D. BAKER.

Mariners' Compass

No. 163,839. Patented June 1, 1875.

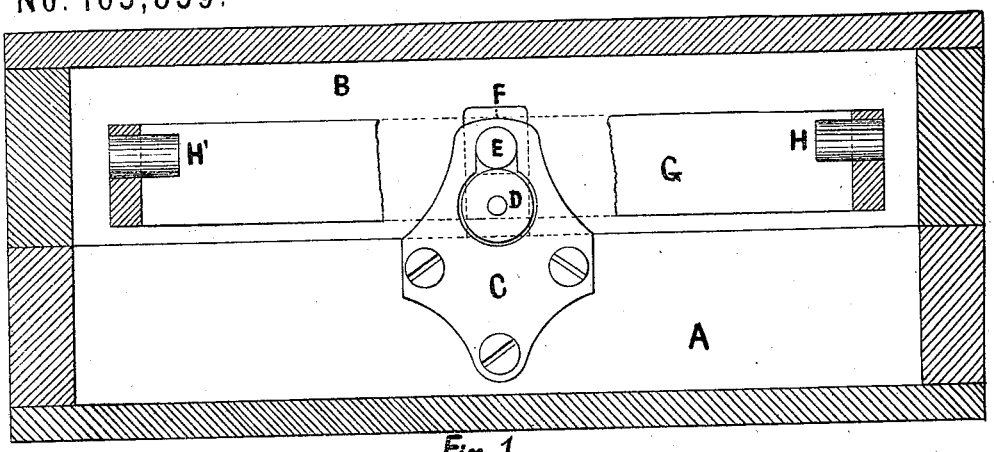

Fig. 1.

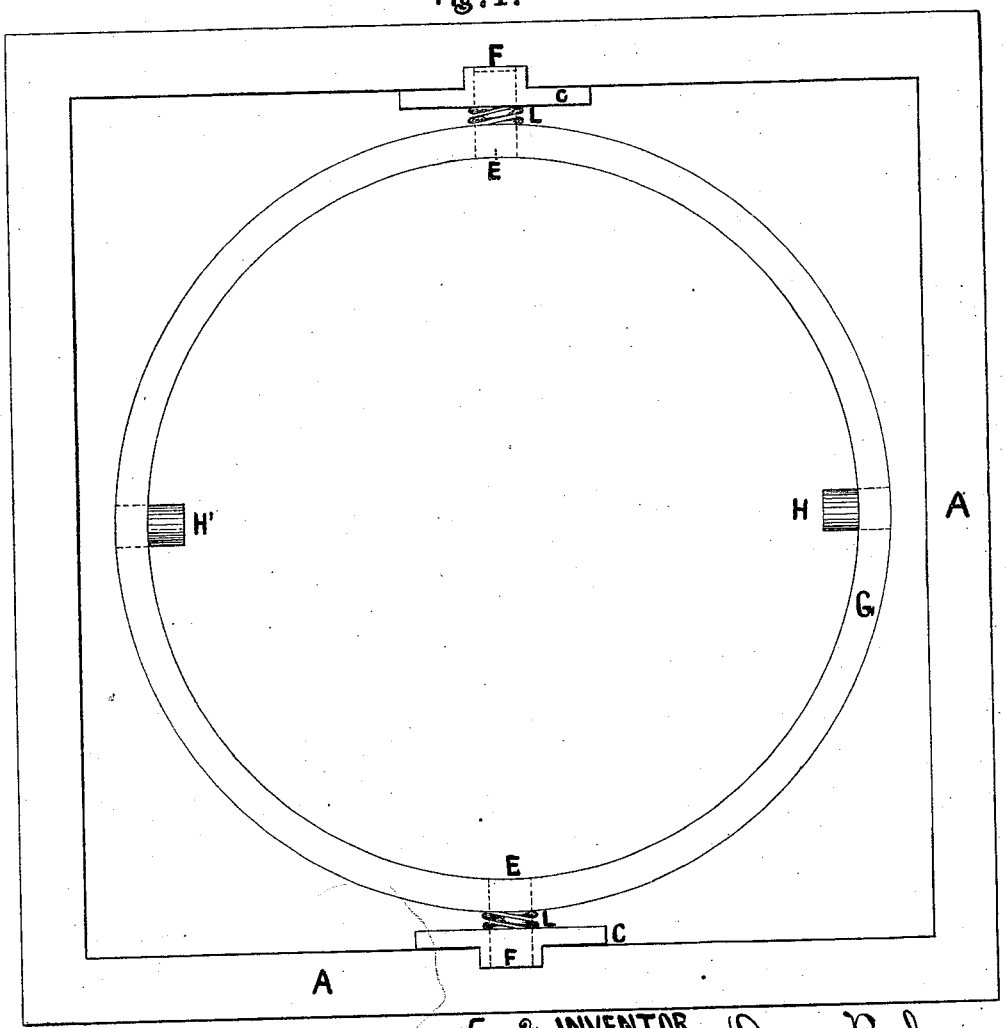

Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

DAVID BAKER, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLARD I. HUMPHREY, OF SAME PLACE.

IMPROVEMENT IN MARINERS' COMPASSES.

Specification forming part of Letters Patent No. **163,839**, dated June 1, 1875; application filed October 21, 1874.

To all whom it may concern:

Be it known that I, DAVID BAKER, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Compass-Cases and Bearings for Compasses, of which the following is a specification:

The object of my invention is to provide a cheap, simple, and convenient means for connecting the top or cover of a compass box or case with the lower portion thereof, and adjusting the gimbal-bearings used for suspending a compass or chronometer within such case or box, so as to allow the same to adjust itself to an upright position when in use as such, as a mariner's compass or chronometer is subject to the various motions attending such use when employed for marine purposes; and it consists in providing the lower portion of the case with gimbal-bearings at the opposite sides thereof, such bearings being provided with friction-wheels, and having guides formed therewith, for retaining the top of the case in proper position when being placed together; also, in self-adjusting spring-washers interposed between the oscillating rings, or the same and the bearing fastened to the case, for the purpose of steadying the same when worn, and preventing rattling.

Figure 1 is a vertical section through the top or cover and case. Fig. 2 is a top-plan view of the case with cover removed.

A represents the lower portion of the case, which is of usual construction. C C are two bearings screwed to the opposite insides of the box, and projecting above the upper edge of the same, and provided with friction or revolving bearing-pulleys D D′, upon which the journals or pivots E E′ of the gimbal-ring G has bearings, said pivots being provided with rubber or elastic metallic spiral spring-washers L. This gimbal-ring G is provided with pivots H H′ upon opposite sides thereof. These may be provided with spring-washers L, so as to steady and control somewhat the compass or chronometer suspended within the case A against the motions imparted to such chronometer or compass when in use for marine purposes.

The two bearings C C are each provided with a vertical projection, F, which rests on the upper edge of the case A, and fits into a corresponding groove formed in the bottom inside edge of the top or cover B, and when being placed together guides the top or cover B to a proper position with the lower portion or case A, and prevents its turning.

Having thus described my invention, what I claim is—

1. The gimbal-bearings C C of a compass-case, constructed with friction-rolls and projections F F, as herein described, to serve a twofold purpose, all being arranged substantially in the manner shown, as and for the purposes set forth.

2. In combination with the pivots E E′ or H H′ of the gimbal-ring G, the friction-pulleys D D′ and the self-adjusting spring-washers L L, for steadying a compass or chronometer suspended within said gimbal-ring, substantially in the manner described, as and for the purposes set forth.

DAVID BAKER.

Witnesses:
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