

WR PATENT NEWS # 2007-49

PATENTS

US5720113 BARTIMUS 1998 PLUMB BOB
and STRING LINE ANCHORING DEVICE
US162237 BARTIMUS 2002 SHEATH
FOR COMBINED STRING LINE ANCHOR and PB
US1098033 FRIENDSHIP 1914 PLOMB and CHALK LINE
US3113387 BEAN 1963 PLUMB BOB with RETRACTABLE POINT
US2594823 SUVERKROP 1952 PLUMB BOB
US5157843 BARCEWSKI 1992 High accuracy self setting plumb bob

In the last but one issue of the WR Patent News we will have a look into the future (patents sometimes need some time to come on the market): Although the plumb bob is several thousands of years in use we can find in our days patents for this tool. I don't mean the laser plumb bobs etc., but the normal plumb bobs with string, body and tip. Unfortunately for this example I could not find any picture of a produced item, but perhaps you will find in the future this patented tool produced in the shops. I would be happy to get information about it.

United States Patent [19]

[11] **Patent Number:** **5,720,113**

Bartimus

[45] **Date of Patent:** **Feb. 24, 1998**

[54] **APPARATUS DESIGNED FOR USE AS BOTH
A STRING LINE ANCHORING DEVICE AND
AS A PLUMB BOB**

*Primary Examiner—Christopher W. Fulton
Attorney, Agent, or Firm—Angus C. Fox, III*

[57]

ABSTRACT

[57]

ABSTRACT

A tool is disclosed which incorporates both a stick-pin peg and an eyelet-shaped hook, either of which may be used to anchor a chalk line. The tool can also double as a plumb bob. The tool has a peg-shaped body with a longitudinal axis. The body has a tapered lower end which terminates in a sharpened stick pin. The body has a recess for holding the eyelet-shaped hook and also incorporates a clamping mechanism which both releaseably secures the hook within the recess, and eliminates any need for tying and untying the string to the tool. The string remains secured to the eyelet-shaped hook. In order to secure the line with the eyelet-shaped hook, the hook is removed from the body by releasing the clamping mechanism. In order to secure the line with the stick-pin peg, the eyelet-shaped hook is secured within the body recess and the string is secured to the needle point by looping the string over itself twice. In order to utilize the anchor/bob as a plumb bob, the body is suspended from its longitudinal axis.



