

(No Model.)

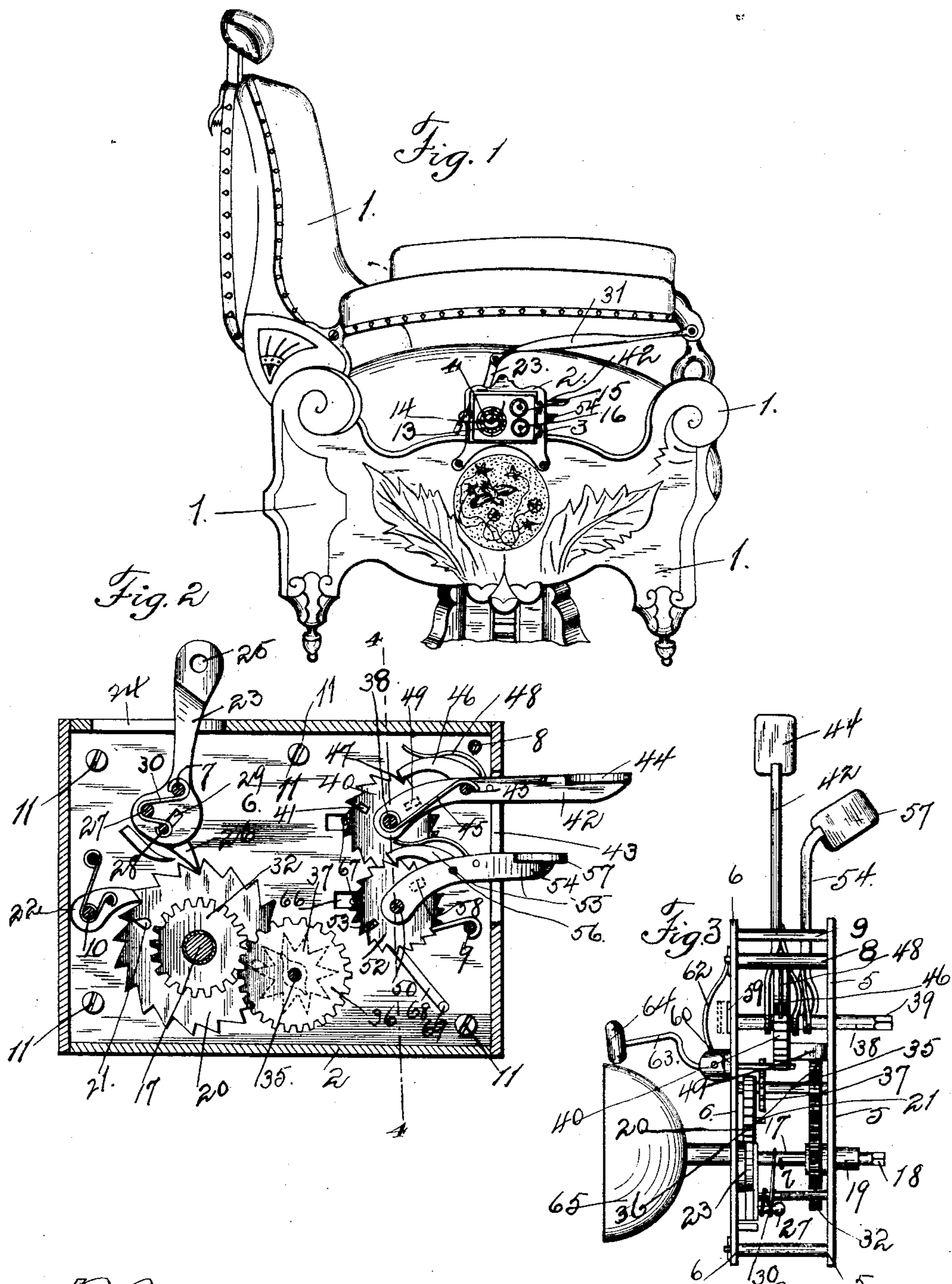
3 Sheets—Sheet 1.

A. GOLDAMMER.

DEVICE FOR REGISTERING SHAVES, HAIR CUTS, SHAMPOOS, &c.

No. 535,618.

Patented Mar. 12, 1895.



Attest:
A. A. B. Chalmers,
W. O. Smith.

Inventor:
Anton Goldammer:
by Higdon and Higdon and Longan Attys

(No Model.)

