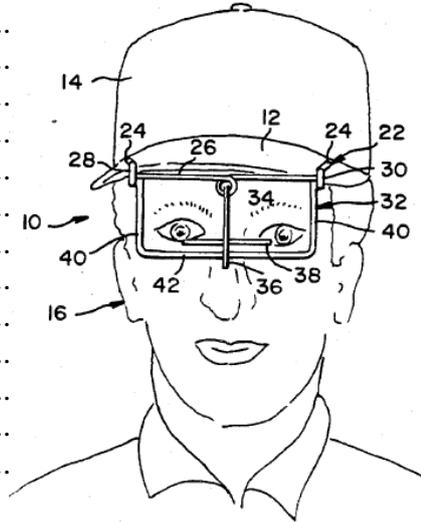


SPECIAL USES of PLUMB BOBS

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Above:
Drawing from patent US 4696111 from 1987
DEVICE FOR ASSESSING INCLINATION

0. INTRODUCTION

Dear Fellow Collector,

Usually we think that only workers like masons, carpenters etc. use plumb bobs to verify the verticality of their work.

But there are also other people who use plumb bobs in unusual, imaginative and sometimes whimsical ways. Today I will illustrate the use of plumb bobs in relation to other activities not normally associated with “work” and “tools” used to perform work.

The sources for the material in this newsletter are old patents, old books or newspapers and the world wide web.

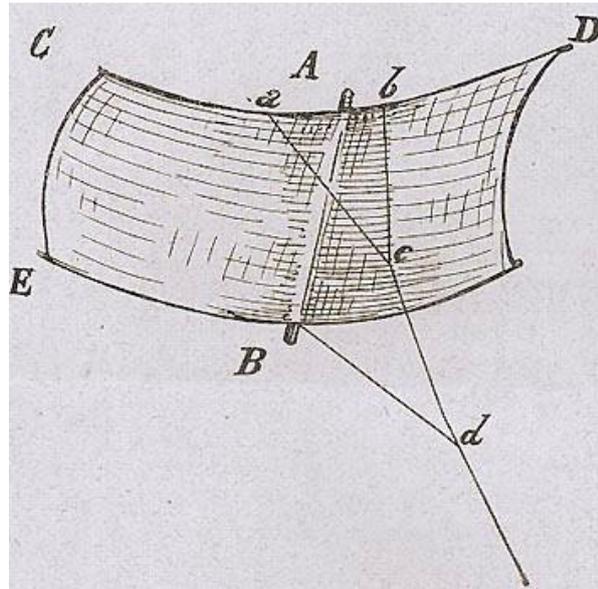
1. CYCLING

To get the right position on a bicycle a plumb bob is used^A:

An offer^B: Plumb Bob

Brass Plumb Bob
with waxed
string. Small size
- stows easily into
Bike Fit Systems
Cleat Screw Kit,
measuring **1" in
length.**
\$ 10.95





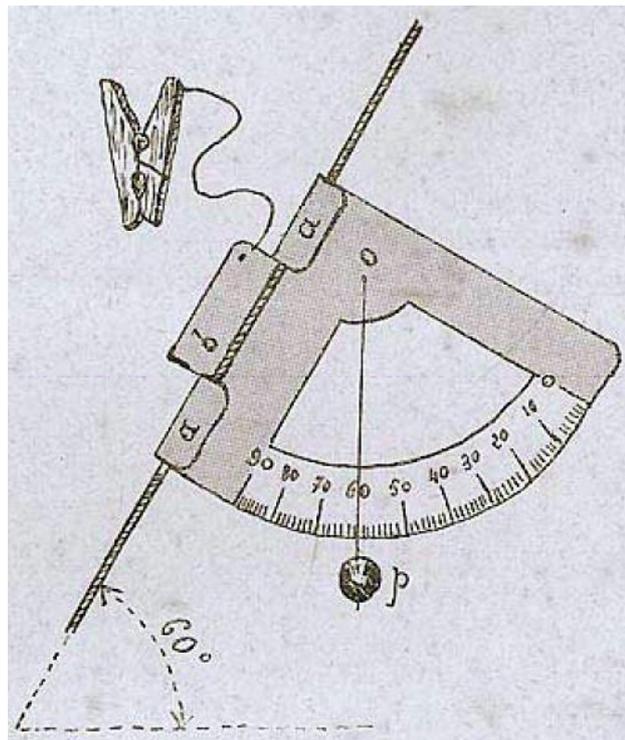
2. KITE



From a 1910 French newspaper^C
Translated from the French original:

Angle Indicator for a KITE

“I tried to make an angle indicator for a kite. It consists of one quarter of a circle whose center is equipped with a plumb line indicating the angle of the scale graduated cable retainer kite with the horizon at the same time against each other cable and part b, the instrument is maintained and steadily and can slide downwards. The center of the quadrant is pierced with a tiny hole through which a wire ending in a ball of lead (p), this thread is the index of the scale. The dimensions shown relate to one quadrant with a degree equal to 2 millimeters, to make the scale easier to perform and also reading less tiring. The central recess is designed to make the device lighter, to distort the least possible information. The drawing shows the device placed on the cable ALBERT BENEZET”



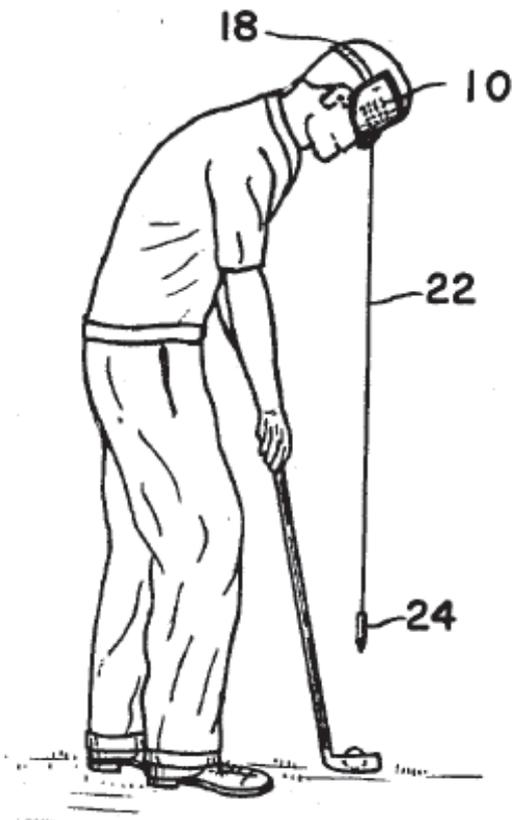
3. GOLF

You want to improve your game of golf?
There are more patents than you would imagine where a plumb bob is proposed to improve your game. Here some examples:



I learned on a web site^D that there exists a special *GOLFER TYPE* plumb bob!
THE PLUMB BOB GUY
“Plumb-Bob Guy evaluates a putt from every direction. First they stand behind the ball and plumb-bob their putter as if they are surveying new road construction. They don't feel confident until they consult a U.S. Corps of Engineers topographic map they have spread out on a Black and Decker Workmate set up on the green. Then they take a soil sample to determine moisture content and grass variety. By this time you've sat in the fairway so long waiting for them to clear the green you get hungry so you build a fire and roast hot dogs.”

