

D. K. CARTTER.
Coverings for Beds.

No. 211,221.

Patented Jan. 7, 1879.

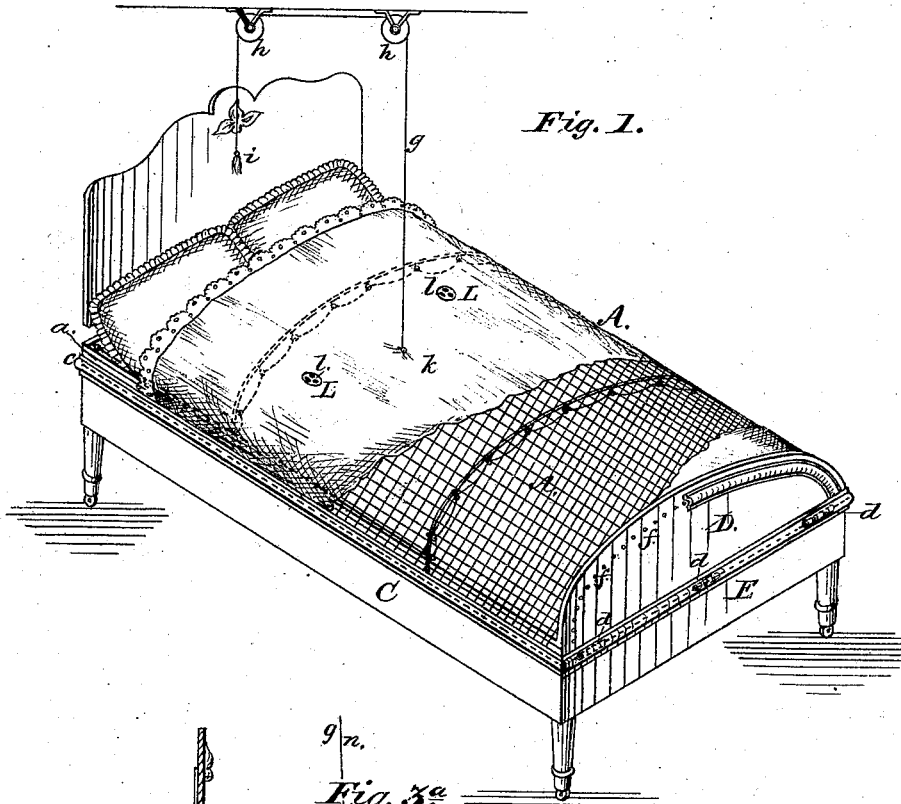


Fig. 1.

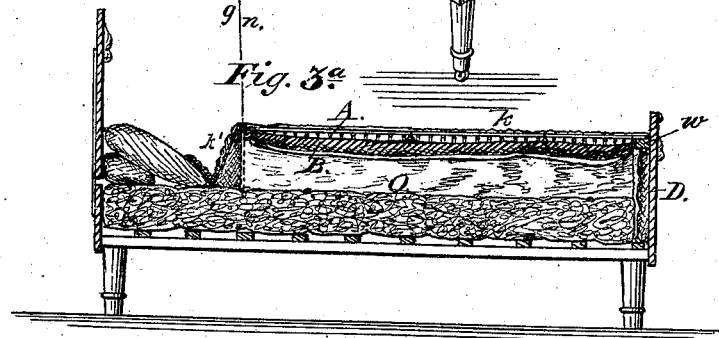


Fig. 2a

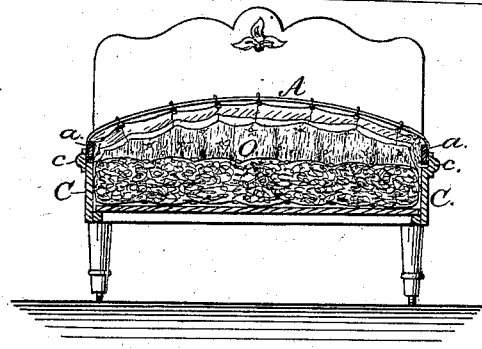


Fig. 2.

Witnesses:

J. C. Sprecht
Albert H. Norris.

Inventor:

David K. Cartter.
By James L. Norris,
Attorney.

D. K. CARTTER.
Coverings for Beds.

No. 211,221.

Patented Jan. 7, 1879.

