

WOLF'S PLUMB BOB NEWS 2013

Issue 10 OCTOBER 1, 2013

SHORT PLUMB BOB STORIES

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www.plumbbobcollectors.info

Dear Fellow Collector,
Dear reader of the PLUMB BOB NEWS,

Please, as always I am in search of new photos, catalog s, articles or personal stories about any aspect of PLUMB BOBS from you. Any help is appreciated.

If you have any information or pictures for these themes, please let me know.

Thank you, looking forward to hearing from you

Wolf

SHORT PLUMB BOB STORIES

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1. INTRODUCTION

eBay provides many plumb bobs which can be easily purchased. The majority of these plumb bobs were manufactured in large volumes in a variety of shapes and sizes by well-known tool companies and can be easily recognized.

However, many plumb bobs for sale on eBay were "homemade" through the modification of existing tools shaped like plumb bobs. At first glance, these plumb bobs appear to be professionally manufactured, however closer examination reveals subtle problems with the plumb bob's shape, form or function. In Chapters 3 and 4, you will find information which will assist you in the identification of homemade plumb bobs and the differences between these specimens made by amateurs and their professionally-made, manufactured counterparts.

When I get questions from all over the world about plumb bobs, then I try to answer these email seriously and sometimes the information are worth to be publish here in my newsletter. So it happened with the handmade mercury filled brass plumb bob in chapter 2. (See Fig. right)

Enjoy all the stories
Wolfgang



2. THE HOME MADE MERCURY FILLED BRASS PLUMB BOB

In April 2013 I got an email concerning an interesting mercury filled plumb bob. Here are the emails we changed.

GERALD,
YOU ASKED ME:

"Dear Sir;
Found your site on-line and I have a plumb bob that I wonder if you could help me with as to the value. I will tell you the story. In 1942 my father was a guard at a POW camp in the Okafanokie (Okefenokee) swamps in Fla. There was a German prisoner who my dad found to be a machinist and my dad asked him could he build him a special plumb bob? He said yes! So my dad told him he

carpenter and I worked as a carpenter for over 20 years. Although I could never match my father, ☺! I don't collect or anything just wondering about the value as it is a one of a kind.

I look forward to your information, and am hoping you enjoy your tour. Thank you again for any help.

Gerald"

GERALD,
NOW I AM BACK FROM MY TOUR AND HAVE TIME TO ANSWER YOUR QUESTION.

PERHAPS YOU CAN GIVE ME LATER SOME MORE INFORMATION ABOUT THE HIGHT AND THE DIAMETER OF THE PLUMB BOB. I ONLY CAN ESTIMATE IT BY THE PHOTOS.

THANK YOU FOR SHARING THE STORY AND THE PHOTOS.



wanted it to weigh **five pounds** and he would like it to be **mercury filled** so it would settle and not be blown by the wind. This is what he built for him and it is indeed mercury filled.

Can you tell me what this would be worth? Thank you for any help or comments.

Gerald H."

"Wolfgang

Thank so much for your reply, I live in a little town called Rainsville in Alabama N. E. corner of the state.

My relationship to plumb bobs is simple my Grandfather was a carpenter, my father a master

SOME GENERAL INFORMATION ABOUT MERCURY AND ITS USE:

MERCURY IS HEAVIER THAN IRON OR BRASS. SO IT WAS USED TO MAKE A PLUMB BOB HEAVIER. A MERCURY FILLED PLUMB BOB HAS LESS SURFACE AND LESS RESISTANCE FOR THE WIND FORCE AS A BRASS OR IRON PLUMB BOB OF THE SAME WEIGHT.

ON THE OTHER HAND MERCURY IS VERY DANGEROUS. IN FORMER TIMES (IN THE 1940s AND 1950s) MERCURY WAS USED LIKE WATER, BECAUSE THEY DID NOT KNOW THAT IT IS EXTREMELY DANGEROUS, ESPECIALLY THE FUMES ARE DANGEROUS.

A FRIEND TOLD ME AFTER I SENT HIM YOUR QUESTION:

“Being in the environmental, occupational health and safety field, I no longer play with mercury like I did when I was a small boy! It is very difficult to ship in the USA now, as well. BUT, what an incredible story, a plumb bob, made by hand, containing one of the most dense/heaviest materials in the world!”



FOR THIS REASON THE MERCURY SHOULD BE SECURED BY A SECOND SCREW (LIKE IN YOUR CASE). SO THE MERCURY CAN NOT SPILL, WHEN YOU UNSCREW THE HEAD TO CHANGE THE CORD.



