

D. BAKER.
Mariners' Compass

No. 163,839.

Patented June 1, 1875.

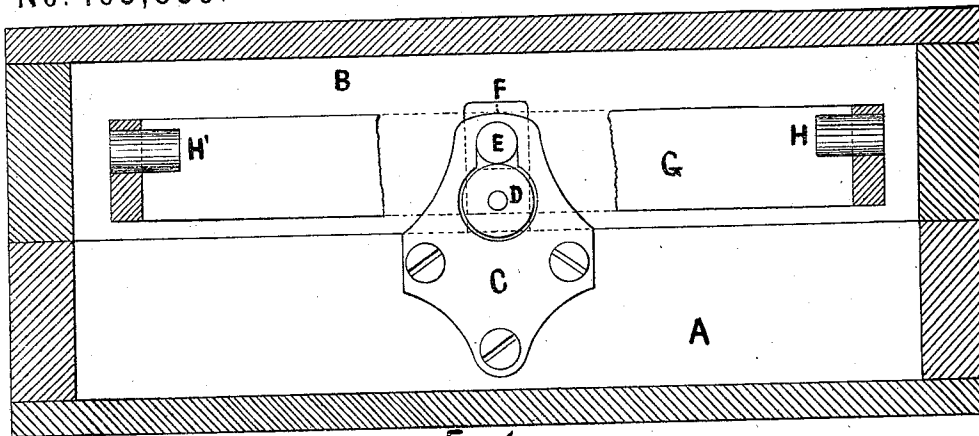


Fig. 1.

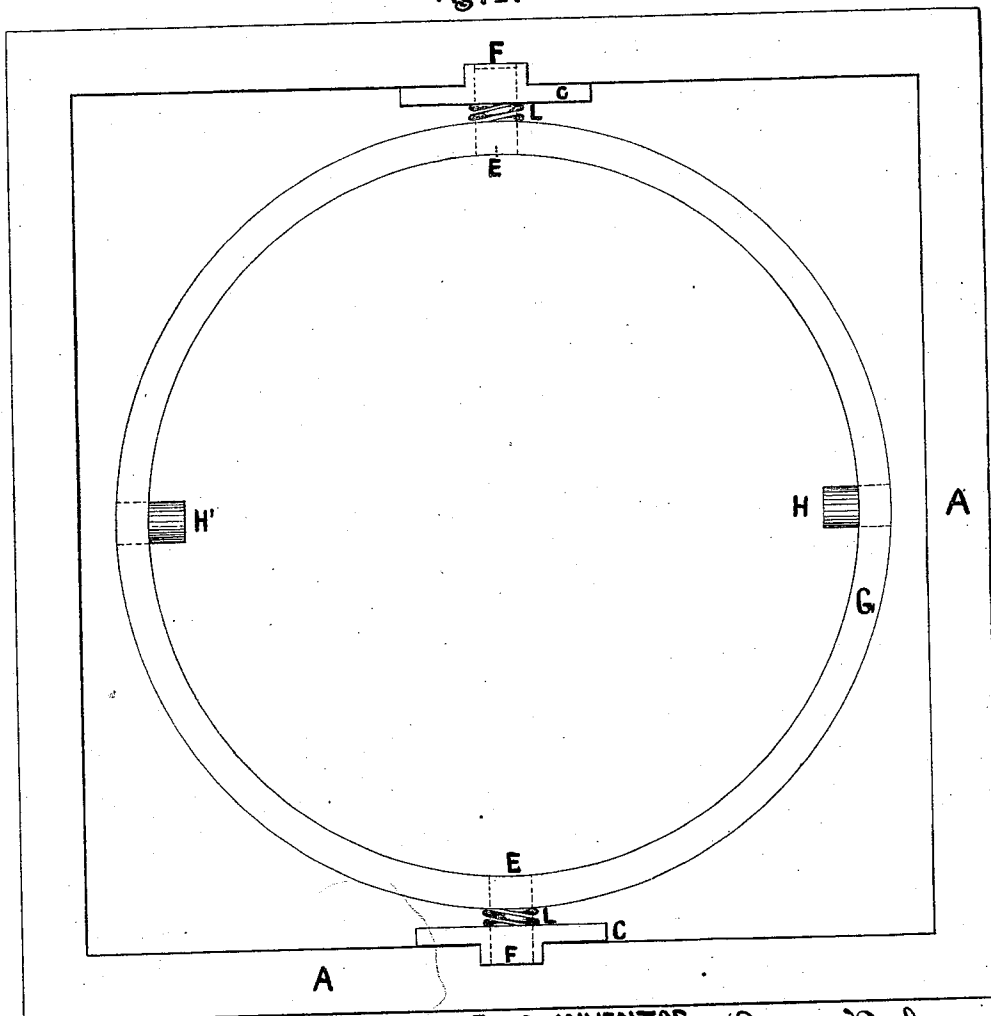


Fig. 2. INVENTOR.

Witnesses.

H. S. Talbot
Arthur Mason

David Baker
Per Sylvester Walker
Atty

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:

SYLVENUS WALKER,
GEO. A. BAKER.