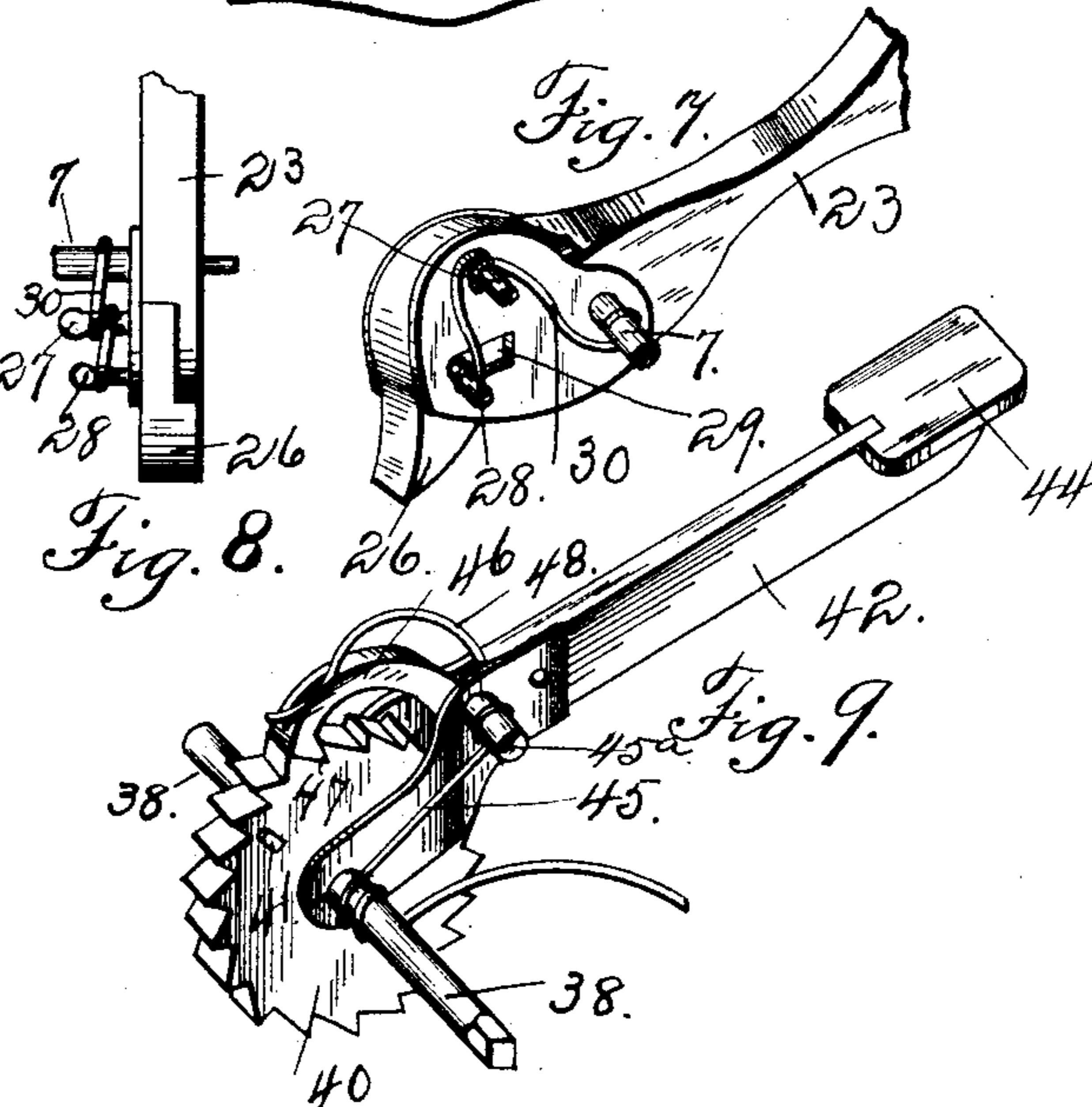
