R. E. PEARY.

SELF OILING HINGE PINTLE.

APPLICATION FILED JUNE 16, 1921.

1,433,095.

Patented Oct. 24, 1922.

Fig. 1.

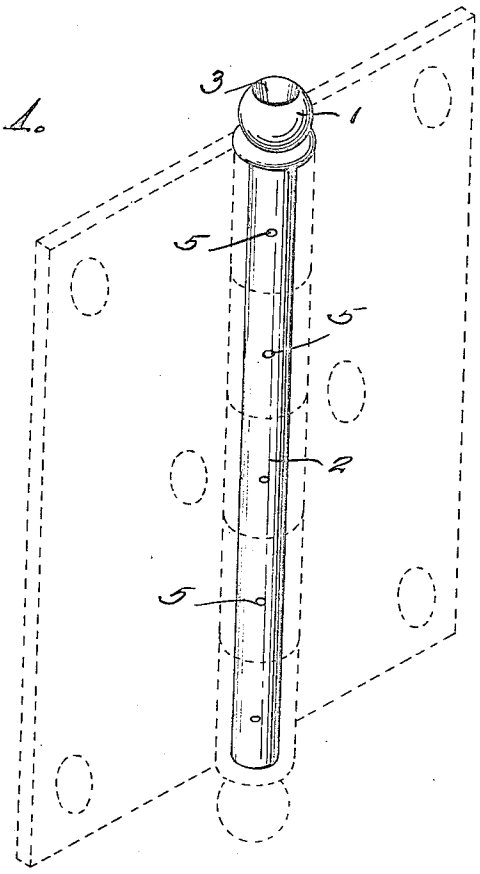


Fig. 2.

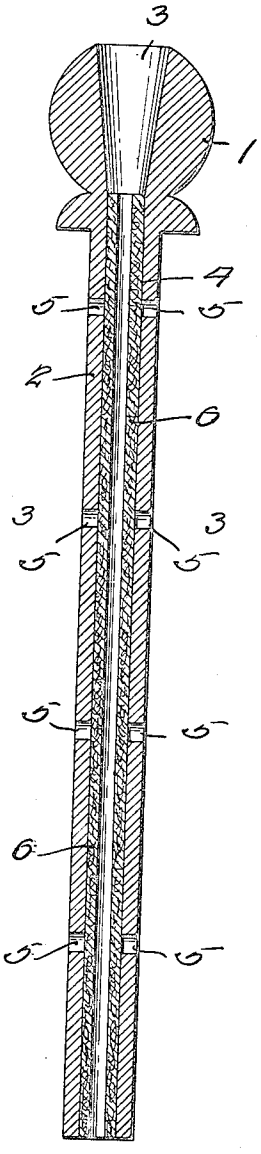


Fig. 3.

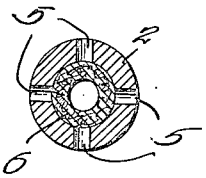
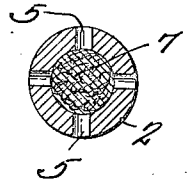


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROBERT E. PEARY, OF WASHINGTON, DISTRICT OF COLUMBIA.

SELF-OILING HINGE PINTLE.

Application filed June 16, 1921. Serial No. 478,106.

To all whom it may concern:

Be it known that I, ROBERT E. PEARY, citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Self-Oiling Hinge Pintles, of which the following is a specification.

My device relates to hinge pintles and particularly to that type of hinge pintle which is adapted to be self oiling.

An object of my invention is to provide a hinge pintle that will maintain the hinges oiled for a long period of time and will distribute the oil uniformly to all parts of the hinge.

Another object of my invention is to construct a hinge pintle accomplishing the above outlined object and which is of sturdy construction, simple to manufacture and constructed with a minimum number of parts.

In my invention I have formed a hinge pintle having a central longitudinal opening extending through the head of the pintle and the body proper. The head and the pintle are preferably formed integral and the opening in the head is adjacent to the longitudinal opening in the body. There are transverse openings allowing seepage of the oil from the interior to the exterior of the hinge pintle thus oiling the hinges. To accomplish the even distribution of the oil I have provided as a part of my structure a hollow wick adapted to fit within the longitudinal opening of the body of the hinge.

