

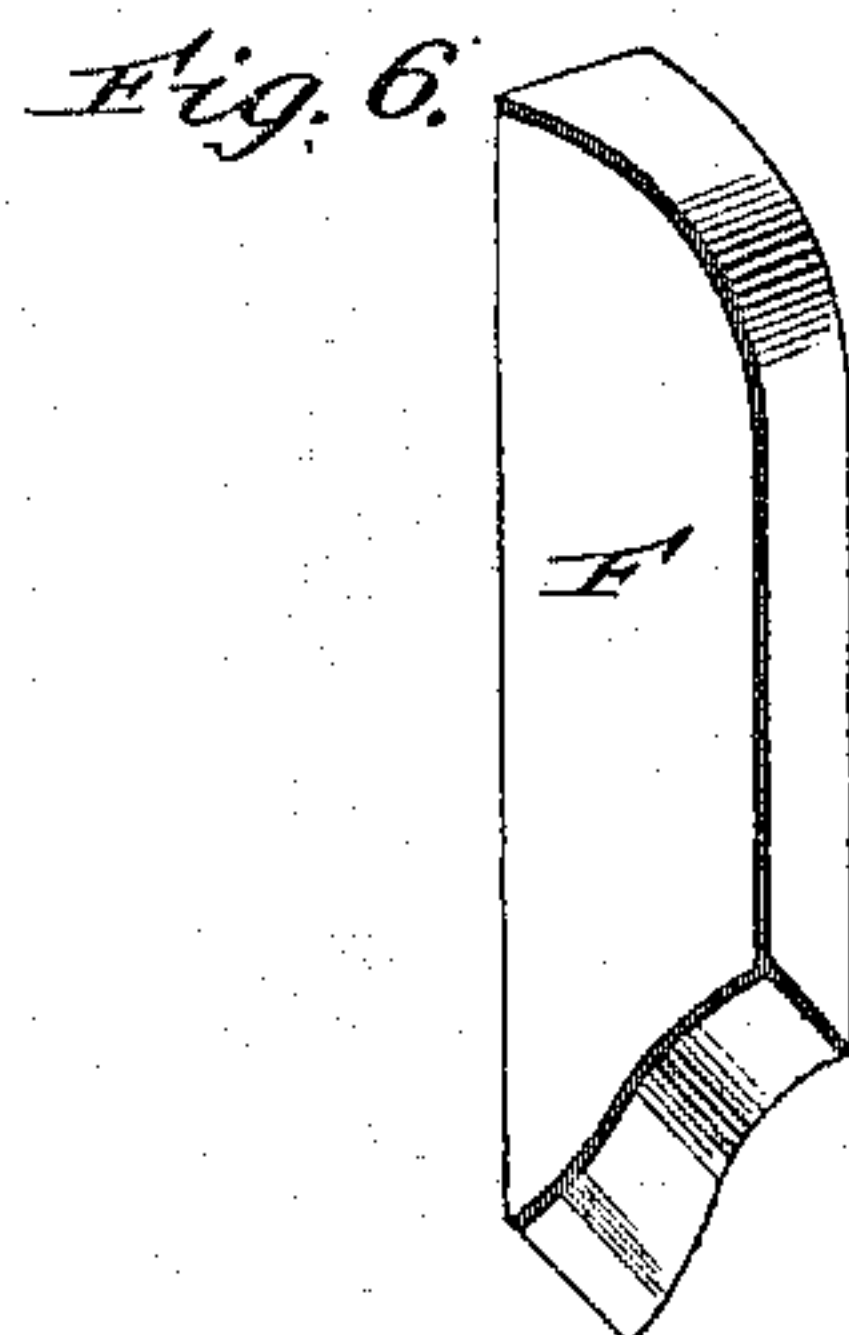
