No. 615,885. Patented Dec. 13, 1898.

A. E. ORMOND.

PIN HOLDER.

(Application filed May 16, 1898.)

(No Model.)

Fig. 1.

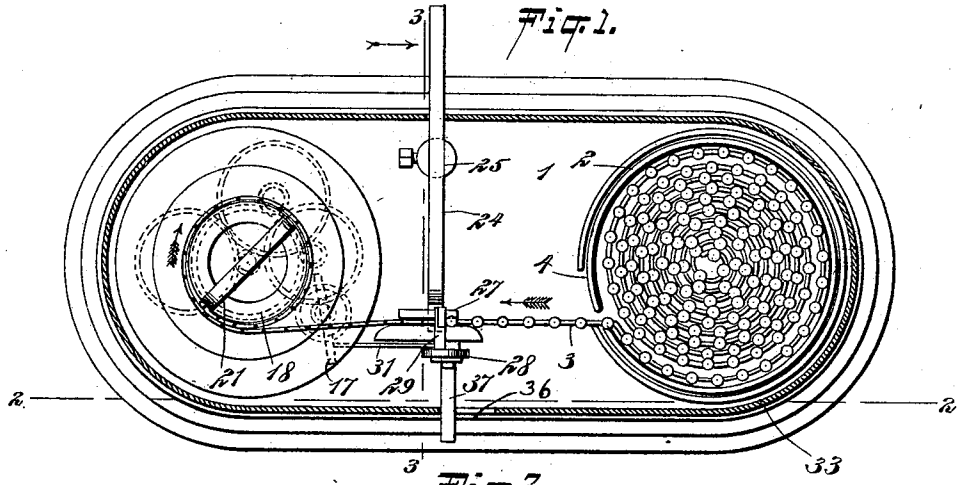


Fig. 2.

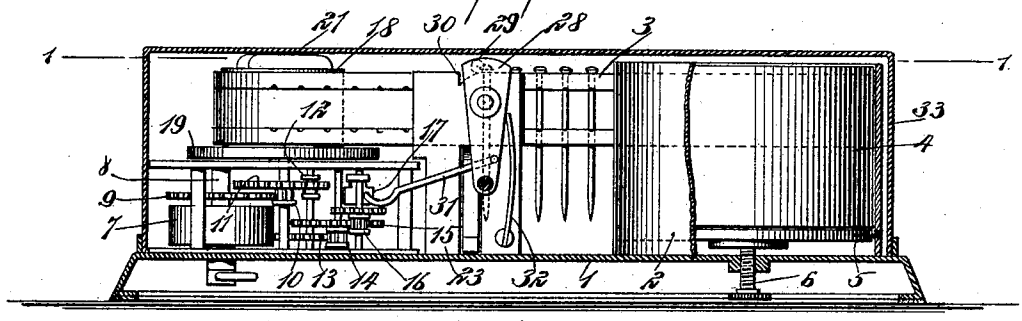


Fig. 3.

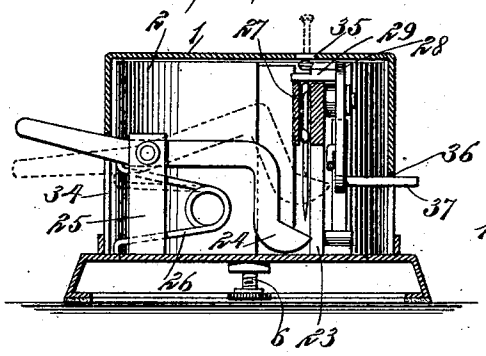


Fig. 4.

