

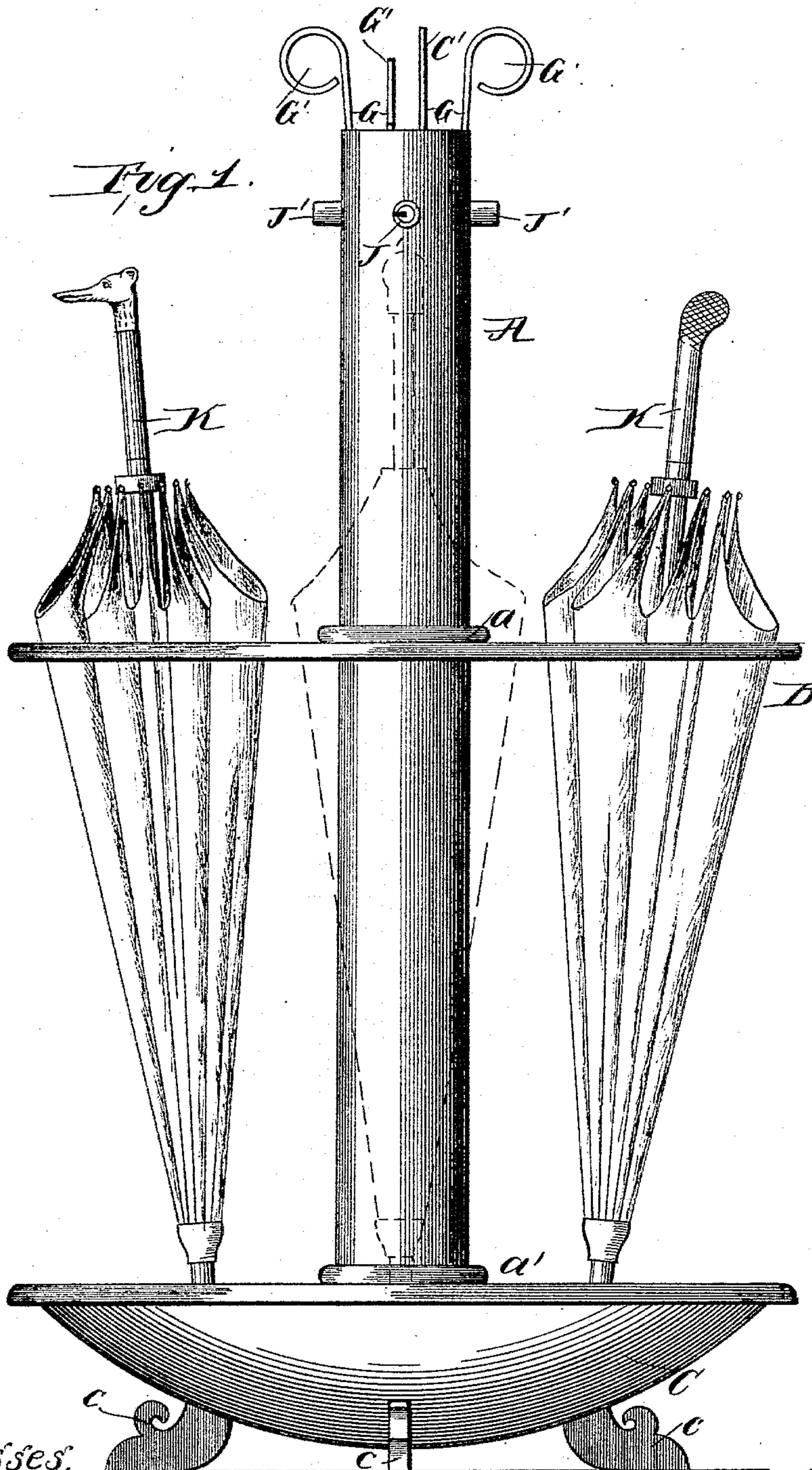
(No Model.)

2 Sheets—Sheet 1.

H. S. PARK.
UMBRELLA STAND.

No. 490,305.

Patented Jan. 24, 1893.



