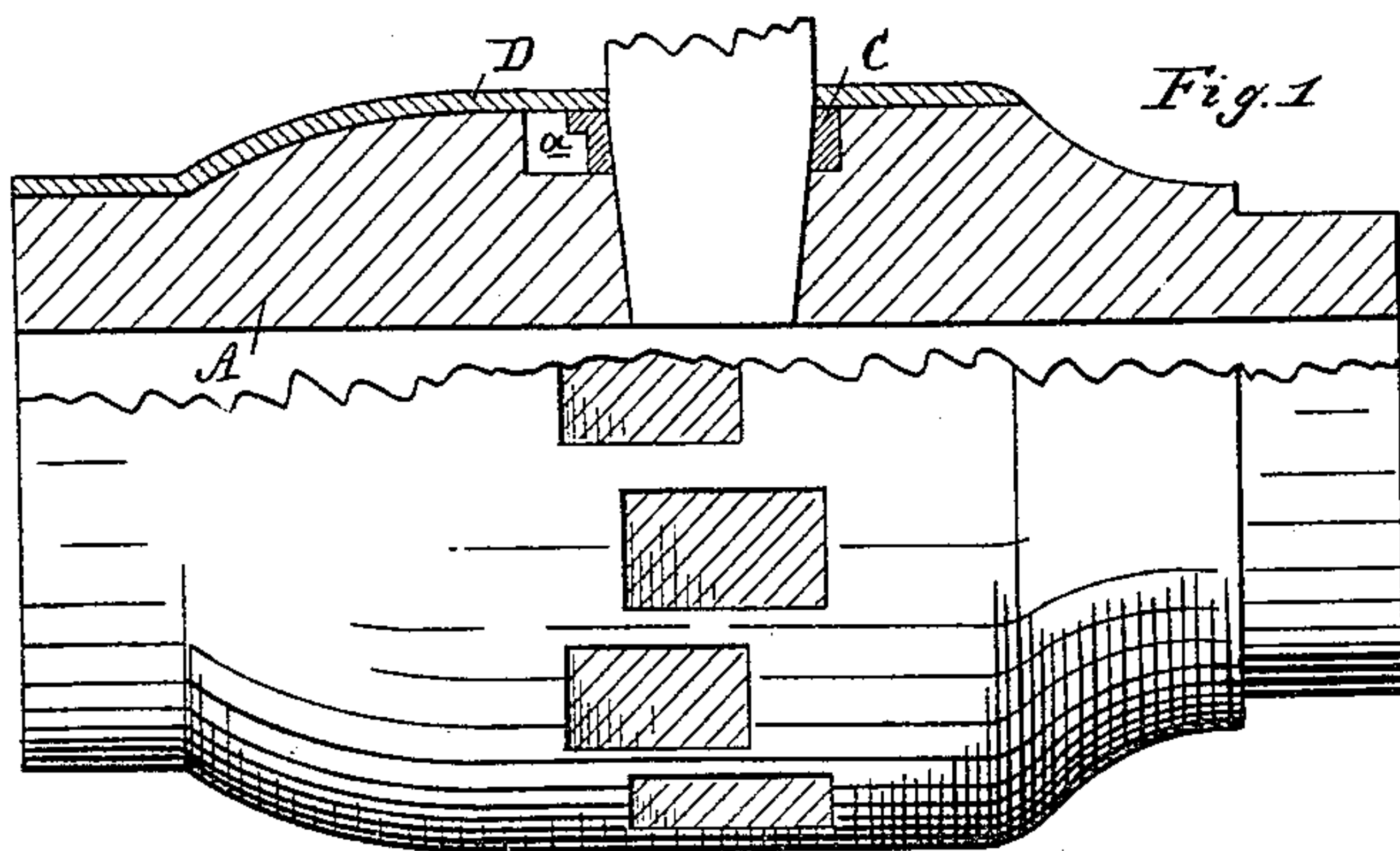


Fig. 1

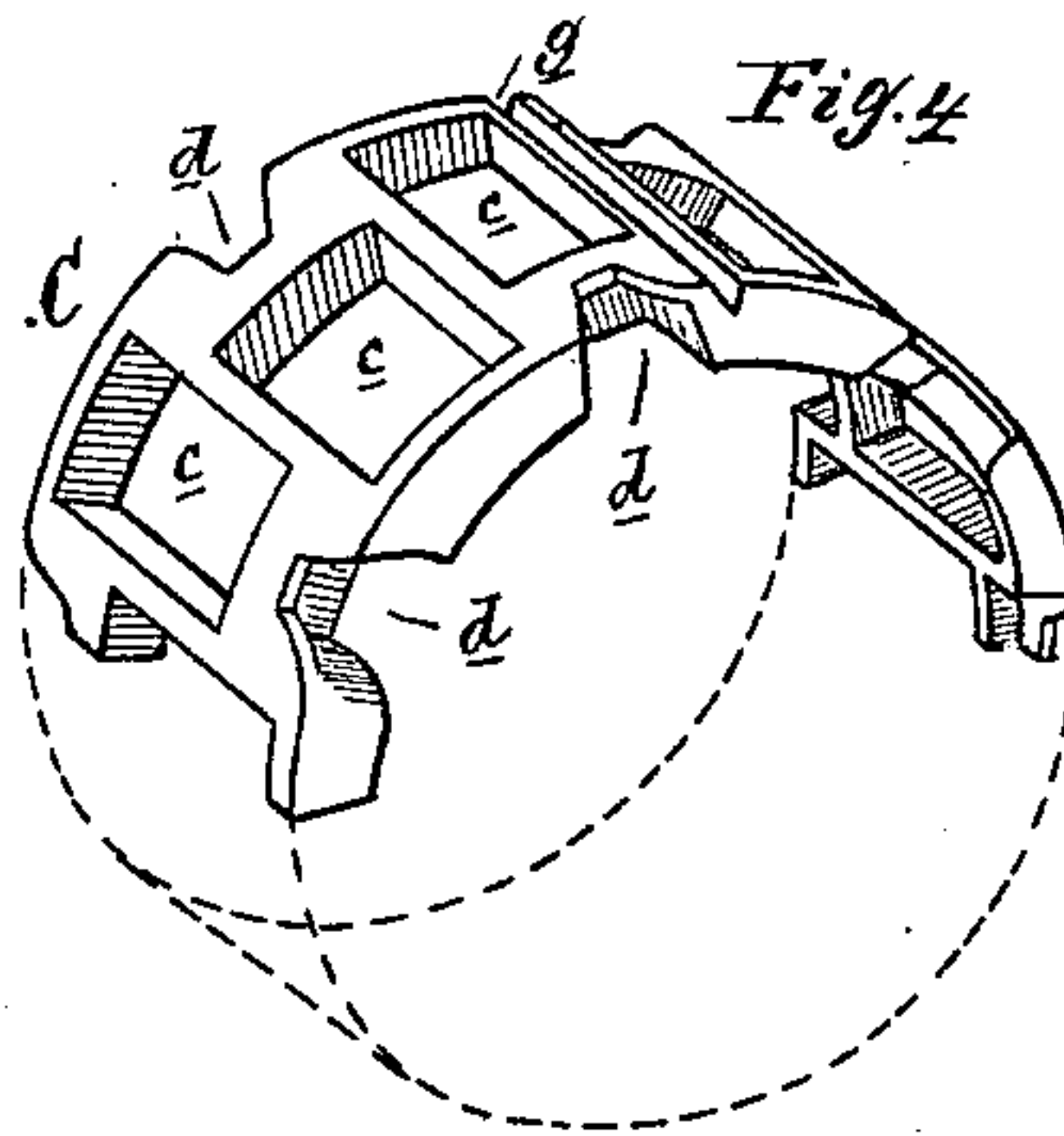