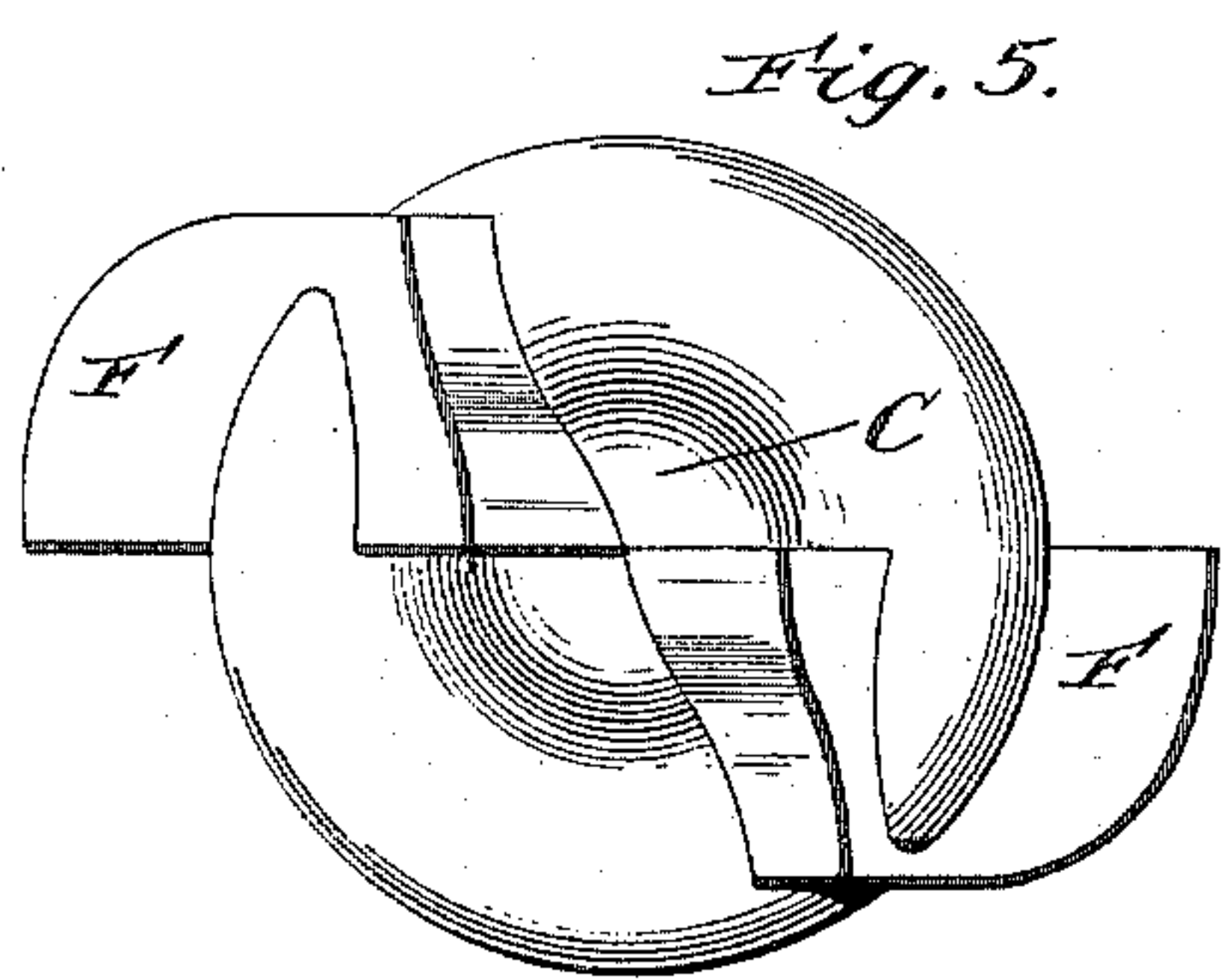
