

No. 812,081.

PATENTED FEB. 6, 1906.

J. S. OLIVER & C. J. THOMAS.

COMBINATION RACK.

APPLICATION FILED JULY 7, 1905.

2 SHEETS-SHEET 1

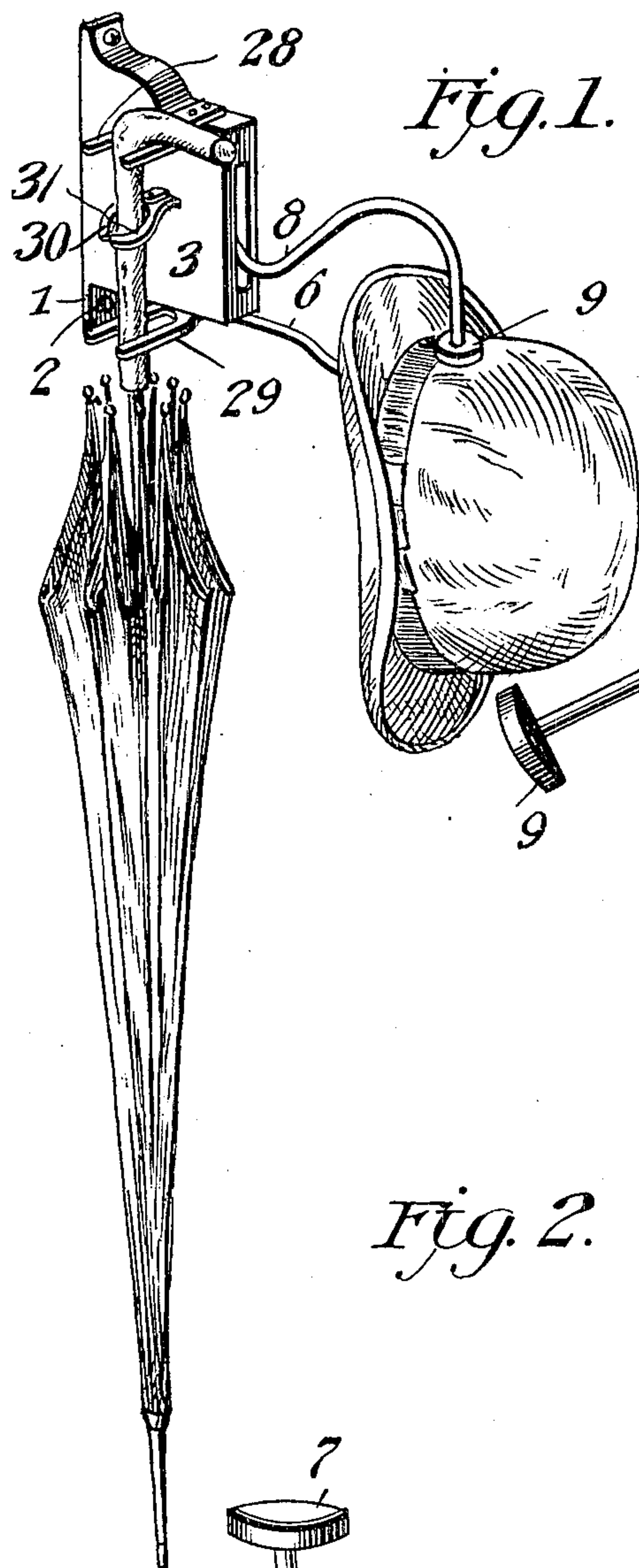


Fig. 1.

