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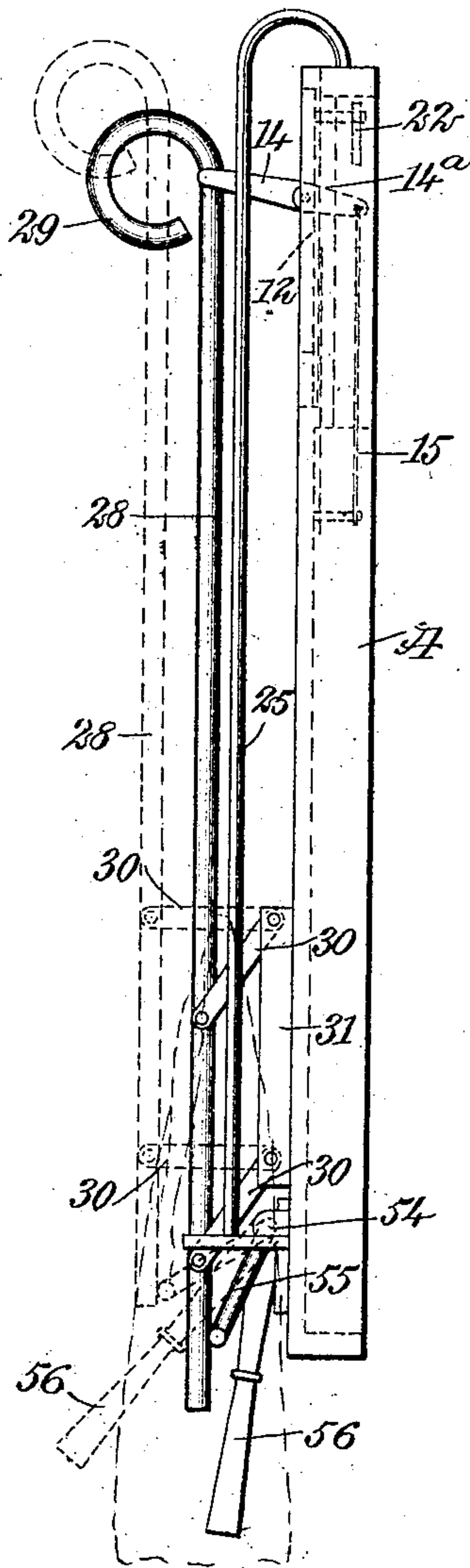
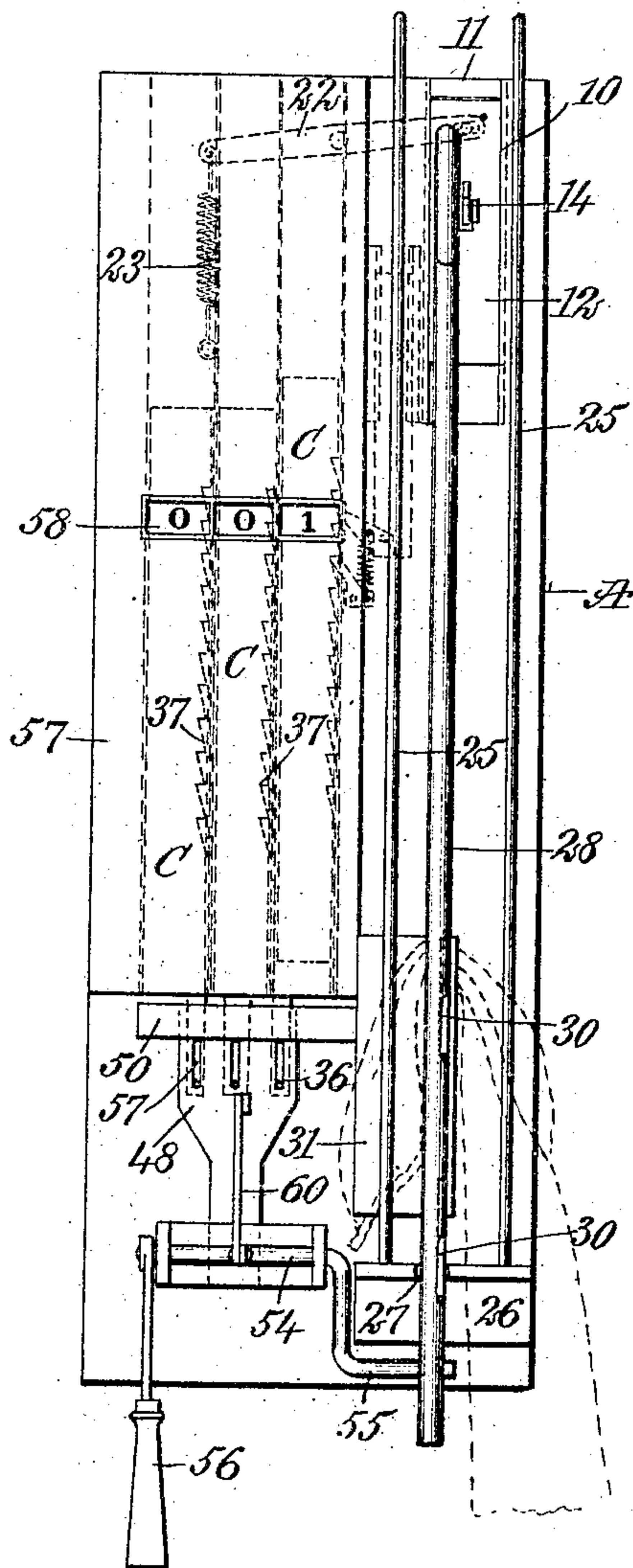
PATENTED JAN. 21, 1908.