Witnesses.

Wm. M. Rheem.
R. N. Kirtle

Inventor
H. S. Park

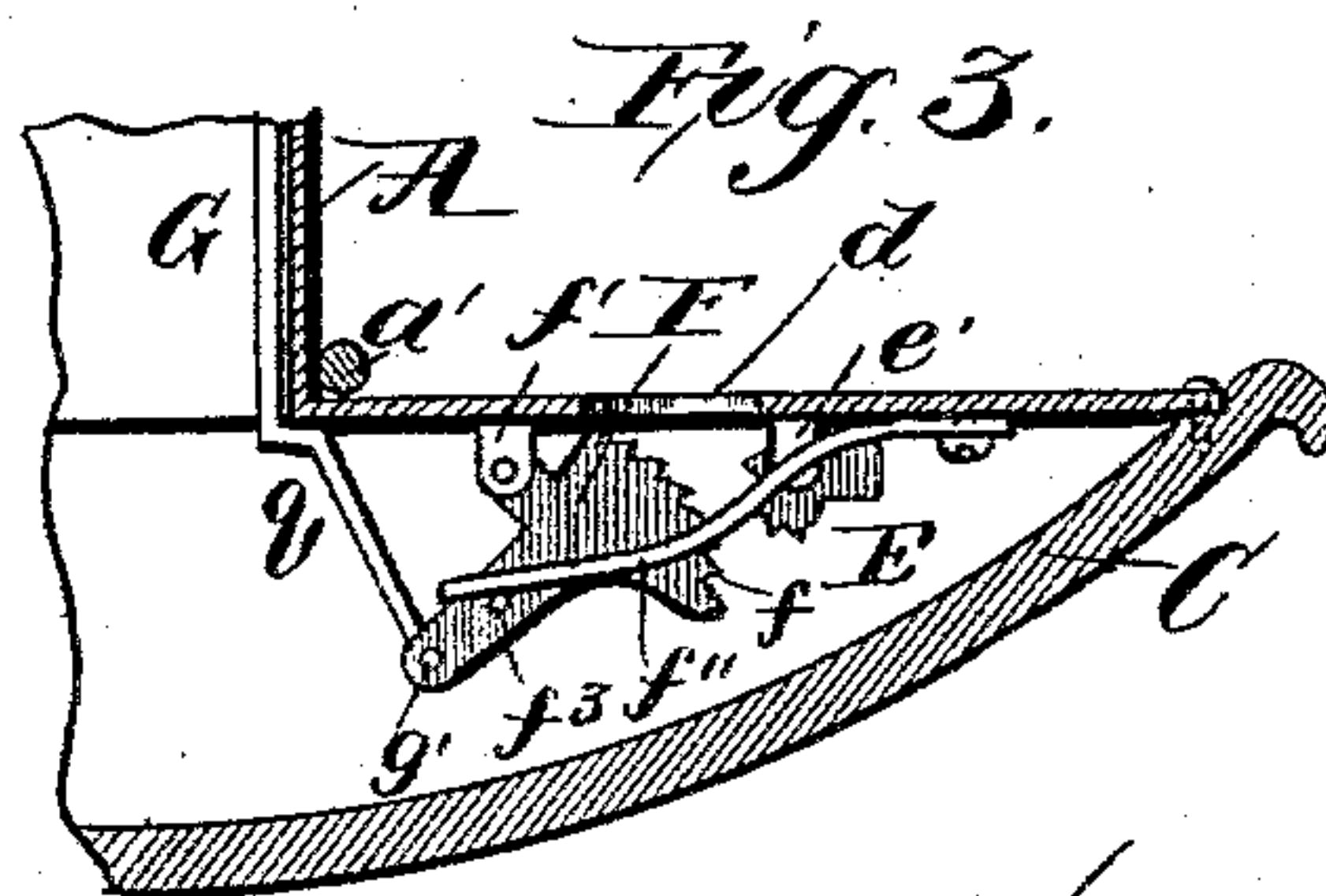
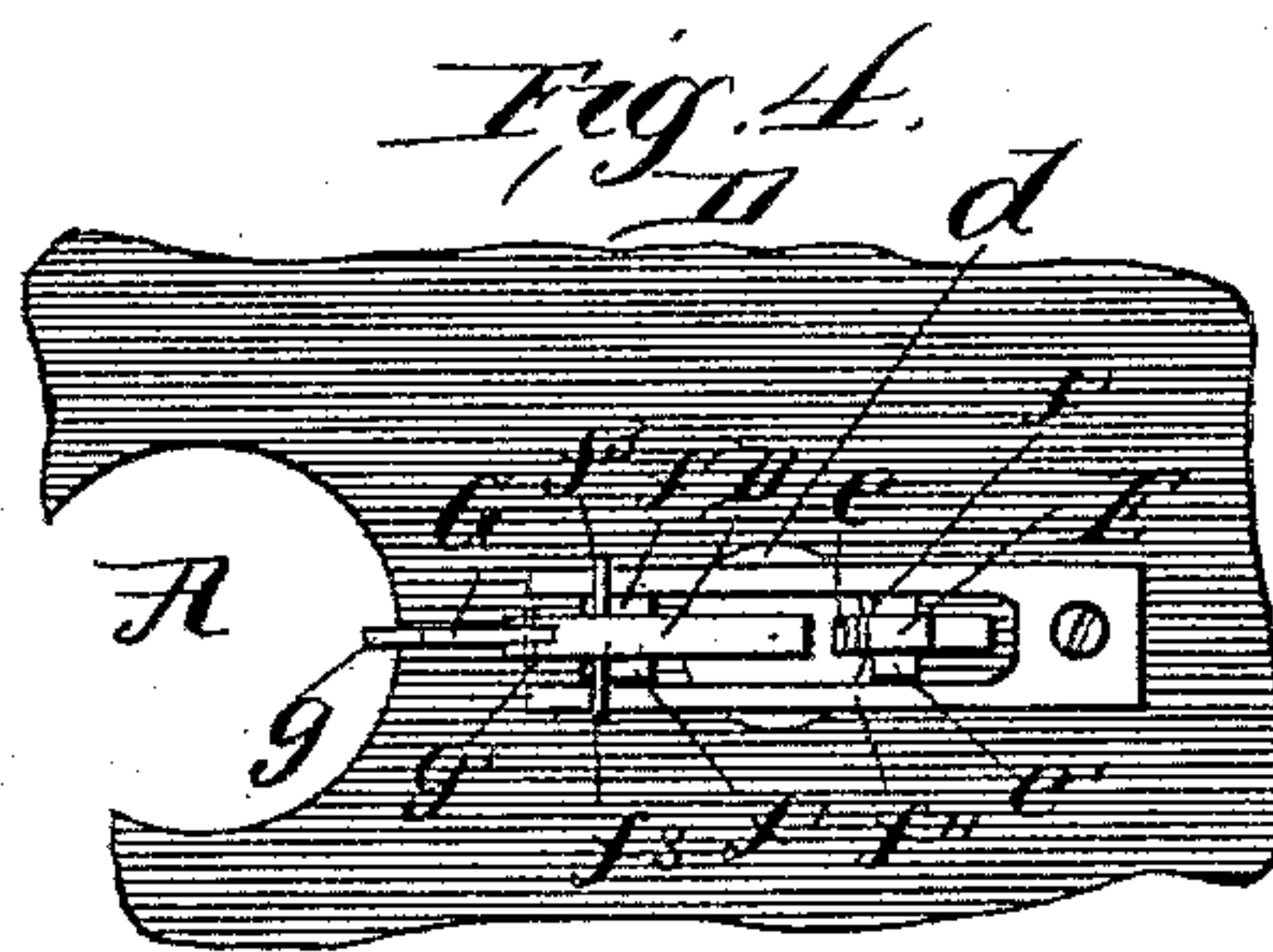
