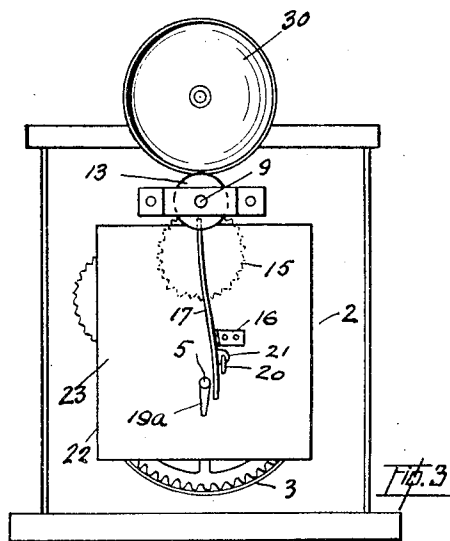
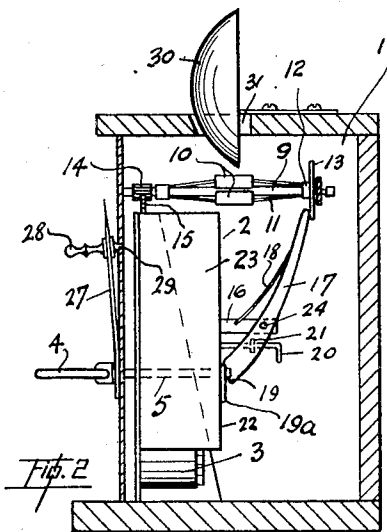
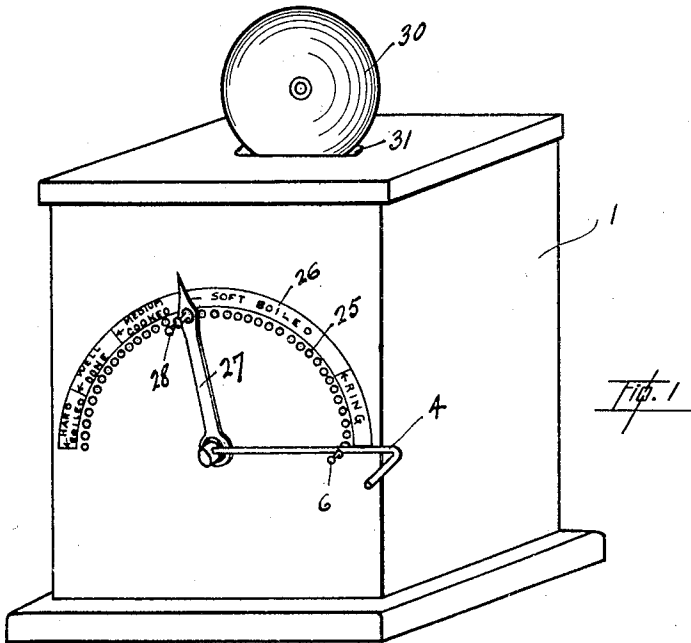


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EGG TIMER.
APPLICATION FILED OCT. 15, 1918.

1,324,871.

Patented Dec. 16, 1919.



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FREDERICK THOMAS ADAMS, OF VANCOUVER, BRITISH COLUMBIA, CANADA.

EGG-TIMER.

1,324,871.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK THOMAS ADAMS, a subject of the King of Great Britain, and a resident of the city of Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Egg-Timers, of which the following is a specification.

My invention relates to improvements in devices for timing the cooking of eggs, and the object of my invention is to provide a device of this character adapted to form a correct and reliable indicator of the periods of time necessary to cook eggs to obtain a desired result and which is provided with audible indicating means operative concurrently with the expiry of the time limit set.

I attain this object by the construction illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of the device.

Fig. 2 is a side elevation, in part section.

Fig. 3 is a back view, the cover being removed.

Similar figures of reference indicate similar parts throughout the several views.

