

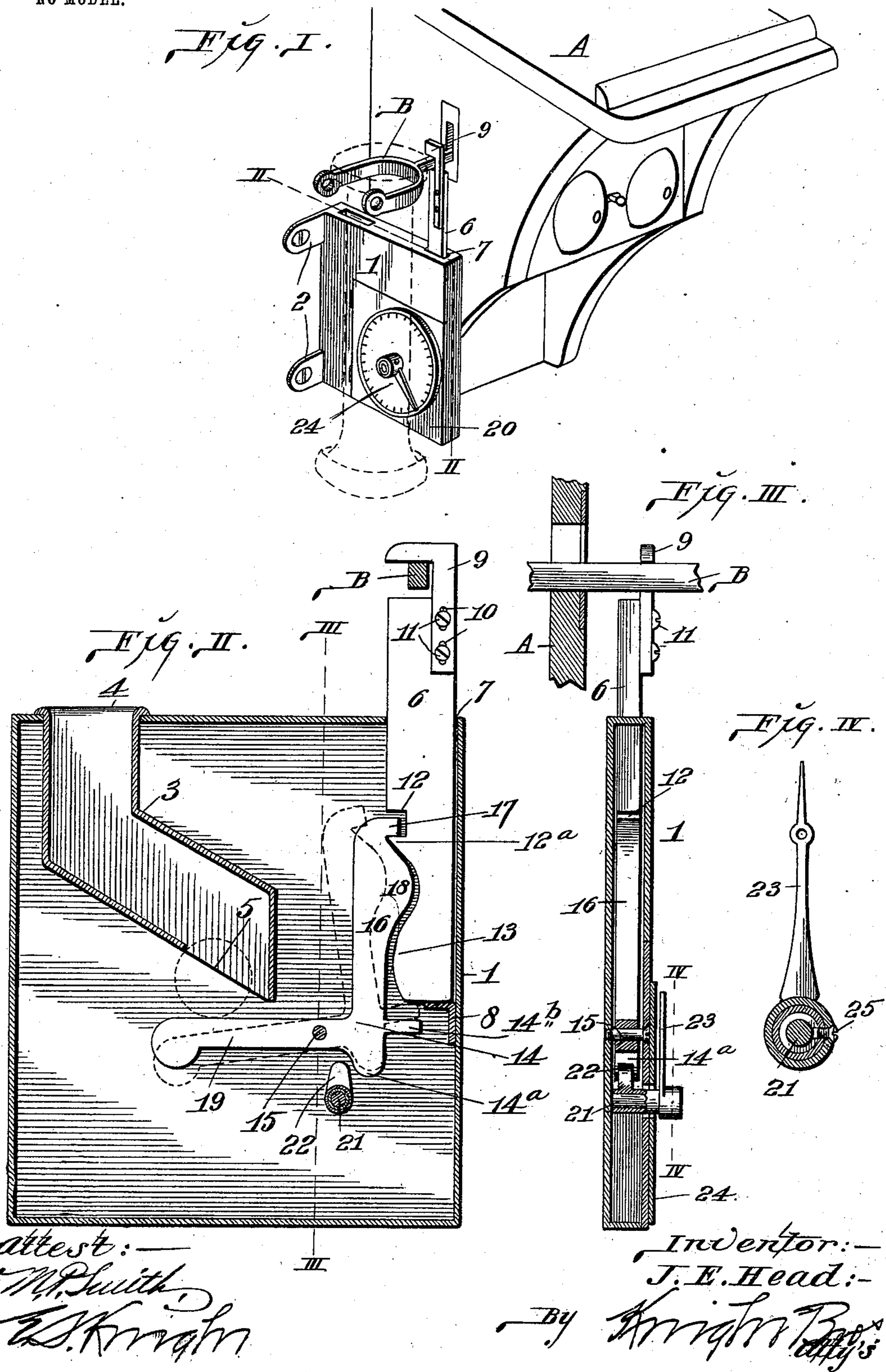
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J. E. HEAD.  
COIN ACTUATED LOCK FOR TELEPHONE HOOKS.

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NO MODEL.



# UNITED STATES PATENT OFFICE.

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## COIN-ACTUATED LOCK FOR TELEPHONE-HOOKS.

SPECIFICATION forming part of Letters Patent No. 725,338, dated April 14, 1903.

Application filed April 24, 1902. Serial No. 104,455. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. HEAD, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Coin-Actuated Locks for Telephone-Hooks, 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 relates to a coin-actuated device by which the receiver-supporting hook-arms of telephones may be held depressed until a coin is introduced into the device to actuate it and free the hook-arm for movement, so as to permit the use of the telephone.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a perspective view showing my coin-actuated device applied to a telephone. Fig. II is a vertical section taken on line II II, Fig. I. Fig. III is a vertical cross-section taken on line III III, Fig. II. Fig. IV is a view taken partially on the section-line IV IV, Fig. III, and showing the finger for manually operating the device without the introduction of a coin.

A designates a telephone to which my device is shown applied.

B is the receiver hook-arm of the telephone.

1 designates the case of my coin-actuated device provided with suitable means, such as the bracket-arms 2, by which it is supported at the side of the telephone beneath the hook-arm B.

3 is a coin-chute having an inlet 4 and an outlet 5, through which a coin may be introduced to fall into the interior of the casing and actuate the mechanism to be described.