THE BEST KNOWN MERCURY FILLED PLUMB BOB IS THE 1906 PATENTED STARRETT PLUMB BOB TYPE 78. SEE MY „PATENT NEWS 2007-31 MERCURY OR LEAD FILLED“ ON MY WEBSITE ON PAGE



„PATENTS OF PLUMB BOBS“ DIRECT LINK:
<http://www.plumbbobcollectors.info/42041.html>

THIS PLUMB BOB HAS AN EXTRA SCREW FOR THE MERCURY (SEE FIG. RIGHT)



OTHER MAKERS USED TWO HOLES TO MAKE IT MORE DIFFICULT TO OPEN THE MERCURY CONTAINER WITH A COMMON SCREW DRIVER. (SEE FIG. RIGHT)



YOUR SCREW IS LIKE THE STARRETT SCREW.

THE VALUE:

IT IS EXTREMELY DIFFICULT TO ESTIMATE A VALUE OF SUCH A UNIQUE PLUMB BOB WITH SUCH A STORY. A FRIEND TOLD ME: FOR A GOOD AUCTION YOU NEED TWO CRAZY GUYS WITH DEEP POCKETS! ☺ IF I DO NOT TAKE INTO ACCOUNT THE VERY INTERESTING STORY, THEN THE PLUMB BOB HAS A VALUE OF \$xxx.xx TO \$ xxx.xx. BUT AS I HAVE ALREADY TOLD YOU, THIS IS A VERY ROUGH ESTIMATE ONLY.

IF YOU SELL IT, PLEASE REMEMBER THE PROBLEMS WITH THE SHIPPING OF MERCURY. HOPE I COULD HELP YOU.

WOLFGANG

PS. I WOULD LIKE TO USE YOUR STORY AND THE PHOTOS IN ONE OF MY NEXT NEWSLETTERS IF YOU AGREE. (OF COURSE WITHOUT MENTIONING YOUR NAME AND MY ESTIMATION OF THE VALUE.)

*“Thank you so much for the interesting info and help. I will take **measurements** and send you results for size. (see Figs. below)*

And please feel free to use pictures all you like. My father was so proud of this plumb bob and commented on the German quality and craftsmanship often. And I too am equally as proud. When I were in the Army I was stationed in Mainz [remark WR: 25 miles from my museum] for 2 1/2 years love your country.... So miss the Bratwurst and Schnitzel and Very good Wine. ☺I will be in touch soon bitte schön! Also feel free to publish my e-mail address.”

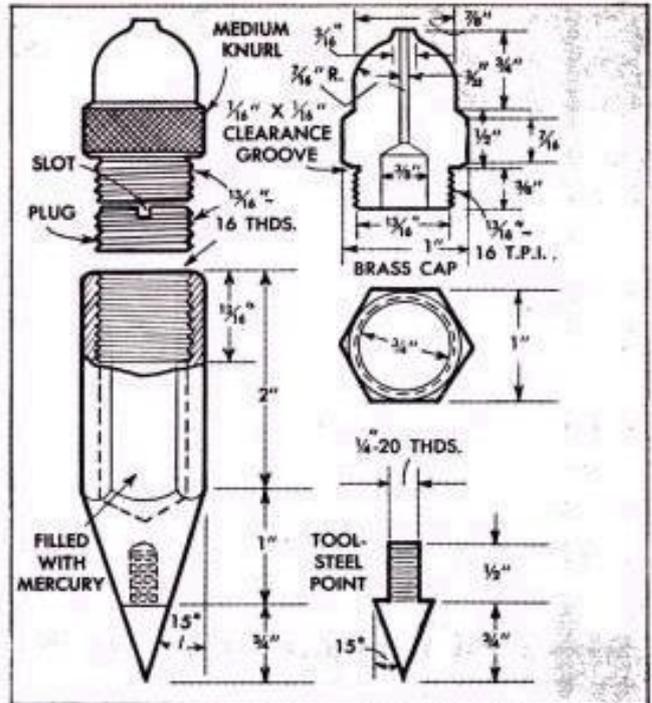


WR: I will not publish it here, but if you are interested to get in contact with Gerald, feel free to ask me.

I am sure you agree with me:
REALLY AN IMPRESSIVE PLUMB BOB!



Missing the reference point!



MERCURY PLUMB BOB

By C. W. Woodson

FOR PRECISE WORK, such as setting up a transit, a **plumb bob** must be of the correct proportions and weight so that it steadies quickly and remains in position. A mercury bob, being considerably heavier than the normal solid type of equivalent size, has less tendency to swing in a breeze and thus takes less time to come to rest.

The body of the bob is turned from 1-in. hexagon brass rod. When chucking the work for the first operation sequence, be sure that it runs dead true. Turn the taper on the end, face-off and then drill and tap $\frac{1}{4}$ -20 for the tool-steel point. Reverse the work and recenter it as before. Bore to a depth of 2 in. with a tap drill for a $\frac{13}{16}$ -16 thread. Run the thread into the bore to a depth of $\frac{13}{16}$ in., then face-off the end.

