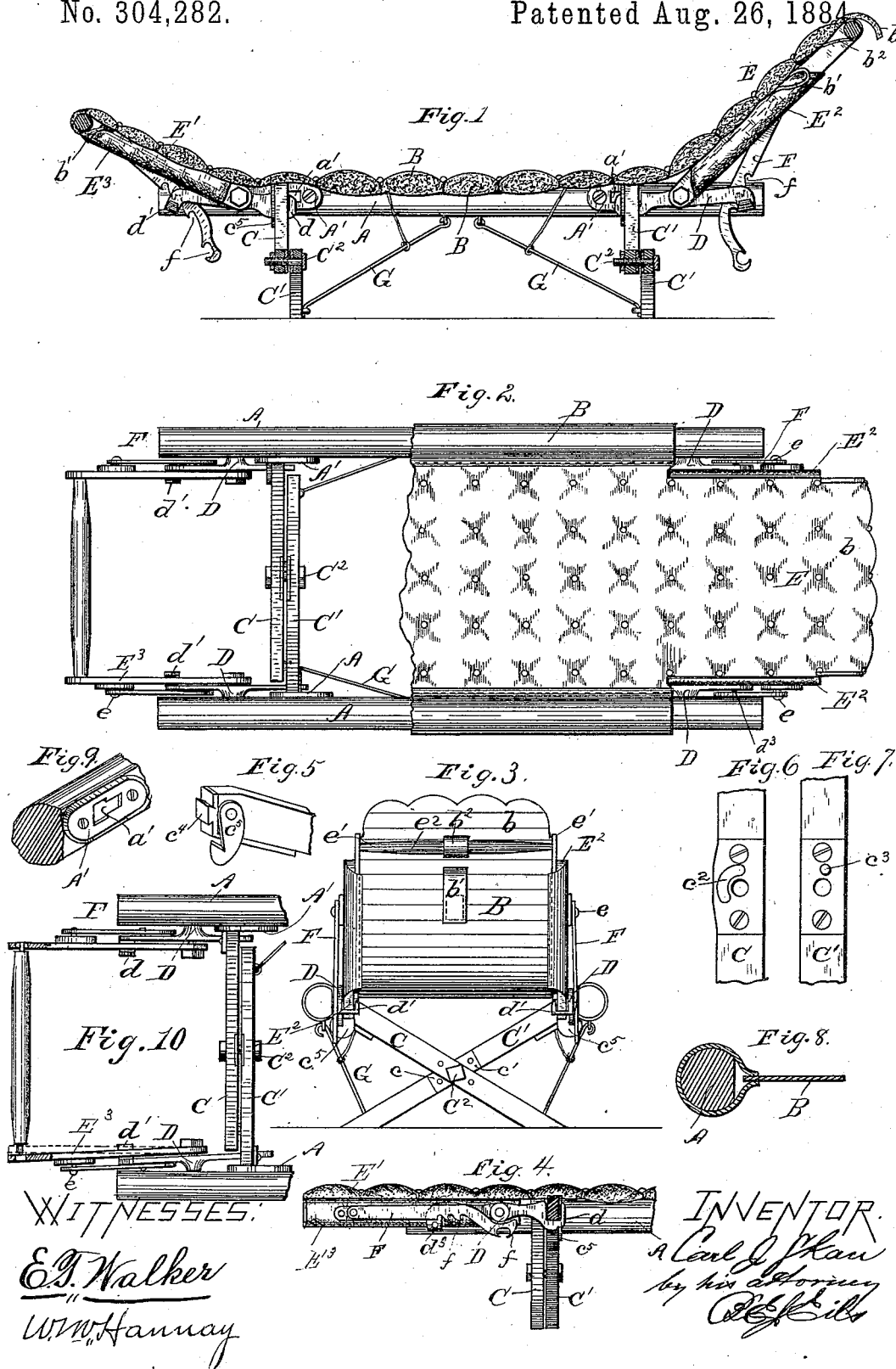


(Model.)

C. J. SKAU.
FOLDING COT.

No. 304,282.

Patented Aug. 26, 1884.



UNITED STATES PATENT OFFICE.

CARL J. SKAU, OF RACINE, WISCONSIN.

FOLDING COT.

