## WOLF'S PLUMB BOB NEWS 2014

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# PLUMB BOBS OF THE WORLD part 2 North- and South America

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Dear Fellow Collector, Dear reader of the PLUMB BOB NEWS, As always, I am searching for new material and information associated with plumb bobs. Please feel free to share new photos, catalogs, articles or stories of a personal nature. I welcome input from fellow collectors! Wolf

# PLUMB BOBS OF THE WORLD part 2 America

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In the last newsletter **part 1 Europe** I listed the shapes from GERMANY, AUSTRIA, SWITZERLAND, FRANCE, ITALY, ROMAN PLUMB BOBS, PORTUGAL, SPAIN, THE NETHERLANDS, BELGIUM, SCANDINAVIA, GREECE, BULGARIA, and POLAND

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In the following part 3 I will talk about:

ENGLAND (with the colonies), TURKEY (Ottoman and Anatolian PBs), EGYPT, RUSSIA, CHINA (ASIA) etc.

#### 1. INTRODUCTION

Contrary to the European countries that were discussed in the last newsletter, there are in the United States a large variety of different forms and types. This is related to the size of the country and with the many construction projects in rebuilding the country. Specialist for American plumb bobs, especially for marked plumb bobs of professional manufacturers is my friend Riccardo Chetoni from Italy. He will try for the next collectors meeting in June 2014 in Pisa to finish his book - which will be available as a CD - on American plumb bobs. With the general overview in this newsletter only a very small part of the knowledge of U.S. plumb bobs will be shown. If you are interested in more information, please contact Riccardo Chetoni or Wolf Ruecker.

#### **REMARK:**

More details about the plumb bobs in this newsletter (and many more) you will find on my web site <u>www.plumbbobcollectors.info</u> on subpages "PATENTS of plumb bobs" and "DOWNLOAD publications"

## 2. UNITED STATES OF AMERICA

We must differentiate in the United States between the "simple" standard plumb bobs, the CARROT and the BEET on one side and on the other hand, the millwright plumb bobs type LAMP (or COMMON SENSE) and the variety of PATENTED MECHANICAL plumb bobs. I wrote about these patented plumb bobs in 2007 every week a newsletter. There are also a variety of special plumb bobs for different professions.

#### 2 a GENERAL

Compared with other countries the following forms are especially for America:

The so-called CARROT is available from many manufacturers and in different sizes. Usually the plumb bobs are from brass. The tip is made of steel and can be replaced. In some of these bobs is still a reserve tip housed in the head of the plumb bob. Delivered are these plumb bobs e.g. by General in a tin can.

Often it is delivered and

also carried on the building plot in a leather sheath on a belt.

Of course, many patents are based on this standard form. A very simple type is the BEET made of cast iron. They are available in red and black. It is very insensitive to external influences and can be inexpensively



mass-produced. This type has no screws for the cord, but a vertical and a transverse hole with an extension for the knot.



Also from iron or cast iron is a conical plumb bob with a simple string fixing.



#### SIX-SIDED PLUMB BOBS

This type has the advantage that it will not roll from the table. It is called "can't roll". Also the production is easy. The row material is the six-sided iron or steel rod.



e.g. made by Bergmann with a special part for fixing the line.

#### **2 b MILLWRIGHTS**

Unique in the world is also the type LAMP (or COMMON SENSE).

These are used by Millwrights.

These forms are available as normal plumb bobs, which can be used in a usual position or as reversible plumb bobs. The body is unscrewed from the central rod and placed reversed. There are many theories about the purpose of the reversal. But they all relate to marketing strategies of the manufacturers. The displacement of the center of gravity by reversing the body should affect the period of oscillation. The results of tests with these plumb bobs are rather very poor. B.

Famous representatives of these types are the makers LEISTNER (born in Falkenstein,



Germany) and HEIMBACH in the region of St. Louis / St. Charles, Missouri, U.S.A.

It are absolute top products both materials and workmanship. Nearly all are marked



with the name, but sometimes it is well hidden inside marked on the rod.



Below three types made by Leistner and Heimbach. At the right side the type SURVEYOR.



#### 2 c MECHANIZED PLUMB BOBS

In the U.S. there are a large number of plumb bobs that have additional mechanical equipment, such as reels, cord storage, gear



boxes or springs. Many of them are patented. This begins with the robust STANLEY plumb bobs (Patent U.S. 151,521 J. A. Traut 1874) that have an incorporated braked reel. They are available in three sizes as # 1, # 2 in brass and as # 5 in iron.