R. HUNTER.
REGISTERING DEVICE.
APPLICATION FILED MAR. 14, 1907.

2 SHEETS—SHEET 1.

Fig. 1

Fig. 2



WITNESSES

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[Signature]

INVENTOR

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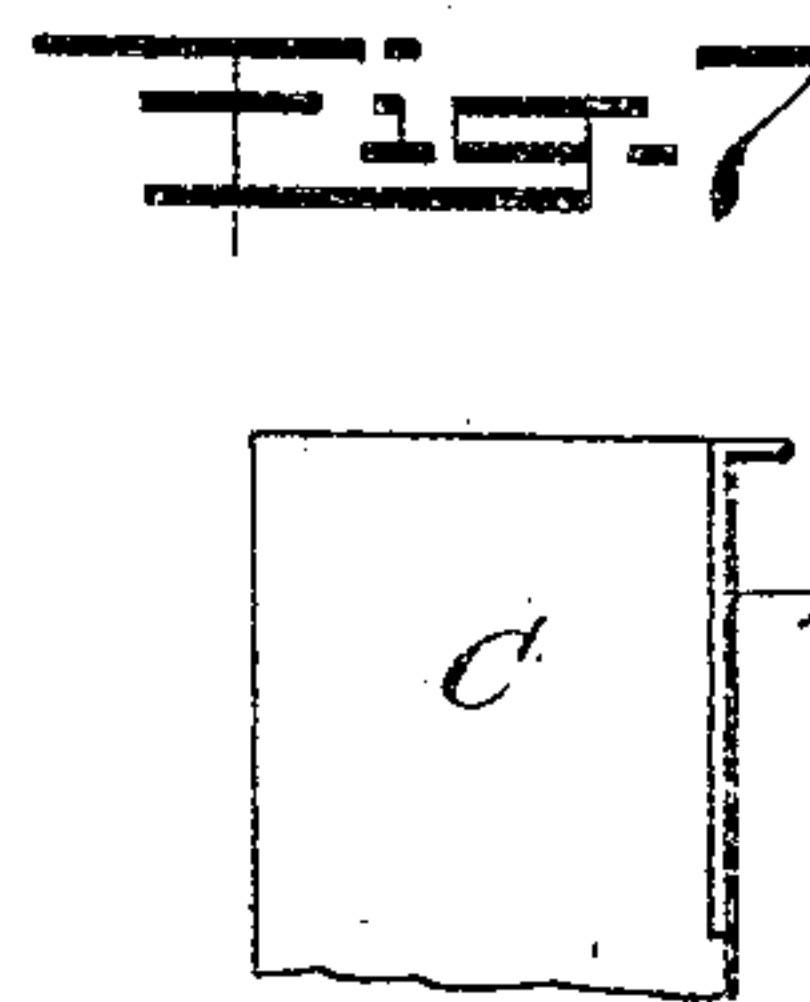
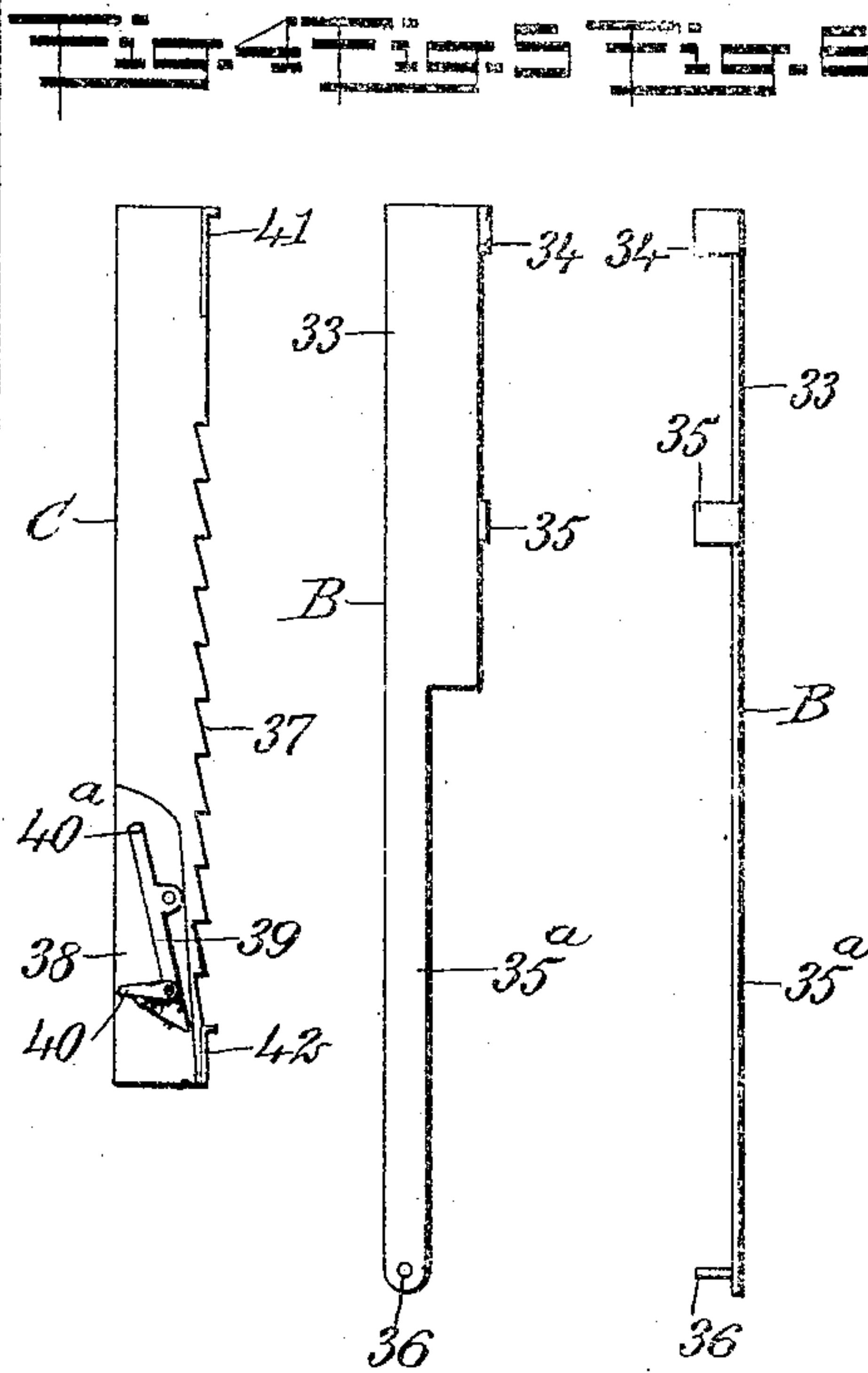
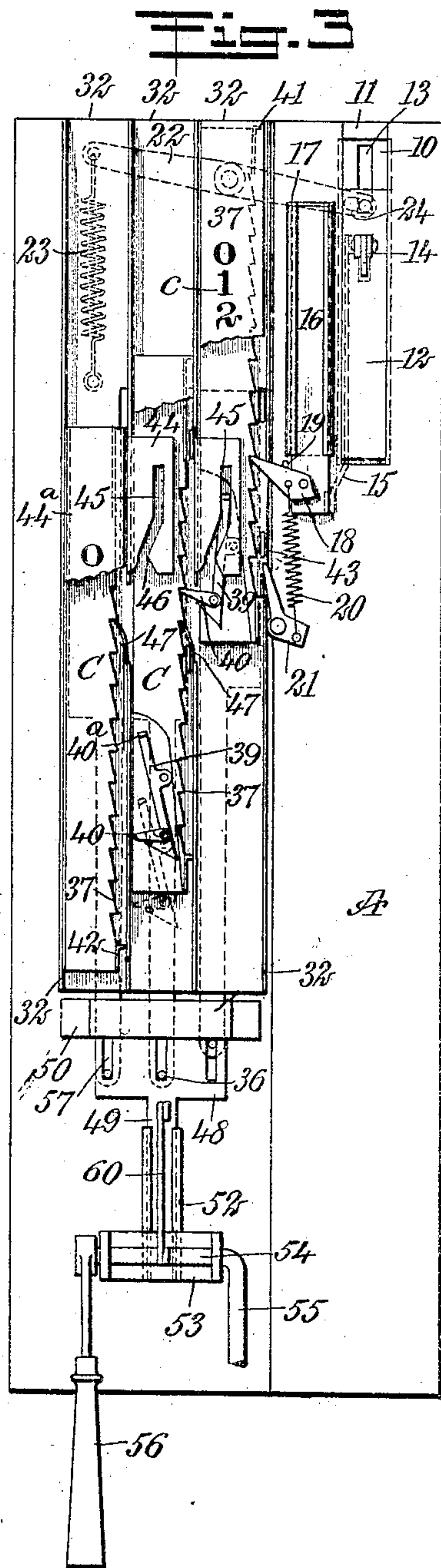
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2 SHEETS—SHEET 2.



