

# WOLF'S PLUMBOB NEWS 2009

Issue 10 Oct. 1, 2009

## UPDATE PLUMB BOB PATENTS

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[www.plumbbob.de](http://www.plumbbob.de)

### SOME NEW PATENTS ABOUT PLUMB BOBS

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#### A INTRODUCTION:

Dear Reader, Fellow Collector,

In 2007 I published over 50 issues about patented plumb bobs. Since then, I continue to find new patents of interest. This issue, I offer as an appendix to WR PATENT NEWS from 2007.

Below you find details of the following US patents:

- D377454 PLUMB BOB (Design patent USA ) 1997 John Littleboy
- 5720112 ASYMMETRICAL PLUMB BOB AND METHOD (USA) 1998 Daniel T. Adams et al.
- 151521 PLUMB-BOBS (USA) 1874 Justus A. Traut
- 562678 MACHINE FOR GRADUATING GLASSES OR TUBES (USA) 1896 Justus A. Traut & Christian Bodmer
- 128513 IMPROVEMENT IN SPIRIT LEVELS (USA) 1872 Justus A. Traut
- 2552173 FISH LURE AND HOOK RETRIEVER (USA) 1951 Michael D. Consolo et al.
- 3405450 PLUMB BOB (USA) 1968 Reginald T. PEACOCK
- 7278220 PLUMB BOB WITH ADJUSTABLE WEIGHTS (USA) 2007 LIN

You can see the original patents using the website (fill in the patent number)

[http://www.google.com/advanced\\_patent\\_search](http://www.google.com/advanced_patent_search)

#### B 1 PLUMB BOB BARBARA

In the WOLF'S PATENT NEWS issue 2007-26 I described the US patent US 5720112 ADAMS 1998 "Plumb bob BARBARA"

"Asymmetrical plumb bob and method" (see: [www.plumbbob.de](http://www.plumbbob.de) )

As you may know, in the Unites States there are two types of patents, "Patents" that deal with new ideas of function and use, and "Design Patents" that deal specifically with the physical form of a new idea. This inventor obviously felt that the physical perfection of his idea of Barbara's endowment was worth patent protection, both for his scantily clothed model for the prudish and fully nude model for the true men of this world.



**United States Patent** [19]  
**Littleboy**

[11] **Patent Number:** **Des. 377,454**  
[45] **Date of Patent:** **\*\*Jan. 21, 1997**

[54] **PLUMB BOB**

[75] **Inventor:** John Littleboy, San Francisco, Calif.

[73] **Assignee:** DWBH Ventures Ltd., Nassau, Bahamas

[\*\*] **Term:** 14 Years

[21] **Appl. No.:** 44,352

[22] **Filed:** Sep. 22, 1995

[52] **U.S. Cl.** ..... **D10/65**

[58] **Field of Search** ..... D10/65; D11/160;  
33/369-373, 391-394

D. 128,194 7/1941 Rosetta ..... D11/160  
2,502,598 4/1950 Seligman ..... D11/160 X  
3,710,507 1/1973 Puynter ..... D11/160 X

*Primary Examiner*—Antoine Duval Davis  
*Attorney, Agent, or Firm*—Fliesler, Dubb, Meyer & Lovejoy

[57] **CLAIM**

The ornamental design for a plumb bob, as shown and described.

**DESCRIPTION**

FIG. 1 is a front elevational view thereof;  
FIG. 2 is a rear elevational view thereof;  
FIG. 3 is a left side elevational view thereof;  
FIG. 4 is a right side elevational view thereof;  
FIG. 5 is a top plan view thereof; and,  
FIG. 6 is a bottom plan view thereof.

[56] **References Cited**

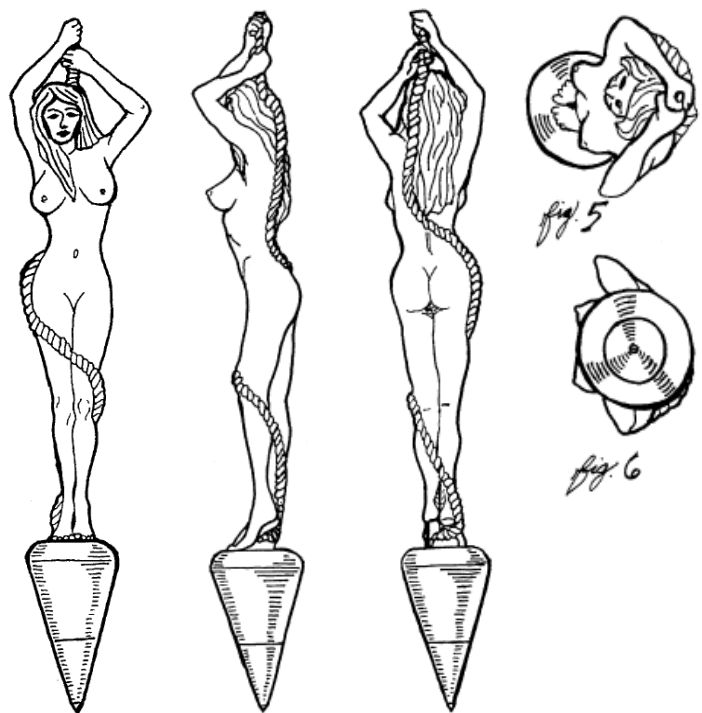
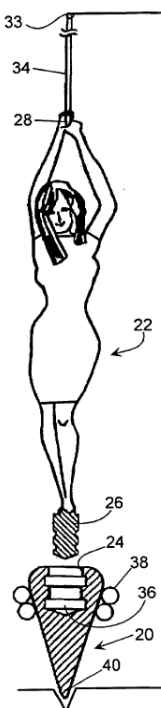
**U.S. PATENT DOCUMENTS**

