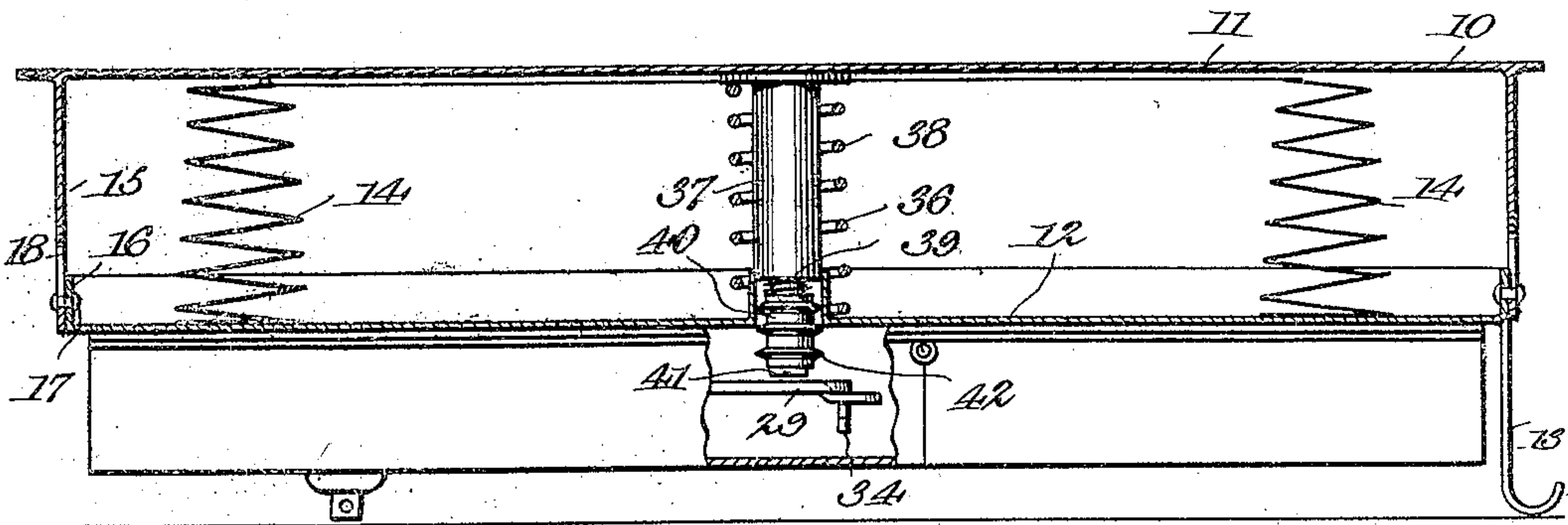


Jan. 2, 1923.