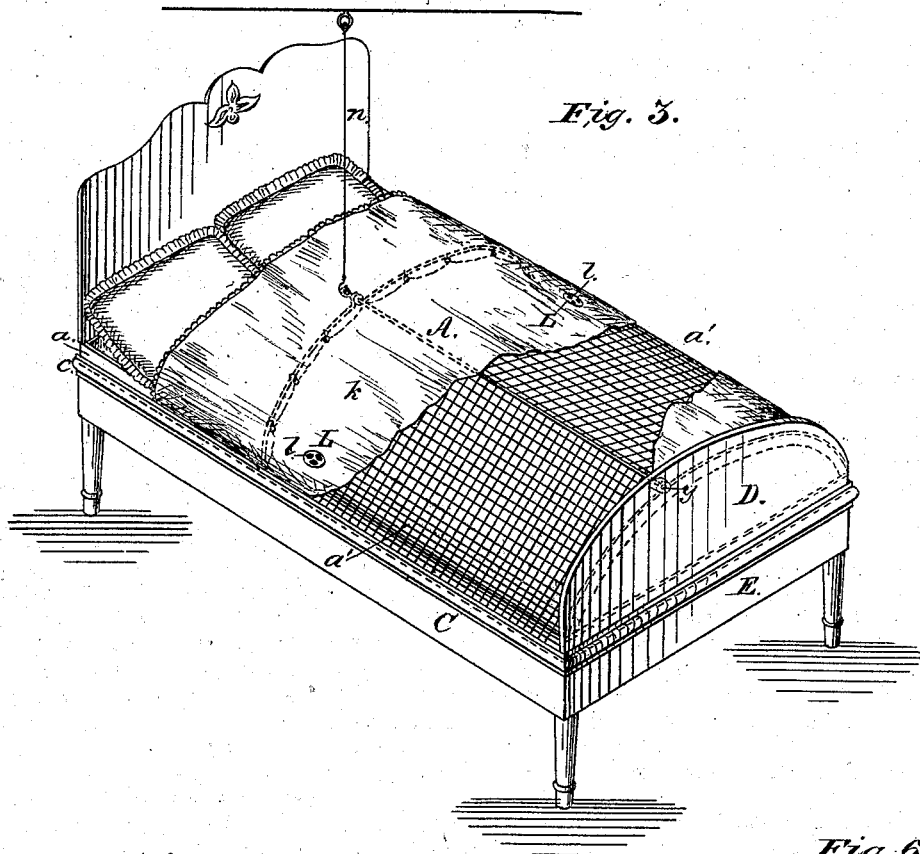


Fig. 3.

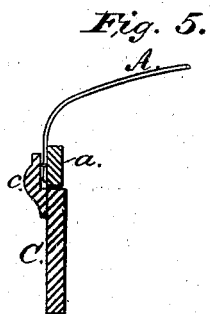


Fig. 5.

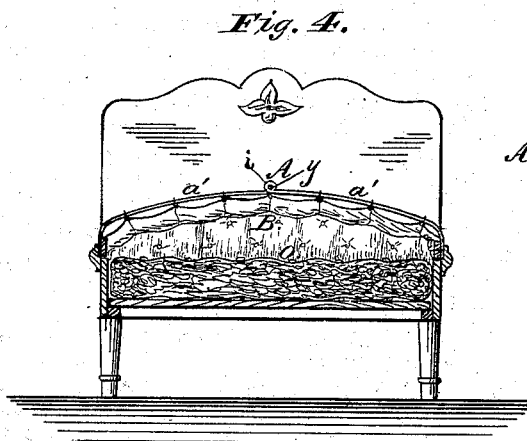


Fig. 4.

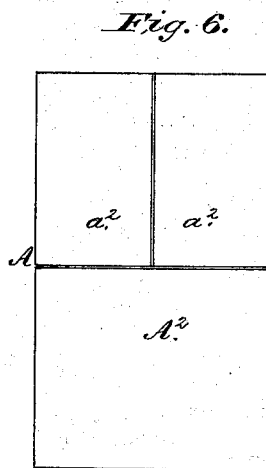


Fig. 6.

Witnesses:

J. C. Brechts
Albert Hectoris.

Inventor:

David K. Cartter,

By James L. Norris,

Attorney.

UNITED STATES PATENT OFFICE.

DAVID K. CARTTER, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN COVERINGS FOR BEDS.

Specification forming part of Letters Patent No. **211,221**, dated January 7, 1879; application filed November 18, 1878.

To all whom it may concern:

Be it known that I, DAVID K. CARTTER, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Coverings for Beds, of which the following is a specification:

My invention relates to an improvement in bed-coverings especially suitable for the use of invalids suffering from acute diseases, wounds, or other affections, which render contact of the covering with the person painful or oppressive.