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REGISTERING DEVICE.

No. 877,430.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed March 14, 1907, Serial No. 362,312.

To all whom it may concern:

Be it known that I, ROSS HUNTER, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Improvement in Registering Devices, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a device especially adapted for temporarily holding linen or laundry work and for registering the number of pieces held by the machine.

A further purpose of the invention is to so construct the machine that the various articles may be readily placed therein one after the other, and wherein as each article is introduced into the machine a record thereof will be automatically established.

It is also a purpose of the invention to provide means whereby the articles may be quickly and conveniently released from the machine when so desired and simultaneously the recording mechanism be brought to the zero mark.

Another purpose of the invention is to provide a machine of the character described that will be very compact, simple, durable and economic, and capable of being conveniently and expeditiously operated.

The invention consists in the novel construction and combination of the several parts as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the machine; Fig. 2 is an edge view or side elevation thereof; Fig. 3 is a front elevation of the machine with the cover plate removed and likewise the mechanism that receives the articles; Fig. 4 is a detailed plan view of one of the registering bars; Fig. 5 is a plan view of a controlling slide for such a bar as is shown in Fig. 4; Fig. 6 is an edge view of the slide shown in Fig. 5; and Fig. 7 is an enlarged side elevation of the upper end portion of one of the registering bars.

The back or base A of the device may be of any desired character and may be made of any suitable material. At the upper right-hand corner of the said base or back A a longitudinal slot or groove 10 is produced having a stop 11 at its upper end, and in this slot

or groove 10, a slide 12 is mounted for movement, and furthermore the said slot or groove 10 is provided with a longitudinal opening 13 at its upper portion below the stop 11.

