

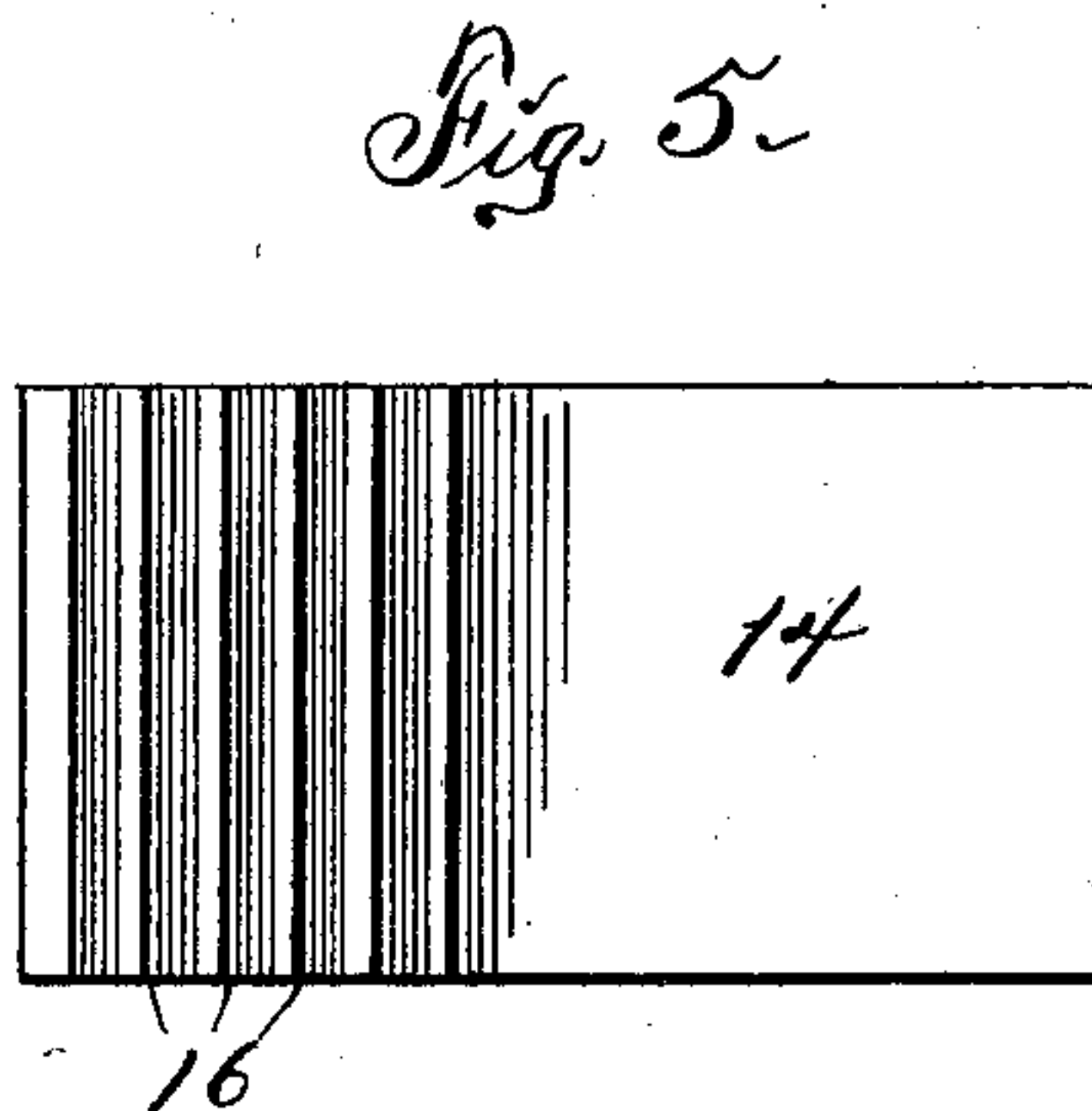