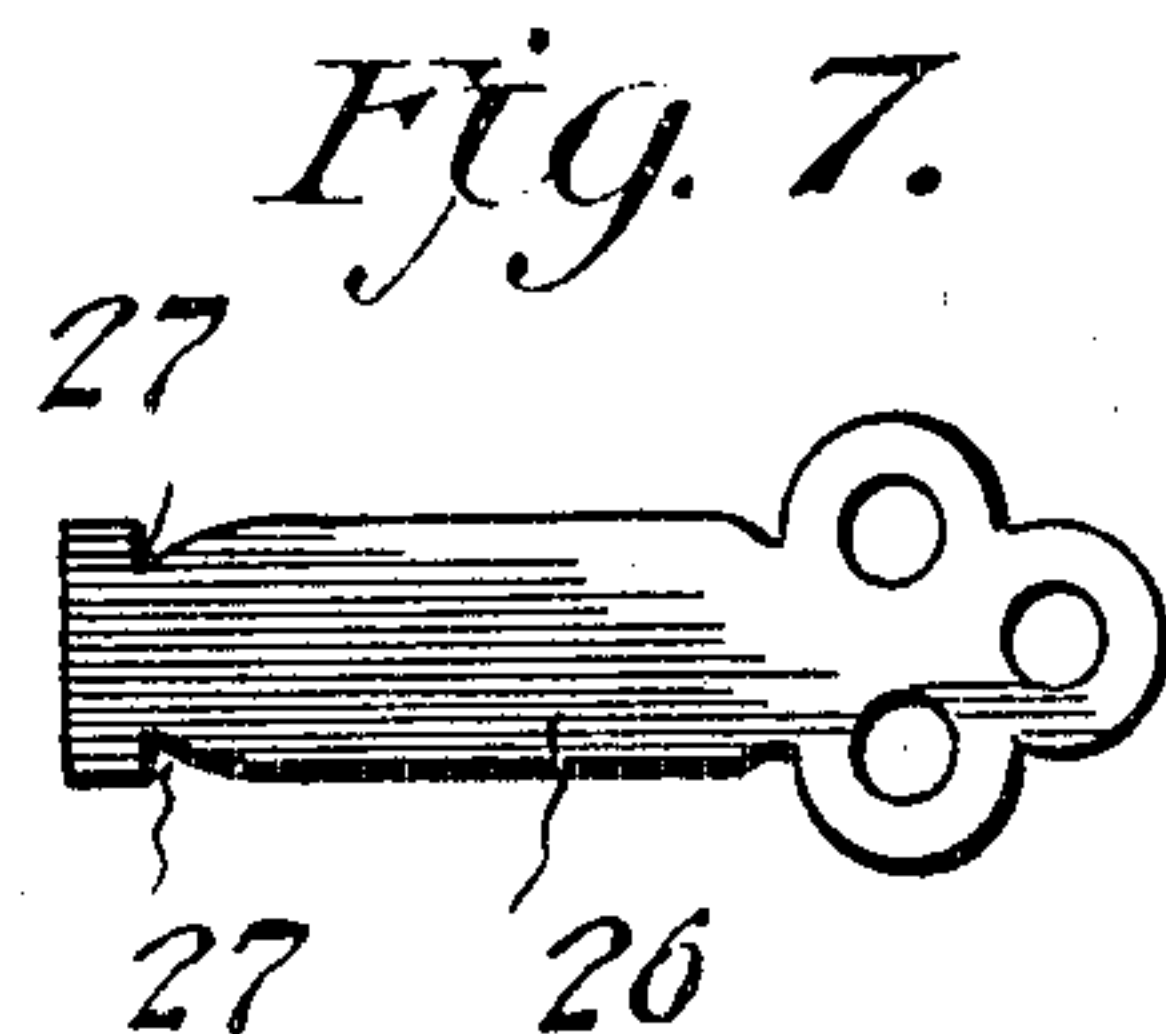


Fig. 7.

