G. W. LORD.

HAT, COAT, AND UMBRELLA LOCK.

APPLICATION FILED MAR. 16, 1908.

907,258. Patented Dec. 22, 1908.

Fig. 1.

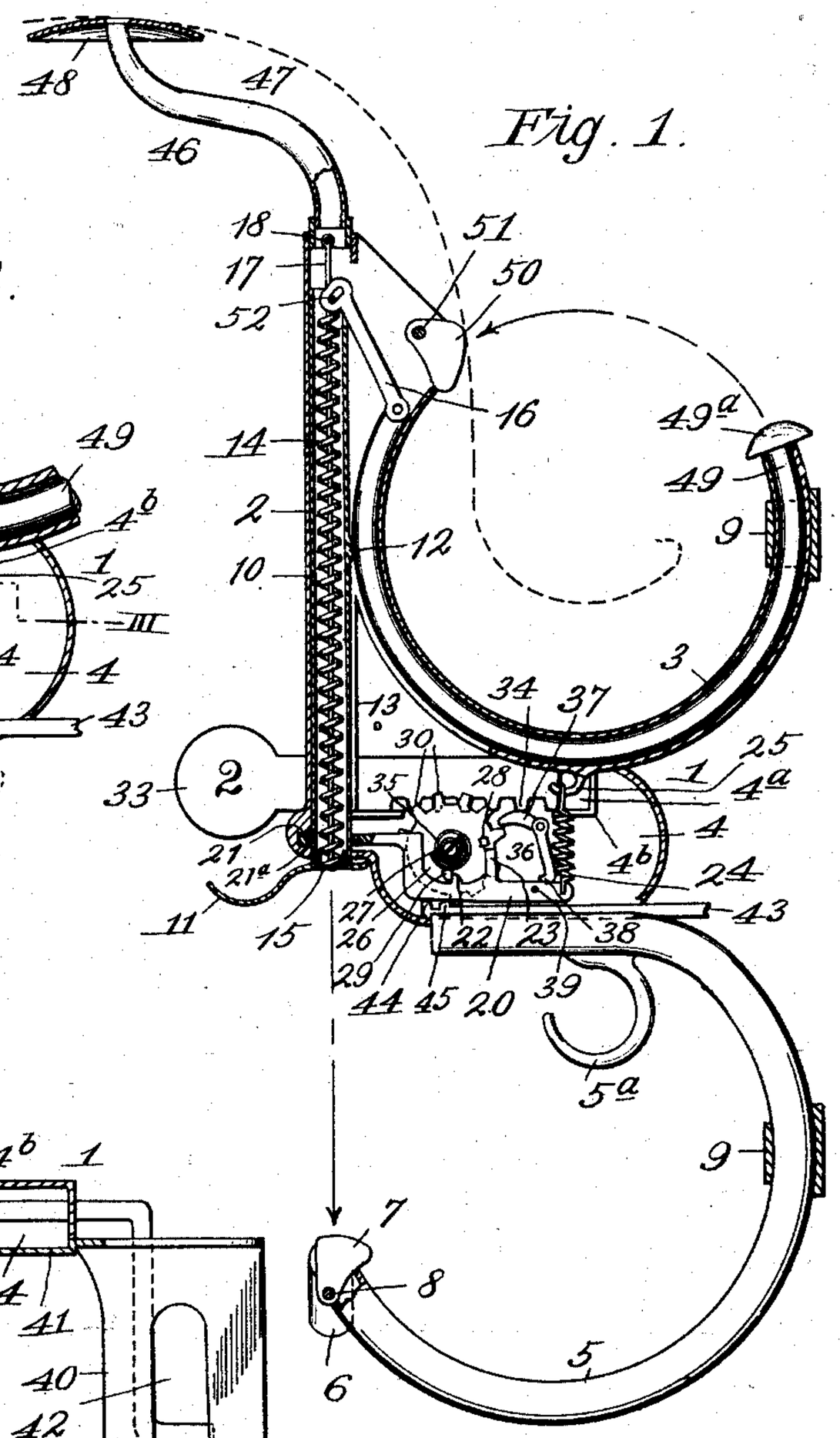


Fig. 2.

