

(No Model.)

J. MACNAREY.

2 Sheets—Sheet 1.

CYLINDER OR DRUM FOR PAPER MAKING.

No. 455,222. *Fig. 1.*

Patented June 30, 1891.

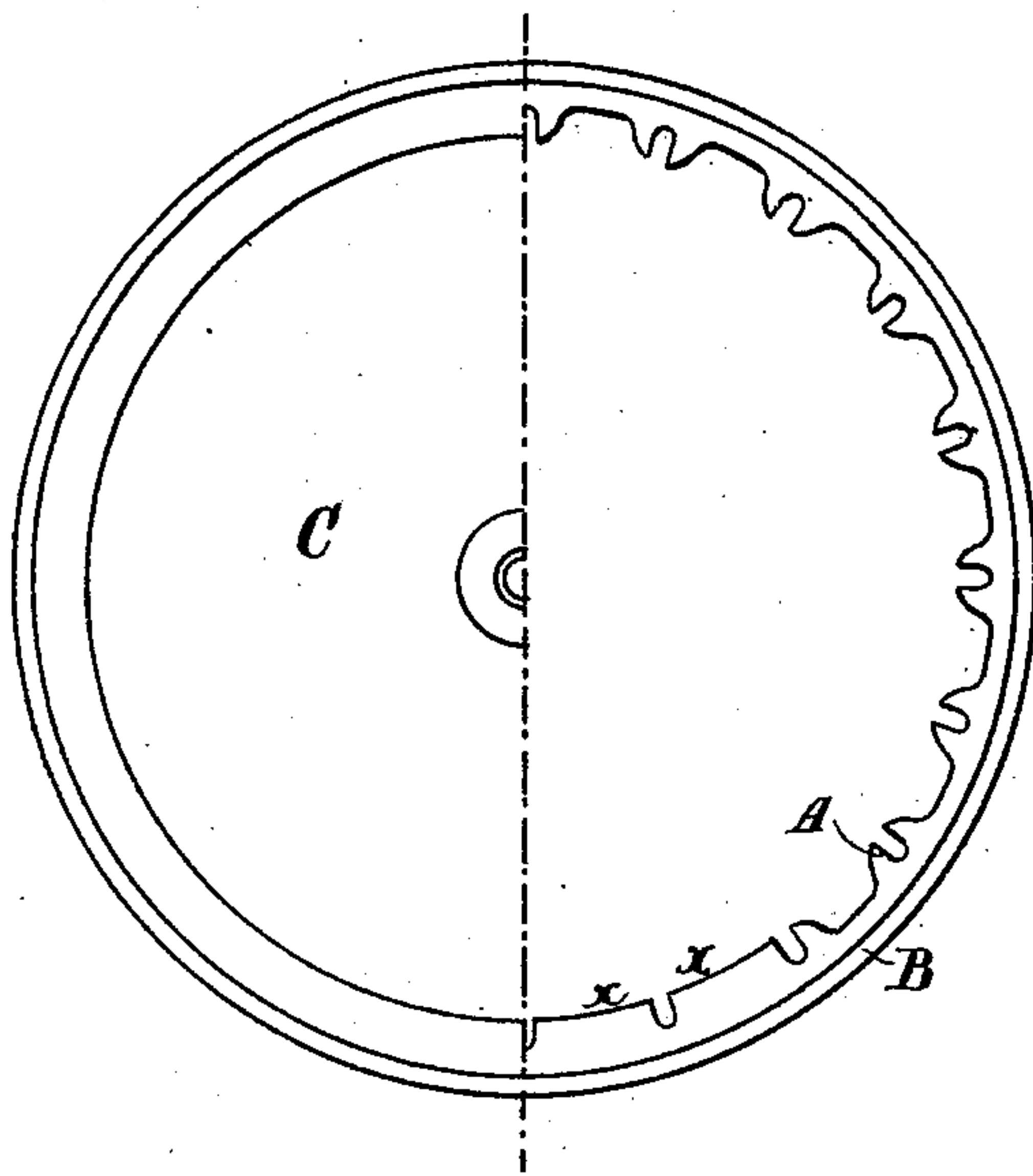


Fig. 2.