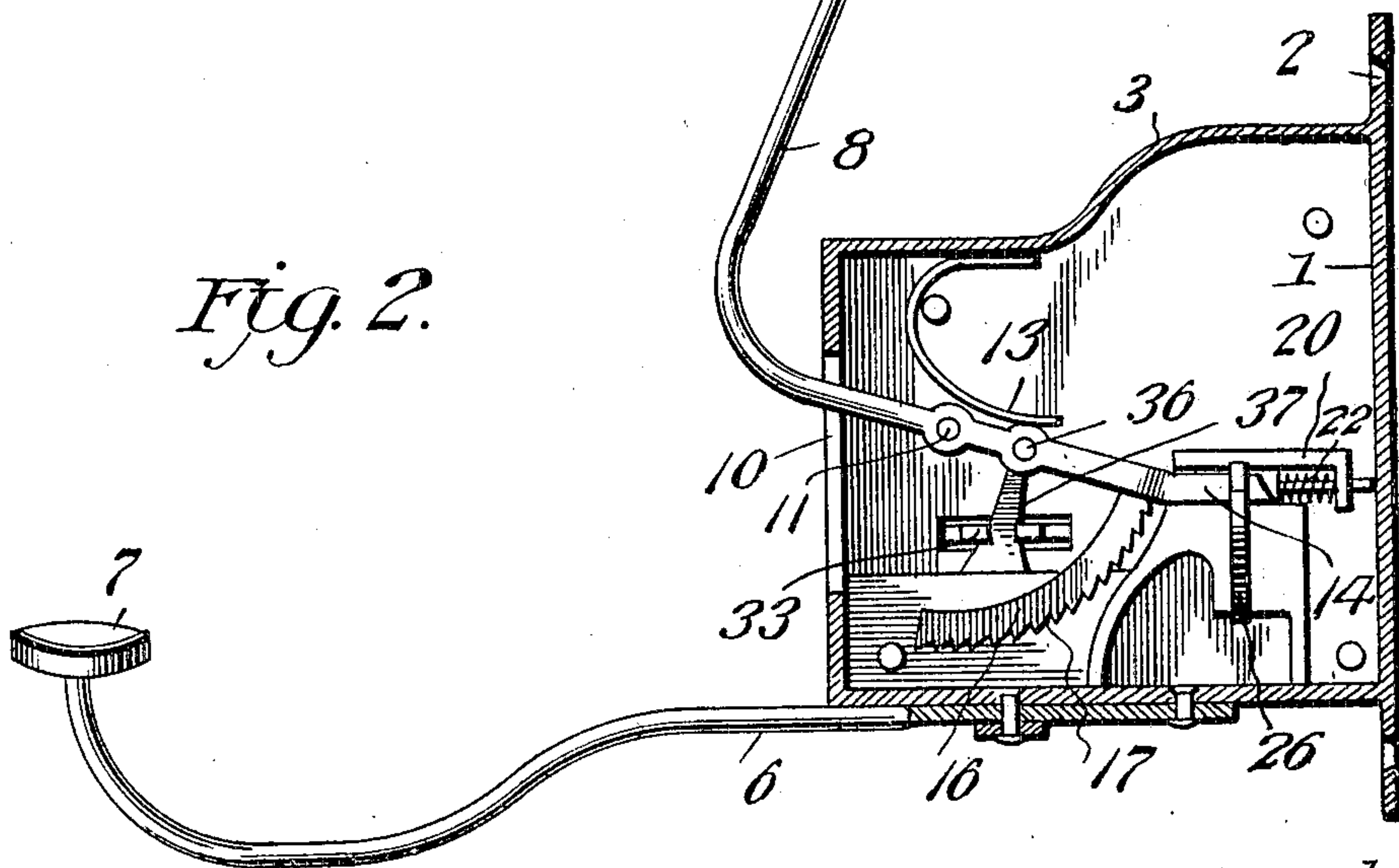


Fig. 2.

