No. 714,733. Patented Dec. 2, 1902.

C. E. NEWELL.

HOOK AND LOCK FOR IRON BEDSTEADS.

Application filed Jan. 8, 1901. Renewed Oct. 9, 1902.)

(No Model.)

FIG. 2.

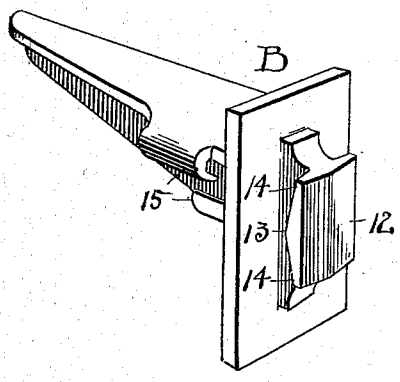


FIG. 1.

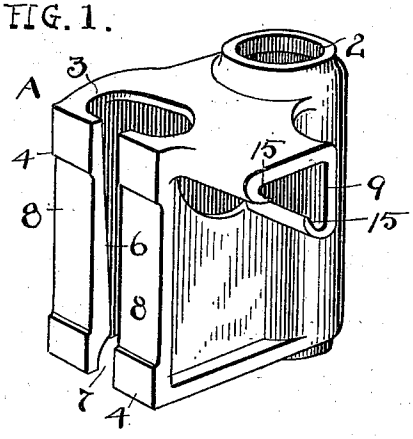


FIG. 3.

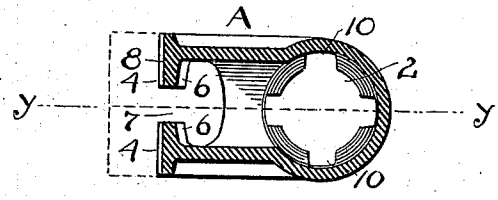
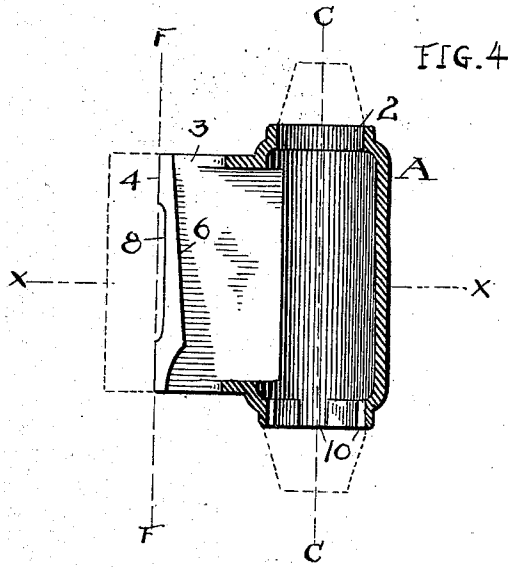


FIG. 4.



ATTEST

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CHARLES E. NEWELL, OF CLEVELAND, OHIO.

HOOK AND LOCK FOR IRON BEDSTEADS.

SPECIFICATION forming part of Letters Patent No. 714,733, dated December 2, 1902.

Application filed January 8, 1901. Renewed October 9, 1902. Serial No. 126,632. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. NEWELL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hooks and Locks for Iron Bedsteads; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to hooks and locks for iron bedsteads; and the invention enters into both these articles and into the manufacture particularly of the lock. Prior to my present invention the method of manufacture for locks of this general character having openings for both the bedpost and the hook has been defective, for the reason, chiefly, that either the peculiar construction of the "lock," so called, or some other determining reason equally conclusive has always heretofore made the use of two separate and distinct cores imperative. In other words, it has been the invariable and universal practice heretofore, so far as I know and believe, to use one core for the bedpost and another core independent thereof for the face adapted to receive the hook and to form an outside facing therefor. All this will appear more in detail in the further description of the invention herein; but I may here say that all such separate coring has been exceedingly defective and objectionable, for the reason that it resulted in defective and imperfect locks, the special and material defect being in the imperfect alinement of the two cores and the crowded condition of the lock thus produced.

My invention has as one of its objects to obviate this material objection and to secure perfect alinement of the cores, and hence perfectly constructed locks in so far as coring them aright is concerned.

The invention therefore consists in the method of manufacture and in the articles manufactured, substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective elevation of my new and improved lock, and Fig. 2 is a perspective elevation of my new and improved hook. Fig. 3 is a cross-section of the lock on line X X, Fig. 4; and Fig. 4 is a cross-section on line Y Y, Fig. 3.

A represents the lock, and B the hook. The features of lock A as made by me are in the vertical bore or opening 2 for the bedpost and upon which the lock is permanently secured, the bore or vertical opening 3 for the inner engaging portion of the hook, and the outside face or faces 4. In Fig. 4 the two straight lines C C and F F, taken vertically through opening 2 and on the front of facing 4, are exactly parallel, as they always should be, and in line with the exact axial center of opening 2.

