J. W. EILER.

SLUG DETECTOR.

APPLICATION FILED MAR. 28, 1907.

968,648.

Patented Aug. 30, 1910.

3 SHEETS—SHEET 1.

Fig. 1.

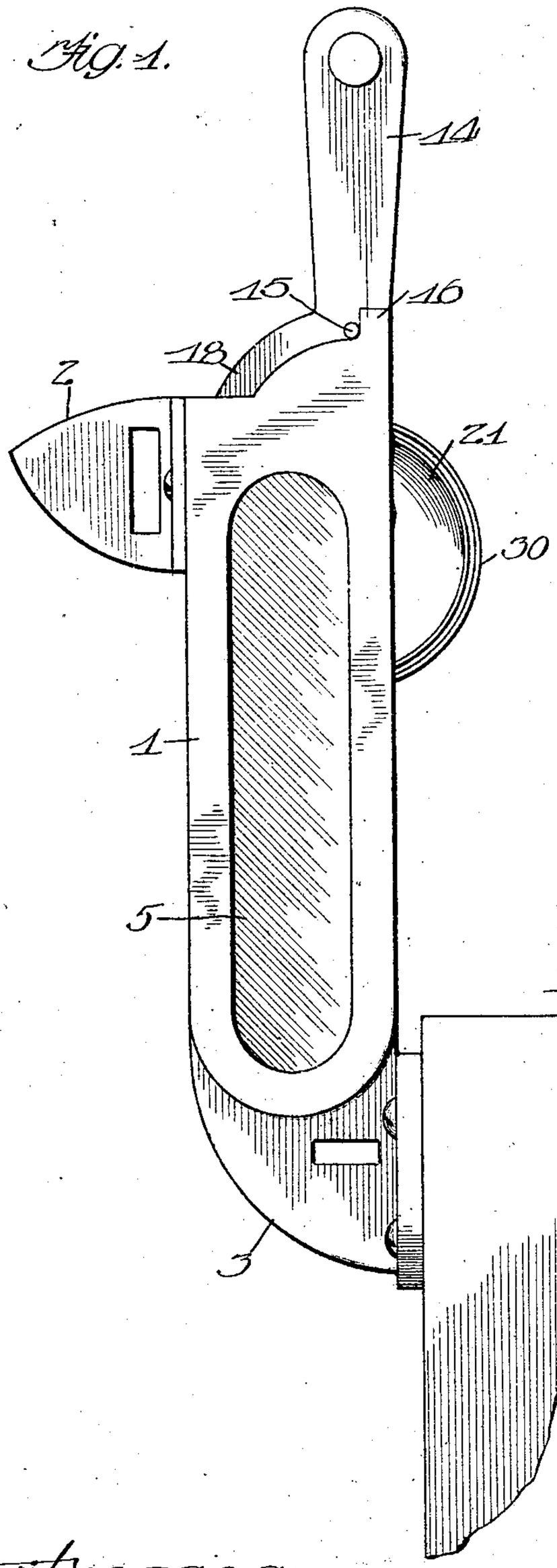
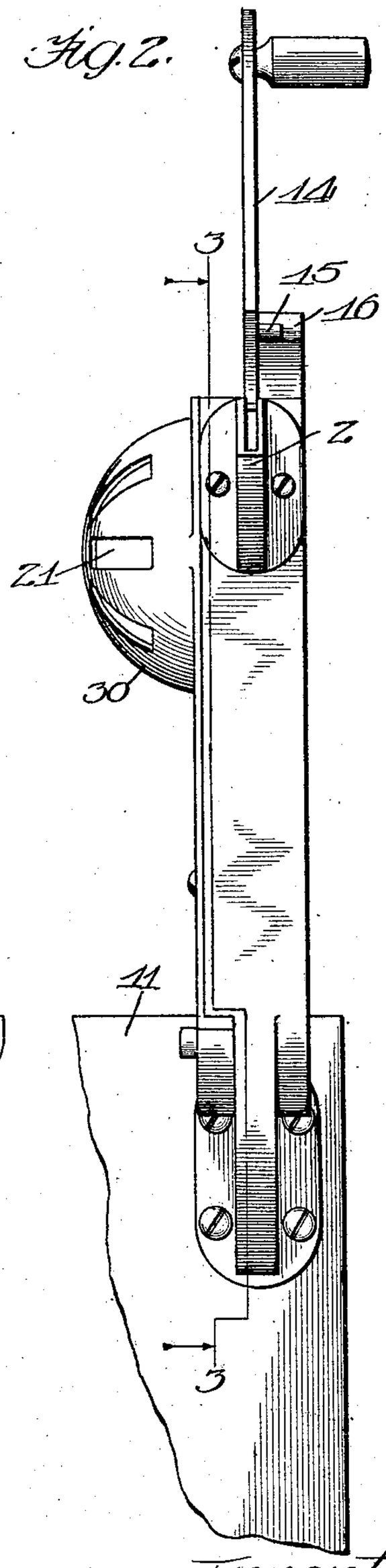