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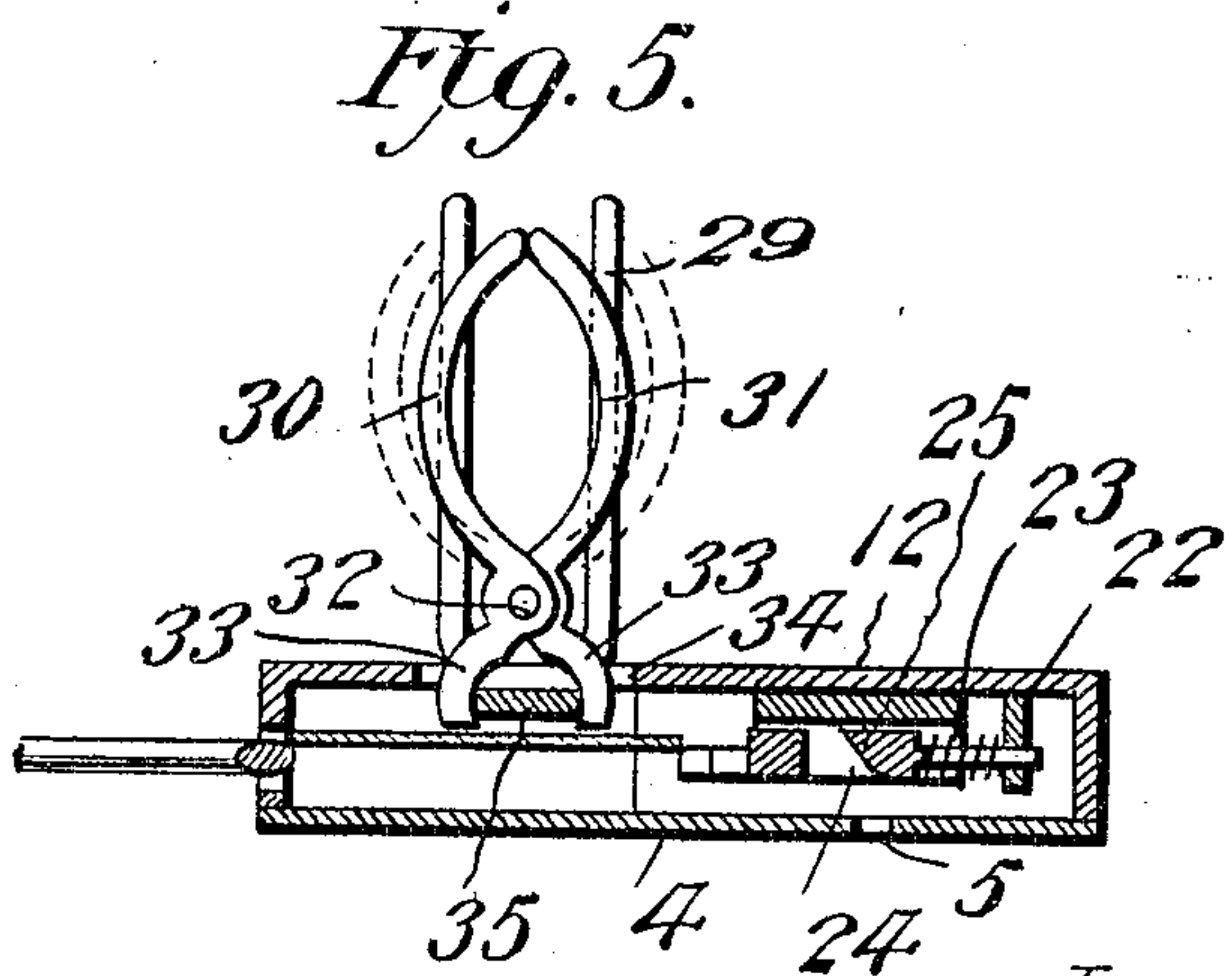