D. 59,559 11/1921 MacQuarrie ..... D11/160  
D. 84,856 8/1931 Shulman ..... D11/160

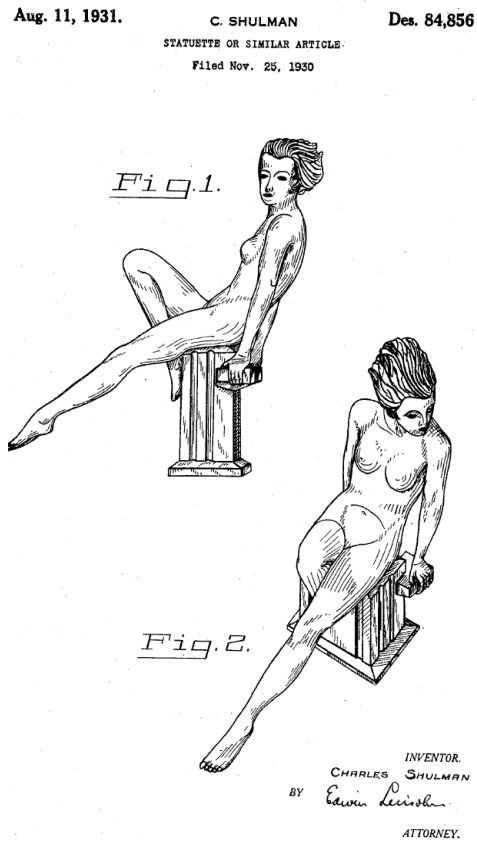
**1 Claim, 2 Drawing Sheets**

From left to right:

- Drawing from the original patent US 5720112 (totally dressed)
- Sold with hot pants; (also sold not dressed).
- -drawings from the Design Patent.

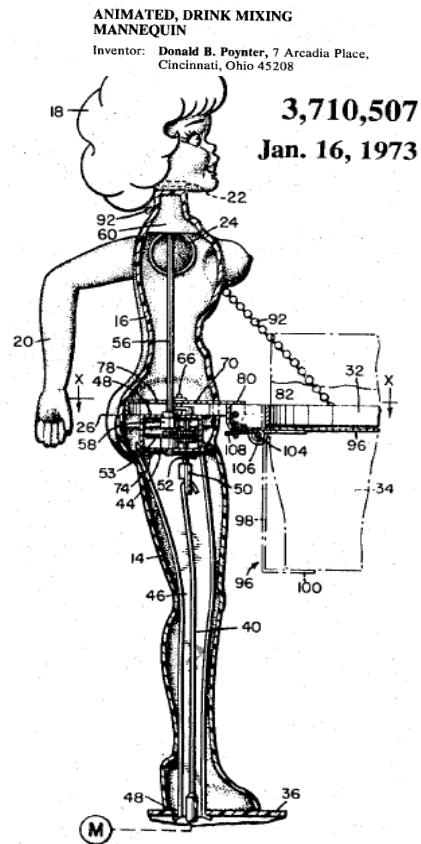
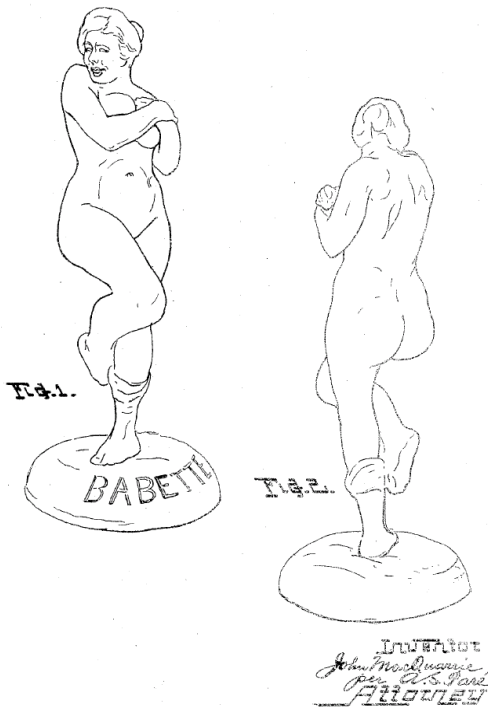


The US Patent Office lists similar preceding patents, (see "References Cited US Patent Documents" above). Here are the earlier rival "forms" of this design patent:



**DESIGN.**  
J. MacQUARRIE,  
STATUETTE.  
APPLICATION FILED APR. 24, 1920.  
Patented Nov. 1, 1921.

59,559.

