


No. 798,428.

PATENTED AUG. 29, 1905.

O. LUDWIG.
MEASURING FAUCET.
APPLICATION FILED NOV. 15, 1904.

Fig. 1. 

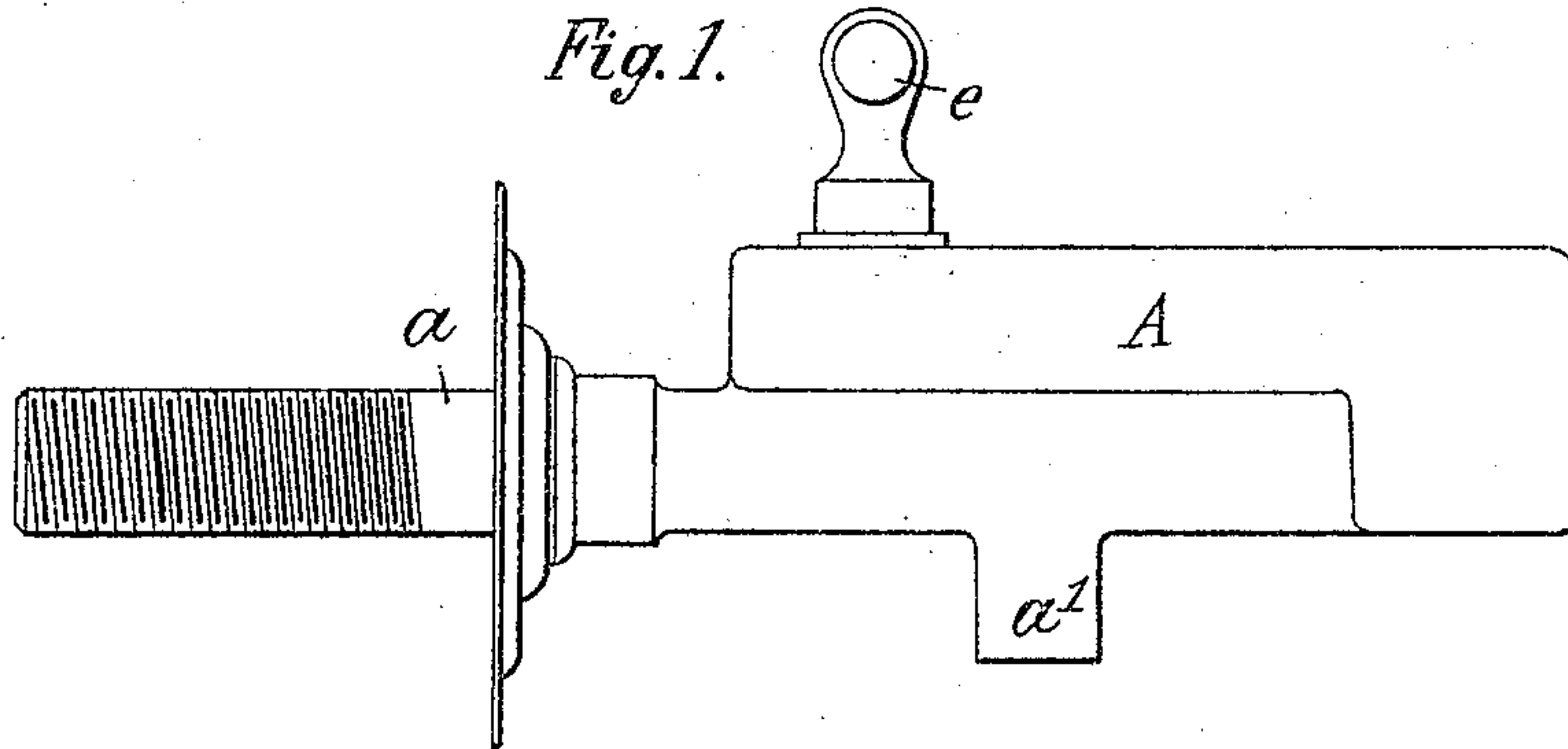


Fig. 2.