This could be correct. I found some patents that show members of this type ☺



United States Patent [19]

Goode

3,819,189

June 25, 1974

[54] GOLF TRAINING AIDS

[76] Inventor: Rexford Fenton Goode, 901½ N.W. 18th St., Oklahoma City, Okla. 73106

[22] Filed: Oct. 4, 1973

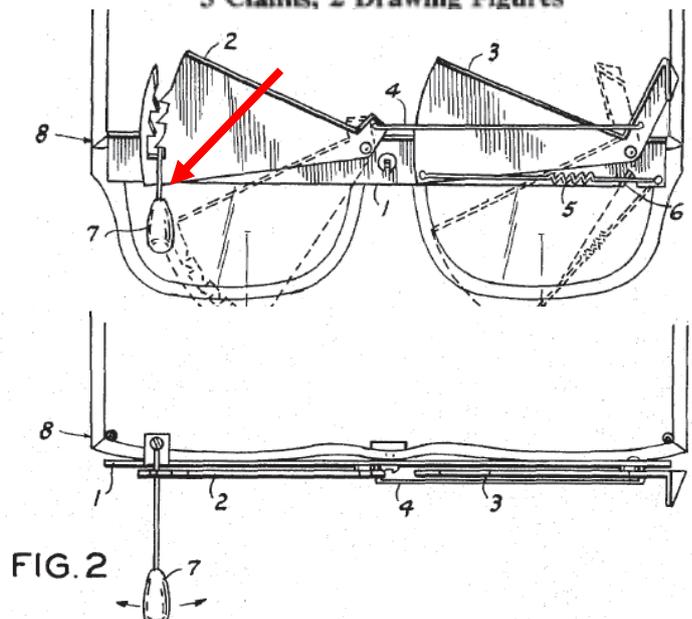
[21] Appl. No.: 403,558

[57]

ABSTRACT

This application discloses a golfer's training aid wherein a pair of opaque shutters are pivotally secured to a frame for a pair of eyeglasses. A resilient member is provided to provide a force for moving the shutters to a position obscuring the user's normal line of sight. A pivotal plumb bob coacts with one shutter and the frame to maintain both shutters above the user's normal line of sight. A pivotal plumb bob coacts with one shutter and the frame to maintain both shutters above the user's normal line of sight. A ratchet-like mechanism on one shutter coacts with the plumb bob and allows both shutters to be moved downward, edgewise, in successive stages, in response to successive relative movements of the plumb bob, caused by movements of the golfer's head and frame during a putting stroke.

3 Claims, 2 Drawing Figures



United States Patent

[11] 3,545,764

[72] Inventor Thomas F. Broderick
697 Cambridge St., Brighton, Boston,
Massachusetts 02135

[21] Appl. No. 790,653
[22] Filed Jan. 13, 1969
[45] Patented Dec. 8, 1970

2,330,442 9/1943 Nero 273/183(B)X
3,178,187 4/1965 Cardwell 273/183(B)

Primary Examiner—George J. Marlo
Attorney—Strauch, Nolan, Neale, Nies & Kurz

TRAINING DEVICE FOR GOLFERS 3 Claims, 3 Drawing Figs.

ABSTRACT: A golfer is compelled to hold his head properly by wearing a mask including two apertures through which his field of vision is restricted. A flexible cord has one of its ends secured to the mask centrally of the apertures, while the other end of the cord is connected to a plumblike weight which is suspended below the mask in the golfer's restricted field of view while addressing a golf ball.

[54] GOLF SWING AND DEVICE

[75] Inventor: Barry M. Fish, Thornhill, Ontario, Canada

[73] Assignee: Lawrence Peska Associates, Inc., New York, N.Y.; a part interest

[22] Filed: Nov. 2, 1973

[21] Appl. No.: 412,319

[52] U.S. Cl. 273/183 B

[51] Int. Cl. A63b 69/36

[58] Field of Search 273/183, 190, 32, 35, 188

[56] References Cited

UNITED STATES PATENTS

1,459,705	6/1923	Bullock	273/190 A
2,461,826	2/1949	Krautter	273/190 B
3,545,764	12/1970	Broderick	273/183 B

[57]

ABSTRACT

A device for aiding a golf player in addressing the ball and in maintaining his stance during the back stroke of the golf club, and the forward stroke to propel the ball into flight. It includes a pendulum type device with a flexible suspension cord and a mouthpiece to be grasped by the mouth of the golfer, and at the lower end of the cord a plumb-bob type of weighted body to be held right over the center of the golf ball, so that the user can visually hold his head stationary during the back stroke and forward stroke of the golf club, for he can immediately visually notice by movement of the plumb-bob weighted body any movement of his head.

1 Claim, 4 Drawing figures

FIG. 1

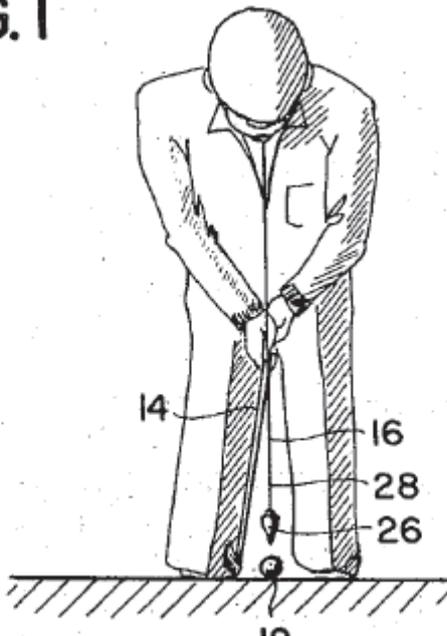


FIG. 2

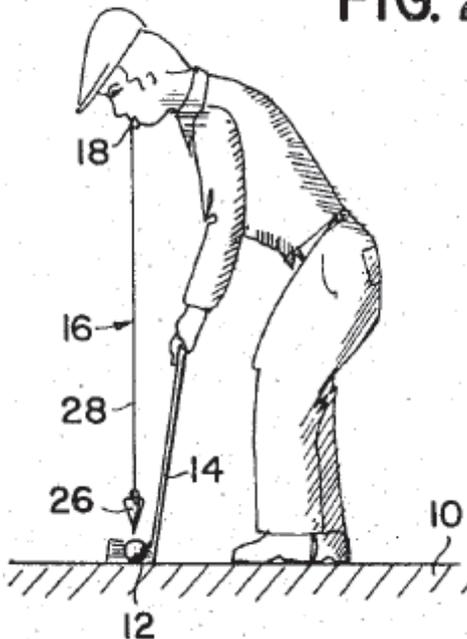


FIG. 3

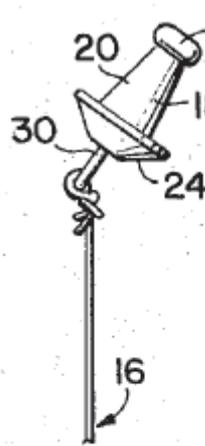
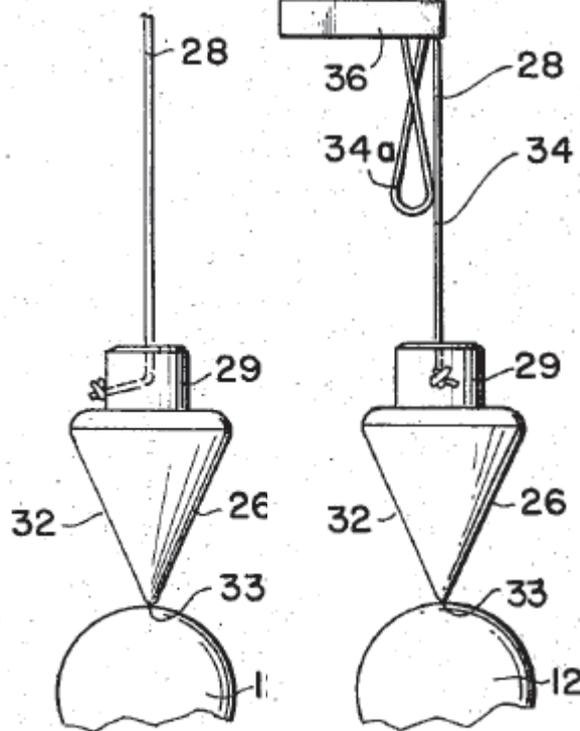
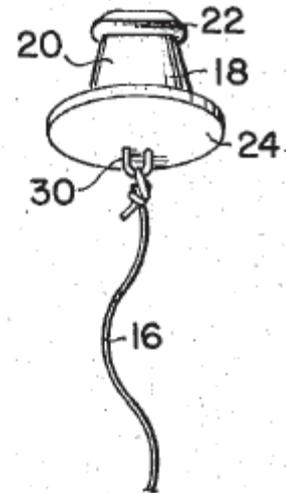


FIG. 4



FLAG FOR GOLF COURSE

The mining surveyors would be happy to know this patent from 1935, but it is for a Golf Course:

GOLF PUTTER WITH INDICATING LEVEL

March 29, 1966

C. L. GARRETT

3,242,582

March 1, 1938.