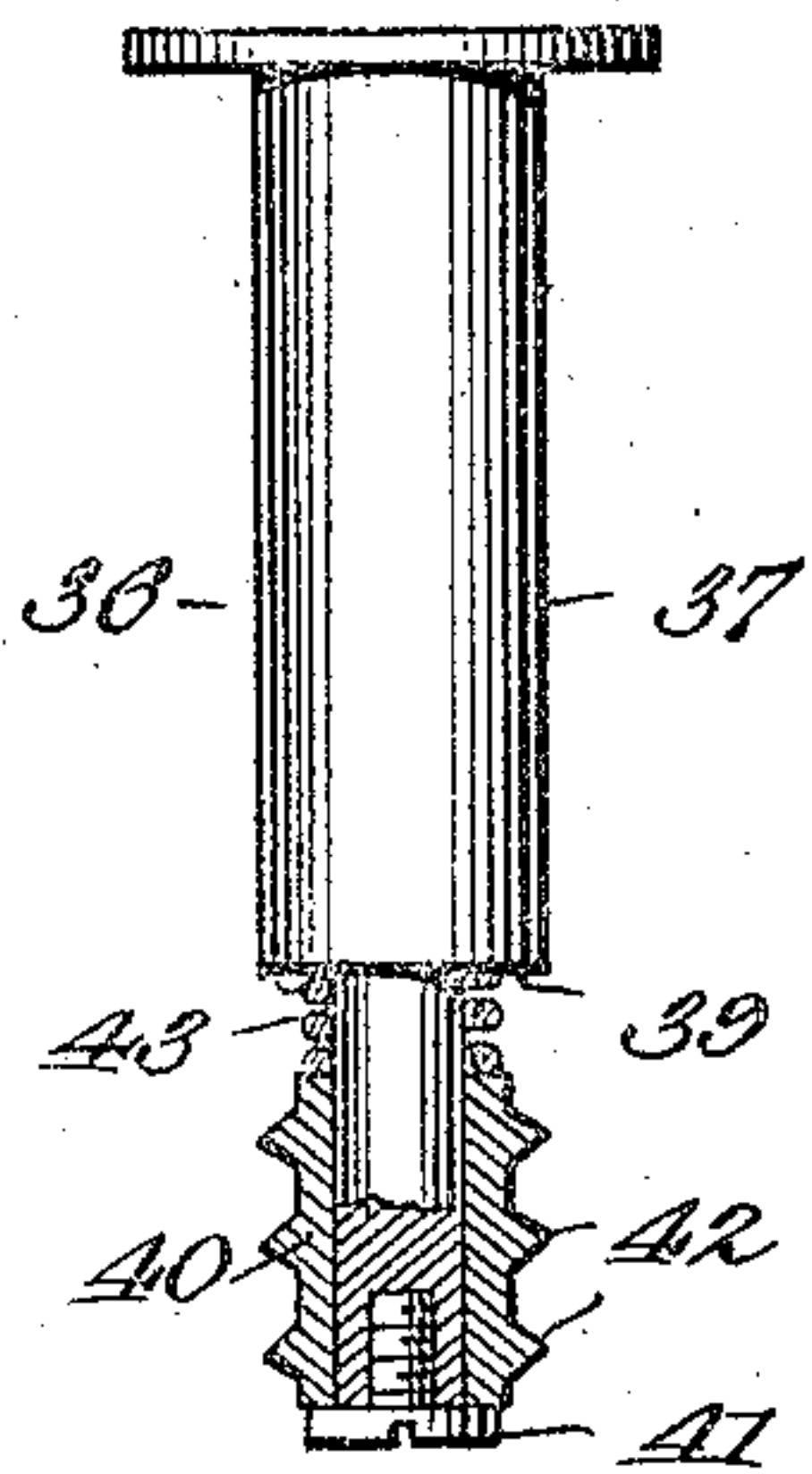
1,441,191.