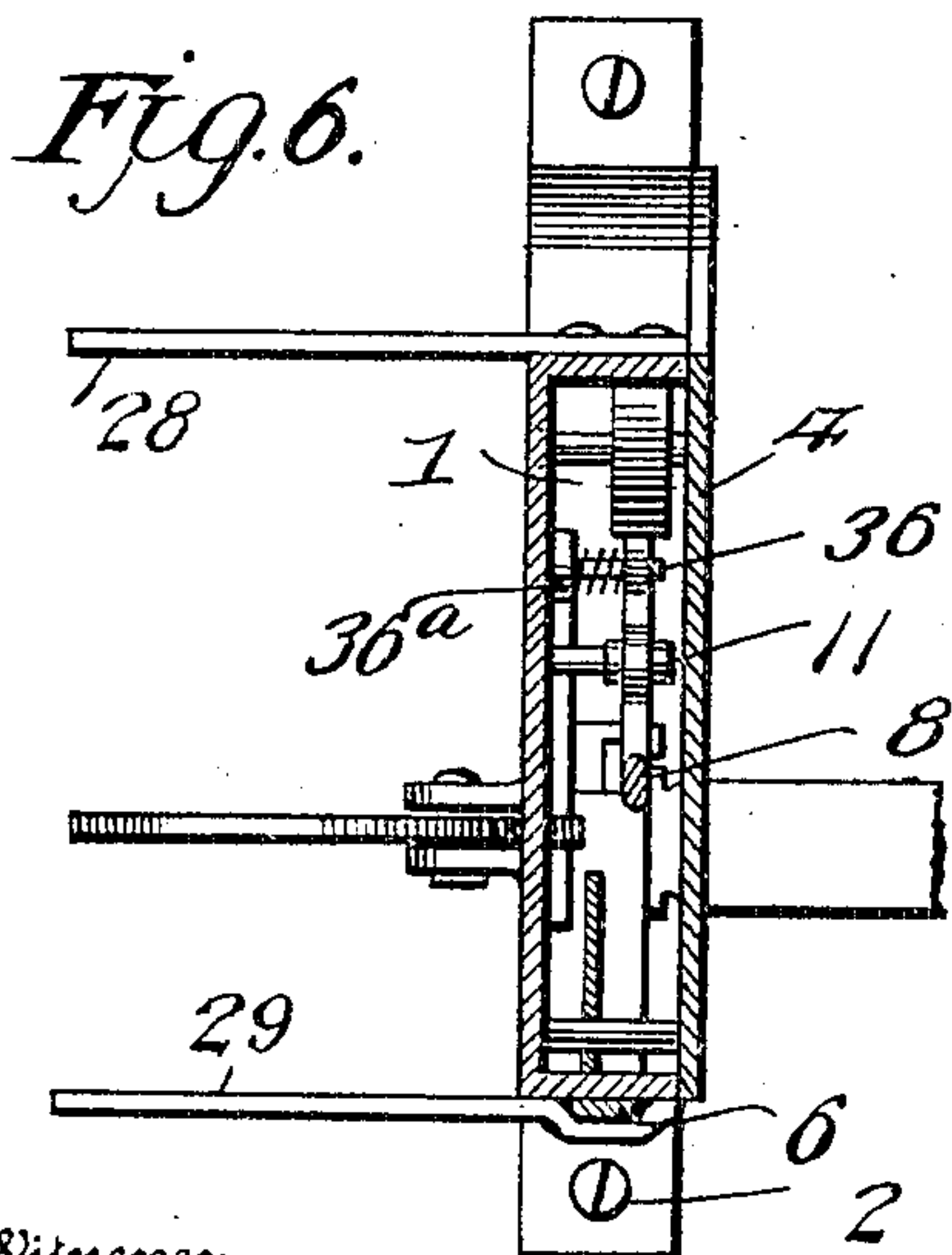
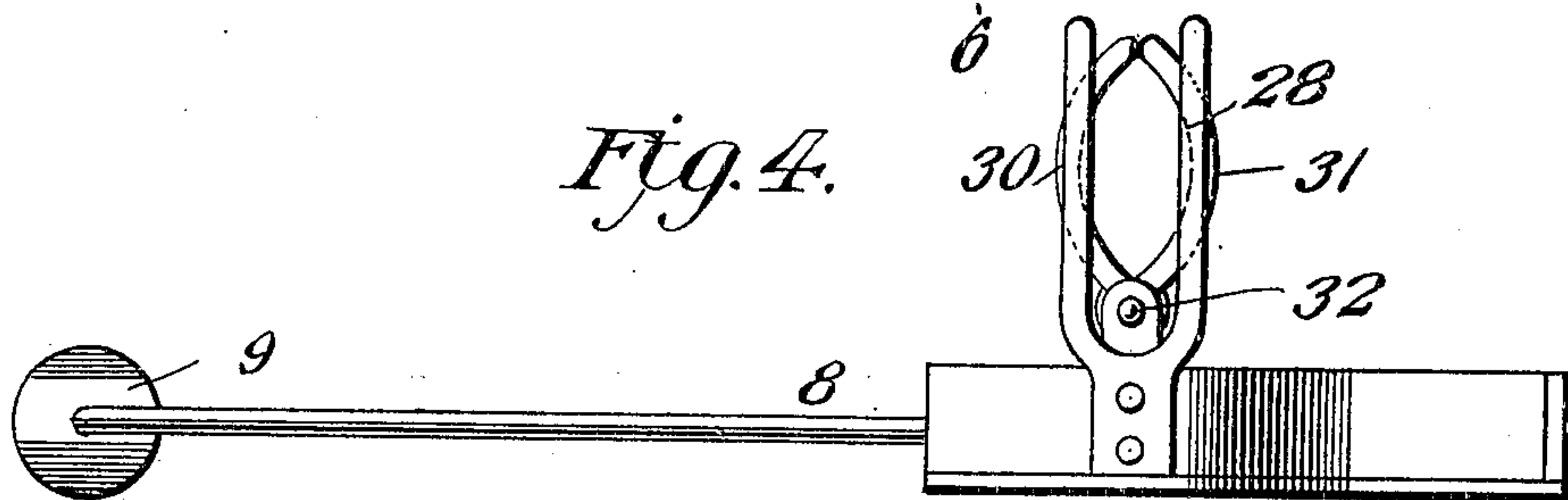
