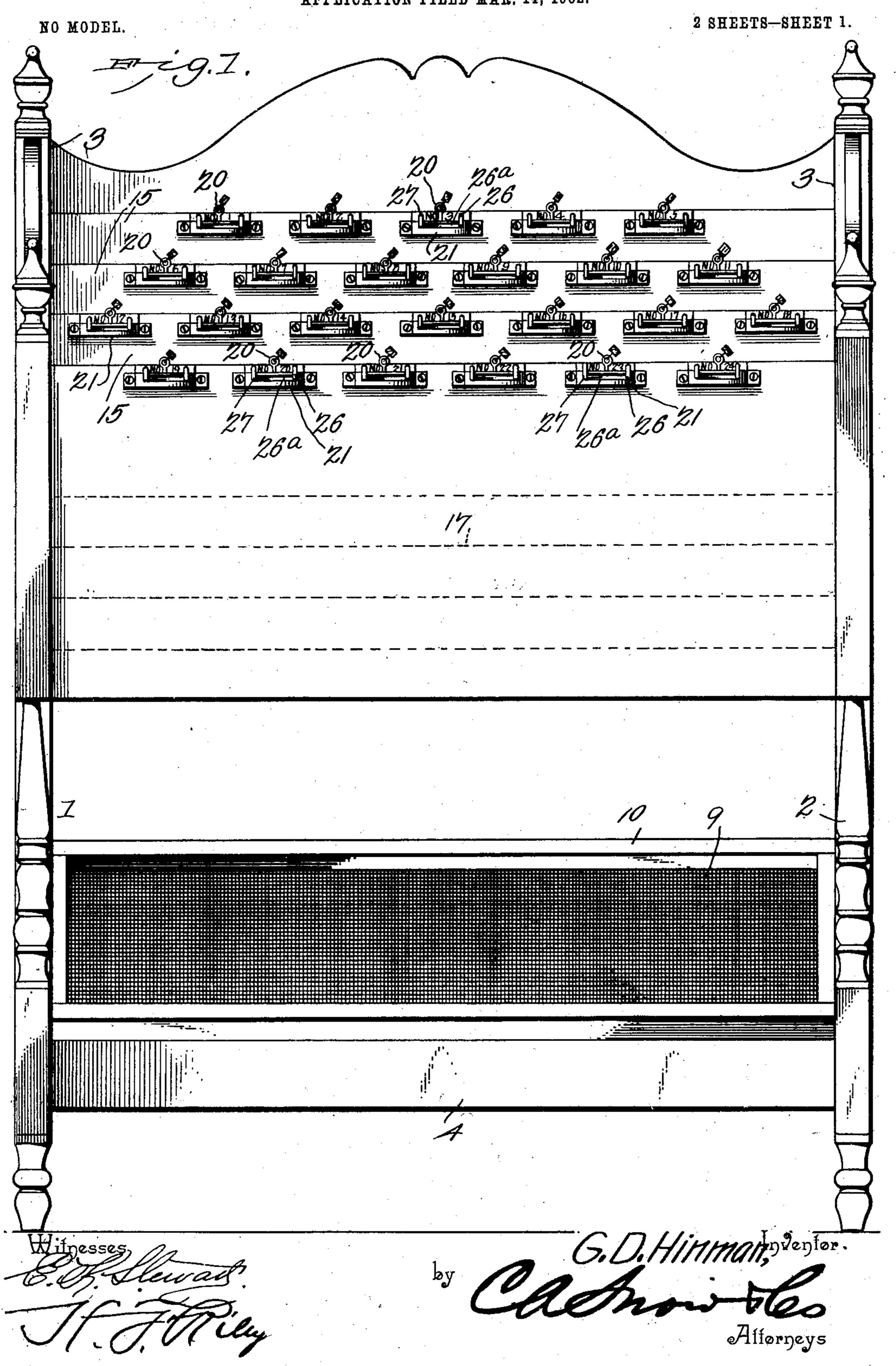
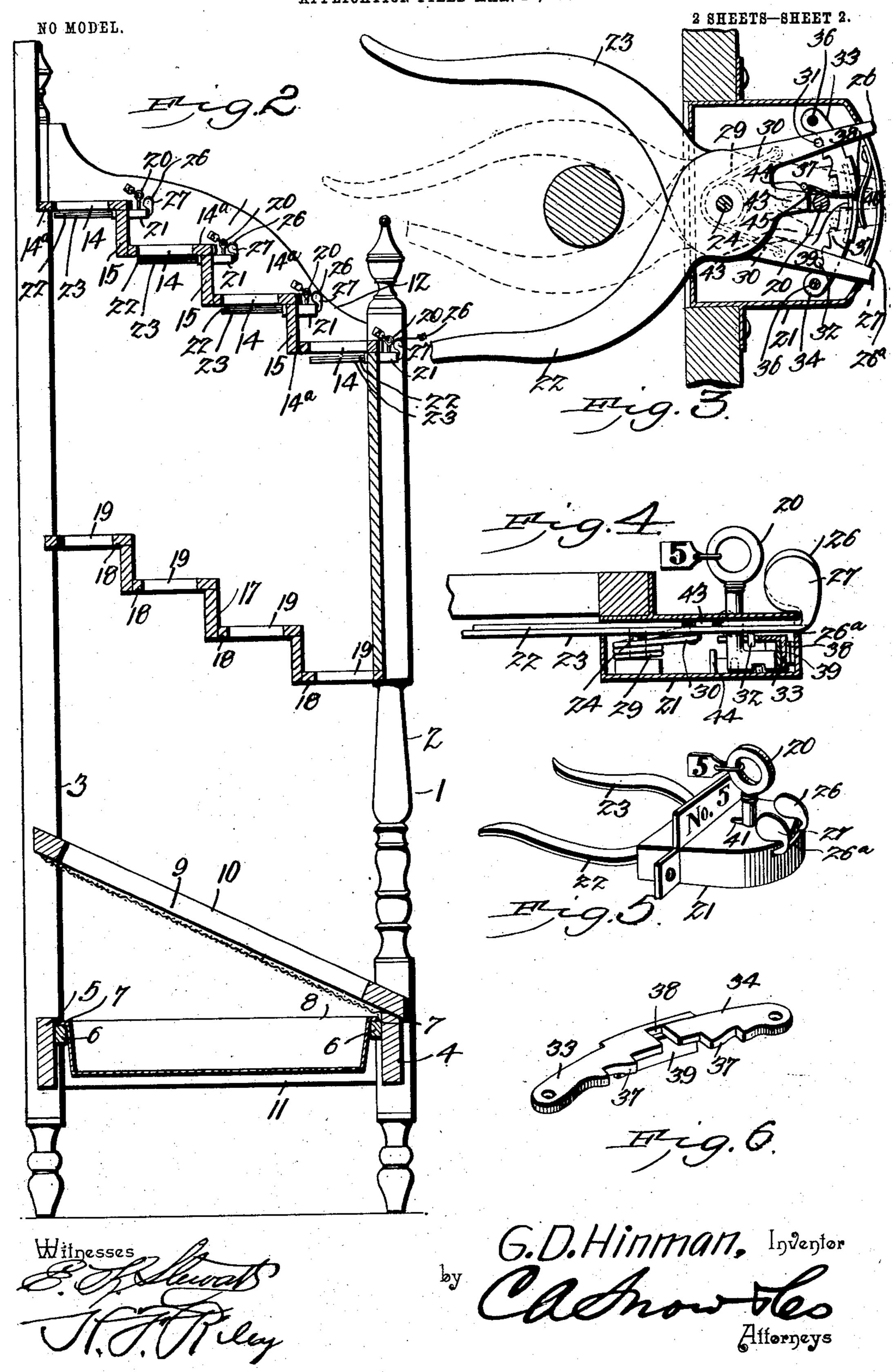
G. D. HINMAN. UMBRELLA STAND. APPLICATION FILED MAR. 14, 1902.