Fig. 2.



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3 SHEETS—SHEET 2.

Fig. 3.

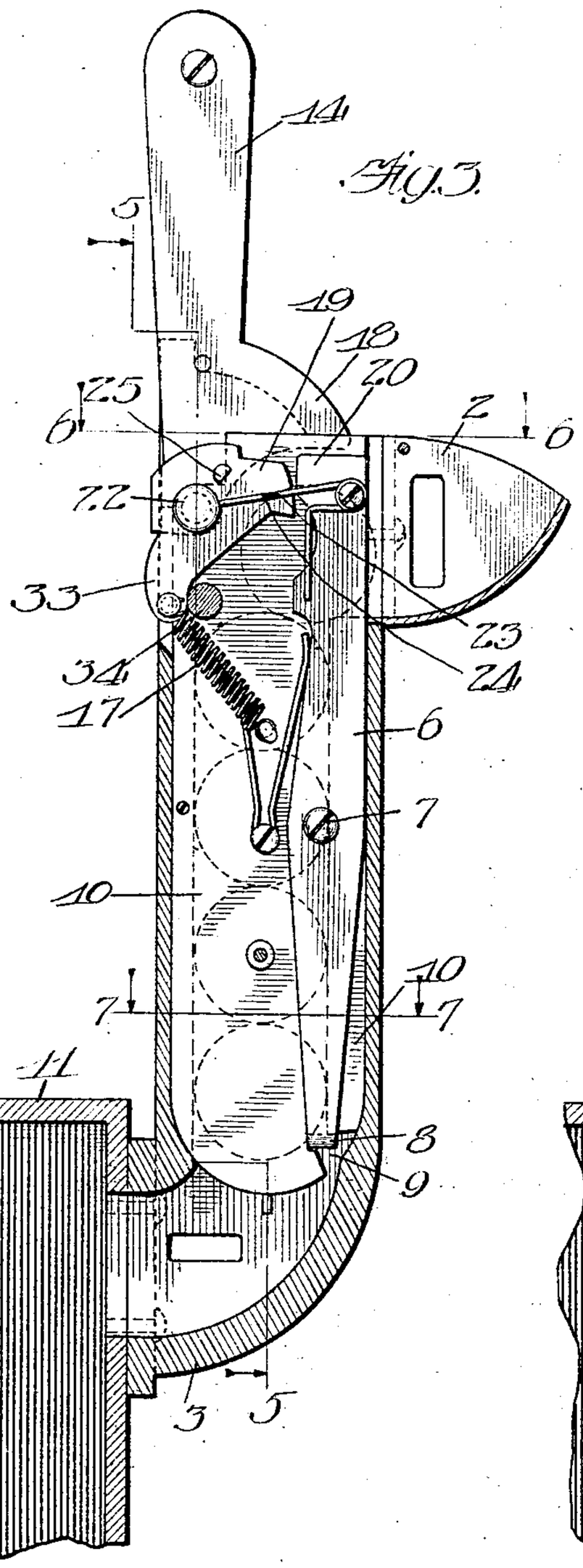
