

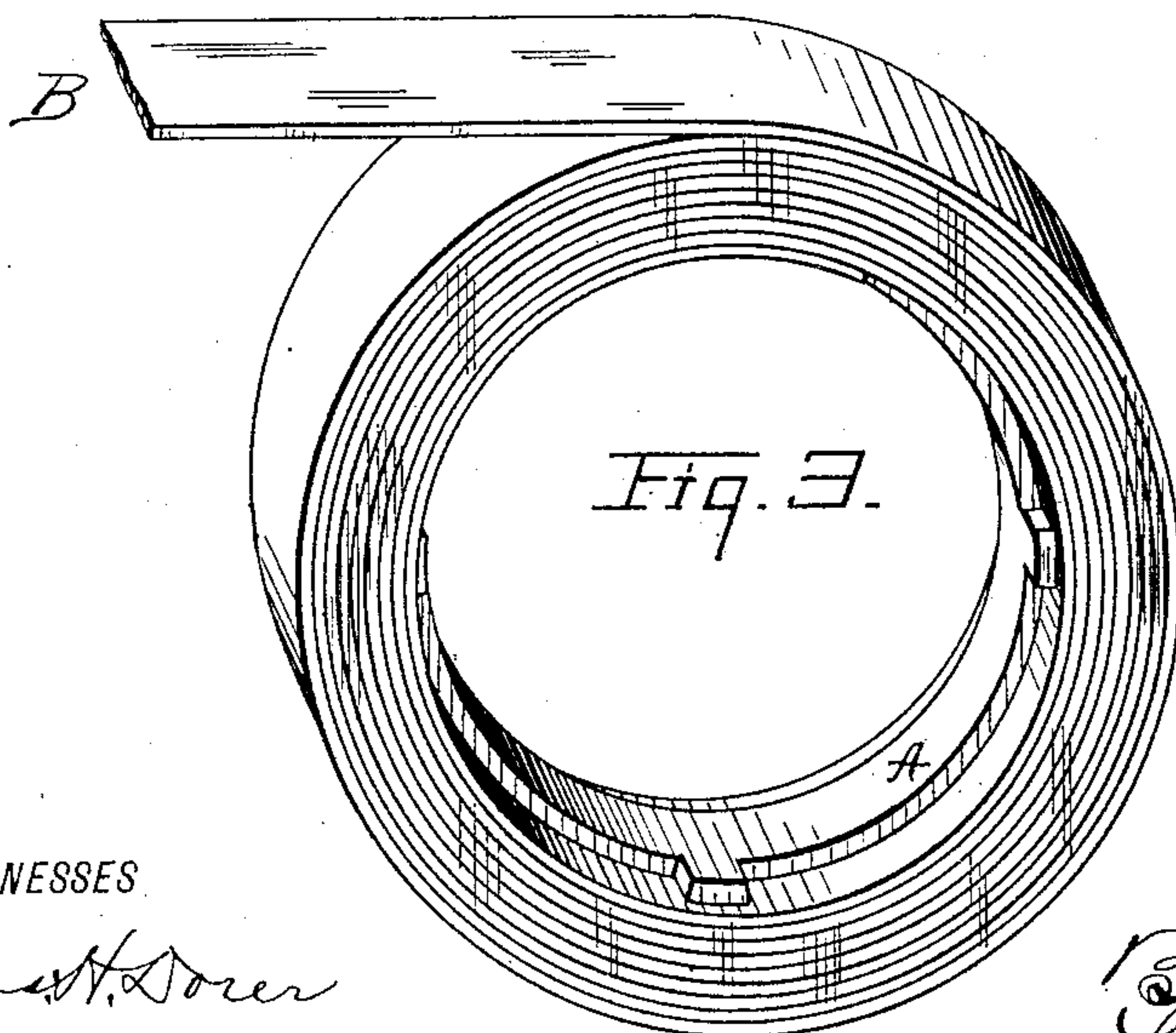
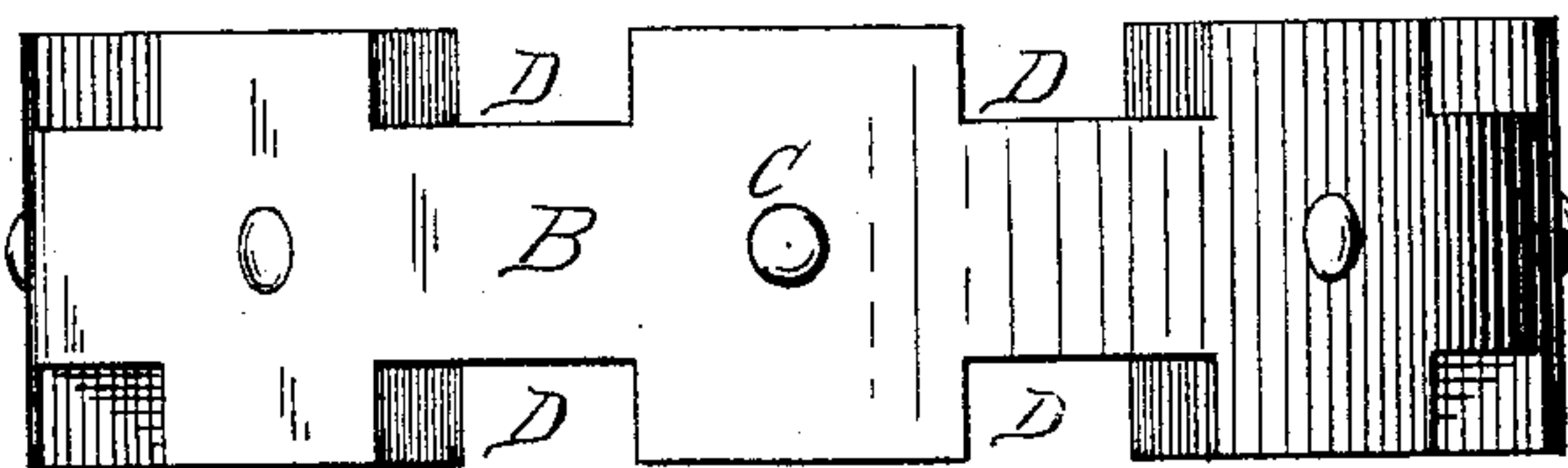
