

No. 775,058.

PATENTED NOV. 15, 1904.

R. P. WESSELS.

COMBINED SAVINGS BANK AND CLOCK.

APPLICATION FILED OCT. 13, 1902. RENEWED JUNE 1, 1904.

NO MODEL.

Fig. 2.

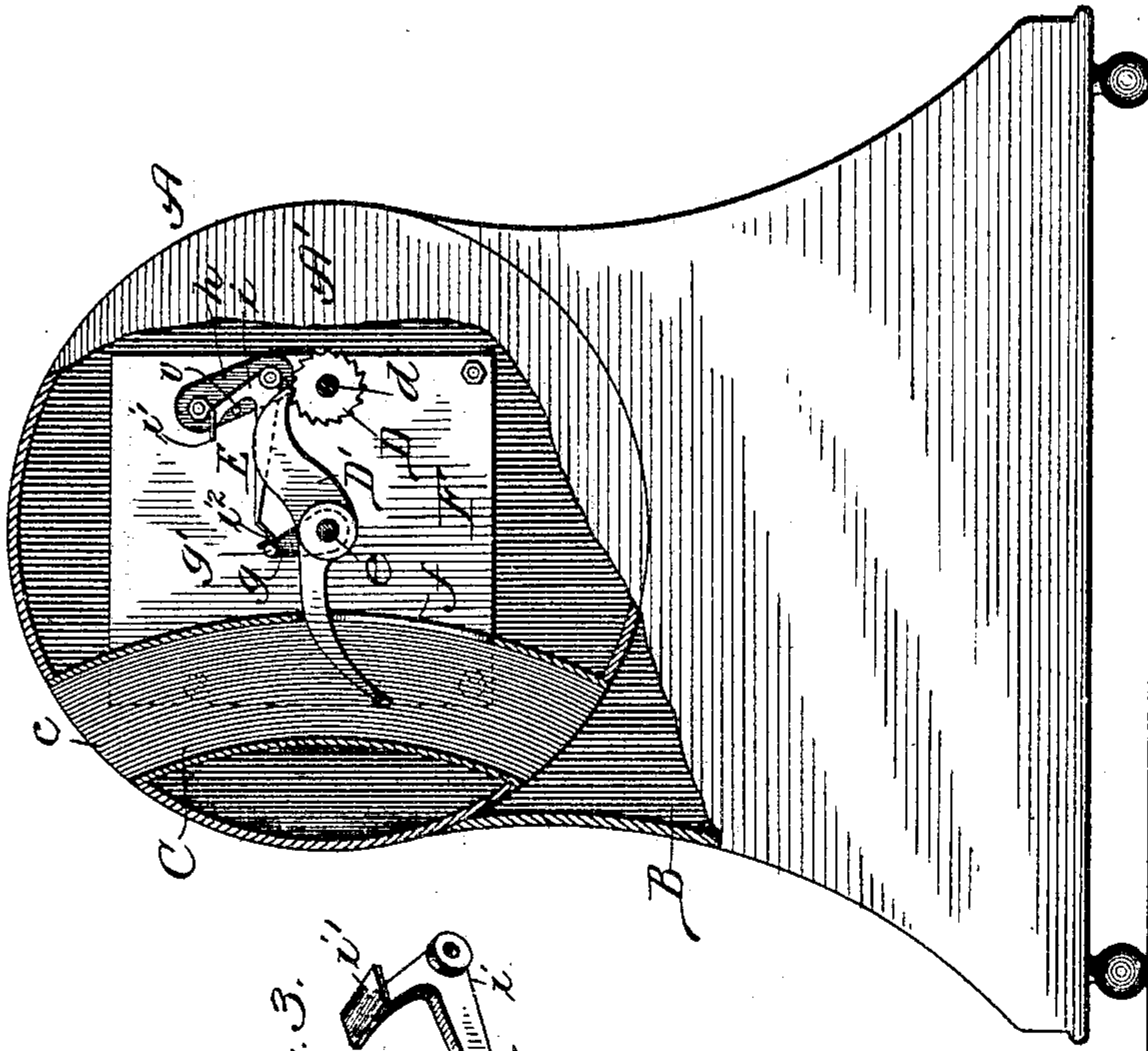


Fig. 3.