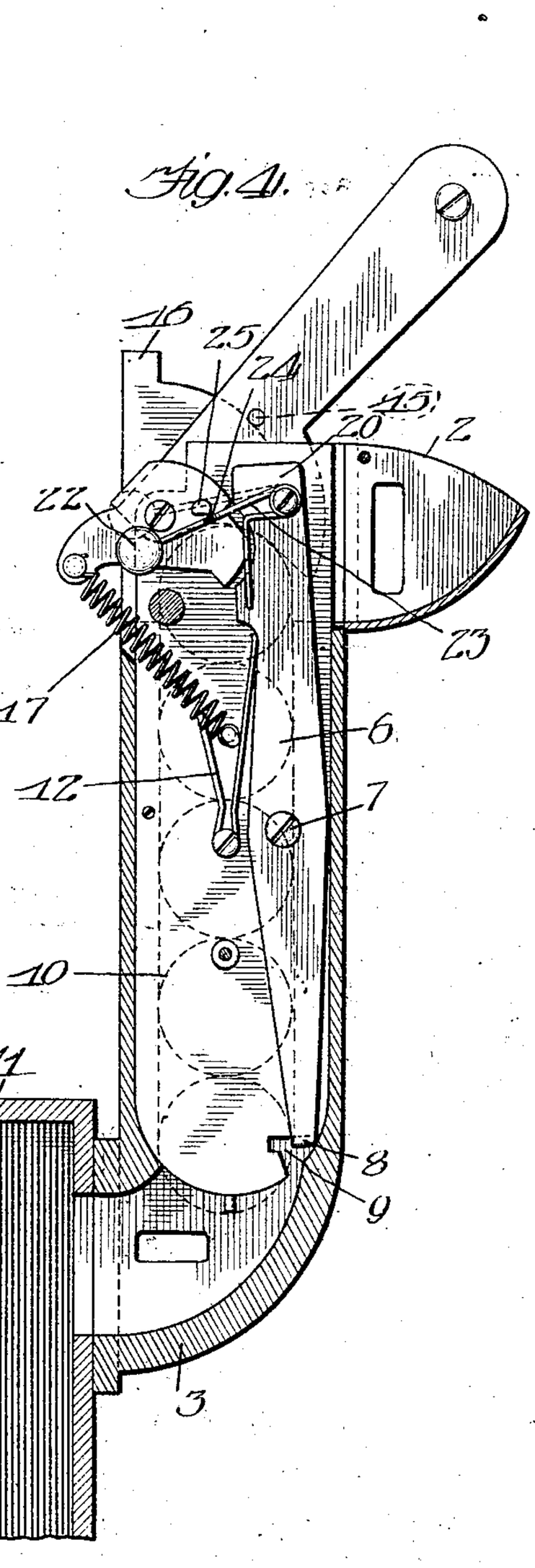


Fig. 4.



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3 SHEETS—SHEET 3.

Fig. 5.