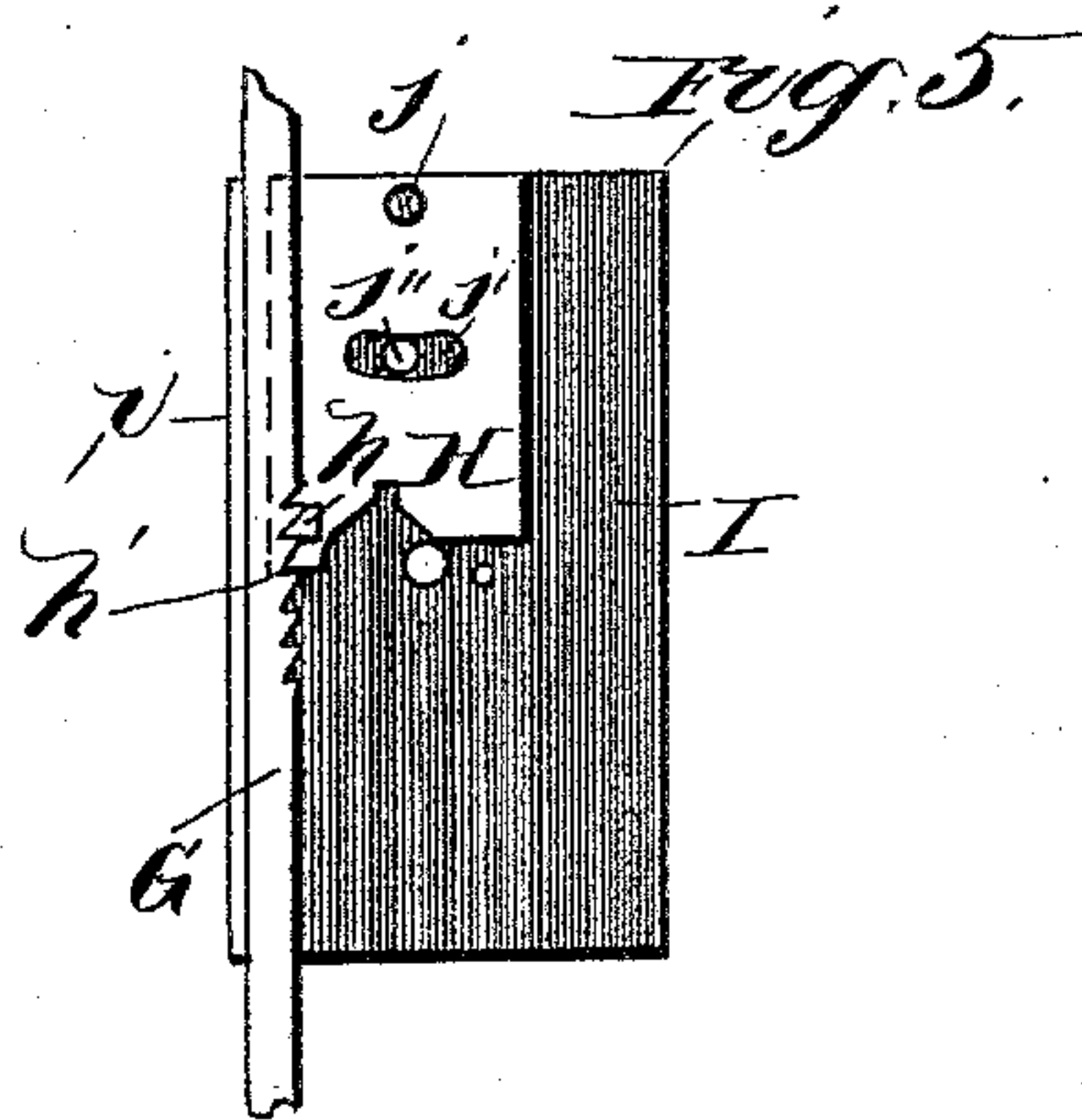
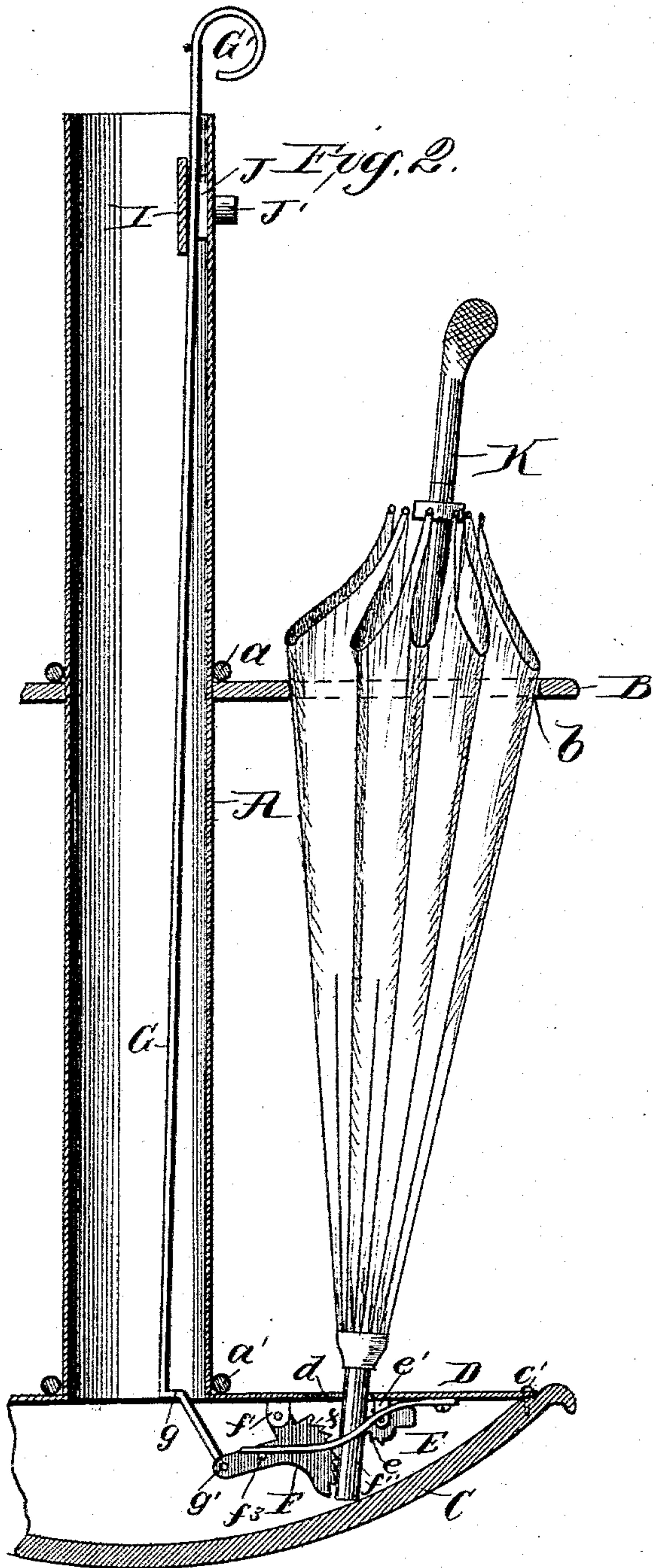
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2 Sheets—Sheet 2.