1 indicates a box in the interior of which is mounted any suitable arrangement of clockwork, indicated by the numeral 2, having the usual clock spring 3, this spring being wound by means of a handle 4 arranged in front of the box and secured to the spring winding shaft 5, which handle, when the spring 3 is run down, rests on a stop 6 secured into the front of the box, as shown in Fig. 1. Rotatably mounted above the clockwork arrangement 2 is a governor shaft 9 carrying a pair of governor balls 10 secured to spring members 11, the members being fixed at one end to the shaft and at their opposite ends to a sliding collar 12 having a flange 13, this collar tending to move laterally inwardly on the shaft as the balls 10 fly outwardly, which action will be well understood without any extended description. The shaft 9 is provided with a pinion 14 meshing with one of the clockwork wheels 15, and fulcrumed on a suitably secured bracket 16 is an arm 17, the upper end of which is held normally against the inner face of the flange 13 by means of a spring 18 while its lower end is beveled on the end as at 19 and disposed to one side of the end of the spring winding shaft 5 so as to lie in the path of a finger 19^a rigidly secured to the

shaft. The tension of the spring 18 is adjustable by means of a rod 20 threaded through a nut 21 carried by the arm on one side, the point of which rod bears on the back plate 22 of the clockwork casing 23, so that rotation of the rod will move the arm about its pivot 24 so that more or less tension is exerted by the spring 18, as the case may be.

The front plate of the box is perforated by a plurality of holes 25 arranged in a semi-circle the length of which is such that it may be divided into divisions representing the different periods of time during which an egg should be cooked, such as, for instance, the periods required for "soft boiled"—"medium"—"well done"—and "hard boiled" and an index 26 having these divisions with their corresponding notices printed thereon is placed on the front of the box surmounting the semi-circular row of holes 25. A pointer 27 adapted to cooperate with the holes 25 and index 26 is mounted freely on and concentrically of the shaft 5, this pointer being provided on its outside face with a stop 28 similar to the stop 6 and on its inside face with a projection 29 capable of being inserted into any one of the holes 25, while mounted on the top of the box is a bell 30 which projects through an opening 31 in the top so that its lower edge lies adjacent to but normally clear of the governor balls 10.

The manner in which the device operates may be described briefly as follows: Suppose it is desired to cook an egg "soft boiled." The pointer 27 is swung around until the projection 29 is opposite the hole 25 which is in line with the dividing line between the "soft boiled" and "medium cooked" divisions, the projection 29 being then inserted in the hole so that the pointer is held against movement. The handle 4 is then moved around from its horizontal position until it strikes the stop 28 on the pointer, this action winding up the spring 3 sufficiently to cause the operation of the clockwork 2 through the period of time necessary to bring the handle 4 back from stop 28 to stop 6, which is also the period required for the soft boiling of the egg. The pointer being set the handle is moved to the pointer stop, whereupon the clockwork will be set in motion by the unwinding of the spring 3, the shaft 5 then being rotated to move the handle 4 backwardly. The

governor shaft 9 is also rotated by the wheel 15 and pinion 14 but the governor balls are prevented from flying outwardly by the pressure of the arm 17 on the flange 13 until this pressure is relieved by the moving of the point of the arm inwardly due to the moving of the lower end of the arm outwardly by the finger 19^a, the finger being carried around by the rotating shaft 5 until at a moment a short distance before the expiry of the "soft boiling" period or at the beginning of the division marked "Ring" in Fig. 1 it comes in contact with the beveled end of the arm 17 and forces it outwardly, thus relieving the pressure of the upper end of the arm on the flange 13 and allowing the balls 10 to fly out and strike the lower edge of the bell 30 as they rotate, thus ringing the bell continuously during the remainder of the period, the termination of which is concurrent with the return of the handle 4 to the stop 6.

In the same manner the device may be set for timing the cooking through periods of varying duration, according to the hole in which the pointer projection may be placed, and thus the desired results may be obtained with certainty and convenience.

