

(No Model.)

J. OLDENDORPH.
JOURNAL BEARING.

No. 597,429.

Patented Jan. 18, 1898.

Fig. 1.

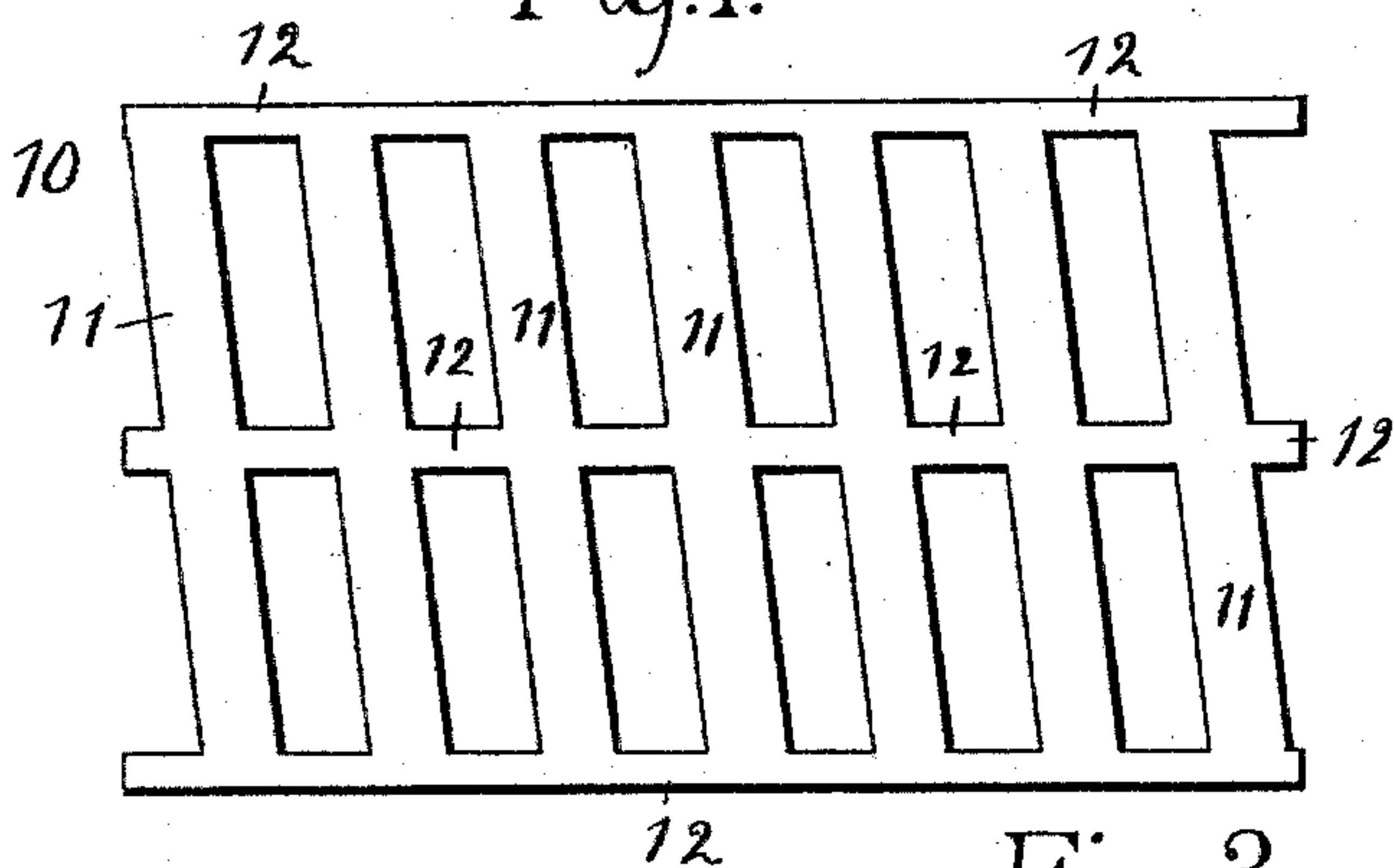


Fig. 2.

