

PATENT NEWS especially for PLUMB BOB COLLECTORS

WR PATENT NEWS # 2007-40

PATENTS

SU1753274 FLESS 1992 PLUMB BOB
SU1044983 PEREGUDOV 1983 PLUMB BOB
US2135211 JOHNSON 1938 PLUMB BOB
US2618863 JOHNSON 1952 PLUMB BOB
DE96450 SIMON 1898 PLUMB BOB WITH BUBBLE LEVEL

Theme: RUSSIAN PLUMB BOBS

In these days it is possible to get patents from all over the world, not only from the USA and Europe, but also from Russia.

You can use the EUROPEAN PATENT OFFICE in MUNICH:

<http://ep.espacenet.com/>

or directly in the advance search:

http://ep.espacenet.com/advancedSearch?locale=en_ep

If you need help, feel free to ask me.

Searching for RUSSIAN plumb bob patents I found nearly 40 patents back to 1974, but there are 2 only that are of interest to collectors.

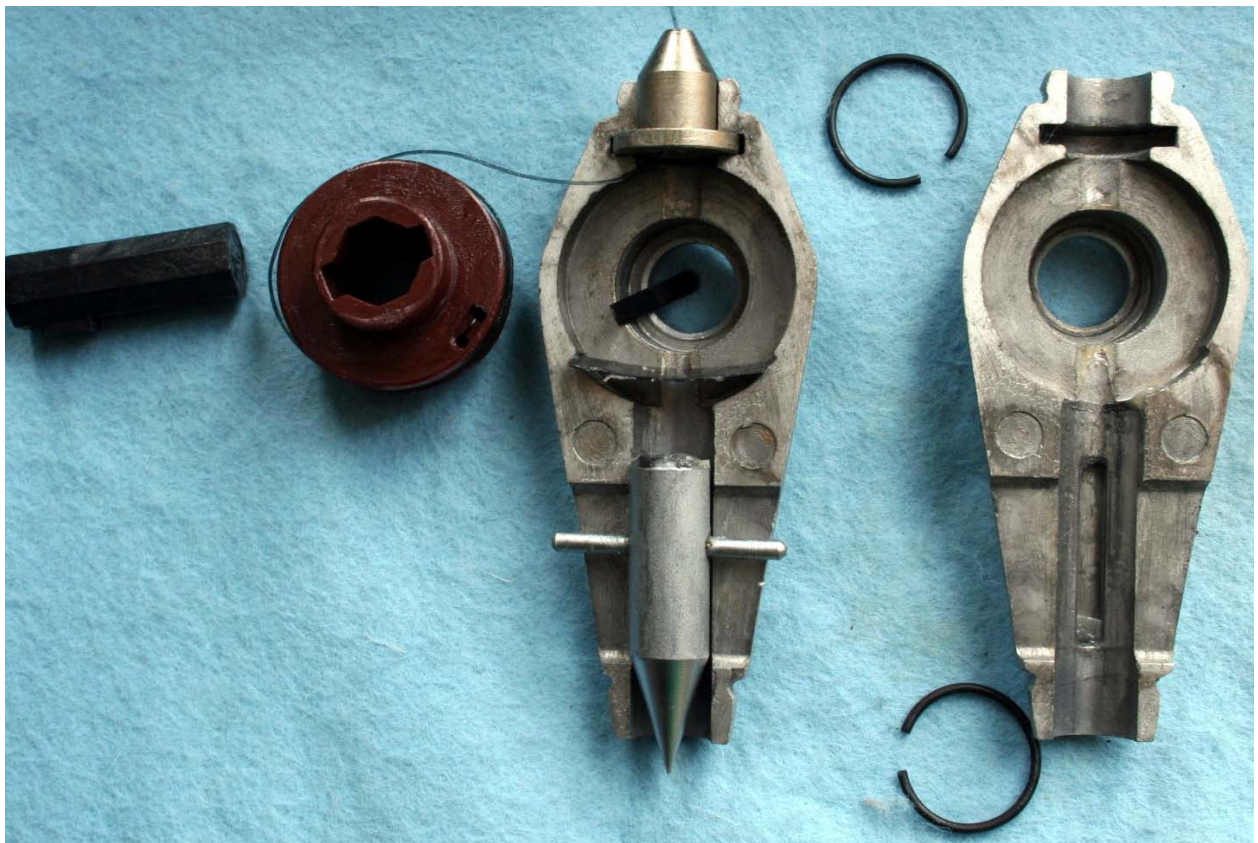
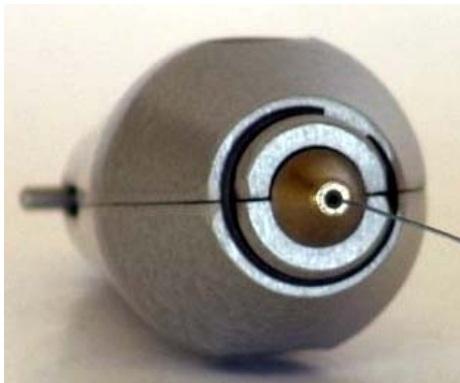
Because my knowledge of the Russian language is ZERO, I asked my collector friend Karlheinz Riess in the eastern part of Germany to help. (This part was occupied a long time by the Russians, so they taught Russian in school. He asked a teacher in his town to translate the main parts of the patents into German. So we know now how these patents work. Thank you very much.