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umbrellas.

United States Patent Office.

GEORGE D. HINMAN, OF BINGHAMTON, NEW YORK.

UMBRELLA-STAND.

SPECIFICATION forming part of Letters Patent No. 733,963, dated July 21, 1903.

Application filed March 14, 1902. Serial No. 98,241. (No model.)

To all whom it may concern:

Be it known that I, George D. Hinman, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented a new and useful Umbrella-Stand, of which the following is a specification.

The invention relates to improvements in umbrella-stands.

improve the construction of umbrella-stands and to provide a simple and comparatively inexpensive one in which the umbrella will be compactly arranged and which will be capable of accommodating a large number of

A further object of the invention is to provide an umbrella-stand of this character having a locking device which will be adapted to operate as a check for an umbrella, whereby the rack is adapted to be left unattended.

Another object of the invention is to provide a locking device which will prevent the removal of its key when the umbrella-jaws or engaging members are open, whereby the keys will be prevented from accidentally being carried away after the umbrellas have been unlocked.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a front elevation of an umbrella-stand constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is
an enlarged horizontal sectional view illustrating the construction of the locking mechanism. Fig. 4 is an enlarged vertical sectional view of the same. Fig. 5 is a perspective view of one of the locking devices. Fig.
6 is a detail perspective view illustrating the
construction of the ratchet-tumblers.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an umbrella-stand designed to be suitably ornamented and provided at its 50 corners with front and rear uprights or supports 2 and 3, which form uprights for the

stand. The uprights are connected by suitable horizontal bars or pieces 4 and 5, arranged at the back of the frame of the stand, at the bottom thereof, as indicated in Fig. 55 1 of the drawings. Secured to the front and rear bars are cleats 6, arranged at the inner faces of the said bars 4 and 5 and receiving horizontal flanges 7 of a drip-pan 8, which is designed to be provided with suitable means 60 for draining it. An inclined screen 9 is arranged above the drip-pan and is preferably mounted on or secured to a frame 10, composed of side and end bars located at the upper face of the screen and suitably secured 65 to the front and rear posts or uprights.

The lower portion of the frame of the umbrella-stand is designed to be provided with suitable side pieces 11, and the upper portion of the frame has ornamental side pieces 70 12. The top 13 of the frame is provided with tiers of openings 14 for umbrellas, and these openings are formed in horizontal bars arranged at different elevations and connected by vertically-disposed bars 15, forming the 75 risers for the step-like arrangement of the horizontal receiving-bars 14^a. Any number of tiers or rows of umbrella-receiving openings may be provided to produce an umbrella-stand of the desired capacity, and the 80 openings of one row are arranged opposite the intervals between the openings of the adjacent row or rows to facilitate the introduction of umbrellas into the stand and to enable the locking mechanism hereinafter described 85 to be readily manipulated. The umbrellastand is also provided below the top with an umbrella support and guide 17, consisting of a step-like structure similar to the top of the umbrella-stand and composed of horizontal 90 bars 18, arranged at different elevations and provided with openings 19, registering with the openings of the top of the umbrella-stand and adapted to receive the umbrellas, whereby the latter are maintained in a vertical po- 95 sition and are prevented from slipping downward on the inclined screen or support 9. The lower step-like guide or support greatly facilitates the introduction of the umbrellas into the stand in a proper position, and it will roo prevent one umbrella from being torn or otherwise injured by the introduction of another umbrella, and the step-like structure will enable the proper lower hole for the um-

brella to be quickly found.