With these and other objects in view which may be incident to my improvements, the invention consists in the parts and combinations to be hereinafter set forth and claimed, with the understanding that the several necessary elements comprising my invention, may be varied in construction, proportions and arrangement, without departing from the spirit and scope of the appended claims.

In order to make my invention more clearly understood, I have shown in the accompanying drawings means for carrying the same into practical effect, without limiting the improvements in their useful applications to the particular constructions, which for the purpose of explanation, have been made the subject of illustration.

In the drawings:

Figure 1 is a perspective view of my hinge pintle as applied to a hinge.

Figure 2 is a longitudinal cross-section through the hinge pintle.

Fig. 3 is a cross-section through the line 3—3 of Fig. 2.

Fig. 4 is a cross-section of a modification of my device employing a solid wick instead of a hollow wick.

In the drawings is shown a hinge pintle having a head 1 and a body portion 2. The head 1 is preferably integrally formed with the body portion 2 and has a tapered central aperture 3 passing therethrough. The tapered central aperture at its lower end meets and joins a central longitudinal opening 4 through the body 2. The body 2 is provided with sets of transverse openings 5 extending from the longitudinal opening 4 to the exterior of the pintle. I have shown these longitudinal openings as extending in four directions, as plainly seen by the cross sectional view in Fig. 3.

It is to be understood that I may employ any other number of openings than four in each set if I so desire, but I have shown four in the drawings simply for purposes of illustration. Under certain conditions it will be found that more than four or less than four will be the proper number for the existing conditions.

Disposed within the central longitudinal opening 4 is a hollow wick 6 extending the length of the central longitudinal opening.

In operation oil is dropped into the opening 3 in the head 1 and this oil is absorbed by the hollow wick 6 and evenly distributed through the entire wick so that a portion of the oil may seep out of each of the transverse openings 5 to oil the hinge. I have found that having these openings 5 located between the joints of the hinges as is indicated in Fig. 1 produces better lubrication than having these openings located adjacent the joints of the hinges.

In Fig. 4 is illustrated a modification employing a solid wick 7 instead of a hollow wick. The operation is similar to that in the modification just previously described and for certain grades of oil this type of wick is found to be the most efficient.

While I have shown and described the preferred embodiment of my invention, I wish it to be understood that I do not confine myself to the precise details of construction herein set forth, by way of illustration, as it is apparent that many modifications and variations may be made therein, by

those skilled in the art, without departing from the spirit of the invention, or exceeding the scope of the appended claims.

I claim as my invention:

1. In a self oiling pintle, the combination of a head with an opening therein, with a body having a central longitudinal opening adjacent to the opening in the head and transverse openings and a wick in the longitudinal opening.

2. In a self oiling pintle, the combination with a head with an opening therein, of a body integrally formed with the head and having a central longitudinal opening and transverse openings and a wick in the longitudinal opening.

3. In a self oiling pintle, the combination with a head with an opening therein, of a body having a central longitudinal opening and transverse openings and a hollow wick in the longitudinal opening.

4. In a self oiling pintle, the combination of a head with an opening therein, with a body integrally formed with the head and having a central longitudinal opening and transverse openings and a hollow wick in the longitudinal opening.

5. In a self oiling hinge pintle, the combination of a head with an opening therein, with a body integrally formed with the head and having a central longitudinal opening and transverse openings adapted to lie between hinge joints and a hollow wick in the longitudinal opening.

6. In a self-oiling hinge pintle, the combination of a head with an opening therein, with a body having a central longitudinal opening adjacent to the opening in the head and a series of transverse sets of openings, and a wick in the longitudinal opening.

7. In a self-oiling hinge pintle, the combination of a head with an opening therein, with a body integrally formed with a head having a central longitudinal opening and a series of transverse sets of openings adapted to lie between hinged joints, and a hollow wick in the longitudinal opening.

In testimony whereof I affix my signature.

ROBERT E. PEARY.