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 R. U. Link

Inventor:
Harry S. Park

UNITED STATES PATENT OFFICE.

HARVEY S. PARK, OF CHICAGO, ILLINOIS.

UMBRELLA-STAND.

SPECIFICATION forming part of Letters Patent No. 490,305, dated January 24, 1893.

Application filed August 3, 1891. Serial No. 401,513. (No model.)

To all whom it may concern:

Be it known that I, HARVEY S. PARK, 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; and I do hereby declare that the following is a clear and exact description of the invention, which it pertains to make and use the same, reference being had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is an elevation showing in full lines two umbrellas in the stand, and in dotted lines another umbrella, one of the places for umbrellas being vacant. Fig. 2 is a sectional elevation showing an umbrella in the stand and locked therein. Fig. 3 is a detail in section, showing the jaws for holding the umbrella when in the stand in their normal position. Fig. 4 is a detail showing a top or plan view of the jaws. Fig. 5 is a detail showing a side elevation of the swinging plate, and catch for locking the releasing rod of the jaws.

The object of this invention is to construct a stand for umbrellas, and have the umbrellas, when placed in the stand, firmly held therein against withdrawal, except by the owner of the umbrella; and its nature consists in providing a central standard and upper receiving plate, a lower receiving plate, and a base with jaws to grasp the tip of an umbrella in case of an attempt to withdraw the umbrella from the receiving plate; in providing jaws one of which is turned by the act of inserting the umbrella tip in the hole of the lower receiving plate for the admission of the umbrella tip, and a locking and releasing rod for the movable jaw, which rod is brought into co-acting relation with a locking catch when moved by the opening of the jaw and inserting the umbrella tip, and in the several parts and combinations of parts hereinafter described and pointed out in the claims as new.

In the drawings, A represents a tube forming the central standard for the umbrella stand, which tube can be cylindrical in cross section, or of other form.

B is the upper receiving plate for the umbrella, secured to the central standard A in any suit-

able manner. As shown, the plate is attached to the standard by a wire *a*, brazed or otherwise firmly secured to the standard and plate, but this plate can be secured in any suitable firm manner, and this plate B is provided with a series of openings *b*, the number of openings corresponding to the number of umbrellas which the stand is to hold, and these openings can be arranged in a single circle or in two or more circles around the plate or otherwise, so as to give the required number of openings.

C is the base of the stand, which can be of a concave or dish shape, as shown, or of any other suitable shape, and this base is supported upon suitable legs *c*, or otherwise, so as to stand firm on the floor or other support, and by having a concave or dish shaped face, a receptacle is formed for the drippings from the umbrellas.

D is the lower receiving plate, attached to the lower end of the standard A by a wire *a'*, brazed or otherwise firmly secured to the standard and plate D so as to unite the two firmly together, or the plate D can be secured to the standard A in any other firm manner, and the outer edge of the plate D can be secured to the base C by screws *c'* or otherwise, and this plate D has a series of holes *d*, for the insertion of umbrella tips, the number of holes *d* corresponding to the number of holes *b*, and a hole *d* is in line with a hole *b*, as shown in Fig. 2.

E is a balanced jaw or dog pivotally mounted in ears *e'*, on the underside of the face plate D, and having a serrated or toothed acting face or edge *e*.

F is a swinging jaw or dog, having a serrated or toothed acting face or edge *f*, and pivotally mounted between the ears *f'* on the underside of the plate D, and this jaw is forced inward or toward the jaw E by a spring *f''*, the attached end of which is secured to the under face of the plate D by a screw or otherwise, and the free ends of which rest on pins *f³*, back of the pivotal point of the jaw or dog, the spring *f''* having, in the construction shown, two arms, one for each side of the jaw or dog F. A dog E and a dog F are located on the opposite side of each opening *d*, and the jaw or dog F is pivoted so that when in its normal condition the face *f* will be in line with the opening *d*, to

be engaged by the end of an umbrella tip when inserted, and turned down on its pivot.

G is a rod, having at its lower end a bend forming a straight face *g*, which, when the jaw or dog F is in its normal position, comes beneath the edge of the standard A and plate D, and forms a lock against raising the rod except by moving the jaw or dog; the rods G, correspond in number to the number of the openings in the receiving plates for the insertion of umbrellas, and a rod G is provided for each jaw or dog F, and is connected to its jaw or dog by a suitable pin or pivot *g'*, and each rod G extends above the upper end of the standard A, and is provided with a finger loop *G'*, in the construction shown, for lifting the rod when released from the engagement at the lower end, of the face *g*, but instead of a loop other suitable means can be provided at the upper end of each rod to be grasped for raising the rod, or the rod can be left without a handle and be grasped itself for raising purposes.

H is a swinging plate having thereon a tooth or catch *h*, which engages with one of a series of ratchet teeth *h'* on the edge of the bar G, a swinging plate with a catch *h* being provided for each bar G.