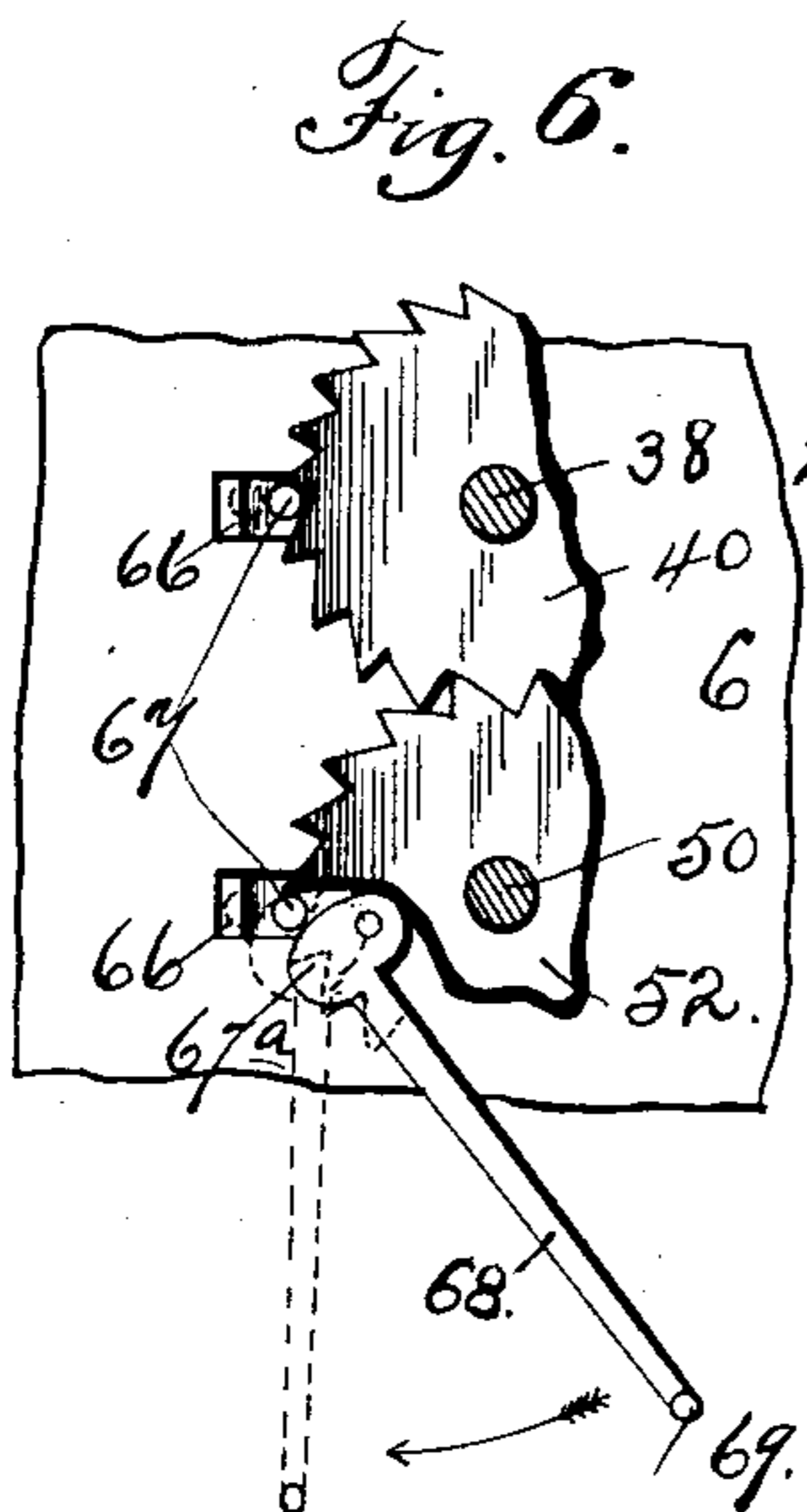
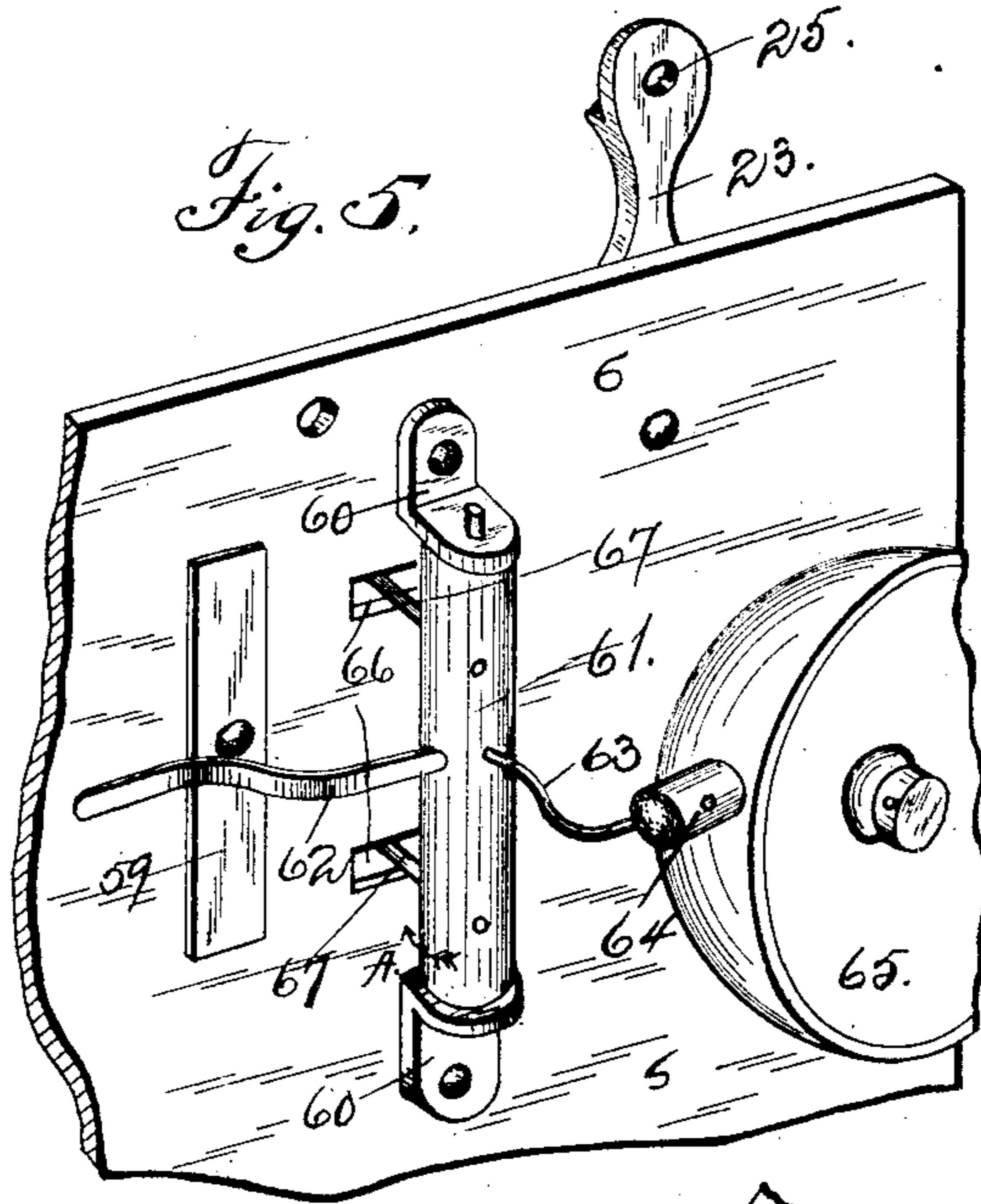