B. WEISS.  
SIGNAL DEVICE.  
FILED MAR. 18, 1922.

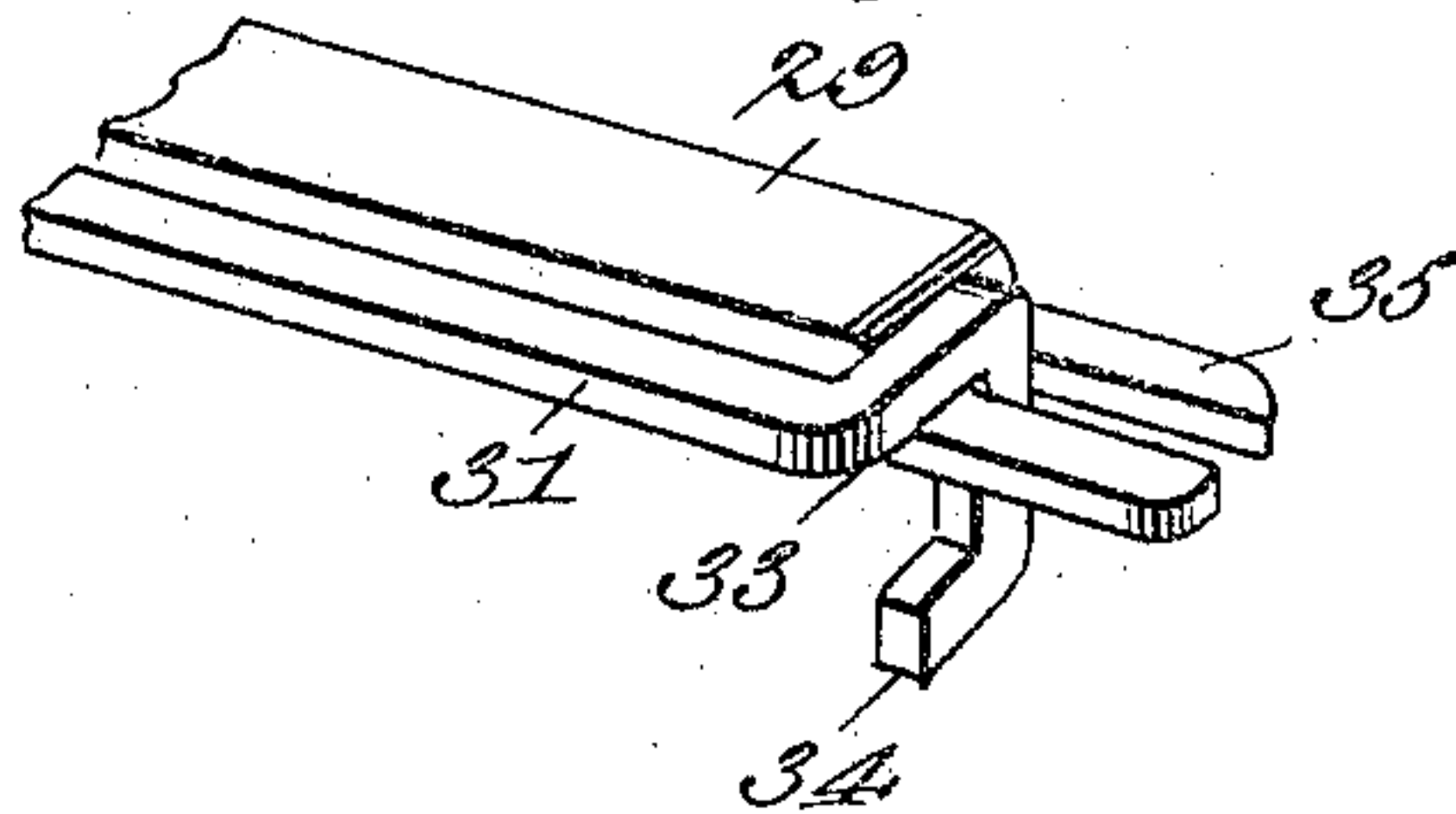
*Fig. 1.*



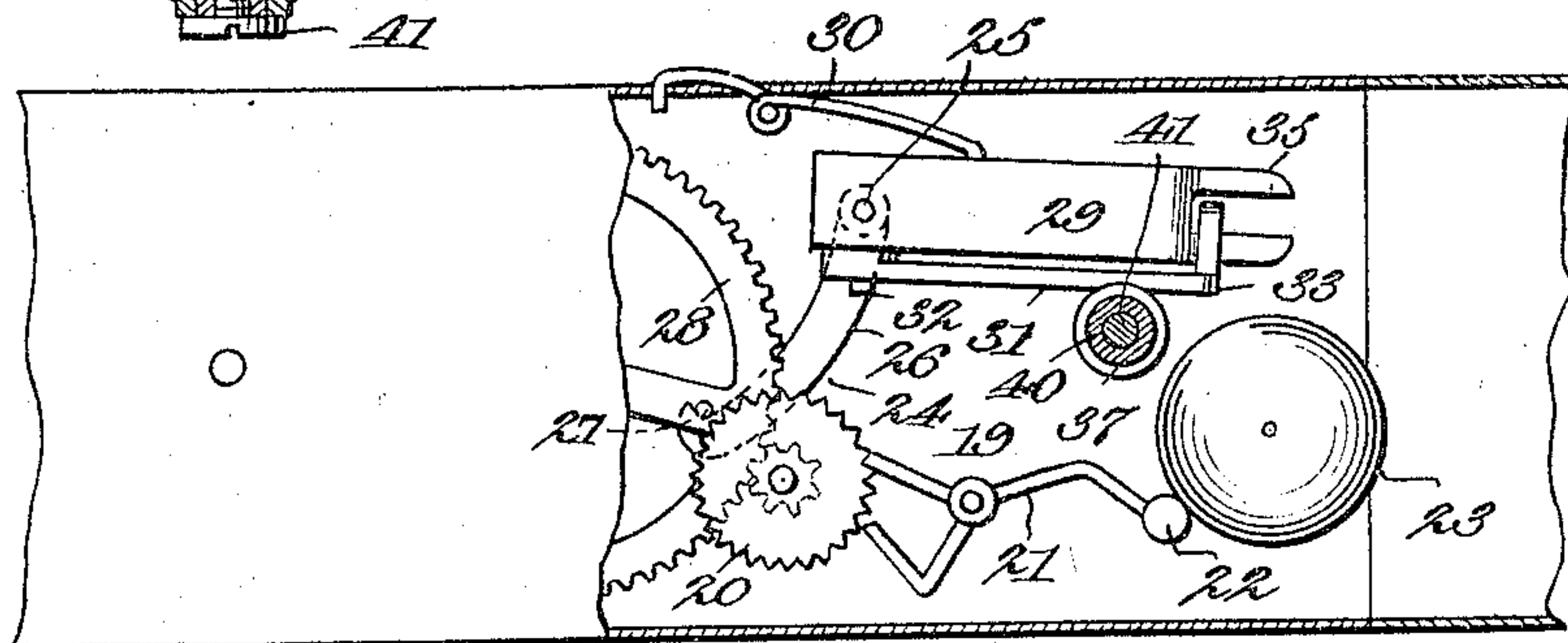
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



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## UNITED STATES PATENT OFFICE.

BENJAMIN WEISS, OF NEW YORK, N. Y.

SIGNAL DEVICE.

Application filed March 18, 1922. Serial No. 544,886.

*To all whom it may concern:*

Be it known that I, BENJAMIN WEISS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Signal Devices, of which the following is a specification.

This invention relates to signalling devices.

Some of the objects of the present invention are: to improve the device shown in the United States Patent No. 1,163,491, granted to me in jointure; to provide alarm actuating means which will actuate the alarm repeatedly at intervals in a more reliable manner. With these and other objects in view the invention resides in the particular provision, construction and operation of parts hereinafter fully described and illustrated in the accompanying drawing, in which:

Figure 1 is a sectional view of the device of the present invention.

Figure 2 is an enlarged detail sectional view of the alarm mechanism actuating means.

Figure 3 is a sectional plan view of the alarm mechanism.

Figure 4 is a detail perspective view of the two-part arm forming a part of the alarm mechanism.

