A. SCHOONMAKER.

BED ATTACHMENT.

APPLICATION FILED NOV. 6, 1918.

1,342,354.

Patented June 1, 1920.

4 SHEETS—SHEET 1.

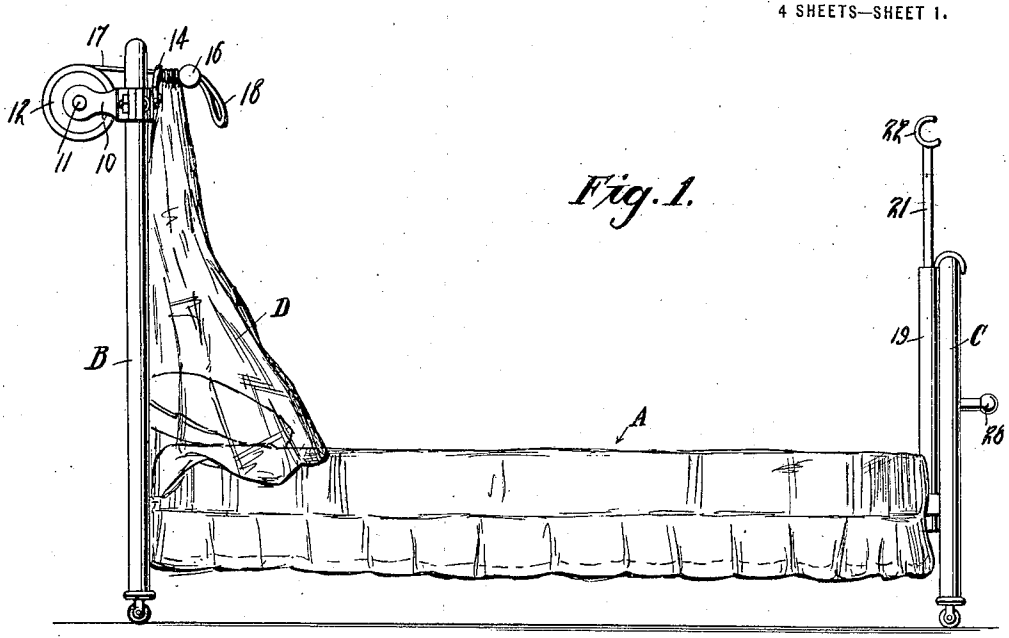


Fig. 1.

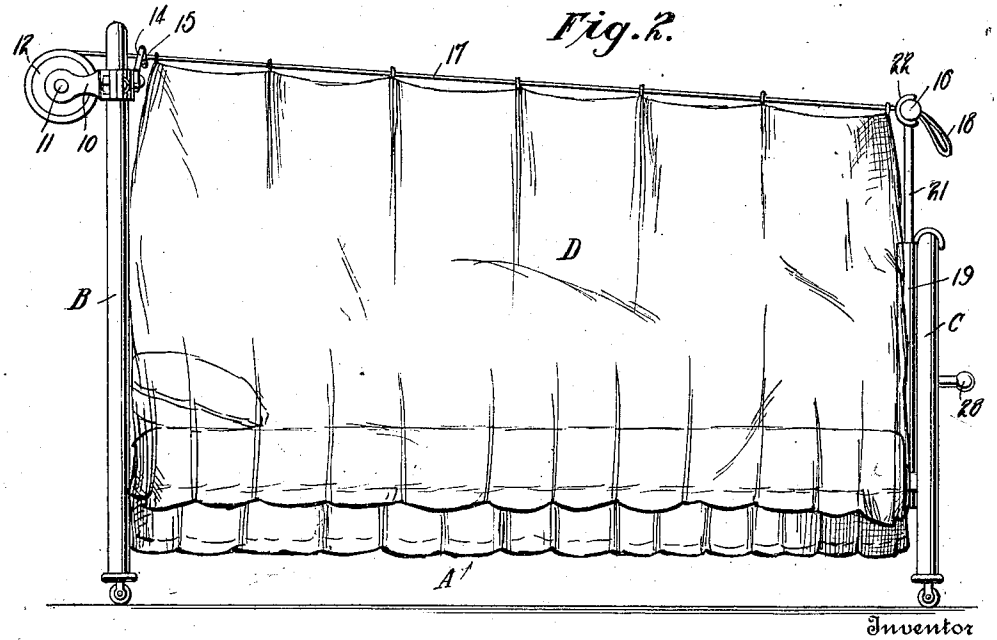


Fig. 2.