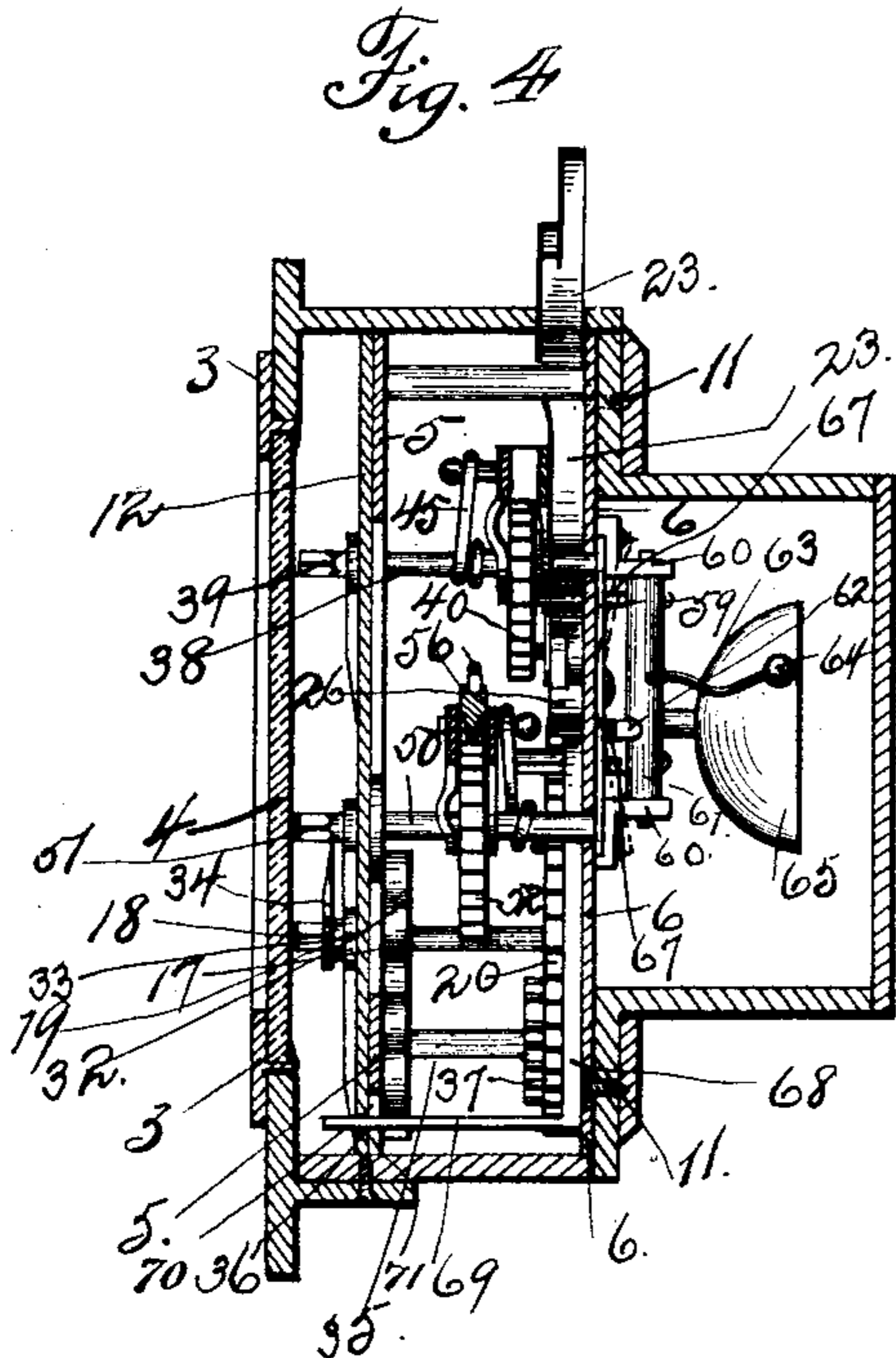
3 Sheets—Sheet 2.