L. W. WEBER
FLAG FOR GOLF COURSES
Filed May 28, 1935

2,110,101

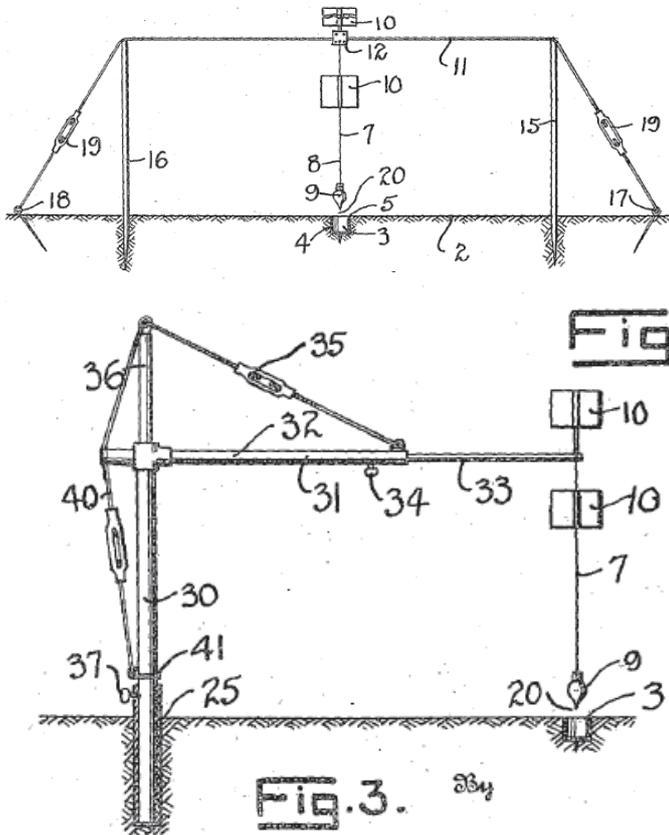


Fig. 1

GOLF PUTTER WITH INDICATING LEVEL
Filed May 22, 1963

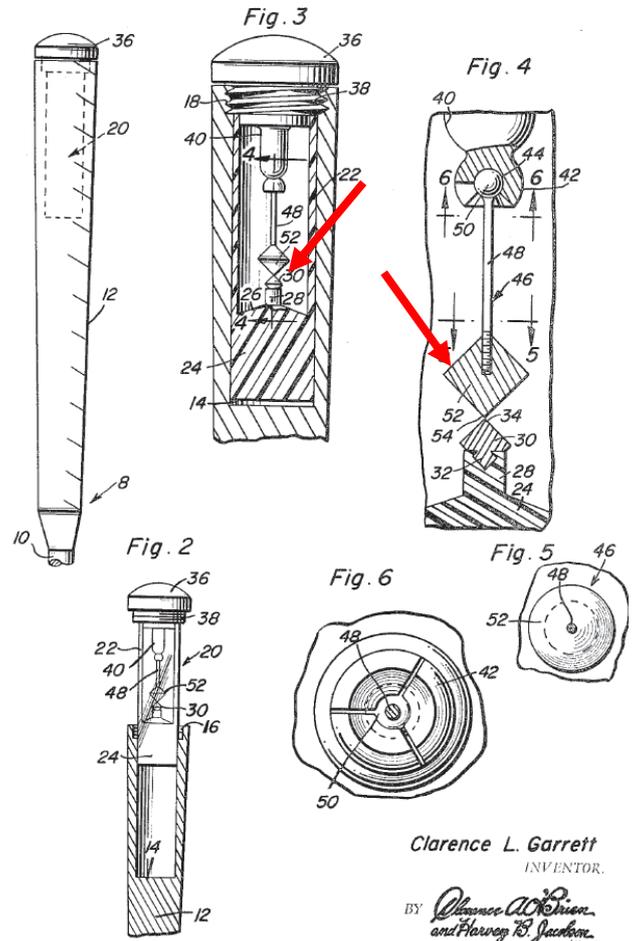


Fig. 3

Fig. 4

Fig. 2

Fig. 6

Fig. 5

Clarence L. Garrett
INVENTOR.

BY *Clarence A. Whelan*
and *Harvey B. Jackson*
Attorneys

The invention relates to an improvement in the manner of positioning the flag on golf course greens.

It is well known that the surface of the golf course green closely adjacent the cup must bear the heaviest traffic and with grass greens the grass becomes worn and trampled so that it is necessary to frequently move the cup from location to location about the green. Needless to say, when the cup is moved the hole must be filled up and a new turf provided in an effort to obtain a smooth surface. Where the cup must be changed frequently it is practically impossible to maintain a smooth green because of the frequent excavations and fillings which must be made.

A majority of the traffic about the cup is due to the handling of the flag. It is the usual practice for the caddy to approach the cup and stand behind the flag as each player approaches the green, and during the putting to hold the flag directly behind the cup while each player is making his shot.

It is one of the objects of the present invention to provide a flag which may be suspended above the cup with sufficient clearance to permit the ball to pass into or over the cup without interference from the flag.

4. BOWLS

As already mentioned in the NEWS 2010-04 English plumb bobs part 1 "PLUMB BOBS" are also used for playing bowls:

TAYLOR ROLPH patent

Recently on EBAY, there was a listing for a "patented TAYLOR ROLPH" with a patent number 30048.

This patent **GB 191030048 MERCER 1911 MEASURING DEV FOR BOWL GAMES** is not for a PLUMB BOB, but for a measuring system of a bowling game. Separated into its parts, you could use either part as a plumb bob, however, that is not the defining feature.

The pieces (plumb bobs) are used horizontal as the END and BEGINNING of the MEASURING LINE.

Inventor is John Harley MERCER, of British nationality, Mount Carron, Carron, Falkirk, Engineer.....

TAYLOR ROLPH used his patent to sell his products (Games, especially bowling games).

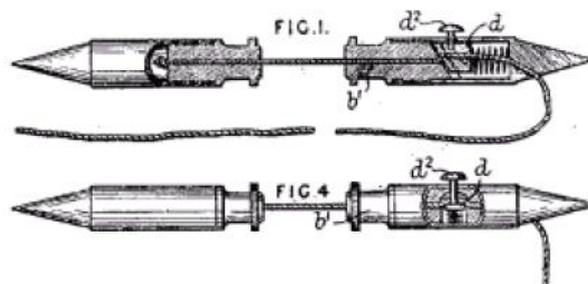


Drawings below from the patent GB 191030048 MERCER 1911 MEASURING DEV FOR BOWL GAMES and GB 181606 MERCER 1922 MEASURING DEVICE FOR GAMES



Abstract of GB191030048

30,048. Mercer, J. H. Dec. 28. Cleats. - In devices for measuring distances in the game of bowls consisting of a cord fixed to one contactpoint but free to pass through another, the cord is gripped at any point by a device of the kind in which kinking of the cord is effected. Three forms of the device are described in the Specification. In the form shown in Fig. 1, a spring normally pushes the locking-piece d against the inclined face of the plug b<1> so as to cause the hole in the former to be out of alinement with the central hole in the latter; in that shown in Fig. 4, the piece d is adapted to force the cord into a recess in the plug b<1>. The third form is similar to that just described. In all cases the locking-piece can be depressed by means of a projection d<2> so as to release the cord.



Data supplied from the esp@cenet database - Worldwide

PATENT SPECIFICATION

Application Date: June 9, 1921. No. 15,864/21.

181,606

Complete Left: Feb. 8, 1922.

Complete Accepted: June 22, 1922.



PROVISIONAL SPECIFICATION.

Improvements in Measuring-devices for use in Games of Bowls and the like.

I, JOHN HARLEY MERCER, of British nationality, Mount Carron, Carron, Falkirk, Engineer, do hereby declare the nature of this invention to be as follows:—

This invention has for its object to improve the measuring device described and illustrated in my Patent Specification No. 30,048 of the year 1910, and the 10 improvements relate more particularly to the modification illustrated in Fig. 5 thereof.