PATENT NEWS especially for PLUMB BOB COLLECTORS

Unfortunately I don't have pictures of the patented plumb bobs.

I have seen a technical Russian plumb bob only twice. One has a German collector and the other one Riccardo Chetoni who sent me the pictures from inside the tool. (Not similar with the SU-Patent)



The first patent



СОЮЗ СОВЕТСКИХ
СОЦИАЛИСТИЧЕСКИХ
РЕСПУБЛИК

ГОСУДАРСТВЕННЫЙ КОМИТЕТ
ПО ИЗОБРЕТЕНИЯМ И ОТКРЫТИЯМ
ПРИ ГКНТ СССР

ОПИСАНИЕ ИЗОБРЕТ К АВТОРСКОМУ СВИДЕТЕЛЬСТВУ

is given Aug. 07, 1992 to **FLESS Pavel** and others.
It is a very new one.

The drawing shows the use.

The plumb bob has a body **1** and in its lower part
a conical movable pointer **2** with an eccentric disk **3**.

Sorry, but I can't understand why they need an
eccentric disk **3** to bring the tip in an exact
position (adjust). If the plumb bob is built
symmetrical, than the tip is directly under the line!
Perhaps someone can help me understand.

In the upper part of the body they have a brake
system (clamps) **6** with two types of coil springs **4**,
5. Number **7** is a plate/disk with a hole in the
middle and a part outside of the plumb bob to
press down the springs **4 + 5**. Then the clamps **6**
open and the line is not longer fixed.