Next, the tool-steel point is machined to the same taper as the body of the bob. Then it is threaded, hardened and the temper drawn to a purple color. Both the plug and the end cap must be machined from stock long enough to be held securely in the chuck. Turn and thread the plug and slot the end before cutting off in the lathe. Note that the end cap is turned to the acorn shape, counterbored for the cord and that the flange is knurled. Run a squaring cut on the lower end of the flange so that it

seats tightly on the top of the body. Then cut a $\frac{1}{16} \times \frac{3}{16}$ -in. clearance groove and run the threads back on the shouldered projection to the groove.

Fill the body of the bob with mercury and turn in the plug slowly to allow any entrapped air to escape. Then tie a knot in the end of the cord, pass the cord through the counterbore and screw the cap in place finger-tight. *Caution:* Use extreme care in handling mercury. Dispose of all unused portions safely.

AND HERE IS A SAMPLE THAT YOU SHOULD NOT USE FOR MAKING A PLUMB BOB.

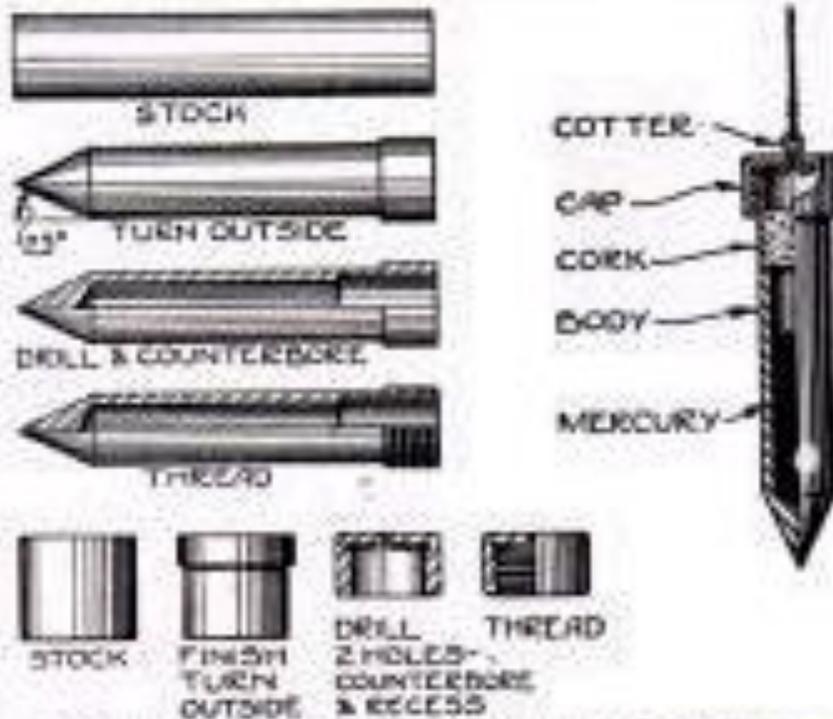
THE CORK IS EXTREMELY UNSAFE.

BUT IT SHOWS THAT IN THE 1950s MERCURY HAS NOT BEEN EVALUATED AS A DANGEROUS SUBSTANCE.

FROM: POPULAR SCIENCE 1918 mercury pb home made

How to Make a Mechanic's Mercury Plumb Bob

THE illustration shows the few operations required for making a simple but highly efficient mercury plumb bob. The body may be of ordinary cold rolled stock and the cap



Stages of development for making a receptacle to hold mercury for a plumb bob

may be of the same material. The cork can be easily removed by shaking the plumb bob vigorously, causing the mercury to act as an internal hammer. The amount of mercury used will be governed by the weight of the plumb bob desired. In finishing the outside, the body and cap may be left turned or polished as the fancy of the one making it dictates.

If the plumb is to be put to a great deal of use the point may be hardened.—FRANK W. HARTH.

3. THE DR. SANCHE PATENTED "PLUMB BOB"

In the auction catalog from Martin Donnelly for the auctions in September and October 2013 I found an interesting looking "plumb bob".



Description by MJD:

An unusual NICKEL PLATED PLUMB BOB imprinted with multiple patent dates and fitted with an unusual coil on the top. A graphic eagle pattern is engraved on the body of this bob, which is marked with patent date of June 24, 1890, May 31, 1892, June 2, 1894, July 27, 1897, August 3, 1897 and August 17, 1897. It is also marked "Victory" and "Detroit, Mich."