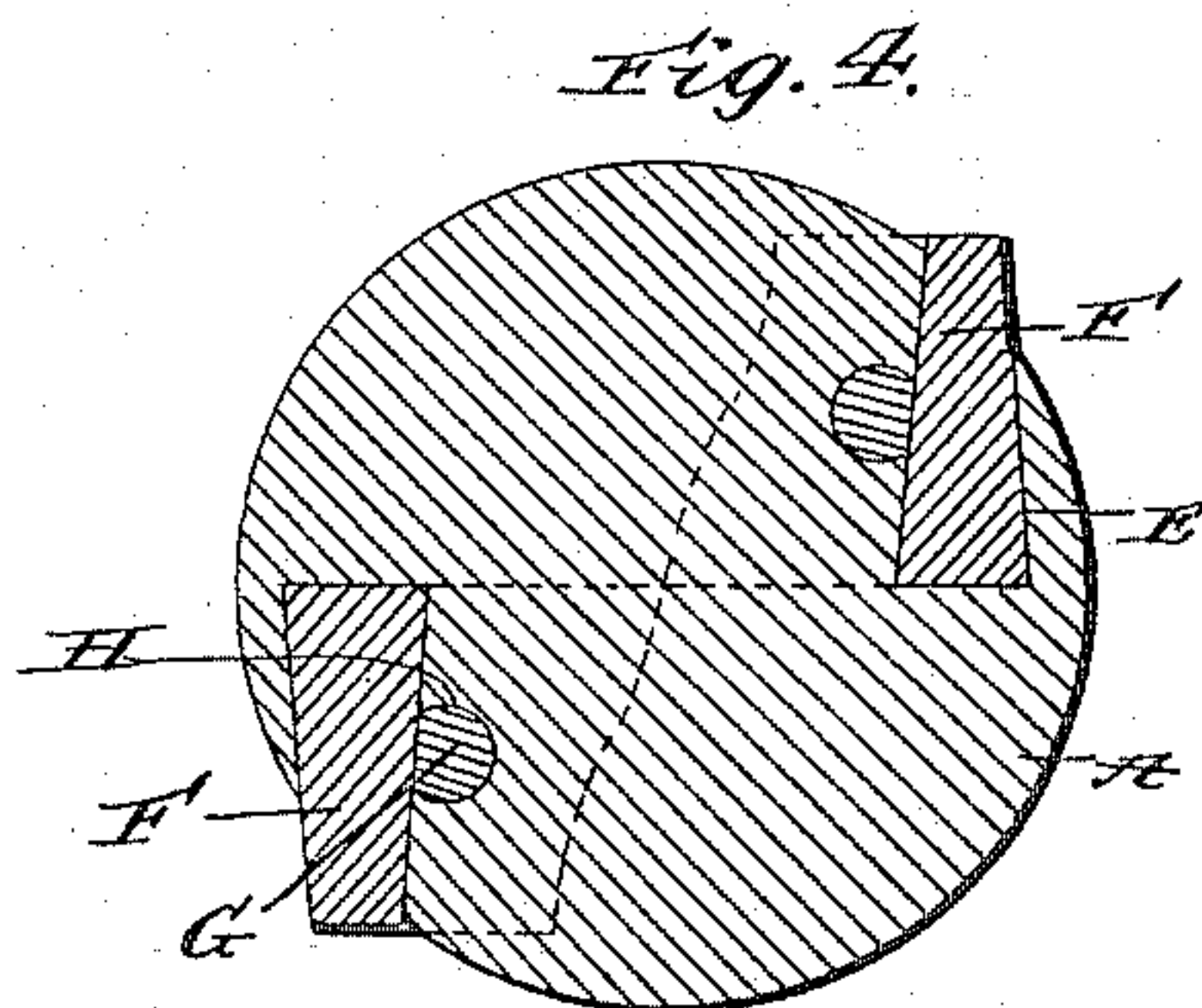
