

No. 635,154.

Patented Oct. 17, 1899.

E. SMREKER.
MEASURING APPARATUS.

(Application filed Mar. 3, 1899.)

(No Model.)

Fig. 1.

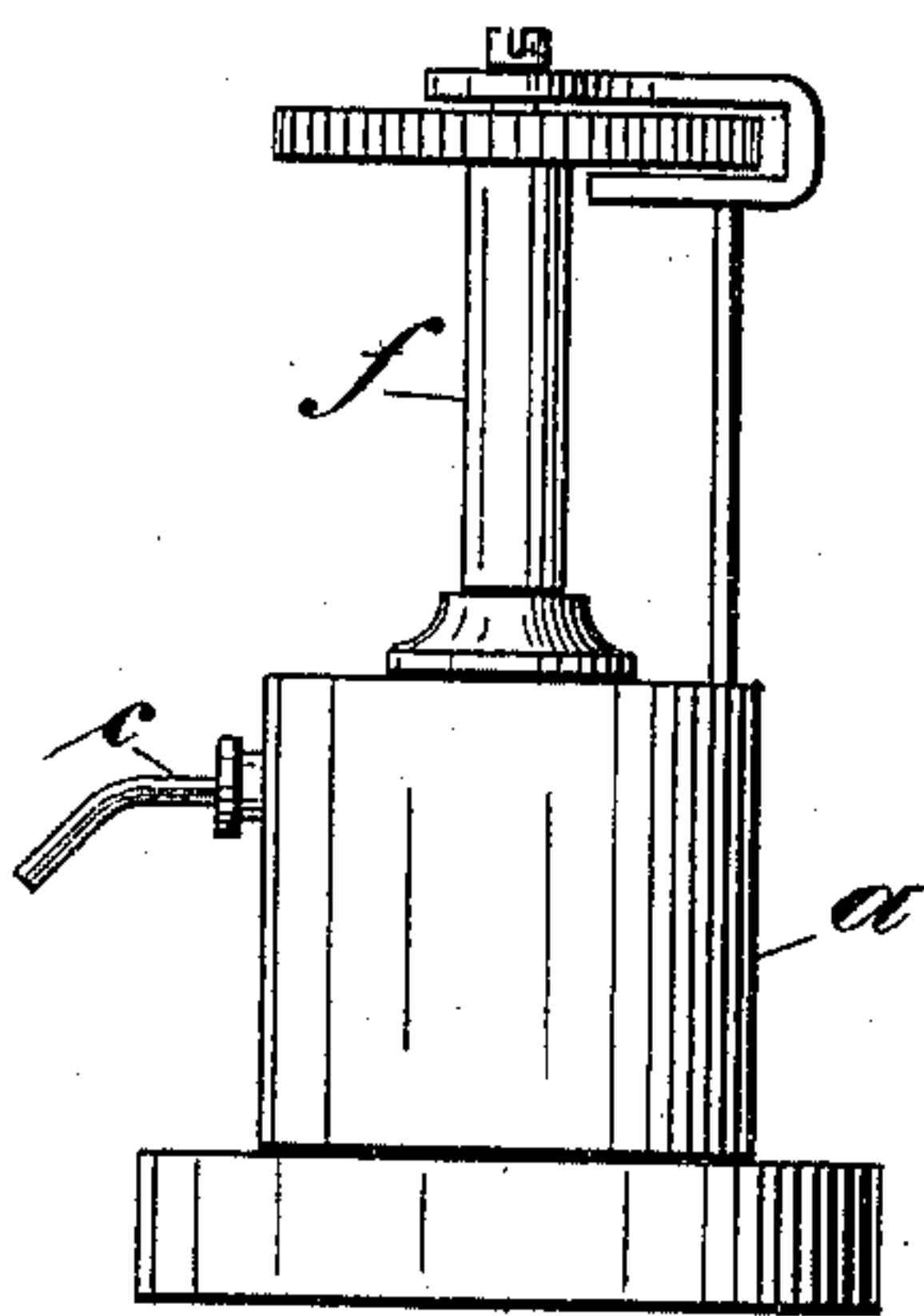


Fig. 2.