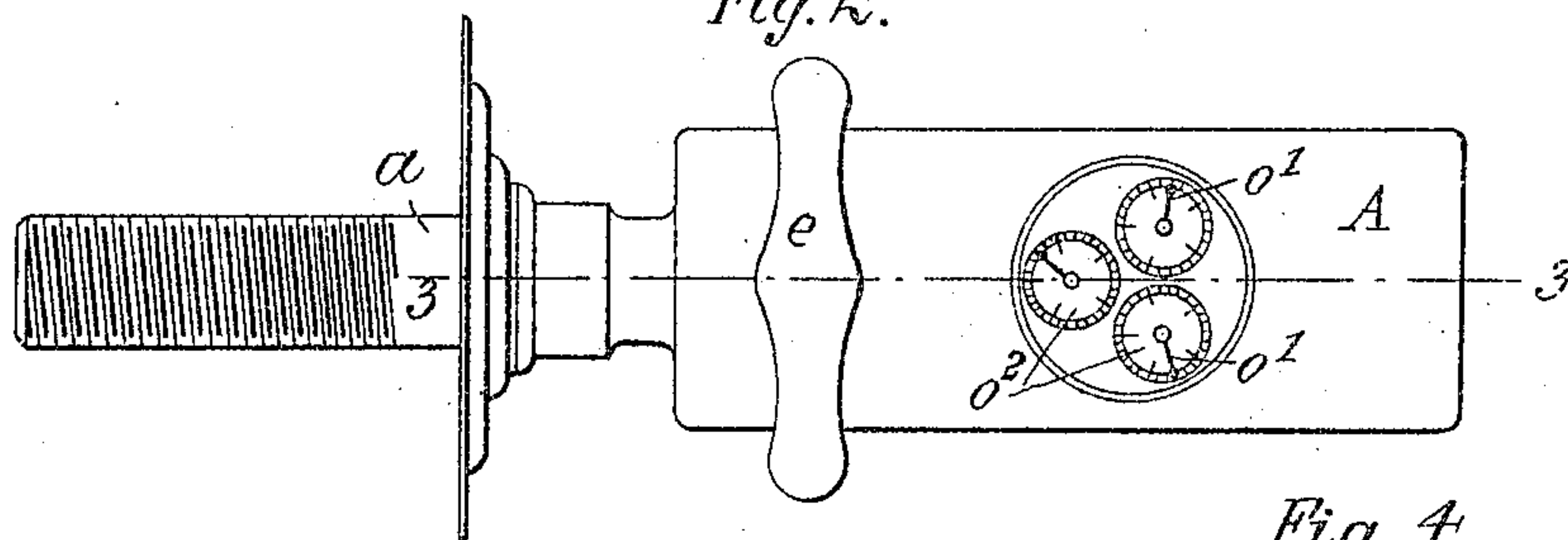


Fig. 4.