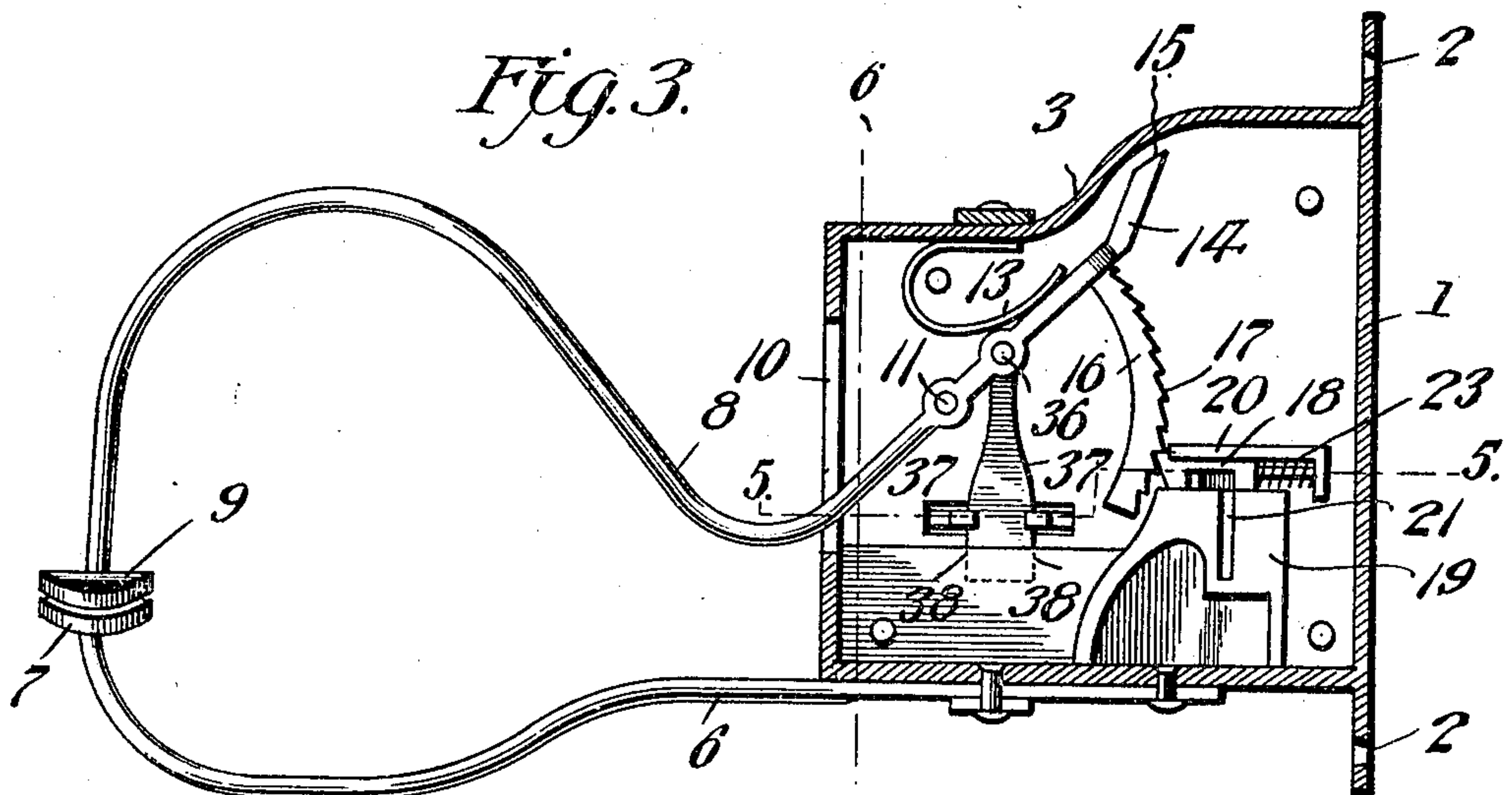
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2 SHEETS—SHEET 2.