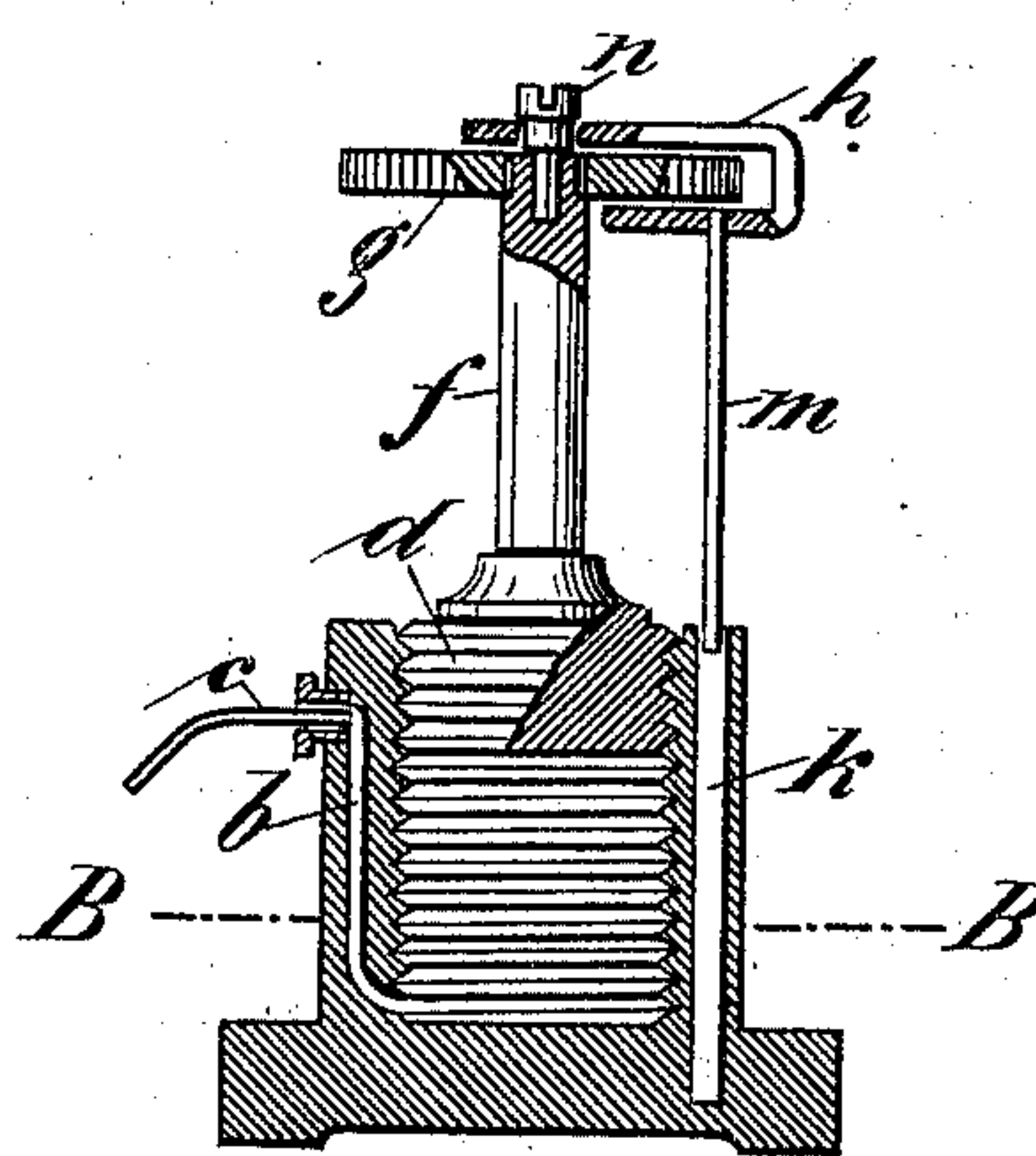


Fig. 3.