Estimate: \$150.00 - \$300.00

Auction: October 25 and October 26, 2013 - Indianapolis, IN

Lot: OC13-282

I know a lot of patented plumb bobs, but they usually have one (or two) date only and not five. **This was suspicious.**

After searching for patents on these dates (i. e. in 1870 420 patents in one day) showing a drawing similar to a plumb bob without any result I remembered that I wrote in 2007 about a special medical tool patented by Dr. Sanche. This tool had engraved also the EAGLE and the word VICTORY. (See Fig. next column). That was the break through. Looking in my newsletters "2007-25 and 2007-27" I had the solution for this combination plumb bob.



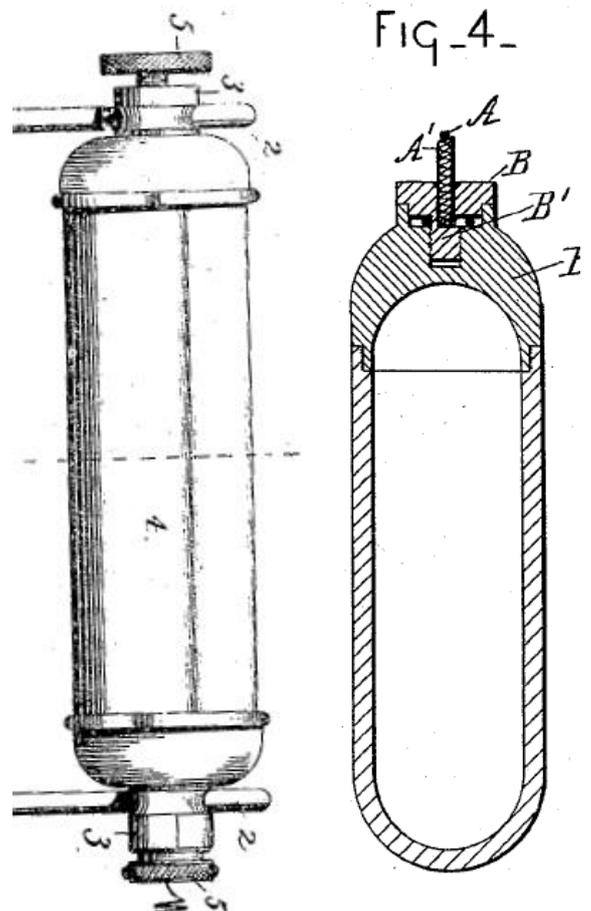
The related patent is US43097

H. SANCHE.
ELECTRIC CONNECTION.

No. 430,974.

Patented June 24, 1890.

with this drawing (below right) or drawing from the 1897 patent (below left):



In my newsletter 2007-27 I wrote about Dr. Sanche:

Two times in the last years was offered a patented plumb bob from DR. SANCHE in the U.S.A and in South Africa.

This part has everything that a plumb bob needs:

- *Nice looking*
- *Marked*
- *Line*
- *You can change the line*
- *Tip or a flat bottom*



One seller in U.S.A. knew what he was selling:

*“An original circa 1909 quack medicine kit / apparatus put out by the notorious quack physician Dr Hercules Sanche who lists NYC and Detroit as his place of business (he had to move around a lot because the Feds got after him last stop being Canada). Kit consists of an ornately etched / engraved (lots of writing and **a wonderful spread winged eagle**) nickel plated (probably over brass) enclosed cylinder which contains carbon which was to be placed in a jar of cold water which was said to force oxygen (hence the oxydonor name) into your system via the nickel plated contact all of which can be stored in the*



similar shaped and equally ornated decorated storage container. The lot also has the original instruction booklet which lists all kinds of outrageous claims as well as the original pasteboard box. Condition apparatus couldn't be better essentially unused mint, the book has some soil and wear nothing to excess and the box also has some soil and wear but is complete with all aprons etc. A neat looking and quite interesting piece of antique quack medicine apparatus which is completely fresh to the market from the attic of an old local estate.”

The other patent that shows the shape of our “plumb bob” is US588483 Aug. 17, 1897 see drawing next page.

What this "PLUMB BOB" all can do you can read in the following article. It helps everyone, soldiers, woman etc.:

OXYDONOR
"VICTORY."
 (Trade-mark Registered Nov. 24, 1896.)



(Trade Mark Registered Nov. 24, 1896.)
 (OXYDONOR APPLIED.)

Protection Against Climatic Diseases.
 OFFICE OF LEWIS BEACH, CHIEF OF POLICE, BRUNSWICK, GA., Jan. 26, 1894.
 To WHOM IT MAY CONCERN:—
 It affords me pleasure to recommend Doctor Sanche's Oxydonor "Victory," which was used here during the recent yellow fever epidemic. Many persons were cured of the fever with the Oxydonor, free of charge, some of whom came under my immediate observation. They were all quickly cured.
 Respectfully,
 LEWIS BEACH, Chief of Police.