Referring now more particularly to the several views of the drawing for all of the details of construction and operation of the parts, it will be apparent that, there has been shown a support 10 which comprises a part 11 and a part 12 having suitable feet 13. In use the support 10 has positioned on the part 11 a container such as a drip pan 40 which receives an ever increasing weight of water. In use the part 12 of the support 10 is stationary with respect to the part 11 which is yieldingly mounted on the part 12. Springs 14 are employed for yieldingly mounting the part 11 on the part 12. The parts 11 and 12, in the present instance, are preferably made of metal and are round. The part 11 has a flange 15 and the part 12 has a flange 16. Pins 17 and slots 18 of the flanges 16 and 15 respectively limit the upward movement of the part 11 with respect to the part 12 under the influence of the springs 14.

Attached to the underside of the part 12 of the support 11 is an alarm, similar to the alarm shown in the said patent granted to

me, in that it is made up of a pair of hinged sections, and in that it has a trip. In the present instance the alarm 19 comprises actuating mechanism 20 including an escapement 21 which wields a striker 22; a bell 23; and escapement stopping and releasing means 24. The escapement stopping and releasing means 24 comprises a pivot 25; an arm 26 connected to the pivot 25; a pin 27 carried by a gear 28 which intervenes the power unit and the escapement of the actuating mechanism; an arm 29 which is attached to pivot 25, the said arm 29 being actuated by a spring 30; and a member 31 which is pivoted to the arm 29 as at 32, and which has pivotal movement within certain prescribed limits by reason of the portions 33 and 34 at the end of the member 31 which engage the furcations 35 at the end of the arm 29.