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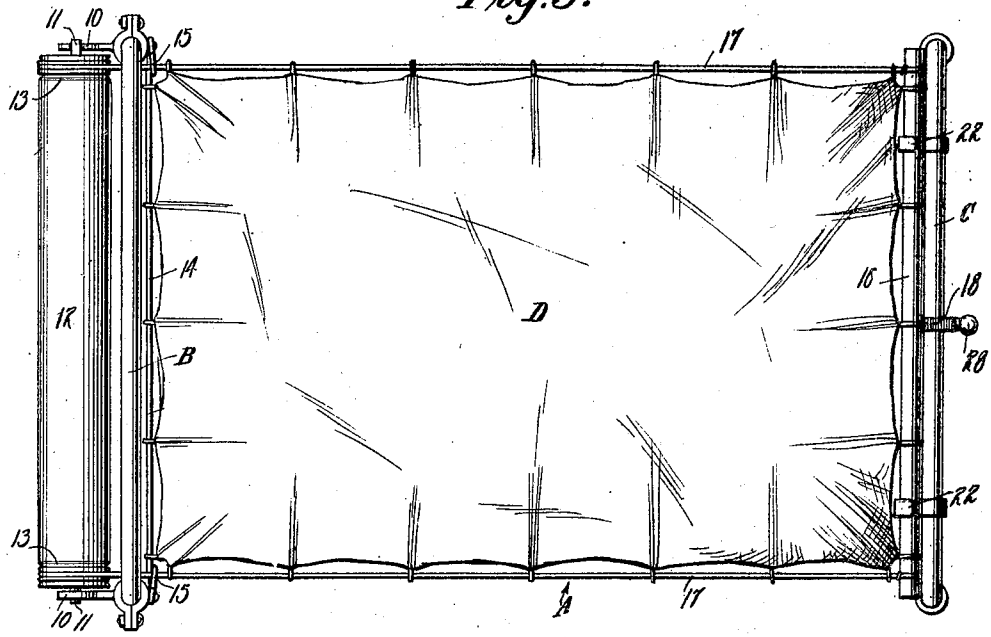
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4 SHEETS—SHEET 2.

Fig. 3.



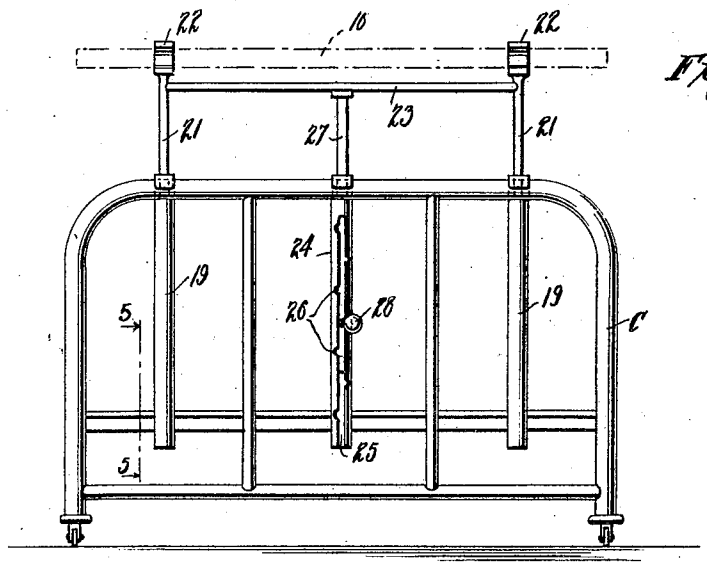
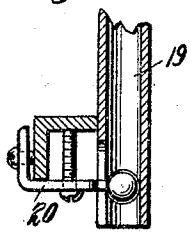


Fig. 4.

Fig. 5.



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4 SHEETS—SHEET 3.

Fig. 6.

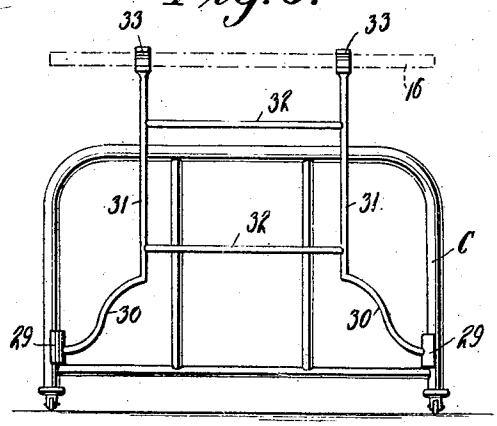


Fig. 8.