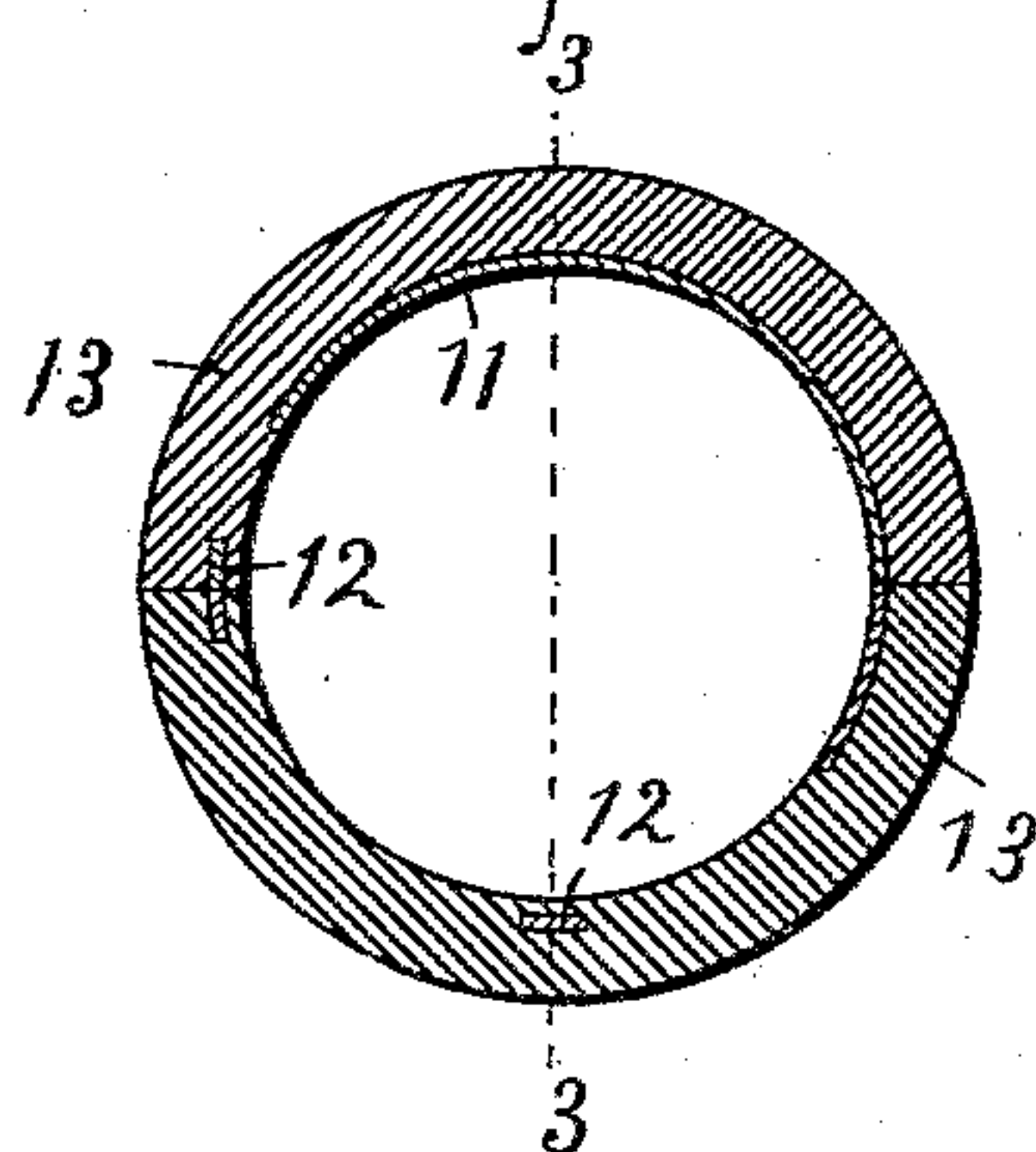


Fig. 3.

