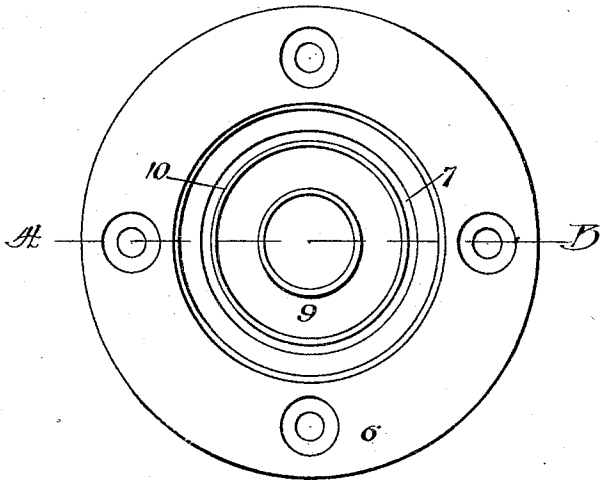
No. 796,981. PATENTED AUG. 15, 1905.

S. C. ANKER-HOLTH.

JOURNAL BEARING.

APPLICATION FILED MAR. 17, 1905.

Fig. 1.



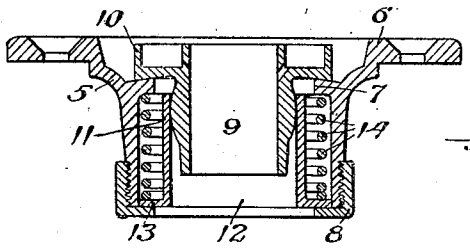
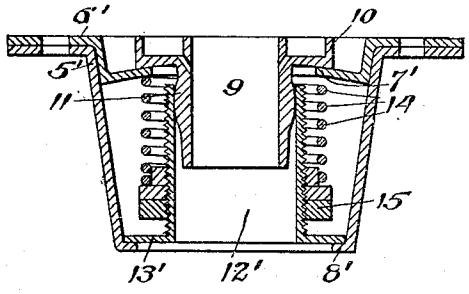


Fig. 2.

Fig. 3.



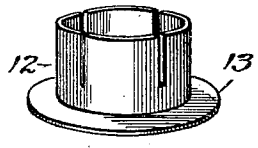


Fig. 4.

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UNITED STATES PATENT OFFICE.

SEVERIN C. ANKER-HOLTH, OF RIVERSIDE, ILLINOIS, ASSIGNOR TO INTERNATIONAL HARVESTER COMPANY, A CORPORATION OF NEW JERSEY.

JOURNAL-BEARING.

No. 796,981. Specification of Letters Patent. Patented Aug. 15, 1905.

Application filed March 17, 1905. Serial No. 250,558.

To all whom it may concern:

Be it known that I, SEVERIN C. ANKER-HOLTH, a citizen of the United States, residing at Riverside, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Journal-Bearings, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to journal-bearings, and is particularly adapted for use in connection with centrifugal cream-separators wherein the bowl is supported and driven by an upright shaft.

It consists in a cylindrical shell which may be integral with the machine to which it is applicable or it may be a separable piece provided with means by which it may be attached to such machine, the latter form being shown in the drawings. It is provided with an inner annular flange, upon which rests a journal-box that is embraced by a thimble that rests upon the bottom of the shell, which forms a fixed support therefor, and a spring surrounds the thimble and operates between the inner annular flange of the shell as a resistant and a flange at the bottom of the thimble to hold the bearing in a central position, the objects of the invention being to provide for a certain amount of oscillatory movement of the shaft, due to imperfect balancing or other causes, by means of a simple and cheap construction and one not liable to become disarranged by use. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of the bearing and supporting-shell. Fig. 2 is a sectional elevation of Fig. 1 on line A B. Fig. 3 is a sectional elevation of a modified form. Fig. 4 is a perspective view of the split thimble that receives the journal-box.

Similar numerals refer to similar parts throughout the several views.

A shell 5, having a flange 6, by which it may be secured to a fixed part of the machine, is provided with an inner annular flange 7, and a bottom 8 screw-threaded is removably attached to its lower end. The journal-box 9 is provided with a collar 10, adapted to rest upon the periphery of the flange 7, and below the flange is a spherical enlargement 11. A thimble 12, having longitudinal slots at its upper end and a lower flange 13, resting upon the bottom 8 and adapted to rock thereon, is adapted to embrace with its upper end the spherical enlargement of the journal-box 9, and 14 is a coiled spring operating between the collar 13 and the lower side of the annular flange 7 in a manner to yieldingly hold the journal-box in a central position.

