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H. WESTPHAL.

UMBRELLA STAND.

No. 370,113. Patented Sept. 20, 1887.

Fig. 1.

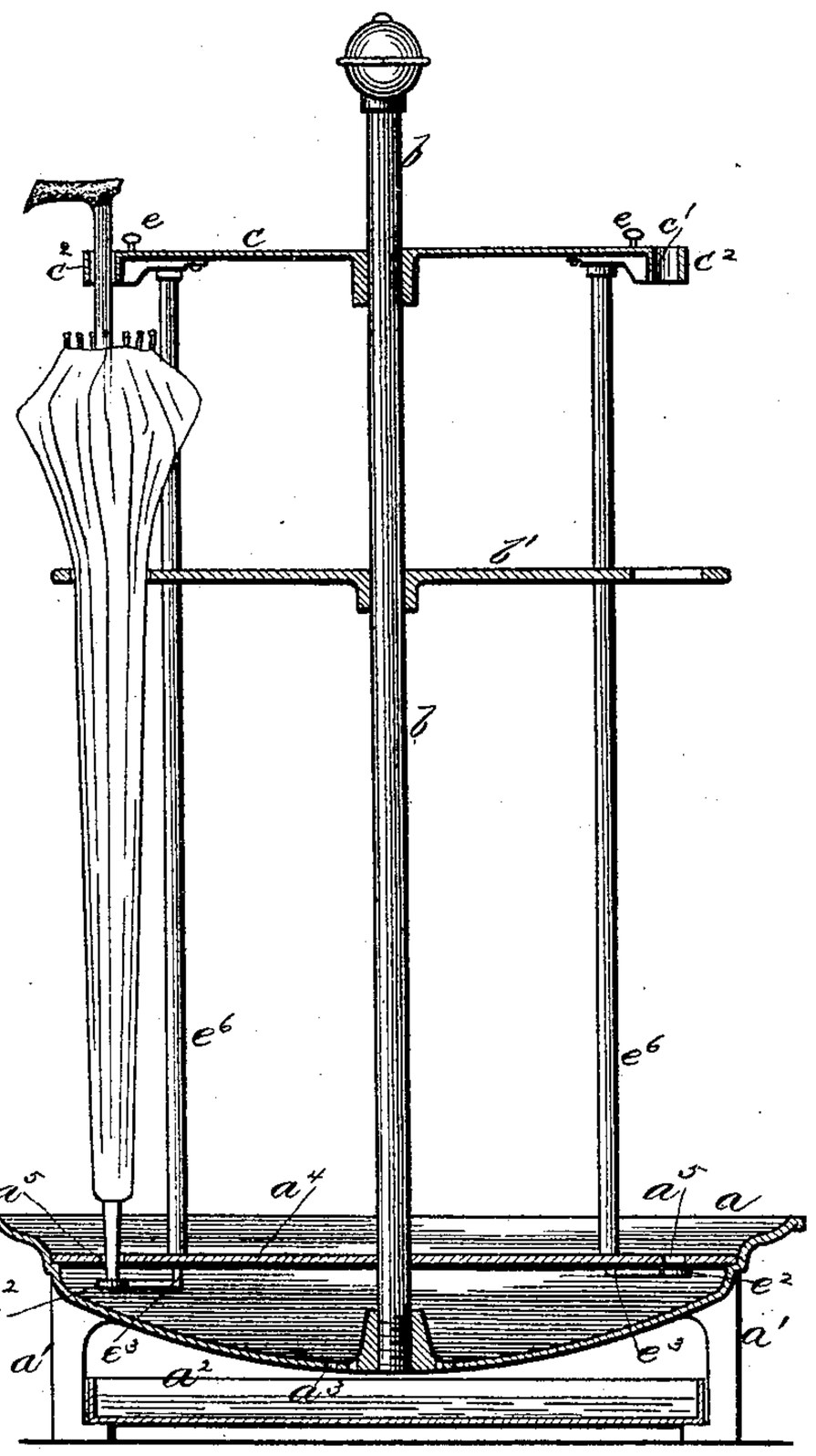

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Fig. 2.