The umbrellas are designed to be secured 5 or locked in the stand, and each opening of the top 13 is designed to be provided with a suitable number or other character corresponding to the number or character of a key 20 of a locking device, whereby the key will to operate as a check for an umbrella. By this arrangement the umbrella-stand may be left unattended; but, if desired, the stand may be used without the locking devices. Each locking device consists of a pair of curved 15 jaws 22 and 23, pivoted at their inner terminals by a pin 24 or other suitable fastening device in a casing 21 and provided with outwardly-projecting arms or handles 26 and 27, having exteriorly-arranged grip portions 20 adapted to be simultaneously grasped by the operator and pressed together to cause the inwardly-extending jaws to clamp an umbrella, as indicated in dotted lines in Fig. 3 of the drawings. The casing, which is approximately 25 rectangular, has a curved or bowed front and is designed to be mounted at the front of the umbrella-stand and at the tops of the risers 15, as illustrated in Fig. 1 of the drawings, and is provided at its front or outer edge with a 30 slot or opening 26a to permit the outwardlyextending arms or handles to be operated. The inner or rear wall of the casing 21 is provided with a slot or opening for the jaws 22 and 23. The jaws 22 and 23 are provided at 35 their inner ends with circular enlargements, which are perforated for the reception of the pivot 24, and the latter also receives coils of a spring 29, having divergent arms or sides 30, which are suitably secured at their outer ends 40 to the arms or handles 26 and 27, whereby the jaws are automatically open to release an umbrella, when they are free to move. The arms or handles 26 and 27 are provided with depending pins or projections 31 and 32, 45 which when the jaws are closed on an umbrella, as indicated in dotted lines in Fig. 2 of the drawings, are automatically engaged by ratchet bars or tumblers 33 and 34. These ratchet bars or tumblers, which are pivoted 50 at their outer ends by pins or other suitable fastening devices 36 to the sides thereof, are curved and are arranged adjacent to the curved front of the casing and are provided at their inner or rear edges with teeth 37, 55 shouldered at their inner ends and adapted to permit the pins to pass readily over them when the arms or handles are compressed for closing the jaws and capable of securely locking the handles or arms against outward 60 movement, whereby the jaws are firmly locked in their closed position. The inner ends of the body portions of the ratchet bars or tumblers terminate short of each other, and the said ratchet bars or tumblers, 65 which are arranged horizontally adjacent to

the plane of the front slot or opening 26a, are

located beneath the arms or handles and are provided with depending overlapping flanges 38 and 39. The outer flange 38 is engaged by a spring 40, secured to one end of the 7c front wall or easing and having its outer end free, as clearly shown in Fig. 3, and said spring is adapted to swing the inner ends of the pivoted ratchet bars or tumblers inward to hold the teeth in engagement with the 75 pins or projections of the arms or handles. The casing is provided at the top with a keyhole 41, adapted to receive the key 20, designed to be rotated to carry its engaging lug or portion in contact with the depending 80 inner end or flange 39 of the adjacent ratchet bar or tumbler, whereby the ratchet bars or tumblers will be swung outward against the action of the spring 40 to release the projections or pins of the arms or handles to per- 85 mit the spring 29 to automatically open the jaws and release an umbrella. In order to prevent the key from being accidentally removed from the lock when the jaws are open, the circular enlargement at the inner end of 90 the jaw 22 is provided with a guard or arm 43, arranged to cover partially the keyhole when the jaws are open, as indicated in full lines in Fig. 3 of the drawings. This arm 43, which forms a keyhole-guard, is arranged to be 95 engaged by the lug or key, whereby the latter will be effectually prevented from being removed from the lock when the jaws are open. When the jaws are closed, the keyhole guard or arm 43 is carried away from the keyhole to 10 the position illustrated in dotted lines in Fig. 3 of the drawings, thereby uncovering the keyhole and permitting the removal of the key. The key is prevented from swinging beyond the keyhole by means of a pin or stud 44, and 105 the spring 45 is secured to the pin or stud and extends forward to the adjacent ratchet bar or tumbler to throw the key backward after the tumblers have been operated sufficiently to release the jaws. When the key is turned 110 from the keyhole to unlock the jaws, it first engages the tumblers and releases the jaws. The continued movement of the key is then resisted by the spring 45, which will throw the key backward, thereby facilitating its re- 115 turn to its initial position. In returning the key to the keyhole the lug or engaging portion is prevented from swinging beyond the keyhole by the stud or pin 44, which forms a stop. The exterior or grip portions of the 120 handles or arms are preferably extended upward and located above the front of the lockcasing, as clearly indicated in Fig. 5 of the drawings, and they are adapted to be simultaneously grasped and pressed together when 125 it is desired to lock an umbrella in the stand.