A lever 14 is mounted in the slide 12 adjacent to its upper end, although the said lever may occupy another position if necessary. This lever has bearing against a wall 14^a which is the upper end of a slot produced in the recessed portion 10 of the back A, and when this lever is drawn downward it bears against the said upper wall 14^a and tends at such time to move the slide 12 in a downward direction, since the lever 14 is pivotally connected with the said slide 12, as is shown in Figs. 2 and 3. The lever 14 extends through the body A and at its rear portion is connected by a link 15 with a second slide 16 parallel to the slide 12, which slide 16 has movement in suitable guideways 17 secured upon the front face of the back A, as is particularly shown in Fig. 3. At the lower end of the said second slide 16 a dog 18 is pivotally mounted and below the slide 16 and also below the dog 18, a pawl 21 is pivoted to the front face of the back A and the said pawl and the said dog are connected by a spring 20, which spring acts to normally carry the two said members 18 and 21 to an upward position. The dog 18, however, is limited in its upward movement by means of a stop pin 19 that is made to extend forwardly from the back A. The slide 12 is carried normally to its upward position when released preferably in the following manner:

A lever 22 is centrally pivoted transversely at the upper portion of the back A, and this lever has a connection 24 with the slide 12 at the upper end of the latter and the opposite end of the said lever 22 is connected with a spring 23, which spring is secured to the back A in any suitable or approved manner, as is best shown in Fig. 3, the tendency of the spring 23 being to carry the slide 12 in an upward position or to an engagement with the stop 11. The pivot pin connecting the lever 22 with the slide 12 extends through the opening 13 in the recessed portion 10 of the back heretofore referred to.

At the right side of the back A two guide rods 25 are made to extend from the bottom to the top of the said back and these guide rods pass out each side of the aforesaid slide 12, and consequently the lever 14 will be almost centrally between the said guide rods

25. The guide rods 25 are bent at their upper ends and are secured to the upper portion of the back A and are removed some distance from the forward face of said dog. The guide rods at their lower ends are secured in a bracket 26 located at the lower portion of the dog and the said bracket is provided with a central opening 27 in its horizontal member, since the said bracket 26 is of angular formation.

10 A retaining bar 28 is located between the guide rods 25, and the said retaining bar 28 is provided at its upper end with a suitable handle section 29 and at the lower portion of the said retaining bar links 30 are pivoted thereto, the said links being also pivoted to an angle plate 31 secured to the outer face of the said back A, as is particularly shown in Fig. 1, so that the said retaining bar may have parallel movement to and from the forward face of the back A and may be carried outwardly therefrom or inwardly thereto, in the latter case occupying a position practically parallel and in the same horizontal plane with the guide rods 25.

25 The articles to be counted are passed beneath the retaining bar and in being so passed are brought in engagement with the lever 14 operating said lever and in consequence also operating the slides 12 and 16. 30 The articles are passed down one after the other as far as possible into a space intervening between the retaining bar 28 and the front face of the back A and as each article is so placed in position on the device it is registered by a mechanism to be hereinafter described.

40 At the left of that portion of the front face of the back A occupied by the retaining bar 28 and its associated parts, channel irons are longitudinally located, which channel irons may be made of cast or wrought material, or may be made from tin or a like material. These channel irons 32 which may be more properly termed guide troughs, are parallel with each other and are adjacent to each other, being preferably arranged as closely as possible. These channel guides or troughs 32 are moved in any approved manner from the front face of the back A in order to accommodate beneath them slides or shifting plates B, which slides or shifting plates, as is shown in Figs. 5 and 6, are constructed with a wide upper portion or section 33 that practically corresponds to the width of the bottom of a guide chute 33^a and with a reduced lower shank 33^b that extends beyond the lower end of the guide chute beneath which the shifting plate is located, and each of the shifting plates B is provided with a forwardly extending lug 34 at one side portion of its upper end and with a second corresponding lug 35 at the same side edge, both of the lugs 34 and 35 being on the wider portions of the said shifting plates, as is shown in Figs. 5 and

6, and a forwardly extending pin 36 is located at the lower end of each slide or shifting plate B, as is also shown in Figs. 5 and 6, which pins are for a purpose to be hereinafter named.

