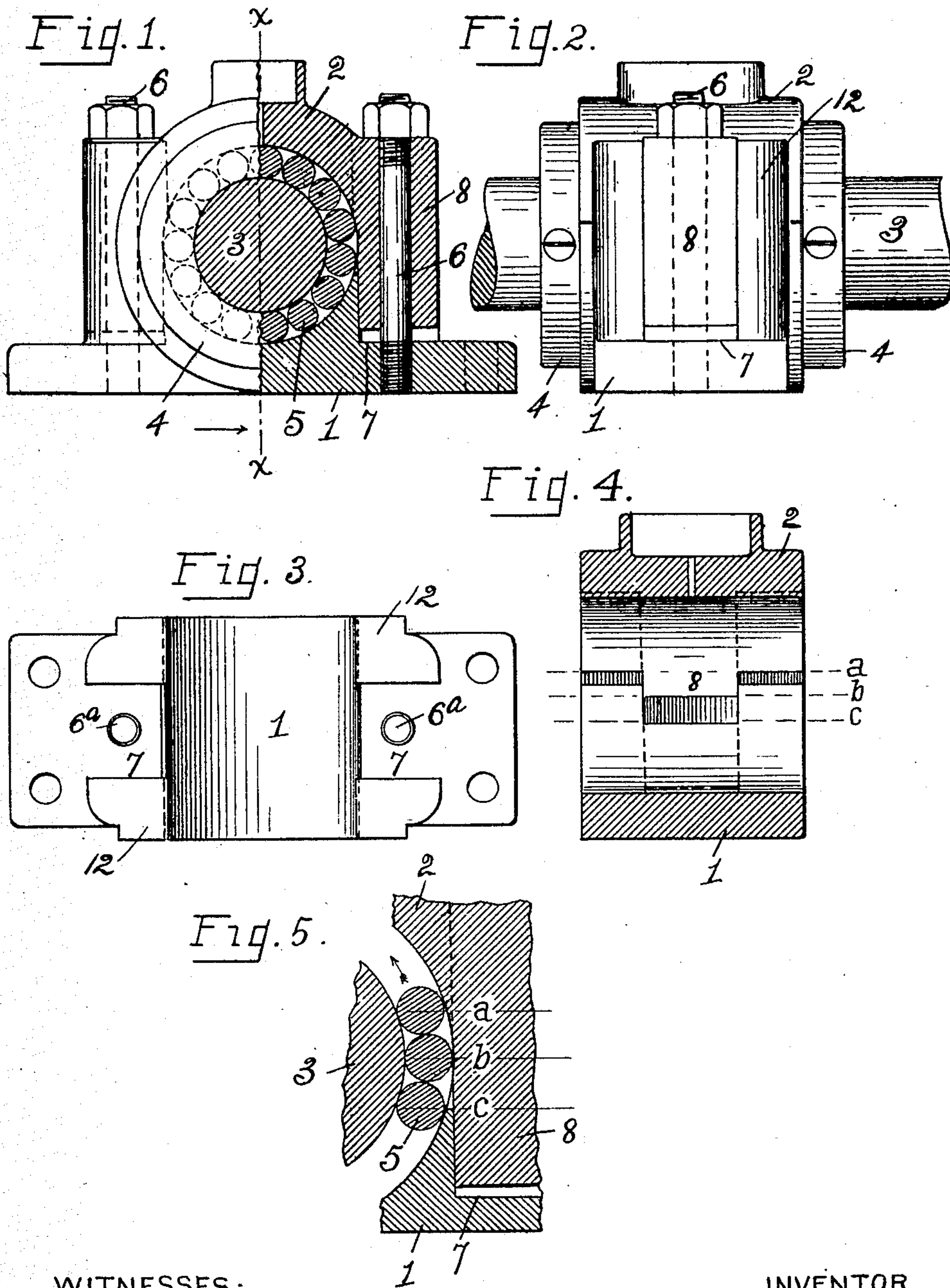


No. 860,281.

PATENTED JULY 16, 1907.

S. S. CONANT.
JOURNAL BOX.

APPLICATION FILED JAN. 24, 1907.



WITNESSES:

D. C. Walter
Hazel B. Hiett

INVENTOR.