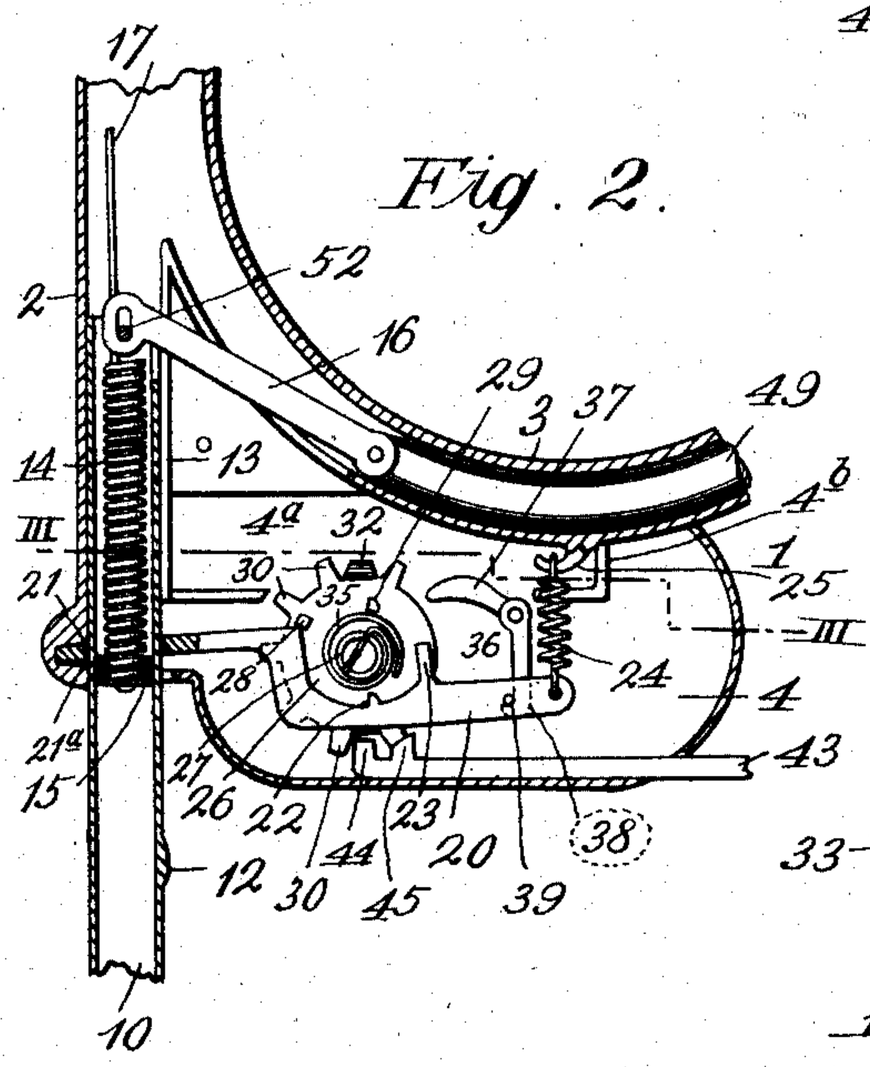


Fig. 3

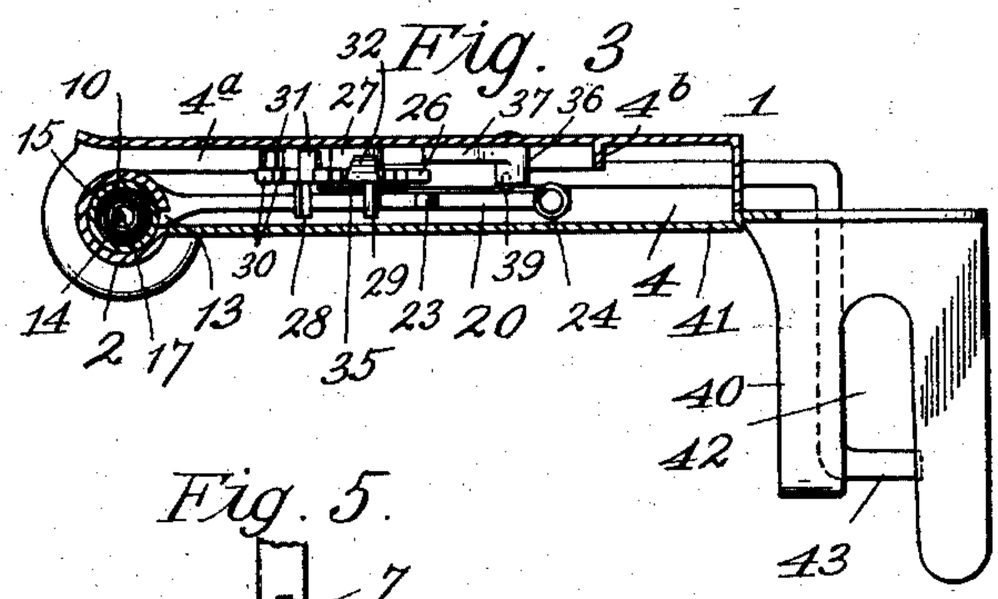


Fig. 5.