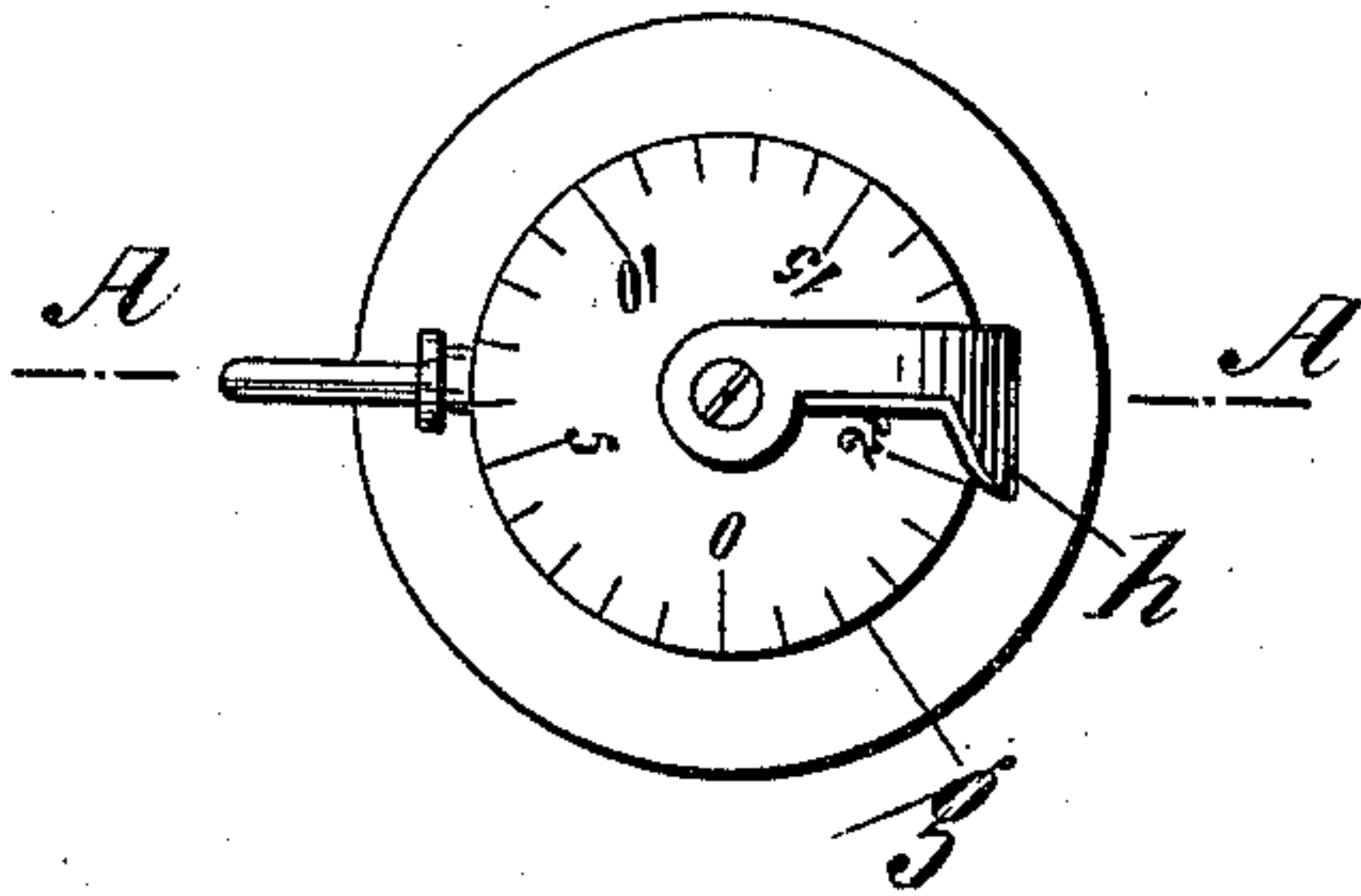
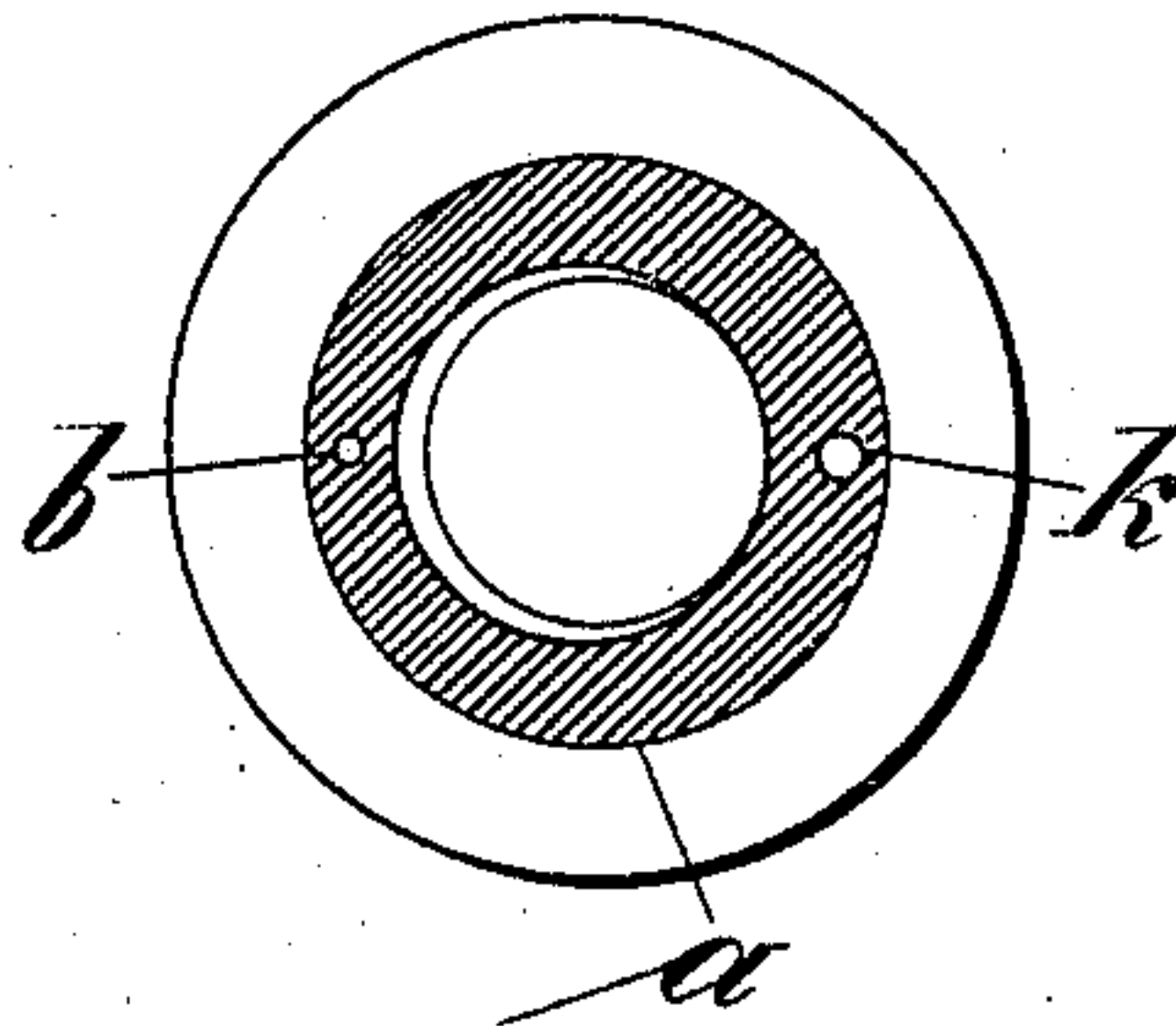