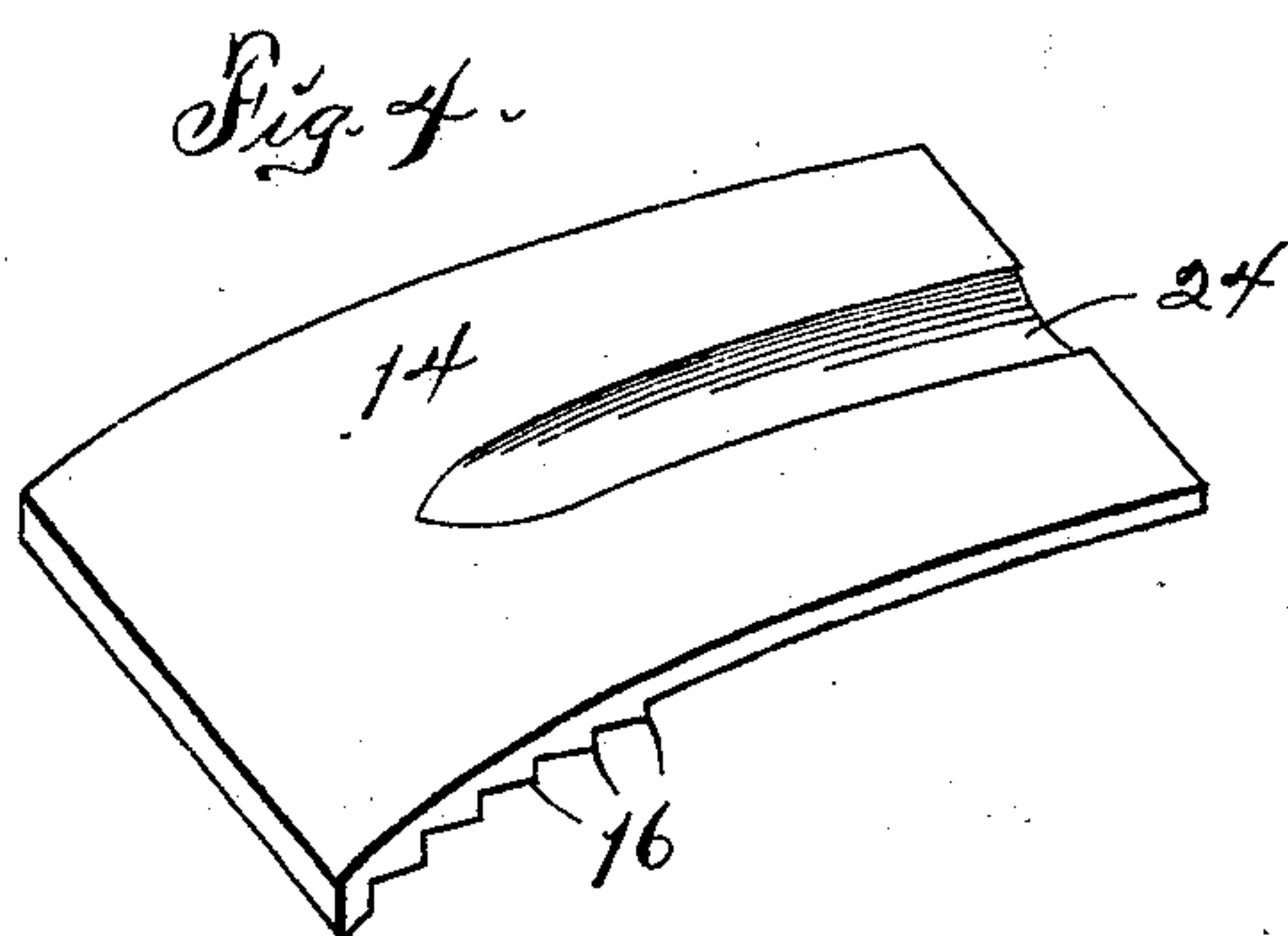