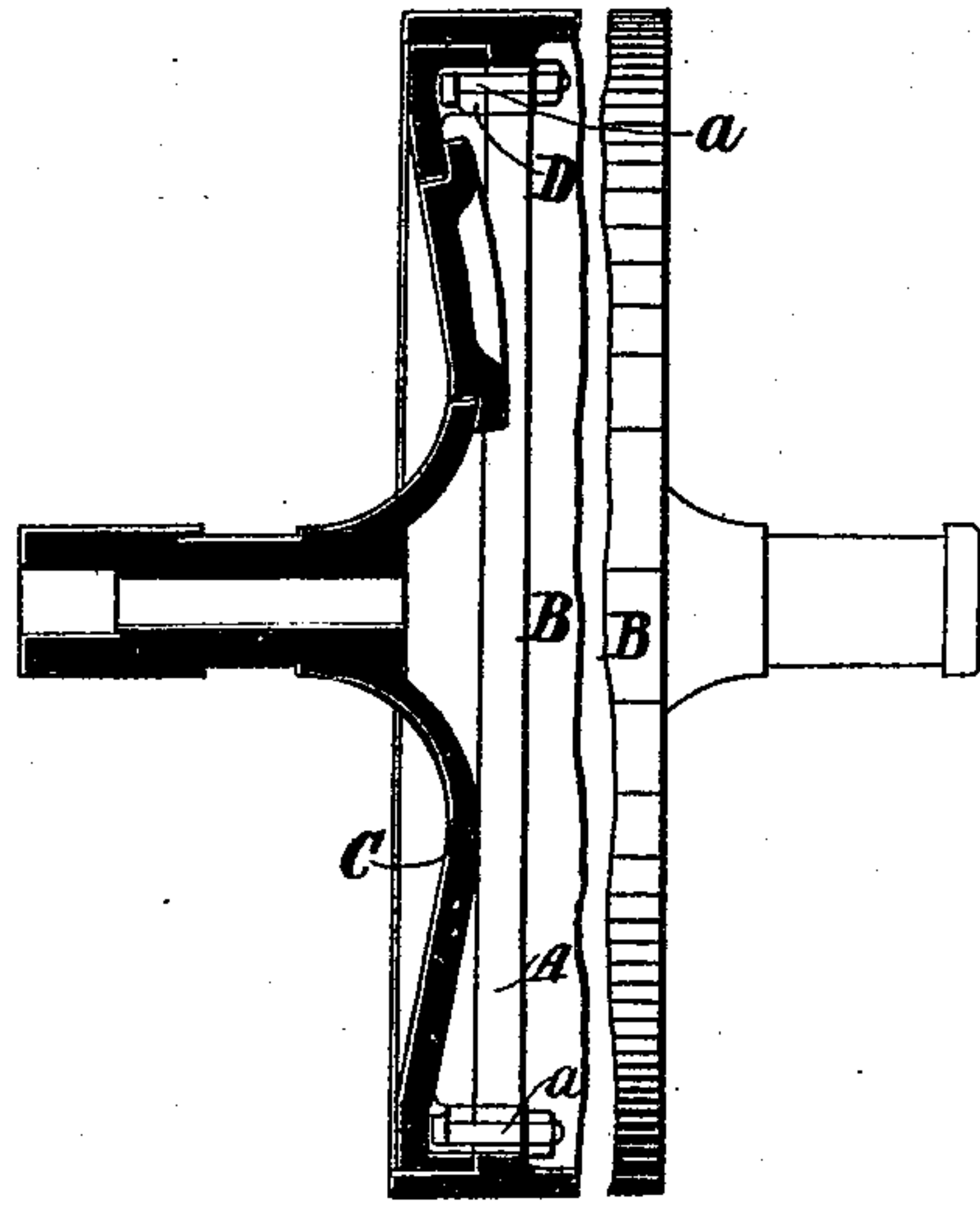