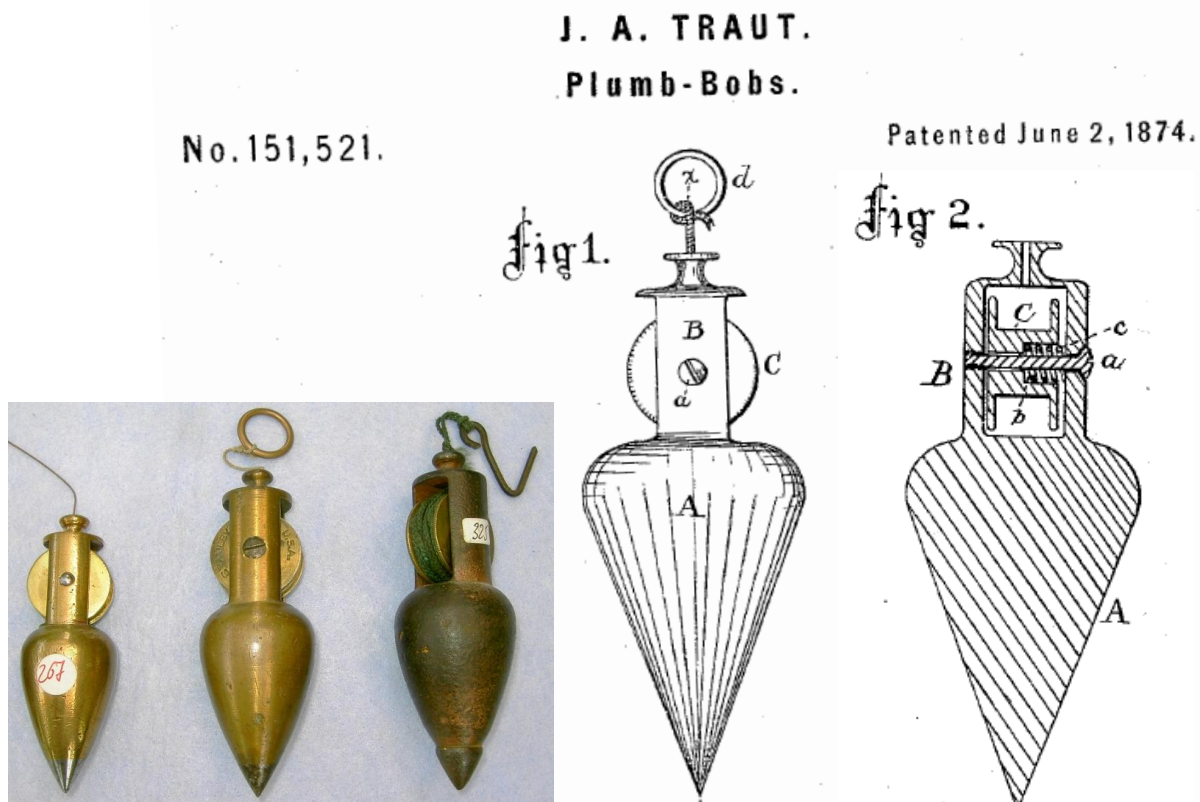


The United States Patent Office, in granting this patent, must have seen "Barbara" as being an improvement on the more Rubinesques or doll-like predecessors! I would agree, although my wife fails to see the advantage:



## B 2 Inventor JUSTUS A. TRAUT

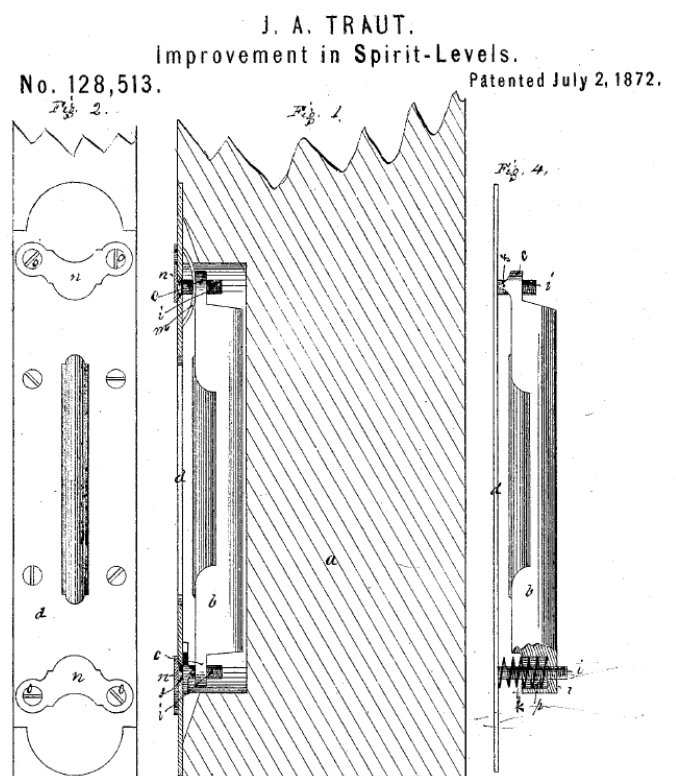
One of the most famous plumb bobs is the patented STANLEY/TRAUT from 1874 Patent US 151521 "IMPROVEMENT IN PLUMB BOBS"



The inventor Justus A. Traut was assignor to the Stanley Rule and Level Co in Hartford Connecticut. More about this item with details see my WOLF'S PATENT NEWS 2007-32

Recently I found another Traut patent, where in the text he identifies many problems with the manufacture of the glass vials of levels at that time. No doubt, the problems of production of uniform vials, and the companion problem of a mounting for the vials in the level that would allow for calibration, is at the core of the reason why vials didn't overtake the function of the plumb level (with plumb bob) immediately. Although the level with vial was invented as early as 1850, (Locke, COLLIMATING LEVEL pat US7477 July 2, 1850), plumb levels remained in common use until 1930. No doubt, the higher cost, perceived accuracy, and the high probability of breakage of the early spirit levels, factored into the equation of their immediate acceptance.

