Editor: Wolfgang Ruecker



# WR PLUMB BOB NEWS # 2008-12

# 2008-12 Oct. 31, 08







Information for plumb bob collectors

210

plumbbobwolf@t-online.de

### **HUNDRED YEARS OLD PATENTS**

# Happy Birthday!



As a specialist in patents and patented plumb bobs, I feel I must devote at least one issue a year to the subject of patents.

Today we will see those patents celebrating their centennial birthday, issued in the year 1908. These patents were issued for plumb bobs or instruments which incorporate a plumb bob.

Only one of the following patents was mentioned in my WR PATENT NEWS 2007, so the rest is new material to my faithful readers.

GB190800163 CARTER (England) 1908 IMPROVEMENTS IN PLUMB BOBS
US879281 LO CELSO (Illinois) 1908 MEASURING DEVICE FOR TAILORS`USE
US880246 SECHLER (Pennsylvania) 1908 PLUMB AND LEVEL
US880387 MORRILL (Washington) 1908 PLUMB BOB
US885076 OLSON (Olson) 1908 COMBINATION TOOL
US894933 BENSON (Minnesota) 1908 LEVELING DEVICE
US896047 SCHADE (Iowa) 1908 TRAMMEL (used as a PLUMB BOARD)
US899730 HAUNTY (Pennsylvania) 1908 PLUMB RULE AND LEVEL
US902778 TRAUT assignor to Stanley (Connecticut) 1908 PLUMB AND LEVEL (liquid containing level glass adjustment)

I was unable to find pictures of any of these devices that were actually made and have survived the century. Like most ideas that are patented, one is never sure if that idea ever achieved any level of commercial success. Nevertheless these patents remain important artefacts in the evolution of plumb bobs.

If anyone knows one of these instruments, please let me know. Thanks.

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Editor: Wolfgang Ruecker <u>plumbbobwolf@t-online.de</u>

#### GB190800163 CARTER 1908 GYROSTATIC PLUMB BOB

(edited from the original text from WR PATENT NEWS 2007-13)

In summer of 2006 a "GYROSTATIC PLUMB BOB" was offered on Ebay from an Australian seller. At that time research in British patents was most difficult, but with perseverance I was able to match a patent to this most curious device. Now in the collection of Nelson Denny, the following photo's were contributed to give us an idea of this futuristic improvement to the lowly plumb bob.

Anyone who might have owned any version of a gyroscopic toy might expect that the physics of such a device might actually be applied to a plumb bob to dampen its movement and bring it to rest more quickly than a conventional bob.

I believe, however, after testing this unusual device that this is an example of an idea that was not fully tested or found to be practical in use.

(from *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, RECEIVED A LETTER OF PATENT, # DE182855 IN 1904 (UNFORTUNATELY THE PATENT DOCUMENTS

DO NOT INCLUDE DRAWINGS OF THE DEVICE) IT IS CALLED A GYRO-COMPASS WHICH WAS REVISED AND RE-PATENTED AS A THREE-GYRO-COMPASS. (ALSO GB190506359 1905)

#### **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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# Information for plumb bob collectors

Editor: Wolfgang Ruecker plumbbobwolf@t-online.de

N° 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:-

This invention relates to improvements in plumb-bobs used in building, 5 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.

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.

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

weight or weights may be caused to revolve by spinning them by means of a

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

or other suitable means.

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.

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 30 plumb-bob.

Dated this 2nd. day of January, 1908.

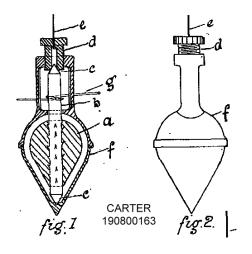
· F. BOSSHARDT & Co., Agents to Applicant.