DR. H. SANCHE & COMPANY,
 261 Fifth Avenue, New York City. 61 Fifth Street, Detroit, Mich.
 2268 St. Catharine Street, Montreal, Canada. 57 State Street, Chicago, Ill.

(No Model.)

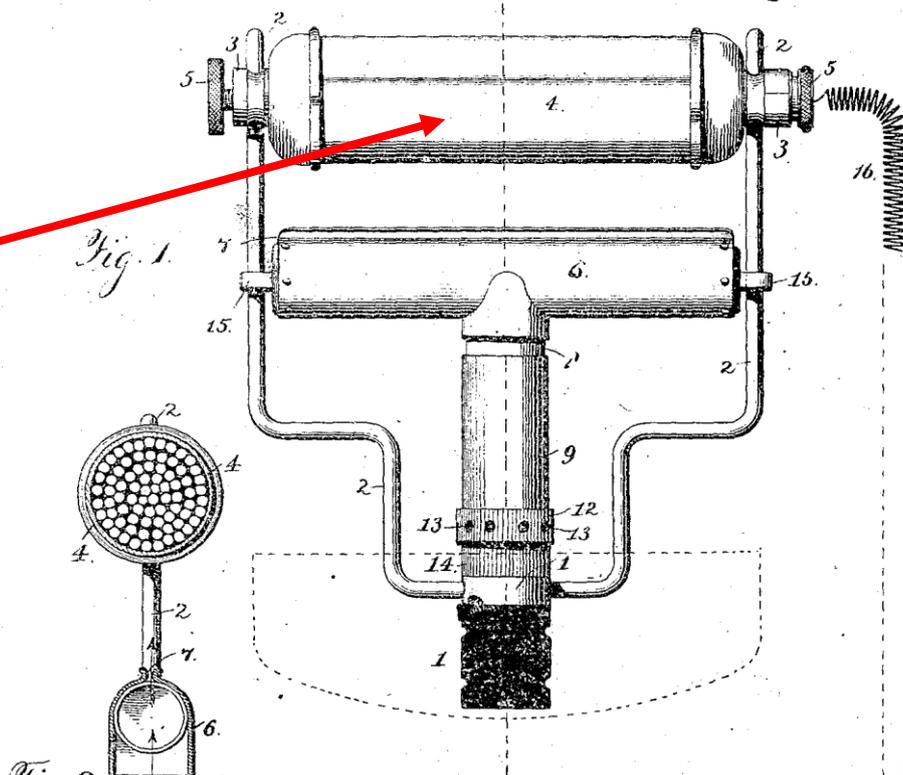
2 Sheets—Sheet 1

H. SANCHE.

APPARATUS FOR TREATMENT OF DISEASES.

No. 588,483.

Patented Aug. 17, 1897.



Two years ago it was not easy to find the patent but I got it. (Actually it is easier to find it by GOOGLE PATENT SEARCHING, but for US-patents only).



forth in cases of colds and febrile affections, as well as other disturbances arranged in the same category.

What I claim is—

1. An apparatus of the type set forth, consisting of a metallic cylinder, or shell, a wire cable connected at one end to said shell, and a contact-plate connected to the other end of said cable and provided with a suitable strap, substantially as described.
2. The combination with the metallic cylinder or shell filled with a material, as set forth, of a wire cable attached to one end of said cylinder and a contact-plate attached to the

other end of said cable and provided with a strap, substantially as described.

3. The combination with a metallic shell having a detachable clamp and a chain and weight connected to said clamp, of a wire cable connected to one end of said cylinder and a contact-plate attached to the other end of the cable, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