Fig. 4

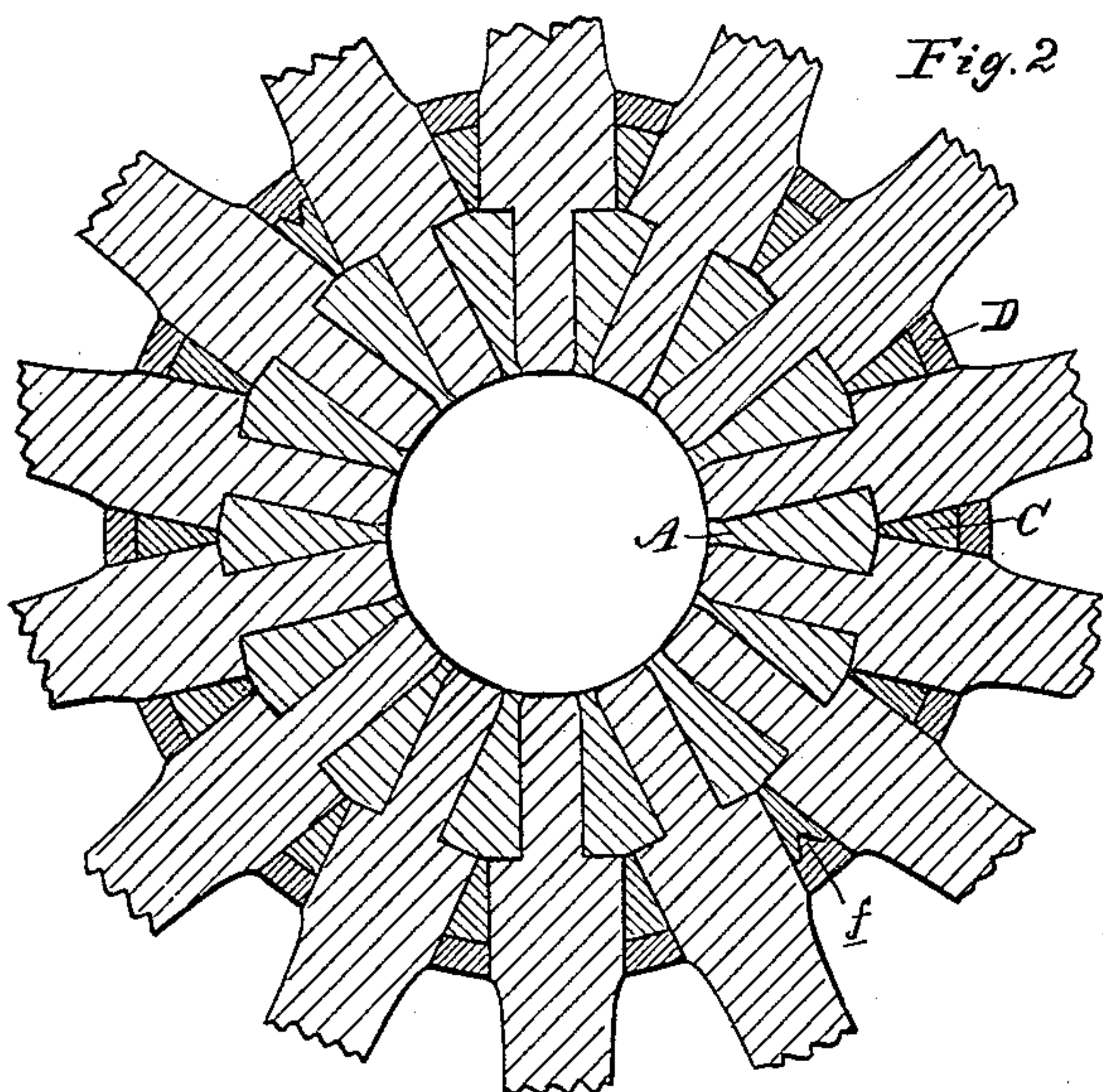


Fig. 2

