

No. 706,938.

Patented Aug. 12, 1902.

E. E. HENDRICK.
BEARING.

(Application filed Apr. 17, 1901.)

(No Model.)

Fig. 1

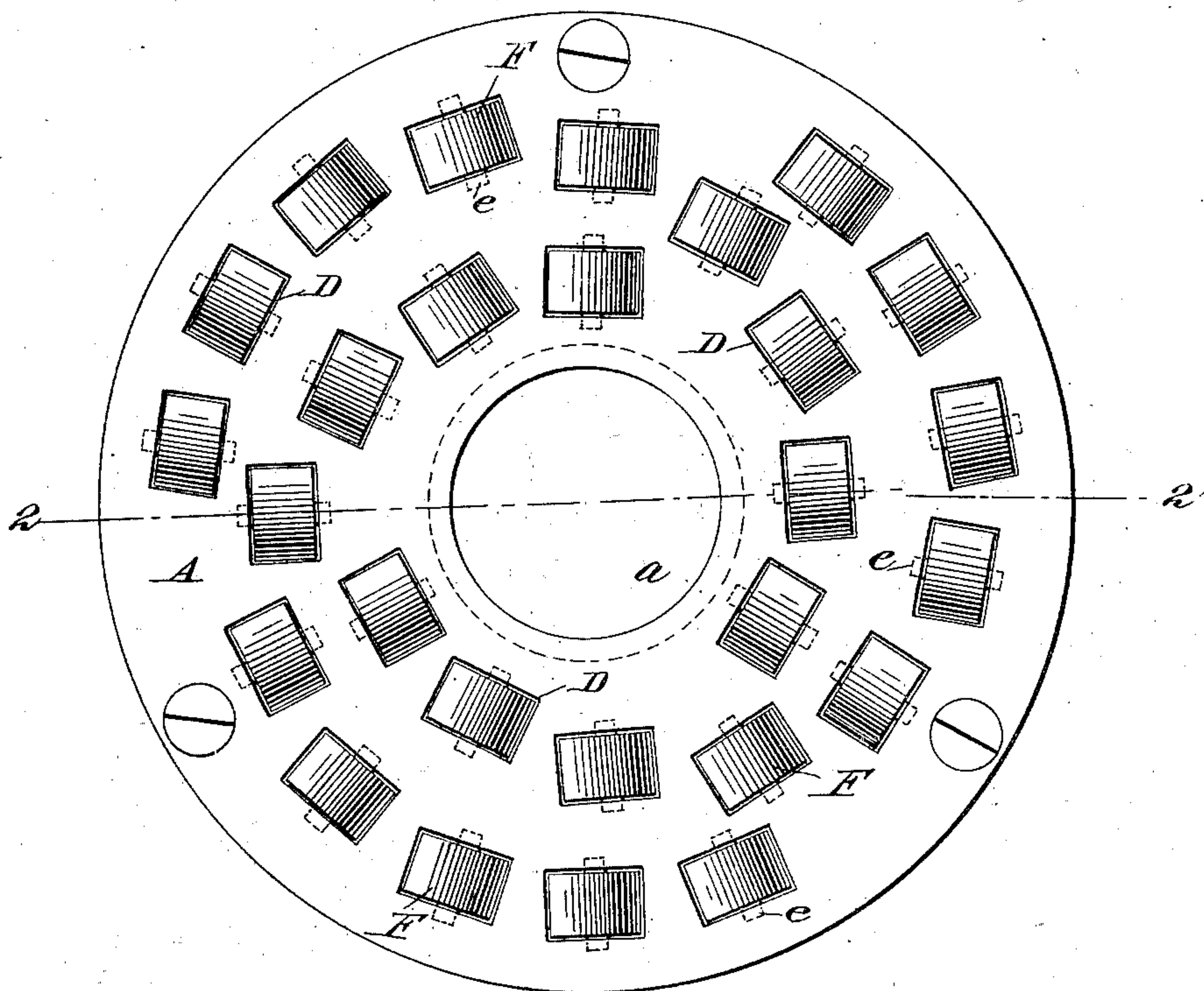
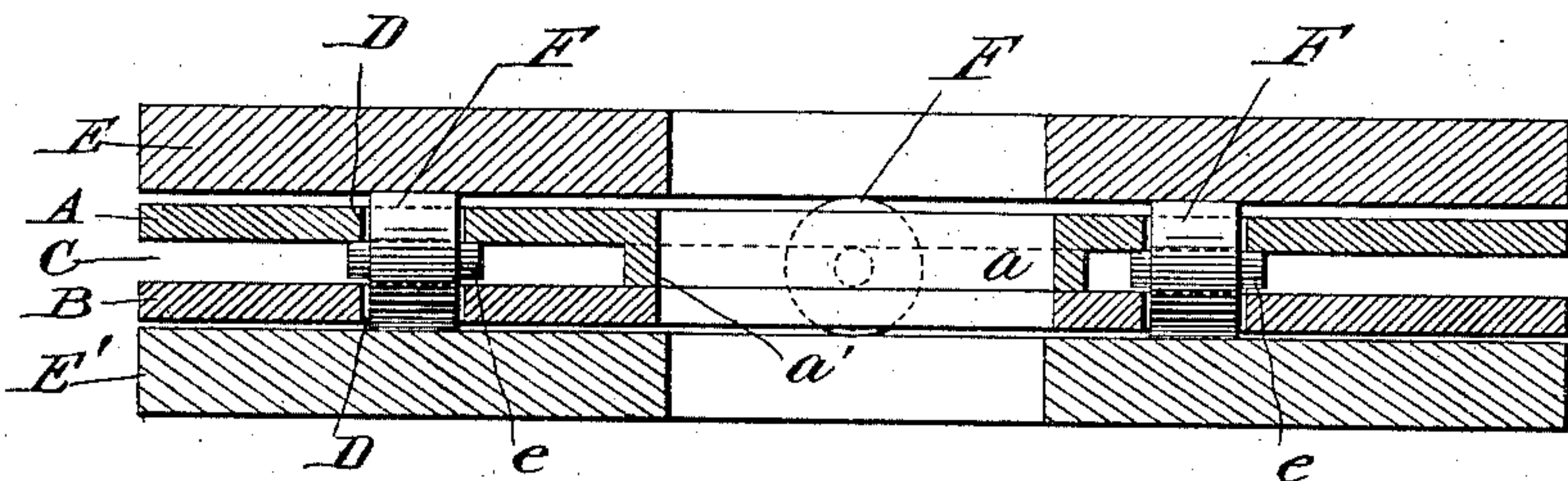