The inventor of the famous "Stanley REEL PLUMB BOB", patent date 1874, Justus A. Traut had already been issued a patent, July 2, 1872, patent number US128513 for "Improvements in Spirit Level". Clearly, his creative thinking was not wed entirely to the preservation of the simplicity of plumb bob used in the plumb level. ☺



In his patent US562678 MACHINE FOR GRADUATING GLASSES OR TUBES June 23, 1896 Traut wrote about the **problems with the vials at that time:**

*“This invention relates to machines or apparatuses for marking or graduating glasses or tubes such as level glasses or tubes; .....the object of the invention is to provide a simple and effective machine or apparatus, whereby the required graduation or indicating mark or marks for indicating the position of the bubble can properly and accurately made upon the glass or tube without the necessity of first surveying the same in order to find the proper circumferential position for the mark in the manner heretofore required.*

**PROBLEMS**

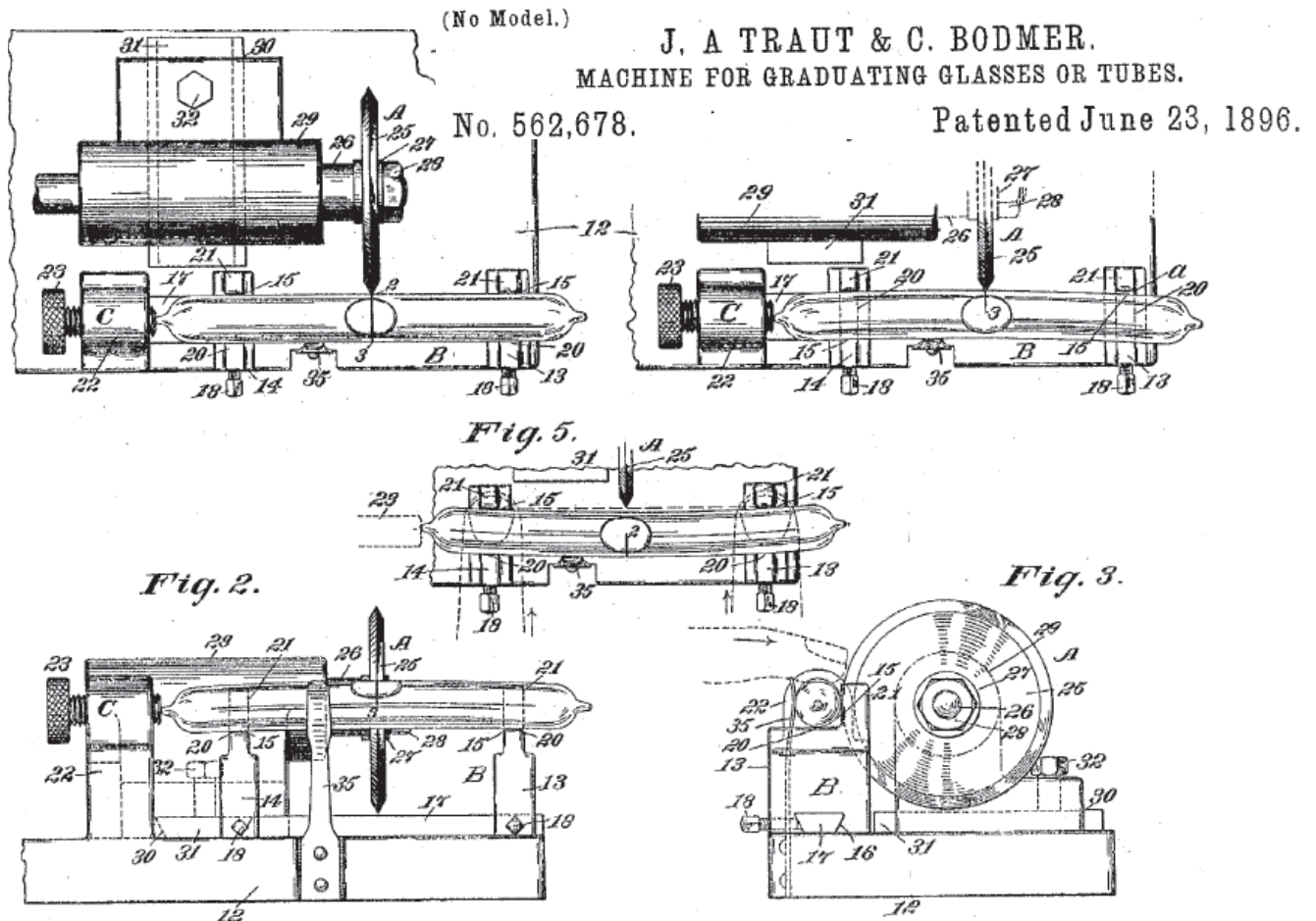
*“According to the method of marking level glasses or tubes, as heretofore practiced, the glasses are first surveyed by the operator, to find the highest point thereof, which step is necessary, owing to the fact that the glass tubes are not only oftentimes of different and varying proportions and degrees of precision, but, as ordinarily used in levels, are longitudinally curved, owing to the impossibility of obtaining perfectly-formed glasses, and when the highest point is obtained by such survey the glass is usually marked by file to indicate such point, and is then held by the operator in position to have the marking-tool place a graduating or indicating mark thereon. This manner of first finding the highest point, then indicating the same, and then marking the tube, not only requires considerable time and labor, and is, therefore, expensive, but depends solely upon the expertness and skill of the operator to determine the exact points at which the ends of the mark are to stop on opposite sides of the tube; ....”*