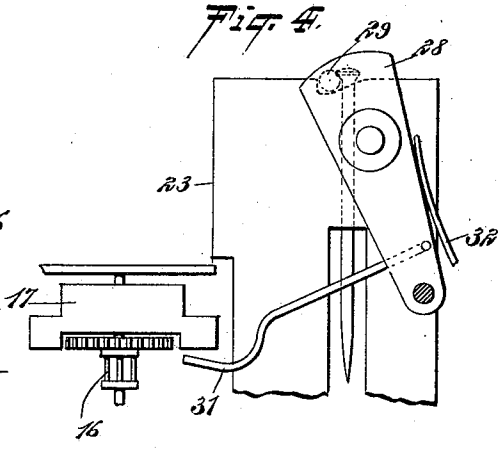


Fig. 6.

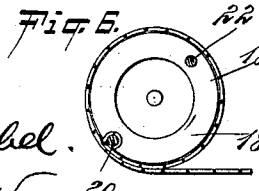
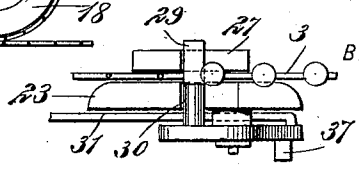


Fig. 5.



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ALBERT EDWARD ORMOND, OF WINNIPEG, CANADA, ASSIGNOR OF ONE-FOURTH TO JAMES G. BENNETT, OF SAME PLACE.

PIN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 615,885, dated December 13, 1898.

Application filed May 16, 1898. Serial No. 680,827. (No model.)

To all whom it may concern:

Be it known that I, ALBERT EDWARD ORMOND, of Winnipeg, in the Province of Manitoba and Dominion of Canada, have invented a new and Improved Pin-Holder, of which the following is a full, clear, and exact description.

This invention relates to improvements in pin-holding devices; and the object is to so construct the machine that it will automatically feed a tape or strip of paper containing the pins to bring the pins one at a time to a discharge-opening, through which the pin may be forced by a lever, and a further object is to so construct the device that it may be used as a paper-weight, thus making it a very convenient and useful article on a desk.

I will describe a pin-holder embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional plan view, on the line 1 1 of Fig. 2, of a pin-holder embodying my invention. Fig. 2 is a partly-sectional side view substantially on the line 2 2 of Fig. 1. Fig. 3 is a transverse sectional view on the line 3 3 of Fig. 1. Fig. 4 is an elevation of a retarding and supporting device employed. Fig. 5 is a top plan view of the retarding device, and Fig. 6 is a top plan view of a take-up drum employed.

Referring to the drawings, 1 designates a base, on one end of which is mounted a cylinder 2 for containing pins arranged on a tape or strip 3. This rolled tape or strip will preferably be arranged and sold for the purpose of this machine in a box 4, of paper or the like, and adapted to fit into the cylinder 2. The box 4 has a slot at one side, as has also the cylinder 2. To accommodate the cylinder 2 for different lengths of pins, I provide it with a vertically-movable bottom 5. This bottom 5 is moved upward and downward by means of a screw 6, extended through a tapped opening in the base 1. At the opposite end of the base 1 is a motor, comprising a spring 7, operating a shaft 8, on which is a pinion 9, meshing with a pinion 10, on the shaft of which is a gear-wheel 11, meshing with a pinion 12, on the shaft of which is a gear-wheel 13, meshing with a pinion 14, on the shaft of which is a gear-wheel 15, engaging with a pinion 16, and on the shaft of this pinion 16 is a fan-governor 17. It is obvious that this chain of gearing may be varied without departing from the spirit of my invention—that is, there may be more or less gears, depending on the rate of speed at which it is desired to drive the motor.

The spring of the motor will be wound in the usual manner of a clock mechanism. The shaft on which the gear-wheel 11 is mounted extends upward through the top of the motor-frame and has attached to it a take-up drum 18, having an annular flange 19 at its lower end. This take-up drum is designed to be engaged by the end of the tape or strip containing the pins and to wind the same thereon as the pins are removed. As a convenient means for attaching the ends of the tape or strip containing the pins I provide one side of the drum with a vertical slot, into which the end of the tape or strip is held by a pin 20. This pin 20 has a cross-head 21, which at the opposite end has a pin 22, designed to engage in a hole formed in the top of the drum.

