## F. J. FINNING. BRASS FOR JOURNAL BOXES. APPLICATION FILED DEC. 16, 1904.

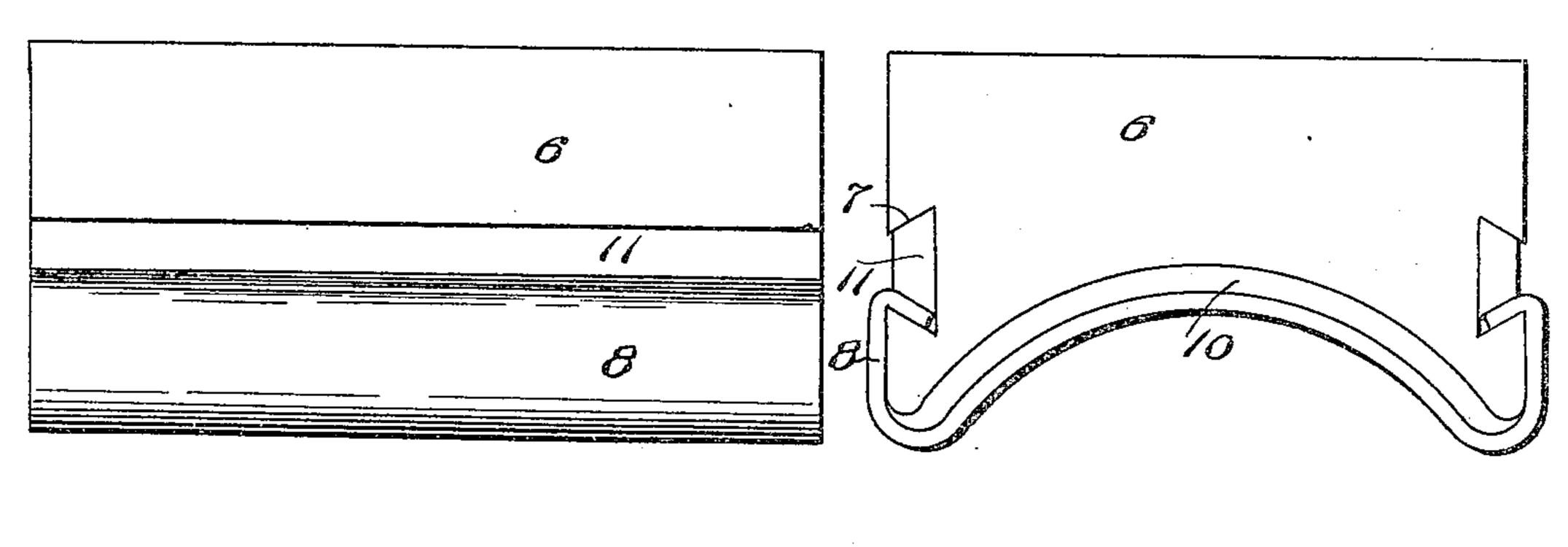


Fig. 1.

Fig. Z.