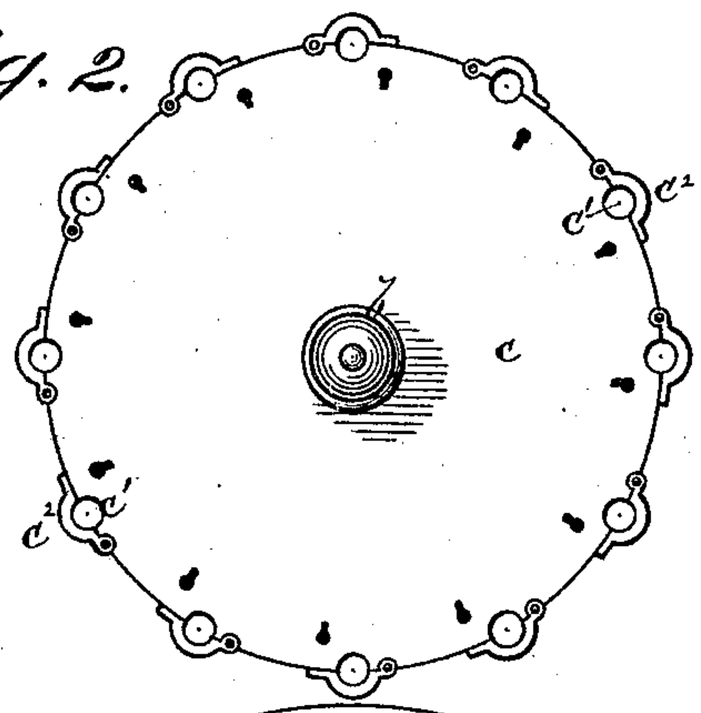

Fig. 3.

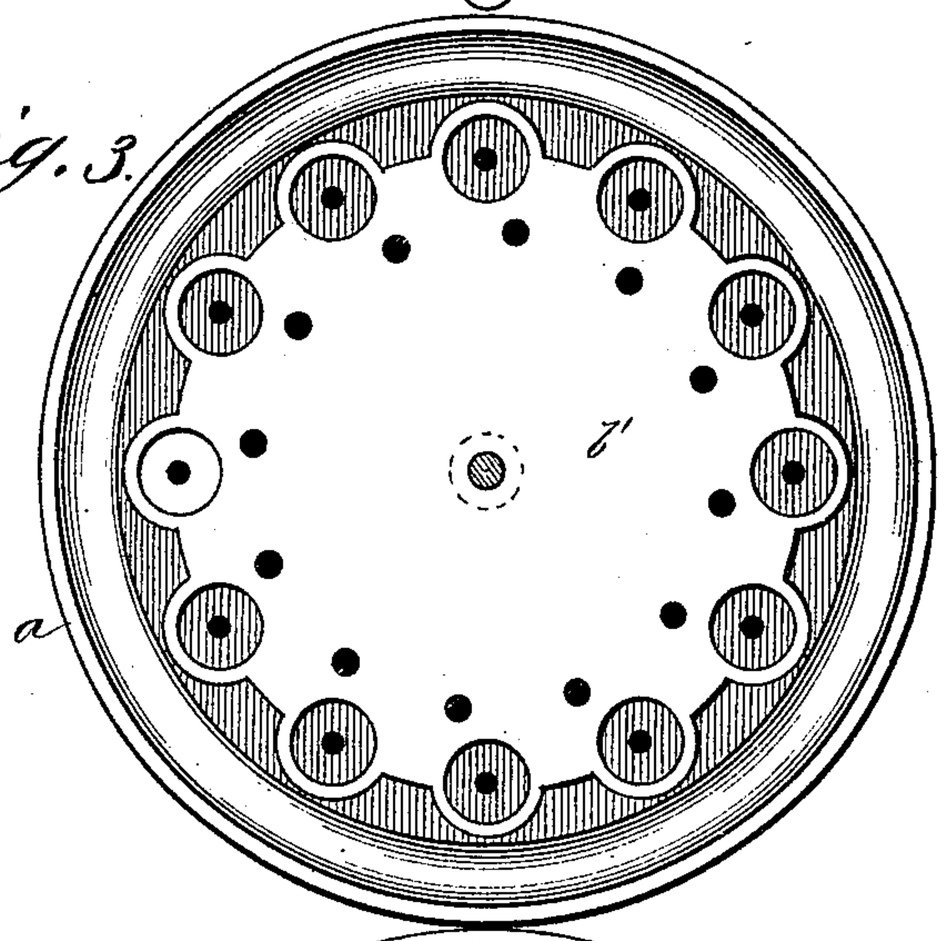

Fig. 4.