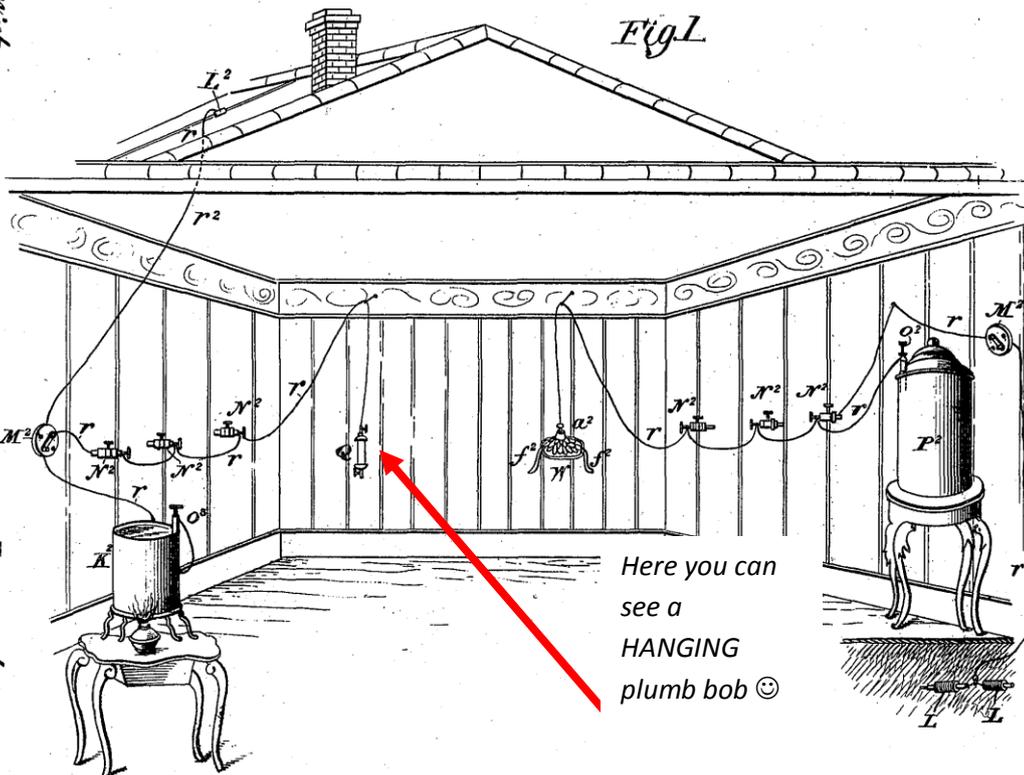
HERCULES SANCHE.

Witnesses:

JAMES L. NORRIS,
J. A. RUTHERFORD.

Witnesses:
James L. Norris
J. A. Rutherford

Inventor:
Hercules Sanche
By James L. Norris
J. A. Rutherford



(No Model.)
No. 587,237.
H. SANCHE.
APPARATUS FOR TREATING DISEASES.
Patented July 27, 1897.
3 Sheets—Sheet 1.



The "helicopter-wings" on top of the tool is known from the patents
 US2472300 KEMPLIN Jan 5, 1946 SELF FASTENING CORD HOLDER (See Fig. right)
 US1178056 CRAIG APRIL 4, 1916 SELF FASTENING

PLUMB LINE HOLDER (See Fig. right below)

Few collectors/people know that this is a patented (plumb bob related) tool, because it is very hard to write the patent information on a wire ☺ .

In my newsletter 2007-25 I wrote about this wire:

The first is from 1916 "SELF-FASTENING PLUMB LINE HOLDER"

Perhaps you have already seen on eBay plumb bobs with this external winder formed of a wire, but you did not know that it was PATENTED. It is difficult to write "patented" on a wire ☺ :

My invention is a self fastening plumb line holder and the object thereof is to provide a holder for the plumb line which will support the plumb line and bob when in use without fastening. I attain this object by the holder illustrated in the accompanying drawing in which:

Figure 1 shows the holder in use, and Figure 2 shows the naked holder.

As shown by Fig. 2 the holder is made of steel wire, having a straight winding portion, 2, several inches long and each end thereof having the wire turned into coils, 3, 3, close together. The plumb line 4 is wrapped along the straight portion and to use the holder the line is unwrapped to the desired length and fastened by being drawn through one of the coils and the holder laid down on the top of a wall or other surface with a square edge as shown in Fig. 1. The weight of the holder in this position will support the line and bob without fastening. The coiled ends also provide means whereby the holder may be held against rolling on an uneven surface.

I claim:

1. A cord holder formed of wire or the like, comprising a single straight body portion, about which the cord is wound, and closed terminal eye portions integral with the body, and having their bodies disposed in substantially the same plane, and constituting fastening means for the cord.