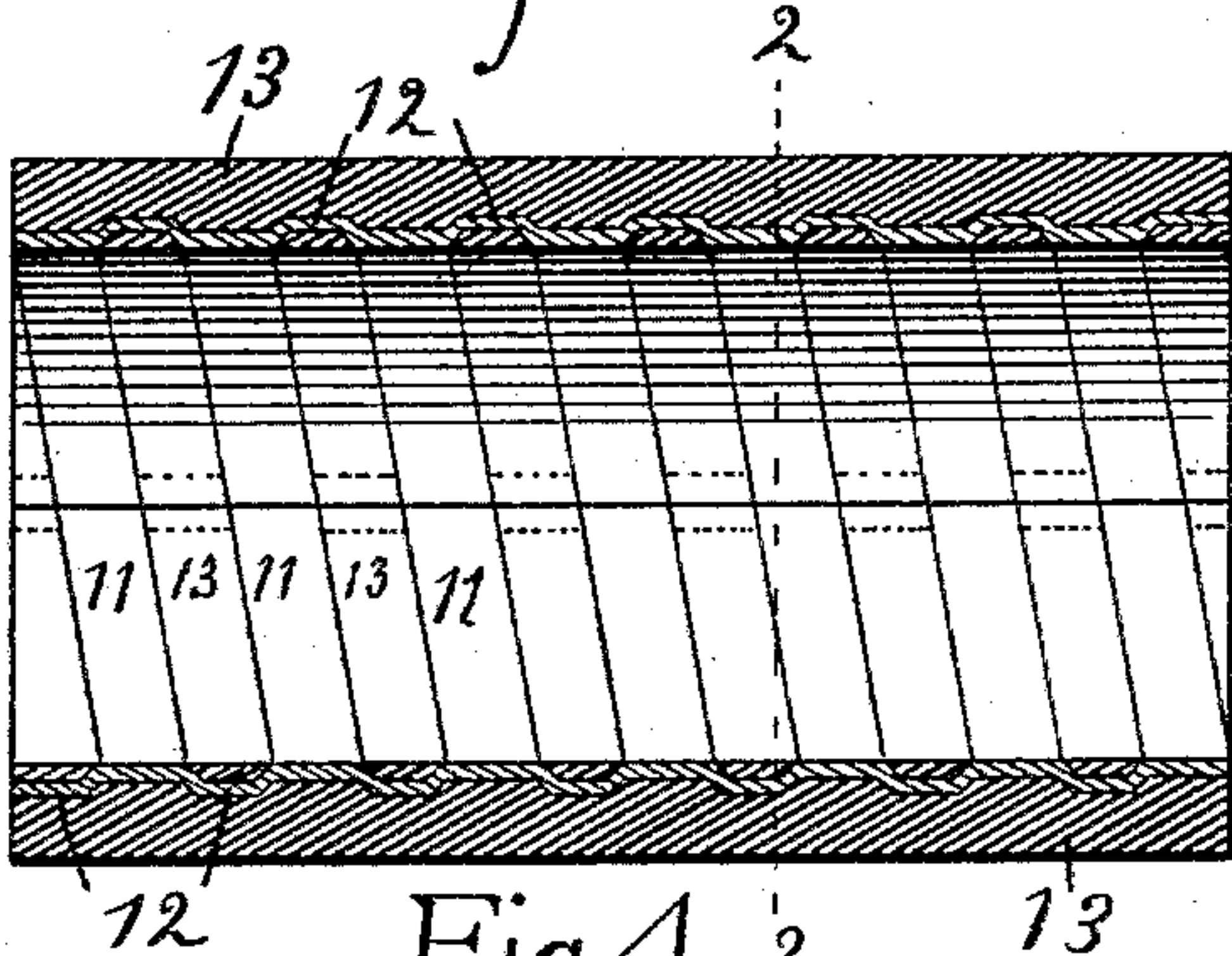