SPECIFICATION forming part of Letters Patent No. 304,282, dated August 26, 1884.

Application filed October 31, 1883. (Model.)

To all whom it may concern:

Be it known that I, CARL J. SKAU, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Folding Cots; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to that class of folding cot-beds described in United States Letters Patent No. 232,418, granted to me on the 21st day of September, 1880.

The object of this invention is to provide a cot-bed that may be readily set up for use or folded into a small compass when not in use, and that, while possessing the quality of extreme rigidity, will be at the same time so light as to be easily moved from place to place.

To this end the invention consists of certain novel features of construction and combination of parts, which will be fully described in the ensuing specification, and particularly pointed out in the claims at the close thereof.

For a full understanding of my invention reference should be had to the accompanying drawings, wherein—

Figure 1 is a vertical longitudinal section of my improved cot. Fig. 2 is a plan view thereof, part of the upholstering being removed. Fig. 3 is an end elevation of the same. Fig. 4 is a detail section on the line X X, Fig. 2. Figs. 5, 6, 7, 8, 9, and 10 are details.

The same letters of reference are used in all the figures in the designation of identical parts.

To the side bars, A, of the frame are secured the longitudinal edges of the webbing B, of canvas or other suitable material, upon which the mattress or upholstering is supported. Upon the inner face of the bars A, near each end, is secured a metal plate, A', provided with a horizontally-arranged key-hole slot, a'. (Shown in detail in Fig. 4.)

The legs C C' of the cot are made in pairs,

crossing at the center, and pivoted together by a bolt, C². The adjacent faces of the legs are provided at the crossing-point with plates c c', (shown in Figs. 6 and 7,) provided at the center with perforations to receive the bolt C² and form bearings therefor. The plate c is provided with a segmental slot, c², arranged concentrically with relation to the central perforation of said plate, and projecting from the plate c' is a stud, c³, adapted to engage with said slot c² to limit the movement of the legs. To the upper ends of the legs are secured plates provided with dovetailed projections c⁴, adapted to be received and secured within the key-holeslots a' of the plate A', and the side bars, A, and cross-legs form the end frame proper.

Between the plates A' and the ends of the side bars are fulcrumed hook-bars D, the hooks d at the inner ends of which are adapted to engage the upper ends of the legs C C' to lock the projections c⁴ in the narrow ends of the key-hole slot a'. The outer ends of these hook-bars are bent to form inwardly-projecting hooks d', to receive and support the side rails, E² and E³, of the folding head and foot sections E and E'. These side rails are pivoted at their inner ends on the fulcrum-bolt of the hook-bars D, and are, near their outer ends, provided with studs e, on which are pivoted the curved adjusting-bars F of the end sections. These adjusting-bars F are provided at one edge with rack-teeth f, adapted to engage with studs d³, projecting from the outer ends of the hook-bars D, opposite the hooks d', and the free ends of said bars are curved in such a manner as to abut against the hubs of the hook-bars when the end sections are adjusted to their lowermost positions, thus furnishing a support for said end sections in addition to that provided by the hooks d'. Gravitating latches e⁵ are pivoted to the sides of the legs CC' near the top, to swing under the hooks d and prevent the accidental disengagement of said hook from the legs of the cot; and, to give additional rigidity to the structure, braces G are secured at one end to the side bars, A, said braces being provided at their opposite ends with hooks or other suitable devices, by means of which they may be secured to the base of the

legs C C'. The canvas B is permanently secured to the side bars, A, and to the side rails of the head and foot sections E E'; but a loose flap, b, extends beyond the end of the head-section, for the purpose to be hereinafter explained. The extension-pieces e' are secured to the inner faces of the side rails, E², of the head-section E by guide-loops or other suitable means, in such manner that they may be drawn out to project beyond the side rails, E², and form an extension of the head-section, or pushed in to bring their outer ends flush with the outer ends of the side rails of the head-section. When drawn out, these extension-pieces may be prevented from slipping by their frictional contact with the side rails of the head-section or otherwise. Between the ends of the extension-pieces is a cross-rail, e², so secured that it may be readily removed and replaced, and to the under side of the canvas B, at the head end of the cot, is secured a loop, b', adapted to receive the cross-rail e². Another and similar loop, b², is secured to the under side of the flap b. When the extension-pieces e' are not drawn out, the cross-rail e² is passed through the loop b', and the flap b hangs over said rail; but when these pieces e' are in the position shown in the drawings the cross-rail is passed through the loop b², to support the canvas and flap against lateral pressure above the point where the canvas is secured to the side rails of the head-section.