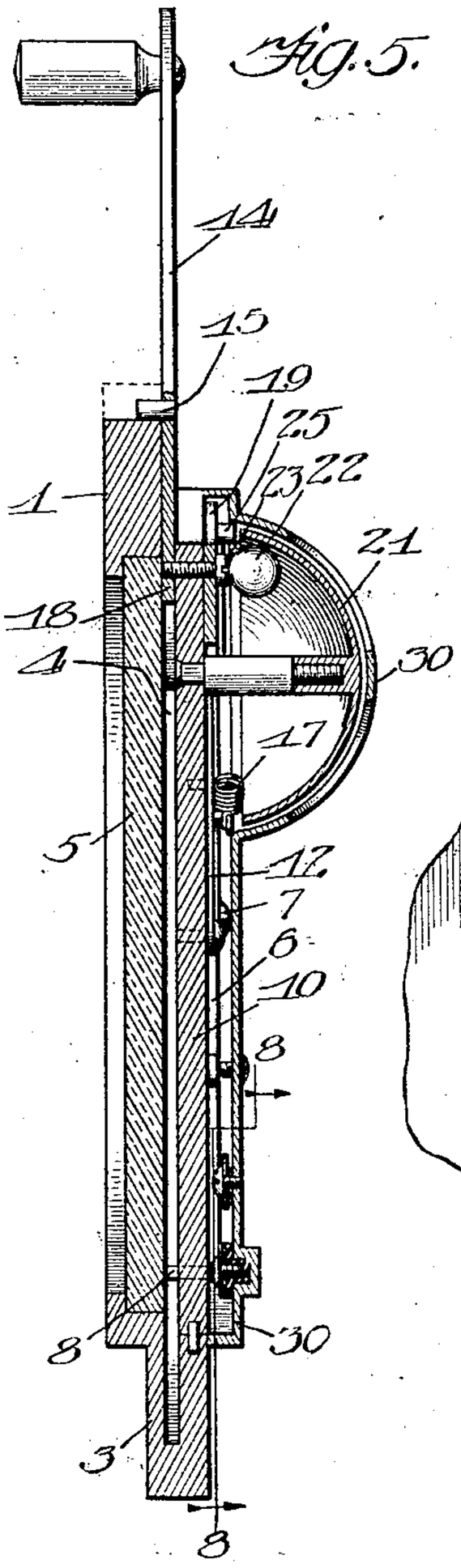


Fig. 6.

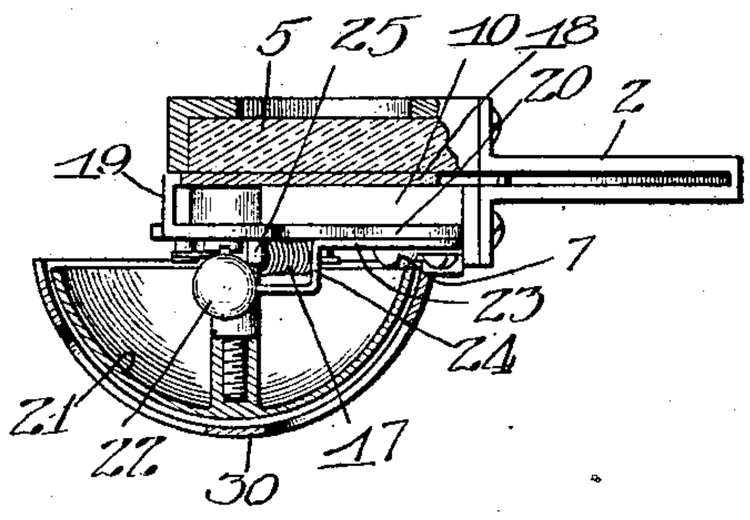


Fig. 7.