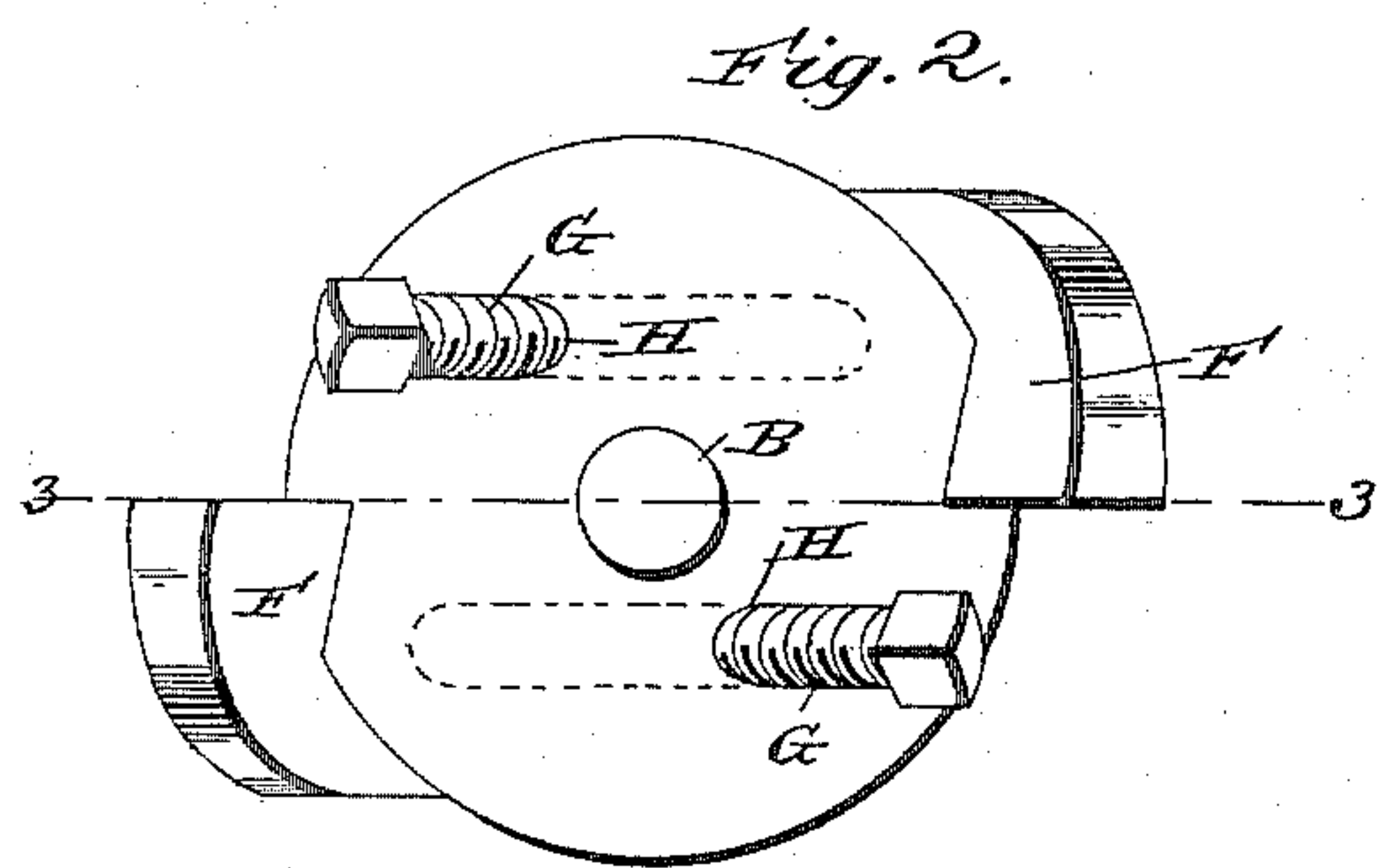
