

No. 760,073.

PATENTED MAY 17, 1904.

C. C. KITTERMAN.
BURGLAR ALARM.

APPLICATION FILED JAN. 19, 1903.

NO MODEL.

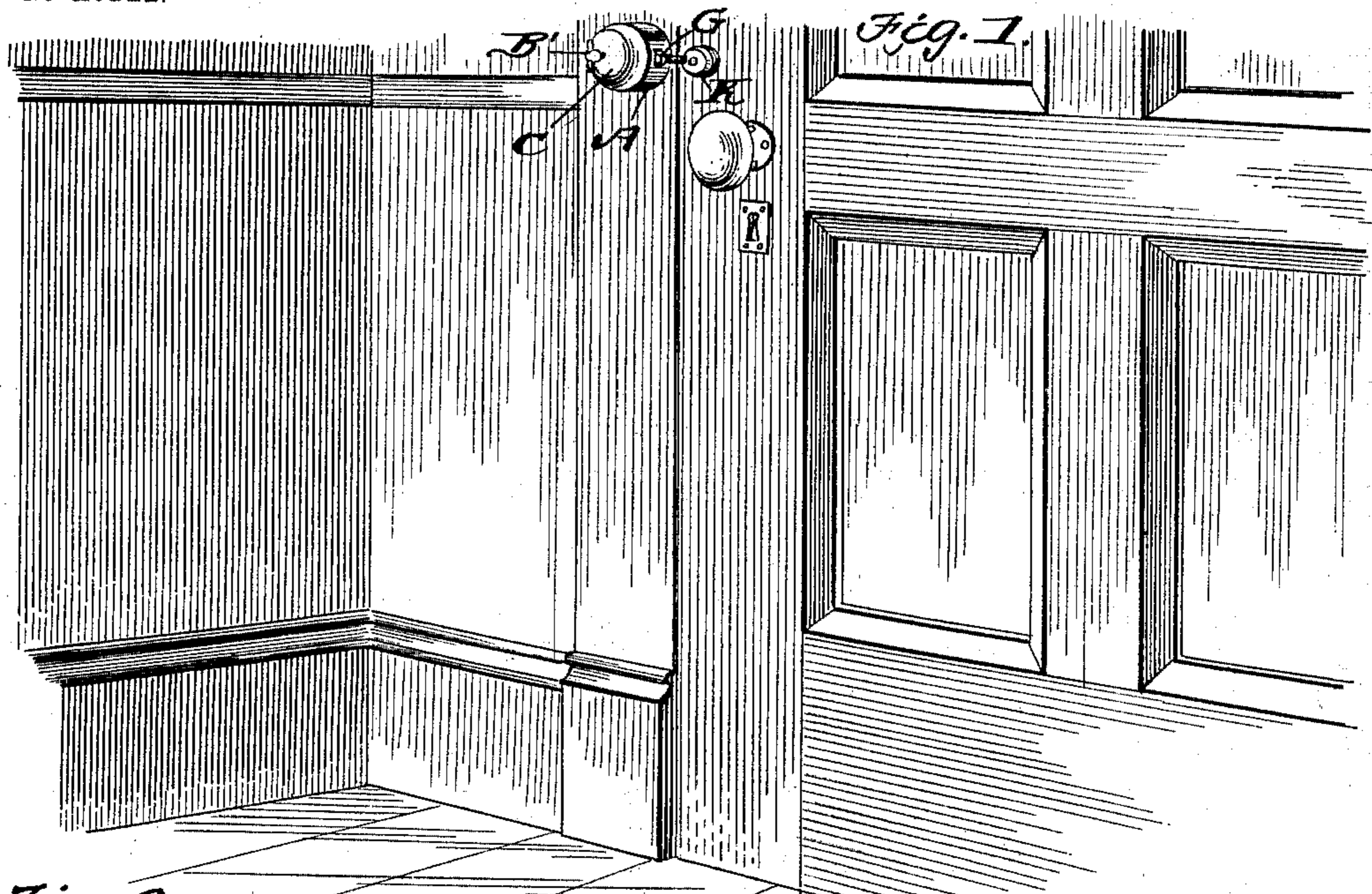


Fig. 6.

Fig. 2

Fig. 3.