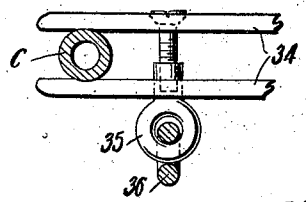


Fig. 9.

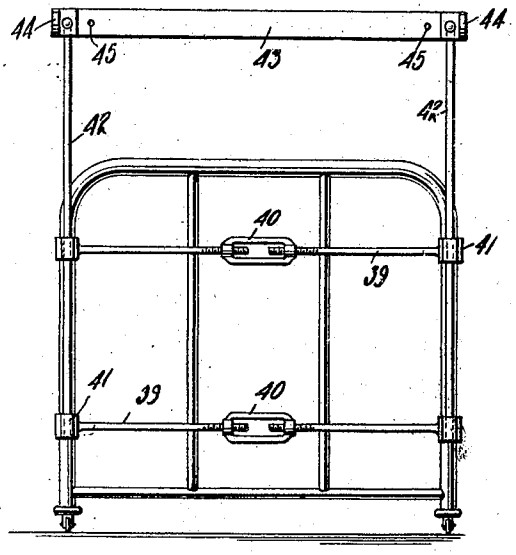


Fig. 7.

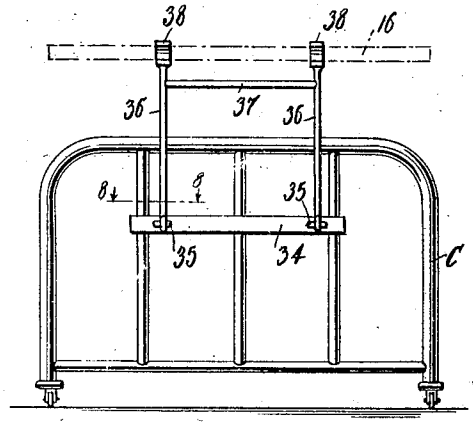
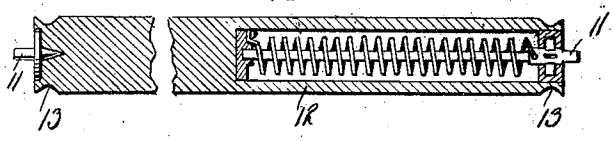


Fig. 10



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1,342,354. **Patented June 1, 1920.**

4 SHEETS—SHEET 4.

Fig. 11.

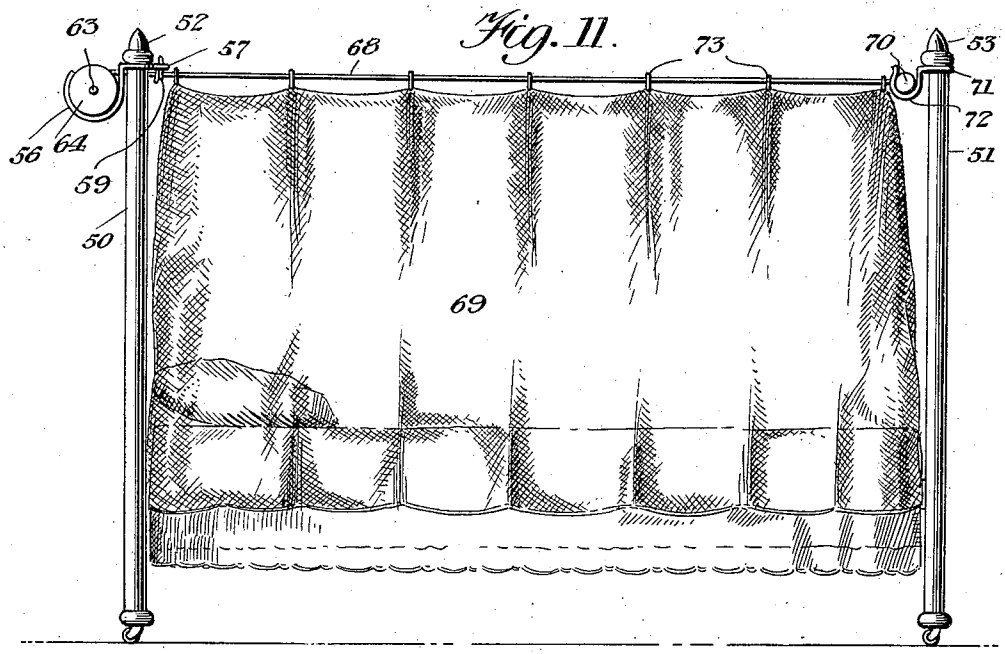


Fig. 12.