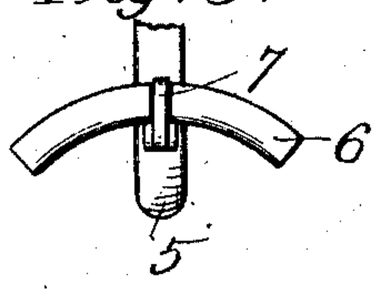
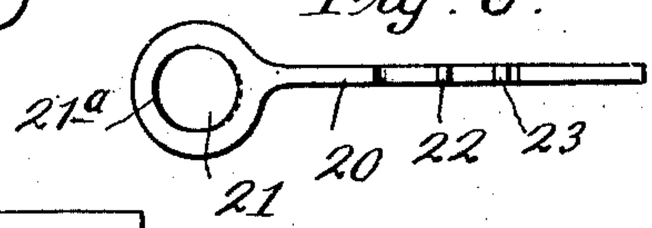


Fig. 6.



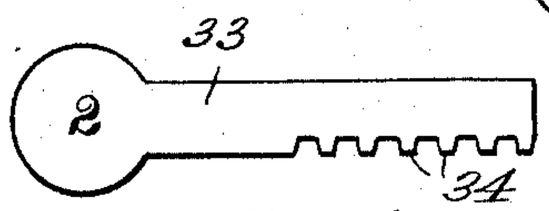


Fig. 4.

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HAT, COAT, AND UMBRELLA LOCK.

No. 907,258. Specification of Letters Patent. Patented Dec. 22, 1908.

Application filed March 16, 1908. Serial No. 421,359.

To all whom it may concern:

Be it known that I, G. W. LORD, a citizen of the United States, residing at Excelsior Springs, in the county of Clay and State of Missouri, have invented a new and useful Improvement in Hat, Coat, and Umbrella Locks, of which the following is a specification.

My invention relates to improvements in coat, hat, and umbrella locks; and my object is to provide a device of this character for use in restaurants, hotels, office buildings, &c., to prevent the removal of hats, garments, or umbrellas by unauthorized persons.

In the accompanying drawing, which illustrates the invention: Figure 1 represents a side elevation, partly in section, of the lock in its inoperative position. Fig. 2 is an enlarged broken vertical section of the same in an operative position. Fig. 3 is an irregular horizontal section on line III—III of Fig. 2. Fig. 4 is a detail of a check or key employed in carrying out the invention. Fig. 5 is a detail front elevation of a coat supporter employed in carrying out the invention. Fig. 6 is a plan view of a clutch forming part of the invention.

In carrying out the invention I employ a casing 1, consisting of a vertical tube 2, a segmental tube 3 communicating with the vertical tube, and a chamber 4 communicating with tubes 2 and 3. Chamber 4 is provided with a keyway 4^a and a stop 4^b at the inner end of said keyway.

5 designates a segmental arm secured to the lower wall of chamber 4 for the purpose of supporting a coat. Said arm is provided at its free end with a transverse curved piece 6 to offer a broad bearing surface for the coat to hang upon. The free end of said arm is also provided with a self-adjusting eccentric gripper 7 which is pivotally secured thereto by a pin 8. It is also provided at its upper portion with a coat hook 5^a.

9 designates a pair of brackets embracing tube 3 and arm 5 and adapted to be secured to a wall or other object for the purpose of supporting the lock.

10 designates a manually-operable bolt reciprocably arranged in tube 2 and adapted to coöperate with arm 5 in locking a coat in position on the latter. Bolt 10 is provided at its lower terminal with a handle 11, and at one side with a projection 12 which extends through the rear slotted portion 13 of tube 2.