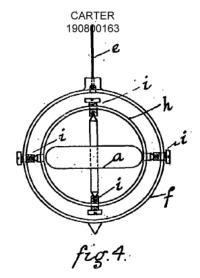
# 2008-12

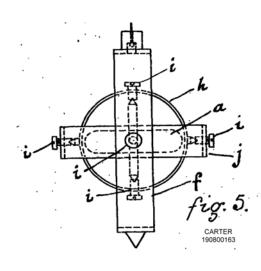
Oct. 31, 08

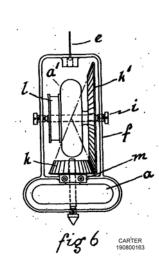
# Information for plumb bob collectors

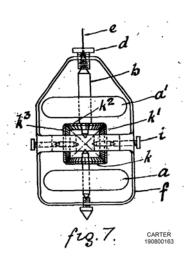
Editor: Wolfgang Ruecker <a href="mailto:plumbbobwolf@t-online.de">plumbbobwolf@t-online.de</a>

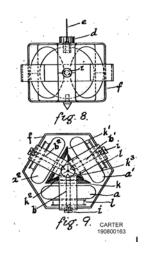


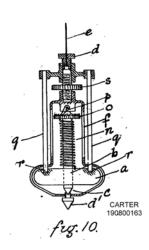


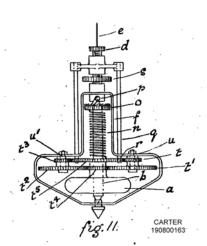












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Editor: Wolfgang Ruecker <u>plumbbobwolf@t-online.de</u>

#### US879281 LO CELSO 1908 MEASURING DEVICE FOR TAILORS'USE

Here we see the use of a plumb bob by a **TAILOR**, one of the more unlikely trades to find use for a plumb bob.

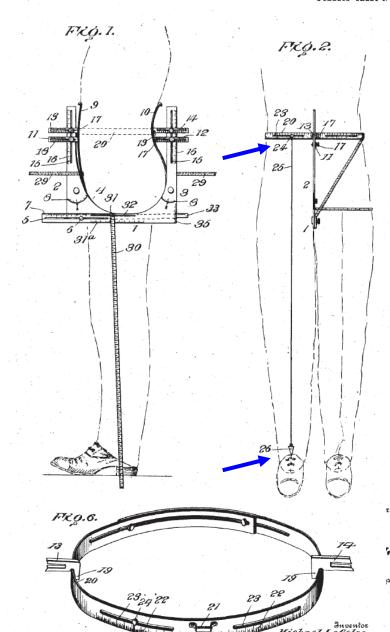
No. 879,281.

M. LO CELSO.

MEASURING DEVICE FOR TAILORS' USE.

APPLICATION FILED MAB. 14, 1907.

2 SHEETS-SHEET 1.



Certainly if the Tailor allows the plumb bob to get out of his control to fall on your foot, a most unusual lawsuit would have to be filed.

Be it known that I, MICHAEL LO CELSO, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Measure Devices for Tailors' Use, of which the following is a specification.

This invention contemplates certain new 10 and useful improvements in measuring devices for the use of tailors and has particular reference to the measuring of trousers.

The invention has for its object an apparatus by which the tailor may obtain all of the main measurements of a customer for a pair of trousers and which may be used to obtain the measurements very quickly and with a minimum degree of adjustment, the device being designed to be applied to the cloth after it has been set for a customer's measurements so that the cloth may be cut from such measurements directly from the device as a pattern.

This installation is especially made to take all the main measurements of a customer in order to make a pair of trousers.

When was the last time you went to a tailor to have a pair of trousers made?

tudinal slots 23. Within each of these slots is a button or stud 24 which is mounted to slide along its respective slot and which has suspended from it a plumb line 25 to the lower end of which a bob or weight 26 is secured. These plumb lines are adapted to extend down in front of the person's legs, so that the proper position for the crease of the trousers may be determined, it being obvious that the line may be moved laterally in one direction or the other by means of the sliding stud 24 in the slot 23.