In the modified form shown in Fig. 3 the shell 5′ is made of sheet metal, and the bottom 8′ is formed by turning the metal inward to form an annular flange, and a separable piece forms the horizontal flange 6′ and the inner annular flange 7′. Provision is made for adjusting the expansible force of the spring 14 by means of the adjusting-nut 15, screw-threaded upon the split thimble 12′.

In operation when the shaft from any cause swings laterally the journal-box is free to move with it, and the spring operates to return it to its original position, and the function of the spherical enlargement is to prevent any tendency of the box to pinch the shaft, and the split thimble will yieldingly embrace the enlargement as a means toward that end.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a journal-bearing, the combination of a vertically-arranged thimble, a support upon which said thimble is adapted to rock, a fixed resistant, a spring surrounding said thimble and operative between said fixed resistant and the thimble to resist a rocking action of the latter, and a journal-box embraced by said thimble.

2. In a journal-bearing, the combination of a vertically-arranged thimble having one or more longitudinal slots at one end, a support upon which the opposite end of said thimble is adapted to rock, a fixed resistant, a spring operative between said fixed resistant and the thimble to resist a rocking action of the latter, and a journal-box embraced by the slotted end of said thimble.

3. In a journal-bearing, the combination of a vertically-arranged thimble, a support upon which said thimble is adapted to rock, a fixed resistant, a spring operative between said fixed resistant and said thimble to resist a rocking action of the latter, and a journal-box having a spherical enlargement embraced by said thimble.

4. In a journal-bearing, the combination of a vertically-arranged thimble having one or more longitudinal slots at one end, a support upon which the opposite end of said thimble is adapted to rock, a fixed resistant, a spring operative between said fixed resistant and the thimble to resist a rocking action of the latter, and a journal-box having a spherical enlargement embraced by the slotted end of said thimble.

5. In a journal-bearing, the combination of a fixed support comprising a cylinder having an upper internal flange and a bottom, a thimble resting upon said bottom and adapted to rock thereon, a journal-box embraced by said thimble, a spring operative between said flange and thimble to resist a rocking action of the latter.

6. In a journal-bearing, the combination of a fixed support comprising a cylinder having an upper internal flange and an adjustable bottom, a thimble resting upon said adjustable bottom and adapted to rock thereon, a journal-box embraced by said thimble, and a spring operative between said flange and thimble to resist a rocking action of the latter.

7. In a journal-bearing, the combination of a fixed support comprising a cylinder having an upper internal flange and a bottom, a thimble resting upon said bottom and adapted to rock thereon, a journal-box embraced by said thimble, a spring operative between said flange and thimble to resist a rocking action of the latter, and means for adjusting the expansive force of said spring.

8. In a journal-bearing, the combination of a fixed support comprising a cylinder having an upper internal flange and a bottom, a journal-box having a collar adapted to rest upon the upper surface of said internal flange, a thimble embracing said journal-box and adapted to rock upon said bottom, and a spring operative between said flange and thimble to resist a rocking action of the latter.

9. In a journal-bearing, the combination of a fixed support comprising a cylinder having an upper internal flange and a bottom, a thimble provided with a flange at one end that is adapted to rock upon said bottom, a journal-box embraced by the opposite end of said thimble, and a spring surrounding said thimble and operative between said flanges to resist a rocking action of the latter.

10. In a journal-bearing, the combination of a fixed cylindrical shell, a cap screw-threaded upon the lower end of said shell, an inner annular flange near the upper end thereof, a journal-box, a thimble embracing said journal-box and provided with a flange adapted to rock upon said cap, and a spring surrounding said thimble and operative between said flanges to resist a rocking action of said thimble.

11. In a journal-bearing, the combination of a fixed cylindrical shell, a cap screw-threaded upon the lower end of said shell, an inner annular flange near the upper end thereof, a journal-box having a collar at its upper end adapted to rest upon the upper side of said inner flange, and a spherical enlargement below said flange, a thimble embracing said spherical enlargement and provided with a flange at its lower end adapted to rock upon said screw-threaded cap, and a spring surrounding said thimble and operative between said flanges to resist the rocking action of the thimble.

In witness whereof I hereto affix my signature in presence of two witnesses.

SEVERIN C. ANKER-HOLTH.

Witnesses:

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GEO. W HENDERSON.