14 designates an expansion spring for normally holding bolt 10 in its raised or inoperative position. Said spring abuts at its ends against a cup 15 and a link 16, and it embraces a rod 17 supporting cup 15, and secured at its upper end in tube 2 by a transverse pin 18 extending therethrough.

20 designates a clutch for automatically engaging bolt 10 and locking the same at any point in its downward movement. Said clutch is rockingly mounted in the swelled lower terminal of tube 2, and has an opening 21 through which bolt 10 extends, it is also provided with an upwardly-extending lug 22 and a finger 23 for purposes hereinafter described.

24 designates a retractile spring connected at its ends to a hook 25, on tube 3, and the free end of clutch 20 for the purpose of normally holding the latter in the inclined position shown in Fig. 2, so that the sharp edge 21^a formed by opening 21 and the bottom of the clutch will bite bolt 10 and lock the same from upward movement.

26 designates a tumbler for releasing the clutch from bolt 10 so that the latter may be automatically restored to its normal position by spring 14. Tumbler 26 is mounted in chamber 4 on a stub-shaft 27 and provided with laterally-projecting studs 28 29. Said tumbler is also provided with a number of radial cog-teeth 30 and laterally-extending teeth 31 32, which latter extend into the keyway 4^a so as to be in the path of key 33 when the latter is inserted therein for the purpose of unlocking the device. Tooth 32 inclines upwardly to guard a safety-device hereinafter described. Key 33 is provided with rack-teeth 34 for engaging teeth 31 32, and it has a serial number corresponding with the number on the face-plate of the lock.

35 designates a spiral spring connected at its ends to stub-shaft 27 and tumbler 26 for the purpose of rotating the latter to partly expel the key while the device is being locked.

36 designates a safety-device pivotally mounted in chamber 4 to prevent the lock from being picked. Said device 36 is provided with an arm 37, extending into the keyway, and a hook 38 which latter is adapted to engage a pin 39 projecting laterally from the free end of clutch 20 to prevent said clutch from being depressed to release bolt 10, until the proper key is inserted.

40 designates an umbrella-supporter projecting rearwardly and laterally from the

face-plate 41 of chamber 4, and provided with an open slot 42 for the reception of the umbrella rod which is locked in the supporter by a horizontal bolt 43. Bolt 43 extends into chamber 4 and is provided at its inner terminal with teeth 44 45, adapted to be engaged by the radial teeth on the tumbler whereby said bolt is actuated.

46 designates a hat-supporter consisting of an arm 47, secured to the top of tube 2, and a disk 48 secured to the upper end of said arm to support the hat.

49 designates a segmental bolt slidably arranged in tube 3 for the purpose of engaging the side of the hat so that it cannot be removed from the supporter 46, said bolt cooperates with a self-adjusting eccentric gripper 50, which engages the inside of the hat and is pivotally mounted on a pin 51 at the upper end of tube 3. Bolt 49 is provided at its free end with a round head 49[a], and is pivotally secured at its opposite end to link 16 having a pin-and-slot connection 52 with the upper end of bolt 10, so that the latter will actuate bolt 49 through the link.

The device is locked by grasping handle 11 and pulling bolt 10 downward toward gripper 7. Clutch 20 will permit bolt 10 to move downward but it will not let said bolt move upward until the clutch is released therefrom. As bolt 10 is drawn downward it will force bolt 49 outward so that the free end thereof will travel toward gripper 50 and thus securely lock the hat upon the supporter 46. When projection 12 contacts with the clutch 20 it will depress the same and carry lug 22 out of contact with lug 28, so that spring 35 may rotate the tumbler and partly expel key 33, the rotary movement of the tumbler being checked by stud 29 contacting with the clutch, see Fig. 2. As the tumbler rotates its radial teeth 30 will engage tooth 44 on the horizontal bolt 43, and push the latter outward to lock the umbrella in supporter 40, said bolt being held in its outward or locked position by one of the radial teeth engaging its beveled upper end. As bolt 49 has less distance to travel than bolt 10, it will grip the hat before said bolt 10 grips the coat, but the pin and slot connection with link 16 will permit bolt 10 to move downward far enough to firmly grip the coat. Any attempt to remove the hat or the coat will result in rotating the high radius of the eccentric grippers into contact with the same, so they will be more firmly held thereby.