25

Witness

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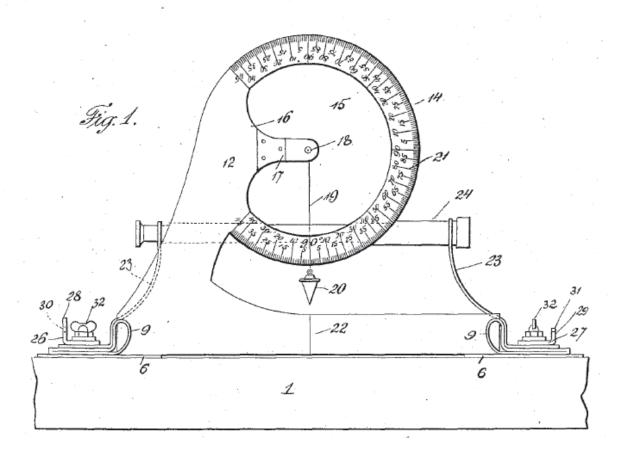
Editor: Wolfgang Ruecker <a href="mailto:plumbbobwolf@t-online.de">plumbbobwolf@t-online.de</a>

#### US880246 SECHLER 1908 PLUMB AND LEVEL

No. 880,246.

PATENTED FEB. 25, 1908.

J. SECHLER.
PLUMB AND LEVEL.
APPLICATION FILED AUG. 10, 1907.



To all whom it may concern:

Be it known that I, Jacob Sechler, a citizen of the United States of America, residing at Economy, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Plumbs and Levels, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to combined plumbs and levels, and the invention has for its object to combine a plumb and level into a useful instrument for carpenters, masons and similar artisans.

Briefly described, my improved instrument consists of a bar or body upon which is mounted a plumb attachment, a telescope attachment, and a sighting attachment, these attachments being secured to the bar 20 or body of the instrument, whereby either or all of said attachments can be used.

carrying a plumb line 19, the lower end of which is provided with a plumb bob 20. The

In this instrument, a simple plumb bob is employed to check the reading on the spirit vial. This appears to be a statement on the rather primitive nature of spirit vials manufactured at that time. It shows that in 1908 some years after the first use of spirit vials (air bubbles) the plumb bob seems the better choice. Then there were problems with the fabrication of the vials and with their installation in the instrument.

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#### **US880387 MORRILL 1908 PLUMB BOB**

No. 880,387.

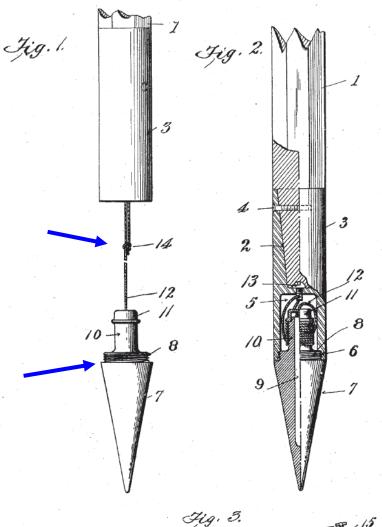
Witnesses

e. A. Davies

PATENTED FEB. 25, 1908.

D. O. MORRILL. PLUMB BOB.

APPLICATION PILED MAY 10, 1907.



The slip knot, #14, will be explained in an upcoming newsletter.

#### plumbbobwolf@t-online.de

Be it known that I, DON O. MORRILL, of Spokane, in the county of Spokane and State of Washington, have invented a cer-5 tain new and useful Plumb-Bob, of which the following is a specification.

The invention relates to the combination of a plumb-bob with a pole used in surveying, in such manner that the bob may either 10 form the point of the pole or may be dropped from the end of the pole by means of a string. and form an extension of the pole, for purposes which will hereafter appear.

This is a combination of a plumb bob and a surveyor's rod (pole). The plumb bob is screwed in the

I would like to know if anyone of you has seen such a plumb bob with the screwthreads #8 on the shoulder.

Or is there a collector of surveying instruments who has such a rod and did not know that there is a plumb bob inside? I am not sure if this tool was ever produced.

The plumb-bob 7, which is shaped so 30 as to form a suitable point for the pole, has screw-threads 8 at its top which engage screw-threads 6 so as to removably secure the bob in the tip. The bob may be made hollow as at 9 and filled with lead if desired.