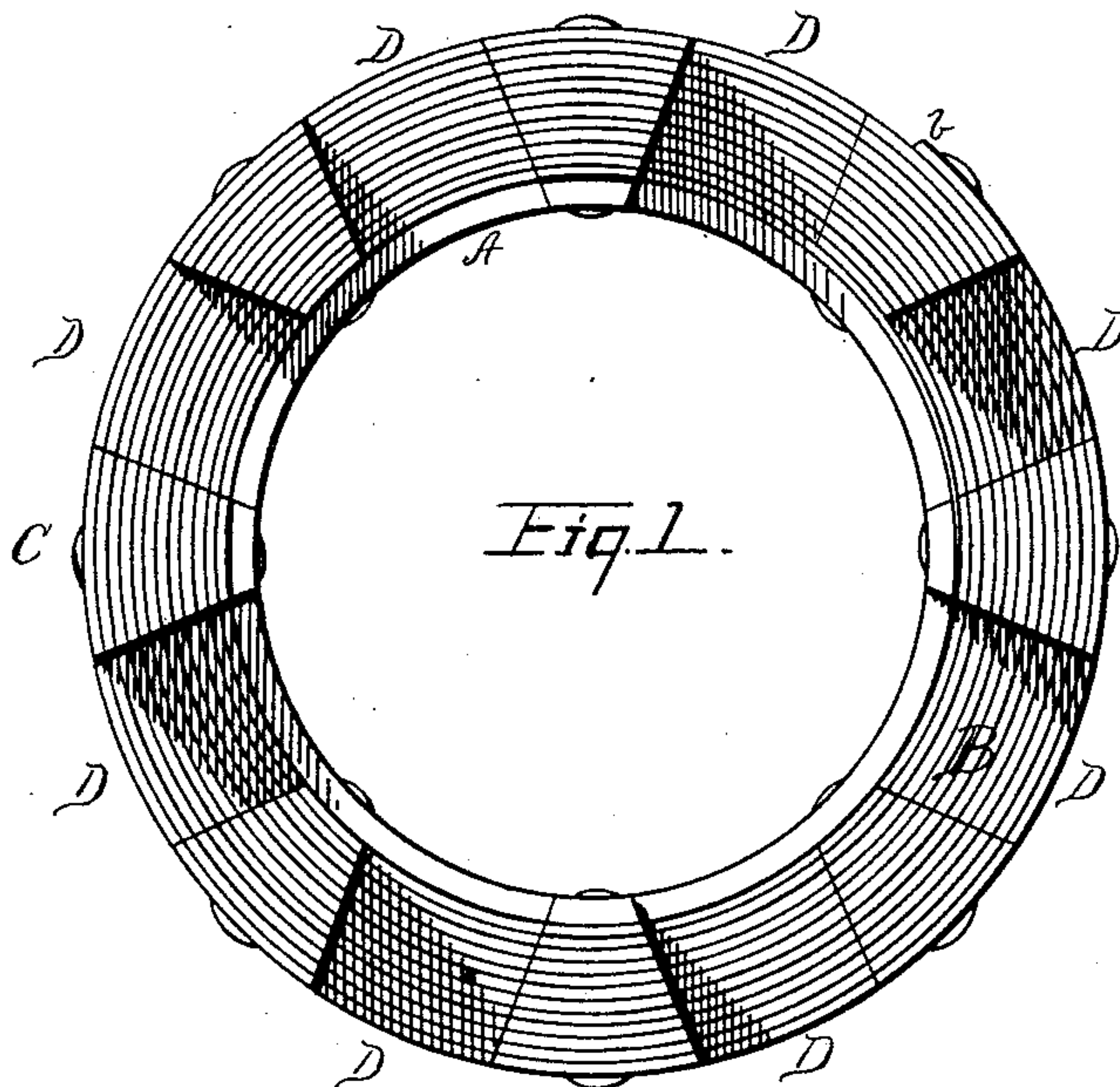
(No Model.)