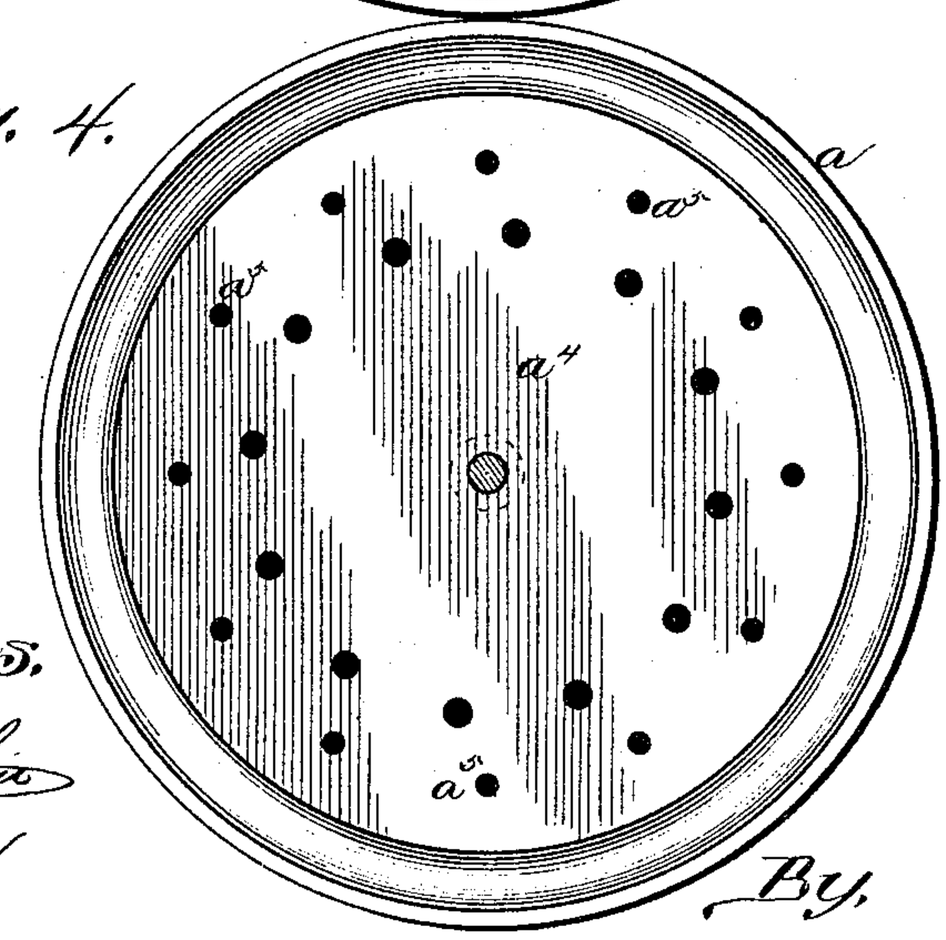

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Fig. 5.