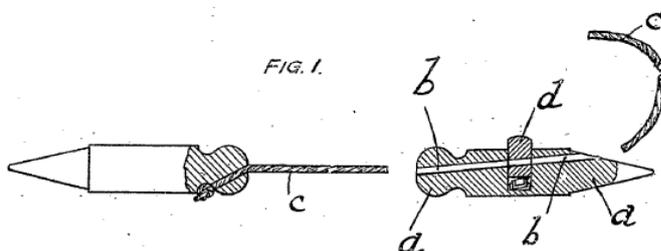
In the manufacture of the device described in the above specification it was 15 necessary, owing to the construction, to

tion, and at different angles, and unless these holes were accurately drilled, and of the correct depth, great difficulty was 20 experienced in threading, or passing the cord through the pin.

By the present invention, instead of the hole being made up of holes drilled at different angles, it is drilled straight 25 through the pin at one operation, and enters and leaves the pin in the same relative positions as shown in Fig. 5 referred to above. By these means the threading difficulty will be entirely eliminated, 30 owing to the hole which takes the cord being perfectly straight.

Dated the 7th day of June 1921.

FIG. 1.



5. PINBALL



Everybody knows a pin ball machine. But did you know that there is a “plumb bob” hidden inside? Here are some details (more see on the web site of the “pinball-fixers”^E:

TILT

Harry Williams (while working for Pacific Amusements) was the person responsible for inventing the "TILT" mechanism in 1932. The idea was to stop people from lifting and moving the machine, so they could "win" at it.

Another milestone for Pinball History, without it, the newer machines would never have gained their popularity as a game of skill.

As Pinball Machines had now progressed from the early Bagatelle games, where you could now win prizes, there needed to be a way to prevent people from "cheating".

The TILT mechanism solved this problem, and there are different versions of the TILT mechanism:

The Plumb Bob Tilt - which has a weighted metal rod dangling down into a metal circle, therefore sensing all movement and "Tilting" the machine.

The Slam Tilt - which is a set of contacts that detect the "slamming" of the front door.

The Roll Tilt – which is a metal ball that runs along an inclined guide that senses if the machine has been lifted.

The Playfield Tilt - which is a set of contacts that detect excessive slamming or lifting / dropping of the machine.

Harry Williams (with Sam Stern) went on to establish Williams Manufacturing in 1944, another name that is well renowned, but unfortunately ceased manufacturing Pinball Machines in 1999, as the Pinball History will reflect.

Plumb Bob

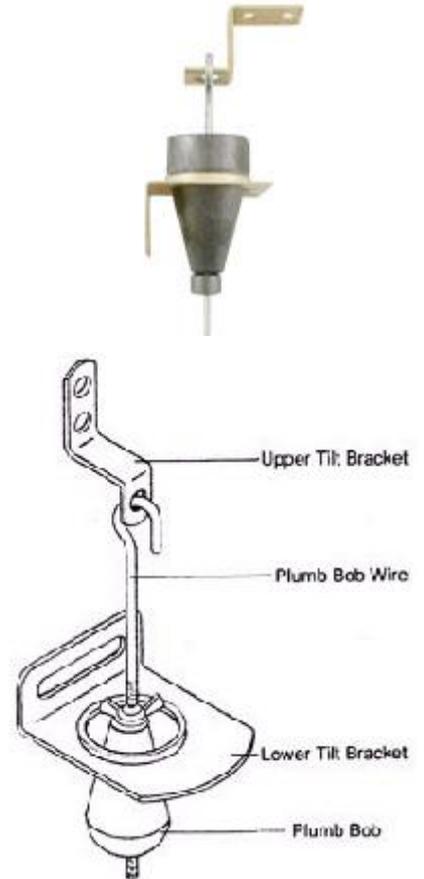
The Plumb Bob was first used as a Tilt Mechanism in 1935. This new design (also by Harry Williams) was far more reliable, easier to adjust, and didn't have to be reset.

The idea of a Plumb Bob has been around a long time, and is used in construction, surveying, and measurement, to name a few.

Basically it is a piece of string that is attached to a weight at one end, while hanging from the other. This gives you a perfectly vertical line that is vertically level.

The Plumb Bob Tilt works on this principle, but is a metal rod attached to the pinball machine cabinet at one end (top), with the weight at the other (bottom). It has a metal ring surrounding the weighted end.

The Plumb Bob works as a switch contact. The metal rod is attached to one half of the switch wiring, while the metal ring is attached to the other half. When the Plumb Bob swings due to movement of the pinball machine, it eventually



touches the metal ring, closing the circuit (switch), and tells the pinball it has been "tilted".

This process causes the pinball machine to shut down until the ball has returned to its start (drained). Modern Pinball Machines give Warnings (which are usually adjustable from 0 to 5) before they shut the machine down, and wait for the ball to be returned.

Harry Williams called this new version "Tilt" after he overheard some players saying that the machine had "Tilted" after nudging it too much.

The Plumb Bob can be adjusted to determine how it reacts to nudging. If the Plumb Bob (or weight) is moved up on it's shaft, it becomes closer to the metal ring. This means that it takes less movement for the Plumb Bob to make contact. Similarly, moving it further down the rod increases the amount of movement required before the machine will tilt.

The Plumb Bob Tilt when activated causes modern pinball machines to stop play on the current ball. Once the ball has drained, a new ball is started, and play is allowed to continue.

But you can cause the machine to end the current game, loose that credit, and have to start over again...

Here are some patent drawings of this system from 1937 and 1994:

United States Patent [19] Patia, Sr. et al. [11] Patent Number: 5,338,031 [45] Date of Patent: Aug. 16, 1994

[54] COMBINATION TILT SWITCH AND PLAYFIELD INCLINE INDICATOR

[75] Inventors: James A. Patia, Sr., Rolling Meadows; James X. Glass, Roselle, both of Ill.

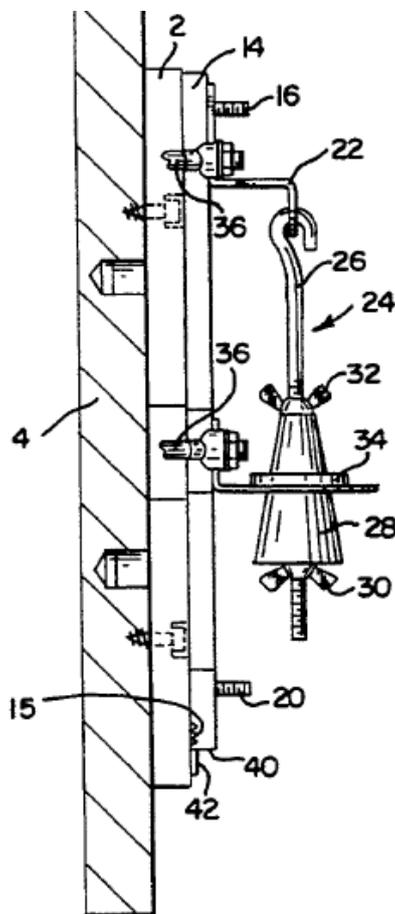
OTHER PUBLICATIONS

Pinball Game advertisement, "The Sporting Goods Dealer", Jan. 1978, p. 298.

Primary Examiner—Vincent Millin
Assistant Examiner—Raleigh W. Chin

[57] **ABSTRACT**

The tilt switch/incline indicator of the invention consists of a first support member that is connected to the game cabinet in a known orientation. A second member is pivotally supported on the first member and can be fixed relative thereto at angles corresponding to the desired angle of incline of the playfield. The second member supports a pendulum-type tilt switch similar to that used in the prior art. The pendulum acts like a plumb line to give a visual indication to the game operator that the playfield is at the desired angle set at the second member by observing when the pendulum is centered relative to the contact. The mechanism of the invention uses the tilt switch as the level indicator such that the playfield can be positioned at a known angle without requiring a separate level indicator or the recalibration to the tilt switch.



March 2, 1937.