Even when they are produced more than 100 years ago, they are working well today.

This type was produced as remakes after the patent period by many makers. (see figure right)



A very special kind of line storage is the **horizontal built in reel type**.

There are a lot of makers and different guiding of the line (one point, two point, tube) from the vertical to the horizontal position.





Improved Plumb-Bobs. The illustrations, Fig. 8, represent improved plumb-bobs, which are put on the market by Frase & Co., 92 Park Row, New York. These plumb-bobs are



made in brass, with screw cap, as represented, and steel point turned true. The special advantage of these bobs over the

#### CARPENTRY AND BUILDING 1888

#### July, 1888.

ordinary plain style is that the line is contained within them, wound around a concealed reel and held there by friction, so that as much of the line as is desired can be unreeled at any time and the remainder left on the spool. Frasse & Co. are also putting on the market brass plumblobs of different sizes and patterns assorted in sets of 14. These sets consist of one plain brass plumb-bob with screw cap and steel point turned true, each 2, 3, 4, 7, 9, 10, 12, 14 and 16 ounces, and two each 6 and 8 ounces, and one 14 ounces, improved brass plumb-bob described above. These plumb-bobs are mounted in a blacklined velvet tray and are described as beautiful in appearance. The steel points are described as screwed in and then turned off to a true center, thus securing their securacy. They are made in two styles, the long slender and the round or styles of the true center, thus securing their securacy. They are made in two styles, the long slender and the round or styles, the long slender and the round or styles are complete line for, either mechanics or surveyors.



No. 465 Adjustable Plummet showing details of Concealed Reel

Spring-loaded tips to protect the tip when hitting the ground are used in some plumb bobs. E.g. in the BERGER 12



More simple wind up systems for the cord: BOSSERDET PATENT 1927 US 1,626,717





PRUTCH DESIGN PATENT 1964 Des. US 198,470



There are a lot of other (patented) mechanized plumb bobs with a sophisticated wind up mechanism for the line, e.g.

KNAUS PATENT 1962 US 3,027,977 Newsletter 2007-46





KRUSE PATENT 1966 US 3,284,914 Newsletter 2007-38



## ROOSE patent 1947 US 2,420,096 Newsletter 2007-41



### WILCOX patent 1897 US 584,803 Newsletter 2007-45

THE REL HRS F. F. OF LINE. WEICHT OF THE PLUMB BOB OZ.



### 2 d WALLPAPERING

For alignment of the first wallpaper roll plumb bobs are needed which lie flat against the wall. Thereby the cord is close to the wall to not have a distance when marking the line with the pencil. The material is lightweight sheet metal, plastic or wood. Particularly interesting is the cut in half wooden plumb bob shown in the figure right. The cord is attached to the center of gravity that the flat surface will hang exactly vertical. Fully usable form.













#### 2 e FIGURAL PLUMB BOBS

The States are the only country where I found figural plumb bobs.

The inventor (patent 1998 US 5,720,112) lived in California. The production was made in China. The figures are called BARBARA (naked), BRANDI (with hot pants) and ROBERT (with shorts). Weight 12oz, 16 oz, 24 oz. Delivered in a plastic box.



#### **2 f PATENTS OF DIFFERENT MAKERS**

Now some more interesting plumb bobs without a lot of technic from several makers. Most of them have a patent.

### GOODELL PRATT Two shapes.





JONESY, a plumb bob instrument for installation in motor homes etc. Patent 1970 US 3,521,369





In Germany the name was HEIDI SENKEL.

#### VAJEN Patent 1882 US 267,655



GURLEY ARMS Patent 1929 US 1,704,237

PERFECTION Inventor Converse. Patent 1905 US 787,896. Thin brass sheet filled with lead.



Right some Stanley plumb bobs, sold in RED and BLACK.



STANLEY 47-173. Inventor West. Patent 1975 US 3,866,329. Was produced 1 year in the U.S.A., later in England. A combination plumb bob is provided having both a vertical position and a horizontal position in which it is operable to determine verticality.





And don't forget the mercury-filled plumb bobs by STARRETT. Patent 1906 US 833,699. The first types with a round and later with a six-sided head (Can't roll). #87



with mercury inside and #177 without. Remakes by several makers.