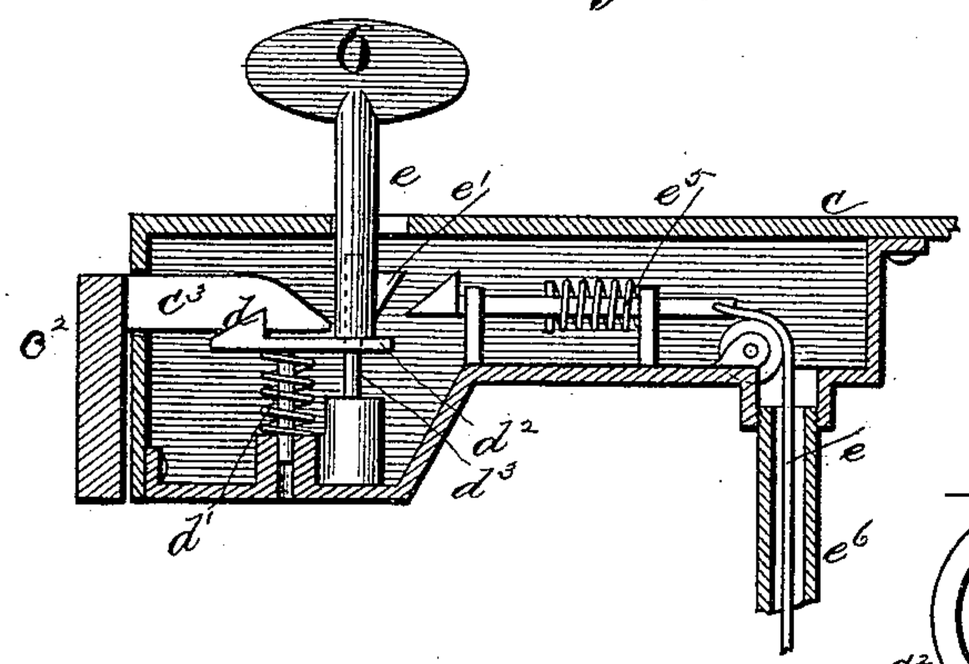

Fig. 6.

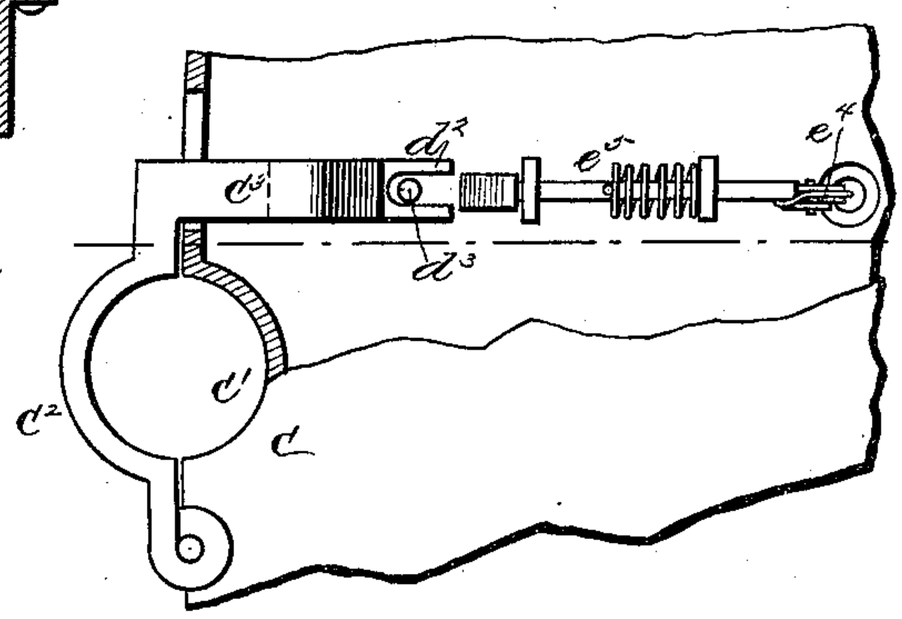

Fig. 7.