R. T. MOLONEY

2,072,510

TELLTALE DEVICE FOR GAMES

Filed Nov. 1, 1935

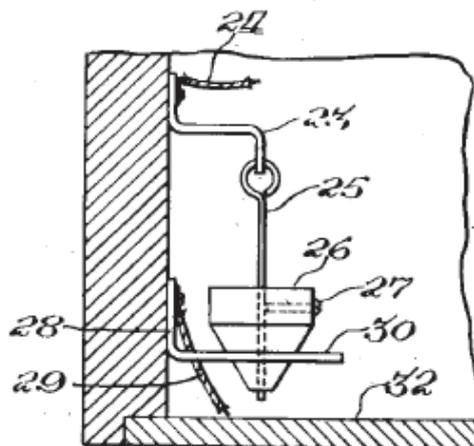


Fig. 5.



TANK WAGON

This system is also used to be sure that a **tank wagon** is in the correct position (horizontal), when it is checked at the “board of weights and measures / gauging office”.

The photos below are from a visit in a German “Eichamt” in Bad Kreuznach. With the diameter of the hole and the diameter of the plumb bob you can make a “definition of tolerance.”



The same mechanism is also used for a US Patent MOTION SENSOR / PEDOMETER: (must be very very small)

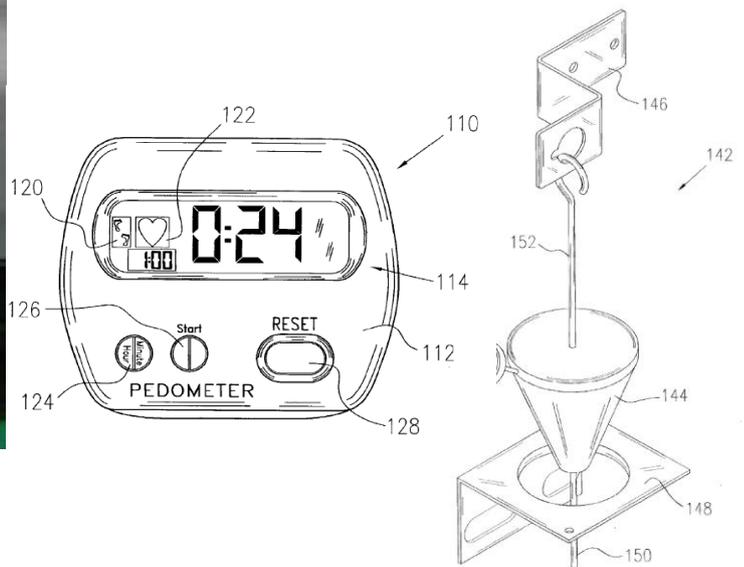


FIG. 5

United States Patent Application Publication (10) Pub. No.: US 2004/0140348 A1
Fromm (43) Pub. Date: Jul. 22, 2004

PEDOMETER
(57)

(57)
ABSTRACT

ABSTRACT

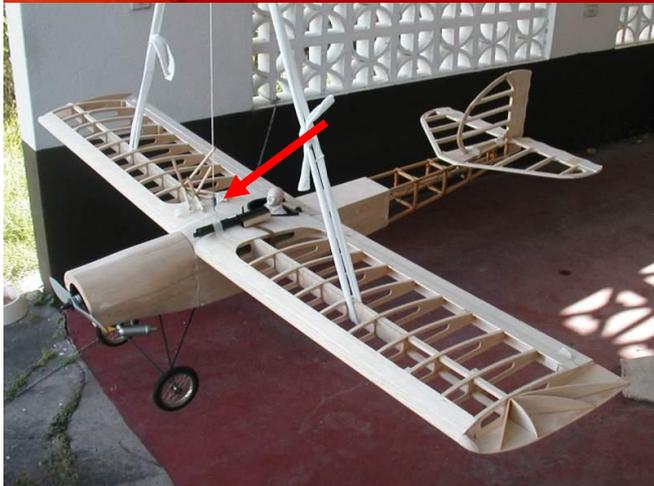
A simple to use and inexpensive pedometer in which a goal time of walking may be set and which will notify the user when the goal has been reached. The pedometer will include structure for establishing a goal time; apparatus for sensing walking, for summing the time walked, and for comparing the time walked with the goal time; and an alarm device for notifying the user when the goal time has been reached. A countdown display will display the total time remaining to be walked. The structure for establishing the goal time may include a button switch wherein the goal time can be increased in increments. The alarm device may be a vibrator, a speaker, headphones, or a combination of devices. The pedometer may notify the user when the user has been inactive for a period of time so as to motivate the user to get up and get moving, but which will not signal the user when not being worn.

[0046] While not shown in FIGS. 1-4, the pedometer includes means for sensing walking in the form of a motion sensor. One form of motion sensor which may be utilized is shown in FIG. 5 and is indicated generally at 142. This form of motion sensor includes a pendulum/plumb bob which is supported by an upper electrically conductive bracket 146. An electrical conductive rod 150 which may be an extension of the plumb bob support rod 152 is adapted to make electrical contact with a lower electrically conductive bracket 148. The terms “upper” and “lower” refer to the position of these components when the pedometer is clipped to a belt or the like. In order to control movement of the pendulum, a dash pot 154 is provided to limit excessive swinging motion.

6. AEROMODELLING

In the ww1 I found another use of the plumb bob^F: It is the story of the construction of a **Seabee Sport/F3A Pattern**.

*“With the aircraft fully assembled and ready to fly, I hung it in a home-made balance-rig to do a final check on the Center-of-Gravity. The CoG will always lie directly under the point of suspension, and a **plumb-bob** hanging from the same point will show the exact location of the CoG on the airframe.”*



Ready for TAKE OFF!



7. BOMBER TRAINING

In MODERN MECHANIX from Oct 1940^G I found:



“Tricycle” Trains Army Bombers

PERCHED on an odd three-wheeled framework of metal tubing, a U. S. Army pilot and his bombardier are pictured above at Riverside, Calif., getting in some ground bombing practice with an electrical machine said to simulate actual bombing conditions. A falling plumb bob plays the rôle of a bomb. Note that the bomb sight, a closely-guarded Air Corps secret since it is reputed to be the most accurate in the world, is covered with a hood to hide it from the prying eye of the camera.

“Tricycle” Trains Army Bombers

*Perched on an odd three-wheeled framework of metal tubing, a U. S. Army pilot and his bombardier are pictured above at Riverside, Calif., getting in some ground bombing practice with an electrical machine said to simulate actual bombing conditions. A **falling plumb bob plays the rôle of a bomb**. Note that the bomb sight, a closely-guarded Air Corps secret since it is reputed to be the most accurate in the world, is covered with a hood to hide it from the prying eye of the camera.*

8. CARS + RAILWAYS

Last year I got from the USA an instrument to measure the alignment of the wheels on a car. With some relative degree of accuracy some parameters of the WHEEL such as camber, caster, king pin alignment and side inclination of front wheels, can be measured and corrected.

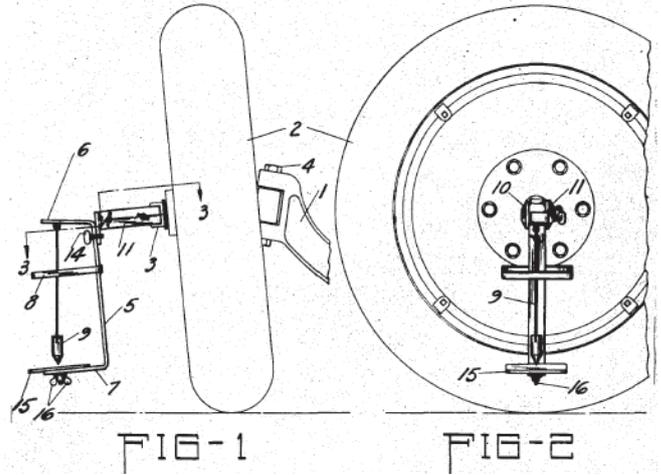


Searching for more information I found some patents from 1931, 1935 and 1951 (not all shown here):

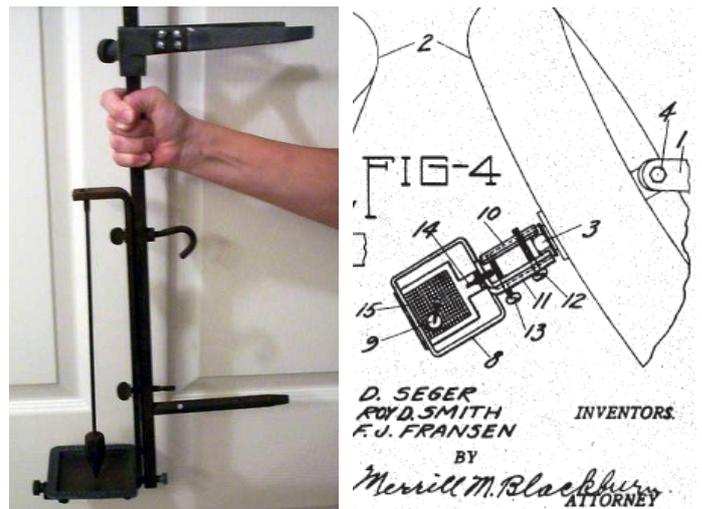
May 7, 1935.