R. V. KEMPLIN
 SELF-FASTENING CORD HOLDER
 Filed Jan. 5, 1946

2,472,300

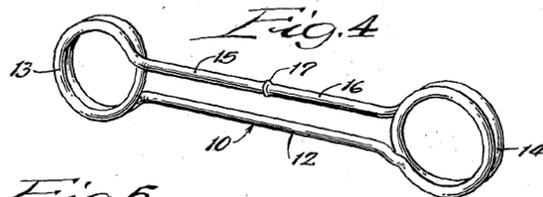
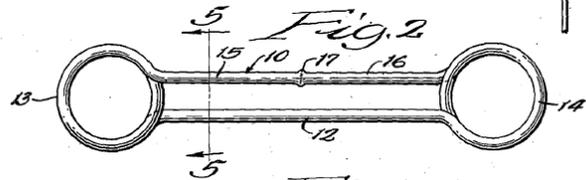
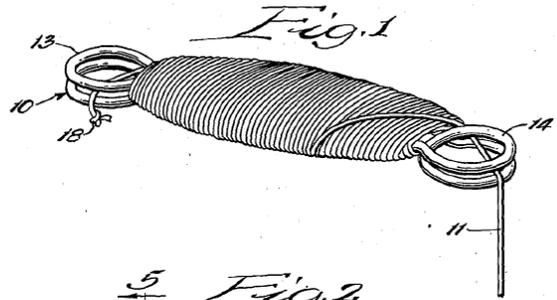
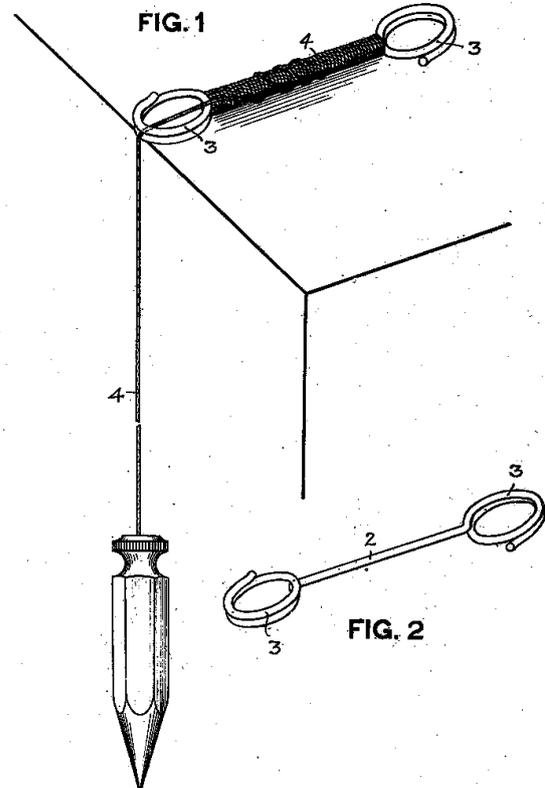


Fig. 5

W. H. CRAIG.
 SELF FASTENING PLUMB LINE HOLDER.
 APPLICATION FILED JAN. 27, 1915.

1,178,056.

Patented Apr. 4, 1916.



WITNESSES
 J. R. Keller
 John F. Hill

INVENTOR
 William H. Craig
 By Alfred Miller
 His Attorney

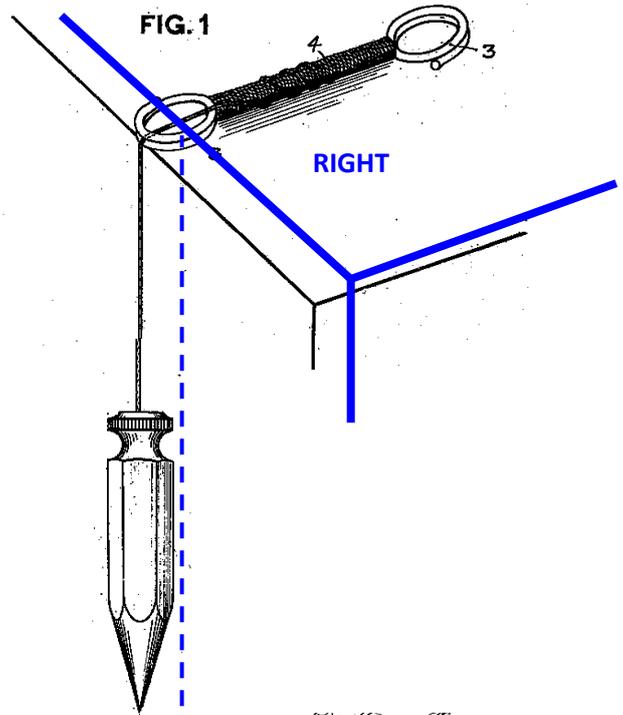
As you can see the “body” is a single wire.

1) If you will wind up a line of 10 feet (3 meters) you need more than **120 turns!** It will be late evening, when you are ready with this work 😊

2) The other point where I don't agree with this patent is the drawing. The shown **POSITION** of the holder has as result a plumb bob that touches the wall. To let the plumb bob swing freely you have **to hang over** the holder minimum half of the plumb bob diameter.

3) If you make now a calculation with the weights and distances you get as result:

You can use a plumb bob of **maximum 120 grams** for a holder of 3 4/8 inch (9 cm) length. Under the best conditions. (Calculation on demand). My two plumb bobs have a weight of 160 and 180 grams, so it doesn't work with these plumb bobs, but with smaller ones.



One holder of my collection that seems to be original and also the plumb bob looks like on the patent drawing.