**SOLUTION**

*In order, therefore, to obviate these serious disadvantages in the marking of level-glasses or similar tubes, we have provided an improved machine or apparatus by means of which the highest point of the glass will be automatically found and marked simultaneously with its indicating or graduating mark or line.....”*

I think the text above states succinctly the challenge of that era of tool manufacture, the problems inherent in making and mounting vials in spirit levels.

Here are the drawings without text. If you want to know more about his invention, see the full patent.

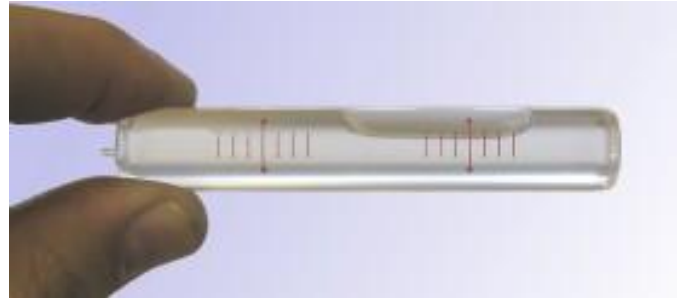


Today, spirit level vials are not always curved both inside and out as they were originally (that is, bent from a glass tube with a uniform wall thickness); rather, the vials are sometimes made cylindrical outside and curved inside.

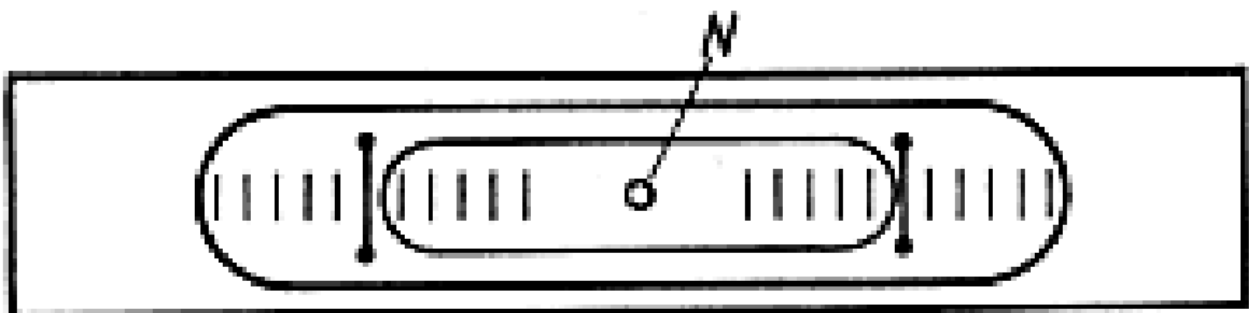
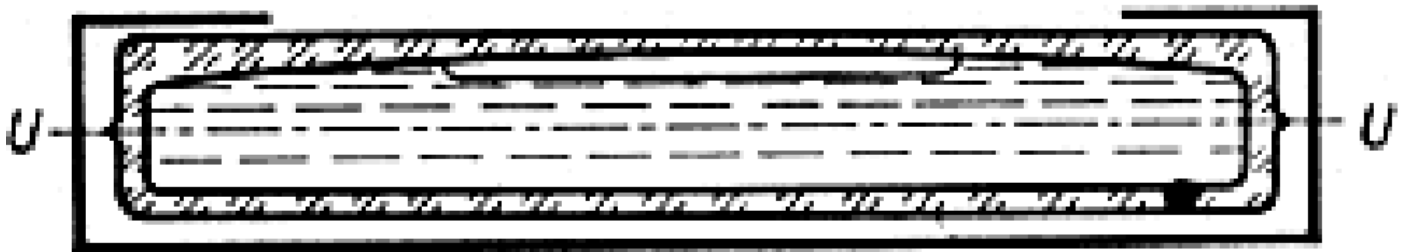
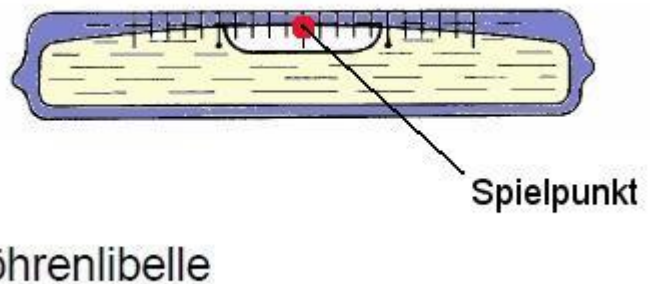
Level Developments Ltd, 97-99 Gloucester Road, Croydon, Surrey, CR0 2DN, United Kingdom  
 tel: +44 (0)20 8684 1400 fax: +44 (0)20 8684 1422 email: [sales@leveldevelopments.com](mailto:sales@leveldevelopments.com)  
 I found on their website <http://www.leveldevelopments.com/ground-bubble-vials.htm>