40 trally perforated. A cord 12 is passed through the perforation in the cap and knotted before the cap is screwed onto the shank, this device forming the attachment of the cord with the bob. With the bob in 45 the position shown in Fig. 2 the cord is pref-

erably coiled around the shank and run through an eyelet in a screw 13 centrally located in the top of socket 5, the end of the cord being slip-knotted around the cord as 50 at 14, Fig. 1.

the ordinary length of pole is insufficient to 55 serve the purpose as, for instance, in a location indicated by diagrammatic Fig. 3, the plumb-bob is unscrewed from the tip and dropped to a length adjustable by means of slip-knot 14 so as to form an extension of 60

1. The combination of a surveyor's pole having a socket at one end, a plumb bob screwed in the socket and forming a remov- 80 able closure therefor, and a cord adjustably connecting the plumb bob and pole and contained in the socket when the bob is screwed therein.

Brock, Bekens Suit

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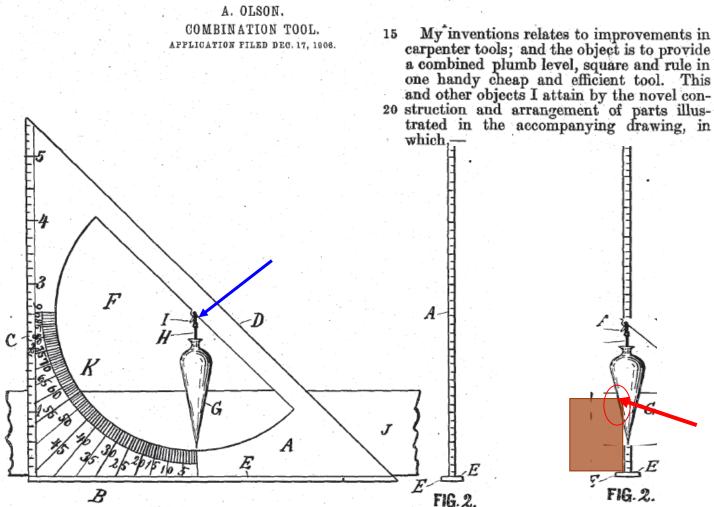
# Information for plumb bob collectors

Editor: Wolfgang Ruecker <u>plumbbobwolf@t-online.de</u>

#### **US885076 OLSON 1908 COMBINATION TOOL**

No. 885,076.

PATENTED APR. 21, 1908.



### Plumb bob

G, whose point moves close to the scale of degrees. Said plumb bob is suspended by a short cord or string H and a hook I, the cord serving to insure full freedom of the bob to hang in a perfectly plumb position, in contradistinction to the much used pivots whose friction hinders free hanging of the bob in similar tools; and the hook being to make the bob detachable so that it may be easily 55 removed when not needed for some time.

FIG.1.

I have great doubts that this instrument works for the measurement of wooden pieces. The plumb bob is simply too thick to swing freely; it appears to touch wood, "J." Thus, the resulting measurement would be crude at best.

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Editor: Wolfgang Ruecker <a href="mailto:plumbbobwolf@t-online.de">plumbbobwolf@t-online.de</a>

#### **US894933 BENSON 1908 LEVELING DEVICE**

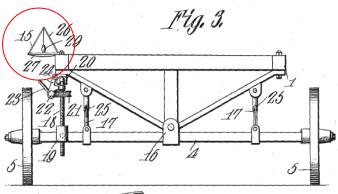
No. 894,933.

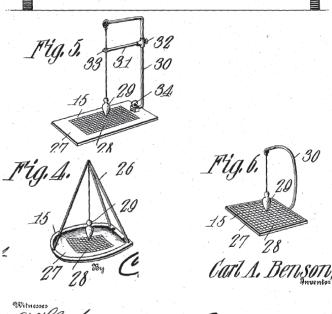
C. A. BENSON.

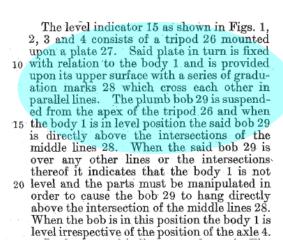
LEVELING DEVICE.

APPLICATION FILED JAN. 23, 1908.