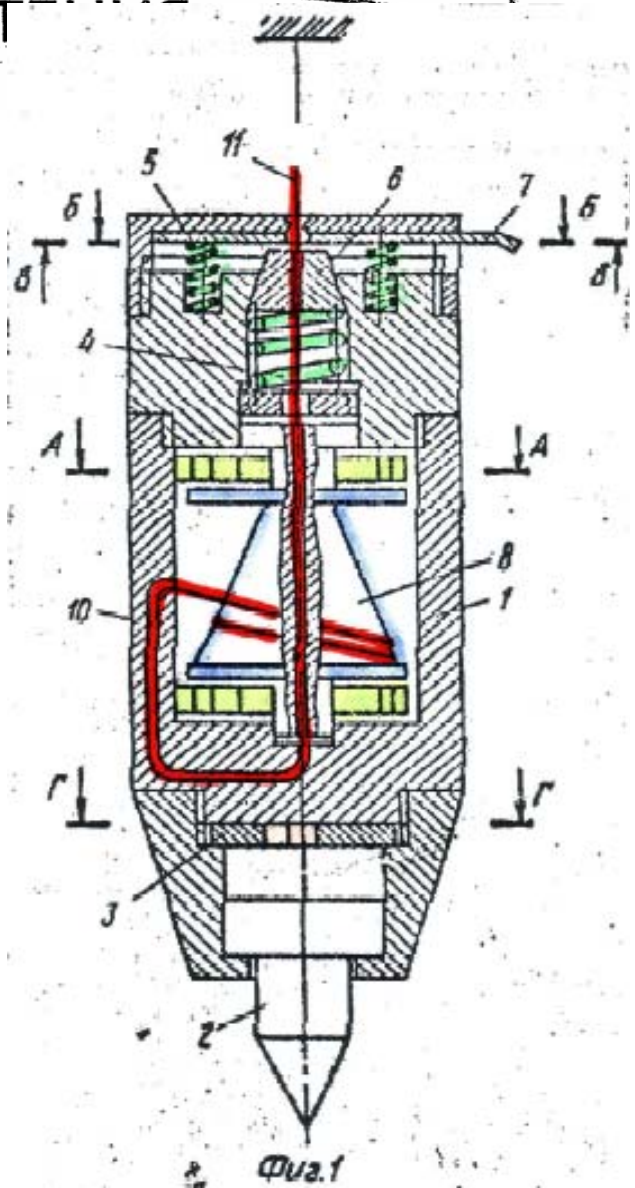
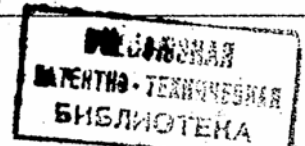
In the hollow body **1** we find a CONICAL SPOOL
8 and on the same axis **2** spiral-springs **9** (not
marked in the original patent) and a
tube/guide/canal **10** to guide the line **11**.

*I wonder how they will produce the channel and
how they will bring the LINE into the CHANNEL
and what is the friction of this part !!!!!!!!!!!!! I think that it doesn't work.*

I tried to translate only the main parts of the patent.