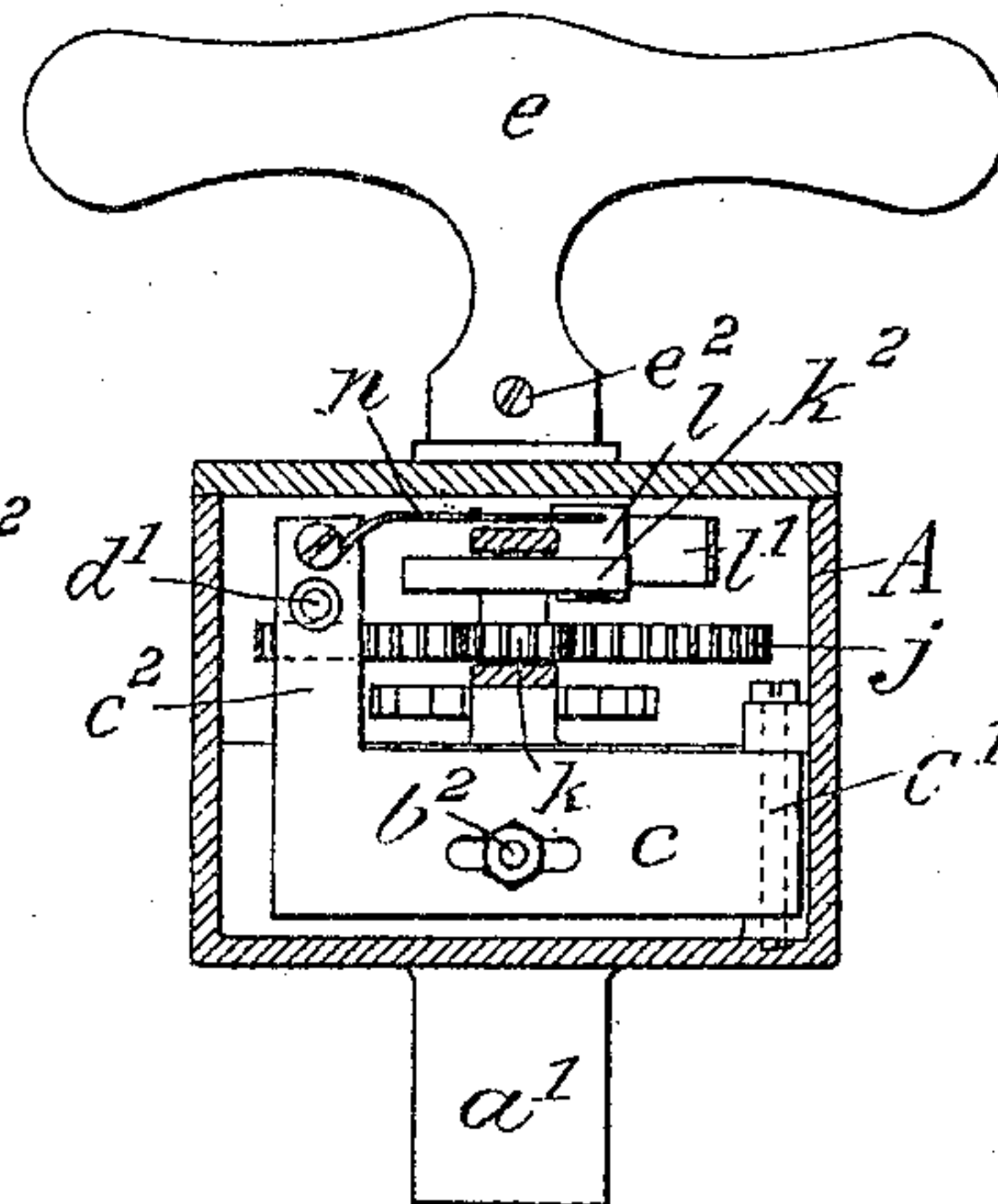
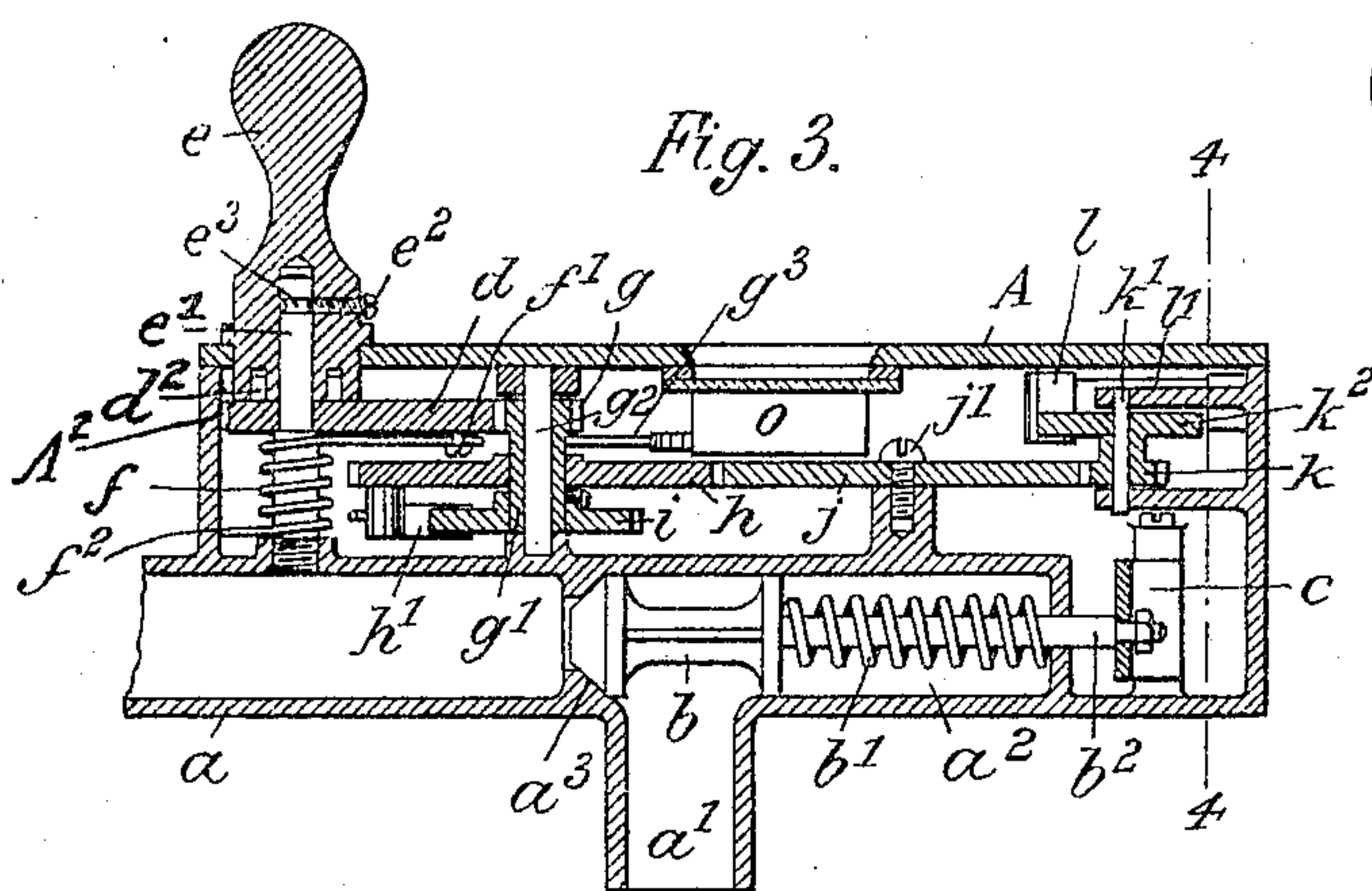