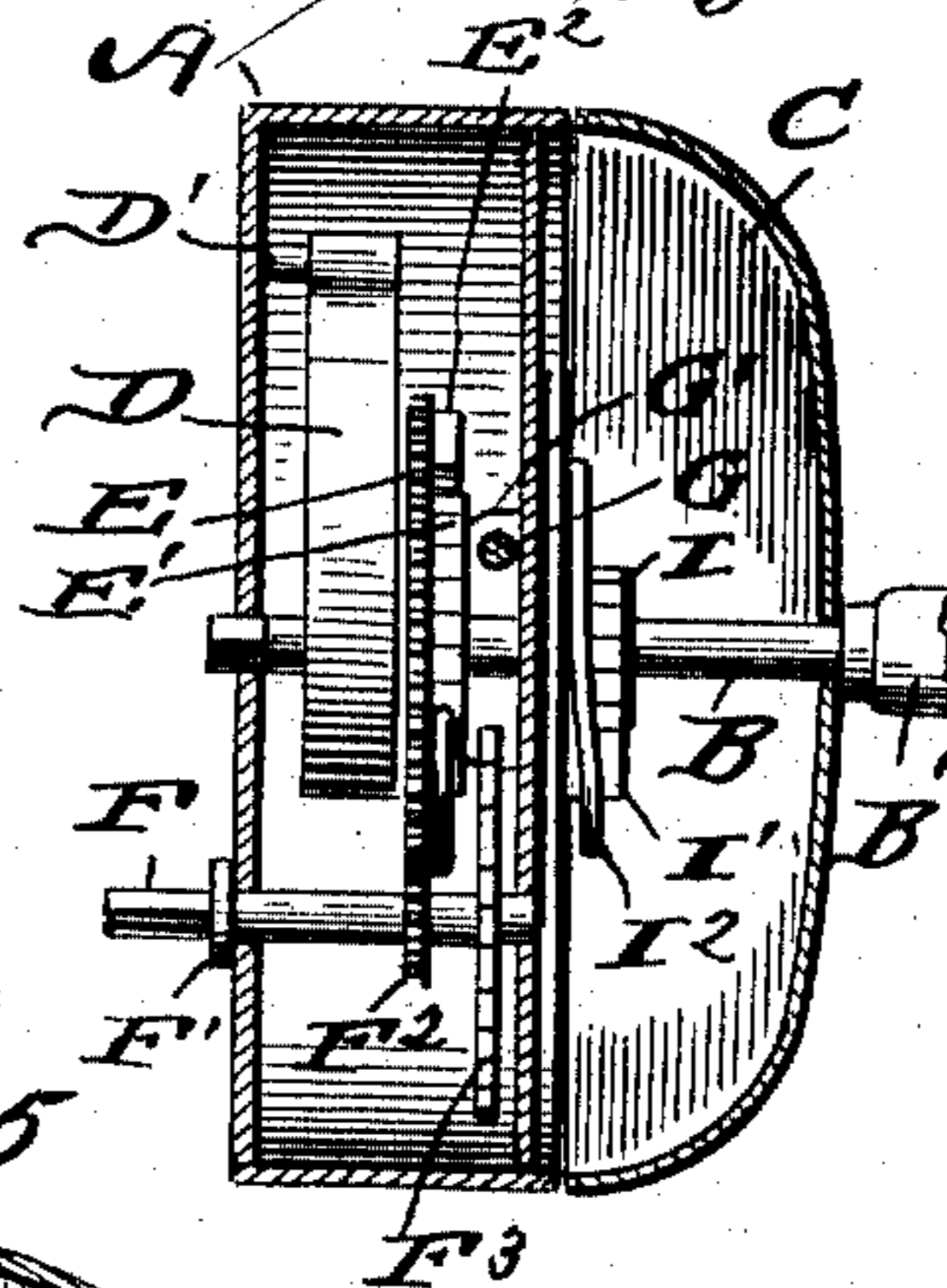
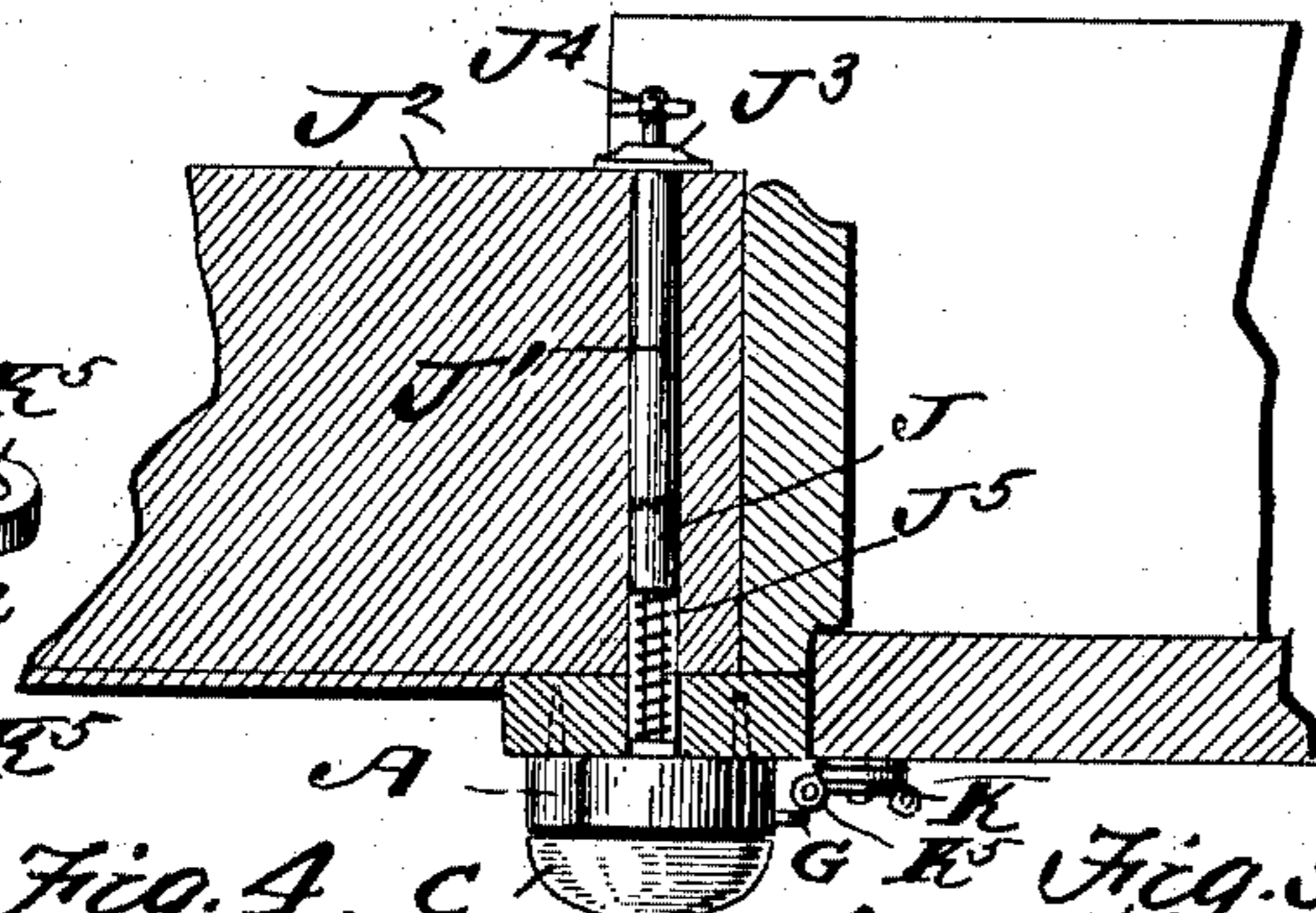