Fig. 4.



Witnesses.

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ERNST SMREKER, OF VIENNA, AUSTRIA-HUNGARY.

MEASURING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 635,154, dated October 17, 1899.

Application filed March 3, 1899. Serial No. 707,667. (No model.)

To all whom it may concern:

Be it known that I, ERNST SMREKER, doctor of medicine, a subject of the Emperor of Austria-Hungary, residing at Vienna, Empire
5 of Austria-Hungary, have invented a new and useful Apparatus for Measuring Small Quantities or Doses of Fluids, of which the following is a full, clear, and exact description.

10 The present invention relates to apparatus by means of which very small quantities or doses of fluids—for instance, quicksilver—may be supplied with the required degree of exactitude.

15 In order to render the present specification more easily intelligible, reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout the several views.

20 Figure 1 is a side elevation of the device; Fig. 2, a vertical section through the same on line A A of Fig. 3; Fig. 3, a plan of Fig. 1, and Fig. 4 a horizontal section on line B B of Fig. 2.

25 The cylinder *a* is provided with an interior screw-thread extending throughout the whole of its length. A piston *d* has an exterior thread to fit the interior thread of *a* and is capable of being screwed into *a* until the
30 lower surface of the piston closes down onto the bottom of the cylinder, as shown at Fig. 2. A port *b* is provided in the wall of the cylinder *a*, said port extending to about the bottom of the cylinder and being in communication with a small pipe *c* at its upper end,
35 said pipe serving as spout or outlet.

The piston *d* is provided with a rod *f*, having a disk *g* fast to its upper end, said disk being provided with a graduation on the upper face thereof, as will be seen from Fig. 3.
40 A bow *h*, which also serves as a registering-hand, is pivotally connected to the rod *f* at *n*

and provided with a downwardly-extending rod *m*, adapted to slide in a corresponding guide-channel *k* in the wall of the cylinder *a*. 45

When the disk *g* is turned, each thread of its screw will, as the piston is lowered in the cylinder, cause a certain quantity of the fluid to be expressed at *c*, and each partial turn will cause a correspondingly-less quantity to
50 be forced out of the apparatus, so that the amount served may be accurately limited by means of the graduation on the face of the disk *g*.

I claim as my invention—

1. The combination of a cylinder having an internal thread and a piston threaded to fit the same, a piston-rod and a disk fast on its upper end and provided with graduations on its face an outlet-port communicating with
60 the bottom of the interior of the cylinder and having exterior spout and a radially-stationary hand to move up and down with the piston, and show the amount of fluid expressed substantially as described. 65

2. The combination of a cylinder having interior thread and a piston having exterior thread to fit, a piston-rod and a disk fast to its upper end and provided with graduations on its face, a port having its lower end communicating with the bottom of the cylinder
70 and its upper end provided with an outlet-spout, a bow pivotally connected to the upper end of the cylinder and having a downwardly-projecting stem guided in a channel
75 in the cylinder-wall for the purpose substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ERNST SMREKER.

Witnesses:

ALVESTO S. HOGUE,
AUGUST FUGGER.