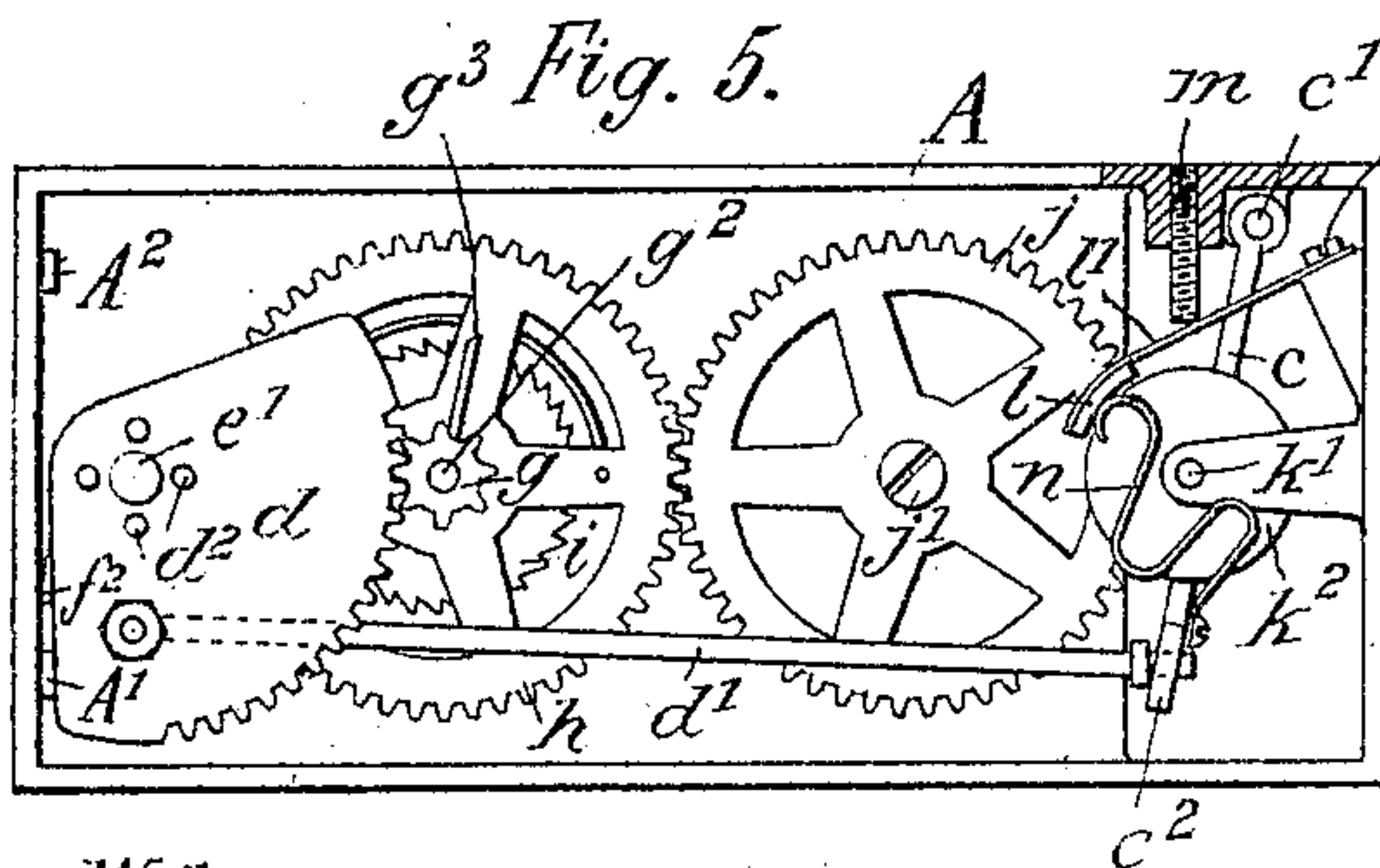