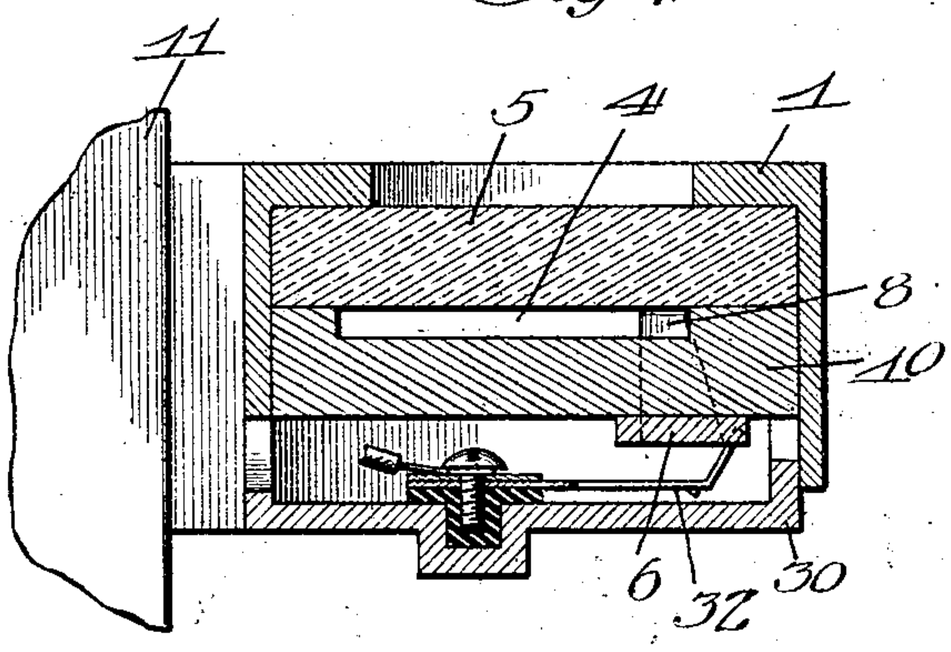
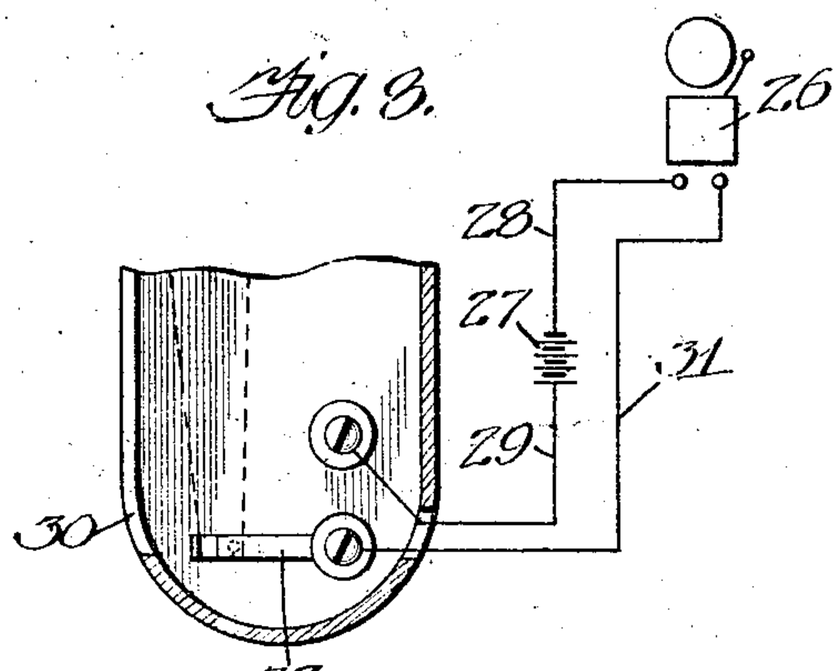


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN W. EILER, OF CHICAGO, ILLINOIS.

SLUG-DETECTOR.

968,648. Specification of Letters Patent. **Patented Aug. 30, 1910.**

Application filed March 28, 1907. Serial No. 365,102.

To all whom it may concern:

Be it known that I, JOHN W. EILER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Slug-Detectors, of which the following is a description.

My invention relates to an attachment for coin controlled devices for retaining the coin last deposited in the device for operating the same, where it may be readily inspected to detect the use of slugs or other means for avoiding the actual depositing of the coin required.

The object of my invention is to provide a simple, sure, and efficient device of the kind described, and one not easily rendered inoperative when in service.

To this end my invention consists in the novel construction, arrangement, and combination of parts herein shown and described and more particularly pointed out in the claims.

