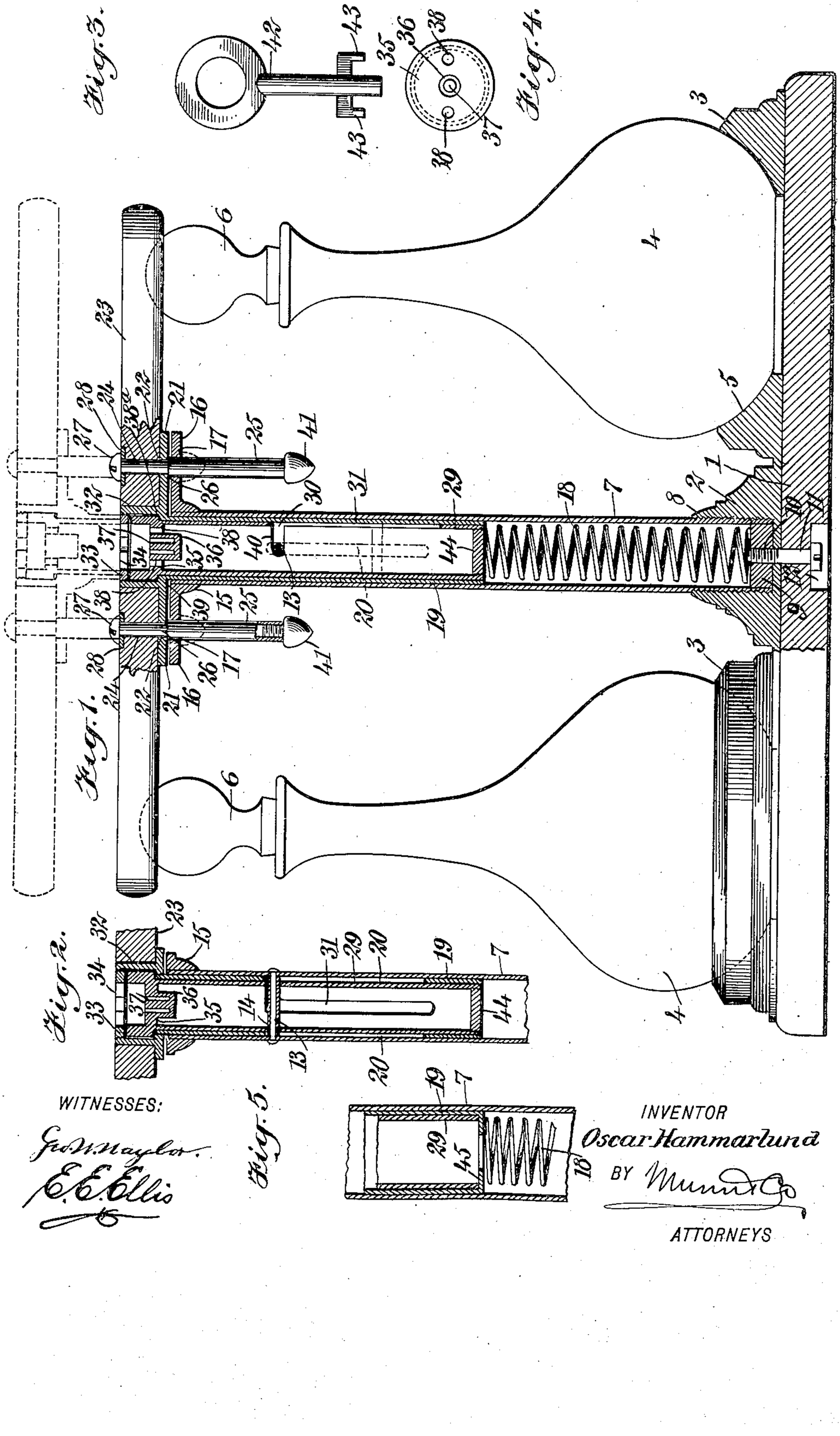
No. 816,317. PATENTED MAR. 27, 1906.

O. HAMMARLUND.

STAND FOR LIQUID CONTAINING VESSELS.

APPLICATION FILED AUG. 10, 1905.



WITNESSES:

Jos. M. Naylor.

