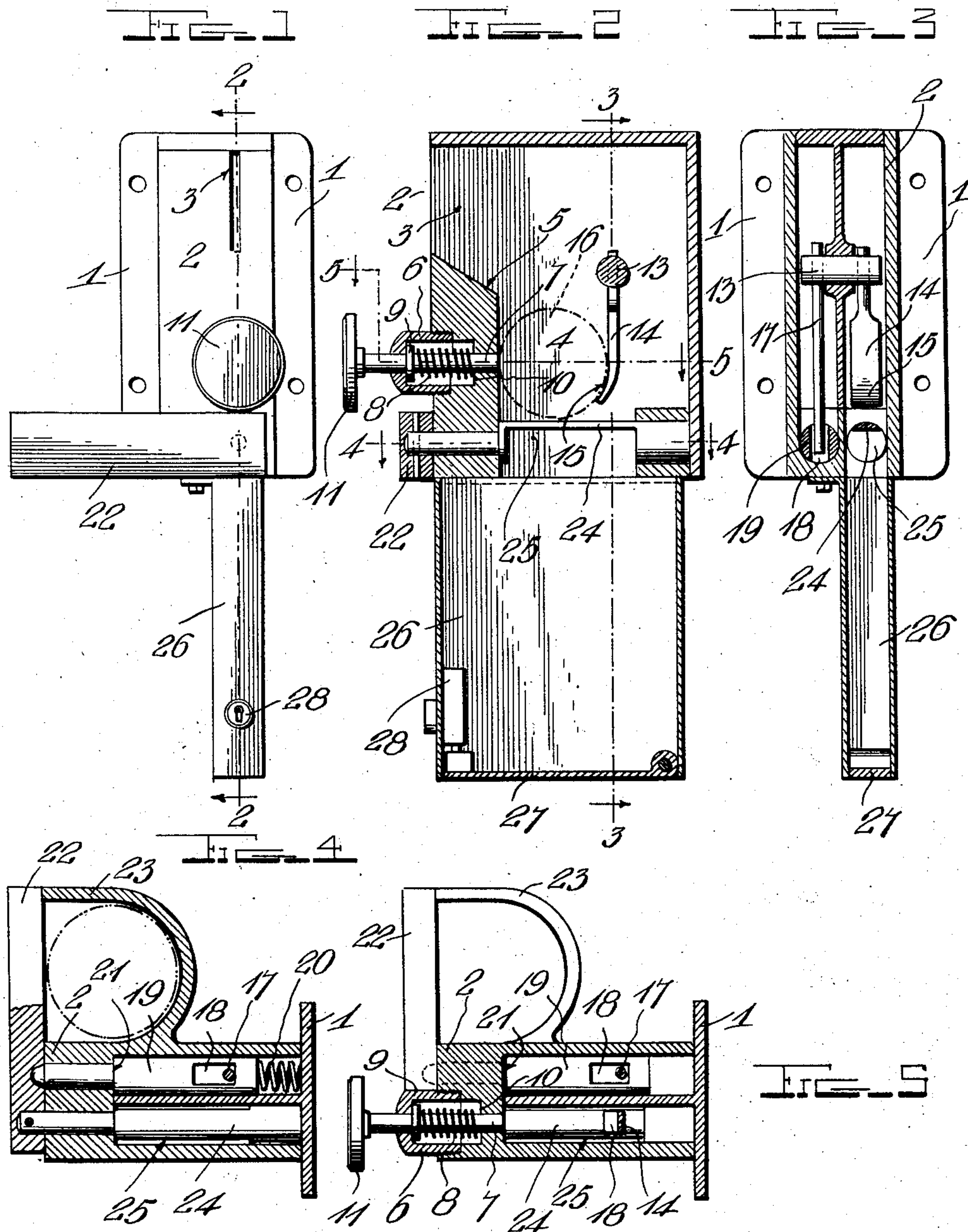


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 CUE LOCKING DEVICE.
 APPLICATION FILED DEC. 1, 1910.

997,428.

Patented July 11, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

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Specification of Letters Patent.

Patented July 11, 1911.

Application filed December 1, 1910. Serial No. 595,130.

To all whom it may concern:

Be it known that I, CHARLES W. TOOMEY, a citizen of the United States, residing at Athol, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Cue-Locking Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to coin-controlled vending mechanism and is intended more particularly to provide simple, efficient and inexpensive means whereby a billiard cue will be locked against withdrawal from the cue rack until prepayment of the sum required for its use has been made.

A further object of the invention is to provide a device for the stated purpose which will be of simple construction and in which the inserted coin will be automatically deposited in the coin receptacle when the cue is released.