In the accompanying drawings, wherein like or similar reference characters indicate like or corresponding parts; Figure 1 is a side elevation of my device mounted in operative position. Fig. 2 is an edge elevation of the same. Fig. 3 is a section taken substantially on line 3—3 of Fig. 2. Fig. 4 is a section similar to that shown in Fig. 3, but with the parts moved to operate the device. Fig. 5 is a section taken substantially on line 5—5 of Fig. 3. Fig. 6 is a section taken substantially on line 6—6 of Fig. 3. Fig. 7 is an enlarged section taken substantially on line 7—7 of Fig. 3; and Fig. 8 is a section taken substantially on line 8—8 of Fig. 5.

In the preferred form of my device shown in the drawings, 1 is a coin receiver having an inlet 2 near one end, an outlet 3 near the opposite end, and a coin passage 4 extending longitudinally thereof and connecting said inlet and outlet and having a transparent panel 5 at one side extending substantially its entire length so that any coins or similar articles therein may be plainly seen and their exact character determined. The passage 4 may be of any desired length and formed to receive any particular coin or slug, the form shown being especially designed to operate in connection with a telephone coin box 11 of the usual or any preferred form and with the common five cent piece or nickel. The inlet, outlet and passage above described are preferably formed to adapt the device to the coin box to which it is attached and so arranged that the particular coin for operating the device when inserted in the inlet will pass preferably by gravity at once into the passage 4 toward the outlet and if not prevented would pass directly from the passage 4 into the outlet and escape from the device.

Any suitably formed movable obstruction may be provided in the passage 4 preferably near the outlet 3 to prevent the escape of coins from the passage 4 as above described. In the form shown a lever 6 is pivotally mounted upon the wall 10 of the passage 4 as at 7 and provided with a part 8 extending through an opening 9 in the wall for this purpose. A spring 12 or other suitable resilient means is suitably attached to the plate 10 and engages the free end of the lever 6 to normally hold the part 8 in position in the passage 4.

Suitable means are also preferably provided to control the operation of my device. As shown an operating handle 14 is pivotally mounted near the inlet 2 and provided with a part 15 adapted to coöperate with a stop 16 upon the receiver to limit the movement of the handle in one direction. A spring 17 or other suitable resilient means is preferably provided to normally retain the handle at the limit of its movement in this direction. The handle 14 is also provided with a part 18 adapted to enter the passage 4 at each operative movement of the handle, and when a suitable number of coins are positioned in the passage, to force the coins along the passage toward the outlet. The obstruction 8 is so positioned that this movement of the coin with which it is engaged, forces the obstruction out of the passage and a single coin passes into the outlet, the obstruction immediately returning to its position in the passage to engage the next succeeding coin. The handle 14 is also provided with an arm 19 arranged to normally engage a projection 20 upon the lever 6 and lock the lever in position. When however the handle 14 is operatively moved the arm 19 is disengaged from the projection 20 thus releasing the lever 6 so that the part 18 upon the handle may coöperate with the coins in the passage to move the obstruction as before described. The projection 20 and arm 19 are preferably so formed that when the lever 6 is moved as above described the part 20 is moved into the path of the arm 19 in a position to co-

operate therewith to prevent retraction of the handle 14 until the obstruction 8 is returned to its position in the passage, the parts thus coöperating to prevent the simultaneous opening of both the inlet and outlet of the passage 4.

In the preferred construction an alarm is provided, arranged to operate each time a suitable coin passes the obstruction 8 into the outlet. As shown a gong 21 is mounted in any desired manner upon the plate 10, and a striker 22 or equivalent means for sounding the gong is attached to the lever 6 by a spring wire 23.

Any preferred means may be provided to operate the striker each time the obstruction 8 is removed from its position in the passage. In the preferred construction shown the wire 23 is offset as at 24 and a pin 25 or equivalent means is provided upon the arm 19 so positioned that when the handle 14 is operated without a sufficient number of coins in the passage to move the lever 6 the pin 25 will pass the wire 23 without engaging the same but when the handle 14 and lever 6 are moved simultaneously the offset portion of the wire is engaged by the pin 25 and the striker is retracted and suddenly released as the lever 6, at the escape of a coin, resumes its normal position, striking the gong a sharp blow as the striker returns to its normal position.

