

PATENT NEWS especially for PLUMB BOB COLLECTORS

## WR PATENT NEWS # 2007-34

### PATENTS

US1357270 BUSH 1920 AUTOMATIC PLUMB BOB  
US2136072 BUSH 1938 AUTOMATIC PLUMB BOB

**THEME: MECHANIZED** spring loaded internal reel

*In the next months, I will write about MECHANIZED plumb bobs with spring-loaded winding mechanism inside.*

*This one looks like a usual US carrot shaped plumb bob and it is marked:  
**LIGHTNING Pat Nov. 2, 20.** Nothing to see of his inner life, no handle, no button, nothing.*



**PATENT NEWS especially for PLUMB BOB COLLECTORS**

*INSIDE it is very interesting.*

*Here are some pictures (of two different items/types, his #461 + #692) from the collection of Nelson Denny:*



PATENT NEWS especially for PLUMB BOB COLLECTORS



The father of these plumb bobs is EUGENE STANLEY BUSH and I found two patents from 1920 and 1938.

## UNITED STATES PATENT OFFICE.

EUGENE STANLEY BUSH, OF PENDLETON, OREGON.

AUTOMATIC PLUMB-BOB.

1,357,270.

Specification of Letters Patent.

Patented Nov. 2, 1920.

Application filed September 19, 1919. Serial No. 324,744.

*To all whom it may concern:*

Be it known that I, EUGENE STANLEY BUSH, a citizen of the United States, and a resident of Pendleton, in the county of Umatilla and State of Oregon, have invented certain new and useful Improvements in Automatic Plumb-Bobs, of which the following is a specification.

1920 BUSH lived in Pendleton, Umatilla OREGON. Than he moved to St. Louis Missouri.

Later (1932 -1934) in other patents:

1,943,057

ENGINE AND TRANSMISSION CONTROL MEANS

Eugene S. Bush, St. Louis, Mo., assignor to Bush Manufacturing Company, St. Louis, Mo., a corporation of Missouri

Application February 8, 1932. Serial No. 591,590

17 Claims. (Cl. 192—01)

2,136,072

AUTOMATIC PLUMB BOB

Eugene S. Bush, St. Louis, Mo., assignor to Bush-Harman Products, Inc., St. Louis, Mo., a corporation of Missouri

Application July 13, 1936, Serial No. 90,376

1 Claim. (Cl. 242—108)

I could not find any of these mentioned factories in www. ☹

1,357,270.

E. S. BUSH,  
AUTOMATIC PLUMB BOB.  
APPLICATION FILED SEPT. 19, 1919.

Patented Nov. 2, 1920.  
2 SHEETS—SHEET 1.