These stated objects, and such other objects as will hereinafter incidentally appear, are attained in the use of the mechanism illustrated in the accompanying drawings and the invention consists in certain novel features of the same which will be hereinafter first fully described and subsequently pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a front elevation of a coin-controlled cue lock embodying my invention. Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 2. Fig. 4 is a horizontal section on the line 4—4 of Fig. 2. Fig. 5 is a similar view on the line 5—5 of Fig. 2.

In carrying out my invention, I secure to the back of the cue rack a plate 1 on the front side of which is a forwardly projecting casing 2 having a slot 3 in its front side through which a coin or token may be inserted. The slot 3 constitutes the front terminal of a coin passage 4 leading to and through the bottom of the casing and having a downwardly and inwardly inclined floor 5 leading from the slot as shown and as will be readily understood.

In the front wall of the casing, below the slot 3, is a tubular projection 6, the bore of which extends to and communicates with the passage 4, a plunger 7 being slidably mounted in the said bore and held normally pro-

jected forwardly by a spring 8 coiled around the plunger between an annular shoulder or stop 9 near the front end thereof and a stop or shoulder 10 in the front wall of the casing. A button or handle 11 is provided at the front end of the plunger to permit the same to be conveniently manipulated.

In the rear portion of the casing a rock shaft 13 is mounted between the side walls thereof and a trigger arm 14 depends from said rock shaft within the coin passage 4 and in the vertical plane of the plunger 7, the extremity of the trigger arm being curved slightly forward, as shown at 15, to readily arrest and support a coin or token 16 falling through the passage 4. A straight bolt-engaging arm 17 depends from the rock shaft 13 at one side of the passage 4 and the lower end of this arm engages a slot or recess 18 in a bolt 19 which is slidably mounted in the casing to move back and forth therein and is normally projected forwardly a spring 20 arranged between its rear end and the rear wall of the casing. The front portion of the bolt may be reduced, if desired, to provide a shoulder or stop 21 which, by impinging against a similar shoulder or stop in the casing, will limit the forward movement of the bolt. The front end of the bolt engages the locking bar or keeper 22 to hold the same normally in its raised position in which it extends across a U-shaped bracket or offset 23 on the side of the casing to retain a cue between the branches of said bracket. The locking bar or keeper is disposed at a right angle to the bolt and is secured rigidly to the front end of a coin support and dropper 24 which consists of a rocking bar or shaft journaled in the front and rear walls of the casing and having its intermediate portion, 25, cut away so that when the keeper is released and drops the coin-supporting bar will be rocked and the coin permitted to drop through the recess presented by the cut away portion. As shown in the drawings, the coin-support and dropper is arranged in the same vertical plane with the plunger 7 and the trigger arm 14 so that prior to the release of the keeper, the coin will be supported on the bar 24 between the plunger and the keeper as clearly shown in Fig. 2.

Depending from the casing and rigid therewith is a coin box 26 having a downwardly swinging bottom 27 which is normally held in a raised closed position by a

lock 28, the key to which remains in the custody of the proprietor of the pool room. The open upper end or mouth of the coin box is in direct alinement with the coin passage 4 so that when said passage is unob-
 5 saged 4 so that when said passage is unobstructed the coin will drop directly into the coin box where it will be retained.

The operation and advantages of the device will, it is thought, be readily understood from the foregoing description, taken
 10 in connection with the accompanying drawings. The base or plate 1 is secured to the back of the cue rack at such a point above the bottom of the same that the U shaped
 15 bracket 23 will fit around a cue without marring the finish of the same. The keeper or locking bar 22 fits close against the front end of the bracket so as to extend across the cue and prevent it from being withdrawn
 20 from the bracket. The keeper is held in this raised locking position by the bolt 19 as before stated, the end of the bolt being beveled in the usual manner to ride easily into en-
 25 gagement with a recess in the rear side of keeper, in the ordinary manner. Inasmuch as the keeper fits close against the front side of the casing, the end of the bolt will be completely inclosed so that tampering therewith
 30 will be prevented and release of the cue can be effected only by the insertion of a coin or token and the operation of the parts in the prescribed manner. To release the cue, a
 35 coin or token of the proper value is inserted through the slot 3 and at once drops upon the support and dropper 24 between the
 40 trigger 14 and the inner end of the plunger 7 as shown in Fig. 2. The coin thus forms a connection between the plunger and the trigger so that pressure applied to the button
 45 or head 11 will be transmitted through the plunger and the coin to swing the trigger arm rearwardly and rock the shaft 13. The movement thus imparted to the rock shaft
 50 13 will swing the arm 17 rearwardly so that the bolt 19 will be withdrawn from engagement with the keeper in opposition to the
 55 spring 20 whereupon the keeper will drop by gravity. As the keeper is rigidly secured at one end to the coin support 24, the falling
 60 of the keeper will rotate the support and bring the cut away portion of the same under the coin which will then at once drop into the coin box. The trigger will thus be
 65 released and will return by gravity to its initial position, the spring 20 projecting the bolt 19, as will be understood. When the cue is returned to the rack, the keeper is swung upward to the locking position and is automatically engaged by the bolt, the recess or slot 18 in the bolt permitting the same to yield or move inward without hindrance from the trigger. When the parts are in their normal positions, pressure upon the button 11 will not release the keeper unless a coin or token be inserted for the rea-

son that the distance between the button and the front end of the projection 6 is less than the distance between the plunger and the trigger so that the inward movement of the
 70 plunger cannot carry it against the trigger and the trigger will remain at rest until the insertion of a coin establishes a connection between the same and the plunger.