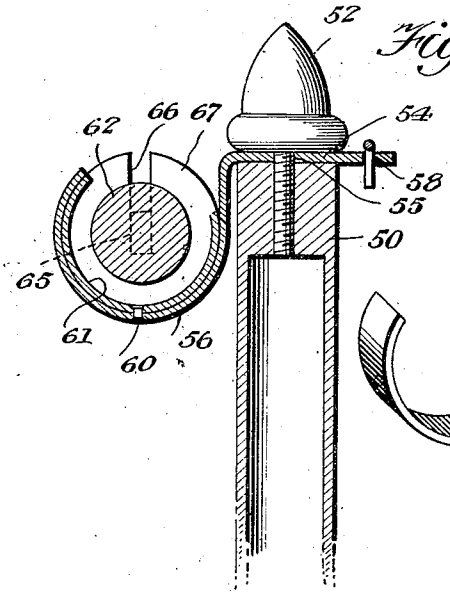


Fig. 14.

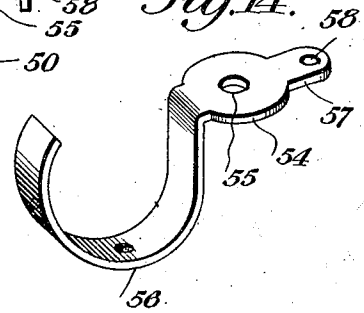
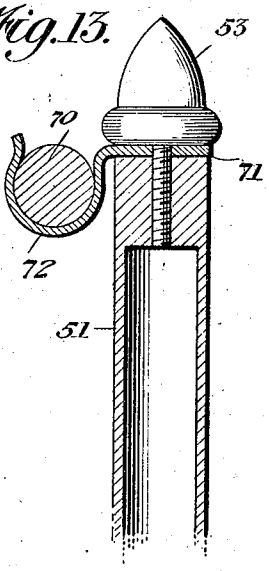


Fig. 13.



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UNITED STATES PATENT OFFICE.

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BED ATTACHMENT.

1,342,354. Specification of Letters Patent. Patented June 1, 1920.

Application filed November 6, 1918. Serial No. 261,369.

To all whom it may concern:

Be it known that I, ARTHUR SCHOONMAKER, a citizen of the United States, residing at Baton Rouge, in the parish of East Baton Rouge and State of Louisiana, have invented new and useful Improvements in Bed Attachments, of which the following is a specification.

This invention relates to bed attachments, particularly to mosquito canopies, and has for its object the provision of a canopy formed of mosquito bar or similar material so mounted upon either a metal or wooden bed that the canopy may be folded into compact form when its use is not desired and extended so as to cover the entire bed whereby the intrusion of mosquitos, flies or other similar insects will be prevented.

An important object is the provision of a device of this character which embodies the use of a spring roller suitably mounted upon the head board of the bed and which serves as a winding drum for holding cords which support the canopy.

A further object is the provision in a device of this character of means adjustably connected with the foot board of the bed whereby the canopy may be adjusted for disposition at different vertical heights.

A further object is the provision of a device of this character which will be comparatively simple and inexpensive in manufacture, highly efficient in use, durable in service and a general improvement of the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings in which:—

Figure 1 is a side elevation of a bed having my device applied thereto, showing one form of the invention and the canopy in its folded position.

Fig. 2 is a similar view with the canopy in its extended position.

Fig. 3 is a top plan view.

Fig. 4 is an elevation of the foot board of the bed showing the parts thereon.

Fig. 5 is a detail sectional view on the line 5—5 of Fig. 4.

Fig. 6 is an elevation of the foot board of the bed showing a modified form of the device applied thereto.

Fig. 7 is a similar view illustrating a further modification.

Fig. 8 is a detail sectional view on the line 8—8 of Fig. 7.

Fig. 9 is an elevation showing the head board of the bed and illustrating a modified form of the device and

Fig. 10 is a detail sectional view through the spring roller.

Fig. 11 is a side elevation showing my device adapted for use upon a metallic type of bed and reduced to a very simple form.