PATENT NEWS especially for PLUMB BOB COLLECTORS

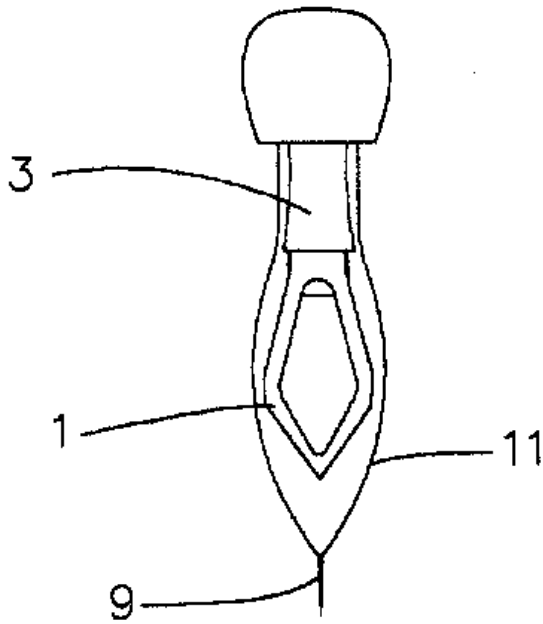


Fig. 1

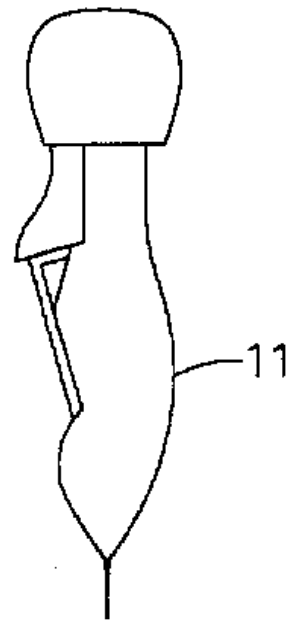


Fig. 2

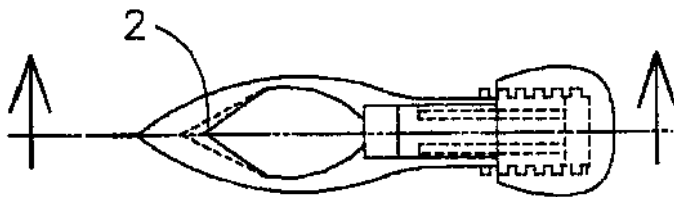


Fig. 4

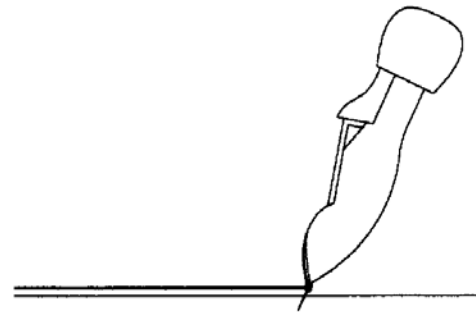
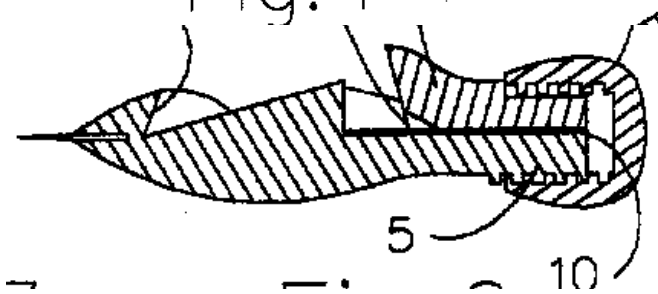


Fig. 8

An improvement of this patent you will find at the end of this issue as US2002/0162237
SHEATH FOR COMBINED STRING LINE ANCHOR and PLUMB BOB TOOL.

PATENT NEWS especially for PLUMB BOB COLLECTORS

On the next pages you will find the patents that are mentioned as

[56]

