H. F. BOODY & E. P. MERRILL.

Improvement in Lining for Journal-Bearings.

No. 131,653. Patented Sep. 24, 1872.

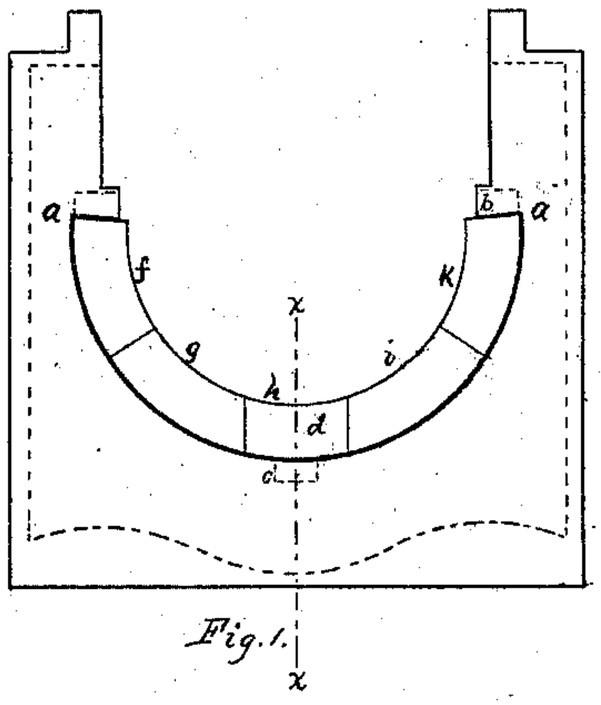

Fig. 1.

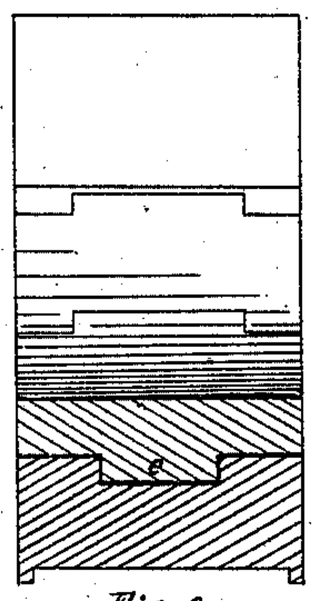

Fig. 2.

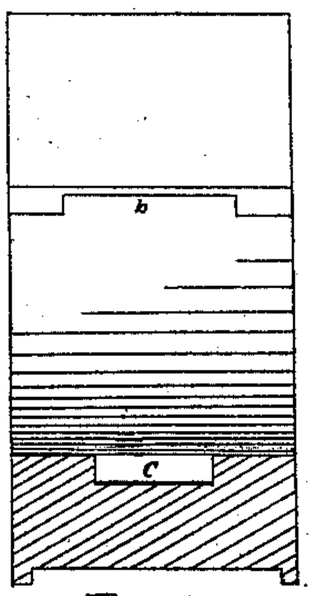

Fig. 3.

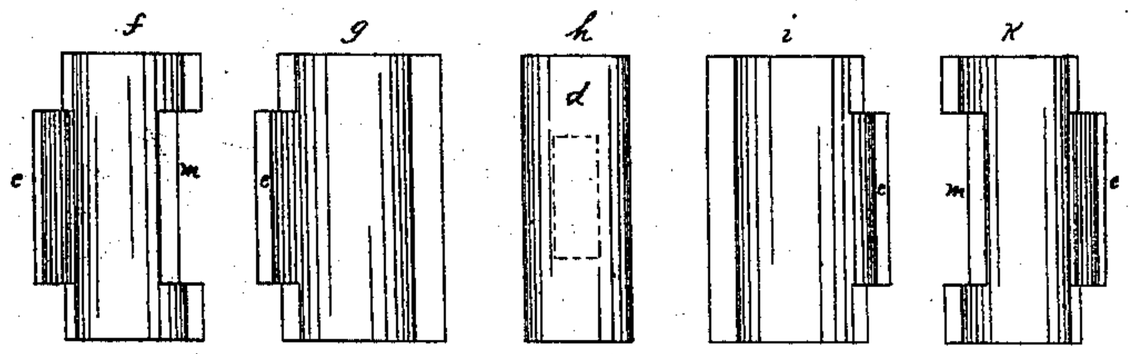

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY F. BOODY AND EDMUND P. MERRILL, OF DEERING, MAINE.