*“Theory of operation:*

*All of our ground spirit level vials are made from glass tubing which is ground internally to form a barrel shaped radius. The principal of operation is that the bubble will move to the highest point of the radius as gravity acts on the liquid inside the vial. This is explained in more detail on our page explaining sensitivity. The radius is usually quite shallow which enables the vials to detect smaller angles than the plastic type vials. We can grind radiuses from 500mm up to 100m long in order to produce vials with a range of sensitivity from 15' (arc minutes) to 4" (arc seconds). Although the sensitivity is determined entirely by the radius of curvature inside the vial, for very sensitive vials it is necessary to maintain a minimum size to ensure that the bubble can move freely without sticking inside the tube. We can offer advice on the best size, sensitivity and liquid type for your application. We also offer Tritium illuminated levels (also known as Betalights or Trasers) which require no power supply, have a life of up to 20 years and enable the bubble position to be clearly visible in the dark. Please contact us for more details”*



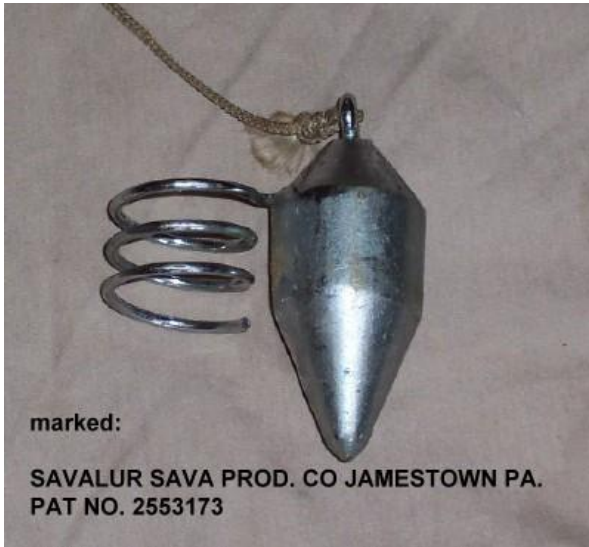
*Perhaps you never thought about the problems of making vials, when using your spirit level? ☺*





## B 3 FISH LURE AND HOOK RETRIEVER

Recently a seller offered on ebay a “Vintage Savalur Sava Nickel Brass Plumb Bob Tool PA Old” with the picture below:

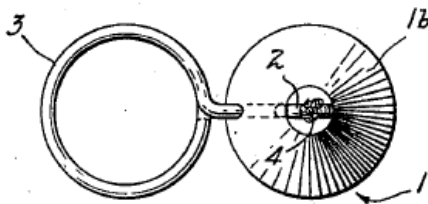


It was clear, that this was not a true plumb bob, because this coiled wire was fixed to the body and the combination was asymmetric.

A quick search in the patent data base of the US Patent Office solved the problem. Consider this concept carefully if you are a fisherman inclined to lose a lot of expensive hooks and lures:

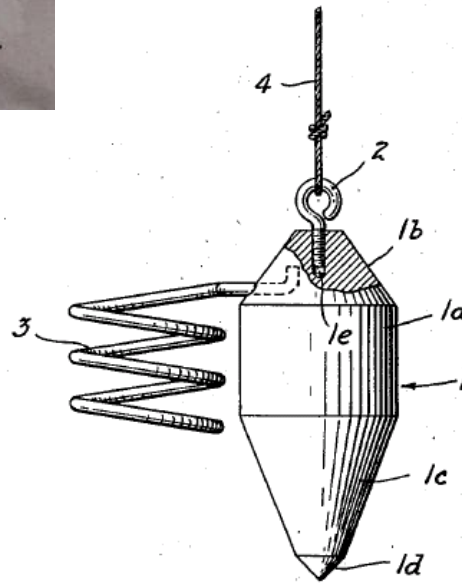
It is a **FISH LURE AND HOOK RETRIEVER.**

In Germany we say, “PETRI HEIL”, if we want to wish a fisherman luck. This translates as:  
 Good Fishing,  
 Make a good catch,  
 Land a big one,  
 Good luck for fishing,  
 Tight lines!

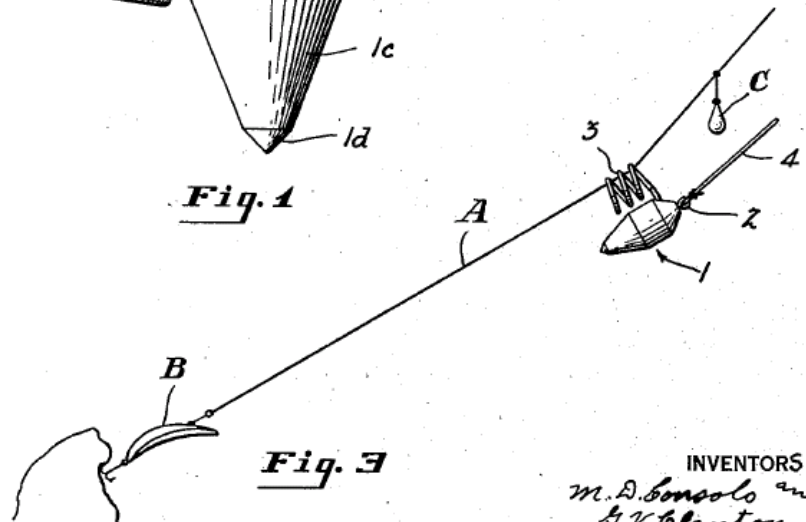


**Fig. 2**

Patented May 15, 1951



**Fig. 1**



**Fig. 3**

INVENTORS  
*M. D. Consolo and*  
*G. V. Clanton*  
 BY *Ray A. Kehr*  
 ATTORNEY