I is a supporting plate having a guide edge *i* for the bar G, and on which is pivotally mounted the swinging plate H, by a suitable pin or pivot *j*, and each swinging plate H is provided with a slot *j'*, the ends of which engage a pin *j''* projecting out from the plate I, so as to limit the swing of the plate H, and a supporting plate I is provided for each rod G and swinging plate H, and these plates I are firmly secured inside of the standard A at or near the top of such standard, and they can be arranged in the same plane or in different planes, according to the number of umbrellas to occupy the stand.

J is a lock, of the ordinary construction of a Deitz or a Sargent lock, of the class in which the key can only be removed when the bolt or tumbler is thrown, and cannot be removed when the bolt or tumbler is returned, and a lock J is attached to each plate I, in such relation to the edge *i* of such plate as to leave a channel between the edge *i* and the edge of the lock, for the passage of the rod G, and the tumbler is arranged by its throw to move the swinging plate H in or out for disengagement with the ratchet *h'*, and each lock has its key-hole guard *J'* projected through the standard A, as shown in Figs. 1 and 2.

K are the umbrellas.

The jaws or dogs E and F are mounted on the underside of the plate D in the ears *e'* and *f'*, to have a jaw or dog on the opposite side of each opening *d*; the springs *f''*, one for each dog F, are attached to the under side of the plate D, for their free ends to rest on the pins *f³* of the dogs F; a rod G is attached at its lower end to each dog F, and a plate I with the swinging plate H and lock J is placed in position for the passage of a rod G between

the edge *i* of the plate I and the edge of the lock, and secured firmly to the inside of the standard A with the upper end of the rod G in a channel therefor, formed by the edge *i* and the edge of the lock, the rod passing above the plate H; the notches or ratchet teeth *h'* are formed on the edge of each bar G in such relation to the movement of the bar through the jaw or dog F, as that when the bar G is raised by the forcing down of the jaw or dog F, a tooth *h'* will come into position to be engaged by the tooth *h*, when the plate H is swung inward by turning the lock, but these ratchet teeth *h'* will not be engaged by the tooth *h* when the bar or rod G is dropped, as shown in Fig. 3, as with the rod or bar in that position the plain face or edge of the bar G comes in line with the tooth *h* and prevents the plate H from being swung by the turning of the key, and as the key can only be removed, in the class of locks used, when the bolt is thrown, it follows that when the ratchet teeth *h'* can be engaged by the teeth *h*, the bolt or tumbler can be thrown, so that the key can be removed, but when the plain face of a bar G is in position to be engaged by the tooth *h*, the tumbler cannot be thrown, and the key cannot be removed.

The plate D, with the required number of jaws or dogs E and F mounted thereon, and with the rods G attached to the jaws or dogs F, one for each jaw or dog, and passing up through the channel therefor between the edge of the supporting plate I and the lock is secured to the base C, and the plate B is secured in position on the standard A to have the openings *b* line with the openings *d*, and when thus assembled the stand is ready for use.

In use, an umbrella is placed through an opening *b*, and its end entered through the opening *d*, and this end or tip of the umbrella strikes the face of the jaw or dog F, which is in the position shown in Fig. 3, and turns the dog down into the position shown in Fig. 2, and such turning down of the jaw or dog F, through its tail end rising, lifts the rod G, the first or initial movement of the jaw or dog carrying the locking face *g* from beneath the edge of the plate D around the standard A, and such raising or lifting of the rod G brings the ratchet teeth *h'* up into the position shown in Fig. 5, so that the key of the lock J can be turned swinging the plate H inward for the tooth *h* to engage the ratchet teeth *h'*, and lock the rod against further upward movement, and when so locked the key can be removed. The tip end of the umbrella passes down between the jaws or dogs E and F, and as the jaw E is balanced and the acting edge *e* is against the end or tip of the umbrella, and at the same time the acting edge *f* of the jaw or dog F is against the end or tip of the umbrella on the opposite side to the jaw E, and is free to turn on its pivot toward the end or tip of the umbrella, and is forced in this direction by the spring *f³*, it will be seen