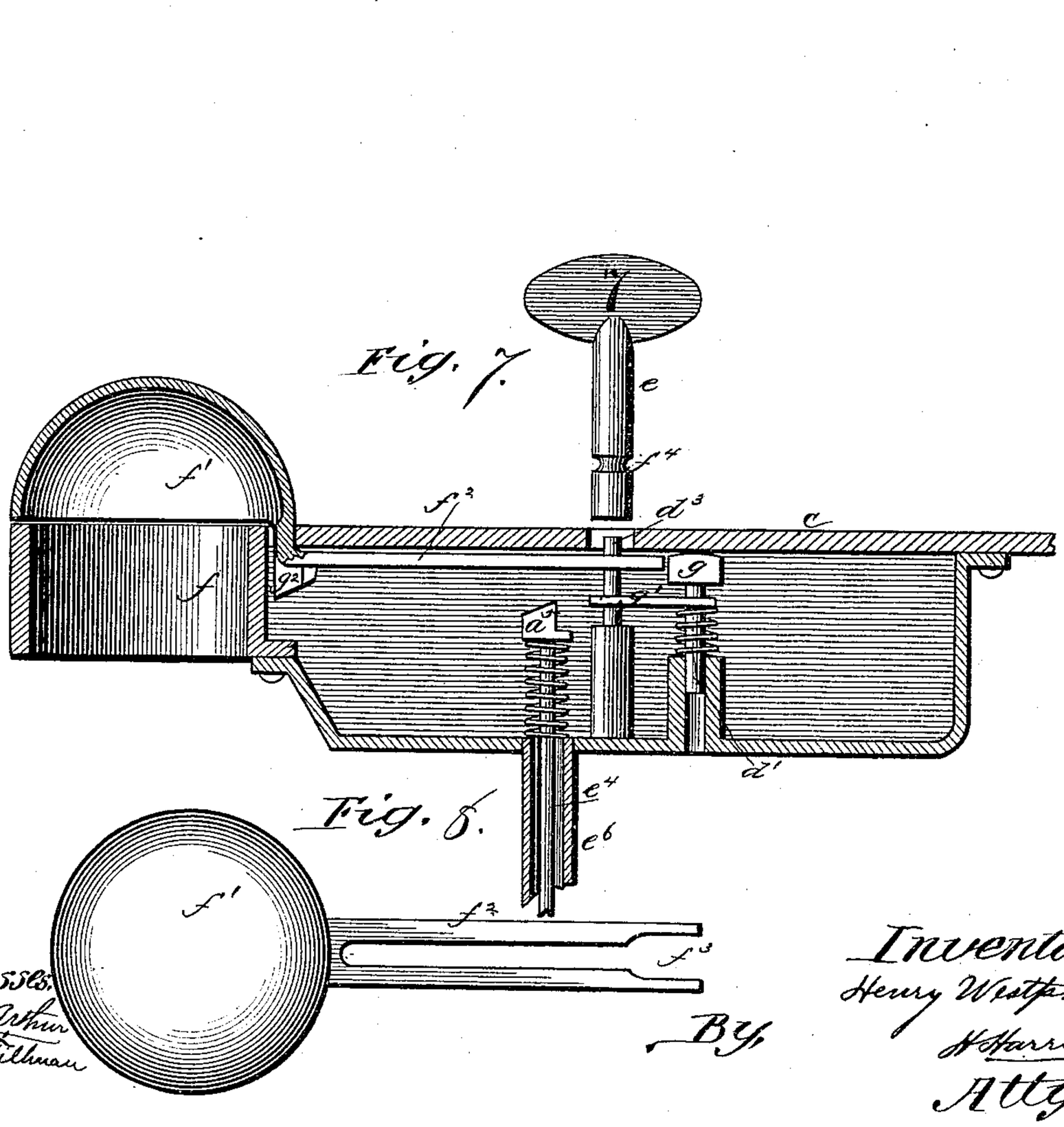

Fig. 8.

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UMBRELLA STAND.

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Fig. 9.