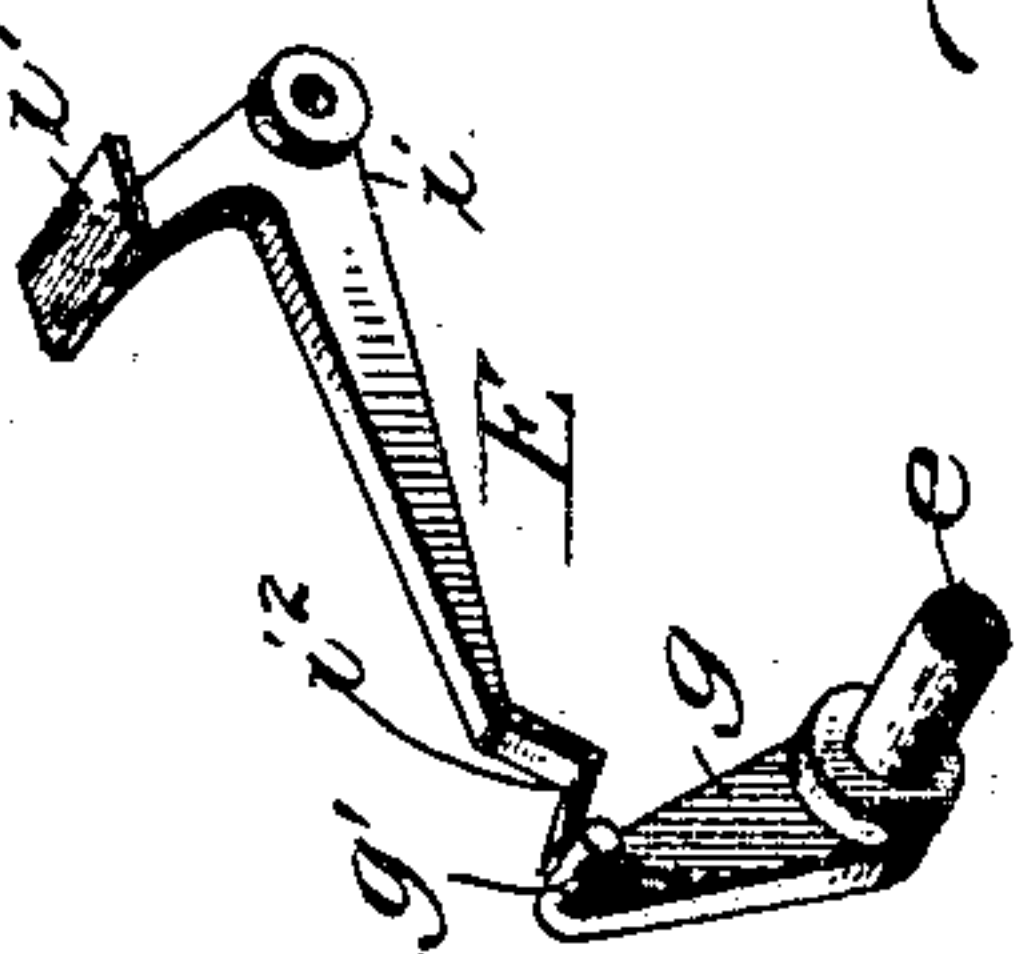


Fig. 1.