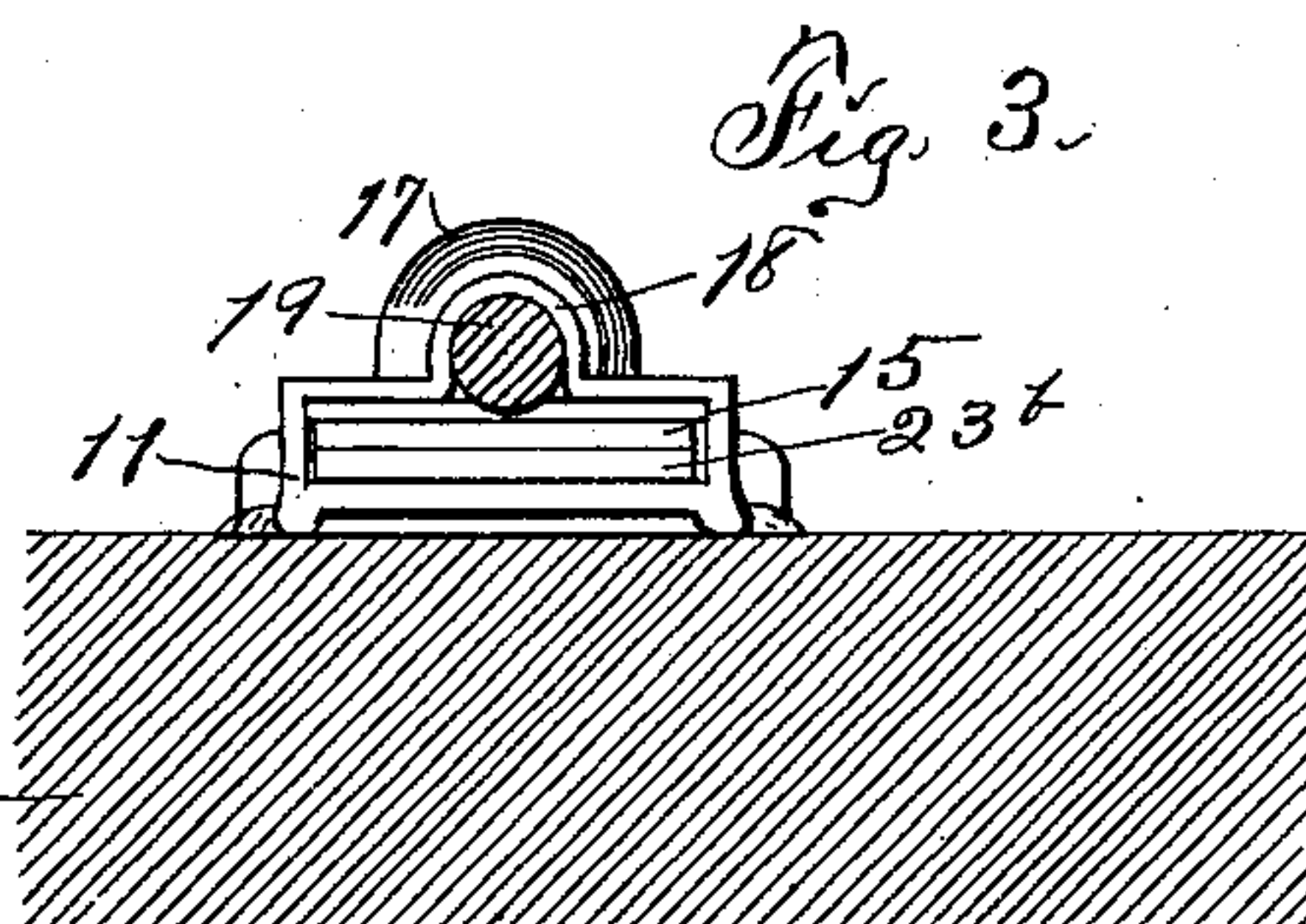