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Attests:
A. A. Blaukumister,
W. R. Smith

Inventor:
Anton Goldammer;
by Higdon and Higdon and Higdon Attys.

(No Model.)

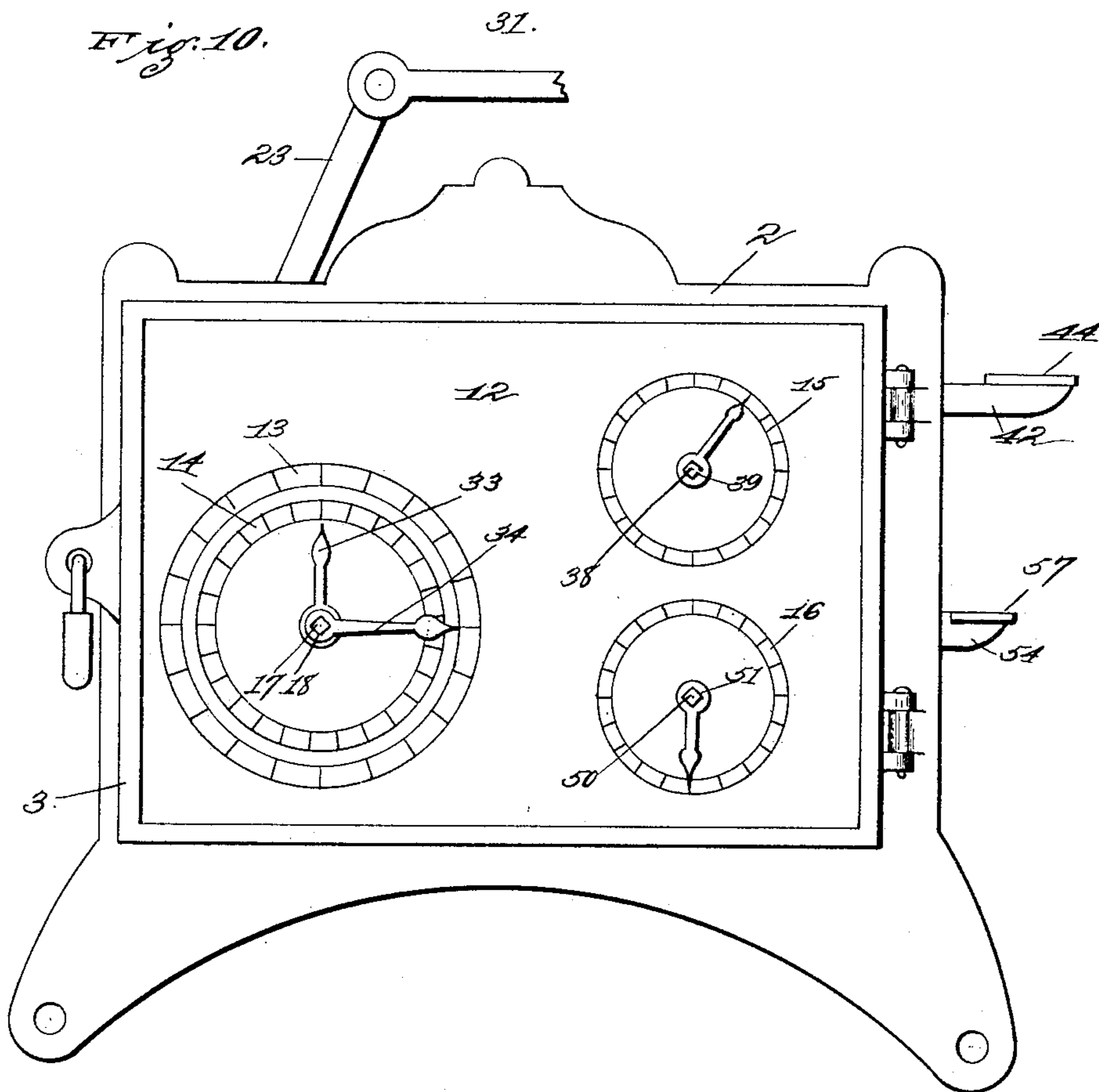
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DEVICE FOR REGISTERING SHAVES, HAIR CUTS, SHAMPOOS, &c.

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Attest
W. P. Smith,
John L. Tunison

Inventor:—
Anton Goldammer,
by Higdon & Higdon & Longan.
Atty's.

UNITED STATES PATENT OFFICE.

ANTON GOLDAMMER, OF EAST ST. LOUIS, ILLINOIS.

DEVICE FOR REGISTERING SHAVES, HAIR-CUTS, SHAMPOOS, &c.

SPECIFICATION forming part of Letters Patent No. 535,618, dated March 12, 1895.

Application filed September 10, 1894. Serial No. 522,527. (No model.)

To all whom it may concern:

Be it known that I, ANTON GOLDAMMER, of the city of East St. Louis, St. Clair county, State of Illinois, have invented certain new and useful Improvements in Machines for Automatically Registering Shaves, Hair-Cuts, Shampoos, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a device adapted to be located upon a barber's chair for the registering of shaves, hair-cuts, shampoos, &c.