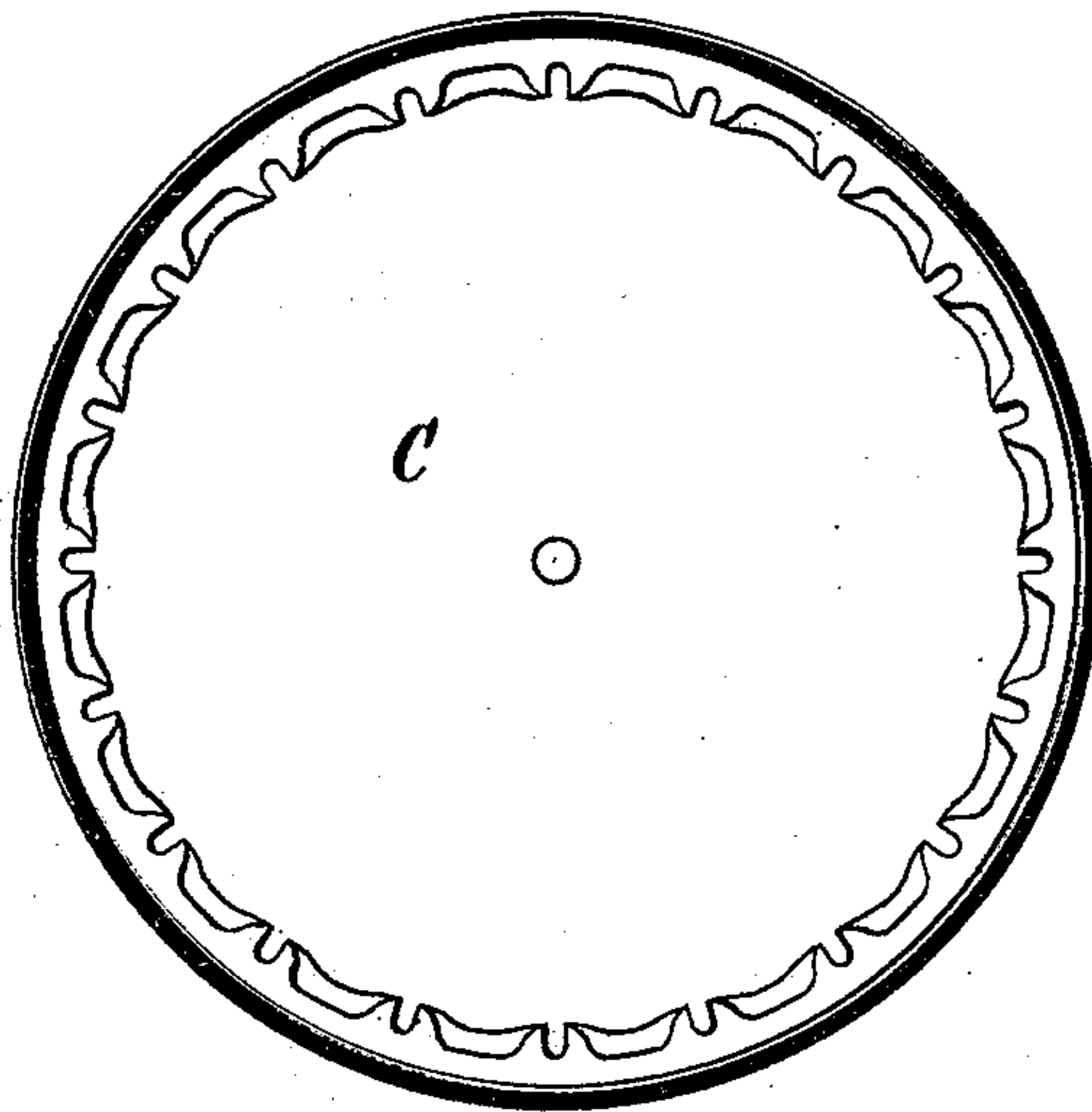