D. SEGER ET AL
KINGPIN ANGLE GAUGE
Filed Sept. 1, 1932

2,000,865



Two homemade versions from the www:



This type of tool was offered on Ebay some years ago.

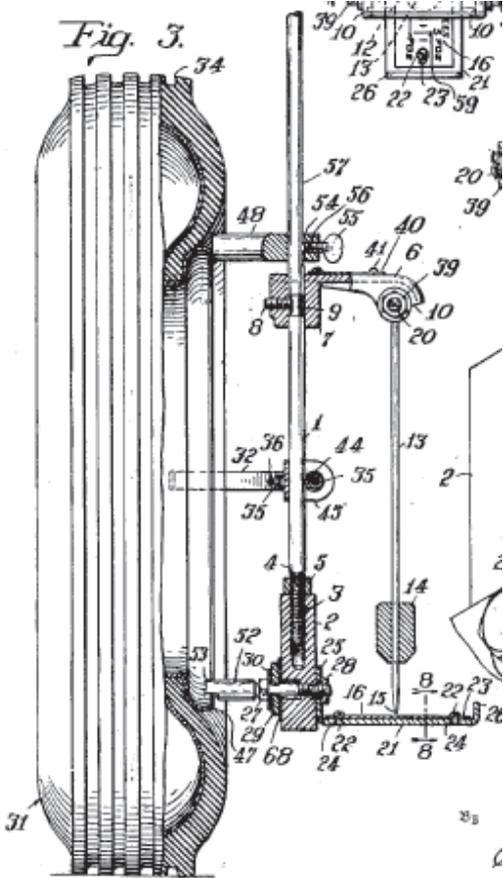
As recently as 1953 this "plumb bob" was part of a patent.

Patented Feb. 3, 1953

2,627,123

UNITED STATES PATENT OFFICE

2,627,123
GAUGE FOR INDICATING CAMBER, CASTER,
AND SIDE INCLINATION OF WHEELS

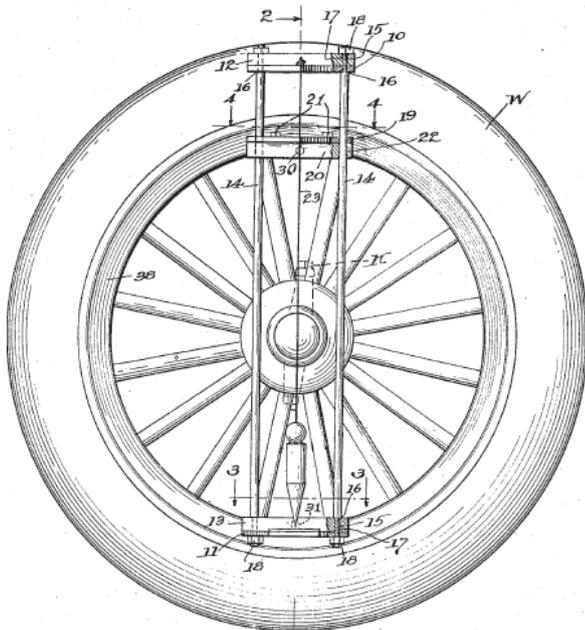


Dec. 25, 1934.

E. M. STARR
WHEEL GAUGE

1,985,330

Filed Oct. 19, 1931 3 Sheets-Sheet 1



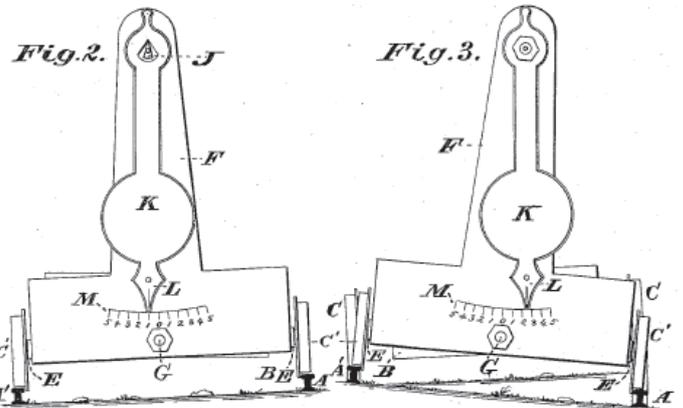
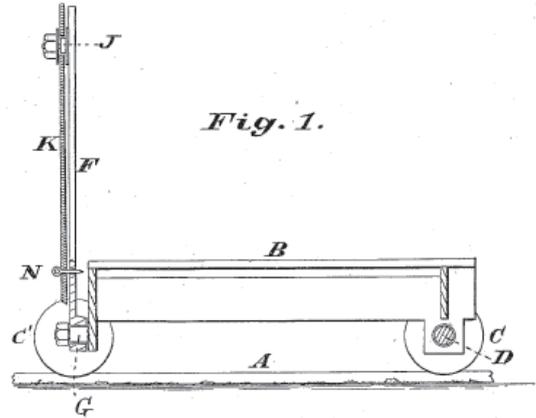
Much older is the RAILWAY GAUGE patent from 1884. The drawings tell it all.

(No Model.)

G. MCGREGOR.
RAILWAY GAUGE.

No. 309,792.

Patented Dec. 23, 1884.



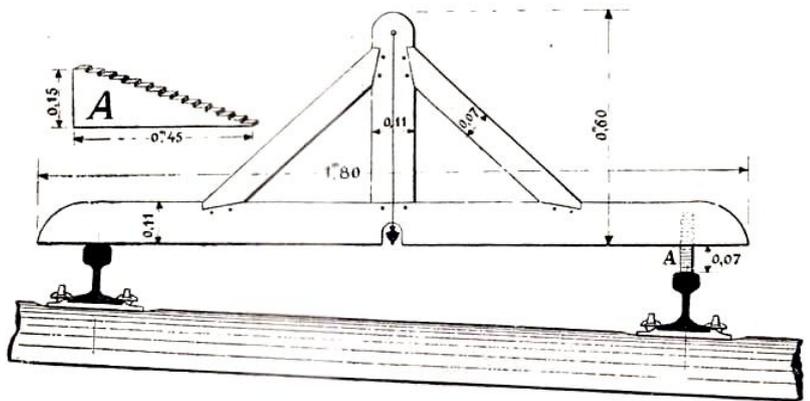
Attest:

A. P. Knight
Geo. Wheelock

Inventor:

George McGregor
By Knight Bros.
Atty.