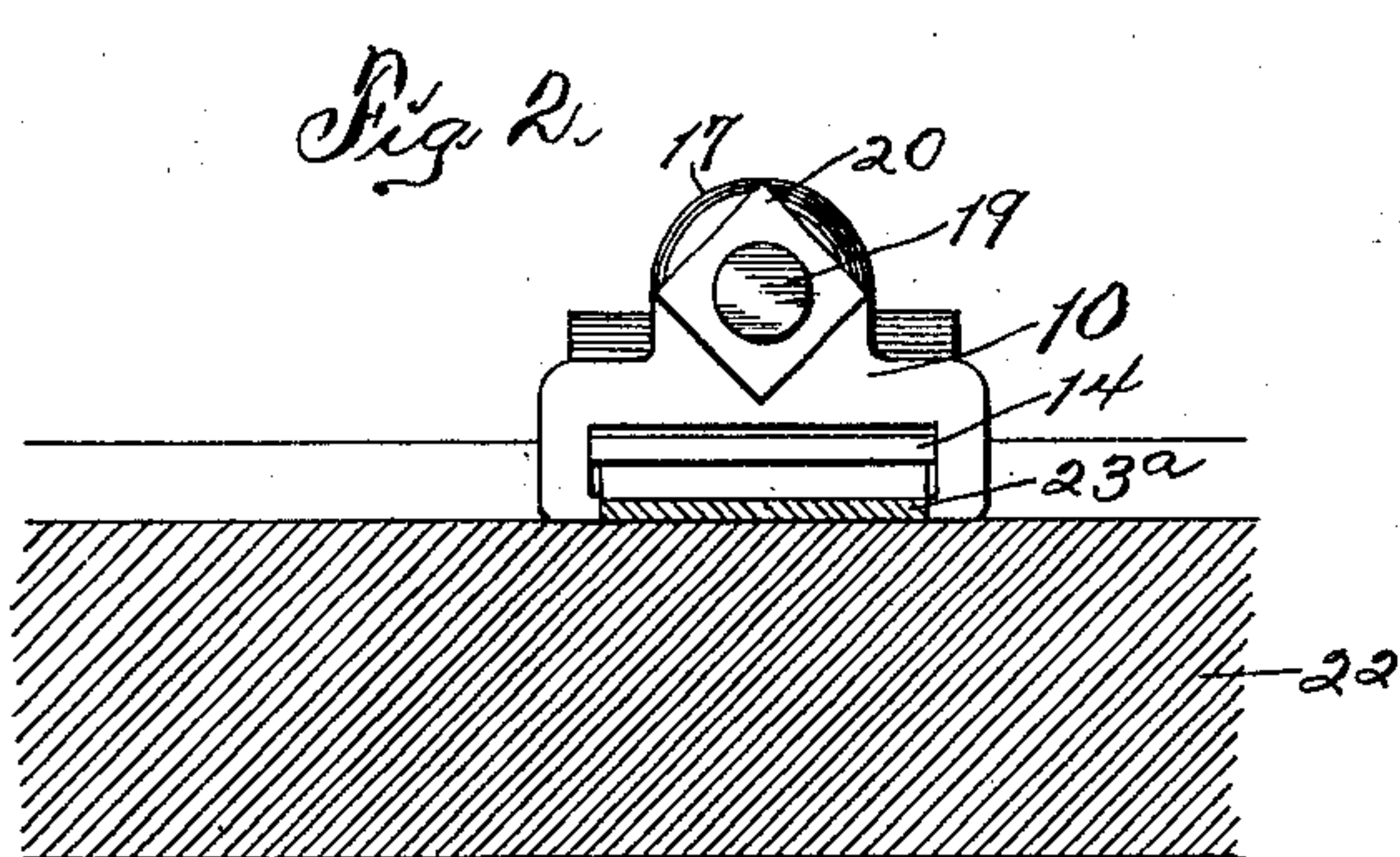