Fig. 3.



Witnesses

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Fig. 4.

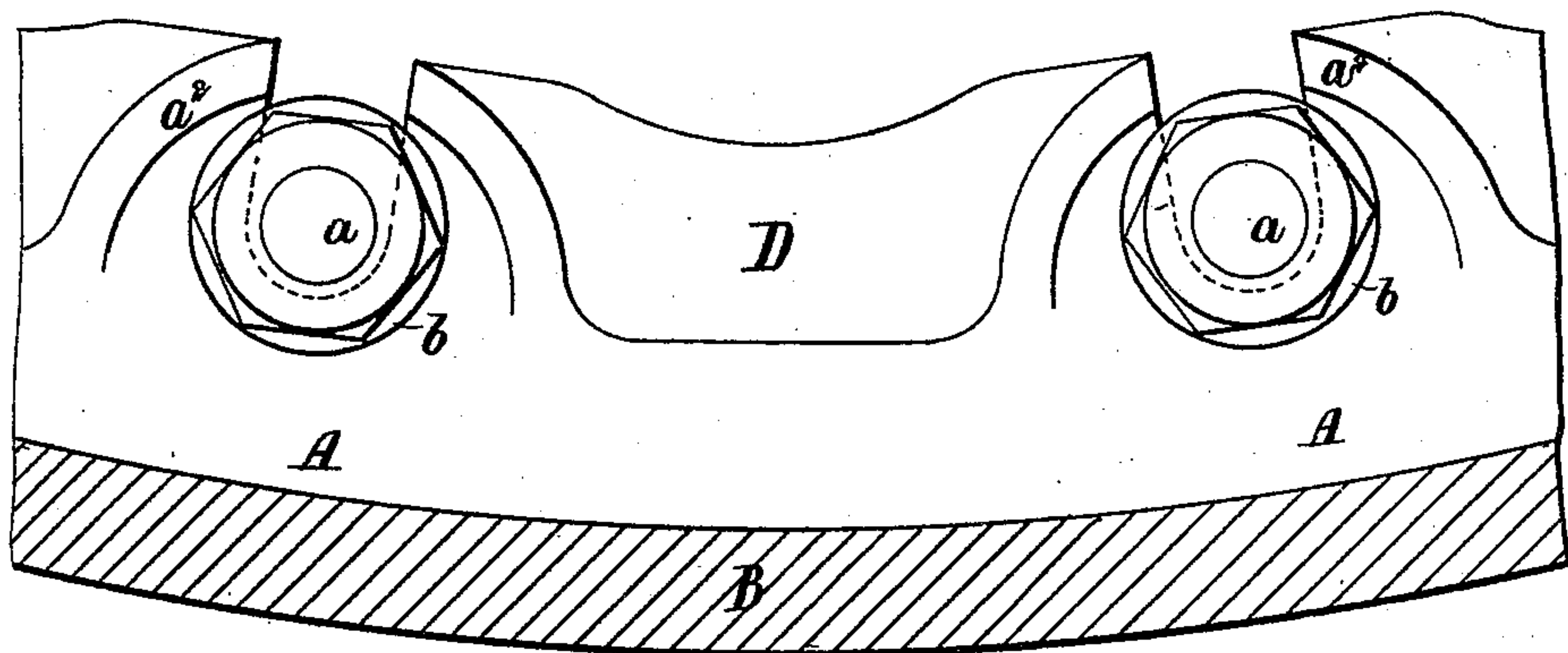