References Cited

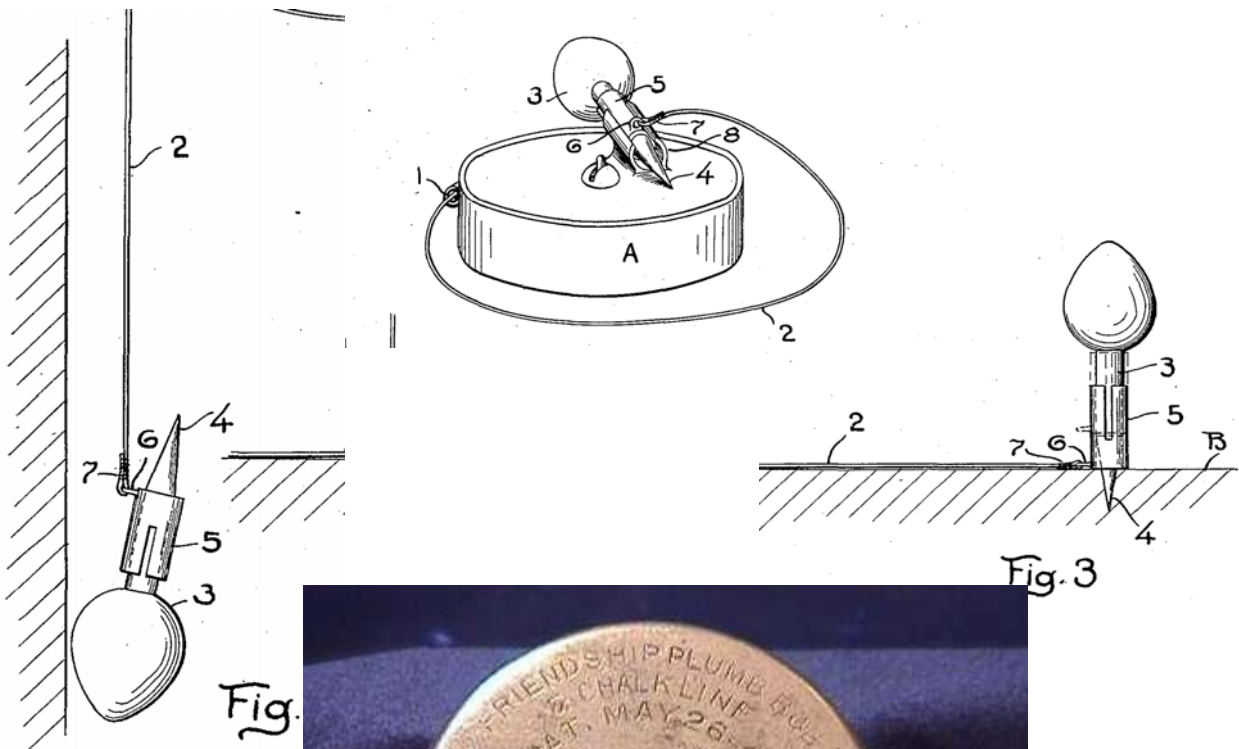
U.S. PATENT DOCUMENTS

1,098,033	5/1914	Friendship	33/413
2,446,253	8/1948	Tresidder	33/409
2,594,823	4/1952	Suvenkrop	33/392
3,113,387	12/1963	Bean, Jr.	33/392
5,157,843	10/1992	Barcowski	33/392

J. FRIENDSHIP.
PLUMB AND CHALK LINE.
APPLICATION FILED MAR. 19, 1913.

1,098,033.

Patented May 26, 1914.



1

3,113,387

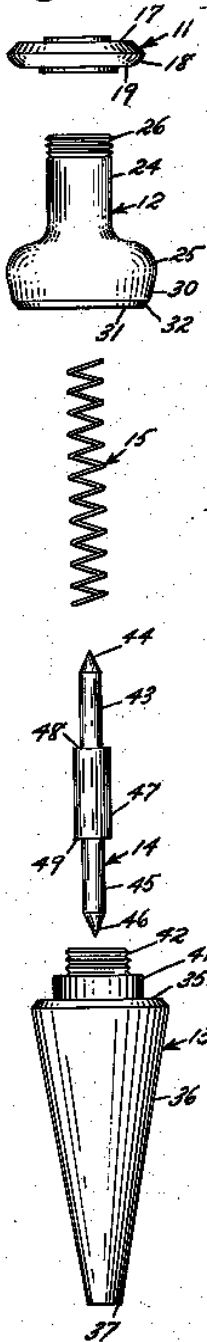
PLUMB BOB WITH RETRACTABLE POINT

Herbert A. Bean, Jr., Braintree, Mass., assignor to C. L. Berger & Sons, Inc., Boston, Mass., a corporation of Massachusetts

Filed Oct. 1, 1959, Ser. No. 843,802

1 Claim. (Cl. 33-216)

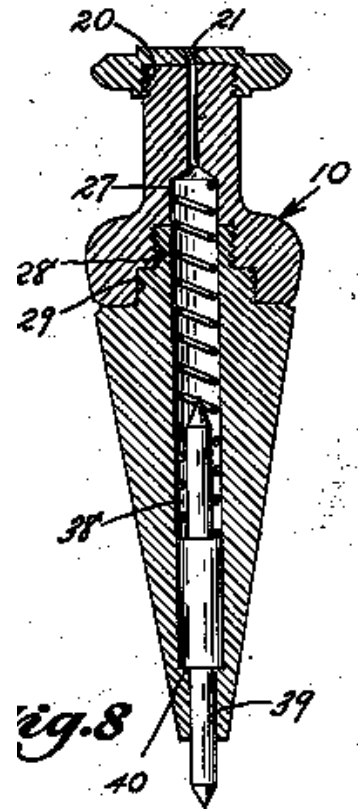
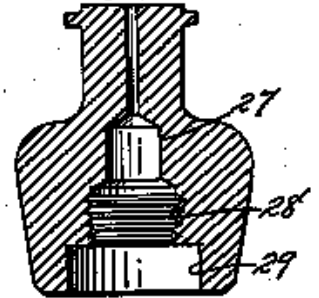
Fig. 1



BEAN was assignor to BERGER & SONS where his plumb bob was produced since 1963.