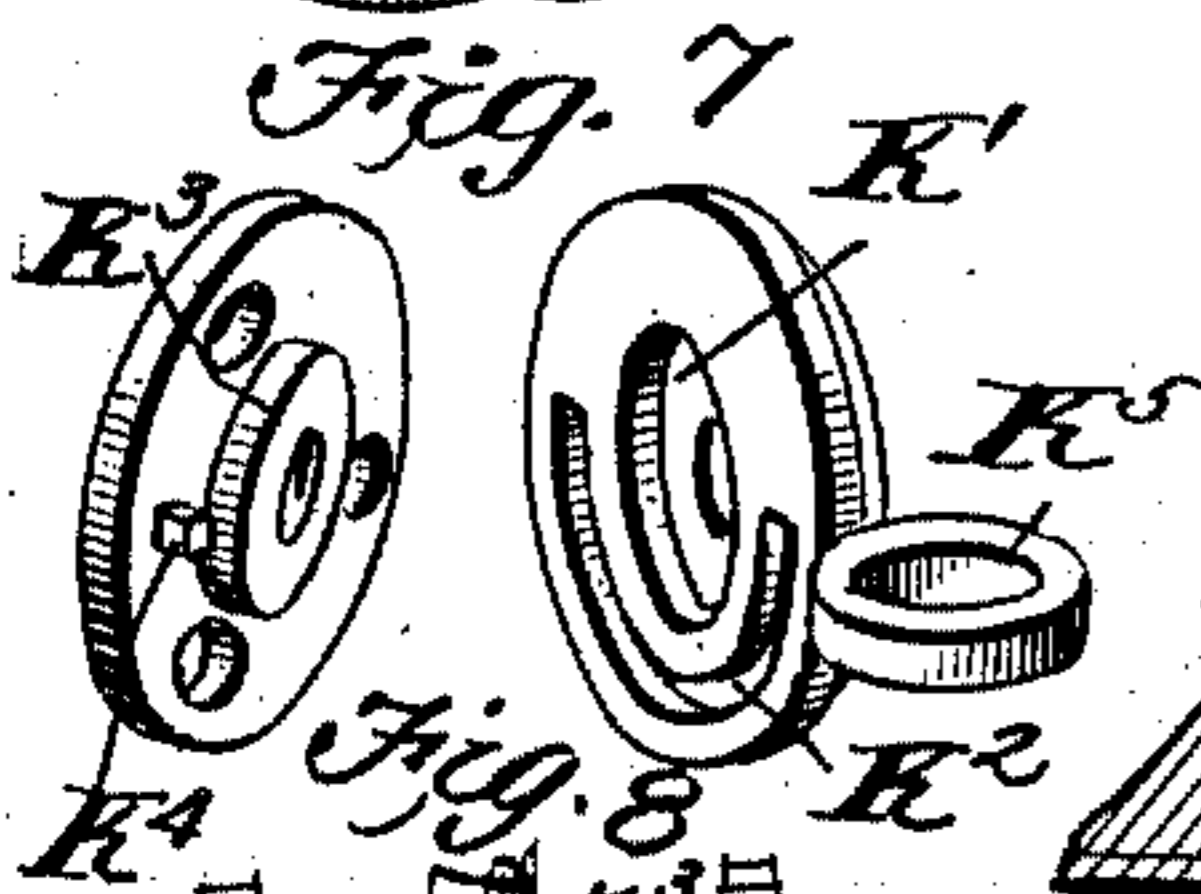