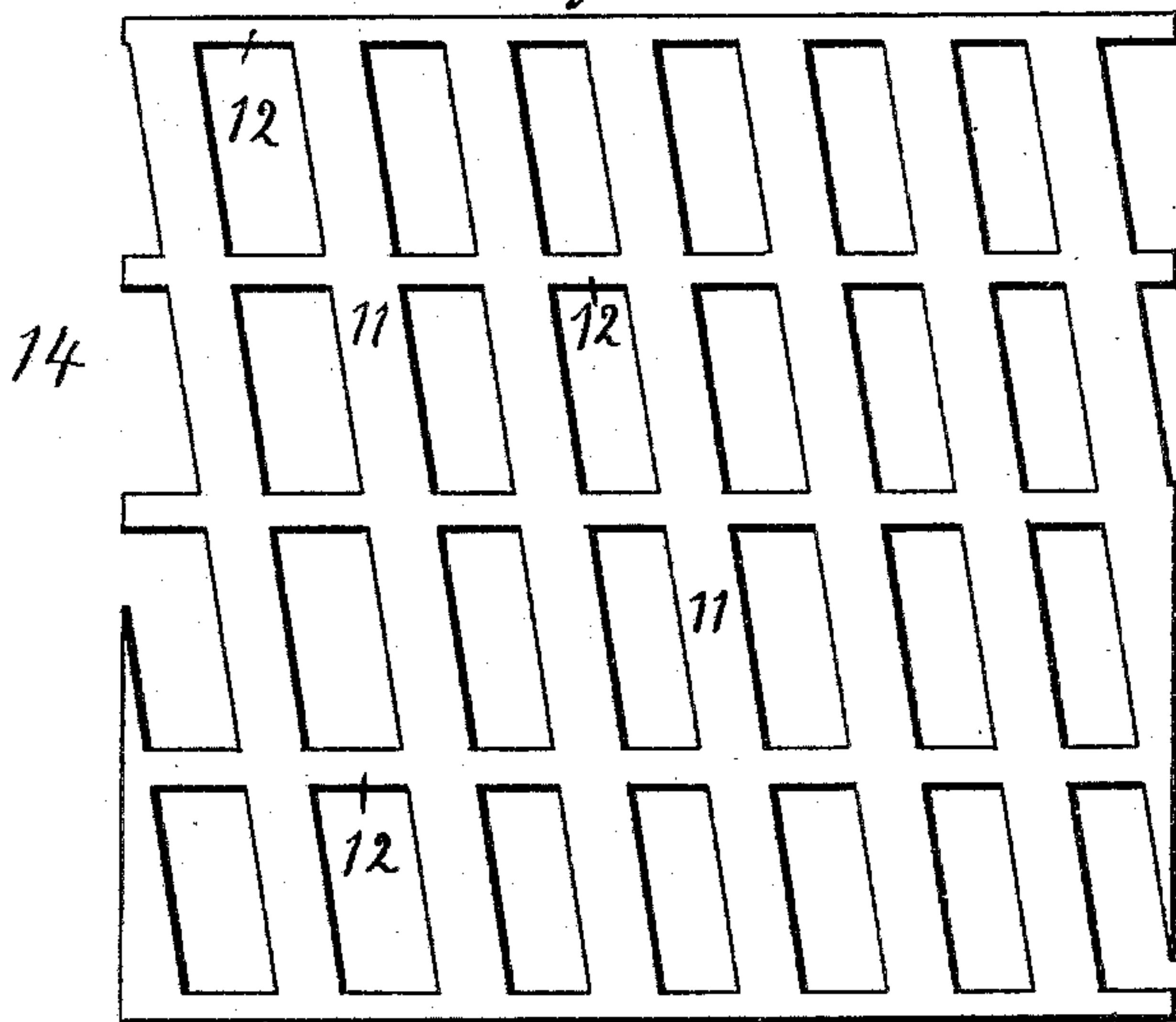