Another instrument (plumb level) for this measurement from BELGIUM:



9. AMUSEMENT

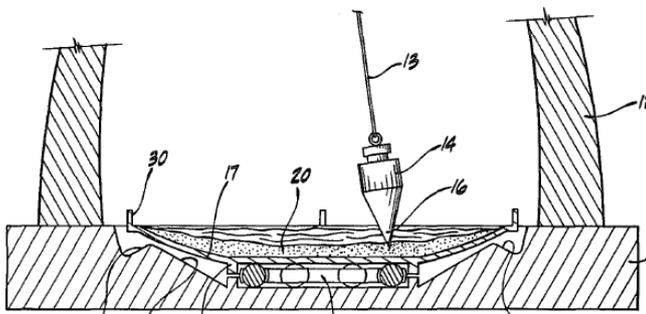
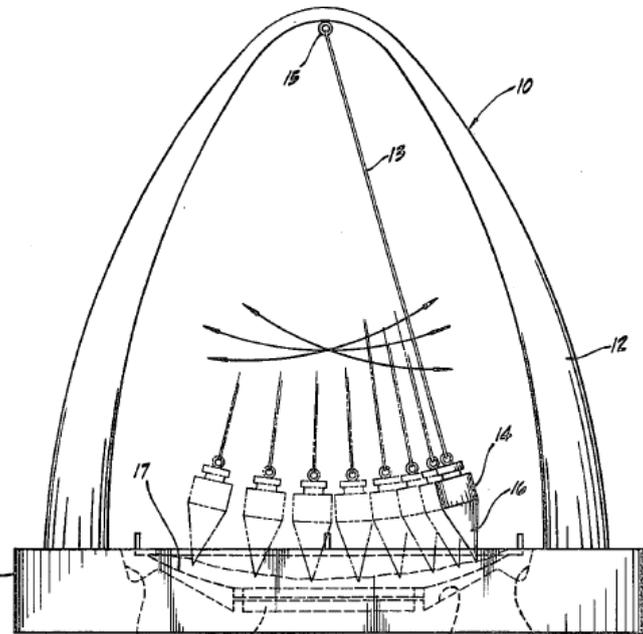
United States Patent [19]
Steward

[11] 4,199,868
[45] Apr. 29, 1980

[54] AMUSEMENT DEVICE FOR TRACING GEOMETRICAL FIGURES 3,516,193 6/1970 Engelman 33/27 L X
3,590,488 7/1971 Padowicz 33/27 L
4,067,111 1/1978 Truitt 33/27 L
[76] Inventor: R. James Steward, 100 Francois, Florissant, Mo. 63031
Primary Examiner—Harry N. Haroian
Attorney, Agent, or Firm—Cohn, Powell & Hind

[57] ABSTRACT

An amusement device including a base and a support carried by the base for suspending a pendulum above a marking surface. The pendulum includes a marker for tracing figures on the marking surface which is provided by a granular material contained in a bowl carried by the base. As the pendulum swings to and fro, the bowl can be rotated to control the tracing of geometrical figures on the marking surface.



To know more about the “Original Foucault Pendulum” in Paris, see WOLF’S PLUMB BOB NEWS 2008-07 about the collectors meeting in Paris on www.plumbbobcollectors.info



TEXT BY ANDY ANDRADE^H

Unlike normal pendulums, like you find in grandfather clocks, two external forces are operating on the pendulum: the downward action of gravity acts upon the mass of the pendulum, and the tension on the line between the mass and the anchor point. It is the interplay between these two forces that, primarily,



describe the patterns in which the mass moves.

It’s a beautiful dance, but it’s difficult to see just how elegant and complex the movement is until you find a way to see the movement in context. By sharpening the mass to a point and having it describe its path through a shallow dish of sand, you can see the track the pendulum takes on its regular rhythmic cycle. Back and forth, to and fro, the pendulum swings into gorgeous elliptical loops and whorls. This chrome Pit and Pendulum, while not as sinister as the version Poe wrote about, belongs on your desk, creating art out of science – beauty out of mathematics. Using phrases like “conical pendulum mathematical aesthetics” make a person appear smart, a prerequisite for mad scientists.

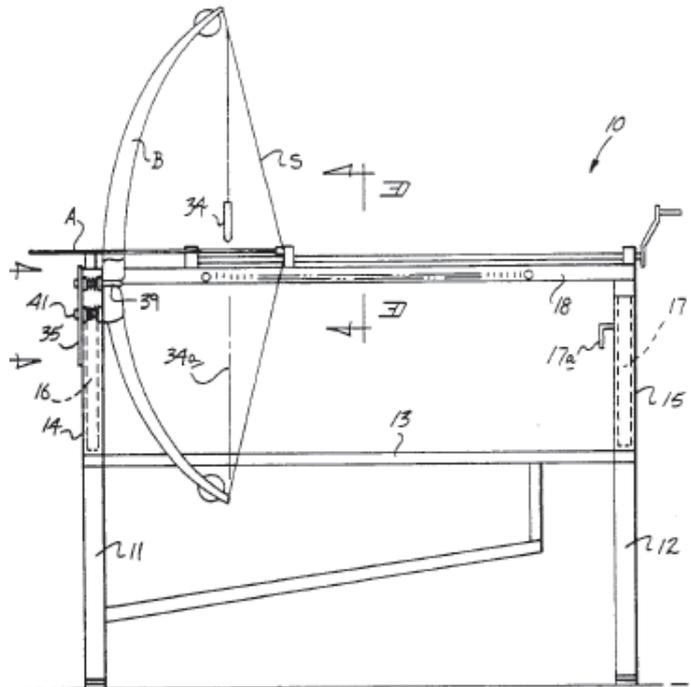
10.ARCHERY

United States Patent [19] Patent Number: 5,121,736
 Hawk [45] Date of Patent: Jun. 16, 1992

[54] ARCHERY BOW SIGHTING-TUNING APPARATUS
 [76] Inventor: Gary L. Hawk, 1880 Alcan Dr.,
 Primary Examiner—Randolph A. Reese
 Assistant Examiner—John A. Ricci
 Attorney, Agent, or Firm—Leon Gilden

[57] **ABSTRACT**

A sighting apparatus includes a framework mounting a forward and rear post vertically adjustable to accommodate height of an individual, with an upper support beam mounted to each upper terminal end of each post. The support beam including a forward plate for mounting the bow thereon, and including a plurality of guide rods positioned on opposed sides of the support beam, with a central drive screw arranged for selective retraction of the bow string of the associated bow. The organization includes a plumb bob and bow angulating member to effect vertical alignment of the bow, with the bow string arranged for retraction and subsequent release to effect flight of an associated archery arrow from the apparatus in an aligned orientation for sighting of the bow.



A plumb bob and support line 34 (see FIG. 10) are sighted along a setting line 34a to intersect upper and lower terminal ends of the bow "B". To permit vertical adjustment and positioning in alignment of the sighting line 34a, a bow mounting plate 35 includes (see FIGS. 5,

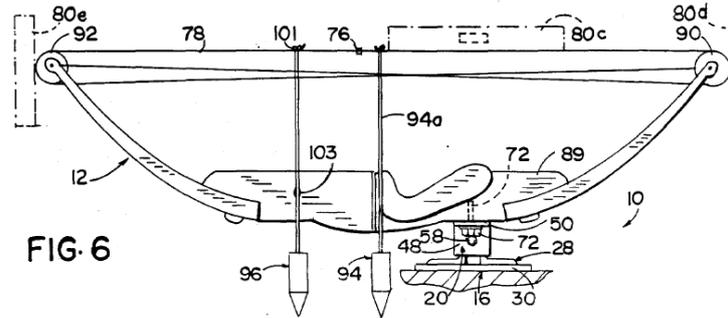
United States Patent [19] Patent Number: 4,974,576
 Morey et al. [45] Date of Patent: Dec. 4, 1990

[54] ARCHERY BOW ALIGNMENT DEVICE AND METHOD
 [75] Inventors: Harry D. Morey, P.O. Box 11285, S. Winn Rd., Shepherd, Mich. 48885; Thomas E. Giesken, Riverdale, Mich.
 [73] Assignee: Harry D. Morey, Shepherd, Mich.; a part interest
 [21] Appl. No.: 243,258

4,175,343	11/1979	Mathews	269/51 X
4,382,339	5/1983	Saunders	33/265
4,398,354	8/1983	Finlay	33/180 R
4,567,668	2/1986	King et al.	33/265 X
4,594,786	6/1986	Rezmer	33/265 X
4,596,229	6/1986	Bell	124/24 R
4,660,814	4/1987	Shader	269/71 X
4,703,922	11/1987	Schell	269/71 X
4,817,579	4/1989	Mathias	124/86 X
4,846,140	7/1989	DiMartino	124/86 X

