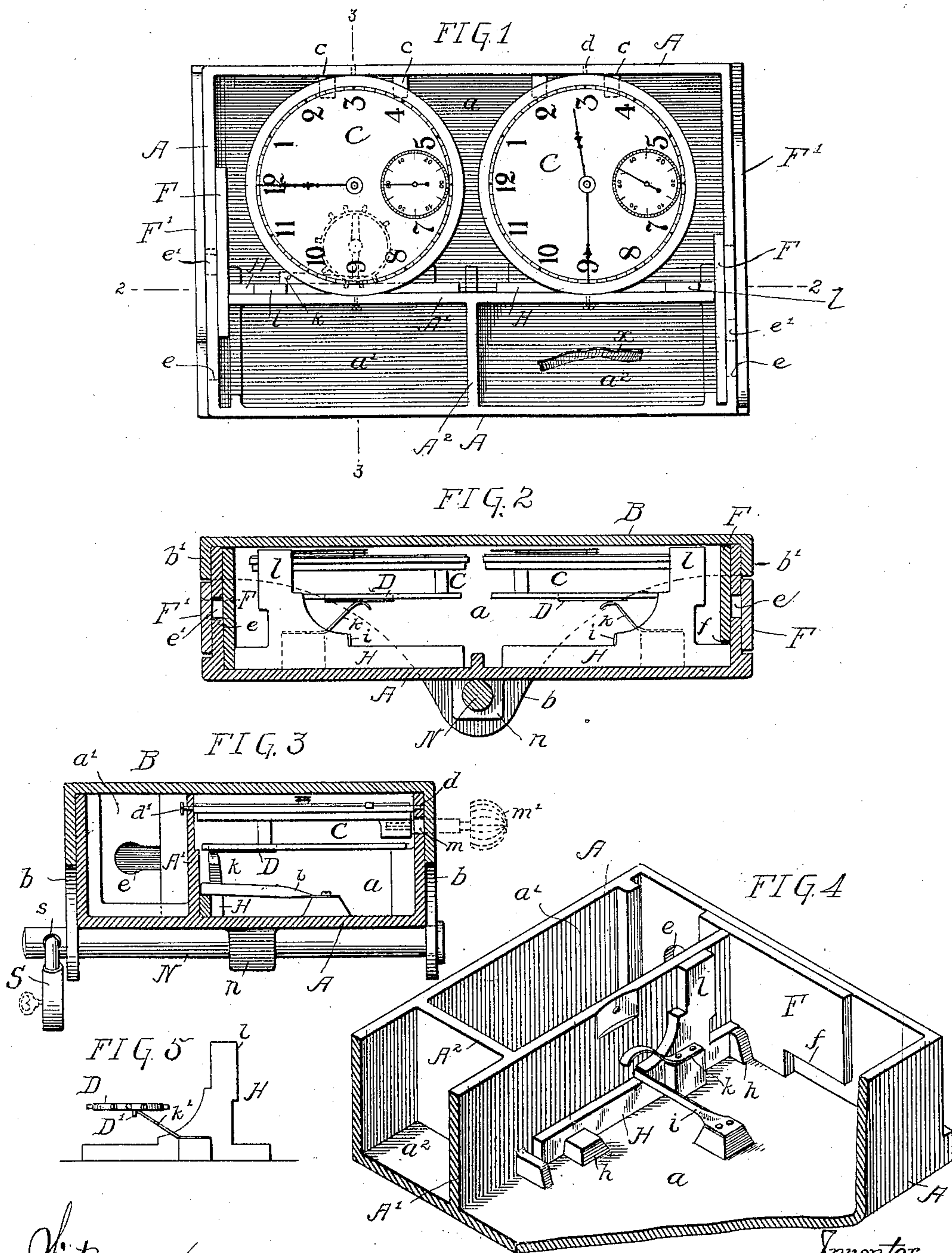


(No Model.)

T. D. MARTINEZ-CARDEZA.  
TIMING DEVICE FOR HOMING PIGEONS.

No. 591,985.

Patented Oct. 19, 1897.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

THOMAS D. MARTINEZ-CARDEZA, OF PHILADELPHIA, PENNSYLVANIA.