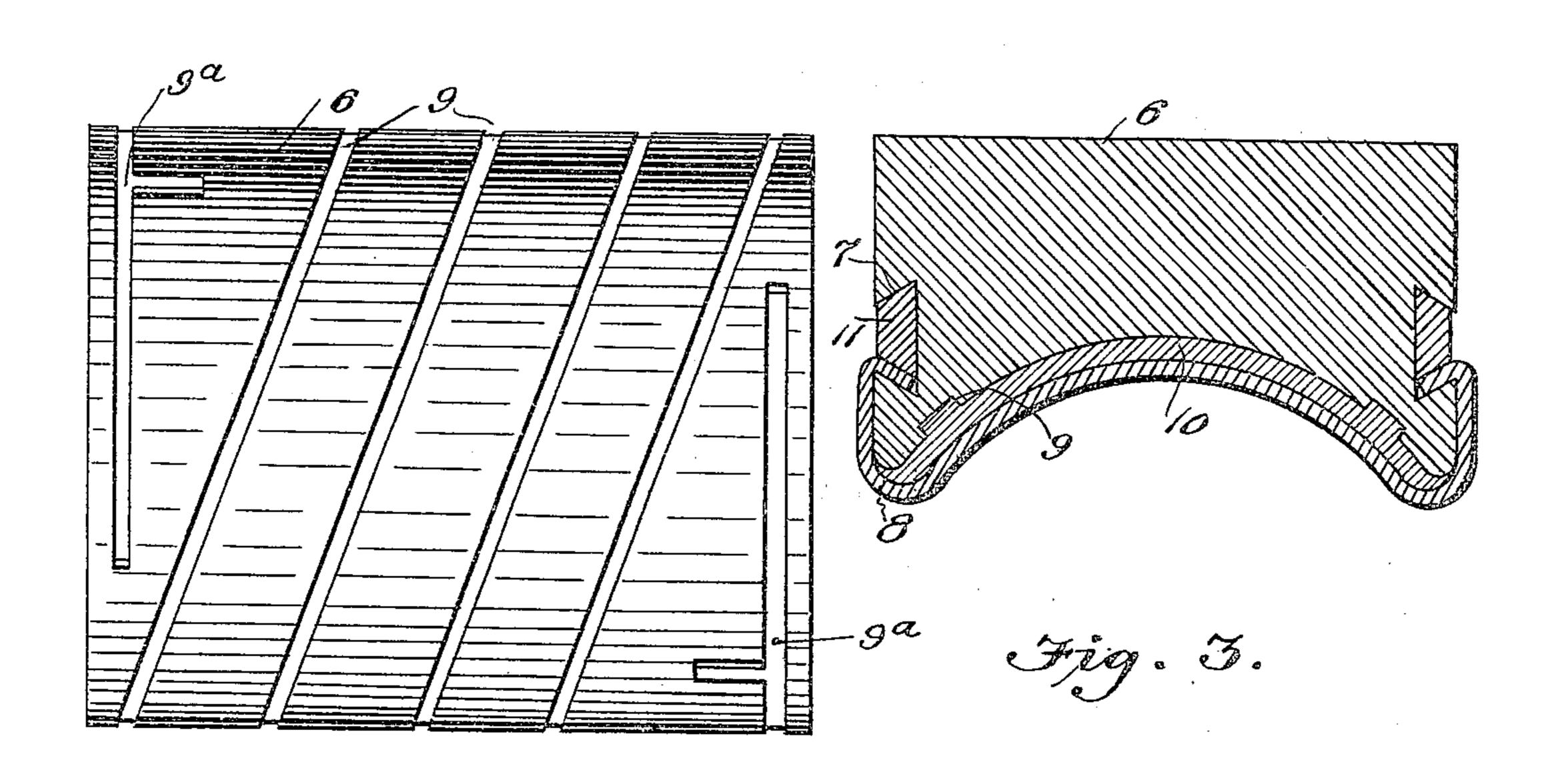


Fig. 4.

Witnesses Maschwidt, Geo. E. Jew. Trank J. Firming, by Milo B. Stevens and Co. Attorneys

## UNITED STATES PATENT OFFICE.

## FRANK J. FINNING, OF NASHUA, NEW HAMPSHIRE.

## BRASS FOR JOURNAL-BOXES.

No. 801,311.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed December 16, 1904. Serial No. 237,140.

To all whom it may concern:

Be it known that I, Frank J. Finning, a citizen of the United States, residing at Nashua, in the county of Hillsboro and State of New Hampshire, have invented new and useful Improvements in Brasses for Journal-Boxes, of which the following is a specification.

This invention is an improved brass or bearing-block for journal-boxes, and is particularly

10 suitable for car-axle boxes.

The object of the invention is to produce a "brass" which shall be cheaper in construction than hitherto and less apt to heat than brasses now in use. The invention permits the use of malleable iron, if desired, instead of the brass metal or composition heretofore used.

The invention is illustrated in the accom-

panying drawings, in which—

Figure 1 is a side view thereof. Fig. 2 is an end view. Fig. 3 is a cross-section. Fig.

4 is a face view of the metal block.

Referring specifically to the drawings, 6 indicates a metal block of proper size and 25 shape to suit the conditions under which it is to be used. This block may be made of malleable iron, brass, or other metal. It has in the sides thereof grooves 7, which receive the ends of a leather 8, which forms the bearing-30 surface for the journal. The face of the block 6 has diagonal grooves, as indicated at 9, and rectangular end grooves, as at 9<sup>a</sup>, and between the leather 8 and the face of the block is a leather filling or backing 10, which, 35 under the pressure or weight on the journal, is forced into the grooves, whereby it is held in place. The ends of the leather 8 are held in the grooves 7 by means of wedge-keys 11, driven into the grooves.

As above stated, the block 6 may be made 40 of malleable iron, which has the advantage of cheapness over brass. The leather 8 is preferably a hard compressed leather of that kind known to the trade as "asbestos-tanned leather," having the qualities that it will 45 stand a great amount of heat and wear and is also a poor conductor of heat. The backingpiece 10 is of softer or less dense leather, so that on a pressure it is forced into the grooves in the face of the block. The compressed- 50 leather bearing 8 takes the lubricant well and will stand much wear and high speed without heating. When worn out, it can be readily replaced by removing the brass from the box and knocking out the keys. The softer-leather 55 backing 10 prevents grinding or wearing of the bearing-leather against the face of the block, which would otherwise be apt to occur.

What I claim as new, and desire to secure

by Letters Patent, is—

1. A "brass" for journal-boxes, comprising a metallic block, a leather facing extending over the block, and a leather backing between the block and the facing.

2. A 'brass' for journal-boxes, comprising 65 a metallic block having grooves in the face thereof, a facing of compressed leather extending thereover, and a leather backing between said facing and the block and pressed into the grooves.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK J. FINNING.

Witnesses:

CHARLES J. HAMBLETT, WILLIAM H. TALLES.