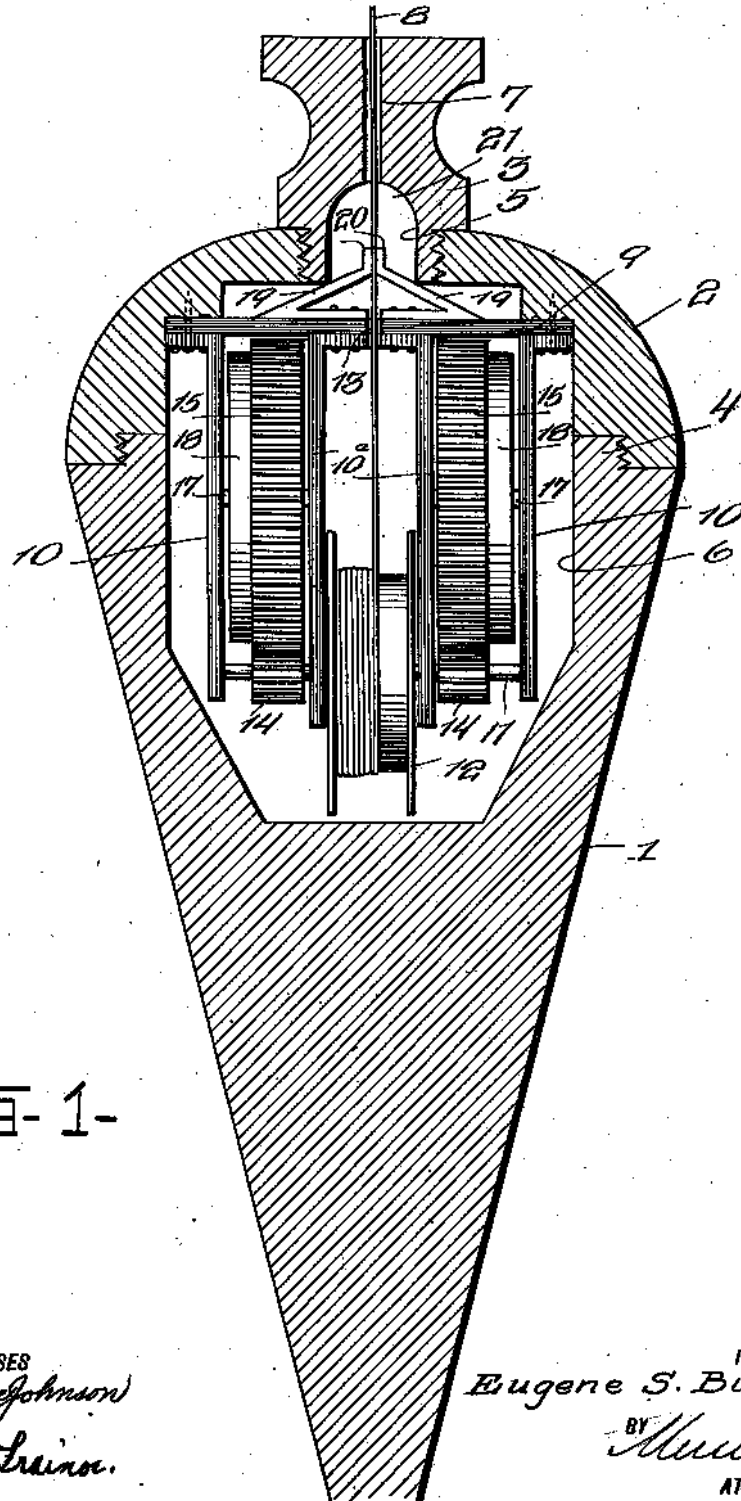


FIG. 1-

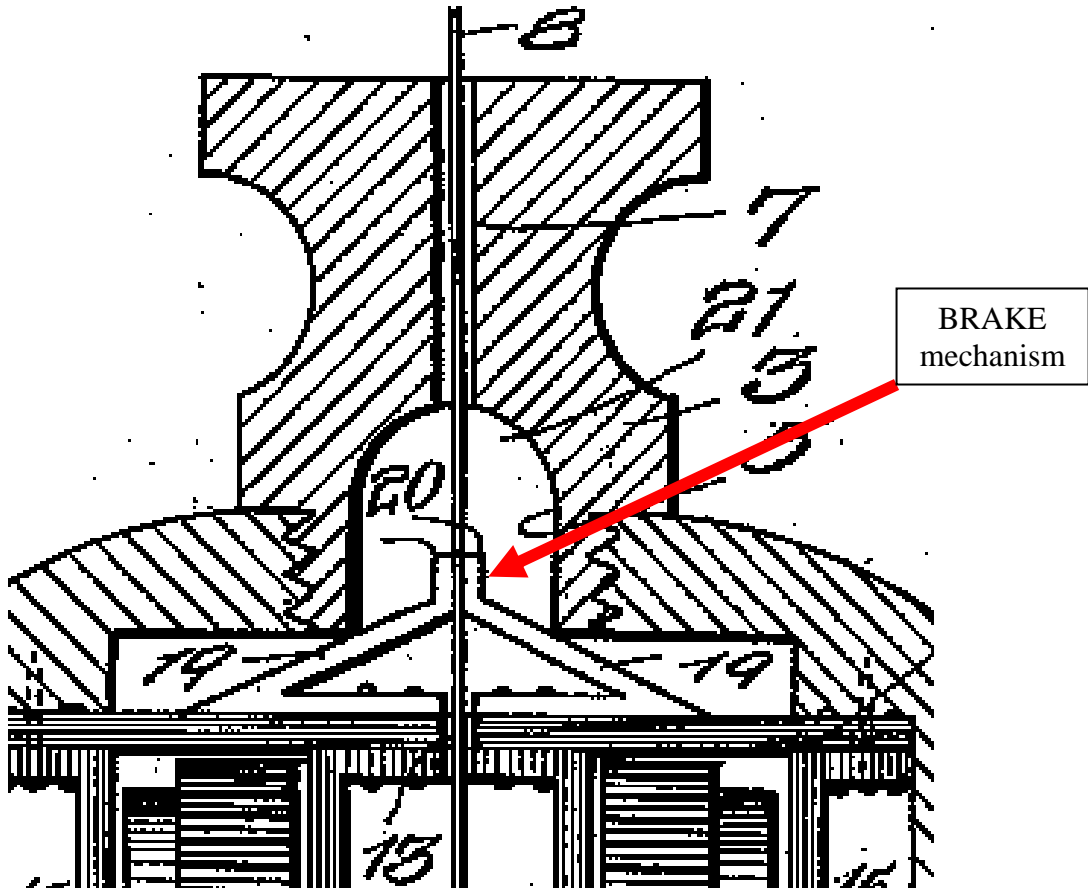
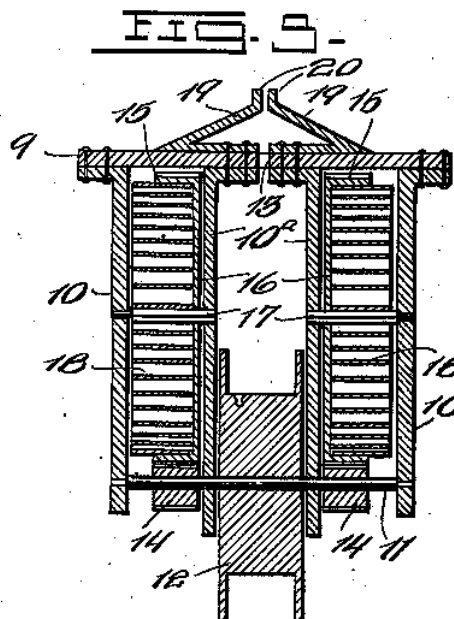
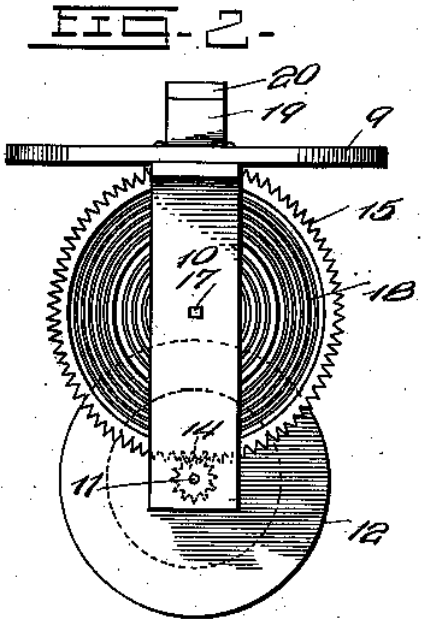
WITNESSES  
*Wynne Johnson*  
*C. E. Linn.*

INVENTOR  
*Eugene S. Bush*  
BY *Murray Ho.*  
ATTORNEYS

PATENT NEWS especially for PLUMB BOB COLLECTORS

We have two special techniques inside: The clamp/brake and the spring winded reel:

E. S. BUSH,  
AUTOMATIC PLUMB BOB,  
APPLICATION FILED SEPT. 19, 1919.  
1,357,270. Patented Nov. 2, 1920.  
2 SHEETS—SHEET 2.



BRAKE mechanism

PATENT NEWS especially for PLUMB BOB COLLECTORS

18 years later, BUSH made improvements of his first patent of 1920.