IMPROVEMENT IN LININGS FOR JOURNAL-BEARINGS.

Specification forming part of Letters Patent No. **131,653**, dated September 24, 1872.

To all whom it may concern:

Be it known that we, HENRY F. BOODY and EDMUND P. MERRILL, both of Deering, in the county of Cumberland and State of Maine, have invented a new and useful Improved Lining for Locomotive and other Bearings; and we hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which is made a part of this specification, in which—

Figure 1 is an end view of a bearing having our improved lining; Fig. 2 is a front or face view of a portion of a bearing having our lining, in section, on the line *x x;* Fig. 3 same, with lining removed; and Fig. 4 is a view, in detail, of the sections of which our improved lining consists.

Same letters show like parts.

Our invention relates to a new and improved manner of making the linings of locomotive-axle and other bearings in sections, so that each section aids in firmly binding all other sections composing the bearing, and thus preventing the lining from slipping or being pushed from its place, in a very simple and cheap manner. These sections are to be made of any of the anti-friction metals or compositions usually employed in such linings; and we claim no improvement in the composition of the material, our invention being confined to the form in which the sections composing the lining are made, and the means employed to confine them in their places. In Fig. 1, at *f g h i k*, are shown the ends of these sections, the sections themselves running parallel to the line of motion of the inclosed shaft. Five of these sections or parts are here shown, but a greater or less number may be used, according to the size of the bearing and other controlling circumstances. On each side of the box which incloses the lining the recesses *a a* are cut of a depth very nearly equal to the thickness of the lining to be used, the upper line of this recess inclining slightly downward toward the center, so that the sections of lining which fit into them have a wedge-shaped edge, and the overhanging line of the recess holds the sections in their places. Each of these upper sections, *f* and *k*, have upon their upper edges the projections *e e* fitting accurately into recesses of the same form, *b*, in the box, while upon the lower edges of these sections *f* and *k* are made the recesses *m m*, which are in turn fitted closely by the projections *e e* upon the sections *g* and *i*. In case more than five sections are used, any additional sections must be of the same form as the sections *f* and *k*—that is, having a projection upon one side and a recess upon the other. As in this case the sections *g* and *i* are next to the last and bottom section. They have no recess upon their lower edge, the lower section *h* being made slightly wedge-shaped, as to its width, so that when pressed in between the preceding sections it presses them closely and firmly together. This bottom section *h* has upon its lower or bearing side a projection at *d* which fits into a cavity, *c*, of the same shape in the bottom of the box. It will be seen that when this last section *h* is inserted it cannot be pressed down to a level with the preceding ones until the projection *d* comes directly over the recess *c*, when, as it is pressed downward, the section *h* forms a binding key to all the others, and is itself held in place by the projection *d* and recess *c*, as herein described. Besides the advantages of being very secure and readily removed, these sections may be made of metal of varying degrees of hardness, so that, by having those sections nearest the bottom of the bearing softer than those above, the natural wear of the bearing will cause it to become tighter as it wears down. As these sections become worn and too thin for the space which they originally occupied, a piece of iron or other metal, cut in proper form and thickness, may be placed under them to bring them to their original position, the section *h* being cut narrower to permit of this being done.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The sections of lining, as herein described; with the projections *e* and recesses *m*, all in the manner and for the purposes as herein set forth.

2. The box as herein described, having the recesses *b b* and projections *a a*, all in the manner and for the purposes as herein set forth.

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EDMUND P. MERRILL.

Witnesses:
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