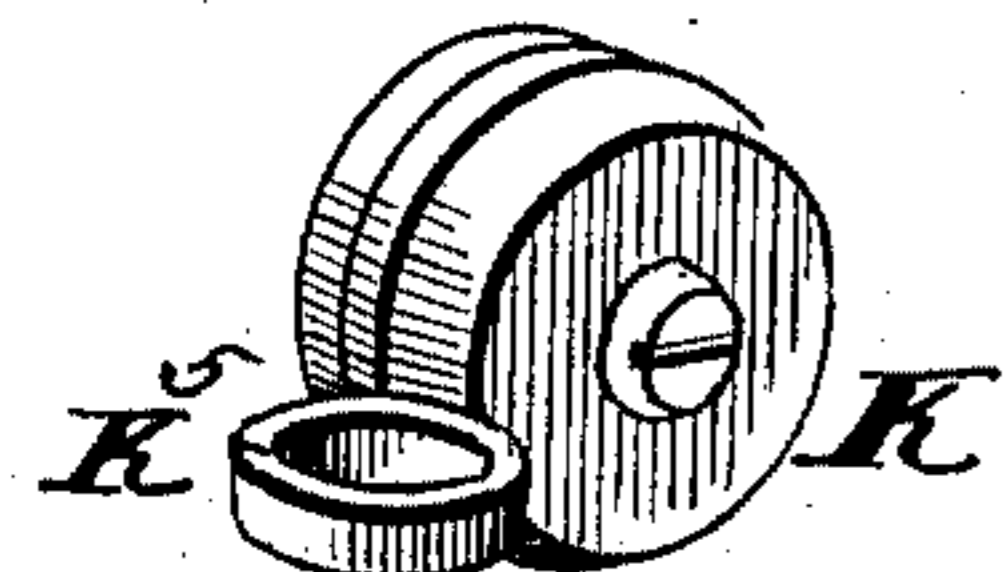
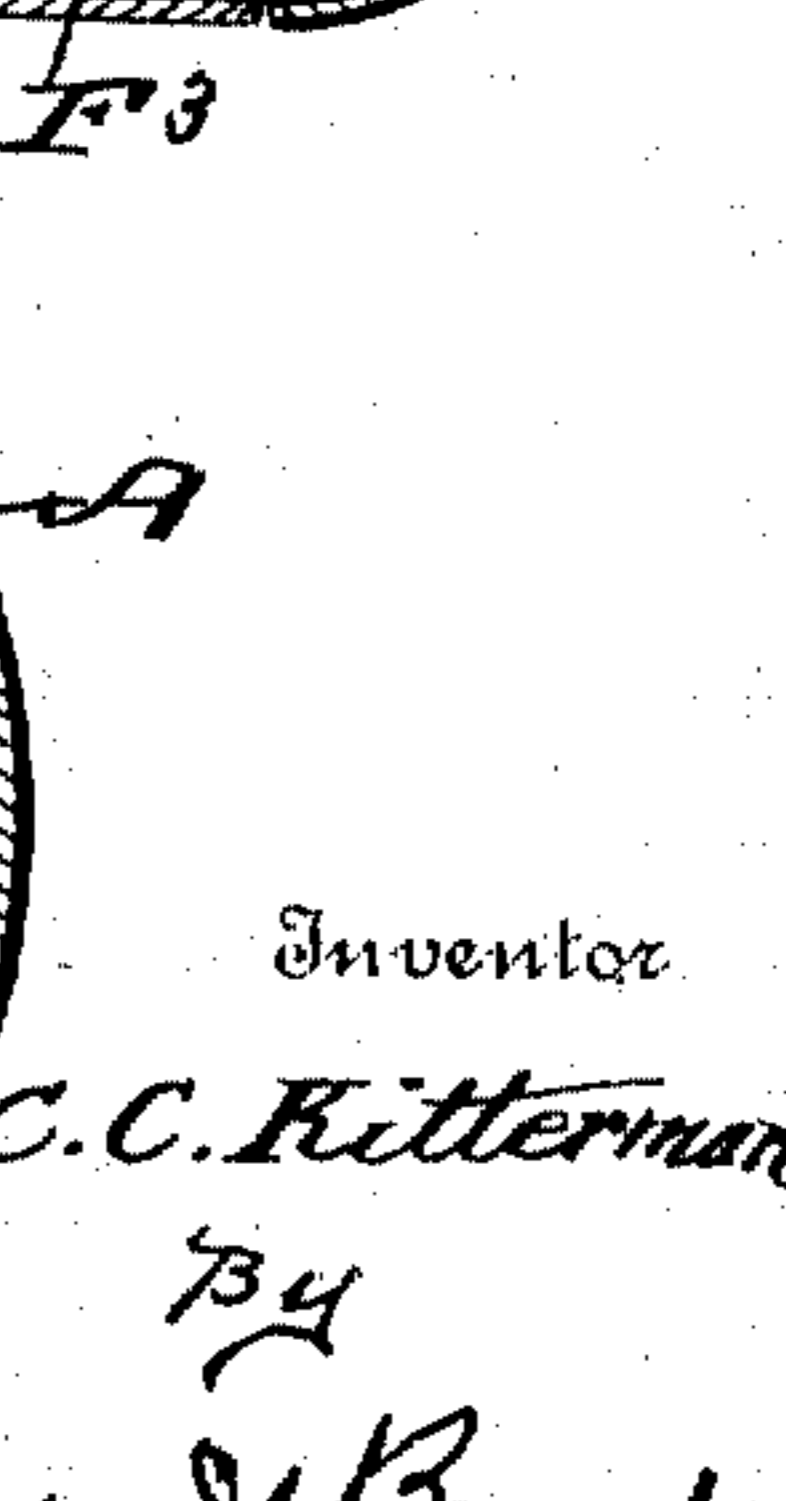