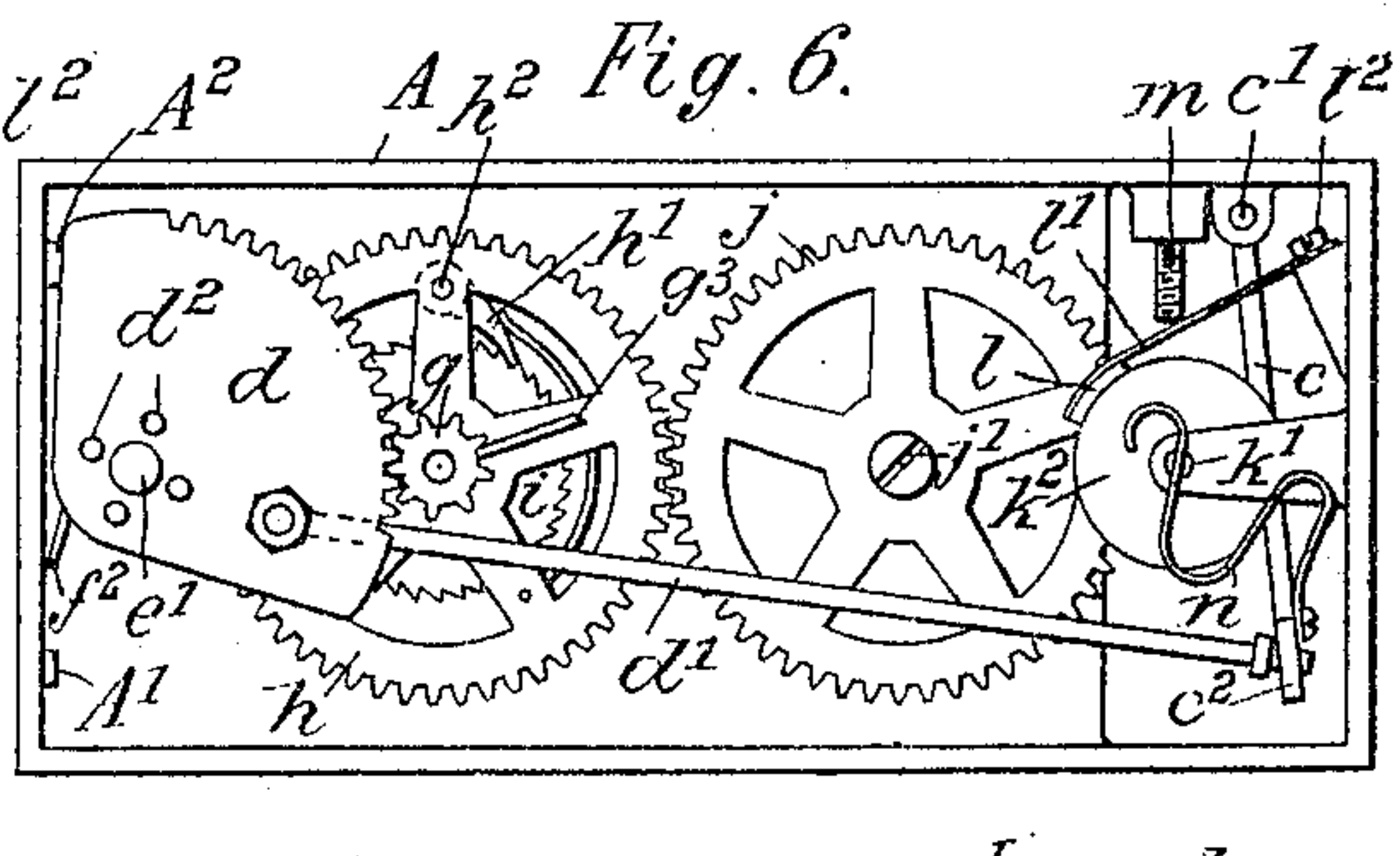
Fig. 3.