## TIMING DEVICE FOR HOMING PIGEONS.

SPECIFICATION forming part of Letters Patent No. 591,985, dated October 19, 1897.

Application filed December 15, 1896. Serial No. 615,774. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS D. MARTINEZ-CARDEZA, a citizen of the United States, and a resident of the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Timing Devices for Homing Pigeons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention consists of a simple and inexpensive device for accurately timing the return of homing pigeons, although with slight modification the structure may be employed for other purposes.

The device in general comprises a box containing one or more watch-movements wound and set at a predetermined hour, the starting of the movement being arrested by a catch or stop in contact with the balance-wheel. In the box are one or more compartments having openings extending through the box-casing into which may be introduced the marked band carried by the pigeon, and after the introduction of this band into the compartment the opening is closed by a sliding gate or cover the movement of which automatically starts the watch-movement, while at the same time the gate is locked in the closed position, preventing the withdrawal of the band or interfering with the watch-movement.

In the accompanying drawings, Figure 1 is a plan view of a timing device constructed in accordance with my invention, the cover-plate being removed in order to more clearly illustrate the construction. Fig. 2 is a longitudinal sectional elevation of the device on the line 2 2, Fig. 1. Fig. 3 is a transverse sectional view on the line 3 3, Fig. 1. Fig. 4 is a sectional perspective view of a portion of the box with the watch-movements removed therefrom, and Fig. 5 is a detail view of a modification.

Referring to the drawings, A represents a rectangular box divided by suitable partitions A' A<sup>2</sup> into a large compartment *a* or two smaller compartments *a'* *a*<sup>2</sup>. In the larger compartment are placed two watch-movements C C, supported partly by the projections *c* in the interior of the compartment, and each movement having a pin *d*, adapted

to a corresponding opening in the side wall of the box, and being further held in place by a screw *d'*, extending through the partition A'. Each watch-movement has a balance-wheel D, constructed and arranged as usual and adapted to be acted upon by a stopping device to arrest its movement, and thus stop the movement of the other parts of the watch. In each end wall of the box is formed an opening *e*, through which a marked band *x*, taken from the pigeon's leg, may be introduced into either one of the compartments *a'* *a*<sup>2</sup>. Each opening *e* is elongated and serves as a guide for a pin *e'*, connecting and firmly securing together two sliding plates F F', the plate F' being outside the box in such position that it may be readily caught and moved by the fingers and the plate F being guided within the box, as shown.

Within the compartment *a* are lugs *h*, which, in connection with the side of the partition A', serve as guides for slides H, each under the control of a plate-spring *i*, tending to press it toward the end of the box. When the slides F F' are in the position illustrated at the left of Fig. 1, and in Fig. 4, the slide H is prevented from coming in contact with the end wall of the box A, but when the slides F F' are moved by hand to the position shown to the right of Fig. 1 a recess *f* in the slide F is moved opposite the end of the slide H, and the latter is then traveled by its spring *i* until its end passes into such recess and in contact with the end wall of the box, serving also to lock the slide F in position and prevent its being moved to the position shown in Fig. 4 until the box is opened. Each slide H carries a spring *k*, adapted to come into contact with the balance-wheel of the watch-movement, and has also an upwardly-projecting finger *l*, by which it may be moved, when the box is opened for the purpose of adjusting the parts.

In one of the side walls of the box A is formed an opening *m*, through which may be introduced a winding-key *m'* (shown by dotted lines in Fig. 3) for the purpose of winding and setting the movements.

The open top of the box is protected by a cover B, having end flanges *b'*, which extend down over the ends of the box, and side flanges *b*, which cover the key-orifices *m*, and at their



central lower ends are provided with openings for the passage of a headed pin N, which passes also through a lug *n*, formed integral with the bottom of the box A, and said pin at its smaller end has an opening *s*, through which passes the hasp of a padlock S.