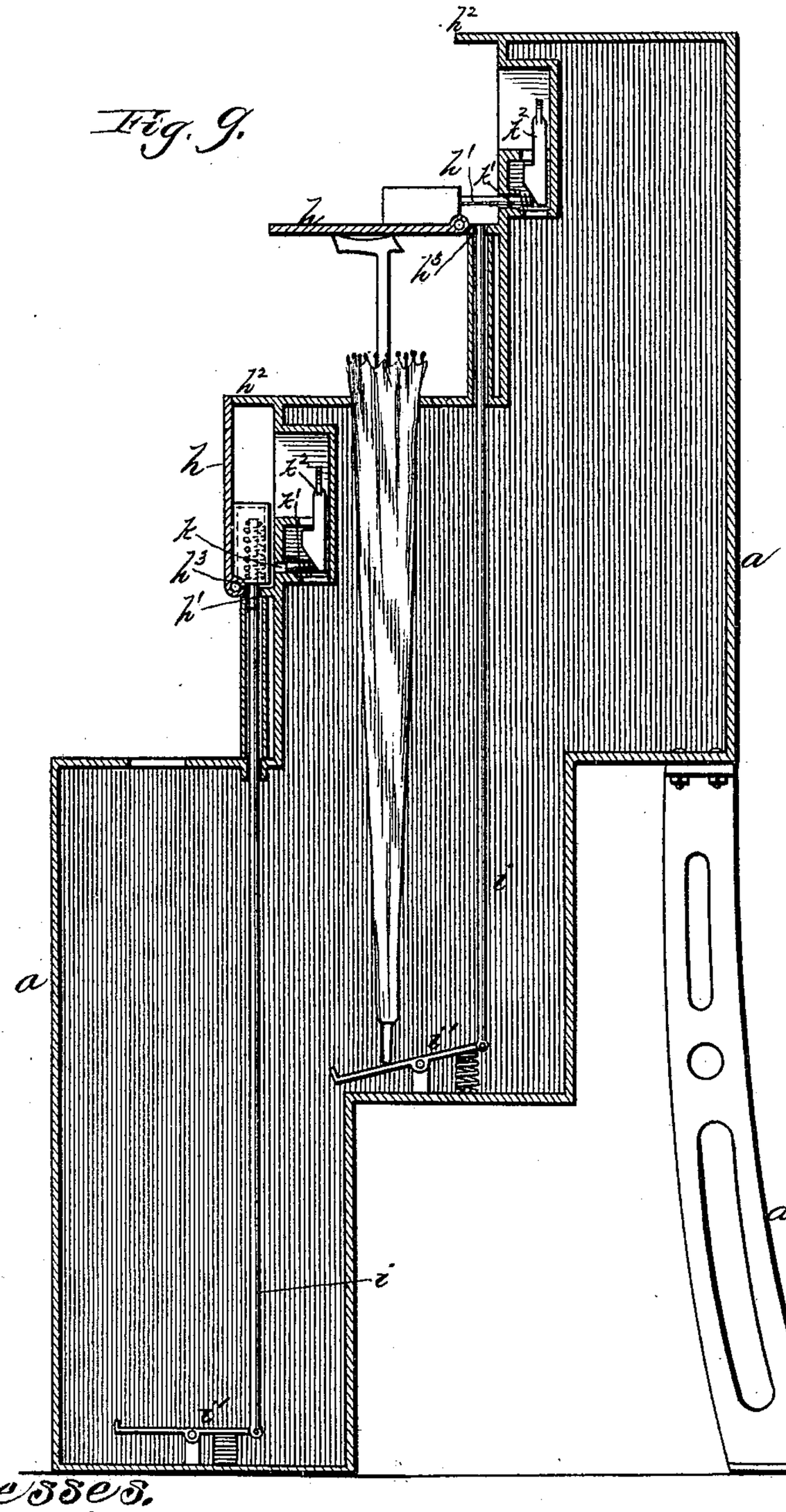
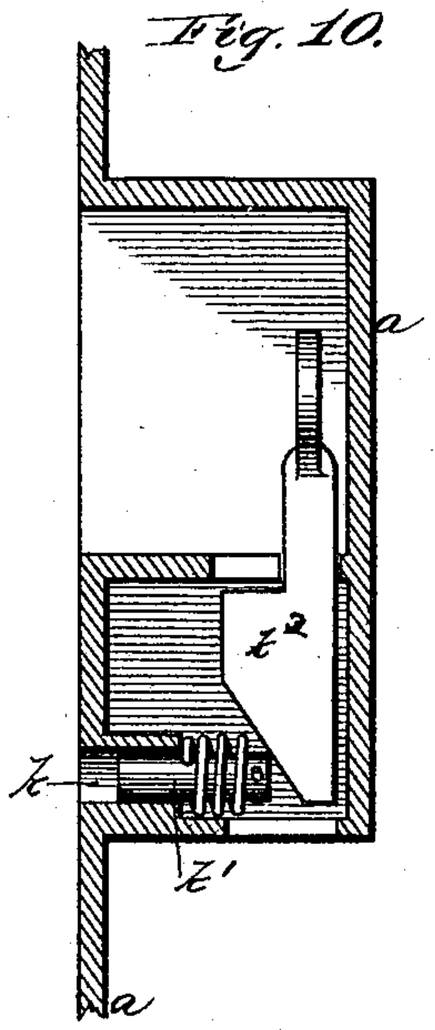


Fig. 10.



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UNITED STATES PATENT OFFICE.

HENRY WESTPHAL, OF CHICAGO, ILLINOIS.

UMBRELLA-STAND.

SPECIFICATION forming part of Letters Patent No. 370,113, dated September 20, 1887.

Application filed December 24, 1886. Serial No. 222,477. (No model.)

