

## PATENT NEWS FOR PLUMB BOB COLLECTORS

### WR PATENT NEWS # 2007-13

#### GB190800163 CARTER 1908 GYROSTATIC PLUMB BOB

In summer 2006 was offered in Australia a "GYROSTATIC PLUMB BOB". At that time the search for British patents was more difficult than actually, but I got it. ☺  
Nelson won the plumb bob on Ebay and he sent me the photos of this futuristic example of patented plumb bobs. Thank you.

At that time everyone thought that with this invention everything could be stabilized, also a SWINGING PLUMB BOB.

THIS EXAMPLE OF THE CARTER GYROSCOPE SHOWS ONE TIME MORE THAT THERE IS A DIFFERENCE BETWEEN THE IDEA OF THE INVENTOR AND THE PRACTICAL USE :-)

I FOUND IN ONE OF MY BOOKS. (SEE ALSO *WIKIPEDIA*). GYROSTATICS WERE PRODUCED IN THE 1800s FOR DIFFERENT REASONS. THIS PRINCIPLE WAS ALSO USED FOR THE **GYRO-COMPASS ON SHIPS**. A GERMAN HERMANN ANSCHUETZ GOT 1904 PATENT # DE182855 (UNFORTUNATELY WITHOUT PICTURES, TEXT ONLY) SUCH A GYRO-COMPASS AND UPDATED THIS SYSTEM FOR A THREE-GYRO-COMPASS. (ALSO GB190506359 1905)

After discussion we think that this system does NOT WORK, because the gyroscope is not fixed with the wall and is part of the plumb bob and swings like anything else.

Nelson Denny wrote:

"THE BOB SEEMS TO BE IN FINE BALANCE AND I HAVE LUBRICATED IT WITH SOME LIGHT MACHINE OIL. I'VE CRANKED IT UP IN EVERY WAY AND ORIENTATION I CAN THINK OF....."

***NOW I EXPECTED THAT THE GYROSCOPIC ACTION WAS INTENDED TO DAMPEN IF NOT TOTALLY STABILIZE THE SWING OF THE BOB ON THE PLUMB LINE.....RATHER, IT SWINGS AROUND JUST LIKE ANY OTHER PLUMB BOB OF THE SAME WEIGHT. WHAT AM I MISSING.....?***

***THE PATENT DRAWINGS SHOW SOME VERY SOPHISTICATED VERSIONS OF THE PRINCIPLE, USING WEIGHTS REVOLVING SIMULTANEOUSLY IN BOTH HORIZONTAL AND VERTICAL PLANE..... I WOULD SAY THIS IDEA IS VERY THEORETICAL : I CAN'T IMAGINE THAT A SPRING OR A PULL CHORD COULD EVER POWER IT LONG ENOUGH, FOR THE BOB TO COME TO REST.....IT LOOKS GREAT THOUGH!"*** variations see page 4



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Here are some pictures from Nelson Denny:



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N<sup>o</sup> 163



A.D. 1908

*Date of Application, 3rd Jan., 1908*

*Complete Specification Left, 2nd July, 1908—Accepted, 17th Sept., 1908*

PROVISIONAL SPECIFICATION.

“Improvements in Plumb-bobs.”

I, FREDERICK SAMUEL CARTER, of 13, Milton Grove, Gorton Manchester, in the County of Lancaster, Mechanical and Electrical Engineer, do hereby declare the nature of this invention to be as follows:—

5 This invention relates to improvements in plumb-bobs used in building, surveying, mining and other operations, the object being to provide means for preventing their oscillation caused by the wind, the hand, or otherwise and thereby render same more quick and reliable in action and at the same time lighter relatively to existing plumb-bobs.

10 To this end my invention consists essentially in so mounting or fixing a weight or weights suitably pivoted in a support so that it or they can be made to revolve freely and at a high rate of speed. This combination suitably suspended forms the plumb-bob. The action of the revolving weight or weights is to steady the bob such that it requires considerable force to move it and therefore it tends to remain perfectly plumb when suspended.

15 The said weight or weights may be rotated by means of clockwork operated by a spring or other suitable means and adapted to be wound up, or the said weight or weights may be caused to revolve by spinning them by means of a cord.

20 The said support may consist of a casing, a frame, or a single pivoted ring or gimbal rings carried in a frame and can be suspended by a cord, wire, chain or other suitable means.

