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 BOB NEWSLETTER

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1. INTRODUCTION

Dear friends, good and bad news. I will continue writing newsletters about plumb bobs and measuring instruments like plumb levels, inclinometers and chalk lines, but in the next year I will reduce the frequency from 12 per year to 4 per year. Thanks to all readers who sent me feedback in the last months. This is necessary / essential for me because I know that all the work is not only for me. I am happy to share my knowledge about my collection and the tools in it with you.

2. SUMITSUBO / CHALK LINES (China, Japan)

In 2008 I wrote my first Newsletter about the combination tools of plumb bobs and chalk lines. I think it is time to update this newsletter 2008-11 that you can find for download on my web site.
A short review into the Newsletter from 2008:

**GENERAL**

Japanese Carpenter's ink pot, or ink pad: The sumitsubo, unlike other carpentry tools, does not have a fixed shape or size. Nowadays the carpenter generally buys his sumitsubo, but in the past he would make it himself, sometimes taking pleasure in carving onto the ink pot. The main dish in the ink pot is called the ink-pool, sumi-ike 墨池. There is a depression containing silk wadding, sponge etc. that is soaked with a mixture of glue solution and ink, and attached to this is a wheel wound with thread, sumi-ito 墨糸. On the side of the pot there is a small plastic pointer with a needle fixed in it, and the end of the thread is attached to this needle. To draw a reference line on timber using a sumitsubo, first fix the needle in the required position on one side of the timber, and then, letting out the thread from the spool, move the sumitsubo to the other required position. Stop the sumitsubo in that position with the thread slightly stretched, and hold it down with the fingers of the left hand. Then with a finger of the right hand lift the thread up and let it go suddenly. The elasticity of the ink-soaked thread causes it to hit the wood and a straight line, used as the reference line, is drawn instantly. This procedure is known by carpenters as sumigake 墨掛け

**Relations between China and Japan:**

Temples are a typical wooden architectural technique. The wooden towers we see today have Periodic dispatch of Japanese envoys to the Tang Dynasty in China was stopped 100 years after the construction of the Heian-kyo capital, in today's Kyoto, at the end of the 8th century, and this official disconnection with China started the "Japanization" of cultural assets received from China. Japanese people gave birth to and refined architectural styles and techniques that thus became unique to Japan, just like they invented their own phonetic letters or kana based on Chinese characters. Five-storied pagodas seen at some Buddhist survived repeated earthquakes and typhoons over the centuries.

Sources:
The page of the TAKENAKA CARPENTER TOOLS MUSEUM in Japan.

**BASIC TOOLS**

The basic tools used by different trades (carpenters, masons, stone-masons, painters,…….) were

- a simple line, colored in ink and wound on a piece of wood, called snap line, ink line or chalk line and
- a simple plumb bob

**EUROPE**

In Europe they used a 5-piece-set

- A wooden container
- A spool to wind up the line
- The line itself
- A colored thick (viscous) liquid made by pulverized charcoal mixed with water.
- A handle with a ring at the bottom. The line was guided through this ring and pressed into the container with the ink. So the line was colored.
All these parts were easy to get or made on a building plot. Later wooden containers were replaced by handles and parts fashioned out of iron or brass. The color was made by a stone called reddle / ruddle, red chalk. (German: Rötel) In Austria the chalk line is called Rötelschnur = Red line). It was mixed with water to a thick liquid, later also used as powder.

The thick liquid would make bold easy to see lines on the wood surface. Using a chalk line could be a very messy process; the skilled workman would have to take great note to spill the ink or mark the board before the line was correctly positioned. From Sweden I got a wooden box with a spool inside. This container is filled with white powder, so no excess powder can come out that was not adhered to the string itself. These containers are still sold and used in our days (also in the USA). From an eBay auction: 50 Meter (165’) Calk line ideal for all outdoor applications where lines are used especially for layout of athletic tracks, parking lots, tennis courts, playground games, airport runways, streets and highways, industrial aisle markings, all areas of construction, etc. The box is constructed of steel and has an extra large capacity. The unit is economical to operate requiring less manpower for faster layouts utilizing a snap line that extends up to 165 feet. Included with the Chalk Line Kit is a 5 lb container of white marking chalk. Colored chalks are available.

**JAPAN + CHINA**

As well in Japan as in China the tools (chalk lines) were made by the carpenters and used during his working life. The shape is like a shoe with a wheel. Material: Wood. It was also used as a plumb bob (weight on a line), as you can see on the picture right.