Fig. 7A



PATENT NEWS especially for PLUMB BOB COLLECTORS

April 29, 1952

L. SUVERKROP

2,594,823

PLUMB BOB

Filed Oct. 21, 1948

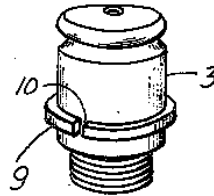
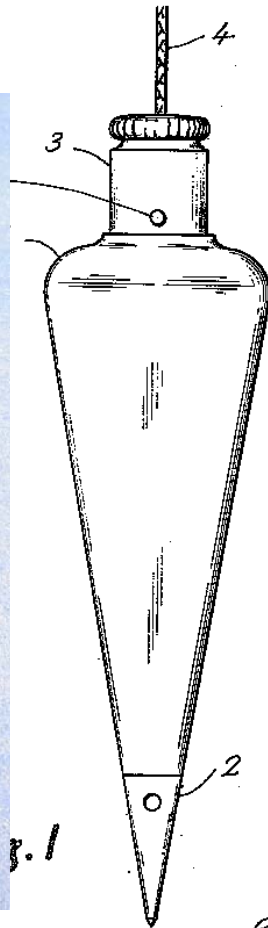


Fig. 4

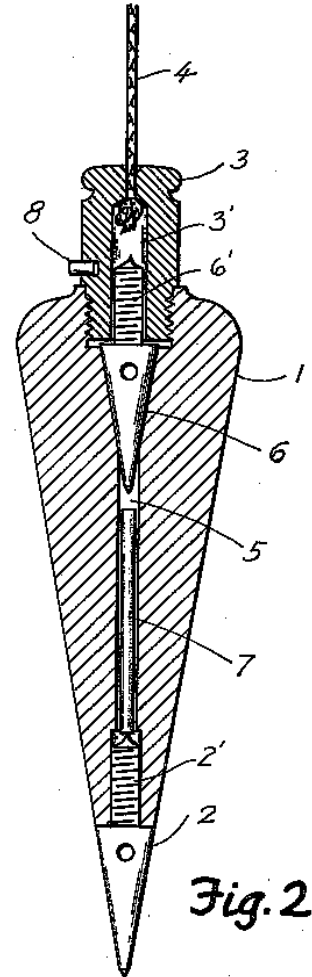


Fig. 2

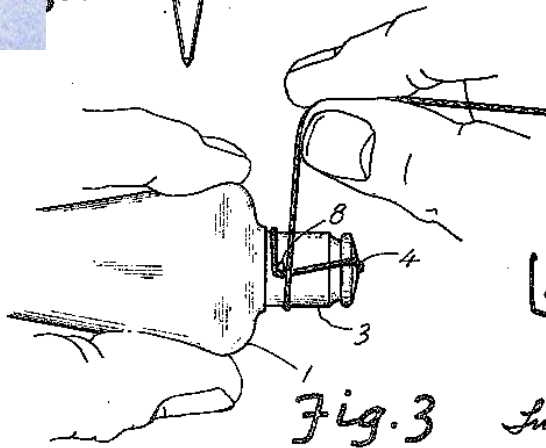


Fig. 3

Lew Suverkrop
INVENTOR.

BY
Lindley, Prentzman & Just

More details see WR PATENT NEWS 2007-16

PATENT NEWS especially for PLUMB BOB COLLECTORS



US005157843A

United States Patent [19]

[11] Patent Number: 5,157,843

Barcewski

[45] Date of Patent: Oct. 27, 1992

[54] HIGH ACCURACY SELF-SETTING PLUMB BOB WITH SLIDE HAMMER

[76] Inventor: Jack Barcewski, 585 Woodbine Dr., San Rafael, Calif. 94903

[21] Appl. No.: 761,560

[22] Filed: Sep. 18, 1991

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 672,500, Mar. 20, 1991, abandoned.

[51] Int. Cl.⁵ G01C 15/10

[52] U.S. Cl. 33/392; 33/332; 33/666

[58] Field of Search 33/332, 339, 353, 392, 33/574, 579, 666, 393, 394

[56] References Cited

U.S. PATENT DOCUMENTS

668,998	2/1901	Napier	33/392
995,872	6/1911	Joice	33/392
1,025,828	5/1912	Paul	33/392
1,178,835	4/1916	Berg	33/392
1,745,027	1/1930	Oxford	33/392
2,318,698	8/1945	Sireci	33/392
2,523,351	9/1956	Armstrong	33/392
2,795,053	6/1957	Wohlstrom	33/392

2,803,067	8/1957	Kurschner	33/332
3,016,616	1/1962	Matson	33/332
3,113,387	12/1963	Bean	33/392
4,461,091	7/1984	Gammon	33/392
4,853,376	11/1992	Fuller	33/392