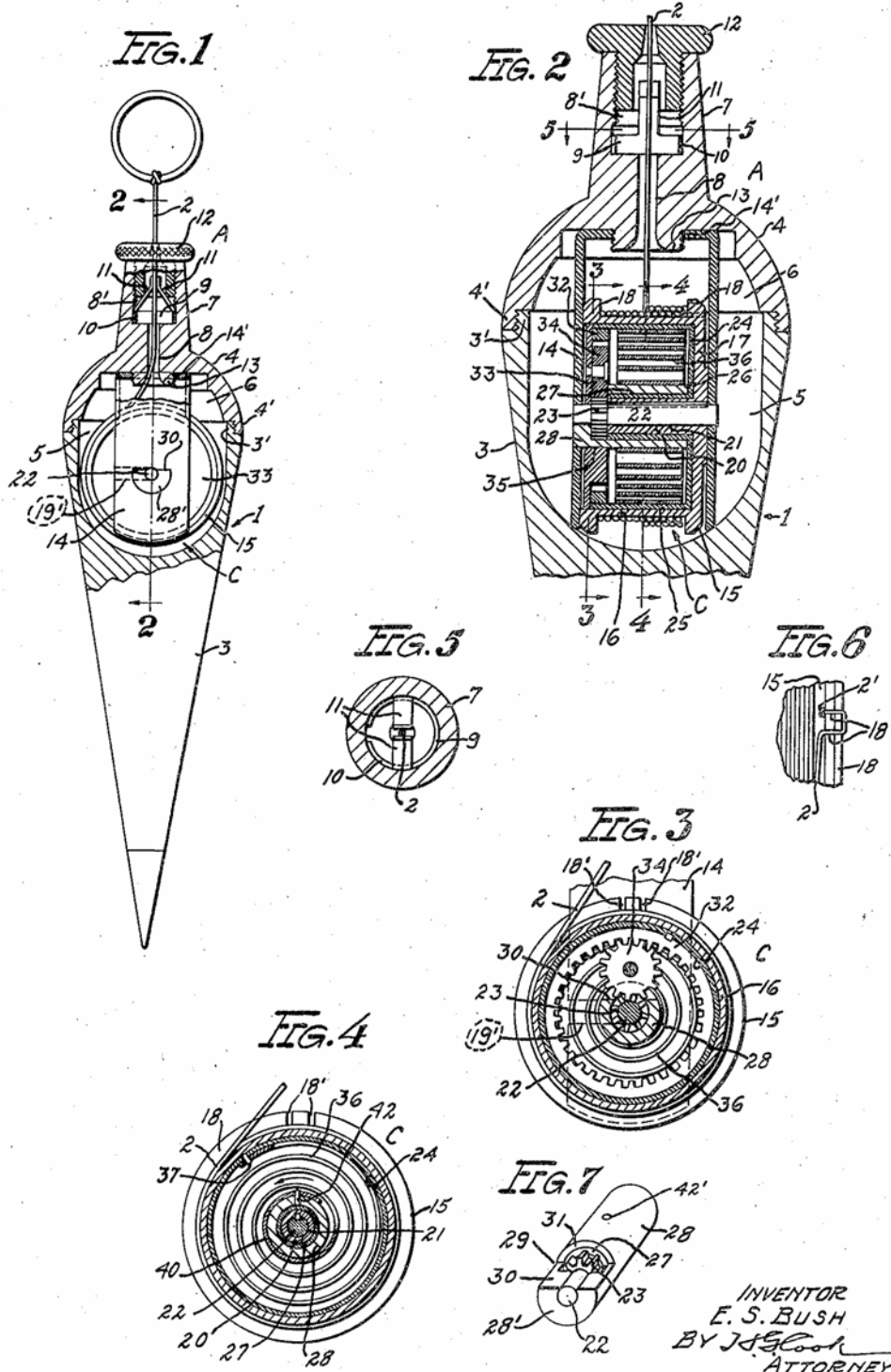
Nov. 8, 1938.

E. S. BUSH

2,136,072

AUTOMATIC PLUMB BOB

Filed July 13, 1936

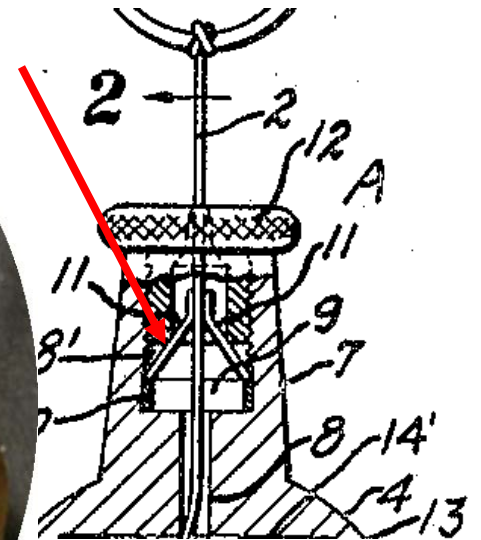
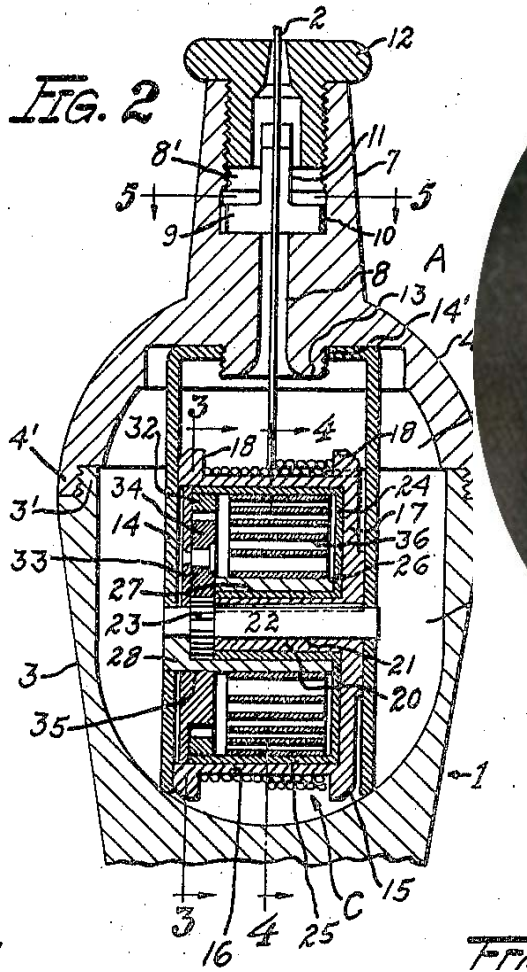