The object of my invention is to construct a device that is simple, inexpensive and easily operated; that will automatically register each shave and also register each hair-cut and shampoo given so that at any time during the day, or at the close of the day's business, the proprietor or operator may see at a glance the exact number of shaves, hair-cuts, and shampoos that have been given.

A further object of my invention is to construct a device that when every hair-cut or shampoo is given and the proper key pressed in and the register made, a bell will be sounded.

My invention consists in certain new and novel features of construction, combination, and arrangement of parts, hereinafter specified and claimed.

Referring to the drawings: Figure 1 is a side elevation of a barber's chair, the same having my device attached thereto as required for practical use. Fig. 2 is a vertical sectional view of the device and showing the main levers and operating mechanism located upon the interior of the casing. Fig. 3 is a top plan view of the operating mechanism, the casing in this view being removed to allow the various mechanism to be more clearly shown. Fig. 4 is a vertical sectional view taken approximately on the indicated line 4—4 of Fig. 2. Fig. 5 is a view in perspective of the mechanism upon the rear side of the rear plate of the device. Fig. 6 is a view showing a device for throwing a portion of the mechanism out of engagement with the pair of ratchet-wheels so that the bell will not be sounded. Fig. 7 is a view in perspective of the lower end of one of the operating pawls. Fig. 8 is a front view of the same. Fig. 9 is a view in perspective showing one of the keys or levers and

the pawl thereof in engagement upon one of the ratchet-wheels. Fig. 10 is an elevation showing the arrangement of the dials.

Referring by numerals to the accompanying drawings, 1 indicates an ordinary barber's chair, the same having mounted upon one side thereof a rectangular casing 2 which has hinged upon its front side a door 3 that is provided with a rectangular plate of glass, or other transparent material, 4. This door 3 is adapted to be locked to the casing 2 by means of a padlock, or with an ordinary lock and key. In Fig. 1 said door is shown locked to the casing with a padlock.

A frame work comprising parallel plates 5 and 6 are positioned within the casing 2, said parallel plates being securely held together by means of pins 7, 8, 9, and 10. The rear plate 6 is secured directly to the rear plate of the casing 2 by means of screws 11, or in any suitable manner.

Immediately in front of the front plate 5 is a partition 12, upon the face of which are stamped or printed three dials, the largest one of which is in reality two dials there being one within the other, the outer one 13 of the dials being divided into twenty equal spaces or divisions and the inner dial 14 into twenty-five equal spaces or divisions. The two smaller dials 15 and 16 are divided into twenty equal spaces or divisions.

Passing through the parallel plates 5 and 6 at a point to one side of and below the centers thereof is a shaft 17, the same extending forward a slight distance beyond the front plate 5, and has its outer end squared as indicated by 18 to receive a hand or pointer in order that a key may be mounted thereon to turn said shaft 17 at certain times.

A sleeve 19 is mounted upon the shaft 17 and extends from a point inside the front plate 5 to a point adjacent the squared end 18. Mounted upon the shaft 17 adjacent the rear plate 6 is a large ratchet-wheel 20, said ratchet-wheel being provided on its inner face with a lug 21.

Mounted upon the pin 10 is a spring-actuated detent pawl 22, the point of which is adapted to engage between the teeth of the ratchet-wheel 20.

Pivoted upon the pin 7, which is nearly in a direct vertical line above the shaft 17, is an

arm 23 that extends vertically upward through a slot 24 formed in the top of the casing 2, said arm being provided on its upper end with an aperture 25. The lower end of this arm 5 23 is bifurcated and a pawl 26 is mounted in said bifurcated lower end and is pivoted upon a pin 27 that passes through said bifurcated lower end. A pin 28 mounted in the side of the pawl 26 passes outwardly through a slot 10 29 formed in one of the sides of the lower end of the arm 23. A spring 30 passing around the pins 7, 27, and 28 serves to retain the point of the pawl 26 between the teeth of the ratchet-wheel 20.

15 Secured to the upper end of the arm 23 by means of a screw or bolt passing through the aperture 25 therein is the rear end of a link 31 that extends horizontally toward the forward part of the chair 1, and is pivoted at its 20 forward end to a portion of the arm of the chair.

Mounted upon the sleeve 19 and adjacent the inner side of the front plate 5 is a gear-wheel or pinion 32. A hand or pointer 33 25 mounted rigidly upon the sleeve 19 outside the plate 5 and the partition 12 extends to and indicates upon the inner dial 14 and a hand or pointer 34 upon the squared end 18 of the shaft 17 extends to and indicates upon 30 the outer dial 13.

Mounted upon the shaft 35, the ends of which bear in the front and rear plates 5 and 6 (said shaft being at a point directly below the centers of the plates 5 and 6) is a gear-wheel or 35 pinion 36 that meshes with the pinion 32.