The Chinese also employed a more box-like reservoir, often decorated with brass parts and wood-carvings.
Later chalk boxes were produced from brass. The shape was a pot with a reel attached to the side.

**AMERICA**

Americans were known to employ lumps of solidified chalk, over which the line was passed to give it a coating of powder. In this solid form, the dispenser part of the chalk box was eliminated. From the Downie Bros., we see a reservoir in a cylindrical shape fashioned out of tin, called “LINE CHALKERS”, that held pulverized colored powders. The line as it was pulled through this container dispensed the powdered chalk on the line.

The first American patented chalk line is from 1867. (Carter’s Pat US60657 May 28 67) see also my WR PATENT NEWS 2007 #20) It was a round brass box filled with powder. The line was stored on a wheel inside. The wheel was turned by a handle.

In 1916 Carter was granted a patent US1168851 for a chalk line box with transmission.

In the 1885 patent granted to DOWNIE (see WR PATENT NEWS 2007-42) the chalk reservoir very literally takes on the shape of a plumb bob. In this “new idea”, the bob is hollow and filled with chalk powder.

Ingenuously, the plumb line passes through the center of the cap then directly through a hole in the tip. The string is knotted at each end so as to allow the plumb line to pass back and forth through the reservoir without be allowed to pass all the way through. A substantial bobbin is shaped into the neck to allow the plumb line to be wrapped when the tool was not in use.

In this decorative example, a recoiling string mechanism is applied to an internal reel, thus the line is retracted into the chalk reservoir.
**COMBINATION TOOLS**

The first practical and commercially successful combination tool joining chalk line with plumb bob was the RIDGELY from 1909 (US909846 CAVILLEER; see WR PATENT NEWS 2007 – 22).

The relatively small reservoir for holding the chalk and a securing pin built into the removable crank made this particular device useful for certain specific types of work, laying out of wall paper, for instance.

Similar combinations are found in Germany by KUKA.

To draw longer lines more useful to the mason or carpenter, larger reservoirs for the chalk were fashioned which when shaped symmetrically with a tip, serve a legitimate dual function of combining chalk box with plumb bob.

Through the 20th century the preferred material for the reservoir changes from brass and tin to easier to form aluminium or plastic.

Chalk boxes sold today frequently employ a gear reduction mechanism that allows the worker to save some time rewinding the line into the chalk reservoir, up to 4 times faster. Not unlike the Carter patent of 1916, these new mass produced models, employ smooth running moulded nylon gears, products of the plastics generation of manufactured parts.
OVERVIEW. HISTORY OF THE CHALK LINE

1 a Basic tools for carpenter and mason 1 b

2 Europe

3 Japan/China

3 a

3 b

3 c

3 d

3 e

4 America

4 a

4 b

4 c

4 d

5 a

5 b

5 c

today

plumbbobwolf@t-online.de
Recently I could buy in Germany nine wooden Asian chalk lines together at a time. Below I will show you these interesting old tools, because some of them are colored and rare. Most of them have the shape of animals.
Let’s have a look on some details. Usually the spool is made from one piece of wood.

But in the following pictures we see another type of spool. All parts are made from wood. The line seems to be new.

In the mouth of two instruments are balls made of wood or stone, which rattle when you shake the tool.

Where the line comes out of the instrument you can see the use of the wood by the line. This marks exist also when you reinforce this part with a brass sheet.
And one more I got in summer 2014:

It looks like a sumitsubo that is offered (but not sold?) since a very long time for a lot of money on eBay.

Above the sumitsubo/chalk line on eBay.

My 1900s sumitsubo:

The seller told me that her father bought it in the 1900s in Asia. She did not know if China or Japan.
The chalk line has a very good decoration and also the inlay (below) looks great.
In addition to the figural items that I know from the Philippines, I got a man who looks like a Chinese. I bought him in the Black Forest in Germany, but he is original from Asia.

3. LITHOGRAPHY WITH PLUMB BOB

In Germany I found this lithography, dated 1977 and numbered 6/100. Unfortunately I can’t read the name of the artist. Do you know him?
4. GLASS PLUMB BOBS

Why should anyone need a GLASS PLUMB BOB? For sure these objects are not made for the mason on the building plot, but perhaps for collectors and for artistic reasons.