(19) **SU** (11) **1753274** **A1**

(51)5 G 01 C 15/10

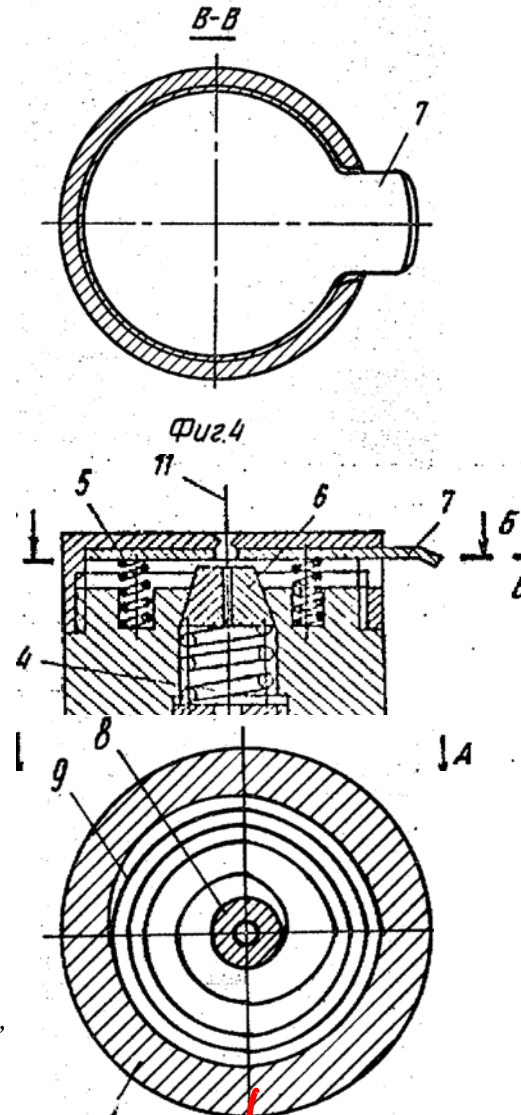


(54) OTBEC

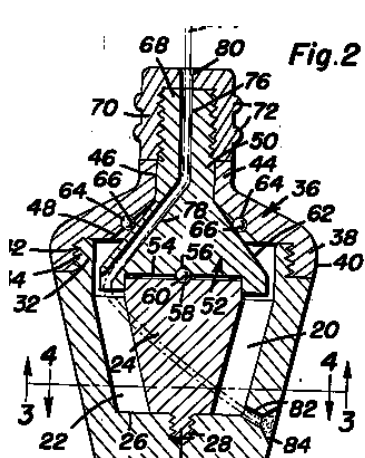
Spell it OTWES = PLUMB BOB

The plumb bob works as follows:

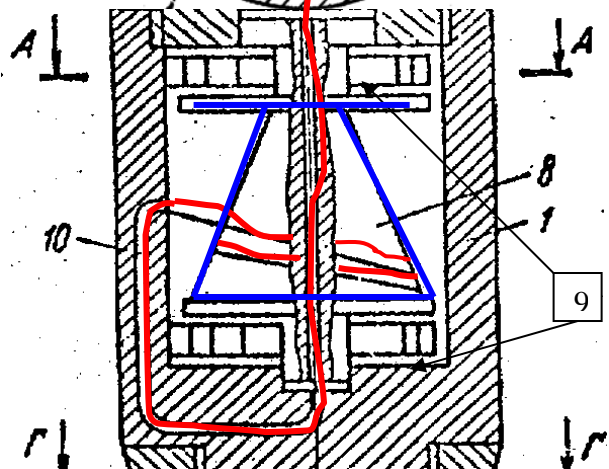
The line 11 hangs on a hook. To break off the line you must press the plate 7 against the force of the springs 4 and 5. The clamps 6 open and you can pull the plumb bob in the wanted position.



When you will bring the plumb bob in another position, press disk 7, lift the plumb bob and the spiral springs 9 will wind up the line 11 on the CONICAL SPOOL 8. I think that the spool is conical, to compensate for the weakness of the spiral springs.

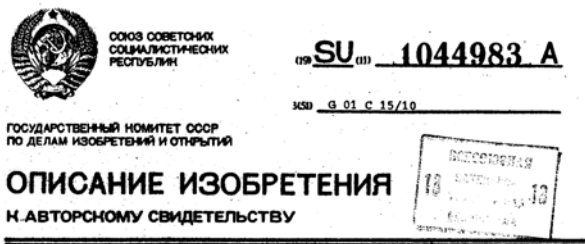


I could not find any vertical conical spools in spring driven plumb bobs in my patents. The only conical spool is in US2621421, but this one is fixed and the line is turned by hand.



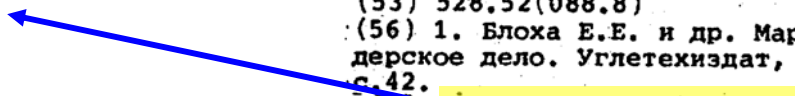
PATENT NEWS especially for PLUMB BOB COLLECTORS

The second Russian patent was given Sept. 30, 1983 to Sergej PEREGUDOV :



- (21) 2738806/18-10
- (22) 19.03.79
- (46) 30.09.83. Бюл. № 36
- (72) С.Т. Перегудов, Н.М. Киряшин
- В.А. Макаров и Н.И. Морозов
- (71) Всесоюзный научно-исследовательский и проектно-конструкторский институт механизированного и ручного строительного-монтажного инструмента, вибраторов и строительного отделочных машин
- (53) 528,52(088.8)
- (56) 1. Блоха Е.Е. и др. Маркшейдерское дело. Углетехиздат, 1956 с.42.
- 2. Патент США № 2135211, кл. 33-217, опублик. 01.11.38(прототип)