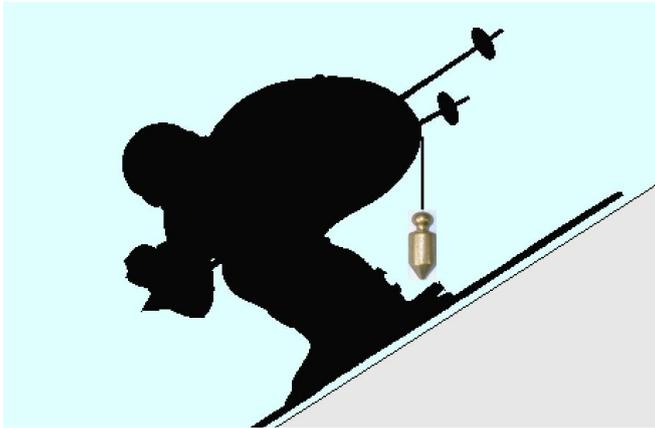
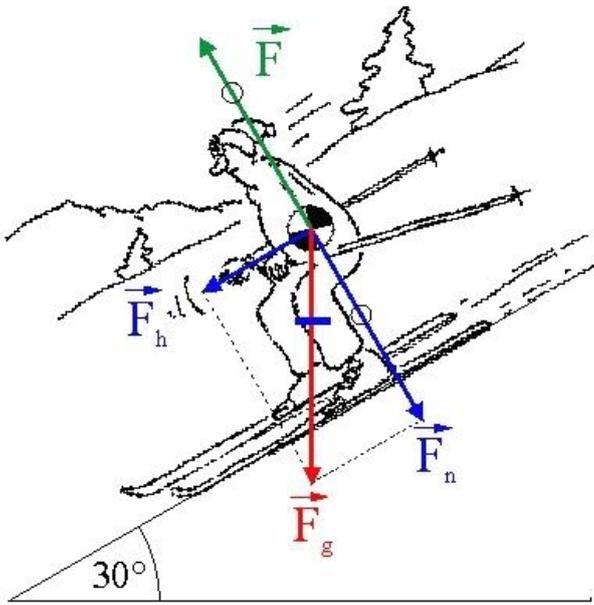
[57] **ABSTRACT**

A method and apparatus for precisely positioning various components of a compound bow is accomplished through the use of a device which adjustably, but securely, holds a compound bow in either a vertical orientation for the positioning of the nock or a horizontal orientation for the positioning of the arrow shelf, sights and pulleys. The method and apparatus of the present invention effectively alleviates the built-in inaccuracies in shooting an arrow. More specifically, the user can accurately position the nock on the main bow string, precisely align the arrow shelf with the main bow string, accurately align the sight bar on the bow with the peep sight on the main bow string, and check the accuracy of the alignment of the pulleys.



arrow 82 is to traverse. Plumb bob 94 indicates the precise vertical position beneath main bow string 78. With this as a guide, the user then adjusts arrow shelf 84 (FIG. 7) laterally (i.e., inwardly or outwardly from the body 89 of bow 12), until the track portion 95 is directly aligned with the string 94a of plumb bob 94.

11.SOMETHING TO SMILE ABOUT ☺

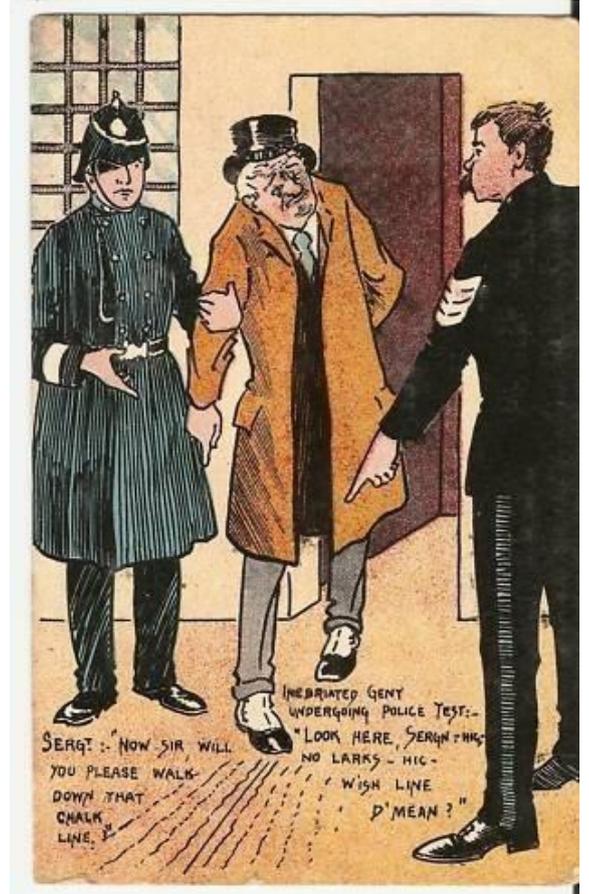


Standard version



High speed version (aerodynamic)

Sometimes not a PLUMB BOB but a CHALK LINE is used to get information about the vertical position.....(unknown source)



A POLICE TEST:
*SERG: NOW SIR, WILL YOU PLEASE WALK DOWN THAT CHALK LINE.
 LOOK HERE SERGENT – HIG – NO LARKS – HIG - WISH LINE D' MEAN?*

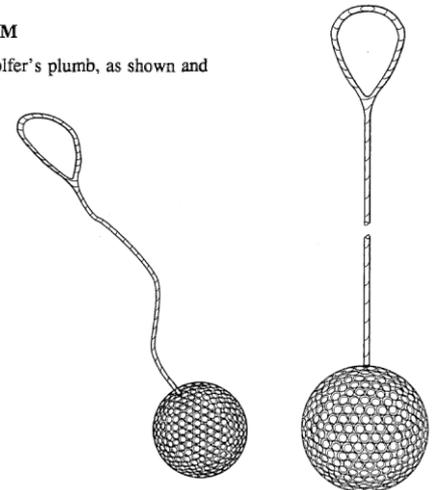
Last but not least: A GOLFERS PLUMB from Design patent US373402 from 1996

United States Patent [19] Williamson [45] Patent Number: Des. 373,402 Date of Patent: **Sep. 3, 1996

[54] GOLFERS PLUMB	2,529,771	11/1950	Herman	273/35
	3,309,089	3/1967	Doyle	273/32 B
[76] Inventor: Manley D. Williamson, 5 Oakland Dr., Castle Hayne, N.C. 28429	4,664,388	3/1987	Huber	D21/234 X
	4,848,766	7/1989	Oka et al.	D21/205 X
	4,867,451	9/1989	Mitchell	273/58 C
[**] Term: 14 Years	5,054,786	10/1991	Solomon	273/196 X

[57] CLAIM

The ornamental design for a golfer's plumb, as shown and described.



Last message before deadline:

PLUMB BOB SELLER ON THE MOON!

The French are now also represented on the moon with a tool shop. (See picture right). The last time I saw D. V., (a reader of my newsletter and a well known French tool seller) at the meeting in Bievres/Paris; May 2008.

This could still be a fine topic for one of the next NEWS.

By the way, Alan Shepard did not use any of the golf training aids shown in the chapter 3 GOLF. See picture right^{ix} **Portrait** by Apollo 12 Astronaut And Fourth Man On The Moon, Alan Bean, Of Apollo 14 Astronaut And Fifth Man On The Moon, **Alan Shepard, Hitting The First Lunar Golf Ball With a No 6 Iron Golf Club, Feb. 1971:**



12.SOURCES and FOOTNOTES

The full patents you can find on <http://www.google.com/patents>

REMARK:

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 and future publications on my website www.plumbbobcollectors.info

Remarks and contact by email:

plumbbobwolf@t-online.de

Thank you for your interest!

Wolf Ruecker

FOOTNOTES:

^A <http://cyclingwitheddie.files.wordpress.com/>

^B WWW.BIKEFIT.com

^C <http://www.carnetdevol.org/revue-cerf-volant/N14/sept-1910.html>

^D www.joeditzel.com/taxonomy/term/149

^E <http://www.pinball-fixers.com/pinball-history.html>

^F <http://anjo.com/rc/aircraft/seabee/>

^G <http://blog.modernmechanix.com/category/war/page/14/>

^H <http://martinandrade.wordpress.com/2007/12/03/3043/>

^{ix} http://www.wimmerspace.com/script/site/page.asp?artid=5&cat_id=13