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COMBINATION-RACK.

No. 812,081.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed July 7, 1905. Serial No. 268,605.

To all whom it may concern:

Be it known that we, JOHN S. OLIVER and CHARLES J. THOMAS, citizens of the United States of America, residing at Baltimore city, in the State of Maryland, have invented new and useful Improvements in Combination-Racks, of which the following is a specification.

This invention relates to a combination hat, coat, and umbrella rack, the object of the invention being to provide a simple, convenient, and efficient construction of rack by which such articles may be suspended and locked in suspended position to prevent their removal and appropriation by unauthorized persons and also to provide locking mechanism adapted to be manipulated by a suitable form of key which may be removed by a person suspending a garment or other article upon the rack and which when applied to unlock the mechanism to permit such garment or article to be removed will be automatically held in the lock-casing against withdrawal until the holding members of the rack are again actuated to secure an article.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the rack in use for supporting a hat and umbrella. Fig. 2 is a vertical longitudinal section through the casing of the lock, showing the normal position of the parts of the rack. Fig. 3 is a similar view showing the position of the parts of the rack when the clamping-arms are closed to secure an article in suspended position. Fig. 4 is a top plan view of the rack. Fig. 5 is a horizontal section through the rack on the plane indicated by the line 5 5 of Fig. 3. Fig. 6 is a vertical cross-section through the rack on the plane indicated by the line 6 6 of Fig. 3, and Fig. 7 is a detail view of one form of key which may be employed.

Referring now more particularly to the drawings, the numeral 1 designates a base provided at its upper and lower ends with apertures 2 for passage of suitable fastenings to secure the same to a support. This base-plate carries a lock-casing 3, which is preferably of the form shown and is provided with a detachable face-plate 4, which may be secured to the body of the casing in any preferred manner. The face-plate 4 is formed with a keyhole 5.

Suitably fixed to the under side of the casing is a stationary suspending and clamping

arm 6, provided at its outer end with a clamping head or button 7. Arranged above the arm 6 and coöperating therewith is a movable suspending and clamping arm 8, provided with a clamping head or button 9, the free ends of said arms being reversely bowed or curved, as shown, to permit of the insertion of a hat, coat, or other article of wear between them, so that said article may be clamped in suspended position by the heads 7 and 9.

The arm 8 extends through and is vertically movable in a slot 10, formed in the outer or front wall of the casing, and is fulcrumed at its inner end on a suitable pivot pin or stud 11, carried by the stationary side wall 12 of the casing. The fulcrumed inner end of the arm is thus mounted to swing vertically in the arc of a circle, and the arm swings to closed position against the resistance of a pressure-spring 13, mounted in the casing and arranged to bear against the rear end of the arm at a suitable distance in rear of the pivotal connection 11.

The rear or short end of the arm 8 terminates in a locking projection 14, extending upwardly at an oblique angle and provided with a beveled end 15, and adjacent to said projection the arm is provided with a curved or arcuately-shaped locking member 16 in the form of a bar provided with rack-teeth 17. This rack-bar is adapted to be engaged by a locking-dog 18, slidably mounted in a guideway formed by a boss 19, carried by the wall 12 or the bottom wall of the casing and a superposed angular guide-strip 20, the guideway thus formed being open at its outer end for the projection of the nose of the dog 18 and upon its side facing the face-plate 4. The boss 19 is provided upon the latter-named side with a key-receiving slot 21, communicating at its upper end with the said guideway and arranged in alinement with the keyhole 5. The dog 18 is provided with a beveled nose to engage the rack-teeth 17 and the beveled end 15 of the locking projection 14, and from the rear of the dog projects a stem 22, slidably mounted in the downturned rear end of the guide-strip 20 and about which is a coiled spring 23, which normally projects the dog to locking position. In the side of the dog adjacent the face-plate 4 a key-receiving slot or recess 24 is formed, which may extend entirely through the dog from side to side thereof and is formed with a rear beveled wall 25, normally arranged opposite the key-

hole 5. The construction of the dog is thus such that when the key 26 is inserted through the hole 5 the dog will be retracted, as the bit of the key will engage the beveled wall 25 and slide the dog backward against the resistance of the spring 23. The key 26 is formed with locking notches or recesses 27, adapted to be engaged by the locking-arm 14 when the arm 8 is opened or moved away from the arm 6, whereby the key will be locked against removal while the rack is out of use.