It will be seen that the umbrella-stand is exceedingly simple and inexpensive in construction, that it will be adapted to compactly receive a large number of umbrellas, and that 130 the keys of the locking devices will serve as checks for the umbrellas, whereby the um-

brella-stand may be left unattended; also, it will be clear that the keys cannot be removed from the locks while the jaws are open and that they cannot be accidentally or unconsciously taken away with an umbrella. The keys may be of any desired construction and may vary in design to prevent one lock from being opened by the key of another lock, and I desire it to be understood that these and similar changes within the scope of the appended claims may be made without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

15 1. In an umbrella-stand, the combination of a casing having a keyhole, jaws pivotally mounted and provided with arms or handles, one of the jaws being provided with a keyhole-guard arranged at the keyhole when the jaws are open, whereby the key will be prevented from being withdrawn, and locking mechanism for holding the jaws in their closed position, substantially as described.

2. In an umbrella-stand, the combination of a casing having a keyhole, jaws pivotally mounted and provided with handles, one of the jaws being also provided with an arm arranged to swing to and from the keyhole and located at the keyhole when the jaws are open to form a keyhole-guard, and means for locking the jaws in their closed position, sub-

stantially as described.

3. In an umbrella-stand, the combination of a casing, a pair of pivoted jaws having armsorhandles, and a pair of pivotally-mounted ratchet bars or tumblers provided with a series of teeth adapted to engage the handles at different points and arranged to hold the same in their closed position and adapted to be operated by a key, substantially as described.

4. In an umbrella-stand, the combination of a casing, a pair of pivoted jaws having arms or handles, a pair of pivoted tumblers or ratchet-bars provided with a series of shouldered teeth arranged to engage the arms or handles at different points to hold the jaws in their closed position, a spring for holding the ratchet bars or tumblers in engagement

with the arms or handles, and means for open-50 ing the jaws, substantially as described.

5. In an umbrella-stand, the combination of a pair of pivoted jaws having arms or handles, a pair of ratchet bars or tumblers pivoted at their outer ends and provided at their inner ends with overlapping portions and adapted to be engaged by a key, said ratchet bars or tumblers being provided with a series of teeth adapted to engage the arms or handles at different points, a spring for holding the 60 ratchet bars or tumblers in engagement with the arms or handles, and means for opening the jaws, substantially as described.

6. In an umbrella-stand, the combination of a pair of jaws pivotally mounted and pro- 65 vided with arms or handles having pins or projections, ratchet bars or tumblers pivoted within the casing and provided with a series of teeth, arranged to engage the pins or projections of the arms or handles at different 70 points and a spring for holding the ratchet bars or tumblers in engagement with the pins or projections of the arms or handles, sub-

stantially as described.

7. In an umbrella-stand, the combination 75 of a casing, pivoted jaws provided with arms or handles, ratchet-bars pivoted at their outer ends and arranged to engage the arms or handles and provided at their inner ends with overlapping flanges, and a spring for engagement with the arms or handles, substantially as described.

8. In an umbrella-stand, the combination of a casing, pivoted jaws provided with han-85 dles, key-operated tumblers for engaging the arms or handles, a stop arranged adjacent to the keyhole of the casing, and a spring arranged to be engaged by a key and adapted to throw the same backward, substantially as 90

described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE D. HINMAN.

Witnesses:

KATHRYN E. TURNER, CHARLES W. YEOMANS.