

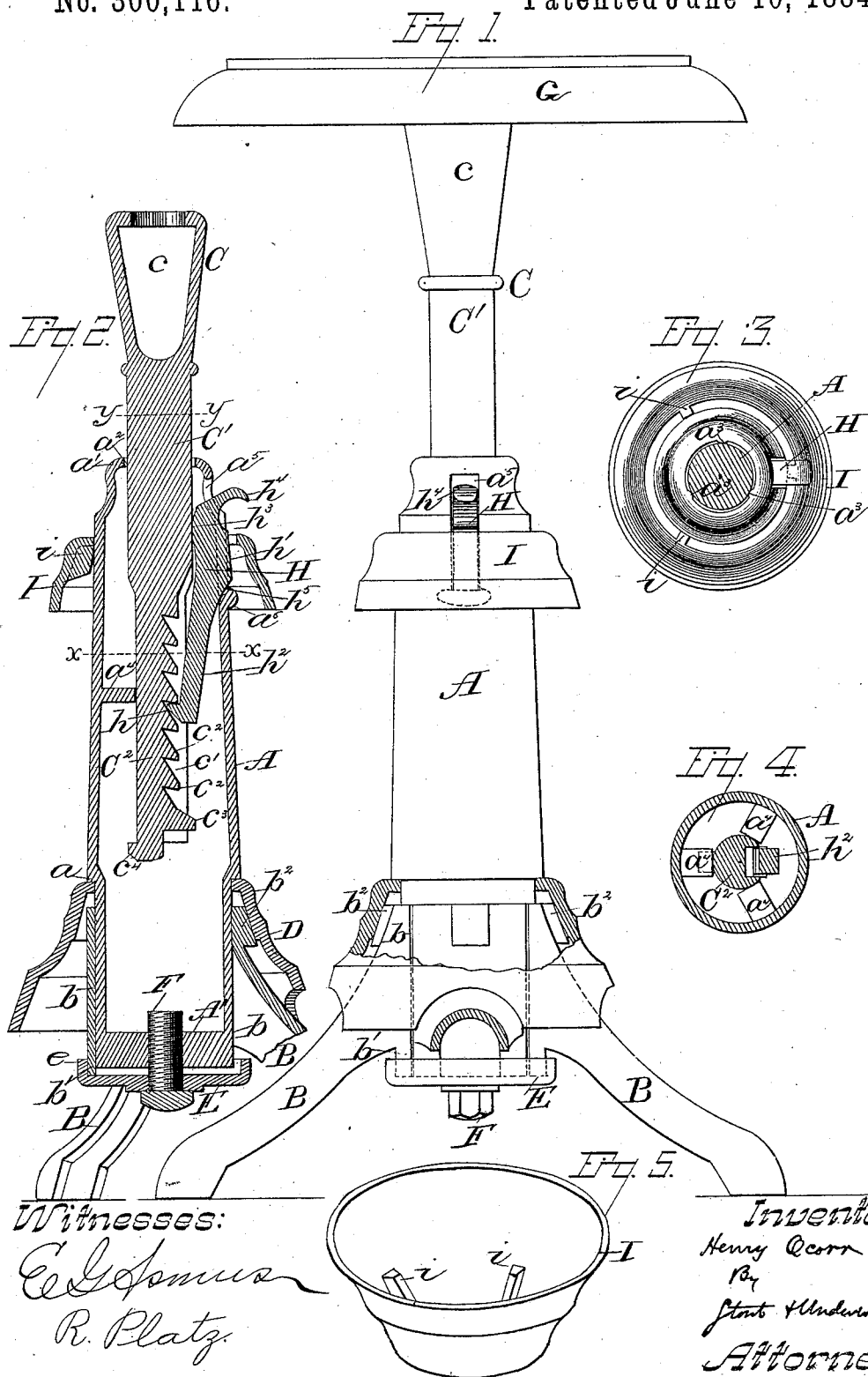
(No Model.)

H. OCORR

STOOL OR SEAT STANDARD.

No. 300,116.

Patented June 10, 1884.



Witnesses:

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UNITED STATES PATENT OFFICE.