Its object is to support the coverings of a bed in such manner that, while having their full effect for warmth or protection, they will be kept from immediate contact with the person, and afford full facility for entering and leaving the bed, for change of position therein without impediment from the weight of coverings, or for obtaining access to the person for treatment.

To this end it consists, first, in an arched net-work or wicker-work frame of wire, willow, or other suitable material, having its concave surface covered with blankets, comforters, sheets, or other bed-coverings, one or more, attached thereto by any suitable means, and supported thereby to conform approximately to the shape of the arch, the base of which is adapted to rest upon and be supported by the side rails of a bed, whereby it and the attached covering are sustained in proper position to cover and protect a person occupying the bed, while at the same time the coverings are kept from contact with the person; second, in combination with an arched frame, constructed of suitable material, having its inside covered with attached bed clothes or coverings, of a curtain, connected with the transverse upper edge of the arched frame, and adapted to fall upon the bed or mattress in proximity to the pillows; third, in an arched frame for supporting the coverings of beds, consisting of two or more sections, suitably jointed or hinged together, each section being adapted to turn upon and independently of the other, said arched frame having its under side or concave surface covered by attached bed clothes or coverings, which also serve to prevent the occupant of the bed

from coming in contact with the frame-work of the arched frame; fourth, in the combination, with a net-work or wicker-work frame, lined with and supporting a fabric or fabrics adapted for bed-coverings, of one or more ventilating devices extending through both said frame and fabric or fabrics, and serving to permit the escape of personal exhalations and to admit fresh air under the bed-coverings when in use, as hereinafter particularly described.

The sick-bed, under its best conditions, and even when ailments necessitating its occupancy are not of the most painful nature, is an object of more or less aversion; but it becomes especially irksome when the tenant is afflicted with a malady of a class which renders the person extremely sensitive to pain from the contact therewith of external objects, or when, from great debilitation, the weight of coverings is oppressive and annoying. In cases of nervous diseases, inflammatory rheumatism, severe wounds, debilitation and attenuation from fevers and consumption, and in many other complaints, the old-fashioned coverings, resting directly upon the body, often give the bed the character of an instrument of torture rather than of a place of rest and recovery.

In my invention the heretofore attendant evils of the sick-bed are to a great extent alleviated, and by its simplicity and cheapness of construction and the facility with which it may be handled it is adapted for popular use in hospitals and by individuals in all ranks of life.

I will now describe the best manner in which I have contemplated carrying out my improvement, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of a bed provided with my improvement. Fig. 2 is a transverse section of the same. Fig. 3 is a perspective view of a bed provided with a cover-supporting frame, composed of two longitudinal sections hinged together at their inner edges. Fig. 3^a is a longitudinal section through the center of the same. Fig. 4 is a transverse section of the same. Fig. 5 is a detail transverse section of the side rail of a bed and the lower edge or foot of the arched frame. Fig. 6 is a diagram illustrating a

modification of the arched frame, in which the foot portion or half of the bed is divided transversely from and secured centrally to the other, which is also divided longitudinally, the longitudinal sections being hinged together.

Referring now to Figs. 1 and 2, the letter A indicates an arched frame of net-work or wicker-work, made of wire, willow, or other suitable material, the base or longitudinal edges of the arch being attached to and braced by bars *a*. The length of this frame, with relation to the bed upon which it is used, should be such as to bring its upper transverse edge to a convenient position with respect to the head of the occupant of the bed, allowing the head to project beyond it.

The letter B designates the coverings or upper clothing of the bed, which may consist of blankets, comforters, sheets, or cushions filled with cotton, feathers, down, or any suitable or desirable material. These coverings are secured to and line the entire concave surface of the frame, and conform approximately to the shape thereof, being held in proper position by threads or clasps embracing the wires or other strands of the net-work or wicker-work, and passing through the coverings.

The base or lower edges of the arched frame rest upon the top edges of the opposite side rails, C, of the bedstead, and these side rails are provided at their outer edges with upward-projecting cleats or moldings *c*, which hold the frame in position and prevent its lateral displacement. The foot-board D, Fig. 1, is hinged at *d* to the foot-rail E, and along its top edge is a row of perforations, *f*, through which extend the ends of the longitudinal strands of the net or wicker work, so that at its foot end the arched frame is firmly connected to the foot-board, and may be raised from the bed by turning the foot-board outward on its hinges. Near its head end the arched frame is provided with an attached cord, *g*, which passes over two pulleys, *h h*, and has its pendant end terminated by a tassel or handle, *i*, within convenient reach of the occupant of the bed, so that the frame may be raised at pleasure for any desired purpose. To the upper transverse edge of the arched frame is closely attached, by any suitable means, a full or gathered curtain, *k'*, of silk, woolen, linen, or other appropriate fabric, which falls upon the bed or mattress in close proximity to the pillows, and lies about the neck and shoulders of the occupant, serving to close the upper end of the chamber formed under the spanning arch of the net-work or wicker-work and the coverings which it supports.