Fig. 2



Witnesses:

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Inventor

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Att'ys.

UNITED STATES PATENT OFFICE.

ELI E. HENDRICK, OF CARBONDALE, PENNSYLVANIA.

BEARING.

SPECIFICATION forming part of Letters Patent No. 706,938, dated August 12, 1902.

Application filed April 17, 1901. Serial No. 56,228. (No model.)

To all whom it may concern:

Be it known that I, ELI E. HENDRICK, a citizen of the United States, residing at Carbon-
dale, in the county of Lackawanna and State
5 of Pennsylvania, have invented a certain new
and useful Improvement in Bearings, of which
the following is a specification.

The object of this invention is to provide a
bearing, consisting of few and easily manu-
10 factured parts, which shall be cheap in con-
struction and durable in operation and which
shall attain maximum efficiency in use.

In carrying out the invention I employ a
cage consisting of two substantially parallel
15 disks which may, if desired, be centrally
perforated to provide for the passage of a
shaft. These disks are provided with mor-
tises, preferably arranged in spiral or tan-
gential series, in order to distribute the wear
20 of the rolls mounted therein over the entire
surface of the bearing-disks arranged on
either side of said cage. Within these mor-
tises are disposed rolls, the peripheries of
which project through said mortises and bear
25 upon the wearing-disks above and below the
cage. Each of the rolls is provided at its
center and on either side with a stud or
gudgeon, adapted to be located in the recess
between the parallel disks of the cage. The
30 degree of outward projection of said studs or
gudgeons is greater than the width of the
mortises through which the rolls extend, and
the width of the recess between the disks and
the diameter of said studs or gudgeons is so
35 proportioned as to preclude the jamming of
the rolls in the mortises.

The invention is illustrated in the accom-
panying drawings, in which—

Figure 1 is a plan view of the bearing, and
40 Fig. 2 is a section on the line 2 2 of Fig. 1.

Referring to said drawings, in which simi-
lar letters denote corresponding parts, A B
designate two parallel disks, forming the cage
for the rolls. In the present instance I have
45 shown these disks as provided with a cen-
tral perforation *a* for the reception of a shaft,
although for some uses this perforation may
be dispensed with. The disk A of the bear-
ing is provided, adjacent to its center or ad-
50 jacent to the central perforation, with a down-
wardly-projecting annular flange *a'*. As

illustrated more clearly in Fig. 2, the disks
A B are separated, there being a recess C be-
tween them.

D D designate mortises formed in each of 55
the disks A B and arranged at varying dis-
tances from the center of said disks. I have
here shown such mortises as arranged in spi-
ral lines, there being three series of such mor-
tises, in order to evenly distribute the wear 60
of the rolls in such mortises upon the disks
or plates E E', placed above and below the
cage. As clearly shown in Fig. 1, the major
axes of said mortises (and of the rolls located
therein, as hereinafter described) are ar- 65
ranged substantially at right angles to the
radii of the disks A B.

F F designate rolls mounted between the
cage-disks A B and the peripheries of which
project through the mortises D. Each of 70
these rolls is provided with studs or gudgeons
e. e., preferably of such size as to permit ver-
tical movement of the roll within its mortise
and of the gudgeons within the recess C.

In assembling the bearing it is only neces- 75
sary to place the rolls in the mortises of the
disk B of the cage, after which the disk A
may be placed in position, the mortises there-
in registering with the mortises in the disk
B. The disks or plates E E' above and below 80
the cage being then adjusted the bearing is
ready for use. If desired, the disks A B,
forming the cage, may be secured together—
as, for instance, by means of screws. Where
the bearing is to be used as a thrust-bearing, 85
both the cage and the wearing-disks may be
provided with the central perforation, as here-
inbefore indicated.

What I claim is—

1. In a bearing, the combination with two 90
parallel separated disks, having mortises
formed therein at varying distances from the
center thereof, of rolls mounted between said
disks, and the peripheries of which extend
through and beyond said mortises and pins 95
or studs upon said rolls, substantially as de-
scribed.

2. In a bearing, the combination with two
parallel disks separated to form a recess and
having mortises arranged at varying dis- 100
tances from the center thereof, of rolls pro-
vided with studs or gudgeons located in the

recess between said disks, said rolls having movement in said mortises and said recess, substantially as described.

3. In a bearing, the combination with two
5 parallel separated disks, having mortises formed therein, the major axes of said mortises being substantially at right angles to the radii of said disks, of rolls located in said mortises and having studs or gudgeons lo-

cated in the recess between said disks, substantially as described.

This specification signed and witnessed this 12th day of April, 1901.

ELI E. HENDRICK.

Witnesses:

J. R. VANDERFORD,
E. D. YARRINGTON.