g³ Fig. 5.



A_h² Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

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MEASURING-FAUCET.

No. 798,428.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed November 15, 1904. Serial No. 232,786.

To all whom it may concern:

Be it known that I, OTTO LUDWIG, a citizen of the United States, residing at New York city, Manhattan, county and State of New York, have invented new and useful Improvements in Measuring-Faucets, of which the following is a specification.

This invention relates to a faucet which is adapted to close automatically and rapidly after the discharge of a predetermined quantity of beer or other liquid. In this way the proper measure will at all times be given and waste will be avoided.

In the accompanying drawings, Figure 1 is a side view of my improved faucet; Fig. 2, a plan; Fig. 3, a vertical longitudinal section, partly broken away, on line 3 3, Fig. 2; Fig. 4, a cross-section on line 4 4, Fig. 3; and Figs. 5 and 6 are details of the braking mechanism, showing it in different positions.

The letter *a* represents the body of a faucet or spigot having a nozzle *a'* and a tubular extension *a''* in front of the nozzle. Within this extension plays a slide-valve *b*, influenced by a spring *b'*, that tends to close the valve against its seat *a''*, and thereby prevent the egress of the liquid. The valve-stem *b''* is attached to a transverse plate or lever *c*, Fig. 4, hinged at *c'* to a casing A, which incloses the operating mechanism. An arm *c''* of lever *c* is connected by a rod *d'* to a toothed sector *d*, rotatably fitted upon a fixed arbor *e'*. The upper end of this arbor is embraced by the socketed lower end of handle *e*, which is connected to sector *d* by pins *d''* of the sector, that enter corresponding recesses of handle *e*. The handle *e* is rotatable on arbor *e'* and is held thereto by a screw *e''* and circumferential groove *e'''*. The arbor *e'* is encircled by a spring *f*, one end of which bears against a screw *f'* of sector *d*, while its other end bears against casing A at *f''*. The sector *d* is free to play between a pair of stops A' A'' of casing A, the tendency of spring *f* being to swing it against stop A'. When in this position, spring *b'* is free to tilt lever *c* inward and move valve *b* against its seat *a''*, whereby the faucet is closed, Figs. 3 and 5. If the handle *e* is so turned that the sector *d* is swung against stop A'', the rod *d'* will swing lever *c* outward, Fig. 6, and open valve *b*. In order to automatically close the valve at a predetermined time upon the release of handle *e*, I have devised the following construction: The toothed sector *d* engages a pinion *g*, having hub *g'* rotatable on spindle *g''*. The hub *g'* is surrounded by a