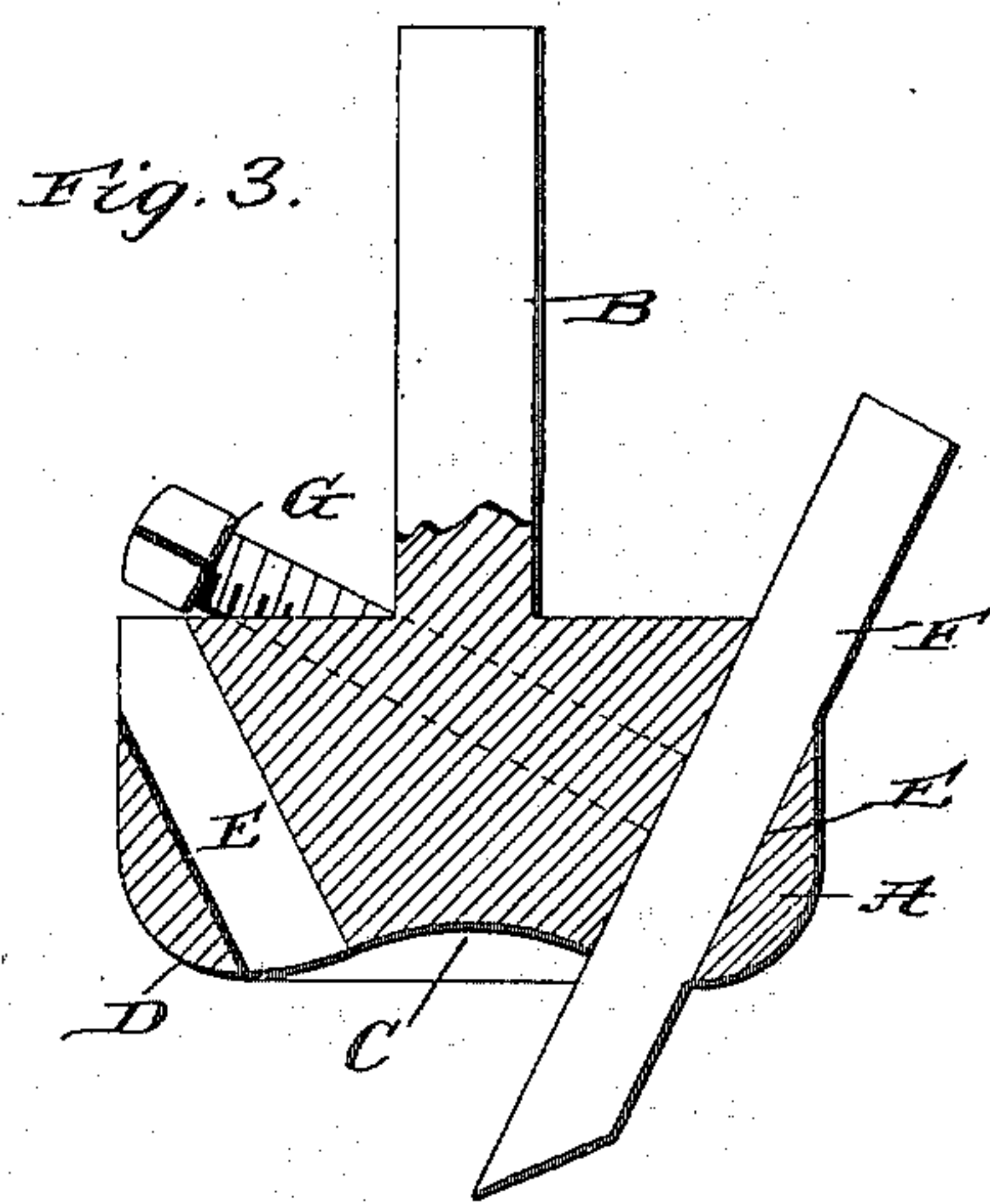