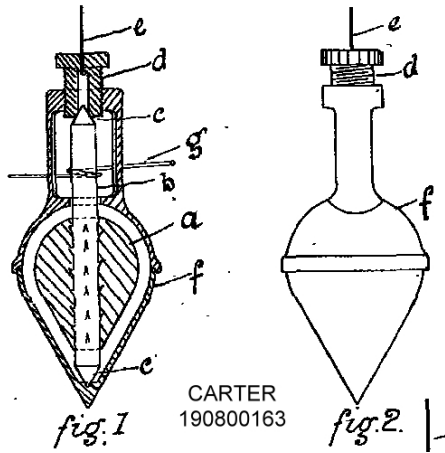
25 For ordinary purposes one weight arranged to revolve in a horizontal plane will be found sufficient while in cases where great steadiness is required a second weight may be employed to revolve in a vertical plane in addition to the one revolving in the horizontal plane. Or two or more weights pivoted so as to revolve in a vertical or any other plane, but not in the same plane relatively to one another may be used.

30 Although the term weights is used it does not necessarily mean that they must be heavy as much lighter weights can be used than in an ordinary plumb-bob.

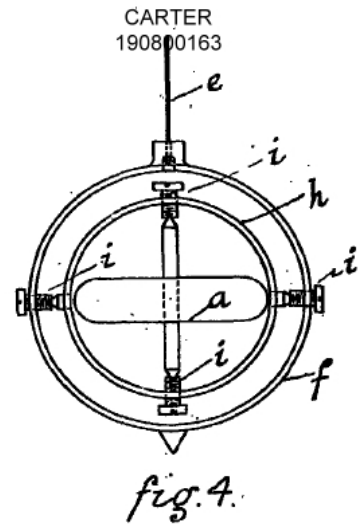
Dated this 2nd. day of January, 1908.

F. BOSSHARDT & Co.,  
Agents to Applicant.

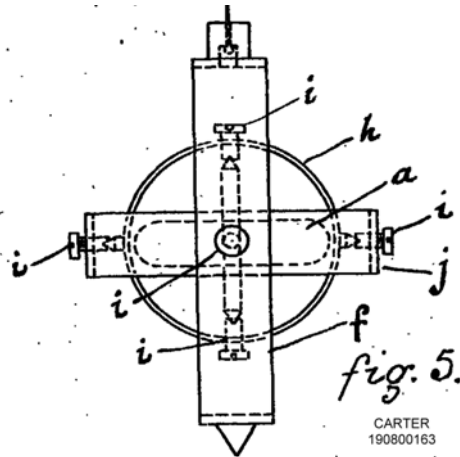
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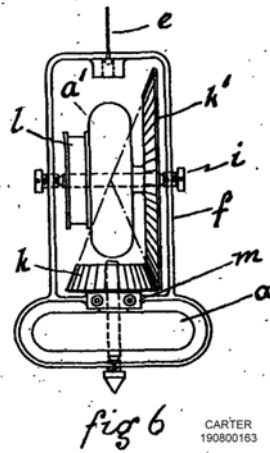
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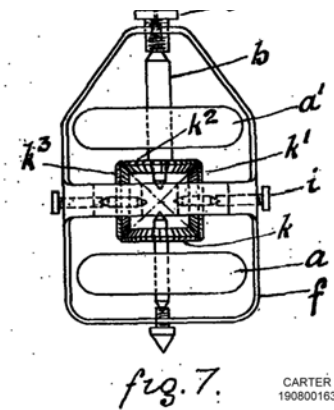
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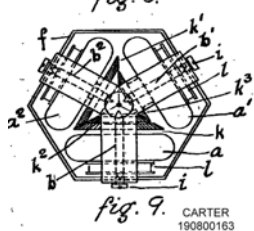
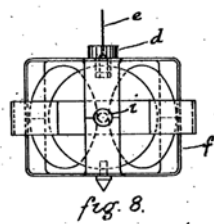
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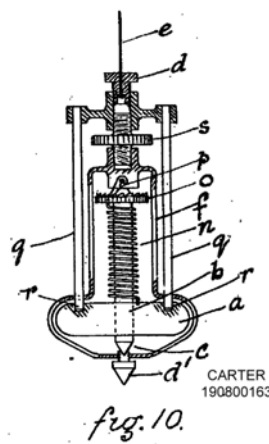
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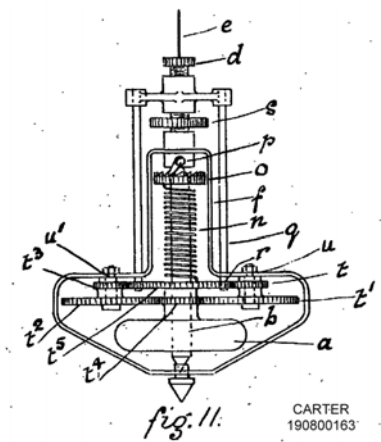
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