The device is exceedingly simple in construction and the arrangement of its parts
 75 and will occupy very little space. While it is intended more especially for use in pool or billiard rooms to compel prepayment of the proper fee before a patron may use a cue, it may be utilized for the sale of canes or
 80 for other purposes.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the
 85 principle or sacrificing any of the advantages of the invention, as defined in the appended claims.

Having thus described my invention, what I claim is:—

1. The combination of a casing, a coin
 90 support rotatably mounted in the casing and having a keeper on its front end, means for locking said keeper in a raised position, and means for releasing said locking means
 95 and adapted to be connected therewith by a coin resting on the coin support, the release of the locking means permitting the keeper to drop by gravity and thereby rotate the coin support to deposit the coin.

2. The combination of a casing, a rotary
 100 coin support mounted therein, a keeper carried by said support, a bolt slidably mounted in the casing and adapted to engage the keeper to hold it normally raised, and means
 105 mounted in the casing to withdraw the bolt and adapted to be connected therewith by a coin resting on the coin support, the withdrawal of the bolt permitting the keeper to drop by gravity and thereby rotate the coin support to deposit the coin. 110

3. The combination of a casing, a rotary
 115 coin support mounted therein, a keeper carried by said support, a bolt slidably mounted in the casing and adapted to engage the keeper to hold it normally raised; and a plunger mounted in the casing to withdraw the bolt and adapted to be connected therewith by a coin resting on the coin support, the withdrawal of the bolt permitting the
 120 keeper to drop by gravity and thereby rotate the coin support to deposit the coin.

4. The combination of a casing, a rotary
 125 coin support mounted therein, a keeper on the end of the coin support, means for holding the keeper normally raised, and a plunger adapted to be connected to said holding means by a coin on the coin support to release said means whereby the keeper will drop by gravity and the coin support rotated to deposit the coin. 130

5. The combination of a casing having a coin passage, a coin support rotatably mounted within the casing extending across said passage, a keeper secured to the coin-support, means within the casing for locking said keeper in normal position, and means controlled by a coin on the coin-support for releasing said locking means.

6. The combination of a casing, having a coin passage therein, a rotary coin-support mounted in the casing across said passage and having a cut away portion adapted to register with said passage, a keeper secured to the coin-support, means for locking the keeper in raised position, and means for releasing said locking means comprising a trigger disposed above the coin-support and arranged to be actuated by a coin resting on the coin-support.

7. The combination of a casing having a coin passage, a plunger mounted in the front wall of the casing to extend into said passage, a rock shaft mounted in the casing at the rear of said passage, a trigger depending from the rock shaft within said passage to hold a coin against the plunger, a keeper mounted on the casing, means to lock the keeper in raised position, and connections between the rock shaft and the said locking means to release the latter.

8. The combination of a casing having a coin passage, a plunger mounted in the front wall of the casing to extend into said passage, a rock shaft mounted in the casing at the rear of said passage, a trigger depending from the rock shaft within said passage to hold a coin against the plunger, a keeper

mounted on the casing, a spring bolt mounted in the casing and engaging the keeper, and an arm depending from the rock shaft and engaging said bolt.

9. The combination of a casing having a coin passage, a plunger mounted in the front wall of the casing to extend into said passage, a rock shaft mounted in the casing at the rear of said passage, a trigger depending from the rock shaft within said passage and having a forwardly curved lower end to hold a coin against the plunger, a keeper mounted on the casing, means to lock the keeper in raised position, and connections between the rock shaft and the said locking means to release the latter.

10. The combination of a casing having a coin passage, a plunger mounted in the front wall of the casing to extend into said passage, a rotary coin dropper mounted in the casing and extending across the coin passage, a rock shaft mounted in the casing at the rear of said passage, a trigger depending from the rock shaft within said passage to hold a coin against the plunger, a keeper carried by the coin dropper, a spring bolt mounted in the casing and engaging the keeper, and an arm depending from the rock shaft and engaging said bolt.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES W. TOOMEY.

Witnesses:

JOHN E. MURPHY,
JAMES MURPHY.