## UNITED STATES PATENT OFFICE

2,553,173

### FISH LURE AND HOOK RETRIEVER

Michael D. Consolo, Wilksburg, and George V. Clanton, Jamestown, Pa.; said Consolo assignor to said Clanton

Application July 25, 1947, Serial No. 763,484

3 Claims. (Cl. 43—17.2)



## PLUMB PRETTY

**T**he plumb bob is an ancient tool. Used in conjunction with various wood frames, the plumb bob has great historical significance in laying out and testing work for accuracy. The ancient Egyptians suspended the plumb bob from a line in an A-frame; the two legs were the same exact length, and the center of the crossbar was scored. When the frame was properly set on a surface and the string

aligned with the score on the crossbeam, the work was true. The Romans inherited the A-frame tool from the Egyptians, and beautifully-turned bronze plumb bobs have been found at Pompeii. Besides the A-frame, plumb bobs were also used with wooden squares and straight, upright boards.

### KNOWS NO BOUNDS

Unlike most other woodworker's tools, plumb bobs are not bound by use to just

one trade. Throughout history carpenters and builders, masons and miners, gunners and sailors, surveyors and well diggers have built, dug, sailed and fired on their enemies aided by plumb bobs.

Plumb bobs can be beautifully intricate brass turnings, or merely functional, pear-shaped cast iron or lead. In home use, a

plumb bob plumbs a point between floor and ceiling, and usually requires two people — one to hold the line on its mark, the other to steady the bob. In searching for a used plumb bob, try to find one without nicks, and with the point undamaged and true.

Sources include *The History of Woodworking Tools*, by W. L. Goodman, David McKay Company, Inc., New York, publishers.

Photographed by John Brewer Photography at George Whiting's American Heritage Tool Museum in Lees Summit, Missouri.

This page from a journal also shows this “mysterious plumb bob” in a collection of plumb bobs.



## B 4 PLUMB BOB invented by R. T. PEACOCK 1968

In WOLF'S PATENT NEWS 2007-17 about "FIX THE STRING" I showed the patent from 1968:

3,405,450  
**PLUMB BOB**  
 Reginald T. Peacock, 5561 Lower Wyandotte Road,  
 Oroville, Calif. 95965  
 Filed July 18, 1966, Ser. No. 565,949  
 3 Claims. (Cl. 33-217)

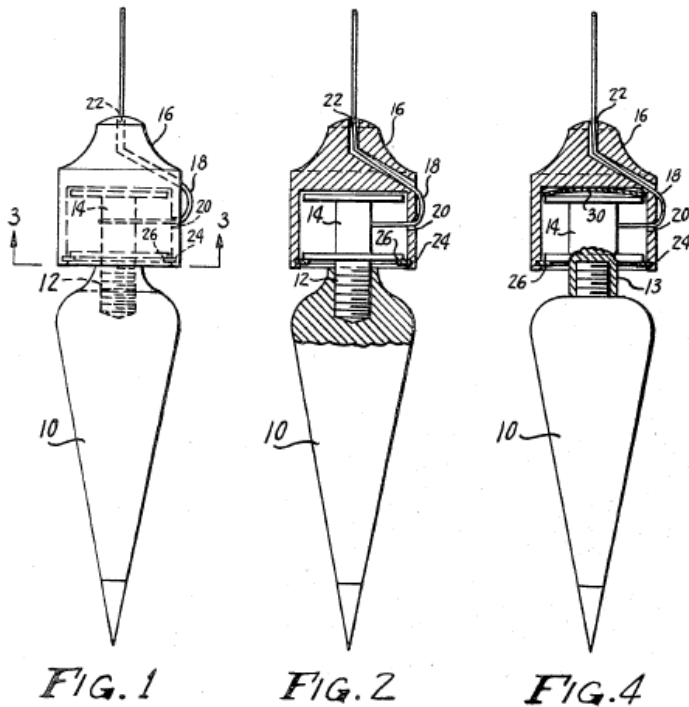
### ABSTRACT OF THE DISCLOSURE

A plumb bob comprising a spool within a cap for winding the plumb line thereon. The plumb body is secured to the cap by a ring positioned under the spool. Bias means are provided between the upper surface of the spool and the cap to maintain a desired resistance to unwinding of the spool.