70 Each channel iron or guide trough is adapted to receive a registering bar C that is produced upon its front face numerals reaching from naught to nine inclusive. Each of the said registering bars C is provided with 75 ratchet teeth 37 in one of its side faces, as is best shown in Fig. 4, and also on the outer face of each of the registering bars C near its lower end, a recess 38 is formed, in each of which recesses a lever 39 is pivoted and at 80 the lower end of each lever a dog 40 is pivotally mounted and the recesses 38 are so formed that when the levers 38 containing them are thrown in direction of the ratchet teeth 37 the dogs 40 connected with the lever 85 39 are given an upward inclination and are rigidly held in position, and at the upper end of each lever 39 for each registering bar C a head 40^a is formed that extends forwardly. At the upper end of each of the registering 90 bars C a lug 41 is located, and a lug 42 is also located adjacent to the lower end of each of the registering bars, as is clearly illustrated in Fig. 4.

95 In the drawings I have shown three channel irons or guide troughs 32 and the registering bar in the initial or left-hand channel iron or guide trough is adapted to expose units, the next tens, and the next hundreds, but I desire to be understood that any desired number of channel irons or guide 100 troughs 32 may be employed. The units or initial channel irons or guide troughs 32 differ from the others in that a stationary lug 43 extends from the back A through it, as is 105 shown in Fig. 3, and each channel iron 32 is provided with a partition about centrally located and in each of the said partitions a slot 45 is made, having an inclined lower section 46, as is shown in Fig. 3. The 110 ratchet teeth 37 of the registering bars C having movement in the tens and the hundreds channel irons or guide troughs are adapted to be engaged by spring pawls 47, as is shown in Fig. 3, and the said channel irons 115 or troughs have suitable openings therein to permit the upward passage and the sliding movement of the lugs 34 and 35 of the sliding plates B, and also have openings therein to permit the inward passage of the dog 18 and 120 the pawl 21, and it may be here remarked that the stationary lug 43 of the tens channel iron or guide trough is located between the lugs 34 and 35 of the sliding plate B that moves below the said channel irons and fur- 125 thermore, the tens and the hundreds channel irons or guide troughs are provided with openings through which the spring pawls 47 may extend, but it will be understood that the spring pawls 47 may be located directly 130

within the said troughs or channel irons so as to engage with the teeth 37 of the registering bars having movement therein, and I do not limit myself to any particular form of pawl for engagement with the teeth 37 of the tens and hundreds registering bars, or to any particular location for said pawls.

A plate 48 is located at the lower end portion of all of the registering bars C, and the said plate 48 is a sliding plate and is provided with a shank extension 49 and moves in a strap guide 50, and the said plate 48 is provided with a series of slots 51, each of which slots receives a pin 36 from the shifting plate B, as is also shown in Fig. 3. The shank section of the plate 48 has movement in guide-ways 52 produced upon the back A, and at the lower end of the said guides 52 a bracket 53 is located and in this bracket a shaft 54 is mounted in turn, which shaft is provided with a crank arm 55 at one end that in one movement of the shaft has lifting engagement with the retaining bar 28, and at the other end of the said shaft 54 a handle 56 is secured whereby to operate said shaft.

In the operation of the device the material is passed down between the guide rails 25 and the retaining bar 28 as has been stated, and as each piece is so passed the lever 14 is depressed. This lever 14 as it is depressed operates the slide 12 and also operates the slide 16, causing the dog 18 to have an upward movement whereby to carry the units registering bar C upward one notch to display one numeral produced thereon and at the same time the pawl 21 engaging with the notched or toothed portion 37 of the units registering bar will prevent the said bar from dropping downward. When the units bar, for example, has been carried upward a sufficient distance to register nine at the display opening to be hereinafter described, the next movement of the said units registering bar C will cause the dog 40 carried thereby to lift the tens registering bar at the next movement of the lever 14 one notch and after the tens bar has been moved upward nine times its dog 40 will lift up the hundreds registering bar one notch so as to show at the opening, hereinafter to be referred to, the registering of the number of pieces contained between the bar 28 and the guides 25.