Two other holders (the middle one from my collection) have a different shape, so that you can store the line with less turns, because you have two wires with a distance to store the line.



WRONG

I claim as my invention:

A cord holder formed of a single wire and having a pair of spaced convolutions at each end connected by a straight portion of the wire on one side of the centerline of the two convolutions and parallel thereto and straight end portions of the wire extending from the pairs of convolutions into abutting relation on the other side of the centerline of the two convolutions and in spaced parallel relation thereto, the straight spaced parallel portions forming a body portion upon which the cord may be readily wound and the two pairs of

the same.

RAY V. KEMPLIN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,178,056	Craig	Apr. 4, 1916
1,710,384	Sommer	Apr. 23, 1929

4. THE AIRCO "PATENT PLUMB BOB"

In 2003 was offered on EBAY a PATENT PLUMB BOB made by AIRCO. See photos right.

The patent research shows not a PLUMB BOB but a WELDING TORCH TIP as result ☹



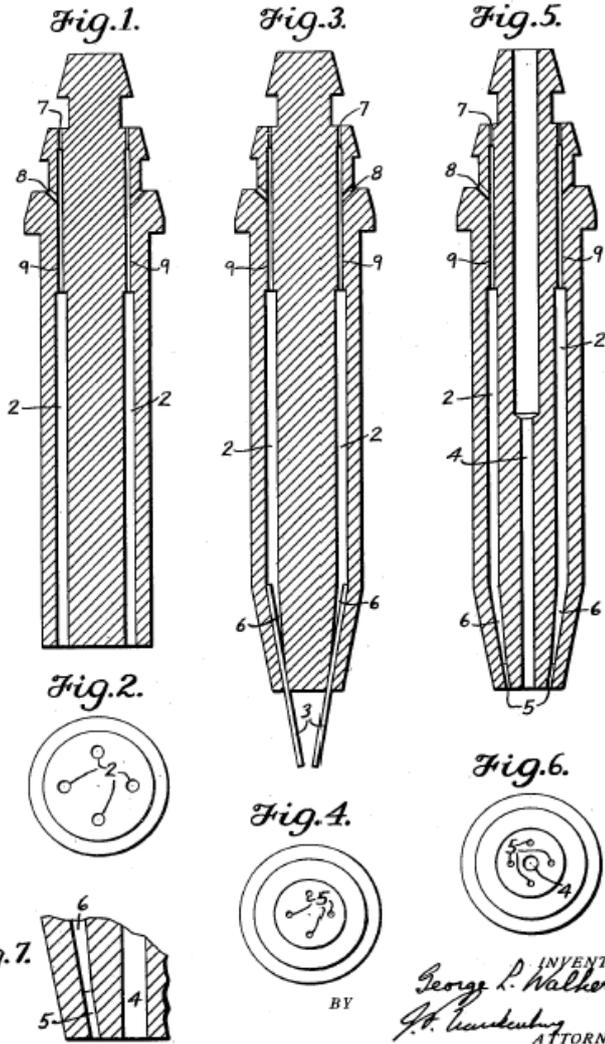
Sept. 25, 1934.

G. L. WALKER

1,975,029

METHOD OF MAKING TORCH TIPS

Filed Oct. 2, 1930



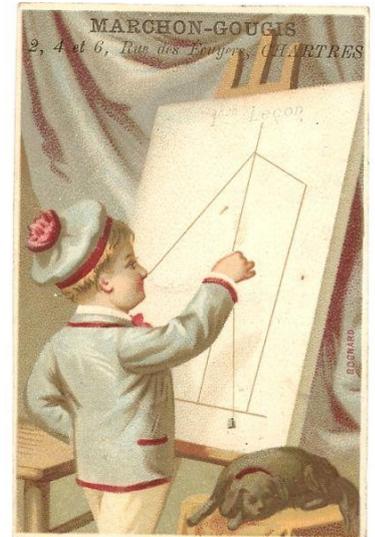
Looks good and usable but is not a "born" plumb bob. Torch tips are sold for less than \$7.00

5. SOMETHING TO SMILE ABOUT

From my collection: An old postcard from France showing a boy in front of a drawing. He verifies the verticality with a small plumb line.

Original text:
CHROMO - MARCHON
GOUGIS. 28 CHARTRES:
LES EPREUVES
D'ALGEBRE. ELEVE AU
TRAVAI.

[Tests of Algebra. Pupil at work.]



6. REMARKS

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 subpage "download publications" or on page "WHAT'S NEW?"

Remarks and contact by email: plumbbobwolf@t-online.de

Enjoy it

Wolf

P.s. For the members of our group the whole world turns around the plumb bob as shown in our logo right. ☺



Logo of the International Plumb Bob Collectors Association IPBCA