Mounted upon the shaft 35 and adjacent the rear plate 6 is a spur-wheel 37, between the teeth of which is adapted to engage the lug 21. A shaft 38 is mounted in the rear 40 plate 6, extends through the front plate 5, and is there provided with a squared end 39 in order that a key may be mounted thereon. At a central point between the plates 5 and 6 and rigidly mounted upon this shaft 38 is 45 a ratchet-wheel 40, the same being provided on its face with a lug 41. A lever 42 has its rear end bifurcated and mounted on the shaft 38 and is located on each side of the ratchet-wheel 40. Said lever extends outward through 50 a slot 43 in the side of the casing 2, and is there provided with a finger plate 44. A spring 45, one end of which is secured to the shaft 38, passes along the side of the lever 42 and has its other end engaged by a pin 45^a, thus 55 forming means for normally holding the lever 42 in its proper position. An actuating hooked pawl 46, the point 47 of which engages between the teeth of the ratchet-wheel 40, is pivoted upon the pin 45^a, and is held in position 60 by means of a spring 48. A lug 49 is positioned upon the inner side of one of the bifurcated ends of the lever and lies directly within the path of travel of the lug 41 on the ratchet-wheel 40. The lug 49 performs the 65 function of a stop, as the lug 41 engages against said lug 49 when the ratchet-wheel 40 has made one rotation.

Mounted upon the squared end 39 of the shaft 38 and outside the partition 12 is a hand or pointer that indicates upon the upper dial 70 15. Directly beneath the shaft 38 is a shaft 50, the rear end of which bears in the rear plate 6. This shaft extends forward through the front plate 5 and is there provided with a squared end 51 to allow a key to be mounted 75 thereon in order to turn said shaft 50 at certain times. Rigidly mounted upon this shaft 50 is a ratchet-wheel 52 in every way similar to the ratchet-wheel 40, said ratchet-wheel 52 being provided with a lug 53. A lever 54 has 80 its rear end bifurcated and located on each side of the ratchet-wheel 52. A spring-actuated pawl 55 is mounted upon a pin 56 passing through the bifurcated rear end of the lever 54, the point of said pawl 55 engaging 85 between the teeth of the ratchet-wheel 52. The forward end of the lever 54 passes outward through the slot 43 and is there provided with a finger plate 57. Upon the inner side of one of the bifurcated ends of the lever 54 90 is a lug 58 that lies directly in the path of travel of the lug 53.

Where the shafts 38 and 50 pass through the rear plate 6 they engage against the upper and lower ends respectively of the spring- 95 plate 59 which is riveted at its center to the rear side of the plate 6.

Mounted in right angled bearings 60 that are secured to the rear side of the plate 6 is a vertical shaft 61, the same having secured 100 thereto one end of a leaf-spring 62, the other end of said spring bearing against the rear side of plate 6. Secured also to this vertical shaft 61 is an arm 63, on the outer end of which is a bell striker 64. A bell or gong 65 105 is located on the rear side of the plate 6 and adjacent the arm 63 and bell striker 64. Passing through the shaft 61 and through slots 66 formed in the rear plate 6 are pins 67, the forward ends of which engage between the teeth 110 of the ratchet-wheels 40 and 52. On the front side of the plate 6 and pivoted adjacent the lower one of the slots 66 in order to engage the lower pin 67 is an eccentric 67^a, the same being provided with an arm 68 and a hori- 115 zontal arm 69 that extends through a slot 70 in the front plate and through a slot 71 in the partition 12.

The operation of my improved device is as follows: We will assume that a customer de- 120 sires a shave. He seats himself in the chair and said chair is tipped back in the usual manner. With this tipping back movement the arm of the chair to which the arm 31 is connected moves rearwardly a slight distance. 125 Consequently said arm 31 is moved with it. This necessarily throws the top of the arm 23 rearwardly which will cause the pawl 26 to engage between two of the teeth of the ratchet-wheel 20 and move said ratchet-wheel 130 one notch, the wheel 20 and the hand or pointer 34 being rigidly secured to the outer end of the shaft 17 and the pointer will necessarily be moved one space, thereby registering one

shave in the outer dial. When the customer has been shaved and the chair repositioned, the link 31 and arm 23 will necessarily resume their normal positions, the spring-actuated pawl 22 preventing the ratchet-wheel 20 from being turned in a reverse direction by the repositioning of the pawl 26. There are preferably twenty teeth in the ratchet wheel 20. Consequently, when said wheel has made one rotation and twenty shaves have been registered, the lug 21 upon said ratchet-wheel 20 will engage between the teeth of the spur-wheel 37 and move said spur-wheel which is rigidly mounted upon the shaft 35 one space or notch. The pinion 36 being rigidly mounted upon the shaft 35 will necessarily be turned one notch and the pinion 32 meshing with said pinion 36 will also be turned one notch, which will turn the hand 33 one space upon the dial 14 as said hand is rigidly mounted upon the sleeve 19 that is upon the shaft 17 showing that twenty-five shaves have been given. Thus it will be seen how each shave is registered. It will also be seen that a total of five hundred shaves may be registered before it is necessary to begin a recount.