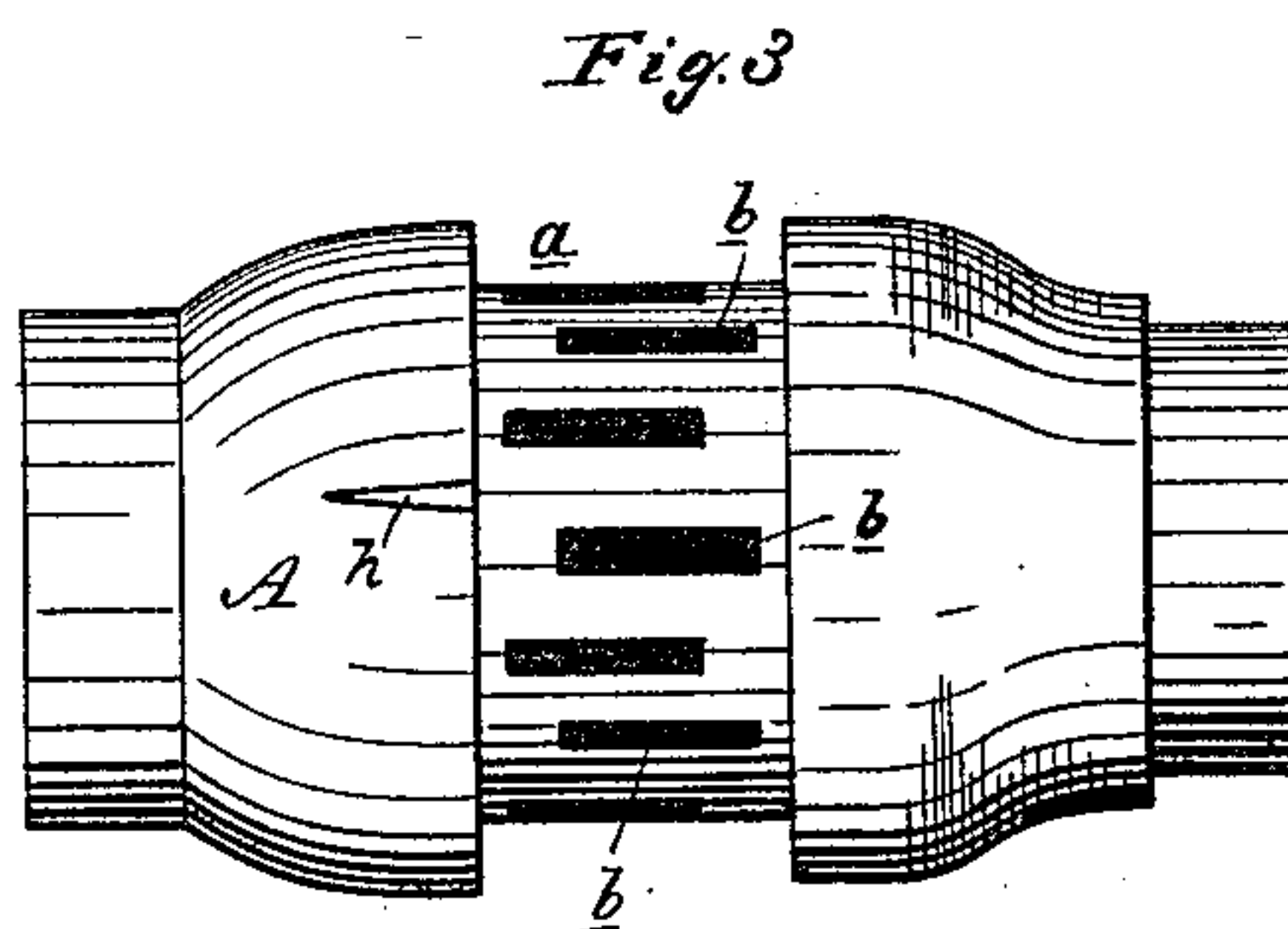


Fig. 3

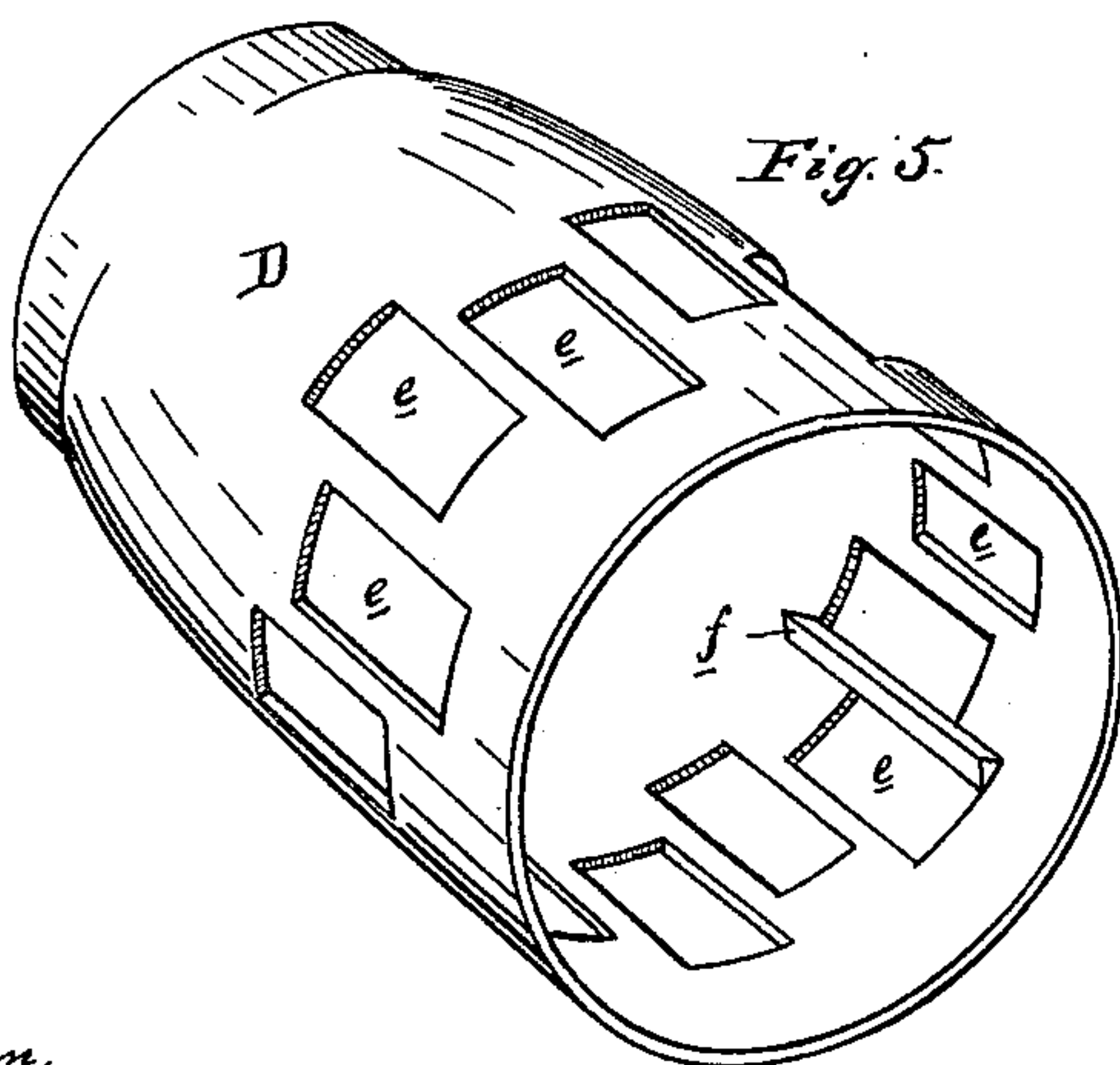


Fig. 5

Attest:

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[Signature]

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Thos. S. Sprague

UNITED STATES PATENT OFFICE.