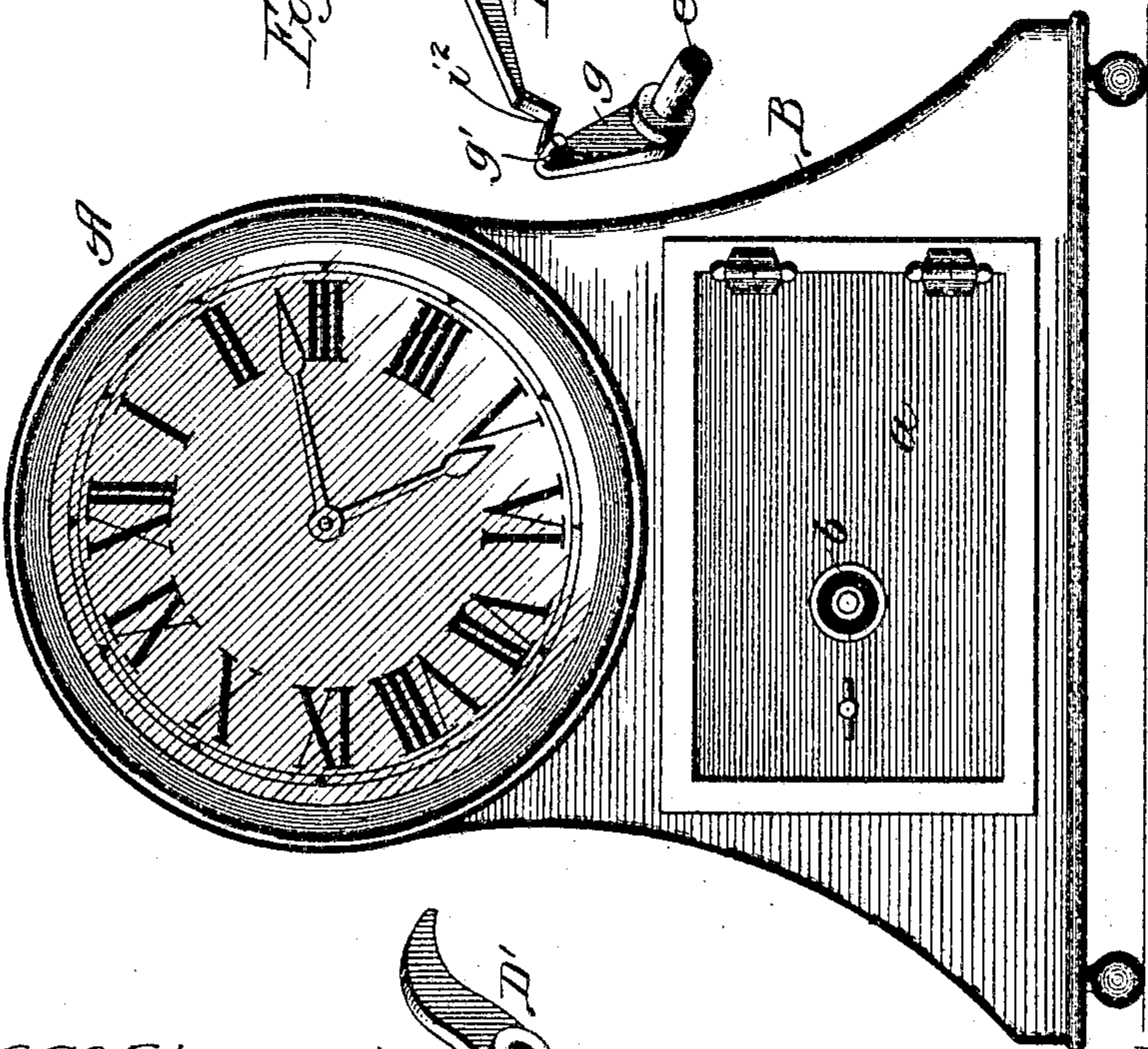
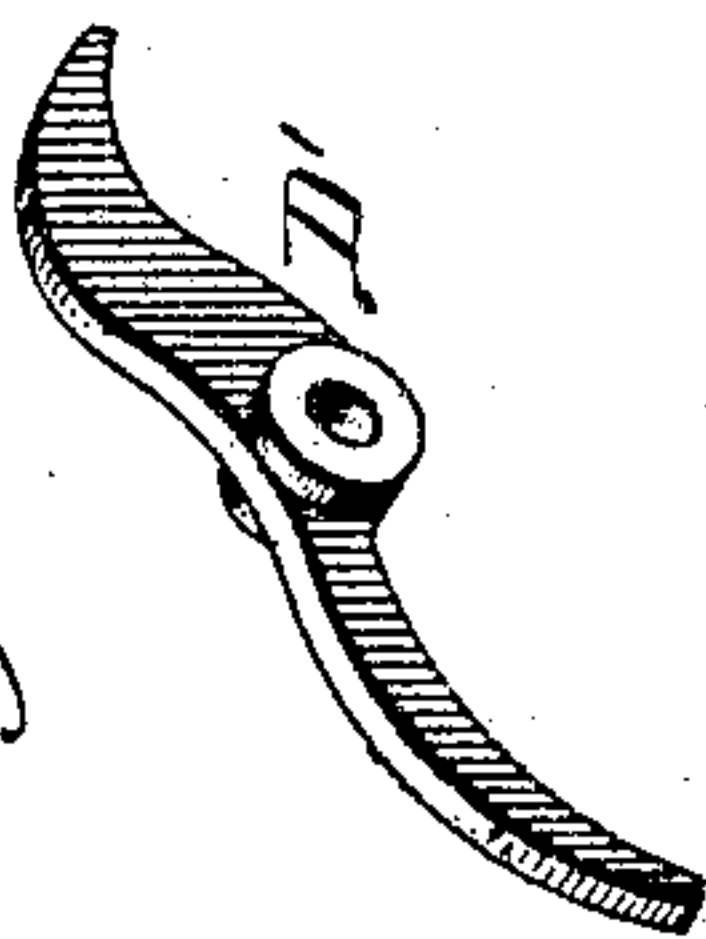