INVENTOR  
E. S. BUSH  
BY J. S. Cook  
ATTORNEY

PATENT NEWS especially for PLUMB BOB COLLECTORS

Now he presents a modified and longer cap and also a modified reel and spring.

The 2 examples from Nelson's collection are not exactly identical with the drawings shown in the patent, even when they are marked "Patented 1920"



**PATENT NEWS especially for PLUMB BOB COLLECTORS**

*In June 2007, I had a long interchange about these patents with Nelson Denny. Here is his conclusion:*

**WOLFGANG,**

**TO ANSWER YOUR QUESTION ABOUT THE LIGHTNING BRAKE,.....AND, I HAVE ADDED AN EXTRA PHOTO TO EACH FILE LOOKING DOWN ON THE INSIDE OF THE CAP AND THE TOP OF THE BODY IN THE SAME VIEW.**

**I PERHAPS WAS TOO DISPARAGING IN MY REMARK ABOUT THE LIGHTNING NOT HAVING AN ADEQUATE BRAKE.....IT IS MORE CLEAR TO ME NOW THAT MY FIRST EXAMPLE OF A LIGHTNING IS MISSING A PART, A COLETTE, THAT GRIPS THE STRING WHEN THE CAP IS TIGHTENED DOWN. GIVEN THE SHAPE OF THE PLUMB BOB BODY, IT IS MORE THAN LIKELY THAT THE MISSING COLETTE LOOKED LIKE THE ILLUSTRATION IN THE BUSH 1920 PATENT. THE DUAL SPRING DRIVE MECHANISM OF THIS SAME BOB SEEMS TO OPERATE ON THE PRINCIPLE OF THE ILLUSTRATION IN THE 1920 PATENT, ALSO.**



**IN MY SECOND LIGHTNING, NEITHER PATENT DRAWING ILLUSTRATES THE CROWN GEAR IN THIS EXAMPLE NOR DOES THIS SECOND BOB EMPLOY A COLETTE AT ALL. IN OTHER WORDS THE BRAKE ON THIS SECOND EXAMPLE IS LIKE NEITHER STYLE OF COLETTES SHOWN IN THE TWO DIFFERENT PATENT DRAWINGS.**

**TYPE 2 CAP HAS AN ASYMMETRICAL HOLE DRILLED THROUGH A CONE SHAPED PROJECTION, THAT CONE SHAPED PROJECTION MATES WITH A CONE SHAPED DEPRESSION IN THE PLUMB BOB BODY.....THIS IS A VERY ELEGANT WAY TO BRAKE THE PLUMB BOB IN THAT THE COLETTE IS TOTALLY ELIMINATED. SIMPLY LOOSENING THE CAP ALLOWS THE STRING TO SLIDE**



**THROUGH.....TIGHTENING THE CAP SIMPLY CLAMPS THE STRING BETWEEN THE CAP AND THE BODY.....THUS, NO MORE MINISCULE PART TO LOSE.**

**..... IF I WERE TO MAKE AN EDUCATED GUESS, I BELIEVE MY TYPE DATES AFTER 1920 WHEREAS MY TYPE 2 DATES AFTER 1938.**

**NELSON DENNY**