FOREIGN PATENT DOCUMENTS

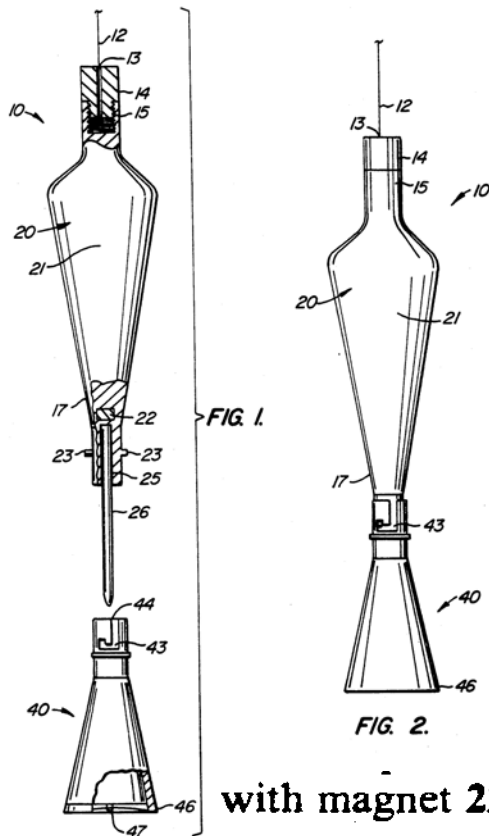
1946297	3/1971	Fed. Rep. of Germany
12345	of 1902	United Kingdom

Primary Examiner—Allan N. Shoap
Assistant Examiner—Alvin Wirthlin
Attorney, Agent, or Firm—Townsend and Townsend

[57] ABSTRACT

A plumb bob capable of marking either soft or hard surfaces is disclosed. A chalk reservoir can be attached to the bob for marking hard surfaces. Removing the chalk reservoir enables the user to insert a metal stake or headless nail into the bob, where it is held by magnetic force. Also disclosed is a slide hammer assembly that helps drive the stake into the surface. When the stake penetrates soft surfaces, its resistance to removal is greater than the magnetic force holding it in the bob and it remains as a plumb line mark when the bob is removed.

12 Claims, 3 Drawing Sheets



with magnet 22

This invention relates to plumb bobs.

Plumb bobs having a marking capability are known. Such bobs contain either chalk or a marking fluid which, when the bob is used, mark the point where the plumb line has been set. Although such bobs can be used over or on relatively clean, hard-surfaced materials such as concrete, where the chalk or liquid mark will be easily visible, they are less useful over such surfaces as dirt or sand, where the mark may be hard to see or insufficiently durable.

A plumb bob that can leave a visible, long-lasting mark on any type of surface or material is desirable in view of the limitations of existing plumb bobs.

Chalk reservoir 40, in a particular embodiment, is conical in shape, hollow, and can be detachably mounted on section 20 by means of slots 43. Slots 43 engage with pins 23 in a known manner to couple section 20 and reservoir 40 together. As with section 20, the exterior of reservoir 40 can be roughened for easy handling. The interior of reservoir 40 is filled with chalk through an opening at end 44. End 46 has a central "x" 47 cut therein, through which the chalk is dispensed during use. The center of end 46 is recessed with about a 1/8 inch lip. When the plumb bob is used to mark hard surfaces such as concrete, chalk reservoir 40 is mounted on section 20 using slots 43 and pins 23. The plumb can then be used in a known manner, as illustrated in FIG. 2.

IF ANYONE OWNS THIS PLUMB BOB, please send me a PHOTO.

PATENT NEWS especially for PLUMB BOB COLLECTORS

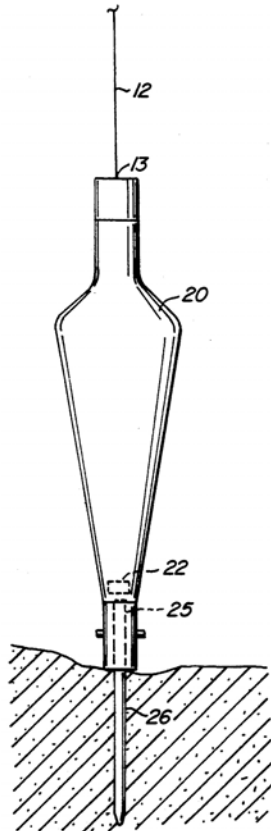


FIG. 3.