If desired a second alarm may be provided arranged to be situated at a point at a considerable distance from my device. This alarm may consist of an electric bell 26 of the usual or any preferred form as shown in Fig. 8, arranged to be operated by a battery 27 each time the lever 6 is operated. As shown the battery 27 is connected by means of a conductor 28 to one pole of the bell and by a similar conductor 29 to a shield or cover 30 rigidly attached to the receiver 1 in position to prevent interference with the gong or other mechanism of my device. A conductor 31 is arranged to connect the other pole of the bell 26 with a suitable spring contact 32 upon the shield 30 normally insulated therefrom but adapted to be operated to close the current by a part of the lever 6 so that each time the lever is moved out of its normal position the circuit will be closed thus operating the alarm.

If desired a portion upon the member 14 may be extended as at 33 and arranged to engage a stop 34 positioned opposite the stop 16 when the handle is in its normal position so that there will be substantially no strain upon the pivotal connection of the handle in case it is pushed back against the stops and little or no danger of injury to the device.

In operation enough coins are positioned in the passage 4 so that when another coin is introduced it will be in position to be engaged by the part 18 when the handle 14 is operated and coöperate with the other coins in the device to force the coin nearest the outlet, past the obstruction 8 as herein described and into the outlet where it is free to escape into the coin box 11. Obviously therefore a coin is discharged from the device each time one is introduced thus leaving the last coin inserted in the device in full view through the transparent panel 5, in the preferred construction the panel 5 being of sufficient length to expose several coins so that if a party should deposit several coins in the device they may all be examined before passing into the coin box 11.

Having thus described my improvement, it is obvious that various immaterial modifications may be made in my device without departing from the spirit of my invention, hence I do not wish to be understood as limiting myself to the exact form and construction shown.

What I claim as new and desire to secure by Letters Patent is:—

1. In a device of the character described, a coin receiver having an inlet portion feeding directly thereinto and a normally unobstructed continuous passage therein, a single obstruction positioned at the lower end of said passage, and means normally removed from the path of movement of the coin mounted near the inlet end of the receiver adapted to enter the passage and cooperate with a plurality of coins to temporarily move the obstruction out of its normal position, substantially as described.

2. In a device of the kind described, a coin receiver having a passage therethrough, an obstruction positioned in said passage near one end thereof, means for positively locking said obstruction in position, and means near the opposite end of said passage adapted to temporarily release said obstruction and to coöperate with a plurality of checks to move the same out of its position in said passage.

3. In a device of the character described, a coin receiver having an inlet portion feeding directly thereinto and a normally unobstructed continuous passage therein, a single obstruction positioned at the lower end of said passage, and pivoted means normally removed from the path of movement of the coin mounted near the inlet end of the receiver adapted to be forced into the passage and coöperate with a plurality of coins to temporarily move the obstruction out of its normal position, substantially as described.

4. In a device of the kind described, a coin receiver having a passage therethrough, an obstruction positioned in said passage near one end thereof, means for positively locking said obstruction in position and means near the opposite end of said passage adapted to temporarily release said obstruc-

tion and coöperate with a plurality of suitable coins positioned in said passage to move one of said coins past said obstruction.

5. In a device of the kind described, a coin receiver having a passage therethrough, an obstruction positioned in said passage near one end thereof, means for positively locking said obstruction in position, a movable part adapted to temporarily partially close the opposite end of said passage, simultaneously release said obstruction, and cooperate with suitable coins to temporarily move said obstruction out of its position in said passage.

6. In a device of the kind described, a coin receiver having a passage therethrough, an obstruction positioned in said passage near one end thereof, a movable part adapted to normally lock said obstruction in position and when operated to partially close the opposite end of said passage, simultaneously release said obstruction, and coöperate with suitable coins to temporarily move said obstruction out of its position in said passage, and means to lock said movable part against retraction while said obstruction is out of its position in the passage.