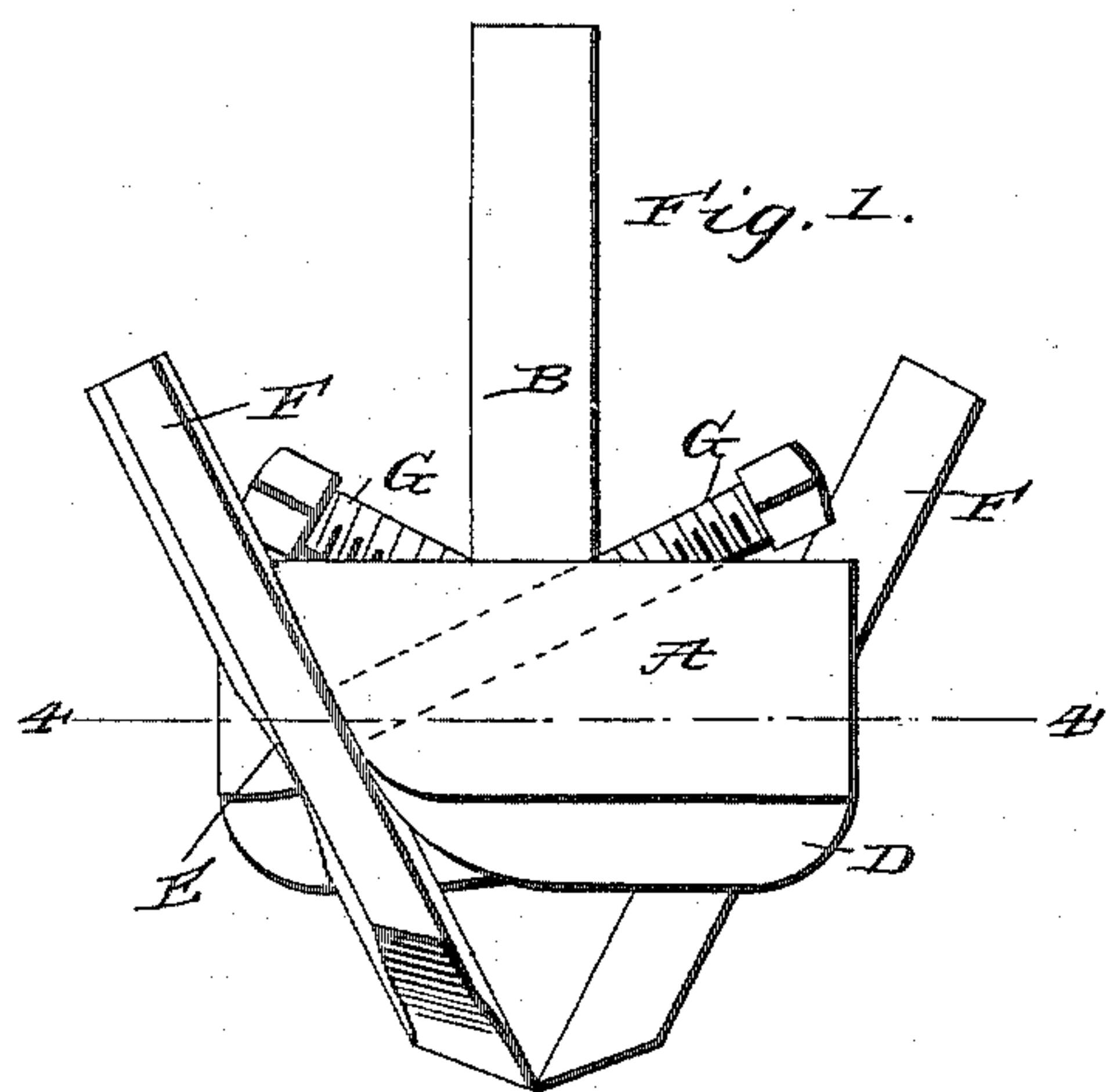
No. 640,321.