In operation, the cover of the box being removed, the watch-movements are wound and set at a predetermined hour, say twelve o'clock, and each movement is stopped by moving the slides H toward the center of the box against the action of the springs *i*, and thus moving the springs *k* into contact with the balance-wheels D of the watch-movements. The slides H are held in place by moving the slides or gates F F' to the position shown to the left of Fig. 1, and in Fig. 4, leaving the openings *e* open for the reception of the bands *x*. The cover B is then placed in position, the pin N introduced through the flanges *b* of the cover and the lug *n* and locked by the padlock S, so that the user cannot gain access to the interior of the box. When the pigeon arrives, the band *x* is removed from its leg and introduced through one of the openings *e* into one or other of the smaller compartments and the corresponding slide or gate F' is so moved as to cover said opening. This movement effects also a corresponding movement of the slide F within the box, the slide F being traveled a distance sufficient to bring its recess *f* into line with the end of the slide H. The slide H is then traveled by its spring *i* until it comes into contact with the end wall of the box, removing the spring *k* from contact with the balance-wheel of the watch-movement and permitting the latter to start. The gate F is automatically locked by the entrance of the end of the slide H into the recess *f*, so that after the movement has been once started it cannot be stopped until the box is opened.

The construction shown may be modified in various ways. For instance as shown in Fig. 5 the balance-wheel D may be provided with a downwardly-projecting pin D' for contact with a spring or plate *k'*, carried by the slide H, or the slide may be so arranged as to make contact with other portions of the watch-movement.

In the drawings the parts are duplicated, two watch-movements and two band or tag receptacles being shown, each of which operates independently of the other. It will be understood that the number of movements and number of compartments may be increased to any desired extent or a single movement or single compartment only may be employed in accordance with the number of pigeons which it is desired to time.

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

1. The combination of the box, a compartment therein having an opening extending through the wall of the box for the introduc-

tion of a band or tag, a slide or gate for closing said opening, a timing device within the box, and a slide adapted to control the timing device and to lock the slide or gate after the latter has been moved to the closed position, substantially as specified.

2. In combination, a box, a compartment therein having an exterior opening extending through the wall of the box for the introduction of a band or tag, a slide or gate for closing said opening, a watch-movement within the box, a spring-actuated slide guided within the box and having a portion normally in contact with the balance-wheel of the watch-movement, said slide being adapted to lock the closing gate or slide after the latter has been moved to the closed position, substantially as specified.

3. The combination of the box, a watch-movement therein, there being in said box an opening for the insertion of a winding and setting key, a compartment in said box having an exterior opening for the introduction of a band or tag, a slide or gate F, F', having a recess, *f*, a slide, H, guided within the box and having a spring, *k*, adapted to make contact with the balance-wheel of the watch-movement, and a spring, *i*, adapted to act on the slide, H, substantially as specified.

4. The combination of the box having two or more compartments and provided with an opening extending into one of such compartments, a slide or gate adapted to close said opening, a recess, *f*, formed in said slide or gate, a watch-movement carried in one of said compartments, a slide, H, guided within the box and adapted to enter the recess, *f*, of said slide or gate, a spring carried by the slide, H, and adapted to be moved into contact with the balance-wheel of the watch-movement, and a spring, *i*, acting on said slide, H, substantially as specified.

5. The combination of the box, two or more compartments formed therein, a watch-movement in one of said compartments a slide or gate adapted to close an opening entering into another compartment, a locking device for arresting or releasing the watch-movement under the control of said slide or gate, a flanged cover adapted to close said box, a locking-pin, N, adapted to pass through openings formed in the flange and devices for locking said pin in position, substantially as specified.

6. The combination of the box, A, having two or more compartments, there being an opening, *e*, extending through the wall of the box into one of such compartments, a sliding gate comprising a recessed plate, F, within the box and a plate, F', on the exterior of the box, a watch-movement, C, within the box and having a balance-wheel, D, a guided slide, H, within said box a spring, *k*, carried by said slide and adapted to be forced into contact with the balance-wheel, D, a spring, *i*, acting on said slide, H, intended to move the latter into the recess of the gate F, a



cover-plate, B, having side flanges, b, provided with openings, a pin, N, adapted to pass through the openings in the flanges and through an opening formed in a lug, n, on  
5 the bottom of the box and a lock, S, adapted to an opening in the pin, N, substantially as specified.

In witness whereof I have hereunto set my hand this 12th day of December, A. D. 1896.

THOMAS D. MARTINEZ-CARDEZA.

Witnesses:

CHAS. J. SCHAEFER,  
MARY C. McGEVERAN.