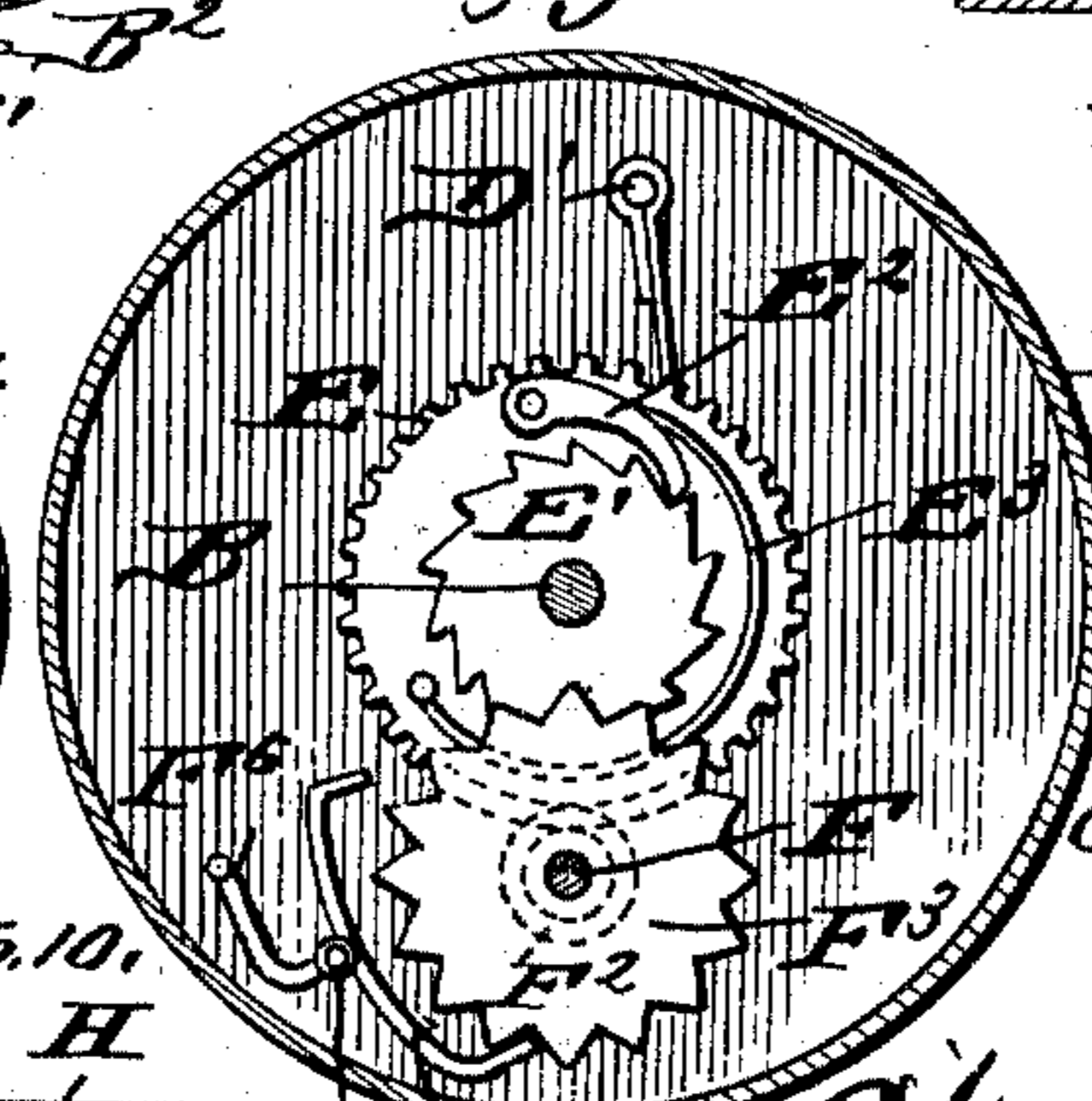