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROBERT P. WESSELS, OF CHICAGO, ILLINOIS.

COMBINED SAVINGS-BANK AND CLOCK.

SPECIFICATION forming part of Letters Patent No. 775,058, dated November 15, 1904.

Application filed October 13, 1902. Renewed June 1, 1904. Serial No. 210,677. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. WESSELS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in a Combined Savings-Bank and Clock, of which the following is a specification.

The primary object of my invention is to provide those dependent on the running of a household-clock and who are desirous of depositing at home with regularity money as savings with means that will tend to remind them to make their savings deposits at regular periods.

To this end I combine with a clock, preferably of the variety requiring to be wound up daily, including an alarm-clock, a coin-receptacle and a coin-chute leading to it, together with means normally operating to lock the clock against being wound and projecting into the coin-path through the chute and therein adapted to be tripped for release to permit the clock to be wound by a coin inserted into the chute to be introduced into the savings-receptacle.

Referring to the accompanying drawings, Figure 1 is a front view of my combined clock and savings-bank. Fig. 2 is a view of the same in rear elevation with all but a broken section of the back removed to expose the locking mechanism. Fig. 3 is a perspective view of the details of an automatically-operated releasable arrester device for the locking-pawl, and Fig. 4 a similar view of the locking-pawl.

A denotes a clock, which as such need involve no features of novelty, but may be the ordinary household article requiring to be wound periodically to cause it to run.

B is a box or receptacle, preferably surmounted by the clock, as shown, though its exact position relative to the clock is not material to my invention and it is shown to be provided with a hinged door *a*, provided for locking it with a permutation-lock, (indicated at *b*.)

At the inner face of the back *A'* of the clock-casing is supported a coin-chute C, extending from a coin-insertion slot *e* in the upper part of the case to the receptacle B, which

affords the savings-bank. On the winding-post *d* at the inner side of the aforesaid back is secured a ratchet-wheel D, which is normally engaged by one end of a pawl D', shown to be journaled between its ends on the hand-setting post *e* of the clock, with its opposite end projecting into the chute C through a slot *f* therein in the path of a coin when passing through the chute. The pawl is formed and so journaled as to cause it to tend to engage by gravity with the ratchet at its end adjacent thereto.

From the foregoing description it will be seen that while the post *d* is free to turn in the direction it is caused to rotate by the running-down action of the clock it cannot be turned in the contrary direction for winding the clock while the pawl engages the ratchet, but that a coin inserted into the chute C in passing through it encounters the end of the pawl in its path and by its weight and momentum overcomes the gravity of the locking end of the pawl, and thus raises it out of engagement with the ratchet-wheel, thereby releasing the locking effect on the shaft *d*. However, unless means be provided to hold the locking end of the pawl in its raised position it will descend by gravity as soon as the opposite end is cleared by the coin (which enters the savings-receptacle B) and reengage the ratchet-wheel, thereby again locking the clock against being wound before sufficient time shall have elapsed for the operation of winding it. To avoid this consequence, an arresting device—like that represented at E, for example—should be provided, and while such a device may be provided in any of a variety of suitable forms I prefer that it shall be automatic in its operation and involve the following-described construction:

Secured on the minute-shaft *e* to rotate with it is a trip-arm *g*, carrying a finger *g'*, extending at a right angle from its free end. On a bearing-plate *h*, rigidly fastened to the back of the clock-works frame F, is fulcrumed a bell-crank lever *i*, having a finger *i'* projecting at a right angle from the free end of its shorter arm into the path of the adjacent locking end of the pawl D' and formed at the free end of its longer arm into a V-shaped or otherwise inclined bearing *i''* to engage with the trip-

finger g' . When, therefore, the action of a coin passing through the chute C raises the locking end of the pawl, the latter in rising encounters the finger i' and turns it out of its path by turning the bell-crank on its fulcrum; but as soon as the pawl clears the finger i' the bell-crank is returned by the superior gravity of its longer arm to its normal position, wherein it is stopped by a stud (shown at v) and wherein the finger i' extends into the return-path of the pawl to arrest it against engagement with the ratchet D to lock the winding-post d . While the winding-post is thus maintained in its unlocked condition the clock may be wound, and after sufficient opportunity has been afforded in the matter of time for performing the winding operation the locking function of the pawl should again be used. This is accomplished by the tripping action of the finger g' on the arm g , which in rotating with the minute-shaft e encounters at its finger g' the inclined bearing on the longer bell-crank arm, and thereby turns the bell-crank on its fulcrum to raise the finger i' on its shorter arm against and thus lift the adjacent end of the pawl until it clears the latter, whereupon the pawl is free to drop into engagement with the ratchet and lock the clock against being wound. Obviously the time during which the pawl will be held out of locking engagement will vary with the position occupied by the trip-finger g at the time of inserting a coin into the coin-chute; but should the tripping action of the finger g' take place too soon after the pawl has been raised by inserting a coin to leave adequate time for winding the clock the pawl may easily be raised again, as by inserting any suitable implement at hand—such as the blade of a penknife, a hair-pin, or the like—into the chute to engage and depress the end of the pawl in the chute, or another coin may be used for the purpose.

From the foregoing description of the mechanism of my invention and its operation it will be understood that the novel combination is intended merely to afford a reminder to deposit a coin for saving at reasonably regular intervals, thereby to overcome the common tendency in those desirous of saving by thus depositing to forget to make the deposit. Hence and inasmuch as it is not necessary to preclude the possibility of winding the clock without previously inserting a coin, which, moreover, might render the timepiece temporarily useless and would therefore be

undesirable, no provision is made for such preclusion.

The particular construction shown and described of the mechanism for releasably locking the clock against winding and the particular means for maintaining the locking mechanism out of operation to permit the clock to be wound may be variously modified without departure from my invention. Hence I do not wish to be understood as limiting my invention thereto.

The locking mechanism may obviously be adapted to be tripped by the passage through the chute of a coin of any denomination or weight or of any dimensions admissible into the chute, and I propose to adapt the mechanism to yield for its release to the weight of the lightest coin—say of a ten-cent piece—so that any other coin may be inserted for saving, thereby not necessarily limiting the savings purpose of the device or the releasability of the locking mechanism to any particular denomination of coin.

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

1. In combination with a clock, a coin-receptacle, a coin-chute within the clock-case leading into said receptacle, locking means within said case comprising a ratchet-wheel on the winding-post of the clock and a pawl pivotally supported to engage at one end with said ratchet-wheel and project at its opposite end into said chute to be tripped by a coin passing through it for releasing the pawl from such engagement, and an arrester supported within said case, comprising a trip-arm secured upon the minute-shaft to rotate with it, and a bell-crank fulcrumed to extend one arm into the path of the locking end of the pawl and its other arm into the path of said trip-arm, substantially as described.

2. In combination, a household-clock the operation of which depends upon frequent windings, a coin-saving bank, a coin-chute leading into said coin-saving bank, and means normally locking the clock-winding mechanism against manipulation said means including a member extending into the coin-path, whereby said winding mechanism is released for manipulation upon the insertion of a coin.

ROBERT P. WESSELS.

In presence of—

L. HEISLAR,
ALBERT D. BACCI.