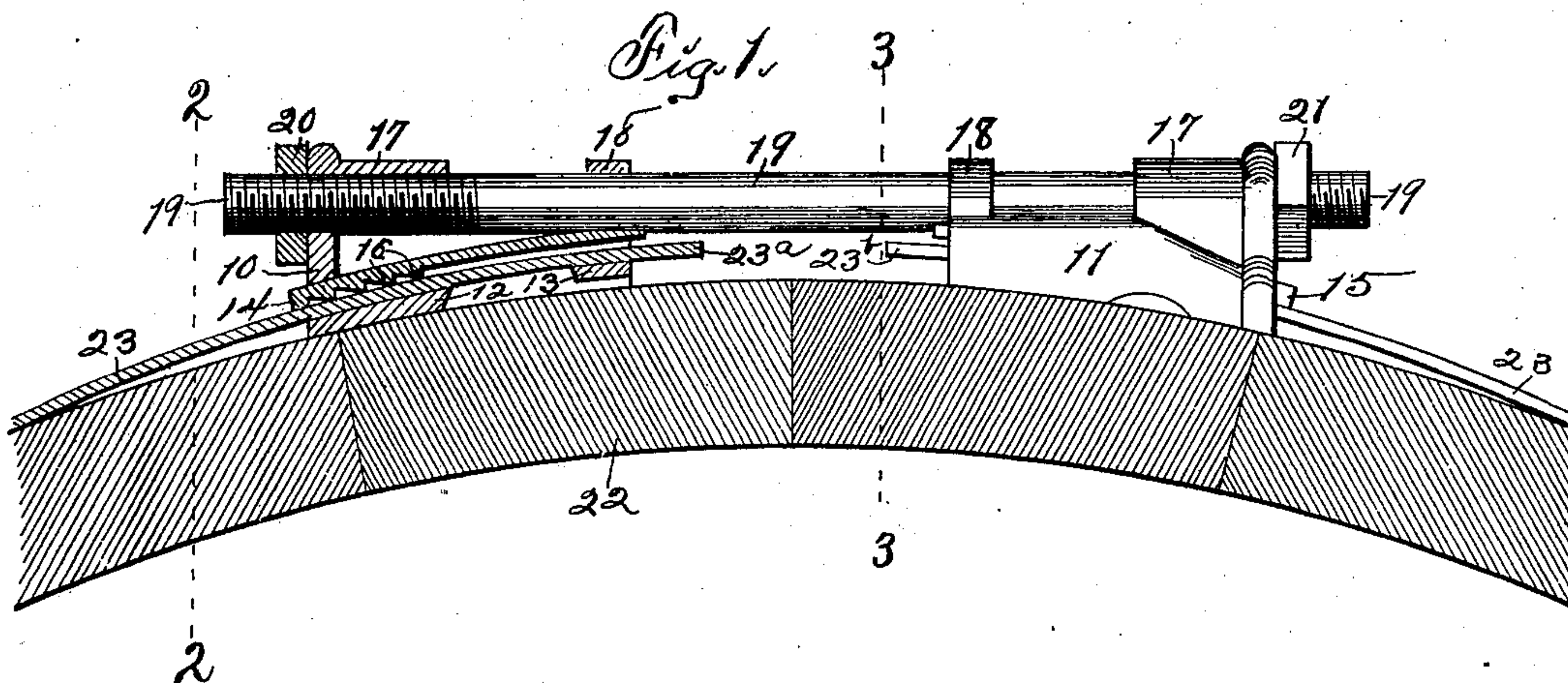
No. 734,512.