Fig. 4.



Witnesses

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JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 597,429, dated January 18, 1898.

Application filed May 24, 1897. Serial No. 637,824. (No model.)

To all whom it may concern:

Be it known that I, JOHN OLDENDORPH, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have
5 invented a certain new and useful Journal-Bearing, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to construct a journal-bearing composed of two dissimilar metals, so that the metals will be firmly held
15 together, and also to reduce the cost of such bearings having their wearing-surfaces arranged in spirally-disposed strips.

My invention consists in a journal-bearing having its wearing-surface composed of two
20 dissimilar metals, one of which is embedded in the other and arranged in strips or plates which are connected by strips which are separated from the wearing-surface by the other metal.

25 In the accompanying drawings, which illustrate a bearing made in accordance with my invention, Figure 1 is a view of a sheet of metal such as I use for bearings made in two parts. Fig. 2 is a section on the line 2 2 of
30 Fig. 3. Fig. 3 is a section on the line 3 3 of Fig. 2, and Fig. 4 is a view of a sheet of metal suitable for making a bearing in one piece.

Like marks of reference refer to similar parts in the several views of the drawings.

35 10 is a sheet of copper which is stamped out so as to leave strips 11 inclined to give the desired pitch to the spiral formed on the interior surface of the bearing. Connecting the strips 11 are cross-strips 12. After the sheet
40 10 has been stamped out, as described, the strips 12 are bent out of the plane of the plate, as shown in Fig. 3. This decreases the distance between the strips 11, which should be taken into account in stamping out the sheet.

45 The sheet is then bent into a semicylindrical form and placed in a suitable mold, and Babbitt metal 13 is cast around it. The strips 12 are completely embedded in the Babbitt metal, and only the spirally-disposed strips 11 appear
50 at the wearing-surface. Two parts thus formed when placed together form the complete bearing. The bending of the strips 12

out of the plane of the sheet 10 and the bending of the sheet may be performed by one operator by suitable dies.

55 The sheet 14 (shown in Fig. 4) is twice as wide as the sheet 10, and after the strips 12 have been bent out of the plane of the sheet it is bent into a cylindrical instead of a semicylindrical form and the Babbitt metal cast
60 around it to form a complete bearing in one piece.

The advantages of my bearing are that the copper is firmly held in place and that the copper can much more readily be stamped
65 out than rolled into spiral form.

Another advantage is that when two-part bearings are desired the parts can be made separately instead of in one part and afterward cutting the bearing in half, as is the case
70 when a spirally-wound strip is used.

I do not wish to be understood as limiting myself to the exact form of bearing shown and described or the metal mentioned, as
75 many changes may be made in the form of the bearing and other metals substituted without departing from the spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters
80 Patent of the United States, is—

1. A journal-bearing consisting of strips of metal embedded in a dissimilar metal but forming part of the wearing-surface of the bearing, and suitable connections for said
85 strips of metal, said connections being completely embedded in said dissimilar metal and separated thereby from the wearing-surface.

2. A journal-bearing consisting of a sheet or sheets of metal stamped out to form wear-
90 ing-strips and connecting-strips for said wearing-strips, and a dissimilar metal cast around said sheet or sheets of metal and completely embedding said connecting-strips but exposing the surface of said wearing-strips.

3. A journal-bearing consisting of strips of copper embedded in Babbitt metal, but forming part of the wearing-surface of the bearing, and suitable connections for said strips,
95 said connections being completely embedded in the Babbitt metal and separated thereby
100 from the wearing-surface.

4. A journal-bearing composed of spirally-disposed strips of copper embedded in Bab-

bitt metal and forming part of the wearing-surface, and suitable connections for said strips, said connections being completely embedded in the Babbitt metal and separated
5 thereby from the wearing-surface.

5. A journal-bearing consisting of strips of copper embedded in Babbitt metal and forming part of the wearing-surface, and suitable connections for said strips, said connections
10 being formed integral with said strips and

separated from the wearing-surface by the Babbitt metal.

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

JOHN OLDENDORPH. [L. S.]

Witnesses:

W. A. ALEXANDER,

H. G. MORSE.