2 SHEETS—SHEET 2.









Hard to believe, but here we have the greatgrandfather of the instruments in today's SUV. (see below)

The plumb bob would tell you when you had to crank the frame to level when the wheels and axels were on uneven terrain.

This invention has relation to leveling devices for threshers and similar machines and

10 it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a simple and an effective means for leveling a 15 thresher or similar machine upon uneven ground and it consists primarily of a means for turning an axle under the body or sills of the machine in such manner as to compensate for the uneven nature of the surface of 20 the ground so that the axle may lie in a plane parallel with the surface of the ground while the body or sills of the machine will be level. An indicating means is mounted upon the body or sills and is intended to show when 25 the said body or sills are in a level position.

3 is an end elevation of a portion of another form of thresher showing a modified form of the invention applied thereto. Fig. 4 is a perspective view of one form of level indicator used upon the thresher. Fig. 5 is a detail perspective view of another form of level indicator, and Fig. 6 is a detail perspective view of still another form of level indicator.



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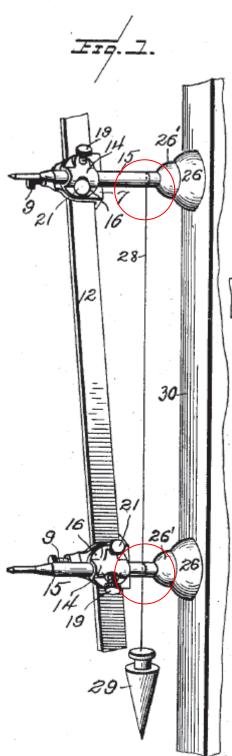
# US896047 SCHADE 1908 TRAMMEL (used as a PLUMB BOARD)

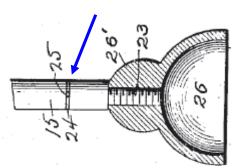
No. 896,047.

PATENTED AUG. 11, 1908.

C. H. SCHADE. TRAMMEL.

APPLICATION FILED MAR. 10, 1908.





It is a trammel (Circle rod), that can also be used as a plumb board. I don't believe that in practice, the recess in the lower rod, # 15 is sufficiently large. In this drawing, one could only measure very low angle deviations.

- This invention relates to certain new and useful improvements in trammels and has for its main object to provide a trammel which may be used for all the purposes of an ordinary trammel, and which may also be used as a plumb board, or surface gage.
- 25In Fig. 1 of the drawings, I have shown how the trammel as employed by me may be advantageously used as a plumb board. It is for this purpose that I provide the trammel points with the annular groove 24 and 30 the transverse opening 25. In practice, it is preferably desirable to make the opening 25 in one of the trammel points larger in diameter than the opening in the other trammel point. The trammel point having the 35 smaller diameter opening 25 will have the plumb line 28 secured thereto, and this plumb line will be passed through the opening 25 in the other trammel point, the plumb line 28 having the bob 29 suspended there-

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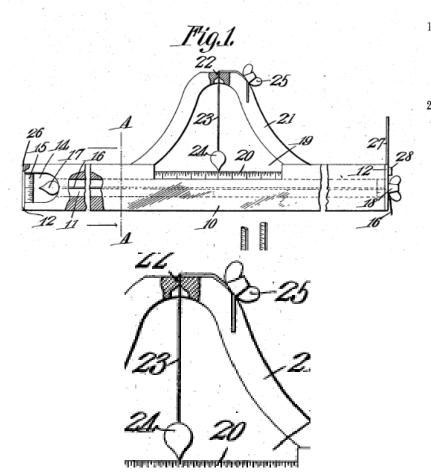
Editor: Wolfgang Ruecker <a href="mailto:plumbbobwolf@t-online.de">plumbbobwolf@t-online.de</a>

# US899730 HAUNTY 1908 PLUMB RULE AND LEVEL

E. M. HAUNTY.
PLUMB RULE AND LEVEL.
APPLICATION FILED JUNE 9, 1908.

899,730.

Patented Sept. 29, 1908.



This invention relates to plumb rules and levels of the type commonly used by carpentus, builders, contractors and others.