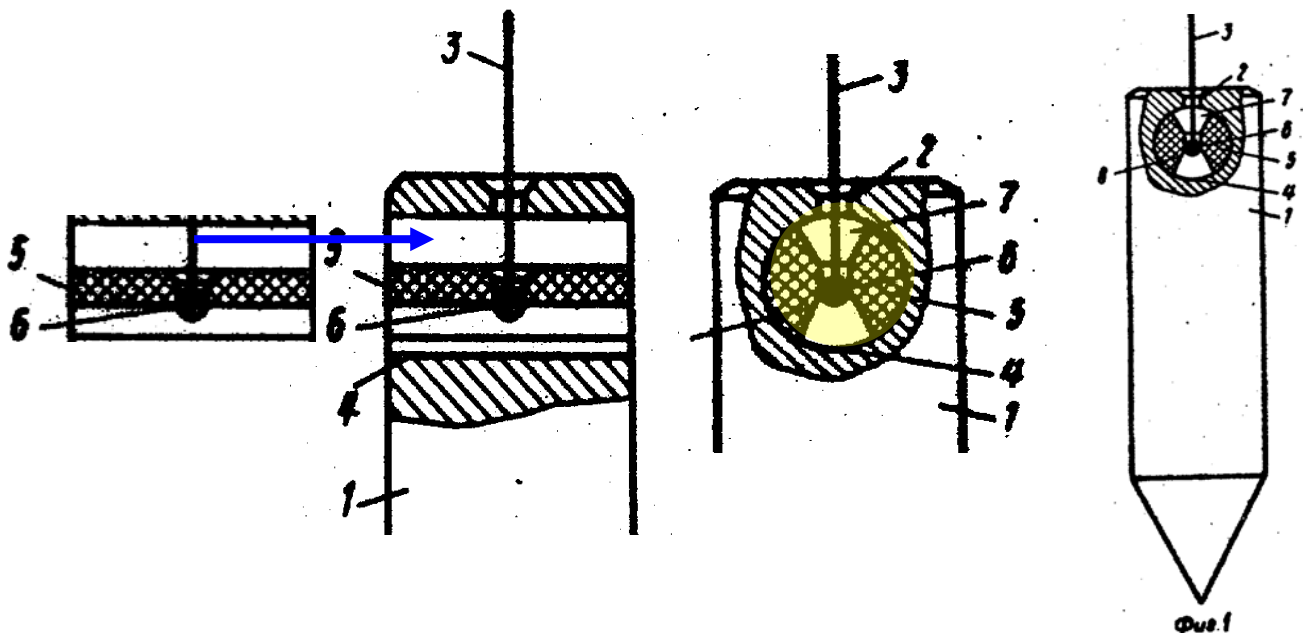
In this patent is mentioned as REFERENCES CITED a patent US2135211 (see next page)



At first view I thought this plumb bob has a spool inside, but reading the translation and talking with another Russian here in my town I learned this is a very special solution for a very simple kind of fixing the string on the plumb bob: A KNOT.

To understand the invention I made a small model, but also with the model we did not find another use of this invention.