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STOOL OR SEAT STANDARD.

SPECIFICATION forming part of Letters Patent No. 300,116, dated June 10, 1884.

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To all whom it may concern:

Be it known that I, HENRY OCORR, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Stool or Seat Standards; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to standards of stools, seats, and other articles of furniture; and it consists in certain peculiarities of construction, as will be more fully set forth hereinafter.

In the drawings, Figure 1 is a side elevation of a stool embodying my improvement, partly broken away to better show the construction. Fig. 2 is a vertical central section of my improved standard. Figs. 3 and 4 are horizontal sections on the lines *yy* and *xx*, respectively, of Fig. 2; and Fig. 5 is a perspective view of the securing-ring inverted.

My improved standard consists, primarily, of three parts: A, the hollow body; B B B, the legs, and C the stem. The body A has vertical walls from its base to about one-third of its height, where its diameter is somewhat increased to form the outer square shoulder, *a*, and from this point the body tapers gradually upward, terminating in a preferably ornamentally-molded top, *a'*, with a central opening, *a''*, to receive the seat-stem C, which is kept steady by means of inwardly-projecting points or lugs *a'''* on the top *a'*. The legs B B B are secured to place in the following manner: Each of these legs (which are preferably three in number) terminates at the upper end in vertical edges *b*, (of which there will be two to each leg when the legs are cast semicircular in section, as shown,) which conform to the rounded surface of the lower part of the body A, and the three leg edges *b b*, &c., completely encompass it, and have downward projections *b'*. The base of the hollow body A is either wholly closed or partly so by plate or bar A', and this has a central vertical screw-threaded hole formed therein.

D is an annular molding, which is pushed up from below around the lower part of the body A, and then the three legs are pushed up to place, and to secure a tight fit lugs *b''* are formed either on the outer upper surface of the top of each leg, as shown in the draw-

ings, or else on the inner upper surface of the annular molding D—say three in number, one for each leg. When the legs are in place, they are secured by means of the circular flanged plate E, whose flange *e* bears against the described downward projections or lips *b'* of the legs, and this plate E has a central hole, through which the bolt F is passed, which screws into the threaded hole in the bottom plate or bar, A', thus firmly fastening all these parts together in proper position.

On the interior of the hollow body A, and about midway of the height of the tapering portion, are cast the three lugs *a¹ a¹ a¹*, which serve as guides to steady the lower part, C', of the stem C when in position. This stem has primarily three parts, of which the upper part is made hollow and flaring, as at *c*, to receive the shank of the seat G. The intermediate portion, C', is a solid round body with vertical faces—that is, everywhere of equal diameter—while the lower part, C'', is of less diameter, and is provided with a vertical exterior groove, *c'*, furnished with the ratchet-teeth *c'' c''*, which extend only about midway from the back or bottom of the groove to the circumferential line of the part C'', while the lower tooth, *c''*, extends out beyond, to form a stop for the pawl-block, as hereinafter described, and below and opposite to this tooth *c''* there is formed a lip or projection, *c¹*, which serves as a stop to prevent the stem from being accidentally drawn up out of the hollow body A in raising the seat, as it would come in contact with one of the described lugs *a¹*, and yet in putting the stem into the body A these lugs form no hindrance, as the stem can then be turned so that the projections *c¹* and *c¹* will pass between the lugs *a¹*. In the upper part of the body A there is formed the slot or opening *a⁵*, and the body A is strengthened or re-enforced at the base of the said slot, as shown at *a⁶*, and this slot is to receive the pawl-block H, by means of which the height of the stem, and consequently of the seat, is to be regulated. The general shape of this block is shown in section in Fig. 2, and its lower end terminates in the pawl *h*, which engages with the ratchet-teeth *c''*, as shown. The front of this block has a straight surface at *h'*, below which it is cut away or curved inward at *h''* to form the shank of the pawl, and