Extended upward from the base 1, between the cylinder 2 and the motor, is a vertically-slotted standard 23, in the slot of which one end of an angle-lever 24 is designed to move to force a pin outward, as will be hereinafter described. This plate 24 is pivoted to a post 25 on the base and held yieldingly in its inoperative position by means of a spring 26. Forward of the standard 23 is a plate 27, and between this plate 27 and the standard the tape or strip 3 is designed to pass.

Pivoted on the standard 23, at the side opposite that occupied by the plate 27, is a retarding-lever 28, having a pin 29 at its upper end, which is normally above the plane of the top of the standard. The top of the standard, however, is provided with a notch 30, into which the pin 29 may move as the retarding-lever is rocked. Connected to the lever 28, near its lower end, is a stop-arm 31, designed to move into the line of movement of the fan 17 and by engaging therewith stop

the motor and hold it at a certain time, and this stop-arm is held yieldingly in such supporting position by means of a spring 32, attached at one end to the standard 23 and engaging at the other end with the lever 28.

The whole mechanism described above may be inclosed by a suitable removable cover 33. This cover at one side has an opening 34 for the outer extended portion of the lever 24. It also has an opening 35 in its top, through which the pins are to be discharged.

In operation by moving the lever 28 to the position indicated in Fig. 4 by means of a pin 37, extended through the slot 36, or otherwise the stop-arm 31 will be moved out of engagement with the fan 17, thus allowing the motor to operate and turn the take-up drum 18, whereby the tape or strip will be drawn forward until the head of a pin comes in contact with the pin 29 on the lever 28. When in such contact, the motor will be automatically stopped, and the lower end of the pin will be directly over the end the discharging-lever 24. Upon pressing downward the outer end of this discharging-lever the pin will be forced upward through the opening 35, so that it it may be easily grasped by the fingers and pulled out, and after it shall have been pulled out the lever 28 will be moved to its normal position to carry the stop-arm 31 in line with the fan 17 by means of the spring 32.

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

1. A pin-holder, comprising a cylinder having a slot at one side and adapted to receive a tape or strip containing pins, a motor adapted to draw the tape or strip from the cylinder, a vertically-slotted standard, a plate at the inner side of the standard and between which and the standard the tape or strip is designed to pass, a retarding-lever on the standard, a pin on said retarding-lever adapted to be engaged by a pin on the tape or strip and retard the motor, a stop-arm on said lever adapted to be moved into engagement with a rotary part of the motor, to stop the same, and a lever for lifting a pin in the tape or strip, substantially as specified.

2. A pin-holder, comprising a cylinder having a slot at one side, a vertically-adjustable bottom for said cylinder, operating to adjust the cylinder to the length of pins contained therein, means for drawing the tape or strip containing pins from the cylinder, and means for lifting a pin in the strip after the said pin shall have arrived at a predetermined point, substantially as specified.

3. A pin-holder, comprising a receptacle for receiving a tape or strip containing pins, a motor operating to draw said tape or strip from the cylinder and comprising a drum having a notch at one side to receive the end of the tape or strip, a pin adapted to pass into said notch and hold the strip, a crosshead to one end of which said pin is connected, a pin at the other end of said crosshead to engage in a hole in the top of the drum, and means for ejecting a pin from the tape or strip, substantially as specified.

4. A pin-holder, comprising a cylinder having a slot at one side, the said cylinder being adapted to receive a rolled tape or strip containing pins, a motor for drawing the tape or strip from said cylinder, a standard arranged between the motor and cylinder, a retarding-lever on said standard, a pin extended from said lever across the upper end of the standard and adapted to be engaged with a pin in the tape or strip to retard the motor, an arm extended from the lower portion of said retarding-lever and adapted to be moved into the line of movement of the governor-fan of the motor, a spring for holding the retarding-lever and stop-arm yieldingly in position, a lever for raising a pin in the tape or strip, and a cover having an opening in its top through which said pin may move, substantially as specified.

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Witnesses:
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H. A. DE LONG.