OSCAR B. BANNISTER, OF SANDUSKY, OHIO.

WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 362,701, dated May 10, 1887.

Application filed March 10, 1887. Serial No. 230,331. (No model.)

To all whom it may concern:

Be it known that I, OSCAR B. BANNISTER, of Sandusky, in the county of Erie and State of Ohio, have invented new and useful Improvements in Wheel-Hubs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to new and useful improvements in vehicle hubs; and my improvement specifically relates to that class of composite wood and metal hubs in which metallic spoke-sockets are provided upon the central portion of the wooden hub and within the body of the hub proper.

The invention consists in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described and claimed.

Figure 1 is an elevation of my improved hub, partly in section. Fig. 2 is a central cross-section of the hub. Fig. 3 is an elevation showing the wooden portion of the hub. Fig. 4 is a perspective view of one half of the metal band or filling which forms the metallic spoke-sockets. Fig. 5 is the hub-sleeve, which secures the inner central band in place upon the hub.

In the drawings which form a part of and accompany this specification, A is a wooden hub of the ordinary cylindrical form with tapering ends, and this hub is provided with a central annular groove, *a*, and with radial spoke-mortises *b*, as shown, opening inwardly from the annular groove and extending toward the axis of the hub. Within this annular groove *a*, I place a metallic filling, C, of corresponding form and size with the groove itself, and this filling is provided with openings *c*, corresponding with the spoke-mortises *b* in the wooden part of the hub, but of larger size, so as to receive the shoulder of the spoke. This filling I preferably make of cast-iron in two like circular halves, so that when placed together within the annular groove around the hub it will fill such groove flush with the face of the hub and form a complete metallic band around the center. The spoke-sockets formed in this metallic band or filling extend the entire depth of the annular groove and bear upon the shoulder of the spoke, when the

latter is in place, upon all sides, and if the spokes are not in the same plane, but are what is called "staggered," the metallic filling may be judiciously cut away, as at *d*, to lighten the band, without weakening the sockets.

D is a metallic sleeve of suitable size and form to embrace the central portion of the hub and the tapering back end thereof in such manner, as shown, as to avoid the necessity of the ordinary hub band on such rear end of the hub. This hub-band is provided, as shown, with spoke-openings *e*, which, when the band is in place, are coincident with the spoke-sockets in the central filling in the annular groove. To hold this hub-band and the filling in their proper relative position with each other, I provide the former with some inwardly-projecting flanges, *f*, and the latter with corresponding grooves, *g*, so that when the parts are secured together the flanges *f* will interlock with the grooves *g*.

It will be seen that in this construction of hub the result is a perfectly solid hub, whereas in other constructions more or less cutting away of the wooden portion of the hub is required to secure the metallic parts in place. This is the case, for instance, where the spoke-sockets are formed integral with the hub-sleeve by means of inward projections, which necessitate the cutting away of some portion of the wood part of the hub to permit the sleeve being adjusted on the hub, a practice that materially weakens the device.

I form a groove, *h*, in the hub A, so that when the sleeve D is in place the flange *f* thereof enters this groove and securely holds the sleeve, band, and hub together. This is important.

What I claim as my invention is—

The combination, with the hub A, formed with annular groove *a* and longitudinal groove *h*, of the filling C, fitted in said groove and formed with groove *g*, and the sleeve D, formed with inwardly-projecting flange *f*, engaging the groove *g* of the filling and the groove *h* of the hub, substantially as and for the purpose specified.

OSCAR B. BANNISTER.

Witnesses:

JNO. M. BOALT,
J. B. LEESON.