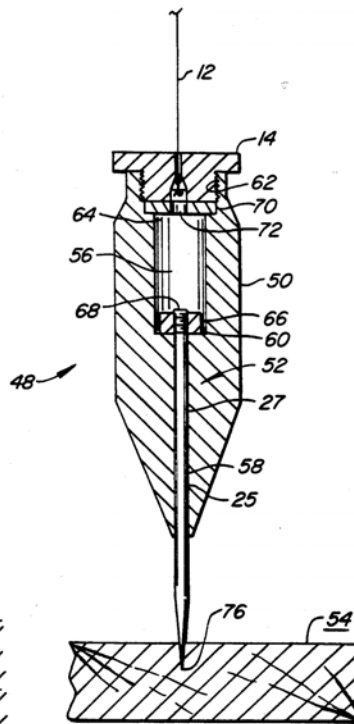


FIG. 4.

As shown in FIG. 3, when a soft or medium hard surface is to be marked, reservoir 40 is removed. Plastic caps (not shown) mount on both ends of the reservoir to prevent chalk spillage during non-use. Stake 26 is held within hole 25 by magnet 22. In one embodiment, a long #16 or #20 nail with its head cut off is used as stake 26. In another embodiment, specially machined plumb stakes are used as stake 26. These machined stakes have

Slide Hammer

When implanting a stake with the plumb bob of FIG. 3, the plumb bob must be lifted from contact with the surface and then dropped so as to have momentum to implant the stake. An exception is with extremely soft surfaces for which the simple weight of the bob suffices. Because the bob may stray as it is being dropped, this decreases its accuracy. Shown in FIG. 4 is a plumb bob 48 including a body 50 and a slide hammer assembly 52,

slidably mounted within body 50, that helps accurately drive stakes into harder surfaces such as wood surface 54.

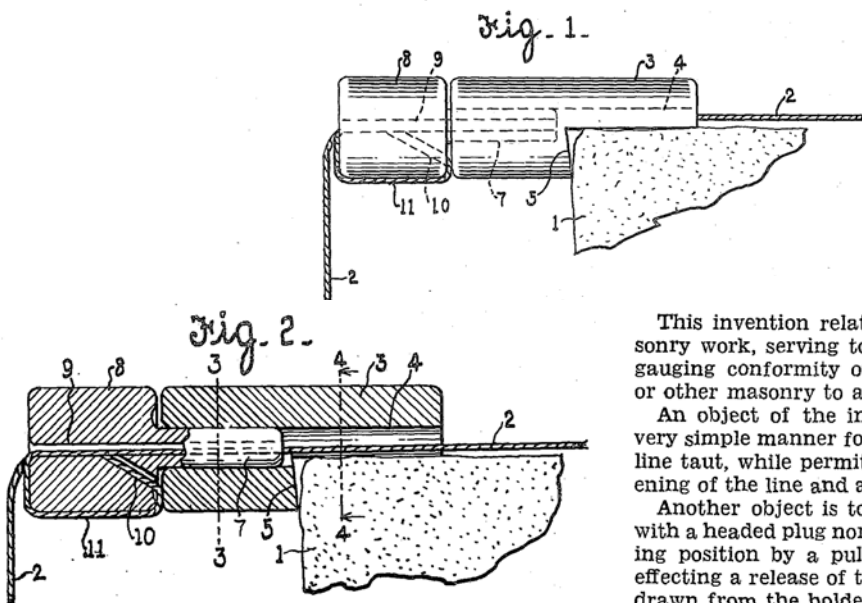
Also as REFERENCE CITED (not really interesting for us) we found:

Aug. 3, 1948.

H. E. TRESIDDER
LINE HOLDER

2,446,253

Filed April 11, 1947



This invention relates to line holders for masonry work, serving to position a line for use in gauging conformity of a course or tier of brick or other masonry to a straight line.

An object of the invention is to provide in a very simple manner for normally holding a gauge line taut, while permitting quick and easy slackening of the line and adjustment of its length.

Another object is to equip a gauge line holder with a headed plug normally held in a line-clamping position by a pull exerted by the line, and effecting a release of the line when slightly withdrawn from the holder.