PATENTED JULY 28, 1903.

J. H. CHRISTOPHER.
BAND FASTENING.

APPLICATION FILED JUNE 18, 1902.

NO MODEL.



Attest:
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UNITED STATES PATENT OFFICE.

JOHN H. CHRISTOPHER, OF DES MOINES, IOWA, ASSIGNOR TO DEMPSTER MANUFACTURING COMPANY, OF DES MOINES, IOWA, A CORPORATION OF IOWA.

BAND-FASTENING.

SPECIFICATION forming part of Letters Patent No. 734,512, dated July 28, 1903.

Application filed June 18, 1902. Serial No. 112,262. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. CHRISTOPHER, a citizen of the United States of America, and a resident of Des Moines, Polk county, Iowa, have invented a new and useful Band-Fastening, of which the following is a specification.

The object of this invention is to provide improved means for connecting end portions of a hoop or band employed on wooden containing vessels and the like, whereby said end portions of the hoop or band may be approximated to each other or separated, as required, to tighten a band on a vessel or slacken the same for adjustment or removal.

My invention consists in the combination of heads recessed to receive end portions of a hoop or band, means for connecting said heads, and wedge-plates mounted for rectilinear movement in the heads and arranged to engage frictionally the end portions of the hoop or band.

My invention consists, further, in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is an elevation, partly in section, illustrating the application of two of the heads to end portions of a hoop or band mounted on a segment of a vessel. Fig. 2 is a cross-section on the indicated line 2 2 of Fig. 1. Fig. 3 is a cross-section on the indicated line 3 3 of Fig. 1. Fig. 4 is a perspective of a wedge-plate that may be employed in either of the heads. Fig. 5 is a bottom plan of the wedge-plate.

In the construction of the device as shown the numerals 10 11 designate heads identical in construction and arranged in opposition to each other. Each of the heads 10 11 is recessed or formed hollow, and each recess or cavity therein is approximately rectangular in cross-section and tapering from end to end. The bottom of each head is formed of two transverse plates 12 13, parallel with each other and spaced apart, and the bar or plate 13 is raised slightly from the lower edges of the side walls to permit the end portion of a hoop or band to be passed beneath it, if desired. Wedge-plates 14 15 are mounted lon-

gitudinally of and project at either end from the recesses or cavities of the heads 10 11 and are formed with ratchet-teeth or serrations 16 transversely of their lower faces. Yoke portions 17 18 form the top of each of the heads 10 11 and form seats for a straining-bolt 19, which is mounted through both heads and confined by nuts 20 21 on its ends outside of and bearing against the ends of the yokes 17. In the drawings the numeral 22 designates a tank or barrel, and a hoop or band 23, preferably formed of bar metal, is mounted around said vessel. The end portions 23^a 23^b of the hoop or band 23 are inserted between the lower faces of the wedge-plates 14 15 and the transverse bottom plates 12 13 of the heads. Then the wedge-plates 14 15 are driven apart slightly to cause the teeth or serrations thereon to "bite" the end portions of the hoop or band 23, and then the nuts 20 21 are screwed upon the straining-bolt and move the heads toward each other. In the movement of the heads 10 11 toward each other under the strain of the nuts 20 21 said heads bear on and press the wedge-plates toward the band ends and establish and maintain a substantial frictional engagement thereof and at the same time move the wedge-plates toward each other coincident with the approximation of the heads, thus bringing the end portions of the band closer together and tightening said band on the vessel. A reverse movement of the nuts 20 21 will slacken the engagement of the wedge-plates on the band ends and permit the removal of the band for repair or substitution.

It will be observed that the straining-bolt and nuts do not act directly on the wedge-plates, but draw on the heads and depend on the tapering formation of the recesses in the heads for the pressure of the wedge-plates toward the band ends. It also will be noticed that the outer faces of the wedge-plates are recessed at 24 to avoid frictional contact of the plates with the bolt and are curved from end to end to conform to the curvature of the band when in contact therewith.

I claim as my invention—

1. As an improved article of manufacture, a band-fastening comprising the heads recessed for the passage therethrough of band

ends, the recesses of the heads tapered from
end to end and of greater depth than the
thickness of the band, friction-plates mounted
in the tapering recesses between the upper
5 portions of the heads and the band ends there-
in and projecting beyond the heads at both
ends, said friction-plates formed with cavities
24 for the free passage of the straining-bolt,
and a straining-bolt connecting the heads and
10 independent of the friction-plates.

2. As an improved article of manufacture,
a band-fastening comprising the heads re-
cessed for the passage therethrough of band
ends, the recesses of the heads tapered from
15 end to end and of greater depth than the
thickness of the band ends, a straining-bolt
connecting the heads, friction-plates mounted

in the tapering recesses between the outer
portions of the heads and the band ends and
movable longitudinally independent of the 20
heads and straining-bolt, said friction-plates
formed with teeth for frictional engagement
with the band ends and curved from end to
end to conform to the curvature of the band
ends, whereby the strain of the bolt may be 25
transmitted through the heads and friction-
plates progressively and successively to the
band ends.

Signed by me at Des Moines, Iowa, this 2d
day of May, 1902.

JOHN H. CHRISTOPHER.

Witnesses:

A. R. DEMPSTER,
S. C. SWEET.