E. E. Ellis

INVENTOR

Oscar Hammarlund

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

OSCAR HAMMARLUND, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO ALLAN FORMAN, OF NEW YORK, N. Y.

STAND FOR LIQUID-CONTAINING VESSELS.

No. 816,317. Specification of Letters Patent. Patented March 27, 1906.

Application filed August 10, 1905. Serial No. 273,602.

To all whom it may concern:

Be it known that I, OSCAR HAMMARLUND, a subject of the King of Great Britain, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Stands for Liquid-Containing Vessels, of which the following is a full, clear, and exact description.

This invention relates to stands or holders for liquid-containing vessels; and it consists, substantially, in the details of construction and combinations of parts hereinafter more particularly described, and pointed out in the claims.

The invention has reference more especially to stands or holders for bottles, decanters, and the like of the type comprising glass or other solid stoppers for the mouths thereof; and one of the principal objects of the invention is to provide a structure of this kind in which one or more bottles, decanters, or the like (of the type referred to) may be placed in such manner that the removal of the same can only be effected in a certain way or by the employment of special means for the purpose, thereby preventing unauthorized or surreptitious abstraction of any of the liquid contents thereof.

A further object is to provide a structure of this kind embodying the characteristic mentioned which is simple in its embodiment and comparatively inexpensive to manufacture, besides being portable and thoroughly effective and reliable for its purposes and possessing the capacity for long and repeated service.

The above and additional objects are attained by means substantially such as are herein illustrated in the accompanying drawings, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional side view of a stand or holder embodying my improvements. Fig. 2 is a vertical sectional view in detail, taken substantially at right angles to the plane of the sectioned parts of Fig. 1. Fig. 3 is a view of the key employed for releasing the locking device for the vessels contained within the stand or holder. Fig. 4 is a top plan view of the central tubular structure shown in Figs. 1 and 2, and Fig. 5 is a sectional detail view representing a slight modification.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I employ a stand or holder for liquid-containing vessels comprising a base or bottom of special construction, mounted upon which is a post or standard of special construction, having associated therewith a member, also of special construction, adapted to be moved vertically and carrying at the upper end thereof a specially-constructed beam for engaging with one or more of the stoppers of the vessels in a manner both to secure the stoppers in the vessels and the latter in the said stand or holder. Combined with the said post and said member is a second and rotatable member, of special construction, adapted to be moved vertically with the first, the organization being such that the parts constitute practically a permutation-lock for securing the vessels within the stand or holder in the manner and for the purpose stated, a special key being required to release the beam from engagement with the stoppers of the vessels to enable the latter to be removed. Preferably I also employ special means tending normally to force the two said members upwardly, thus to cause the said release of the beam to take place automatically on rotating the said second-named member to a determinate position by proper manipulation of the key.

Reference being had to the drawings by the designating characters thereon, 1 represents the base or bottom of my improved structure, the same being provided centrally of the upper surface thereof with a bearing-block 2, disposed about which may be any desired number of rings or holders 3 for the support of the bottom portions of one or more vessels 4—such as bottles, decanters, and the like—the inner surface of each of said rings or holders being preferably beveled inwardly and downwardly on a curve at 5, thus to more accurately receive the said lower portions of the vessels, substantially as indicated in Fig. 1. The latter may be of any desired form, and each is preferably closed at the mouth thereof by means of a glass or other suitable projecting hard stopper 6. Mounted within the said bearing-block 2 is the lower end portion of a hollow post or standard 7, which is preferably screw-threaded externally at 8 for a suitable distance from its lower end to be received in a corresponding internally-threaded opening