To all whom it may concern:

Be it known that I, HENRY WESTPHAL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Umbrella-Stands, of which the following is a specification, to wit:

This invention relates to an improvement in umbrella-racks; and it consists in certain peculiarities of the construction and arrangement of the same, substantially as will be hereinafter more fully set forth and claimed, whereby the umbrella and its key cannot both be removed at the same time.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a vertical section of one form of my device; Fig. 2, a view of the top plate; Fig. 3, a cross-section showing the middle plate; Fig. 4, a view of the bottom plate and foot of the stand; Fig. 5, a detail transverse section, and Fig. 6 a detail plan view, of the lock mechanism; Fig. 7, a sectional view of a modification of the lock; Fig. 8, a detail view of the cap used therewith; Fig. 9, a vertical section of a different style of stand, and Fig. 10 a detail view of the lock used with the same.

a represents the base of my stand, of any desired form and size, and is herein shown as a circular casting of dish shape set upon short legs or feet *a'*, on which rests a removable pan, a^2, to catch the drip, which passes into it from perforations a^3 in the bottom of the stand. Upon the dish-like bottom is secured (preferably so as to be readily removed) a covering-plate, a^4, through which, at proper intervals, is formed a series of holes, a^5, to permit the passage of the points of the umbrellas to be held therein.

From the center of the base rises a standard, *b*, to a suitable height, and upon this is secured at the proper point a plate, *b'*, having a series of large openings corresponding in location and number with the holes a^5 in the covering-plate a^4, but of sufficient size to admit the folds of the umbrella and gather them loosely about the handle or stick. At or near the upper end of the standard is secured another plate, *c*, of smaller size, and formed on its outer edge with a series of depressions or recesses, *c'*, to receive the umbrella-handles, and of just the proper size to closely hold them in place. Each of these recesses is provided with a hinged hasp, c^2, formed with a projecting point, c^3, which, when the hasp is closed, enters a slot or opening in the flanged side of the plate *c*, and is notched to engage a lock-bolt, which may be of any suitable form and operated in any suitable way; but one form is clearly shown in Figs. 5 and 6.

To make a more sightly article and place the locks where they are out of the way, I secure them beneath the plate *c*, and in this case each consists of a notched or hook-shaped catch *d*, seated upon a spring, *d'*, and provided with a guide-pin sliding in a hollow boss upon the lock-frame. The hook end of this catch is adapted to engage and hold the notched end of the hasp when it is closed, as in Fig. 5, and the other end of the catch is extended rearward and forked, as at d^2, to embrace a pin or stud, d^3, on which the hollow key *e* is placed, passing down through an opening of suitable size and shape in the plate *c*. This key is of any form, but preferably of such form as to receive a number corresponding to the number of the lock and umbrella-receptacle to which it belongs. The key is also upon one side provided with a projection, *e'*, as in the drawings.

In the space between the covering-plate a^4 and the bottom of the stand I place a series of small plates or arms, e^2, which are each secured upon or connected to a rod, e^3, which extends upward through the frame to the lock-case, where it is, by a flexible connection, e^4, secured to a spring-bolt, e^5. To prevent any person from gaining access to this rod, I prefer to inclose it in a protecting-tube, e^6, as shown.

It will be at once seen that when the stand is not occupied the key is in place and secured by the bolt e^5 springing over the projection *e'* of the key and locking it in, so that it cannot be removed. At the same time the key has by striking the forked end of the latch pressed the latter down. When an umbrella is placed in the holder and the hasp closed on its handle, either the weight of the umbrella or a pressure upon it presses down the plate or arm e^2, which