Samuel S. Conant,
By Cunn & Cunn,
his attorneys.

UNITED STATES PATENT OFFICE.

SAMUEL S. CONANT, OF TOLEDO, OHIO.

JOURNAL-BOX.

No. 860,281.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed January 24, 1907. Serial No. 353,814.

To all whom it may concern:

Be it known that I, SAMUEL S. CONANT, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Journal-Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon, which form a part of this specification.

My invention relates to journal-boxes for use in connection with a roller-bearing of the circular series type; and it consists of the novel features of construction hereinafter described and claimed.

The object of my invention is to provide a journal-box which will present a substantially continuous and unbroken runway for the rollers at the points of juncture of the parts, whereby the usual vibration and wear incident to the rollers passing over the joints is entirely obviated, and which is also adjustable to take up lost motion, due to wear of the bearing parts.

The invention is fully described in the following specification, and illustrated in the accompanying drawing, in which,—

Figure 1 is an end elevation of the journal-box embodying my invention with one-half in central vertical section. Fig. 2 is a side elevation of the same. Fig. 3 is a top view of the lower bearing section. Fig. 4 is a section of the box on the dotted line *xx* in Fig. 1, and Fig. 5 is an enlarged sectional detail of a portion of the box illustrating the manner in which the rollers pass the points where the sections of the bearing join.

Referring to the drawing, 1 designates the lower and 2 the upper section of the journal-box, 3 the journal, 4, 4 the journal collars, 5 the rollers, and 6 the bolts or screws securing the box sections together.

The lower box section 1 has at each side two spaced upstanding tongues 12, the lower portions of whose inner surfaces form part of the arc-shaped bearing surface of the section, and the upper portions of whose inner surfaces extend vertically upward from the arc terminals. Between each pair of tongues, the lower section is cut away to form a vertical mortise 7, each of which communicates with the interior of the section from a point *c* upward, this point being considerably below the arc terminals on the tongues 12. Formed on each side of the upper section 2 is a tenon 8 of suitable size and length to fit snugly in the cooperating mortise 7 of the base section, each tenon being vertically bored to receive a bolt or pin 6, the lower end of which either threads into or passes through an alining aper-

ture 6^a in the base of the mortise. The inner faces of these tenons are formed vertical from approximately a point *b* to their lower ends, which points are slightly below the arc terminals of the lower box section, while the inner surfaces of the tenons above such points form a continuation of the arc of the upper section, as best shown in Fig. 4.

It is apparent that the arc-shaped bearing surfaces of the interlocking members of the two sections overlap, or are carried past each other, so that the rollers enter upon the portion *a b* of the upper arc before leaving the lower arc, thus carrying the rollers past the junction without vibration. It is to be noted that the vertical inner faces of the interlocking members recede gradually from the arcs of the sections, so that there are no prominent angles to cause jarring.

The advantages of this construction over that of the ordinary journal-box are readily apparent to those skilled in the art, as the provision of a substantially unbroken bearing surface not only prolongs the life of the rollers, but makes the journal run more smoothly and without vibration. It is also apparent that the spacing of the contiguous arc terminals of the two sections enables the sections to be adjusted to compensate for lost motion.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. A journal box, comprising an upper and a lower section having interlocking members, the arc-shaped bearing surfaces of the two sections being carried past each other in reverse directions on the inner surfaces of said members, and the inner surfaces of said members beyond the arc terminals thereon being vertical and gradually receding from the respective arcs.

2. A journal box, comprising an upper and a lower section having interlocking members, the arc-shaped bearing surfaces of the two sections being carried past each other in reverse directions on the inner surfaces of said members, the inner surfaces of said members beyond the arc terminals thereon being vertical and gradually receding from the respective arcs, and the several arc terminals which are directly opposed to each other being normally spaced to permit adjustment.

3. A journal box, comprising an upper and a lower section having interlocking members, the arc-shaped bearing surfaces of the two sections being carried past each other in reverse directions on the inner surfaces of said members, and the inner surfaces of said members beyond the arc terminals thereon being vertical and gradually receding from the respective arcs, in combination with bolts passing through the members in one section into the other section.

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

SAMUEL S. CONANT.

Witnesses:

M. W. YOUNG,
WILBER A. OWEN.