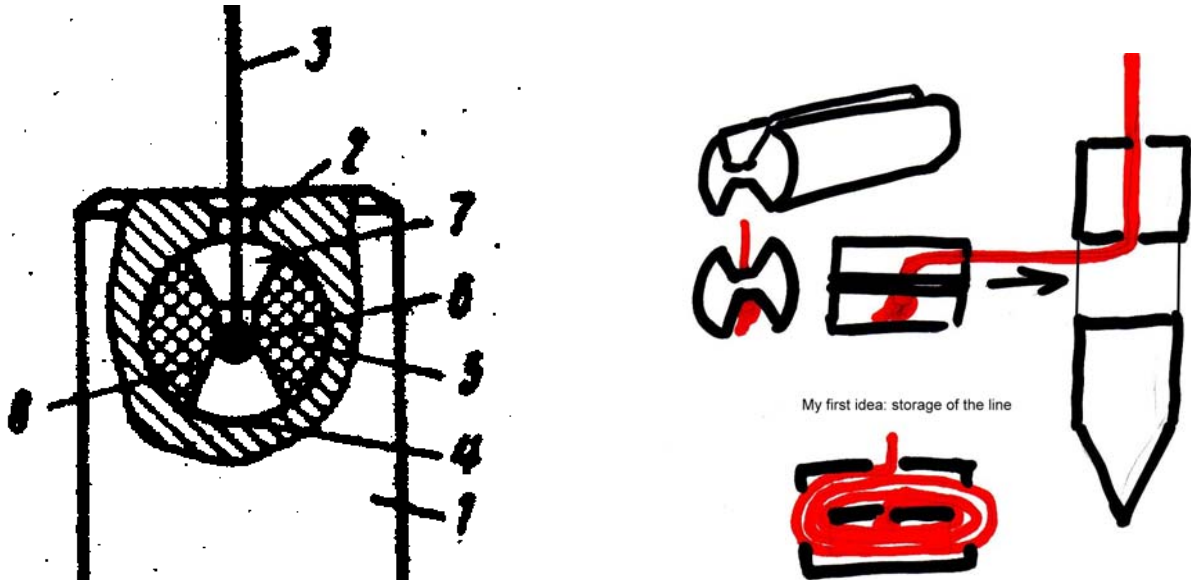
My first idea (see my drawing next page): The part 5 core/tube was used to store the line, but we could not find any confirmation for that. ☹ It is only to make the knot outside of the plumb bob and to bring the knot into the body. ☺



PATENT NEWS especially for PLUMB BOB COLLECTORS

The patent says:

The body 1 has a hole 2 for the line 3 and a cross hole 4. The core 5 has an upper and a lower groove 7. The line 3 is fixed with a knot 8. The core may be from plastic. The assembly is shown in the drawing.



The REFERENCE CITED patent US2135211:

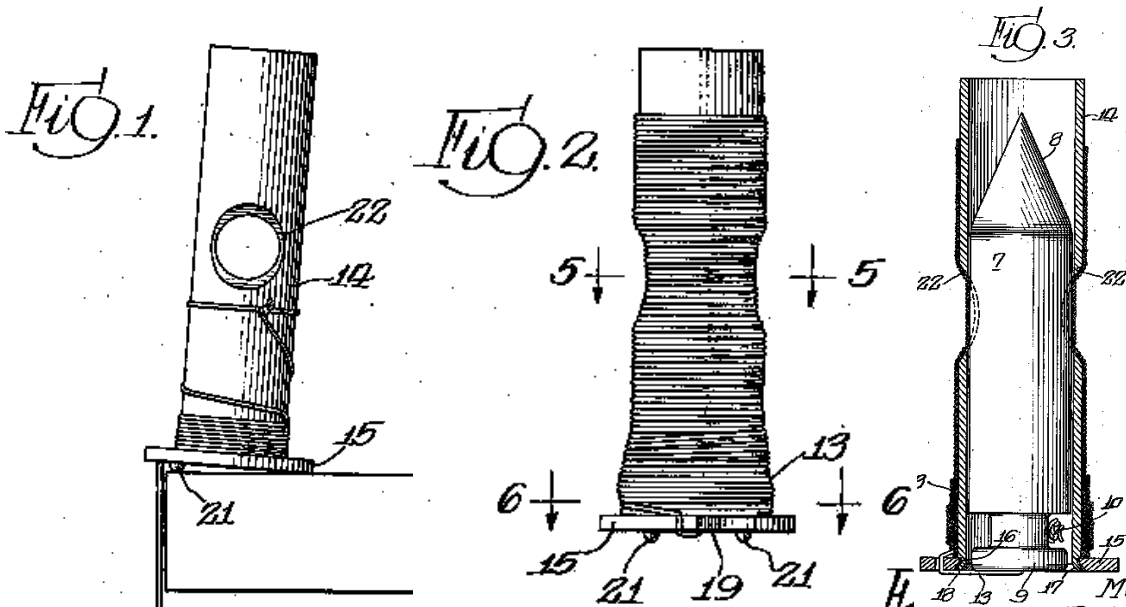
Nov. 1, 1938.