is in the bottom casting, and by its intermediate connections draws back the bolt a^5 to release the key, which at once permits the catch d to spring into engagement with the hasp, as in Fig. 5, and locks the umbrella fast. The key is then removed and taken by the depositor as a check to identify his property. The umbrella cannot be removed except with its particular key, and no mistake can occur by persons in a hurry. When the owner returns, the key is inserted, and when pressed down it forces back the spring-catch and releases the hasp, which is at once opened and the umbrella removed; and it will be particularly observed that the locking-bolt e^5 at once springs over the key projection and locks the latter fast, so it cannot be removed, to become lost or stolen, thus alternately securing the key or the umbrella, both of which cannot be removed at the same time. The tripping device for the key being located at the bottom of the stand and inclosed, it cannot be operated except by the deposit of an umbrella. It will be obvious that this effect can be obtained with many variations of the form of lock without departing from the spirit of my invention. Thus in Figs. 7 and 8 I have shown another form, in which the upper flanged plate, c, instead of being fitted with hasps at its edge, is formed with holes f, of sufficient size to admit the body of the umbrella, and is provided with a cap, f', which slides over these holes to cover them and their contents. This slide is formed with a forked or slotted shank, f^2, which embraces the key-pin d^3, and this slot is enlarged at its rear end, as at f^3, to permit the passage of the body of the key, which in this case is provided with a groove, f^4. A spring-catch, g, is seated upon one side of the key-pin, and provided with a forked arm, g', to embrace said pin, so that the key will force the catch down when it is inserted. The spring-bolt e^5 is connected, as before, with the bottom of the stand, and the cap or its shank fitted with a lug, g^2, with which this bolt engages. From this it will be seen that the catch g springs up behind the shank of the cap to lock it when closed, and the enlarged slot f^3 allows the key to be removed. When the key is again inserted and the catch pressed down, the slide is pushed back to uncover the umbrella, and at the same time its slotted shank embraces the grooved key and prevents its being drawn out, while the spring-bolt e^5 engages and locks the slide at its rearmost position, and it cannot be moved again to release the key till an umbrella is deposited. This is different in construction, but the same in principle as that first described.

A very simple modification is shown in Figs. 9 and 10, where I have represented a cross-section of a wall-stand arranged in tiers, each tier containing as many receptacles as desired. In this I have placed over each hole or receptacle a hinged lid, h, provided on its upper or rear side with a spring-bolt, h'. This lid or cover, when turned down over the end of the umbrella, effectually prevents its removal, and when lifted lies against a projecting lip, h^2, on the next higher tier. The bracket upon which the lid is hinged is provided with a hole, h^3, into which the spring-bolt shoots when the cover is lifted and locks it in place. A rod, i, suitably inclosed to prevent tampering, lies just below this hole, in a position to be projected into it, and extends down through the stand, and is connected to one end of a lever-plate, i', upon the other end of which the point of the umbrella rests when deposited. Pressure upon the umbrella tips the lever-plate and projects the rod i, which forces back the spring-bolt, leaving the lid free to fall over the umbrella, when its spring-bolt slips into a second hole, k, in the face of the stand or main frame, and thus locks the lid closed. A small spring-actuated lock-bolt, k', seated in line with this hole, serves to force the spring locking-bolt back from this position upon the insertion of the bevel-faced key k^2, as in Fig. 10, and the lid, being then lifted, is locked up and at the same time incloses the key, where it cannot be got at for removal till the umbrella is deposited.

From the foregoing it will be at once seen that I do not desire to confine myself to any particular size, form, or method of construction of either the stand or its lock, so that the principles of my device are preserved, as herein described. I am aware that simple locks have heretofore been placed upon umbrella-stands; but I do not know of any such device in which either the key or the umbrella was securely locked, and neither could be removed without first inserting the other, thus preventing all danger of the loss or stealing of keys, and thus rendering the stand useless. It is obvious that with any given form of lock the keys are not only numbered, but are each of a different size and shape, an infinite variety of such devices being well known in mechanics.

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

1. In an umbrella-stand, the combination, with the stand, of a lock for securing the umbrella and the key alternately, each when the other is removed, substantially as and for the purpose set forth.

2. The combination, with an umbrella-stand provided with an opening or receptacle for the umbrella, of a lock mechanism and a key for the same, said mechanism being provided with a catch to secure the key, and also one to secure the umbrella, operated alternately each by the insertion of the other article, substantially as and for the purpose set forth.

3. The combination, with an umbrella-receptacle provided with a lock acting alternately to secure the key or the umbrella, of a connection from the lock to the umbrella-rest at the bottom of the stand, whereby the inser-

tion of the umbrella causes the release of the key, substantially as and for the purpose set forth.

4. The combination, with an umbrella-receptacle provided with a movable plate or arm to receive the point of the umbrella, of a lock for securing the umbrella, a lock for securing the key, and a connection between the latter and the movable arm, whereby the insertion of the umbrella causes a movement of the plate or arm to release the key, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY WESTPHAL.

Witnesses:
W. C. McARTHUR,
W. S. McARTHUR.