

J. E. YEAGER.
JOURNAL BEARING.
APPLICATION FILED MAR. 9, 1909.

966,726.

Patented Aug. 9, 1910.

Fig. 1.

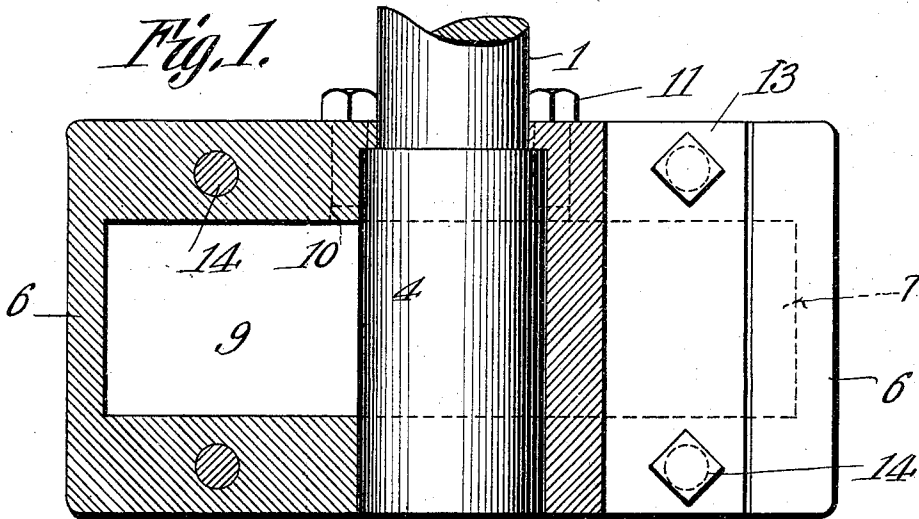


Fig. 2.

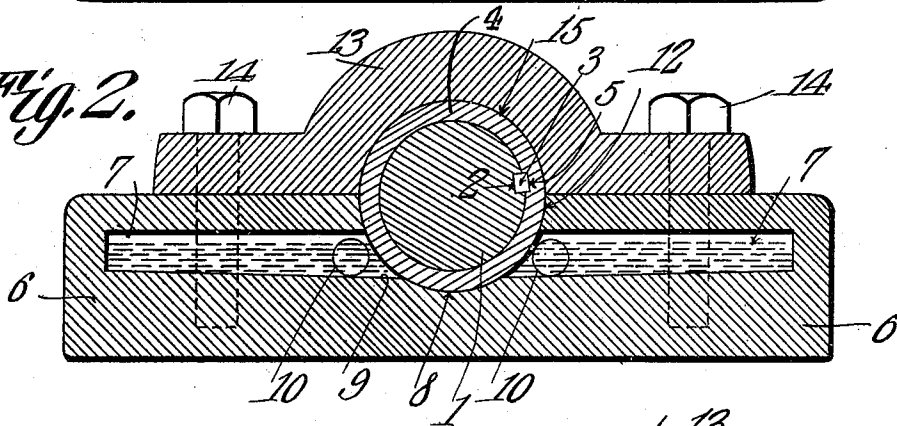
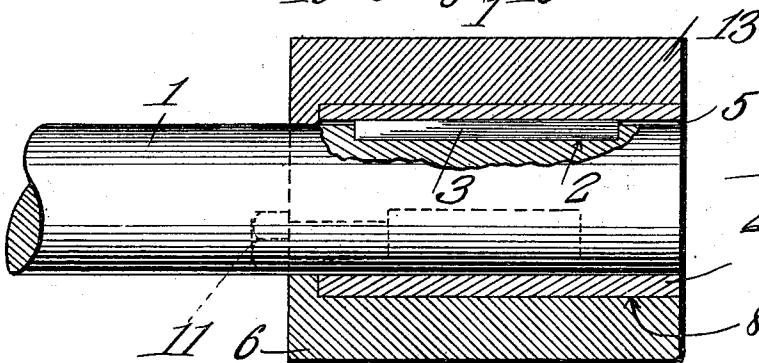


Fig. 3.



Witnesses

E. J. Hamill
E. Hamill

Inventor
John E. Yeager

By *Cashow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

JOHN E. YEAGER, OF CARBONDALE, PENNSYLVANIA, ASSIGNOR OF THREE-FOURTHS
TO JOHN P. STANTON, OF SCRANTON, PENNSYLVANIA.