Fig. 12 is a sectional view through one of the posts thereof, showing the roller support also in section.

Fig. 13 is a sectional view through one of the foot posts, showing the canopy retaining bracket also in section, and

Fig. 14 is a perspective view of one of the roller casing supporting brackets.

Referring more particularly to the drawing and especially the form of the device illustrated in Figs. 1 to 5 inclusive, the letter A designates a bed of ordinary construction including the head board B and foot board C. For the purpose of illustrating the invention it is immaterial whether the bed be of wood or metal type, though in the present instance I have illustrated a metal bed.

In carrying out my invention I provide upon the rear side of the head board B, adjacent the upper end thereof, a pair of spaced brackets 10 which support the ends 11 of an ordinary spring roller 12 which is preferably provided adjacent its end with peripheral grooves 13. Secured upon the front side of the head board B adjacent its upper end is a guide member 14 which is shown in the present instance as being formed from a rod or wire provided intermediate its ends with loops 15 and suitably secured upon the head board B.

The canopy is designated as a whole by the letter D and is formed of mosquito bar or similar material so constructed as to form a substantially rectangular inclosure of a length to extend entirely over the bed when extended. At one end, the canopy D is se-

cured to the head board B and at its other end is secured to a transverse bar 16 to the ends of which are secured flexible members 17 which pass through the guide loops 15 and which are trained about the roller 12. From the foregoing it will be seen that the action of the roller 12 is such that the spring contained therewithin will hold the canopy in folded position against the head board of the bed as illustrated in Fig. 1 of the drawing.

When the use of the canopy is desired, it will be seen that the bar 16 must be pulled toward the foot of the bed and held in such position. In order to accomplish this, the bar 16 is provided with a suitable handle 18 which may be grasped so that the canopy can be extended.

In order that the bar 16 may be held at the foot of the bed so the canopy will be maintained extended, I provide upon the foot board C a pair of spaced upright tubular members 19 to which are connected brackets 20 secured upon the lower rail of the foot board as shown. Slidably mounted within the upright tubular members 19 are rods 21 which are provided at their upper ends with hooks 22 and which are connected adjacent their upper ends by a transversely extending rod 23 whereby the rods 21 may be moved in unison. When the canopy D is pulled to its extended position, the bar 16 is engaged within the hooks 22 so that such extended position will be maintained. In order that the bar 16 may be thus held at different adjusted heights, I provide a third upright tubular member 24 which is provided with a longitudinally extending slot 25 with which communicate a plurality of transverse slots 26. A vertical rod 27, connected to the under side of the transverse rod 23, is disposed within this tubular member 24 and has secured thereon a laterally extending handle 28 which extends through the longitudinal slot 25 and which is disposable selectively within the transverse slots 26. By grasping the handle 28, the rods 27, rods 21 and consequently the bar 16 may be elevated to the desired extent and held in such position by engagement of the handle 28 within a selected one of the notches or transverse slots 26.

Referring to Fig. 6 of the drawing it will be seen that I have shown a modified form of the means for holding the bar 16 at the end of the canopy. In this form, I have shown the bar retaining member at the foot board as constructed of steel spring wire which is provided with clamping members 29 engaging about the end posts of the foot board and having upwardly curved portions 30 connected therewith and carrying at their upper ends vertically disposed portions 31 which are held in proper spaced relation by means of transverse members 32. The upper ends of the upright portions 31 are provided with hooks 33 engageable by the bar 16 at the end of the canopy.

Referring to Figs. 7 and 8 of the drawing it will be seen that I have provided still another modification of the means for holding the bar 16 at the foot of the bed. In this form, I have shown a pair of bar sections 34 disposed against the outer and inner faces of the foot board C and held in clamping relation to the vertical bars of the foot board by spaced eye bolts 35 with which are pivotally connected vertically extending members 36 connected by a spacing rod 37 and carrying at their upper ends hooks 38 in which the bar 16 may be engaged. In this form of the device when the use of the securing means for the bar 16 is not desired, as when the canopy is in its folded position against the head board of the bed, the member 36 may be swung downwardly upon the eye bolts 35 as pivots and will extend downwardly entirely out of the way.