PATENT NEWS especially for PLUMB BOB COLLECTORS

As told on page 2 here you find the IMPROVEMENT of the patent from Bartimus:

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2002/0162237 A1**

Bartimus

(43) **Pub. Date: Nov. 7, 2002**

(54) **SHEATH FOR COMBINED STRING LINE ANCHOR AND PLUMB BOB TOOL**

Publication Classification

(76) Inventor: **Christopher Shawn Bartimus, Payette, ID (US)**

(51) **Int. Cl.⁷** **G01C 15/10**
(52) **U.S. Cl.** **33/392**

Correspondence Address:
PEDERSEN & COMPANY, PLLC
P.O. BOX 2666
BOISE, ID 83701 (US)

(57) **ABSTRACT**

(21) Appl. No.: **10/062,891**

(22) Filed: **Jan. 30, 2002**

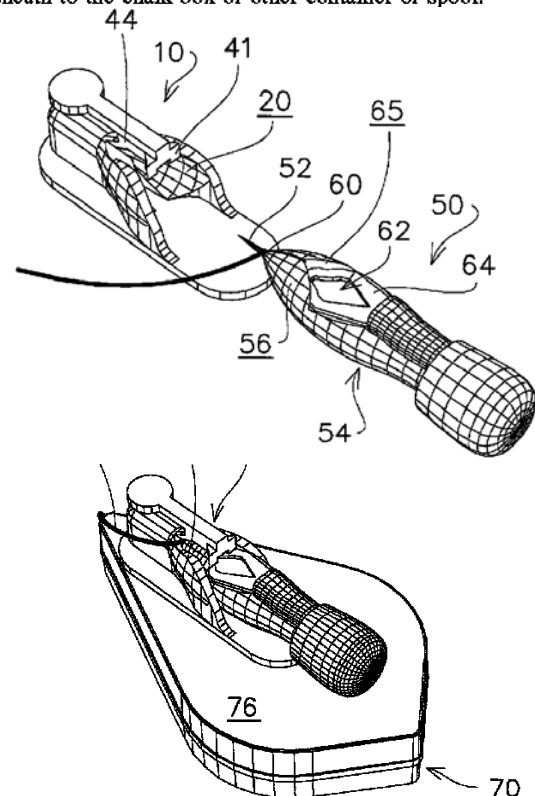
Related U.S. Application Data

(63) Continuation-in-part of application No. 09/847,614, filed on May 2, 2001.

Embodiments of a sheath for a pointed tool are described, which tool may be a combination string/chalk line anchor and plumb bob. The sheath includes a cavity for housing the pointed needle or spike that extends out from the combination tool, and a cavity for at least partially encircling the body of the tool. A locking mechanism is included to secure the tool in the sheath until removed is desired. The sheath may include a system for attaching it to a chalk box, and a slot defining an exit-point for string line to extend out from the sheath to the chalk box or other container or spool.

[0010] The tool of Ser. No. 09/847,614 ("614") includes an external channel system through which the string line may extend to exit the tool at the axial centerline of the tool. In addition, the '614 tool includes an adjustable pointed spike that may be moved axially to protrude various amounts out from the body of the tool. This adjustability feature allows the tool body to serve as a fixed stop for the insertion of the needle into materials of differing hardness so that the sharpened spike is not inserted into the wood or other material farther than is needed to satisfactorily anchor the string. Also, the adjustability feature reduces the risk of breaking the point when it is inserted too far. If the sharpened spike is broken, it may be removed from the tool and replaced with another adjustable spike, further increasing the efficiency of the carpenter and decrease his/her equipment costs.

[0011] Thus, the integrated string line anchoring device and a plumb bob provides a simple, but useful, economical, and efficient tool that is reusable and effective for a long period of time. As a means of protecting the tool and preventing dulling or breakage of the tool point, and preventing injury by the tool point, a cover or sheath for the tool is needed. The instant invention meets this need, in an effective, economical, and easily-used sheath that allows the tool to be safely and comfortably carried in a tool box, on a chalk box, or by other means.



Remark:

This was the last WR PATENT NEWS in 2007 where I explained Patents of plumb bobs. Next week you will find as the end of this set a CALENDAR 2008 with PATENTS and PLUMB BOBS. You can print it on thick paper or cardboard and hang it into your office or home to remember the WR PATENT NEWS.

Thanks you for your interest and your feedbacks. Good bye. Wolfgang

The END