It will be observed that by means of the toothed adjusting bars F and stud d' the end sections may be adjusted to and supported at any desired degree of inclination; and it will also be seen that the cot may be readily folded by detaching and folding the legs, removing the cross-rails of the end sections, folding the end sections over the body of the cot, and securing the whole of these parts in a compact roll.

One purpose of rendering the end sections of this cot adjustable in height is to enable a user of the cot to have his head in a higher or lower position without the necessity of using pillows or a pillow-support. A further purpose is to enable a user to assume a half-reclining position, the end section supporting his back and being adjusted higher or lower to render the position easy and comfortable. It will sometimes occur that a cot of this character will be set up, one end near a window and the other end near a gas-bracket. In this case a user of this cot could elevate either end section, so that he could assume a reclining position at either end of the cot, to protect his eyes from a glare of light, and need not have the cot turned around. In some instances the user of the cot will be so tall that when in a reclining position his head will project beyond the end of the end section and have no support. To avoid this difficulty I have made the head-section of my cot extensible, as hereinbefore described. The covering of the head-section proper is permanently se-

cured to the side rails E², and will always be retained in position whatever may be the adjustment of the head-section; but without some additional support the end of the cover or canvas would be apt to sag a little at the center, and for this reason I have provided the removable cross-bar e². The flap b of the canvas is, however, not secured to the extension-rails of the head-section, and would, if not secured to the cross-rail e², slip down toward the body of the cot. I have therefore secured a separate loop to the under side of the flap, so that it may be sustained in proper position.

I have heretofore stated that the extension-pieces may be held in any position by friction or otherwise. I deem the frictional support sufficient, as the pressure upon these extension-pieces is exerted transversely, so that increased pressure would cause increased frictional resistance. Were the pressure exerted upon the extension-pieces in a longitudinal direction, it would be of course necessary to use some means to prevent said pieces from slipping, and any of the well-known mechanical devices employed for a similar purpose might be used in this structure; but under existing circumstances I do not regard the use of any such means as essential.

Having thus described my invention, what I claim is—

1. In a folding cot, the combination, substantially as before set forth, of the side bars having horizontal key-hole slots, the cross-legs provided at their upper ends with dovetailed projections, the hook-bars fulcrumed to the side bars and engaging the legs with their inner hooked ends, and devices to retain said hooks in engagement with the legs.

2. In a folding cot, the combination, substantially as before set forth, of the side bars having horizontal key-hole slots, the cross-legs provided at their upper ends with dovetailed projections, the hook-bars fulcrumed to the sides and engaging the legs with their hooked inner ends, and the gravitating latches pivoted to the legs.

3. In a folding cot, the combination, substantially as before set forth, of the bed-frame, the hook-bars centrally pivoted to the side bar, and provided at their inner ends with hooks for engaging the legs of the bed-frame, and at their outer ends with inwardly-projecting hooks and outwardly-projecting studs, the end sections pivoted on the fulcrum-bolts of the hook-bars, and the toothed adjusting-bars pivoted to said end section, and supported as set forth.

4. In a folding cot, the combination, with the bed-frame, the hook-bars having their inner ends extended to project beneath the legs of the bed-frame, and outwardly-projecting studs at their outer ends, and the end sections pivoted on the fulcrum-bolts of the hook-bars, of the toothed adjusting-bars, curved at one end and pivoted at the other end to the side

rails of the end sections at a distance from said fulcrum-bolts nearly equal to the length of said adjusting-bars.

5 5. In a folding cot, the combination, with the bed-frame, of the head-section, the extension-pieces secured to slide upon the side rails of the head-section, the cross-rail removably secured between the extension-pieces, the canvas secured to the bed-frame, and provided

with an end flap having a loop on its under side, and the loops secured to the under side of the canvas, substantially as before set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CARL J. SKAU.

Witnesses:

CHARLES H. LEE,
M. J. SMOLLEN.