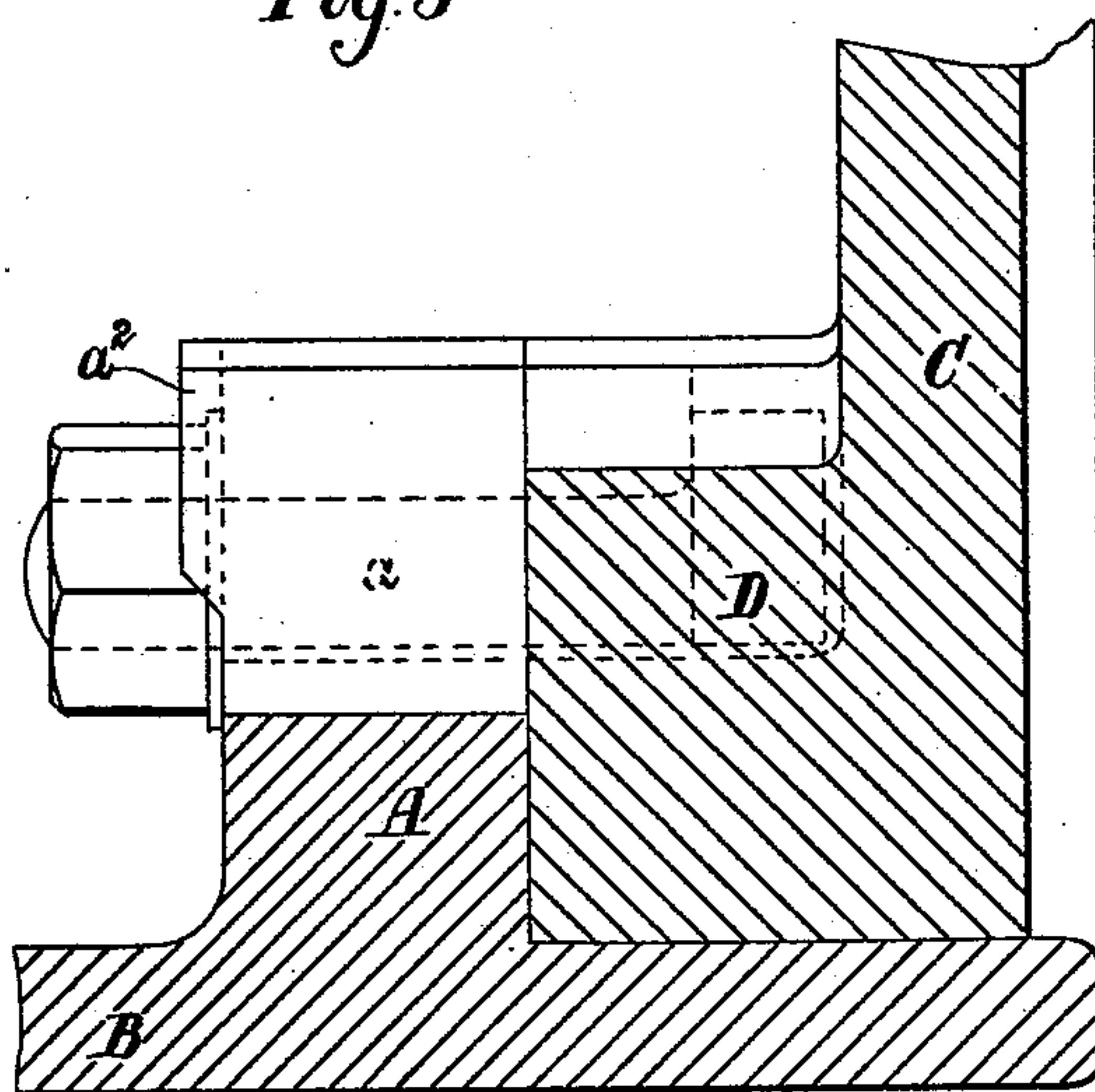


Fig. 5



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UNITED STATES PATENT OFFICE.