therefor in the bearing-block, as shown, the said lower end of the said tubular post or standard being preferably provided with a plug 9, entering a central opening of which is the upper threaded portion 10 of a headed screw 11, extending through a corresponding opening formed in the base or bottom 1 of the structure and preferably leading from a recess 12 in the under side of the base or bottom. The said tubular post or standard 7 is of the desired height and is provided at a suitable distance from the lower end thereof with an inner transverse pin 13, preferably inclosed in a sleeve 14, the ends of which bear against corres; onding inner surface portions of the post or standard, it being noted that the latter is provided at its upper end with an annular enlargement or collar 15, rigid therewith, and provided with oppositely-disposed laterally-extending plates 16, formed at suitable distances from the ends thereof with openings 17, for a purpose presently to be explained. Located within the tubular post or standard 7 at the lower part thereof and with the lower coil thereof resting upon the said plug 9 is a spiral spring 18, and also located within the hollow post or standard is a tubular member 19, formed in opposite sides thereof with vertically-elongated openings or slots 20, the lower extremities or ends of which are disposed a suitable distance from the lower end of the said tubular member. The upper end of this tubular member is rigidly provided with oppositely-disposed laterally-extending plates 21, corresponding to the hereinbefore-mentioned oppositely-disposed laterally-extending plates 16 of the annular enlargement or collar 15 of the tubular post or standard, the said plates 21 being formed therein with openings 22, corresponding to the said openings 17 in the said plates 16. A beam 23 is supported directly upon the upper surfaces of the said oppositely-disposed laterally-extending plates 21 of the tubular member 19 by means of the upper tubular portions 24 of parallel pendent rods 25, having annular shoulders 26, engaging with the lower edges of the said openings 22, the said upper tubular portions 24 of the rods having screws 27 entering the same for fastening the beam upon the plates 21, suitable washers 28 being preferably placed beneath the heads of said screws within suitable recesses therefor in the upper surface of the said beam 23. The said rods 25 have vertical movement within the openings 26 of the said oppositely-disposed laterally-extending plates 16 at the upper end of the hollow post or standard 7, and it will be observed on reference to Fig. 2 that there is another or inner tubular member 29, located within the said tubular member 19 and being provided in opposite sides thereof with bayonet-slots 30, the vertical branches 31 of which register with the hereinbefore-mentioned slots 20 in said tubular member 19, it being noted that the said pin 13, supported between the sides of the tubular post or standard 7, extends through both sets of the said mentioned slots, substantially as indicated in Figs. 1 and 2. The upper end portion of the said tubular member 19 is fitted at 32 within a central opening provided therefor in the beam 23 and is closed by an escutcheon or plate 33, having therein a keyhole-slot 34, while the upper end portion of the said inner tubular member 29 is provided some distance within the same with a head or plug 35, having a central annular recess 36, upstanding in which is a nib 37, while formed in said head or plug on opposite sides of the walls of said central recess 36 are openings 38. (See Figs. 1 and 3.)

Inasmuch as in the operations about to be described it is essential that the tubular members 19 and 29 shall be caused to move together upwardly and also inasmuch as that when the parts are in such position as to cause the beam 23 to be in locked engagement with the stoppers 6 of the vessels 4 it is essential that the member 19 shall be prevented from independent vertical movement, some means of engagement between the two said members 19 and 29 is required and which is herein shown as being in the form of an annular shoulder 38ª at the upper end portion of the tubular member 29, which engages with a corresponding shoulder 39, projecting inwardly from the upper end portion of the said tubular member 19, so that it will be seen that when the inner tubular member 29 has been rotated within the tubular member 19, as will be presently explained, by which to cause the pin 13 to enter one or the other of the reversely-disposed horizontal branches 40 of the hereinbefore-mentioned bayonet-slots 30, the beam 23 will be so locked in engagement with the stoppers 6 as to absolutely prevent removal of the vessels 4 from the stand or holder, as will be apparent.

It will be understood that normally the spring 18 is so compressed as to tend to force both of the tubular members upwardly within the post or standard 7, so that as soon as the inner tubular member 29 is again rotated, by which to cause the pin 13 to come within the vertical branches 31 of the bayonet-slots, the pressure of said spring will instantly cause the tubular members to rise, and consequently the beam 23 as well. The lower ends of the rods 25 are provided with enlargements 41, which limit the upward movement of the beam 23 in the hereinbefore-mentioned guides therefor, and it is thought that the construction and operation of my improvements will be fully understood from the above description.

In Fig. 3 I have shown a key 42, which is employed for rotating the inner tubular member 29 by simply inserting the end thereof through the keyhole-slot 34 of the escutcheon

33 in such a manner as that the nib 37 will be received in the end of the key, while the projections 43 of the latter will be received in the said mentioned openings 38 in the head 35 of the member 29. Preferably the lower end of the inner tubular member 29 is threaded internally to receive a plug 44, against which the upper end of the spring 18 has its bearing.