As the operation of the levers and mechanism that register the hair-cuts and shampoos are identically the same, the operation of but one will be described. We will assume that the customer desires a hair-cut. When the operator has finished his work he presses downwardly upon the plate 44 of the lever 42. As the spring-actuated pawl 46 is carried by said lever 42 and the point of said pawl engages between the teeth of the ratchet-wheel 40, said ratchet-wheel 40 will be turned one notch. As the operator removes his hand from the plate 44 the lever 42 and plate 44 will reposition themselves by the action of the spring 45. The hand or pointer that is mounted upon the end of the shaft 38 will necessarily be turned one division upon the upper dial 15, thus registering one hair-cut. As there are but twenty notches in the ratchet-wheel 40, when said ratchet-wheel has made one rotation and twenty hair-cuts registered the lug 41 will engage with the lug 49 on the inside face of the bifurcated end of the lever 42 and lock the wheel. The operator must now open the glass door of the casing and position a key upon the outer end of the squared portion 39 of the shaft 38, pushing said shaft a slight distance rearwardly and at the same time sufficiently turn the key and shaft to return the pointer to zero. The shaft 38 is allowed to pass rearwardly, by reason of the resiliency of the spring-plate 59 against which it bears after passing through the rear plate 6. The lug 41 having thus been released from the lug 49, the lever 42 and ratchet-wheel are free to turn so as to count anew. The pins 67 extending from the vertical shaft 61 through the slots 66 and being engaged by the teeth of the ratchet-wheels 40 and 52 are necessarily vibrated with each movement of said ratchet-wheels. When-

ever one of said wheels is moved a notch, the pins will be moved outwardly a slight distance which will necessarily rotate the vertical shaft 61 a slight distance and thereby slightly depress the spring 62. As the tooth of the ratchet-wheel that engaged the pin 67 leaves said pin, the resiliency of the spring 62 will cause the vertical shaft to slightly rotate in a reverse direction and the bell striker 64 to contact with the bell 65, thereby sounding the same. Thus it will be seen how the registering of the hair-cuts and shampoos are made and at the same time the bell sounded.

When it is desired to dispense with the sounding of the bell, the operator by means of the horizontal arm 69 of the eccentric-arm 68 moves the same in the direction of the arrow in Fig. 6 to the position as indicated by dotted lines therein. This throws the pins 67 to a position where they will not be engaged by the teeth of the ratchet-wheels 40 and 52.

Thus it will be seen how I have constructed a registering device for barbers' chairs that possesses superior advantages in point of simplicity, durability and general efficiency.

What I claim is—

1. A device for automatically registering shaves, hair-cuts, shampoos, comprising a casing adapted to be located upon the side of a barber's chair, a pair of parallel plates mounted within said casing, a shaft passing through said plates, a ratchet-wheel mounted upon said shaft, an arm provided with a spring-actuated pawl adapted to engage with the teeth of said ratchet-wheel, a horizontal arm connected to the arm of the chair and to the upper end of the arm that carries the spring-actuated pawl, a hand or pointer mounted upon the outer end of the shaft, a sleeve mounted upon said shaft, a pinion mounted upon said sleeve and meshing with a second pinion, a pair of ratchet-wheels mounted upon shafts passing through the parallel plates, levers carrying spring-actuated pawls, the points of which engage between the teeth of said ratchet-wheels, and hands or pointers mounted upon the outer end of the shafts upon which the ratchet-wheels are mounted.

2. In a device of the class described, a casing, a pair of parallel plates mounted within said casing, a partition in said casing upon which is stamped or printed a series of dials, shafts passing through the parallel plates and partition and having mounted upon the outside of the partition hands or pointers adapted to indicate upon the dials, ratchet-wheels mounted upon the shafts between the parallel plates, operating levers carrying spring-actuated pawls adapted to engage with and move the ratchet-wheels one notch at a time, one of said levers being operated by the action of the chair, the other two adapted to be manually operated.

3. In a device of the class described, a casing, a pair of parallel plates mounted within said

casing, a pair of shafts passing through said casing and having ratchet-wheels mounted upon them between the parallel plates, operating levers, the rear ends of which are bifurcated, mounted upon said shafts on each side of the ratchet-wheels, spring-actuated pawls carried by said levers and adapted to engage with the teeth of the ratchet-wheels, lugs formed integral with the faces of the ratchet-wheels, and lugs formed integral with the inner sides of the bifurcated ends of the operating levers.

4. In a device of the class described, a casing, a pair of parallel plates arranged vertically within said casing, the rear one of which is provided with a pair of transverse slots, a

vertical shaft carrying a bell striker mounted in bearings upon the rear side of the rear plate and adjacent the slots therein, pins formed integral with said shaft and passing through said slots, an eccentric pivoted upon the rear plate adjacent one of the slots, an arm formed integral with said eccentric, and an arm formed integral with said first mentioned arm, extending forward through a slot in the front plate.

In testimony whereof I affix my signature in presence of two witnesses.

ANTON GOLDAMMER.

Witnesses:

MAUD GRIFFIN,
JNO. C. HIGDON.