C. F. BRUSH.

ARMATURE FOR DYNAMO ELECTRIC MACHINES.

No. 336,087.

Patented Feb. 16, 1886.



WITNESSES

Chas. H. Dyer
Wm. M. Moore.

Charles F. Brush
INVENTOR

By
Leggett and Leggett
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES F. BRUSH, OF CLEVELAND, OHIO.

ARMATURE FOR DYNAMO-ELECTRIC MACHINES.

SPECIFICATION forming part of Letters Patent No. 336,087, dated February 16, 1886.

Application filed May 13, 1884. Serial No. 131,395. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BRUSH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and
5 useful Improvements in Armatures for Dynamo-Electric Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable
10 others skilled in the art to which it pertains to make and use the same.

Figure 1 is a side view of my improved armature-ring without the bobbins. Fig. 2 is a top view of the same. Fig. 3 shows the ring partially formed and before the bobbin spaces
15 have been cut out.

The present invention relates to armature-rings for dynamo-electric machines of the kind shown in Patent No. 285,457, granted to me
20 September 25, 1883.

According to the present invention a band-formed armature-ring is constructed by winding or building up a series of superposed layers of band-iron of the full width of the armature and then cutting away portions to form
25 the bobbin-spaces. I prefer to form the ring by winding the band-iron upon a suitable base-ring, and in order to insulate the layers one from another I may cover the band with suitable varnish or paint, or wind in with the
30 iron an interposed ribbon of paper or other suitable insulating-web. It is evident that the ring may also be formed by winding two or more bands together, or by building up the ring with separate concentric layers, or by
35 winding one or more long bands with interposed short pieces of the same width.

In the drawings, A is the base-ring, to which the hub is secured, and upon which the band-iron is wound or built up. One end of the band-iron B is secured by rivets or otherwise
40 to the base-ring, and the band is then wound tightly around the base-ring and upon itself in the manner shown in Fig. 3 until the desired thickness of ring is obtained, when the end of the band is secured, as at b, Fig. 1. Suitable
45 bolts or rivets, C, are then passed through the ring radially to secure the layers together, after which the bobbin-spaces are formed by cutting away at the places indicated at D in Figs. 1 and 2. This may be done by the ordinary
50 milling, planing, or slotting machines. The ring thus completed may be wound with wire in the ordinary manner, and will form an armature of exceptional solidity and efficiency.

I claim herein as my invention—

An armature composed of superposed layers of band-iron wound one upon another, the opposite faces of which are provided with radial grooves situated directly opposite one another and extending the entire width of the
60 ring, the side walls of the grooves being made integral with the layers of the band, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 23d
65 day of April, 1884.

CHARLES F. BRUSH.

Witnesses:

E. B. PHILLIPS,
ALBERT E. LYNCH.