In order to unlock the device the key is pushed forward in the keyway until it contacts with stop 4[b]. In its forward movement it engages the laterally-extending teeth 31 32 and rotates the tumbler; it also contacts with and releases the safety-device 36 from clutch 20, so that as the tumbler continues to turn it will carry lug 28 into contact with finger 23 and thereby depress clutch 20 and cause the same to release bolt 10, which is immediately restored to its normal position by spring 14. As bolt 10 moves upward out of engagement with the coat on arm 5, it will draw bolt 49 out of engagement with the hat on supporter 46; at the same time bolt 43 is drawn inward to release the umbrella, by the radial teeth on the tumbler contacting with tooth 44. The clutch is held in its depressed position by lug 29 on the tumbler, which also locks said tumbler from backward rotation by engaging lug 22, and thereby prevents the removal of the key until bolt 10 is again drawn downward.

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

1. A device of the character described consisting of a casing, a garment-supporting arm projecting therefrom, a manually-operable bolt slidably mounted in said casing adapted to coöperate with said arm to secure a garment on the latter, an automatic clutch carried by the casing provided with an opening through which the bolt extends, the edge of said opening being adapted to grip and hold the bolt in an operative position, and key-controlled means for releasing said clutch from the bolt.

2. A device of the character described consisting of a casing, a garment-supporting arm projecting therefrom, a vertically-positioned bolt in the casing adapted to move downward toward said arm to secure a garment thereon, means rockingly-mounted in the casing provided with an opening through which the bolt extends, the edge of said opening being adapted to grip and hold the bolt at any point in its downward movement, and a key-controlled device for releasing said means from the bolt.

3. A device of the character described, consisting of a casing, a garment-supporting arm projecting therefrom, a manually-operable bolt slidably mounted in said casing adapted to coöperate with said arm to secure a garment on the latter, a clutch for locking said bolt in an operative position, a key-controlled tumbler for releasing said clutch from the bolt, means on the bolt and the tumbler for locking the latter while the former occupies an inoperative position, a projection on the bolt for disengaging said means, and a spring for actuating the tumbler to expel or partly expel the key when said means are disengaged.

4. A device of the character described consisting of a casing, a garment-supporting arm projecting therefrom, a manually-operable bolt slidably mounted in said casing adapted to cooperate with said arm to secure a garment on the latter, a clutch for locking said bolt in an operative position, a rotary tumbler for releasing said clutch from the bolt, a key for operating said tumbler,

and means on the clutch and the tumbler to prevent withdrawal of the key when the bolt occupies an inoperative position.

5. A device of the character described consisting of a casing, a garment-supporting arm projecting therefrom, a manually-operable bolt slidably mounted in said casing adapted to coöperate with said arm to secure a garment on the latter, a rotary tumbler, a key for turning said tumbler forward, a spring for turning said tumbler backward to partly expel the key, a clutch for locking the tumbler against the action of said spring, and means on the bolt for disengaging the clutch from the tumbler so the spring may act thereon.

6. A device of the character described consisting of a casing, a garment-supporting arm projecting therefrom, a manually-operable bolt slidably mounted in said casing adapted to coöperate with said arm to secure a garment on the latter, means for automatically locking said bolt in an operative position, a toothed rotary tumbler adapted to release said means from the bolt, a toothed key for operating said tumbler, and a safety-device pivotally mounted in the casing in the rear of the tumbler to prevent the automatic locking means from being released until the proper key is inserted.

7. A device of the character described consisting of a casing provided with a keyway, a garment-supporting arm projecting from said casing, a manually-operable bolt slidably mounted in said casing, adapted to coöperate with said arm to secure a garment on the latter, a clutch for locking said bolt in an operative position, a tumbler for releasing said clutch from the bolt, a key for operating said tumbler, and a safety-device projecting into the keyway to prevent the clutch from being released until the proper key is inserted.

8. A device of the character described consisting of a casing, an umbrella-supporter projecting therefrom, a bolt coöperating with said supporter to lock an umbrella therein, and a rotary tumbler for actuating said bolt.

9. A device of the character described consisting of a casing provided with a vertical tube and a segmental tube, a segmental arm projecting from said casing, a bolt slidably mounted in the vertical tube, adapted to coöperate with said arm to secure a coat thereon, a hat supporter, a bolt slidably mounted in the segmental tube, adapted to coöperate with the hat supporter to secure a hat thereon, and a link connecting the bolts so they will operate simultaneously.

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Witnesses:
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