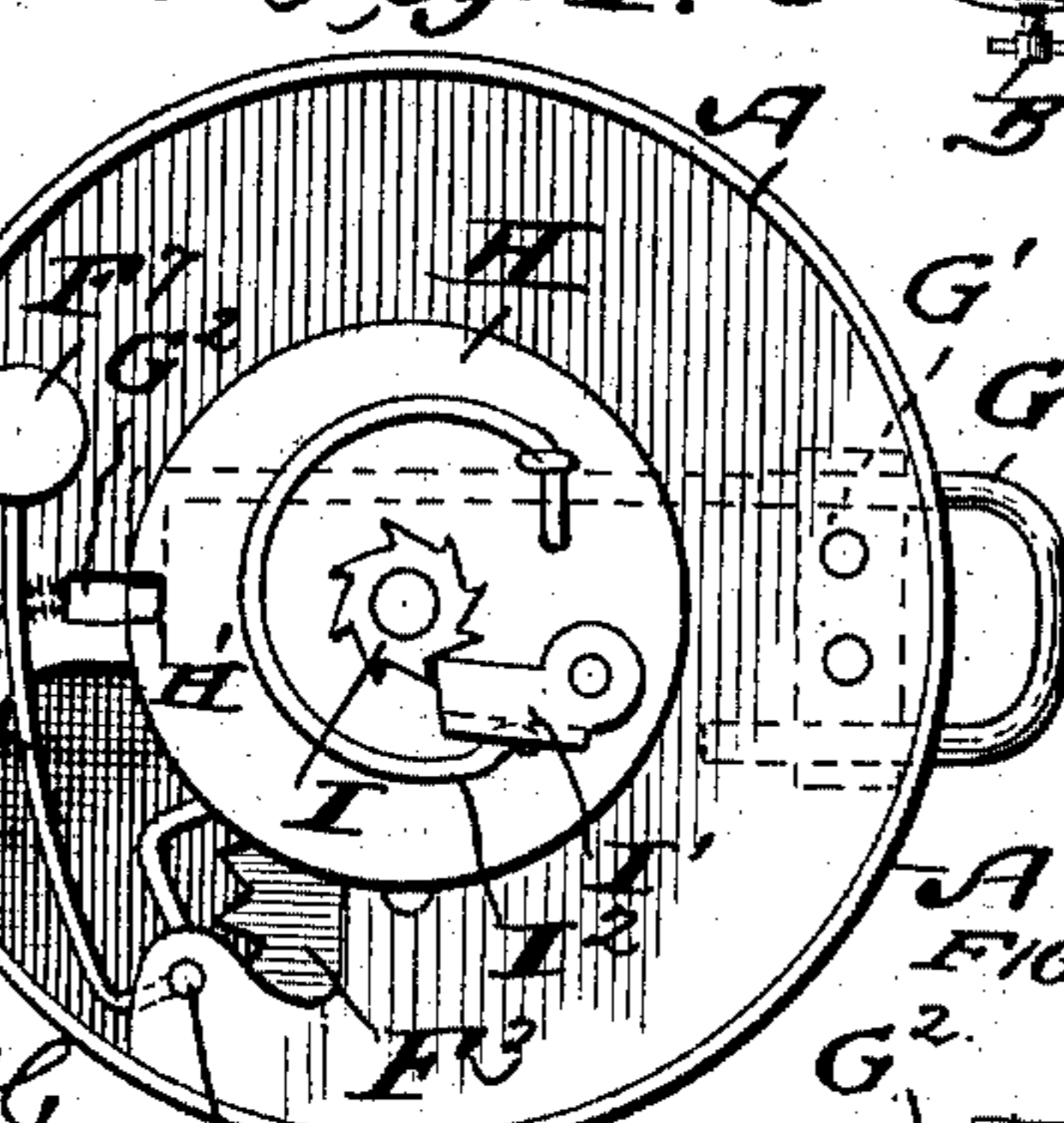
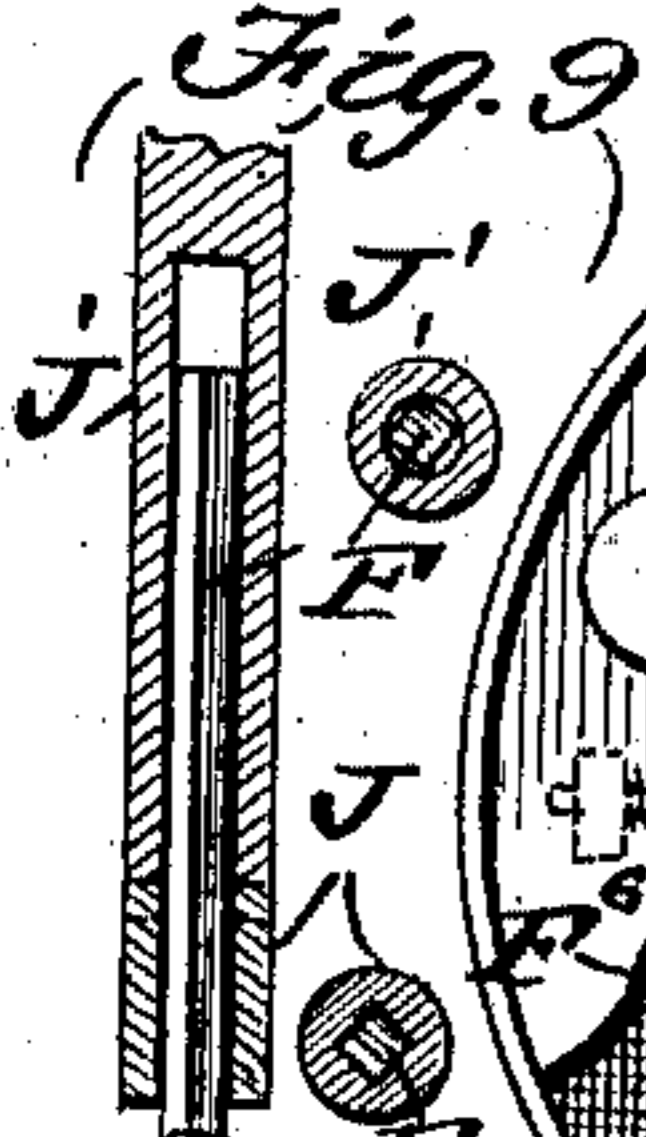