When the units registering bar C reaches the limit of its upward movement, the lower lug 42 of the said units registering bar will engage with the lower lug 35 on the sliding plate below it and will raise the said sliding plate to such an extent that the pawl 21 will be carried out of engagement with the teeth 37 of the said units registering bar, whereupon the said bar can drop to assume its normal position but when the said bar reaches its lowest or normal position the upper lug 41 on the said bar will engage with the upper lug of the sliding plate beneath and will re-

store the said sliding plate to its normal position, bringing the pawl 21 again in engagement with the ratchet teeth 37 of said units registering bar, and as the shifting plate B located beneath the units registering bar is moved to permit freedom of movement of said registering bar, and as the said units registering bar descends the dog 18 will drop with it until it reaches the fixed lug 43 whereupon the dog 18 will be carried out of engagement with the teeth of the units registering bar and will offer no resistance to the free downward movement thereof.

When it is desired to remove the material from the machine the shaft 54 is turned so as to move the crank arm 55 beneath the retaining bar 28 lifting said bar so that, for example, napkins will drop out from the machine and at the same time the plate 48 will be raised, since said plate 48 is connected with the shaft 54 by means of a link 60, and the said plate 48 will be elevated so as to bring all of the registering bars C down into their normal positions, exposing the ciphers at the opening 58 produced in a cover plate 57 as is shown in Fig. 1.

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

1. In a registering device for laundry or similar articles, a supporting body, a retaining means for the articles and between which and the said body the articles are passed, the said retaining means being movable toward and from the body, and a registering device operated by the passage of the articles between the registering means and the supporting body.

2. In a registering device for laundry or similar articles, a retaining means for the articles and a registering device operated by the passage of the articles to the retaining means, and a releasing device for the retaining means and the registering device.

3. In a machine for registering and holding laundry and similar articles, a body section, a retaining bar, a guide bar between which the retaining bar operates, registering bars having sliding movement on the body, and means for operating the registering bars by the passage of articles between the retaining bar and the said guides.

4. In a machine for registering and holding laundry and similar articles, a body section, a retaining bar, a guide bar between which the retaining bar operates, registering bars having sliding movement on the body, means for operating the registering bars by the passage of articles between the retaining bar and the said guides, and means for simultaneously lifting the retaining bar to free the articles held thereby and bring the registering bars into initial position.

5. In a laundry registering device, a body section, guide bars carried thereby, a retain-

ing bar located between the guide bars capable of being carried to and from the body section, a lever located between the guide bars adjacent to the upper or receiving portion of the retaining bar, registering bars having numerals produced thereon, and means connected with the said lever whereby to remove the registering bars step by step to expose one number after the other, the registering bars being arranged in the order of units, tens, hundreds, one registering bar having means for operating the adjoining registering bar.

6. In a laundry registering device, a body section, guide bars carried thereby, a retaining bar located between the guide bars capable of being carried to and from the body section, a lever located between the guide bars adjacent to the upper or receiving portion of the retaining bar, registering bars having numerals produced thereon, means connected with the said lever whereby to remove the registering bars step by step to expose one number after the other, the registering bars being arranged in the order of units, tens, hundreds, one registering bar having means for operating the adjoining registering bar, means for carrying the retaining bar to releasing position, and simultaneously restoring the registering bars to their initial position.

7. In a machine for registering and holding laundry or similar articles, a body section provided with a guide, a retaining means having parallel movement toward and from the body section, and between which and the

said guide the articles are passed, a registering device, and means for operating the registering device by the passage of the articles between the said guide and the retaining means.

8. In a machine for registering and holding laundry and similar articles, a body section, a guide carried thereby, a retaining means, movable toward and from the body section, a lever located adjacent to the receiving portion of the retaining means, and moved by the passage of the articles between the guide and the retaining means, a registering device, and connections between the said lever and the registering device for operating the latter.

9. In a machine for registering and holding laundry and similar articles, a body section, a guide carried thereby, a retaining means, movable toward and from the body section, a lever located adjacent to the receiving portion of the retaining means, and moved by the passage of the articles between the guide and the retaining means, slides operated by the said lever, a registering mechanism, and means for actuating the registering mechanism by the movement of said slides.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROSS HUNTER.

Witnesses:

EDWD. JONES,
ALFRED A. CUNNINGHAM.