that any attempt to withdraw the umbrella is effectually prevented, as with the first upward movement of the umbrella, the jaw E and the jaw F are both forced toward the umbrella end or tip and tightly clamp such end or tip between the jaws and prevent any withdrawal of the umbrella, as with the greater pull the stronger will be the clamp of the jaws or dogs on the end or tip. The spring of the rod G allows the jaw F to swing inward toward the tip or end of the umbrella, but as this rod is locked at its upper end by the engagement of the catch *h* with the ratchet teeth *h'*, the rod cannot descend nor can the rod be raised until the catch *h* is released from the ratchet teeth *h'*, and while the rod is locked or held against upward movement, the jaw F is maintained in position for forcing inward against the umbrella tip or end with any attempt to withdraw the umbrella. The jaw F is released from a clamping action in withdrawing the tip or end of the umbrella by releasing the catch *h* from the ratchet teeth *h'*, to do which the key is inserted in the lock and the lock turned to swing the plate H back or outward, and when the catch *h* is released the owner of the umbrella can take hold of the upper end of the rod G and raise such rod, which swings the acting face *f* of the jaw F away from the umbrella end or tip, leaving the umbrella free to be withdrawn from the openings *b* and *d*.

The parts, in their normal condition, before the insertion of an umbrella, are shown in Fig. 3, for the dog F and rod G, in which position the acting face of the dog F is in line with the opening *d*, and the catch *g* is engaged with the edge of the plate D around the tube A, and such catch *g* cannot be released by an upward pull at the upper end of the rod G, and can only be released by turning down the acting end of the dog F, and with the dog F and rod G in this position, the plain face of the rod above the ratchet teeth *h'* will be engaged by the catch *h*, and with this catch engaged the tumbler is thrown so that the key cannot be withdrawn, and with the release and upward movement of the rod G through the insertion of an umbrella tip, the ratchet *h'* comes into line with the catch *h*, so that the lock can be turned and the key withdrawn, and it will thus be seen that with the parts in their normal condition, the key cannot be withdrawn, but with the rod G raised the lock can be turned and the key

withdrawn and taken charge of by the owner of the inserted umbrella, and with the key withdrawn the rod G cannot be raised until the ratchet *h'* is released from the catch *h*, which can only be done by turning the lock, and until this rod G is raised the umbrella cannot be withdrawn, as with any upward movement to withdraw an umbrella, the dogs E and F act and firmly clamp the umbrella end or tip, so that the umbrella is firmly held and clamped against withdrawal by the action of the jaws or dogs E and F, and the jaw F can only be released from the clamping action by lifting the rod G.

What I claim as new and desire to secure by Letters Patent is:—

1. The combination, in an umbrella stand, of a central standard, an upper receiving plate, a lower receiving plate, clamping dogs below the lower receiving plate brought into action by attempted withdrawal of the umbrella to firmly grasp the umbrella tip or end, a releasing rod for one of the clamping jaws to withdraw the dog and release the umbrella, and a lock for the releasing rod, substantially as as and for the purposes specified.

2. The standard A, plate B, having the openings *b*, and plate D having the openings *d*, in combination with the dogs E and dogs F on opposite sides of the openings *d*, and each having an acting face engaging an umbrella end or tip by attempted withdrawal of the umbrella, releasing rods G, each having a ratchet *h'*, and swinging plates H, each having a tooth *h*, substantially as and for the purposes specified.

3. The standard A, plate B, having openings *b*, and plate D, having openings *d*, in combination with the dogs E and dogs F on opposite sides of the opening *d*, and each having an acting face brought into engagement with an inserted umbrella tip or end by attempted withdrawal of the umbrella, releasing rods G, for the dogs F, each rod having ratchet teeth *h'*, swinging plates H, each having a catch *h*, and a lock for actuating the swinging plates, constructed to permit the withdrawal of the key with the engagement of the catch *h*, and prevent the withdrawal of the key when the lock is not turned, substantially as specified.

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Witnesses:

R. N. KIRK,
O. W. BOND.