In the operation of the parts thus far described the arm 8 is normally arranged in the elevated position shown in Fig. 2, so as to enable a hat or garment to be suspended on the head 7 of the arm 6. To lock the hat or garment in suspended position, the arm 8 is depressed until the interposed object is clamped between heads 7 and 9, as shown in Fig. 1, the locking projection 14 and rack 16 being thereby raised against the pressure of the spring 13, thus releasing the key 26 to permit of its removal. When the key is removed, the dog 18 is forced outwardly by the spring 23 and engages the rack 16 to lock the arm 8 in depressed position, thus preventing surreptitious removal of the suspended garment or object. When the key is inserted, the dog 18 will be retracted, thus permitting the arm 8 to be swung open, whereby the locking projection 14 will be swung down to engage and lock the key in inserted position. By providing the locking-bar 16 with a plurality of teeth provision is made for securing the arm 8 in different adjusted positions to accommodate garments or objects of different thicknesses between the clamping-heads 7 and 9.

Rigidly secured to the top and bottom of the casing are bifurcated or forked holders 28 and 29, which project laterally beyond the wall 12 and are disposed in vertical alinement to receive the handle of an umbrella or other similar article, the grip portion of which is designed to be supported by the holder 28. Intermediate these holders are gripping-jaws 30 31, curved to conform to and clamp the handle of an umbrella between them. The jaws are pivotally mounted upon a pivot pin or stud 32 and provided with actuating-arms 33, projecting into the casing through a slot 34 in the wall 12. The arms are adapted to be actuated by a vertically-movable actuating device in the form of a spreader-plate 35, pivotally mounted at its upper end upon a pin or stud 36, carried by the inner end of the movable clamping-arm 8 in rear of its fulcrum 11. A spring 36^a surrounds the pivot-stud 36 and yieldingly spaces the spreader from the arm 8. The side edges of the spreader-plate are provided with diverging portions 37 and terminate in straight portions 38, the former being adapted to spread the arms 33 apart and permit said arms to move toward each other when the spreader-plate is respectively moved

downward and upward by the clamping-arm 8, the portions 38 serving to hold the arms 33 spread to maintain the jaws in closed position to grip the umbrella. It will be observed that the spreader-plate is thus mounted to be moved with and actuated by the clamping-arm 8, so as to close the jaws 30 and 31 to grip the umbrella when the arm 8 is depressed and to release the jaws to permit removal of the umbrella when said arm 8 is raised, thus enabling the articles suspending on the arm 6 and placed in the holders 28 and 29 to be simultaneously locked and released.

From the foregoing description, taken in connection with the drawings, the construction and mode of operation of the device will be readily understood, and it will be seen that a simple and inexpensive construction of rack is provided for supporting garments and various articles and locking the same in supported position to prevent their removal except by the owner or an authorized person.

Having thus described the invention, what is claimed as new is—

1. In a garment-rack, the combination of a casing, a stationary clamping element, a movable clamping element pivotally mounted in advance of its inner end within the casing and carrying upon its inner end an arcuate toothed rack and a locking projection, a spring bearing upon the inner end of the movable clamping member to force the same downward and the outer end upward, and a sliding spring-actuated dog adapted to engage the rack and adapted to be retracted by the key, the locking projection of the movable member being adapted to engage and lock the same from withdrawal when the dog is retracted.

2. In a garment-rack, the combination of a casing provided with supports for an umbrella or similar object, a stationary clamping element, a movable spring-retracted clamping element pivotally mounted upon the casing and provided with a rack and a key-locking element, a spring-actuated locking-dog to engage the rack, said dog adapted to be retracted by an inserted key, pivotally-mounted gripping-jaws for engaging the objects supported by the aforesaid supports, said jaws being provided with actuating-arms projecting into the casing, and a spreader pivotally attached to the inner end of the movable clamping element and movable between said arms to spread them apart and close the clamping-jaws.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN S. OLIVER.
CHAS. J. THOMAS.

Witnesses:

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JOHN R. SKILLMAN.