Patented Jan. 2, 1900.

G. L. PROBST.
ROTARY CUTTER.

(Application filed Sept. 1, 1899.)

(No Model.)



witnesses:

C. H. Raeder
J. H. Crony

Inventor
George L. Probst.
By *James J. Shady*
Attorney

UNITED STATES PATENT OFFICE.

GEORGE L. PROBST, OF POMEROY, OHIO.

ROTARY CUTTER.

SPECIFICATION forming part of Letters Patent No. 640,321, dated January 2, 1900.

Application filed September 1, 1899. Serial No. 729,198. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. PROBST, a citizen of the United States, residing at Pomero-
roy, in the county of Meigs and State of Ohio,
5 have invented new and useful Improvements
in Rotary Cutters, of which the following is
a specification.

My invention relates to rotary cutters such
as are employed in carving-machines; and it
10 consists in the peculiar and advantageous con-
struction hereinafter described, and particu-
larly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is
a side elevation of my improved cutter. Fig.
15 2 is a top plan view of the same. Fig. 3 is a
view, partly in section and partly in eleva-
tion, the sectional part being taken in the
plane indicated by the broken line 3 3 of Fig.
2. Fig. 4 is a transverse section taken in the
20 plane indicated by broken line 4 4 of Fig. 1.
Fig. 5 is an inverted plan view of the cutter.
Fig. 6 is a perspective view of one of the bits
removed from the cutter-head.

Similar letters of reference designate cor-
25 responding parts in all of the several views of
the drawings.

In the preferred embodiment of the inven-
tion the circular cutter-head A is formed in-
tegral with its shank B and has its face shaped
30 as shown—that is to say, provided with a cen-
tral concavity C and an annular portion D of
convex form in cross-section surrounding the
concavity. It is also provided in its periphery
or side, at opposite points, with grooves E,
35 which extend from its upper side to its lower
side or face, as shown. These grooves E ex-
tend inwardly, as well as downwardly, and are
of dovetail form in cross-section, as best shown
in Fig. 4, in order to secure the bits, presently
40 described, against lateral displacement.

F F are bits of dovetail form in cross-sec-
tion, which are inserted endwise in the grooves
E of the cutter-head, and G are binding-screws
for holding the bits in their operative posi-
45 tion, said screws being arranged in threaded
bores H, disposed at right angles to the bits
and grooves, as shown.

By virtue of the grooves E, extending from
the upper to the lower side of the cutter-head,
50 long bits F may be employed, which when
the screws G are loosened may be readily ad-
justed by hand, the operator having but to
grasp their upper portions and move them to
the extent desired.

The concavity or depression C in the cen- 55
ter of the face of the cutter-head also consti-
tutes one of the important features of my in-
vention, since it affords a free passage for
shavings through the center of the cutter and
by preventing clogging or choking of the bits 60
enables the same to cut freely at all times.
In this connection it will be noticed that the
meeting-points of the bits rest below the cen-
ter of the concavity C and that said bits may
65 be readily adjusted when worn, so as to make
them always occupy the same relative posi-
tion.

Having described my invention, what I
claim, and desire to secure by Letters Patent,
is— 70

1. In a rotary cutter, the combination of a
cutter-head having a central depression in its
face, and also having downwardly and in-
wardly extending grooves in its side, and bits
adjustably secured in the grooves of the head 75
and having their points arranged below the
depression in said head, substantially as speci-
fied.

2. In a rotary cutter, the combination of a
cutter-head having grooves of dovetail form 80
in cross-section in its periphery at opposite
points; said grooves extending downwardly
and inwardly from its upper to its lower side,
bits of dovetail form in cross-section arranged
in the grooves, and binding-screws arranged 85
in the head and bearing against the bits, sub-
stantially as specified.

3. In a rotary cutter, the combination of a
cutter-head having a central depression in its
face, and also having grooves of dovetail form 90
in cross-section in its periphery at opposite
points; said grooves extending downwardly
and inwardly from its upper to its lower side,
bits of dovetail form in cross-section arranged
in the grooves and having their meeting- 95
points arranged below the center of the de-
pression in the head, and binding-screws ar-
ranged in the head and bearing against the
bits, substantially as specified.

In testimony whereof I have hereunto set 100
my hand in presence of two subscribing wit-
nesses.

GEORGE L. PROBST.

Witnesses:

W. H. PROBST,
G. J. HETZEL.