Instead of forming the upper end portion of the inner tubular member 29 with the annular shoulder 38 to bear on the corresponding annular shoulder 39 at the upper end portion of the tubular member 19 for holding down the latter when the pin 13 has been caused to enter the horizontal branch of either one of the bayonet-slots 30 I may simply construct the lower end of the tubular member 19 with an inturned flange 45, (see Fig. 5,) against which the lower end of the inner tubular member 29 is held, and thereby derive the same result, as will be apparent. In this case the plug 44 may be dispensed with, the upper end of the spring 18 then bearing against the under side of said flange. In either case the said spring may sometimes be dispensed with, however, the release of the beam 23 from engagement with the stoppers then being performed by hand.

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

1. A stand or holder for stoppered liquid-containing vessels, comprising a base, a post thereon, a member adapted to be moved vertically with respect to the post, a rotatable member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, and means for preventing said members from being thus moved except on rotating the second-named member to a determinate position.

2. A stand or holder for stoppered liquid-containing vessels, comprising a base, a hollow post thereon, a hollow member adapted to be moved vertically within the post, a rotatable hollow member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, and means for preventing said members from being thus moved except on rotating the second-named member to a determinate position.

3. A stand or holder for stoppered liquid-containing vessels, comprising a base, a post thereon, a member adapted to be moved vertically with respect to the post, and a rotatable member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, said post and said members being constructed with means for preventing the members from being thus moved except on rotating the second-named member to a determinate position.

4. A stand or holder for stoppered liquid-containing vessels, comprising a base, a hollow post thereon, a hollow member adapted to be moved vertically within the post, and a rotatable hollow member within and adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, said post and said members being provided with means for preventing the members from being thus moved except on rotating the second-named member to a determinate position.

5. A stand or holder for stoppered liquid-containing vessels, comprising a base, a post thereon, a member adapted to be moved vertically with respect to the post, a rotatable member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, means for preventing said members from being thus moved except on rotating the second-named member to a determinate position, and normally restrained means actuated to force the members upwardly when such position of said second-named member is reached.

6. A stand or holder for stoppered liquid-containing vessels, comprising a base, a hollow post thereon, a hollow member adapted to be moved vertically within the post, a rotatable hollow member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, means for preventing said members from being thus moved except on rotating the second-named member to a determinate position, and normally restrained means actuated to force the members upwardly when such position of said second-named member is reached.

7. A stand or holder for stoppered liquid-containing vessels, comprising a base, a post thereon, a member adapted to be moved vertically with respect to the post, a rotatable member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, said post and said members being constructed with means for preventing the members from being thus moved except on rotating the second-named member to a determinate position, and normally restrained means actuated to force the members upwardly when such position of said second-named member is reached.

8. A stand or holder for stoppered liquid-containing vessels, comprising a base, a hollow post, having a transverse pin interiorly thereof, a hollow member within the post,

having vertical slots therein, through which the pin extends and provided at the upper end thereof with an escutcheon having a keyhole therein, a second member within the first having bayonet-slots therein, the vertical branches of which register with said vertical slots in the first-named member, and through which said pin also extends, said first-named member carrying a beam adapted for engagement with one or more stoppers of vessels on the base and said second-named member having a head at its upper end, provided with a nib and opposite recesses, and a key for insertion through said keyhole, adapted to receive said nib, and having projections which enter said recesses.

9. A stand or holder for stoppered liquid-containing vessels, comprising a base, a post thereon, a member adapted to be moved vertically with respect to the post, a rotatable member adapted to be moved vertically with said first-named member, the latter carrying a beam adapted for engagement with one or more stoppers of vessels on the base, and means for preventing said members from being thus moved except on rotating the second-named member to a determinate position, the lower end of the first-named member having an inturned flange on which rests the lower end of the second-named member.

In testimony whereof I have signed my name to this spcification in the presence of two subscribing witnesses.

OSCAR HAMMARLUND.

Witnesses:
E. EVERETT ELLIS,
JNO. M. RITTER.