The outer surface of the frame may have a coverlet, *k*, or counterpane, of any kind dictated by the fancy. Through the net-work or wicker-work of the arched frame A and its inner supported bed-coverings and the outer coverlet are formed ventilating-passages L, which may be lined with paper, metallic, or flexible tubing, the outer ends of which are provided with perforated plates *l*, and adapted

to admit fresh air under the coverings, or permit the escape of personal exhalations. These ventilators may be located at any suitable points. In all cases the arched frame should be of such a height, and the coverings supported at such a distance from the bed O as to avoid contact with the person of the occupant.

In Figs. 3 and 4 the arched frame A is represented as divided into two longitudinal sections, *a' a'*, provided at their inner edges with overlapping eyes *x x*, through which passes a rod, *y*, thus forming an articulating joint, upon which either of the sections may be turned up to permit ingress to or egress from the bed at either side. In this case the foot ends of the sections are not secured to the foot-board, but rest upon curved cleats *w* secured to said board, and serving to support the ends of the frame-sections and preserve their shape.

The foot-board is provided with linings or paddings, the edges of which may extend under and be secured by these cleats; but the end of rod *y* rests in a socket therein, while the opposite end of said rod is suspended by cord *n*, leading from the ceiling, or it may be from an arm projecting from the head-board.

In the diagram, Fig. 6, Δ^2 represents the lower half of the arched frame A, and $a^2 a^2$ upper quarter-sections of said frame, which should be hinged together at their inner edges. In a frame thus constructed it is preferable to have a rod, similar to the rod *y*, Fig. 3, running the whole length of the frame, with the quarter-sections $a^2 a^2$ articulated thereupon, as the sections *a' a'* in Fig. 3 are, and the lower section need not be secured to the foot-board otherwise than is incidental to the support of the center rod. This form of arched frame may be placed with either end toward the head of the bed, so that in case of surgical treatment either a leg or arm of the patient may be exposed by lifting one of the quarter-sections.

The foot-board, whether hinged or not, I prefer to pad on its inner surface, so that it will contribute to the warmth of the bed, and prevent disagreeable contact of the feet of the occupant of the bed with the wood.

Heretofore a frame for supporting bed-clothing from the occupant of a bed has been constructed of longitudinal and transverse strips of steel to form an elevated frame-work, said frame being adapted to be placed on a bedstead, and the bed-coverings being simply spread over the top or other surface of the frame-work.

My invention overcomes serious objections to that style of device, inasmuch as in my invention the coverings are attached to and entirely cover the interior of the arched frame, forming not only a means of retaining and imparting warmth, but likewise subserving the purposes of a cushion-lining to the frame, in order to effectually prevent the occupant of the bed from coming in contact with the frame-work; and, moreover, by attaching the coverings to the interior surface of the frame-work,

all interstices around the lower edge of the latter are perfectly closed and the entrance of cold air effectually avoided, whereby I produce an arched bed-covering which can be sold as an article capable of being applied to any bedstead.

What I claim as my invention is—

1. An arched net-work or wicker-work frame for supporting the coverings of beds, said frame having its inside or concave surface entirely covered with attached blankets, comforters, or other bed-clothes, and supported by such attachment to the inside of the frame in an approximate shape to the arch, the construction being such that the bed-clothes are supported away from the occupant of the bed, and the person occupying the bed is prevented from contact with the frame-work.

2. The combination, with the arched frame constructed of suitable material, having its inside or concave surface entirely covered with attached bed clothes or coverings, of a curtain attached to the transverse upper edge of the arched frame and adapted to fall upon the bed or mattress in proximity to the pillows, for the purposes set forth.

3. An arched frame for supporting the coverings of beds, consisting of two or more sections, suitably jointed together, each section adapted to turn upon and independent of the other, said arched frame having its under side or concave surface entirely covered by attached bed clothes or coverings, which also serve to prevent the occupant of the bed from coming in contact with the said frame-work, substantially as and for the purpose described.

4. An arched frame for beds constructed of suitable material, and having its under side or concave portion covered with attached blankets, comforters, or other bed clothes or coverings, said frame being provided with suitable ventilating-apertures for permitting the escape of personal exhalations from the chamber formed by the arched frame and admitting fresh air, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

D. K. CARTTER.

Witnesses:

JAMES L. NORRIS,
ALBERT H. NORRIS.