Sometimes are offered (patented) glass plumb bobs as recently on eBay, filled with sand:

All these items above seem to be not real plumb bobs, but there are some other examples:
Our friend Michel Mailhot (co-owner of a special-glass fabric) from Canada wrote me that he let make two plumb bobs by a specialist for his collection:

Already some years ago I saw pictures of the same shape, but other color (amber):

I asked the seller for the patent information on the cap: march 30 58’ ext’d march 30 72’
Searching (every patent drawing) on March 30, 1858 brought no positive result for a plumb bob patent. 😞
I think it is NOT A PATENTED PLUMB BOB, but a part of a patented machine or installation. Perhaps I will find something later. DO YOU KNOW MORE?
Other ”GLASS” plumb bobs on eBay: from CANADA

and the U.S.A.
Michel wrote: Object: Fil à verre
Bonjour A vous tous
Merci Wolf pour les photos des fil à plomb en verre
En voici 2 autres que j’ai dessiner et fais fabriquer par un souffleur de verre scientifique.
cordialement a tous
Michel
Translation:
Wolf thank you for the pictures of the glass plumb bobs. Here are two others that I have designed and let manufacture by a scientific glassblower.

In 2003 I made a joke with my friend Riccardo by presenting to him a “certificated glass plumb bob”. 😊:
I am sure that some existing certificates have the same value (ZERO) as mine. 😊.

There exists a web site with two very nice professional made artistic glass plumb bobs.
CORNING MUSEUM, 1 Museum Way
Corning, NY 14830
USA
Here is the link:
http://www.cmog.org/collection/search?f[0]=sm_actor_name%3AMount%2C%20Nick

“About us” from their site:
Nick Mount has been one of the leading figures in the Australian studio glass movement since the early 1970s. Over the subsequent decades, as both teacher and practitioner, he has made a significant contribution to the development of glass as an artistic medium in this country. Mount’s work is represented in major private and public collections including state galleries and the National Gallery of Australia. He also exhibits regularly in Europe, the United States and Japan. Like many artists working in hot glass, Mount draws from Venetian traditions. He was
introduced to these by the American glass artist, Richard Marquis, who had worked at the renowned Venini factory in Murano in 1969, and came to Australia in the early 70s to demonstrate glassblowing. Employed to assist Marquis, Mount was immediately fascinated by the unknowable nature of glass and challenged by the degree of skill required to work with it. Further inspired by subsequent studies in glass in the USA and a visit of his own to Murano, Mount launched into a creative exploration of glass that continues to reach new levels of technical and artistic achievement.

VISIT THIS SITE! A lot of interesting items are waiting for you.

**5. SOMETHING TO SMILE ABOUT**

From the member in our group Alessandro Mori, Italy I got with the X-mas-card this year a picture from an exhibition of plumb bobs that looks strange:

The plumb bobs not hang vertically, although they do not swing or oscillate. 😊

**Artist:**

TATIANA TROUVE "350 points towards infinity" 2009

Plumb, magnets, metal / Fils à plombs, aimants, métal

14.9 x 31.2 x 31.2 feet / 450 x 950 x 950 cm

Photograph: Stefan Altenburger

Courtesy Galerie Perrotin

The solution of this mystery is: Under the ground are hidden some magnets!

(Works not with brass plumb bobs 😊)

More pictures of the artist Tatiana Trouvé *1968 Cosenza, Italia you will find on the site of the museum Migros Museum für Gegenwartskunst, Zürich (Suisse)

http://www.migrosmuseum.ch/en/

and


or with this link you get more information about Tatiana Trouvé:


Thank you, Alessandro for this information.

**6. X-MAS CARDS from collectors**

Every year I get some X-MAS CARDS from friends:

Thank you very much to Michel Mailhot, CAN; Ali Enginsal, TR; Dogan Basak, TR; Riccardo Chetoni, IT; Dick Jones, Wales and all the others …
7. REMARK

DEAR READER OF THE PLUMB BOB NEWS,
DEAR FELLOW COLLECTOR,

This is an article of the monthly published WOLF’S PLUMB BOB NEWS that is sent on demand as PDF-file attachment by email. FREE. You can see all former publications on the website www.plumbbobcollectors.info on sub page “download publications”. Remarks and contact by email: plumbbobwolf@t-online.de

Enjoy it

Wolf Ruecker

PS. This NEWSLETTER is also available in GERMAN.

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