Oct. 15, 1968

R. T. PEACOCK  
 PLUMB BOB  
 Filed July 18, 1966

3,405,450



Some ideas from the original patent:

*"This invention relates to a plumb bob and in particular, to a plumb bob having means for winding and unwinding the plumb line included therein and allowing for fractional adjustment of the height at the plumb bob.....which has a minimum of moving parts and is therefore more dependable than the plumb bobs of the prior art.....to provide an enclosed storage space for said plumb line to avoid injuring or entangling of said plumb line when the plumb bob is not in use.....It is further object of this invention to provide an improved plumb bob cap and spool that will adapt to any standard plumb bob....."*

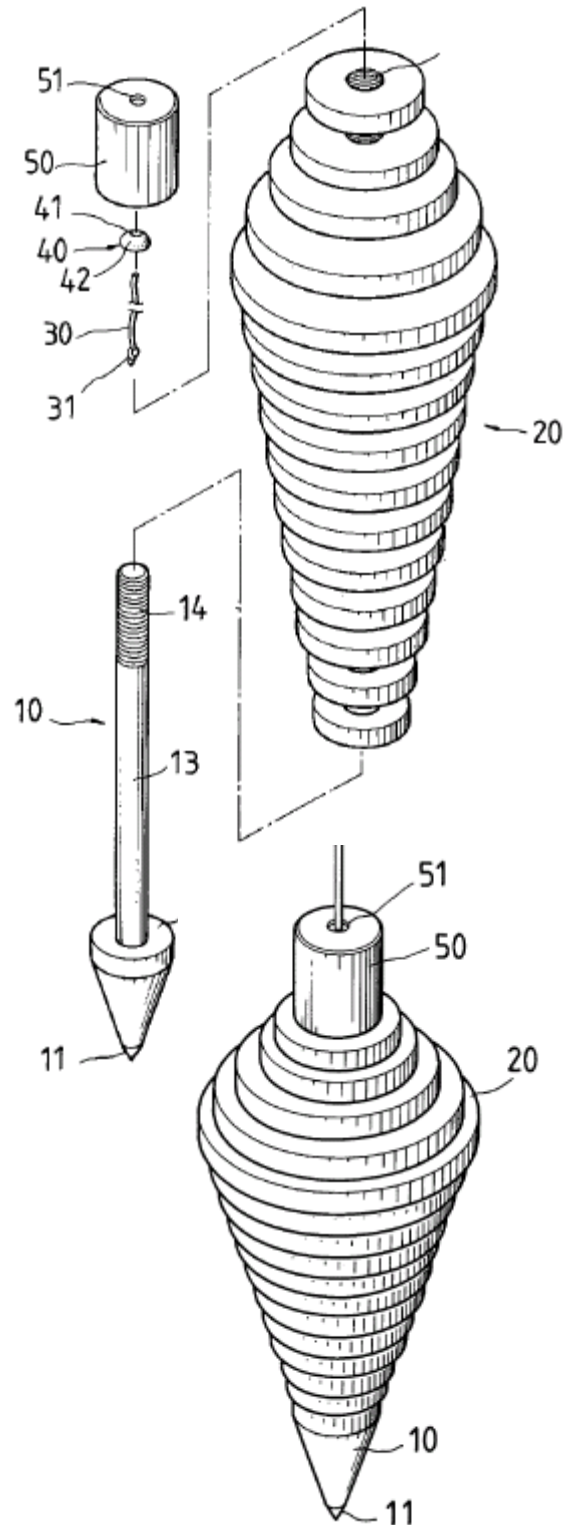
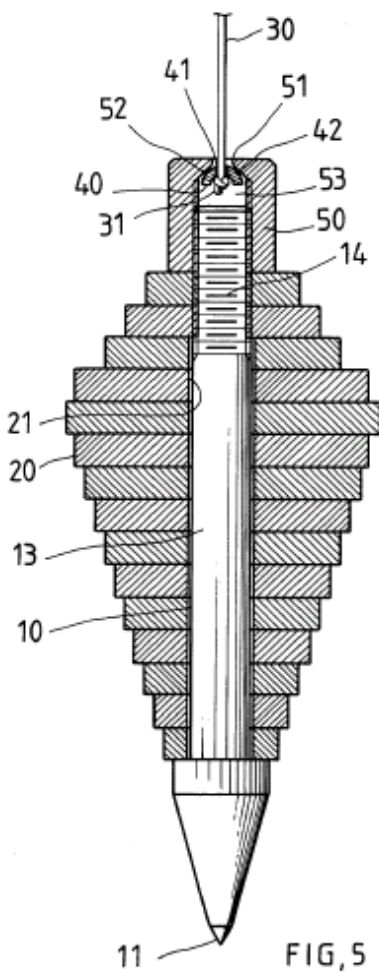
Do you have such a patented part in your collection? Please let me know.

## B 5 PLUMB BOB PATENT from 2007

If you think, that the inventing of plumb bobs has ended now, you are wrong. Oct. 9, 2007 a patent US 7,278,220 was granted to YOU TEN LIN for a PLUMB BOB WITH ADJUSTABLE WEIGHTS. Perhaps you can buy it in the next years in a tool shop.

(57) **ABSTRACT**

A plumb bob with adjustable weights for suiting different applications is disclosed that includes, in one embodiment, a bottom point; a shank extended upward from the point and having a lower portion and an upper threaded section; hollow first weight elements adapted to put on the lower portion of the shank and rested upon the point; hollow second weight elements having an axial threaded hole and being adapted to put on a portion of the threaded section of the shank to threadedly secure thereto with the first weight elements being fastened thereunder; a hollow projecting knob including an axial bore having lower threads and a top shoulder; and a string including a bottom knot engaged with and stopped at the shoulder. The knob is adapted to threadedly secure to the remaining portion of the threaded section of the shank.



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