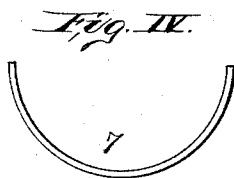
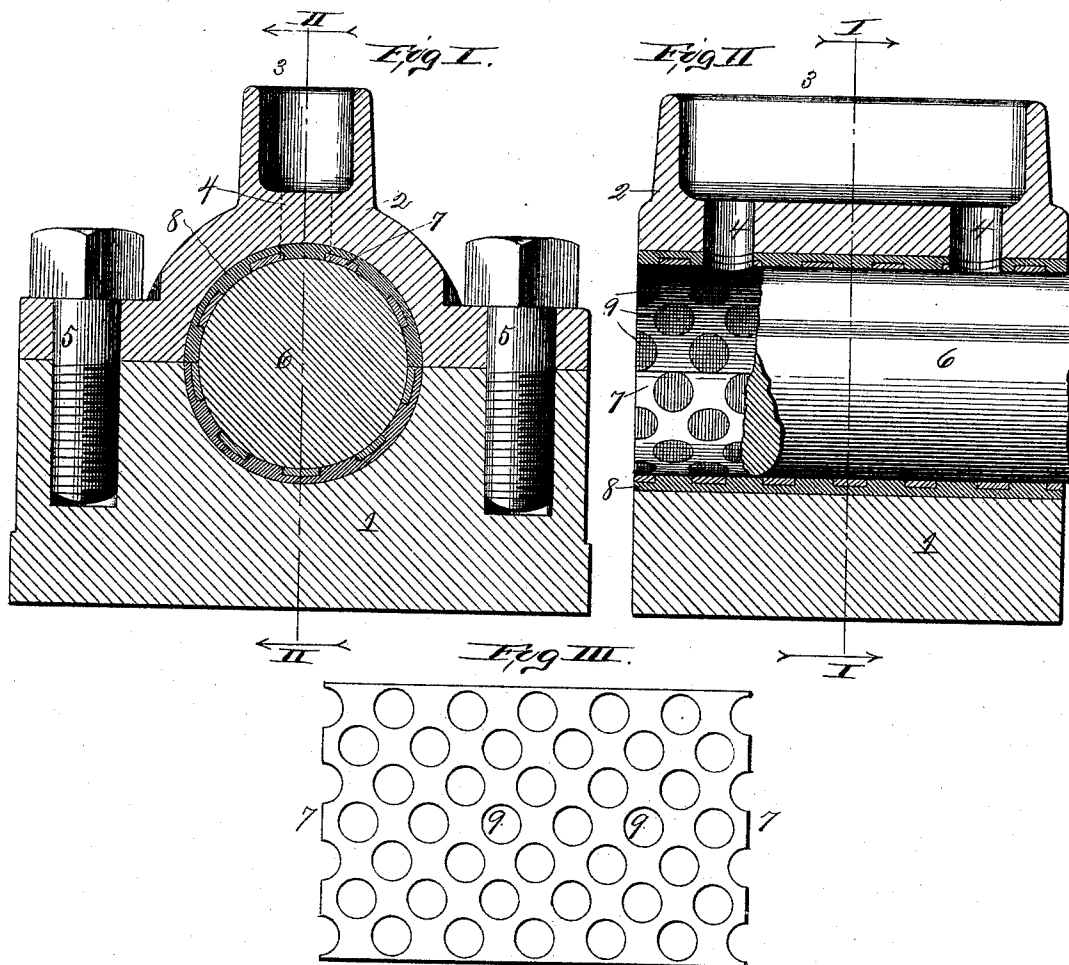


(No Model.)

F. J. RANDALL.
LINING FOR BEARING BOXES.

No. 497,210.

Patented May 9, 1893.



Attest:
W. H. A.
Albert W. Eberole.

Inventor:
Frank J. Randall
By Knight Bros.

Attys

UNITED STATES PATENT OFFICE.

FRANK J. RANDALL, OF ST. LOUIS, MISSOURI.

LINING FOR BEARING-BOXES.

SPECIFICATION forming part of Letters Patent No. 497,210, dated May 9, 1893.

Application filed November 30, 1892. Serial No. 453,582. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. RANDALL, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Linings for Bearing-Boxes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 The object of my improvement is to produce a combination lining for journal boxes, which will be superior in wearing surface to the common one part lining at less cost, and besides will save greatly in labor in preparing; 15 and my invention consists in features of novelty hereinafter fully described and pointed out in the claim.

Figure I is a horizontal, transverse section, taken on line I—I; Fig. II, illustrative of my 20 invention. Fig. II is a vertical, longitudinal section, taken on line II—II, Fig. I, the shaft or journal being partly broken away to more clearly exhibit the journal bearing behind it. Fig. III is a top view of the perforated plate 25 that forms a part of the box lining. Fig. IV is an edge view of the perforated plate, showing it curved to the contour of one half the diameter of the shaft.

Referring to the drawings:—1 represents 30 the base of the box, and 2 the cap with an oil cup 3 in its upper part from which extends downward discharge openings 4.

5 are screw bolts that secure the cap to the base of the box, and 6 is a shaft or journal 35 having bearing on the lining.

7 represents a perforated, metal plate, and

8 Babbitt metal that fills the perforations 9 in the perforated plate, and the intervening space between the box proper and the perforated plate.

To properly prepare the lining, I take two strips of perforated copper or other suitable material, and insert them into the box so they completely surround the shaft or journal; 45 these strips being pliable are readily formed into half circles to fit the periphery of the shaft and after thus being fitted, the box cap is placed in position, and tightened to its place by the screw bolts 5, and Babbitt metal is poured from a suitable point into the box, filling the space between the perforated copper 50 lining and the box and the perforations in the copper strips, thus producing a smooth bearing composed of two good wearing materials evenly distributed and at a minimum cost 55 of production. In wide boxes, two or more strips of the perforated material may be formed to the shaft, and then placed side by side in the sections of the box; in narrow boxes only one strip being required. 60

A single plate might be used to completely surround the shaft, but I prefer to use two or more.

I claim as my invention—

A lining for journal boxes consisting of a 65 perforated plate and a metal filling in which the plate is embedded out of contact with the journal box; substantially as described.

FRANK J. RANDALL.

In presence of—

ALBERT M. EBERSOLE,
ED. S. KNIGHT.