toothed wheel *h*, rotatable upon the same, and by a fixed ratchet-wheel *i*. The ratchet-wheel *i* is operatively connected to wheel *h* by a spring-pawl *h'*, pivoted to wheel *h* at *h''*, and engaging the teeth of the ratchet-wheel. The wheel *h* intergears with toothed wheel *j*, rotatable on pivot *j'* and engaging a pinion *k*. This pinion is rotatable on spindle *k'* and carries a brake-disk *k''*. Against the periphery of the brake-disk bears a brake-shoe *l*, mounted on a spring-arm *l'*, which is connected to casing A at *l''*. In order to set the brake to different pressures, I provide a screw *m*, tapped into casing A and adapted to bear to a greater or less extent against spring-arm *l'*. To suddenly open the brake during the latter part of the valve movement, and thus insure a quick closing of the faucet, I secure to lever *c* an arm *n*, that is adapted to engage shoe *l* during the latter part of the inward movement of the lever. When the handle *e* is turned to open valve *b*, the springs *b'* and *f* are placed under tension and the lever *c* is swung outward to disengage arm *n* from shoe *l*, and thus set the brake. Upon the release of the handle the springs *b'* and *f* will tend to close the valve and return the handle to its initial position. This movement will be retarded, however, by the set brake, the pinion *k'* of the brake-disk checking, by wheels *j* *h*, pawl *h'*, ratchet-wheel *i*, pinion *g*, sector *d*, rod *d'*, and lever *c*, the speed of the return stroke of valve *b*. During this slow movement of valve *b* the liquid is discharged from nozzle *a'*. When the lever *c* has been swung inward to such an extent that its arm *n* swings shoe *l* off disk *k''*, the brake will be suddenly opened. Thus the last portion of the valve-stroke will be accomplished at full speed to effect a rapid closing of the faucet and prevent dripping at the nozzle.

By properly adjusting the screw *m* the faucet may be set to discharge pints, quarts, or other measures before valve *b* closes.

If desired, the faucet may be provided with a registering device for indicating the number of times the cock has been opened. This registering device is actuated by an arm *g''* of hub *g'* and is contained within a housing *o*. It serves to move the recording-pointers *o'* over dials *o''*.

What I claim is—

1. In a measuring-faucet, the combination of a nozzle with a valve, a handle for actuating the same, a brake-disk operatively connected to the valve, a brake-shoe, means for

applying the shoe to the disk, and means for taking the shoe off the disk during the latter part of the return stroke of the valve, substantially as specified.

5 2. In a measuring-faucet, the combination of a nozzle, with a valve, a handle operatively connected thereto, a brake-disk, means for intergearing said disk with the handle, a brake-shoe, a spring-arm adapted to hold the shoe
10 against the disk, and means for taking the shoe off the disk during the latter part of the return stroke of the valve, substantially as specified.

15 3. In a measuring-faucet, the combination of a nozzle, with a valve, a handle operatively connected thereto, a brake-disk, means for intergearing said disk with the handle, a brake-

shoe, and an arm operatively connected to the valve and adapted to engage the shoe, substantially as specified. 20

4. In a measuring-faucet, the combination of a nozzle, with a valve having a stem, a lever connected thereto, a toothed sector connected to the lever, a brake-disk, means for intergearing said disk with the sector, a handle, a brake-shoe, and an arm secured to the lever and adapted to engage the shoe, substantially as specified. 25

Signed by me at New York city, Manhattan,
New York, this 14th day of November, 1904. 30
OTTO LUDWIG.

Witnesses:

WILLIAM SCHULZ,
FRANK V. BRIESEN.