One object of the invention is to improve the general construction of such a device.

Another object of the invention is to provide a plumb rule and level with a means whereby grades, batters, and the like may readily be set off or measured.

A still further object of the invention is to provide a plumb rule and level which shall be free from the objectionable features incident to the employment of an air bubble as a means of leveling.

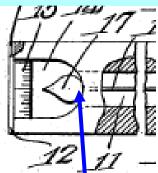


plate 12. The passage diameter than the plumb bob 17 and when it 70 is desired to render the plumb bob 17 and when it 70 is desired to render the plumb bob inoperative the thumb that 18 is loosened and the cord is pulled towards the suspension end of the body and the thumb nut again locked thereon. This brings the plumb bob against 70 the mouth of the recess 11 and holds it there inactive. Furthermore, the thumb nut 18 allows for the adjustment of length of the cord so that the point of the plumb bob is nearly but not quite in contact with the 80 scale 15.

This is a combination of a plumb level and a plumb board, equipped with 2 plumb bobs.

Most interesting is the reason stated for the need for this "improvement." "A STILL FURTHER OBJECT OF THE INVENTION IS TO PROVIDE A PLUMB RULE AND LEVEL WHICH SHALL BE FREE FROM THE OBJECTIONABLE FEATURES INCIDENT TO THE EMPLOYMENT OF AN AIR BUBBLE AS A MEANS OF LEVELING"

At this time they had difficulty attaching spirit vials correctly in instruments. That was an obstacle for the flush of victory of the "spirit level".

(See also patent of TRAUT on the next page)

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# Information for plumb bob collectors

Editor: Wolfgang Ruecker

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US902778 TRAUT assignor to Stanley (Connecticut) 1908 PLUMB AND LEVEL (liquid containing level glass adjustment)

# UNITED STATES PATENT OFFICE.

JUSTUS A. TRAUT AND FRANK L. TRAUT, OF NEW BRITAIN, CONNECTICUT, ASSIGNORS TO STANLEY RULE & LEVEL COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

PLUMB-LEVEL.

No. 902,778.

Specification of Letters Patent.

Patented Nov. 3, 1908.

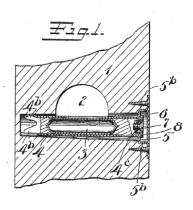
Application filed April 8, 1908. Serial No. 425,804.

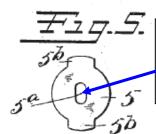
Sure this is not a plumb bob patent, but a patent for a "liquid containing level glass" with adjustment, but it has a relation to plumb bob history.

What is of interest in the patent? The inventor Justus A. Traut (inventor of the most famous friction reel plumb bob, patented in 1874), invents an improvement to the liquid levelling vial which in many levelling devices supplants, the need for plumb bobs all together. In the 1908 patent Justus Traut's son Frank L. Traut is mentioned. The Traut plumb bob from 1874 is, in my opinion, the best plumb bob ever made for many trades; most work well even after 130 years.



902,778.





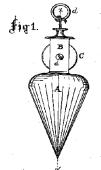
With this slot they could correct the position of the glass.

# UNITED STATES PATENT OFFICE.

JUSTUS A. TRAUT, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY RULE AND LEVEL COMPANY, OF SAME PLACE.

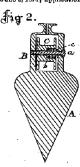
#### IMPROVEMENT IN PLUMB-BOBS.

Specification forming part of Letters Patent No. 151,521, dated June 2, 1874; application filed



Be it known that I, Justus A. Thaut, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Plumb-Bobs, of which the following is a specification:

In my plumb-bob a frame extends above the body of the plumb, and within which frame there is a friction-spool, the edges of which project at two sides of the frame; and the central upper portion of said frame is provided with a hole, through which a cord passes to the barrel of the spool, all as hereinafter described.



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If any reader owns or has seen any of these devices, I would be very interested in hearing about it.

UNITED STATES PATENTS can be downloaded from GOOGLE
<a href="http://www.google.com/advanced\_patent\_search">http://www.google.com/advanced\_patent\_search</a>

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