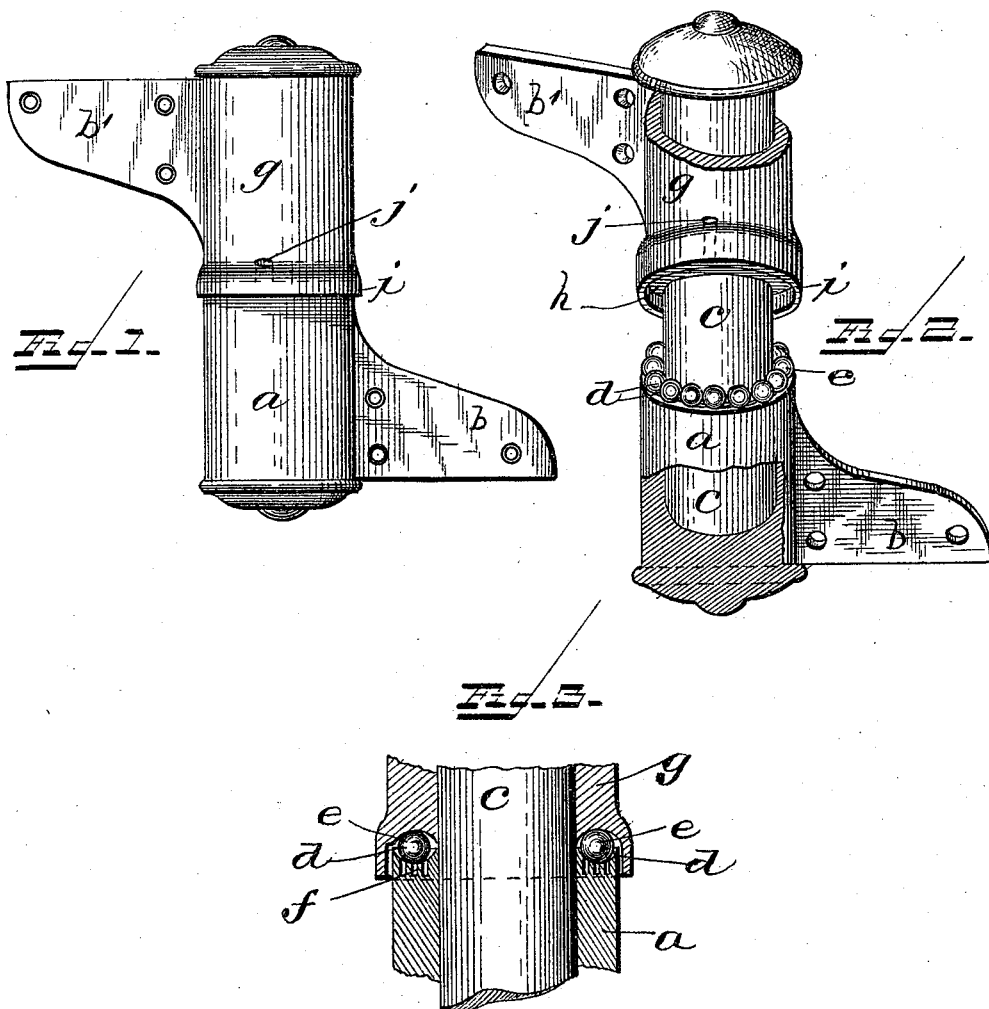


(No Model.)

H. M. LOCKE.
DOOR HINGE.

No. 493,230.

Patented Mar. 7, 1893.



WITNESSES
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UNITED STATES PATENT OFFICE.

HERBERT M. LOCKE, OF WASHINGTON, DISTRICT OF COLUMBIA.

DOOR-HINGE.

SPECIFICATION forming part of Letters Patent No. 493,230, dated March 7, 1893.

Application filed September 30, 1892. Serial No. 447,381. (No model.)

To all whom it may concern:

Be it known that I, HERBERT M. LOCKE, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Door-Hinges; and I do 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 letters of reference marked thereon, which form a part of this specification.

My invention is a ball bearing hinge and consists in the novel construction and arrangement of its parts.

In the accompanying drawings: Figure 1 is an elevation of my hinge. Fig. 2 is a perspective view with top part of the hinge raised to show the balls, and a part of the base, and upper part cut away to show bolt. Fig. 3 is a view in section of so much of Fig. 1, as is necessary to show the construction of the tracks that carry the balls.

My invention is designed to be used on heavy doors and is described as follows:

The base *a*, of the hinge is provided with an ear or ears *b*, and said base is made hollow so as to receive the lower end of the bolt *c*; the upper edge or bearing part of said base is provided with a track *d*, to receive the balls *e*; in the bottom of said track are cut two, three,

or more grooves *f*. The cap *g*, or upper part of the hinge is provided with ear or ears *b'* and has in the lower part of its face a groove *h*, which is the same size as and concentric with, groove *d*; said cap is also provided with a flange *i*, which encircles the upper part of the base *a*; said cap is also provided with one or more openings *j*, through which the hinge and balls may be oiled.

The purpose of the groove *f*, is to receive the oil and dust that may escape from the balls so that the track may not become clogged.

The purpose of the flange *i*, is to close the seam between the base and upper part of the hinge.

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

The combination of the hollow base *a*, provided with circular track *d*, and grooves *f*, in the bottom of said track; cap *g*, having circular track *h*, concentric with track *d*; balls *e*, working in said tracks; and bolt *c*, uniting the upper and lower parts of said hinge, all substantially as shown and described, and for the purposes set forth.

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

HERBERT M. LOCKE.

Witnesses:

JOHN S. DUFFIE,
ANNIE A. LANSDALE.