6 designates a slide that extends through an opening 7 in the top of the casing 1 and is movable within said casing, being supported when in its lowered position by a ledge 8, fixed to one of the walls of the casing. The upper end of the slide 6 has adjustably connected to it a hook 9, provided with slots 10, that receive set-screws 11, by which the hook is held in any set position vertically on

the slide 6. The hook 9 overhangs the hook-arm B of the telephone instrument, so as to provide for the holding of said hook-arm by the slide 6. In the slide 6 within the casing 1 is a notch 12, and beneath said notch is a bulging cam 13.

14 is a trigger mounted on a pivot-pin 15, seated in the side walls of the casing 1. The trigger 14 has a vertical arm 16, provided with a finger 17, adapted to engage the tongue 12<sup>a</sup> at the lower side of the notch 12 in the slide 6. At the rear edge of the trigger-arm 16 is a cam 18, that is arranged in the path of travel of the slide-cam 13, and a finger 14<sup>b</sup>, that occupies a position beneath the slide 6.

19 is a horizontal coin-receiving arm of the trigger 14, positioned beneath the outlet from the coin-chute 3.

In the practical use of the device the parts normally occupy the positions seen in Figs. II and III, in which the slide 6 is held by the finger 17 of the trigger-arm 16, so that the telephone hook-arm B is held depressed. On the introduction of a coin through the chute 3 the coin falls upon the trigger-arm 19 and swings the trigger into the position seen in dotted lines, Fig. II, thereby releasing the slide 6 from resistance by the disengagement of the finger 17 from the tongue 12<sup>a</sup> of the slide. The hook-arm B may then be raised for use of the telephone. As the hook-arm B is raised the cam 13 of the slide strikes against the cam 18 of the trigger-arm 16 and throws the trigger 14 a greater distance than it was previously moved by the introduction of the coin, and the coin is therefore permitted to fall out of the position seen in Fig. II and into the bottom of the casing 1. When the telephone-receiver is again placed on the hook-arm B, the slide 6 is carried downwardly and the trigger 14 is returned to its normal position, where it again engages and holds the slide ready for the subsequent introduction of a coin. The trigger-arm 19 is lowered by the weight of the coin dropped thereonto through the chute 3, the finger 14<sup>b</sup> of the trigger 14 moves upwardly in the arc of a circle and comes in contact with the lower end of the slide 6 and follows said slide upwardly in the movement of the telephone hook-arm B.

On the replacing of the telephone-receiver in the hook-arm and the consequent downward movement of the slide 6 the trigger 14 is returned to its normal position in engagement with the slide by being engaged through the slide bearing against the finger 14<sup>b</sup>. The action against said finger moves the trigger-arm 16 until it overbalances the arm 19 and falls into engagement with the tongue 12<sup>a</sup> of the slide.

From the foregoing it will be seen that the actuation of the trigger is always positive, inasmuch as the cams 13 and 18, respectively on the slide and trigger, act to move the trigger-arm 19 sufficiently to discharge the coin deposited thereon, while the finger 14 serves to limit the movement of the trigger and to effect its return after it has been overbalanced in discharging the coin.

20 is a door that closes a doorway in the casing 1, through which access is gained to the interior of said casing.

In order to enable the proprietor of a store or other place in which the telephone bearing my attachment is located to use the telephone without the necessity of introducing a coin, I have provided means for the actuation of the device that will now be described.

21 is a rock-shaft mounted in the casing 1, having fixed thereto the hub of a trip-arm 22, that is positioned beneath the horizontal arm 19. The trip-arm 22 is located in proximity to an extension-arm 14<sup>a</sup>, projecting from the trigger 14, so that by the turning of the rock-shaft 21 said trip-arm may be thrown against said extension-arm to move the trigger and disengage it from the slide 6, so that the slide is released in the same manner as in the introduction of a coin. 23 is a finger fixed to the hub of the trip-arm 22 exterior of the casing 1 and arranged to travel over a dial 24, mounted on the door 20. The dial 24 preferably bears a series of numbers or other

characters to which the finger 23 may be moved, according to the position in which it is set on the rock-shaft, in a manner to move the trip-arm 22 into engagement with the extension-arm 14<sup>a</sup> of the trigger 14 for the actuation of said trigger. 25 is a set-screw inserted through the hubs of the trip-arm 22 and finger 23. This screw is adapted to bear against the rock-shaft 21 to hold said trip-arm and finger to the shaft 21. This arrangement dispenses with the necessity of the proprietor and his clerks of a store frequented by the public being provided with keys to unlock the mechanism that holds the telephone hook-arm or of their using coins or what are termed "slugs" to actuate the mechanism, and though it is impossible for unscrupulous persons to actuate the mechanism by the device provided for the use only of authorized persons the loss to the proprietor incident to such fraudulent actuations would be small.

I claim as my invention—

The combination with a telephone hook-arm, of a retaining device comprising a slide having engagement with said hook-arm, a tongue carried by said slide, a cam at the lower end of said slide, a trigger having an arm adapted to engage the tongue on said slide and an arm adapted to receive a coin, a cam on the slide-engaging arm of said trigger positioned above the cam of said slide, and a finger carried by said trigger extending beneath said slide and adapted to be engaged by the slide to move the trigger after it has been overbalanced by the coin deposited on the coin-receiving arm of the trigger, substantially as described.

JAMES E. HEAD.

In presence of—  
E. S. KNIGHT,  
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