What I claim as my invention is:

1. In an egg timer, a bell, a clockwork rotated governor the balls of which rotate normally clear of the bell, and means operative after a predetermined interval of the governor's rotation whereby its speed is increased and the bell rung by the outwardly-flying balls.

2. An egg timer comprising a clockwork mechanism, means for winding said clockwork to operate through a predetermined interval, a suitably supported bell, a governor driven by said clockwork the balls of which rotate adjacent to and normally clear of said bell, brake means for maintaining a uniform governor speed during a portion of the interval, and means for relieving the brake pressure to increase the governor speed during the balance of the interval so that the bell will be rung by the outwardly-flying balls.

3. An egg timer comprising a clockwork mechanism, means for winding said clockwork to operate through a predetermined interval, a suitably supported bell, a governor driven by said clockwork the balls of which rotate adjacent to and normally clear of said bell, brake means for maintaining a uniform governor speed during a portion of the interval, means for relieving the brake pressure to increase the governor speed during the balance of the interval so that the bell will be rung by the outwardly-flying balls, and means for adjusting the brake pressure.

4. An egg timer comprising a clockwork mechanism, means for winding said clock-

work to operate through a predetermined interval, a suitably supported bell, a governor driven by said clockwork the balls of which rotate adjacent to and normally clear of the said bell, brake means for maintaining a uniform governor speed during a portion of the interval, and means for relieving the brake pressure to increase the governor speed during the balance of the interval so that the bell will be rung by the outwardly-flying balls.

5. An egg timer comprising a clockwork mechanism, a suitably supported bell, a governor driven by said clockwork the balls of which rotate adjacent to and normally clear of the said bell, brake means for maintaining a uniform governor speed during a portion of the clockwork operation, a fixed stop, a movable stop adapted to be set at varying distances from the fixed one, a handle lever adapted to wind said clockwork when moved manually from the fixed stop to the movable one and to be returned to the fixed stop by the operation of the clockwork, and a finger actuated by the returning lever operative at a predetermined point in the travel thereof to relieve the brake pressure to increase the governor speed whereby the bell is rung by the outwardly-flying balls.

6. An egg timer comprising a clockwork mechanism, a suitably supported bell, a governor driven by said clockwork the balls of which rotate adjacent to and normally clear of the said bell, brake means for maintaining a uniform governor speed during a portion of the clockwork operation, a graduated index plate, a fixed stop positioned at the commencement of the index, a pointer adapted to cooperate with said index, said pointer being provided with a stop member similar to the fixed stop, means for temporarily locking the pointer in any position to which it may be moved, a handle lever adapted to wind said clockwork when moved manually from the fixed stop to the pointer stop and to be returned to the fixed stop by the operation of the clockwork, and a finger actuated by the returning lever operative at a predetermined point in the travel thereof to relieve the brake pressure to increase the governor speed whereby the bell is rung by the outwardly-flying ball.

7. An egg timer comprising a clockwork mechanism, a suitably supported bell, a governor driven by said clockwork the balls of which rotate adjacent to and normally clear of the said bell, brake means for maintaining a uniform governor speed during a portion of the clockwork operation, a graduated index plate provided with a series of apertures, a fixed stop positioned adjacent the first aperture of the series, a pointer adapted to cooperate with said index, said pointer being provided with a stop member similar to the fixed stop and a projection adapted to

engage any of the apertures in which it may be placed, a handle lever adapted to wind said clockwork when moved manually from the fixed stop to the pointer stop and to be
5 returned to the fixed stop by the operation of the clockwork, and a finger actuated by the returning lever operative at a predeter-

mined point in the travel thereof to relieve the brake pressure to increase the governor speed whereby the bell is rung by the out- 10 wardly-flying balls.

Dated at Vancouver, B. C., this 27th day of September, 1918.

FREDERICK THOMAS ADAMS.