Fig. 4.

Fig. 5



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BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 760,073, dated May 17, 1904.

Application filed January 19, 1903. Serial No. 139,624. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. KITTERMAN, a citizen of the United States, residing at Bolckow, in the county of Andrew and State of Missouri, have invented a new and useful Burglar-Alarm, of which the following is a specification.

My invention is an improvement in door-bells, and has for its object the construction of such a bell so that it may be rung from without the door by callers and at night set for a burglar-alarm which will ring when the door is opened, and to so arrange the bell that it may be used by a caller, even when set as an alarm, without interfering with the alarm mechanism.

In the accompanying drawings, Figure 1 is a perspective view showing the practical application of my device. Fig. 2 is a sectional view of the door and door-jamb, showing in elevation the location of the various parts. Fig. 3 is a vertical section through the bell and casing, the operating mechanism being shown in elevation. Fig. 4 is a face view of the casing, the bell being removed. Fig. 5 is a detail face view of a part of the mechanism within the casing. Fig. 6 is a view of the night-latch for setting off the alarm. Fig. 7 is a detail perspective view of the night-latch taken apart. Fig. 8 is a section taken transversely through the night-latch. Fig. 9 is a detail view showing the construction of the clutch by means of which the bell is rung from the outside. Fig. 10 is a detail sectional view of construction.

In carrying out my invention I employ a cylindrical casing A, through which extends a central shaft B, and at one end of the case a bell C is secured on the shaft, and without the bell a cap-piece B' is secured upon the outer end of the shaft and has a transverse cross-piece B² passed through it. Its opposite end, also without the casing, is squared. Within the casing and coiled around the shaft B is a spring D, its inner end being secured to the shaft, its outer end being fastened to a pin D'. Adjacent the spring and rigidly secured

to the shaft is a gear-wheel E and adjacent that a ratchet-wheel E', which is engaged by a pawl E², pivotally mounted on the gear E, and a curved spring E³, carried around the ratchet, is secured at one end to the gear and at the opposite end to the pawl. A second shaft F extends transversely through the casing, journaled at one end in the end of the casing adjacent the bell and projecting outward through the opposite end of the casing, carrying a collar F'. Within the casing it carries a pinion F², meshing with the gear E, and adjacent the bell end of the casing a verge-wheel F³. A double-acting pawl F⁴ is pivotally mounted within the casing and adapted to engage the verge-wheel.

Fastened to the pivotal pin F⁵, which carries the pawl F⁴, is the angled wire arm F⁶, which carries at its free end the bell-hammer F⁷.

On one side of the casing are formed two adjacent perforations, through each of which passes an arm of the U-shaped member G. These arms are adapted to slide on a guide-bracket G', and one of them extends across the casing to one side of the verge-wheel and adjacent its free end is bent at a right angle and thence upward, projecting through a slot G² at the bell end of the casing. An arm G³ is connected to this upturned arm and extends to the rear of same, sliding in a bracket G⁴ and having a spiral spring G⁵ around it, which normally projects the member G outward and holds the upturned end in the forward part of the slot G². Outside of the casing and within the bell the shaft B carries a disk H, notched at H', and this disk is of such size that its margin covers the forward end of the slot G² except when the notch H' registers with the slot. The disk is revolubly mounted on the shaft, and adjacent to it the shaft has a ratchet I, rigidly mounted thereon, and a pawl I' is pivoted at one side of the disk and adapted to engage the ratchet, while a spring I², similar to E³, connects the pawl and the disk.