M. E. JOHNSON

2,135,211

PLUMB BOB

Filed Dec. 2, 1937



PATENT NEWS especially for PLUMB BOB COLLECTORS

In the first Russian patent is mentioned as REFERENCE CITED a German patent DE96450 from 1898 for a combination plumb bob with a bubble level:



PATENTSCHRIFT

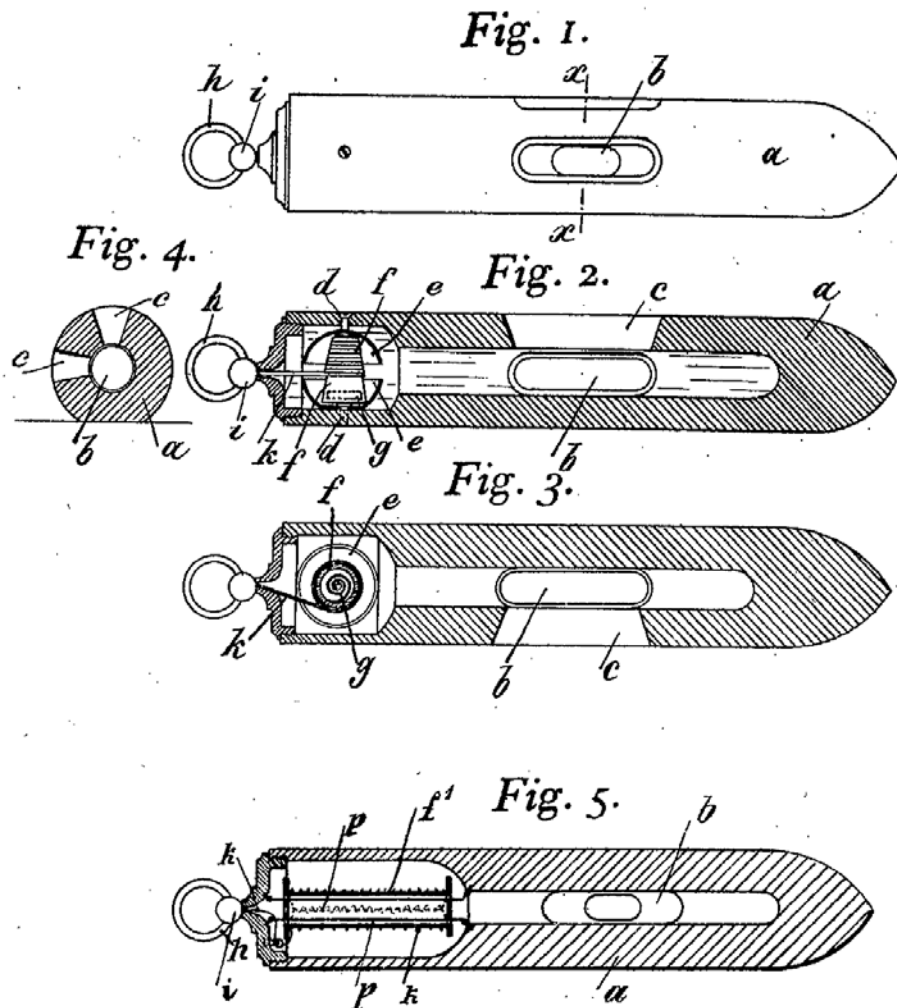
— № 96450 —

KLASSE 42: INSTRUMENTE.

ERNST SIMON IN SULZBACH B. SAARBRÜCKEN.

Loth mit Wasserwaage.

Patentirt im Deutschen Reiche vom 14. März 1897 ab.



YIKES! that was more work than I thought for 2 Russian patents ☺☺