7. In a device of the kind described, a coin receiver having an inlet, and an outlet, and a coin passage connecting the same, a movable obstruction positioned in said passage near said outlet, and an operating handle mounted near said inlet, in combination with intermediate means between said handle and said obstruction for normally locking said obstruction in position in said passage but upon operating said handle said obstruction is released and the parts coöperate with a plurality of coins to pass a single coin out of said passage.

8. In a device of the kind described, a coin receiver having an inlet, and an outlet, and a coin passage connecting the same, a movable obstruction positioned in said passage near said outlet, resilient means tending to maintain the position of said obstruction in said passage, and an operating handle mounted near said inlet, in combination with intermediate means between said handle and said obstruction for normally locking said obstruction in position in said passage, but upon operating said handle said obstruction is released, the parts being adapted to cooperate with a plurality of coins to pass a single coin out of said passage.

9. In a device of the kind described, a coin receiver having a passage therethrough, a movable obstruction positioned in said passage, and an operating handle, in combination with intermediate means between said handle and said obstruction for normally locking said obstruction in position but releasing said obstruction upon the operative movement of said handle, and parts upon said handle adapted to coöperate with a plurality of coins to move said obstruction and eject a coin from said passage, an alarm, and means adapted to coöperate only upon the simultaneous movement of said handle and said obstruction for operating said alarm.

10. In a device of the kind described, a coin receiver having a passage therethrough, a lever pivotally mounted upon said receiver with a part projecting into said passage to obstruct the same, resilient means tending to hold said lever in position, and an operating handle, in combination with a part attached to said handle arranged to normally engage said lever and prevent its movement but releasing the same upon the operative movement of said handle, and parts upon said handle adapted to coöperate with a plurality of coins to move said lever and eject a single coin past said projecting part, an alarm, and means upon said lever and said handle arranged to coöperate only upon their simultaneous movement to operate said alarm.

11. In a device of the kind described, a coin receiver having a passage therethrough, a lever pivotally mounted upon said receiver with a part projecting into said passage to obstruct the same, resilient means tending to hold said lever in position, and an operating handle, in combination with a part attached to said handle arranged to normally engage said lever and prevent its movement but releasing the same upon the operative movement of said handle, and parts upon said handle adapted to coöperate with a plurality of coins to move said lever and eject a single coin past said projecting part, a gong, a striker upon said lever, and a part upon said handle adapted to engage said striker and operate the same only upon the simultaneous movement of said lever and said handle.

12. In a device of the kind described, a coin receiver having a passage therethrough, a movable obstruction positioned in said passage, and an operating handle, in combination with intermediate means between said handle and said obstruction for normally locking said obstruction in position but releasing said obstruction upon the operative movement of said handle, and parts upon said handle adapted to coöperate with a plurality of coins to move said obstruction and eject a coin from said passage, a gong, a striker resiliently connected to said obstruction, and a part upon said handle adapted to engage said striker and operate the same only upon simultaneous movement of said obstruction and said lever.

13. In a device of the kind described, a coin receiver having a passage therethrough, a movable obstruction positioned in said passage, and an operating handle, in combination with intermediate means between said handle and said obstruction for nor-

mally locking said obstruction in position but releasing said obstruction upon the operative movement of said handle, and parts upon said handle adapted to coöperate with a plurality of coins to move said obstruction and eject a coin from said passage, a gong, a striker resiliently connected to said obstruction, and a part upon said handle adapted to engage said striker and operate the same only upon simultaneous movement of said obstruction and said lever, a second alarm positioned remote from said receiver and means controlled by the movement of said obstruction for operating said alarm at each operative movement of said obstruction.

14. In a device of the kind described, a coin receiver provided with a passage therethrough, means for inspecting the contents of said passage, an obstruction positioned in said passage, mechanism for locking said obstruction in position, and means for moving said locking mechanism to release said obstruction, and coöperating with a plurality of coins to move said obstruction out of its position in said passage.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN W. EILER.

Witnesses:
BURTON U. HILLS,
CHARLES I. COBB.