Forerunner of today's laser plumb bobs were patents in the U.S. with battery and light beam. As an example may be mentioned the GRIFFIN light plummet, (1986 U.S. Patent 4,625,428) which has incorporated a special



switch that only turns on the lights when the bob is hanging on the cord. This protects the battery, because you can't forget to turn it off.



#### **2 g MINING PLUMMETS**

MINING PLUMMETS were sold usually in wooden boxes as a pair.

The use of these very special plummets you should read in newsletter 2009-03 MININING PLUMMETS.

Some very nice pieces from the collection of Nelson Denny †

#### **BUFF & BERGER PLUMMETS**



#### **GURLEY-BOXED-PAIR**



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#### **GURLEY BOX SINGLE**



WELSH PLUMMET



## 2 h OTHERS

As in all countries we also find a lot of homemade plumb bobs made from ammunition or projectiles.

Very often are offered bobs made from patented projectiles produced by Driggs and Worthington.





We also find homemade bobs made from other technical tools or parts. e.g. plumb bobs made from former (patented 1887) oilers/oil cups for machines made by Lunkenheimer.





#### 2 i KOMBINATION WITH CHALK LINE

In the U.S., there are some interesting plumb bobs that can be also used as a chalk line device. Two of them look very similar, but have been patented at different times. This is the



RIDGELY Patent 1909 US909846



# and the SPAETH U.S. Patent 1932 US 1,876,473 shown below.



And then there's the huge 8 in high combination of DOWNIE BROS. It was patented in 1885 as U.S. 316,530 and is

completely made of brass. It is filled with a colored powder. The line passes this powder from the top to the hole in the tip on the bottom. Often the combination unit is simply sold as a plumb bob, as most sellers do not know that it is also a chalk line.









In Canada I only know two makers or dealers.

That is the brand **HERCULES**, with a typical design: A strongly knurled surface on a cylindrical brass plumb bob. Produced in 4 sizes from brass.



The second group of plumb bobs comes from the company VERITAS or LEE VALLEY. All the plumb bobs are patented.

Thanks to Ulrich Biber for the pictures of the Veritas bobs.

The one below is for wallpapering.





# 4. SOUTH- AND MIDDLE AMERICA



According to my (little) knowledge about plumb bobs from South America there are almost entirely FLAT BOTTOM PLUMB BOBS.

This type is different to the flat bottom plumb bobs known from the Netherlands and France.

Most of them have a wooden spacer. (figure right a picture from José Asturias, collector in Guatemala).

The German maker Gampper also produced plumb bobs for South-America. (see figures below and on top of the right column).

You find a threaded hole in the bottom of the bob. Gampper tried to sell a small screwed-in-

tip in South-America, but it was not successful.





From Guatemals I got the two flat bottom bobs. Thanks to José.



The plumb bob with the wooden spacer is from the collection of Primitivo Gonzales in Spain and was bought in South-America.



I just got from Ulrich Biber these pictures with South-American plumb bobs with a (relatively) large tip.



To be continued .... In **PART 3** next month I will show the shapes from England (with the colonies), Turkey (Ottoman / Anatolian plumb bobs), Russia and China (Asia) etc.

## 5. SOMETHING TO SMILE ABOUT

You should not believe everything that is offered in beautiful images and text. In a Martin Donnelly auction in March 2014 was offered:

#### Lot: IL14-939

An unusual PULLEY CAP PLUMB BOB,

No. 6. This classic globular form **bob is fitted with a pulley at the top to facilitate letting out and retrieval of the string.** The first bob of this form that we have seen.



Length: 4.500 Inches Condition: GOOD+ Estimate: \$60.00 -\$120.00

I had to smile about it and hope that no collector spent money for such a joke.

Of course, there are plumb bobs that have above a reel to wind up the cord. Famous example is the Stanley plumb bob (Inventor Traut), which was produced in three sizes. If you compare the two plumb bobs you can see the difference immediately. On the left side the string is NOT CENTERED

guided upwards and you need two cords to go up. In addition, the role has no brake. "plumb bobs" with

such reels are used as counter-weights for special pulldown-lamps (see



figure below) in the kitchen or in the office.

I think someone made a joke and combined a reel (without a brake) with an English plumb bob. Perhaps he used it as a plumb bob and knotted the line to the reel. But this has nothing to do with built-in reel plumb bobs and will not help him to work faster.





#### 6. REMARK

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Enjoy it

Wolf Ruecker



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