I have referred to the two vertical openings 2 and 3 separately, and they are so regarded for the purposes of this description and to make clear their uses and relations to other parts, but in point of fact they are one, and the entire lock is rather of the nature of a shell with a hollow interior. It will be noticed that there is no dividing-wall between the so-called "vertical openings" 2 and 3, but they are open to each other the full depth and width of the lock internally. This is a peculiarity and novelty in my present improved lock and is one of the features which renders it possible to use a single and complete core for the entire casting instead of coring the front and rear of the lock separately, as formerly. I am enabled to do this by making a hollow lock throughout. Now the essential and important advantage of this is manifest not only in the lock itself but in the use thereof. Formerly with separate coring it was exceptional and almost impossible to place the two cores in perfect alinement and the slightest deviation from such alinement, though so small as to be wholly imperceptible to the eye, when carried into the bedstead might be sufficient to give a worked or twisted appearance to the structure and would greatly magnify itself by the time the effect of such irregularity reached the top of the bedpost. This was, therefore, a serious defect in the old methods which I have wholly overcome by my new method of casting articles of this kind and in the article itself. Now alinement of post and facing 4 is the rule and per-

fect manufacture the satisfactory result. Incidentally there is considerable economy in material without taking from the strength of the lock.

Minor features of construction of the lock are such as make far more perfect adaptation, and among these are the gradually-deepening ribs 6 at either side of the vertical slot 7 in the facing 4 and through which hook B enters opening 3. The said faces 4, furthermore, are formed with a recessed or retired portion 8 between their ends, so that hook B bears only on the ends of the facing and not on its center, and thus makes a much improved bearing-surface with a facing for the hook at top and bottom to prevent possible rocking or looseness. Ear 9 in Fig. 1 is for the cross-rail connecting the locks.

At the bottom of opening 2 in the lock are shown a series of notches 10 or recesses formed deeply in the otherwise-contracted neck of said opening, which serve to drain off the paint and prevent accumulation after the lock has been dipped in paint preparatory to enameling; otherwise there would be a deposit of paint at this point which might not harden under the low temperature of baking the enamel.

A novel feature of hook B is its construction for reversibility, and yet retaining exactly the same engagement with the lock. To this end the engaging portion 12 of the hook, and which is its hook portion proper, is dual or double and alike on both sides. To this end said hook portion is deepest at its middle and rear at 13 and shallow at its ends 14. The inclines from 13 to 14 are equal on both sides of the hook and alike from point 13 on each side and also have the same inclination relatively as bearing-ribs 6, thereby resting flatly thereon when in engagement therewith; but of course it depends on which way the hook B is turned whether what are here the upper or the lower inclined surfaces be thus engaged, and only one set is engaged at a time. Obviously to make the change hook B is inverted.

It has been practically impossible to so form the taper on hooks as to reverse them, and thus use L-shaped side rails of beds with the open sides up thus L or the flat sides up thus ⌜, for the reason that the engagement on lock A and hook B was too short to provide sufficient leverage to keep the hook from rocking in the lock; but with my construction such reversal is entirely practical and satisfactory and a comparatively long engagement is obtained.

It will be noticed as a feature of the ears or clips 9 that they are substantially triangular in cross-section, with closed top and side and open at their inclined bottom, where the edges 15 of the opening are tapered and adapted to be turned inward to engage and lock upon the connecting-rail. This can be done because said clips are of malleable metal, adapting them to be bent to make locking engagement in this way.

It may be stated that in this class of work it is my practice to use a dry sand core built up bodily and solidly in one piece to produce the lock shown in Fig. 1, and the body of the core fills the entire interior of the lock. The hook member B has a triangular clamp at its side corresponding to the ear or projection 9 on lock A, with edges 15 along its side for engagement with the side rails of the bed.

What I claim is—

1. As a new article of manufacture, a corner-lock for bedsteads having an opening down through its rear portion for the corner-post and a front facing parallel to the axis of said opening, a slot down through said facing and a triangular projection 9 at one side, said slot and projection 9 being in open communication through the interior of the lock with the opening for the corner-post, and the said projection 9 having flexible edges 15 at its side adapted to be clenched on a cross-rail and having its top formed continuous with the top of the lock, substantially as described.

2. In locks for bedsteads, a lock having an opening through from top to bottom for a bedpost and provided with recesses in the edge of the said opening at the bottom of the lock adapted to allow paint to drain off from within the lock and about the bedpost, substantially as described.

3. A lock for metallic bedsteads having a hollow interior and an opening for a bedpost down through the rear of the lock formed with narrow portions at its top and bottom, and recesses formed in the lower narrow portion through which paint is adapted to drain off the inside wall of the lock, substantially as described.

Witness my hand to the foregoing specification this 24th day of December, 1900.

CHARLES E. NEWELL.

Witnesses:
M. A. SHEEHAN,
R. B. MOSER.