On the shaft F is a friction-clutch J, hav-

ing a square bore and a sleeve J', having a round bore and turning loosely on the shaft F, which is square without the casing. This sleeve passes through the door-jamb J², and
 5 on the outer side of the jamb is encircled by an ornamental plate J³ and carries at its end a cap and cross-piece J⁴, corresponding to the B' B² of the shaft B. In order to hold the clutch and sleeve in contact, a spiral spring
 10 J⁵ surrounds the shaft F, bearing at its inner end on the collar F' and at its outer end on the clutch J.

In placing the bell in position the casing having the bell mounted thereon is placed in
 15 position on the inside adjacent the door, the member G projecting toward the door and just far enough from it to permit the door to open and close without striking it. The shaft F extends outward through the slot produced
 20 in the jamb, the sleeve J' extending to the outer side of the jamb. By using the sleeve and clutch, which can be readily removed from the shaft and are held in place by the plate J³, it is not necessary to manufacture
 25 casings having various length shafts to accommodate different thicknesses of jamb or to cut down the jamb, as the device can be practically adjusted by using a shorter or longer sleeve to fit all sizes of jambs.

30 Secured to the inner side of the door is the latch K, which is made in two sections, the outer section having a central circular perforated recess K' and a semicircular slot K². The inner section has a central perforated
 35 boss K³, adapted to fit in the recess K', and a pin K⁴, adapted to project into the slot. A ring K⁵ is secured to the periphery of the outer section. The inner section is fastened to the door by small screws and the outer section
 40 fitted over it, the slot being at the top and secured by a screw passing through the perforation of the recess and boss into the door. The outer section can be turned on the inner section one hundred and eighty degrees, be-
 45 ing stopped in each direction when the ends of the slot engage the pin. The lowest position of the ring, therefore, is a horizontal one, and it can be thrown toward or away from the casing A. When thrown toward it, the
 50 ring is in such position that when the door is opened it will strike and force inward the U-shaped member G.

The practical operation of my device is as follows: During the day the ring is thrown
 55 back, so that the door can be opened without sounding an alarm. A visitor can also ring the bell by turning J⁴, which turns the shaft F and verge-wheel, causing the hammer to strike the bell. At night the latch can be
 60 thrown over, bringing the ring into position to strike the bell when the door is opened. By means of B' the spring can be wound up,

and as the upturned end of the member G engages the notch H' the disk H will be held stationary and the spring will not unwind. 65 The bell, however, can be still rung by a caller without interference with the alarm. Should the door be opened and the ring be in position to strike the member G, the latter will be forced inward, the disk H released, and the alarm will sound during a complete revolution 70 of the disk, when the member G will again engage the notch and hold the disk. It is also evident that owing to the independence of the two ways of ringing the bell the alarm cannot be prevented from sounding by holding the handle J⁴ with one hand while opening the door. 75

From the above it will be seen that I have devised a very efficient bell-ringer of this type. 80

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an alarm of the kind described having projecting, operative 85 mechanism, of a circular sectional latch adapted to be secured to a door, the outer section having a circular annular recess, said recess being centrally perforated, and a semicircular slot partially encircling the said recess, the 90 inner section having a perforated boss adapted to fit in the annular recess of the outer section, a pin carried by the inner section and adapted to fit in the slot of the outer section, a projecting ring formed on the periphery of the outer 95 section, said ring being adapted to be moved into and out of alinement with the operative mechanism of the alarm.

2. A device of the kind described, comprising a casing having a bell mounted thereon, a 100 shaft journaled in said casing and adapted to extend into a door-jamb said shaft being squared exterior of the casing, a clutch having a square bore on the shaft, a revoluble sleeve adapted to engage the clutch, a spring 105 adapted to force the clutch into engagement with the sleeve a handle at the outer end of the sleeve, a verge-wheel carried by the shaft within the casing, a double-acting pawl engaging said wheel, and a hammer connected 110 to the pawl and adapted to ring the bell.

3. A device of the kind described comprising a cylindrical casing carrying a bell, a central shaft, a spring secured at one end to the shaft and at the opposite end to the casing, a 115 gear-wheel thereon, a ratchet, a pawl pivoted to the gear and engaging the ratchet, a spring secured to the gear at one end and to the pawl at the other, a disk mounted on said shaft having a notch in one side, a U-shaped member 120 projecting from an arm adapted to engage the notch, a ratchet secured adjacent the disk, a pawl pivoted to the disk and engaging the ratchet, a spring secured to the disk and pawl,

a bell mounted on the casing, a shaft parallel to the first-mentioned shaft journaled in and projecting from the casing, a pinion mounted on said shaft within the casing and meshing
5 with the gear, a verge-wheel, a double-acting pawl engaging the verge-wheel, means for turning the shaft carrying the verge-wheel from without the door, means for winding the

spring secured to the first shaft, means secured to a door for forcing in the U-shaped member, and means for ringing the bell when either shaft is rotated.

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Witnesses:

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