JOHN MACNAREY, OF BURY, ENGLAND, ASSIGNOR TO GEORGE BENTLEY
AND JOHN BROAD JACKSON, OF SAME PLACE.

CYLINDER OR DRUM FOR PAPER-MAKING.

SPECIFICATION forming part of Letters Patent No. 455,222, dated June 30, 1891.

Application filed November 13, 1890. Serial No. 371,283. (No model.) Patented in England February 10, 1887, No. 2,133.

To all whom it may concern:

Be it known that I, JOHN MACNAREY, work-
manager, a subject of the Queen of Great
Britain and Ireland, residing at Lodge Bank
5 Works, Bury, in the county of Lancaster, Eng-
land, have invented certain Improvements in
the Construction of Cylinders or Drums for
Paper-Making and other Machines, (for which
I have obtained a patent in Great Britain,
10 No. 2,133, dated February 10, 1887,) of which
the following is a specification.

This invention relates to the construction
of cylinders or drums by means such as are
described in the specification of English Let-
15 ters Patent No. 1,346, dated May 3, 1872,
granted to Daniel Bentley and John Broad
Jackson.

My present invention has for its object to
obviate the defect incidental to the construc-
20 tion as described and illustrated by the speci-
fication of the said Letters Patent, consisting
in the distortion of the cylinder or drum by
the drawing inward of the periphery of the
said cylinder or drum at portions a little
25 from the ends, due to the pressure put on the
bolts or fastenings and owing to the space be-
tween the lugs A in the drawings accompa-
nying the specification of the said Patent No.
1,346 of 1872, and the projections with the T-
30 slots on the end disk.

In the accompanying drawings, Figure 1
represents an end view of a cylinder or drum,
one half being shown with the end plate or
disk in place and the other half being shown
35 without the end plate or disk. Fig. 2 is a
side view partly in longitudinal section. Fig.
3 is a section showing the inside of one of the
end plates or disks, and Figs. 4 and 5 are en-
larged sectional details illustrating the pres-
40 ent invention.

According to my present improvements I
form a flange A around the inner circumfer-
ence of the cylinder B, near the end thereof,
and a flange D on the head C, so that when
45 the head C is placed in position the two
flanges A and D abut firmly against each
other, making a joint entirely around the cyl-
inder. In these flanges A and D are formed
slots a' and d' , respectively, at convenient
50 intervals and coinciding with each other for

the reception of the fastenings, such as the
bolt a . Around each slot a' on the flanges
A are preferably cast projections a^2 , which
inclose or partly inclose the washers b and
the nuts used with the fastenings and keep 55
the bolts a in place should the nuts become
slack. When the head C is placed in posi-
tion and the bolts a are screwed up or other-
wise fastened, the bearing of the joints
formed by the abutting of the meeting faces 60
of the parts A and D prevent the hereinbe-
fore-mentioned distortion of the cylinder or
drum B. The joints are preferably turned
on the meeting faces, and they may, in addi-
tion or in substitution, be cemented. Where 65
the fastenings a occur, the joint preferably
extends from the inner periphery of the cylin-
der D continuously to the top of the flanges.
Instead of there being deep recesses between
the fastenings, a continuous flange or nearly 70
continuous flange may be made to give an
extended bearing on D. This is indicated at
 $x x$, Fig. 1.

I claim as my invention—

1. A fastening for the ends or heads of a 75
cylinder or drum, consisting of a flange on the
inner periphery of the cylinder near its end,
and a flange on the head of the two said
flanges abutting against each other all around
the cylinder end, and coinciding slots in the 80
flanges for the reception of fastenings, sub-
stantially as set forth.

2. A fastening for the ends or heads of a
cylinder, consisting of a flange on the inner
periphery of the cylinder near its end, and a 85
flange on the head, the two said flanges abut-
ting against each other all around the cylin-
der end, coinciding slots in the flanges for
the reception of the bolts, and projections a^2 ,
as and for the purposes set forth. 90

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN MACNAREY.

Witnesses:

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