JOURNAL-BEARING.

966,726.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed March 9, 1909. Serial No. 482,236.

To all whom it may concern:

Be it known that I, JOHN E. YEAGER, a citizen of the United States, residing at Carbondale, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Journal-Bearing, of which the following is a specification.

This invention has relation to journal bearings and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide a boxing of peculiar configuration, which forms the lower portion of the bearing, and which is provided with compartments adapted to contain a lubricant. The said boxing is provided with an opening for the reception of the journal, and said journal is held in position in the boxing by means of a cap detachably mounted upon the boxing.

The bearing surface of the journal preferably consists of a detachable bushing, which is held in position upon the journal by a key fixed in a peculiar manner upon the journal and engaging a slot provided in the said bushing. The bushing may be of Babbitt or other relatively soft metal, especially adapted to be used in journal bearing construction.

In the accompanying drawings; Figure 1 is a plan view of a journal bearing, with parts in section; Fig. 2 is a vertical sectional view of the same; Fig. 3 is a transverse sectional view of the same.

The journal 1 is provided at its end portion with a recess 2, which extends toward the center of the journal from the periphery thereof, and seated in the said recess is a key 3. The ends of the key abut against the ends of the said recess 2, and, consequently, when the key is inserted in position in the said recess it is retained against both lateral and longitudinal movement. A hollow bushing 4 is provided in its interior with a longitudinally disposed slot 5 which is adapted to receive the outer or projecting portion of the key 3. The opening in the bushing 4 is sufficient to snugly receive the journal 1.

The journal bearing consists of a boxing 6, which is provided with an internal chamber 7, having, at a point approximately midway between the ends a concaved depression 8, which is transversely disposed with relation to the said boxing 6. The upper sur-

face of the bottom 9 of the said chamber 7 converges from the ends of the boxing 6 toward the depression 8. Orifices 10 are provided in the side of the boxing 6 and enter the side wall of the chamber 7. Said orifices are normally closed by screws 11, and it is through the said orifices that a lubricant may be introduced into the chamber 7.

The upper portion of the boxing 6 is provided with an opening 12, the side walls of which are concentric with the curved surface of the depression 8, and of the same degree of curvature. The upper edges of the side walls of the opening 12 lie in a plane which traverses the center of the arc occupied by the said side walls and the curved surface of the depression or recess 8. A cap 13 is adapted to be applied to the top of the boxing 6, and is held in position thereon by means of screws 14, which pass transversely through end portions of the said cap, and at their threaded portions enter the body of the boxing 6. The said cap 13 is provided with an arcuate portion 15, which is adapted to receive the upper portion of the bushing 4 surrounding the end portion of the journal 1. The curvature of the inner surface of the arcuate portion 15 of the cap 13 is the same as that of the end walls of the openings 12, and is the same as the curvature of the depression 8 in the bottom of the lubricant compartment of the boxing 6. By such an arrangement it is apparent that while the bearing surface of the journal is exposed to the lubricant contained by the boxing, the bearing surface of the boxing and the attached cap is sufficient to afford ample support for the journal without adding undue friction. It will also be seen that by reason of the fact that the bearing surface of the cap 13, together with the walls of the opening 12, extends more than half way around the circumference of the bushing 4, and consequently the parts are retained against vertical or lateral movement. When the parts have become excessively worn, the bushing 4 should be removed and a new one substituted in its stead. It will therefore appear that a simple and an effective journal bearing is provided in which the lubricant is automatically applied to the journal, and that, by reason of the simplicity and compact arrangement of parts, the bearing is susceptible of use in

application in numerous directions or places, unnecessary to be enumerated here.

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

5 In combination with a journal, a bearing consisting of a boxing provided with an opening in its top against the side edges of which the said journal directly bears said
10 boxing provided in its interior and at the opposite sides of the said opening with an oil chamber, the oil chamber in its bottom and immediately below the said opening

having a bearing upon which the said journal rests, and a detachable cap applied to the upper side of the boxing and having a bearing surface for the entire portion of the journal located above the top of the boxing. 15

In testimony that I claim the foregoing as my own, I have hereto affixed my signature 20 in the presence of two witnesses.

JOHN E. YEAGER.

Witnesses:

JAS. M. WALKER,
E. HUME TALBERT.