Means 36 is employed for effecting the operation of the alarm actuating mechanism. In the present instance the means 36 consists of a member 37 which is arranged centrally of the part 12 of the support 10, and the said member 37 is movable through an opening in the part 12 which is surrounded by a boss which acts as a guide. The upper end of the member 37 has a head, between which and the part 12, is a spring 38 which surrounds the member 37. The lower end of the member 37 is reduced to provide a shoulder 39. A member 40 is arranged on the reduced end of the member 37. A screw 41 prevents the member 40 from slipping off of the said reduced end. The member 40 has a plurality of cam-ribs 42, preferably three in number. The member 40 is actuated by a spring 43 which surrounds the reduced end of the member 37, and which is arranged between the shoulder 39 and the adjacent end of the member 40.

Under the normal relation of the parts 11 and 12 of the support 10, the head of the member 37 touches the top of part 11, and the lowermost cam-rib 42 is some distance above the member 31. Weight, such as water in a drip pan placed on the part 11 will cause the said part 11 to move downwardly causing the lowermost cam-rib 42 to encounter the member 31 with the result that the member 31 and the arm 29 to which it is connected will move laterally. The lateral movement of the arm 29 turns the pivot 25 which causes the arm 26 to move out of engagement with the pin 27



with the result that the escapement will operate. The operation of the escapement effects the winding of the striker 22 and therefore the ringing of the bell 23. And  
 5 so the cycle of operations is repeated by the other two cam-ribs 42 encountering the member 31. The fact that the member 31 is allowed to have pivotal movement and the fact that the member 40 is yieldingly  
 10 mounted insures the successive operations of the alarm as the weight applied to the part 11 is increased. In the interval of cam-rib engagements, the arm 26 is in engagement with the pin 27 of the gear 28 holding  
 15 the latter against rotation and consequently preventing the operation of the escapement means 24. Under the arrangement and operation of the parts the alarm will be sounded at three intervals. Of course any number  
 20 of cam-ribs 42 may be employed to sound the alarm as many times as may be desired.

From the foregoing it will be manifest that the device of the present invention is  
 25 capable of being used for other purposes besides giving a warning signal that the drip pan of a refrigerator is partly or nearly filled with water.

What is claimed is:

30 1. In combination a support comprising a movable element and a relatively stationary element, an alarm device carried by said stationary element, said alarm device including a spring actuated arm and a member  
 35 pivotally mounted on said arm, and means operable upon the movement of said movable element for effecting the movement of said spring actuated arm to operate said alarm device, the said means including a

member having spaced cam-ribs which encounter and move said pivotally mounted member.

2. In combination a support comprising a yieldingly mounted element and a relatively stationary element upon which the first element is mounted, an alarm device carried by said stationary element, said alarm device including a pair of pivotally mounted members one of which has movement with respect to the other, and means operable  
 50 upon the movement of the yieldingly mounted element for effecting the movement of said pivotally mounted members to operate said alarm device repeatedly at predetermined intervals, the said means including a  
 55 yieldingly mounted member having spaced cam-ribs which encounter and move one of said pivotally mounted members.

3. In combination a support comprising a yieldingly mounted element and a relatively stationary element upon which the first element is mounted, an alarm device carried by said stationary element, the said alarm device including escapement mechanism having a bell striker, and means for stopping  
 60 and releasing said escapement mechanism; said means including a gear having a pin, an arm adapted to be moved in the path of travel of said pin, and a pair of pivotally mounted members connected to said arm;  
 65 and means operable upon the movement of said yieldingly mounted element for releasing said escapement mechanism and allowing the said first means to stop said escapement mechanism.

In testimony whereof I hereby affix my signature.

BENJAMIN WEISS.