its bearing-surface or pivotal point is shown at h^3 on the rear of the block proper, above which it is rounded out or cut away, so as to enable it to be operated with a rocking motion on said bearing or fulcrum-point h^3 , as hereinafter set forth, and this rounded portion terminates in an outward-extending hook or latch, h^4 , for use in freeing the pawl from engagement with the ratchet-teeth. When the pawl-block has been placed in position bearing against the stem in the hollow body, and also at h^5 upon the body A at the base of the slot a^5 , it is secured in place against the liability of falling out by means of the annular securing-ring or molding I, which is slipped down over the standard from above. This ring (shown inverted in perspective at Fig. 5) is provided with three interior webs or flanges, $i i i$, that project from the interior surface of the molding toward a common center, and which webs are made to taper so as to fit firmly down upon the tapered exterior surface of the body A and clasp it firmly from all sides, while the space between two adjacent webs, $i i$, is sufficient to enable the pawl-block H to work freely, and these webs i have another function, as described further on.

The operation of my device is very simple, yet extremely effective. When the parts have all been put together, as shown in Figs. 1 and 2, and it is desired to elevate the stem and seat, it is only necessary to pull up on the latter, when the stem will be raised and the pawl h of the block H will slip automatically into the notch below, and thus on, engaging in turn with the several teeth until the stool is at the elevation desired, the stop c^3 limiting the downward motion of the pawl-block, as well as the upward motion of the stem C. Now, if it is desired to keep the seat at such elevation secure against accidental lowering, it is only necessary to turn the securing-ring or molding I partly around until one of its webs or flanges i bears directly against the straight surface h' of the front of the pawl-block H, and all the parts will be firmly locked, as shown in Fig. 3, no matter how much the stool may be shaken or moved. If it is desired to release and lower the stem, first the securing-ring I must be turned around, so that its web i will no longer press against the front of the pawl-block H, and then by lifting on the latch h^4 the block can be moved and rocked on its fulcrum-point h^3 and its rounded upper rear edge brought against the surface C' of the stem, which will force the pawl h free from engagement with the ratchet-teeth c^2 , and enable the stem to drop, by its own weight, the desired distance, and then, by releasing the latch h^4 , the pawl-block will automatically act by its own weight, and the pawl h will instantly move into the notch opposite it. By reason of the teeth only extending part of the depth of the groove c' , the said

groove always presents straight side walls, which retain the pawl h when free from the teeth, and prevent any lateral displacement, and hence it is impossible for the latch-block to get out of place.

The advantages of my improved standard are manifold, and though I have shown it with especial reference to stools and seats, it is obvious that it may be employed with tables, stands, or any other articles of furniture having standards or legs which it is desirable to vary in height. It is simple in construction, but very sure in its operation, and has the great advantage of being what is known as a "knockdown" standard—that is, one which is in several pieces, readily separable, so as to occupy but little space in transportation or storage—and it is composed wholly of castings or separate pieces of metal, so that if one part becomes broken it can be readily restored without requiring the whole device to be cast or otherwise formed anew.

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

1. The combination, in a standard for furniture, of the hollow body and its supporting-legs with a sliding stem having ratchet-teeth, as described, a pawl-block, H, and webbed ring I, as set forth.

2. In a standard for furniture, the combination of a tapering body and its support with a sliding stem having ratchet-teeth, as described, a pawl-block, H, and a securing-ring having webs i , as and for the purpose set forth.

3. The combination, with body A, having slot a^5 , its support, and stem C, having groove and ratchet-teeth formed therein, of a pawl-block, H, substantially as described, and a ring for locking the block.

4. The combination of the hollow body A and a suitable support therefor, having slot a^5 , stem C, provided with groove and ratchet-teeth formed therein, pawl-block H, with pawl h , and securing-ring I, having interior webs or flanges, i , substantially as set forth.

5. In a standard for furniture, the combination, with the hollow body A and a suitable support therefor, having slot a^5 , of the vertically-movable stem C, with solid vertical portion C' and lower portion, C^2 , the latter having an exterior groove, c' , with straight walls, and ratchet-teeth c^2 formed therein, and a securing-ring and pawl-block suspended loosely against the stem.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

HENRY OCORR.

Witnesses:

H. G. UNDERWOOD,
M. KAUMHEIMER.