In Fig. 9 of the drawings, I have illustrated a modified form of the means whereby the spring roller may be supported upon the head board. This form of the device is particularly adapted for use upon a metal bed and involves the provision of a plurality of horizontally disposed rods 39 arranged in pairs and having their inner ends threaded and provided with turn buckles 40. The outer ends of the rods 39 are provided with curved shoe members 41 which clampingly engage against the outer sides of the endmost rails of the head board. Vertically extending posts 42 are secured to each vertically alined pair of shoes 41 and carry at their upper ends a transverse bar 43 upon which suitable brackets 44 are secured for holding the ends of the roller 12. This bar 43 is further provided with a plurality of openings 45 for the passage of the flexible members 17 connected with the canopy. It will be readily seen that this form of the means for supporting the spring roller at the head of the bed may be vertically adjusted so that the canopy may be raised and lowered.

From an inspection of the drawings it is believed that the use of the device will be obvious as the spring tension upon the roller 12 normally holds the canopy D in its folded position against the head of the bed. When the use of the canopy is desired, it is merely necessary that the operator grasp the handle 18 and exert a pull thereon so that the canopy will be moved into its extended position, the flexible members 17 unwinding from the roller 12 during this pulling upon the bars 16. In view of the fact that the flexible members 17 extend throughout the length of the canopy, it will be seen

that they will hold the canopy in proper form so that sagging thereof will be prevented. Regardless of which form of the securing means is provided at the foot of the bed, the bar 16 is engaged upon the hooks carried by which ever means is used so that the canopy will be readily held in its extended position.

Referring now particularly to the form of the device shown in Figs. 11 to 14, I have illustrated my device associated with a metal bed of the style in which all the posts are of equal height. In this form the posts at the head of the bed are designated by the numeral 50 and the posts at the foot by the numeral 51. At their upper ends these posts are provided with threaded holes within which are engaged the threaded shanks of tubular knobs 52 and 53, respectively. In applying my device to this form of bed, I make use of a pair of brackets associated with the head posts 50, each of these brackets including a plate portion 54 having a central opening 55 for the passage of the shank of the knob and further includes a downwardly extending substantially semicircular saddle 56. The plate portion 54 has also extending therefrom an extension 57 provided with a hole 58 within which is engaged a guide member 59, for a purpose to be described. The brackets are disposed with their plate portions 54 upon the upper ends of the posts 50, after which the knobs 52 are screwed into place, thus holding the brackets firmly in position. Engaged within the saddles 56 and secured thereto in any suitable manner, as by rivets 60, is a trough-like structure 61 within which is disposed a spring roller 62 having its trunnion 63 extending through one closed end 64 of the trough and having its squared lug 65 engaged within a slot 66 formed in the other closed end 67 of the trough. The ends of the trough thus have the nature of ordinary shade roller brackets and will properly hold the roller 62 upon which are wound the wires or other flexible members 68 which support the canopy 69. The wires 68 extend through the guides 59, as clearly shown in Fig. 11. At their other ends, the wires 68 have secured thereto a transverse bar 70.

Associated with the foot posts 51 are brackets including a plate portion 71 provided with a central opening for the passage of the shank of the knob 53 and further including the saddle portion 72. These brackets are placed and held in position upon the posts 51 in the same manner and extending in the same direction as the brackets upon the head posts 50. When the canopy 69 is pulled into position to be disposed over the bed, the transverse bar 70 is engaged within the brackets 72 whereupon the wires 68 and consequently the canopy, will be maintained in extended position. When the bar 70 is released from engagement within the brackets 72, retention of the spring, not shown, within the roller 62 will cause the wires 68 to be recoiled upon the roller. The canopy is suspended from the wires 68 by a plurality of eyes 73 which are slidable upon the wires so that when the wires are wound upon the roller the canopy will be compactly folded adjacent the head of the bed.

While I have shown and described the preferred embodiment of my invention, it will of course be readily understood that I reserve the right to make such changes in the form, construction, and arrangement of parts as will not depart from the spirit of the invention nor the scope of the subjoined claims.

Having thus described my invention I claim:—

1. In a canopy attachment for beds, comprising a canopy connected with the head of a bed and having its front end provided with a transverse bar, means for holding said free end at selected heights with respect to the foot of the bed comprising guide members secured upon the foot of the bed, a frame including vertical rods slidable through said guide members, and means cooperating with said guide members and said rods whereby to hold said frame at selected positions, the upper end of said frame carrying hooks engageable by said transverse bar.

2. A canopy attachment for beds comprising a spring roller mounted upon the head of the bed, a canopy secured at one end upon the head of the bed, a transverse bar at the other end of the canopy, flexible members secured to said bar and trained about said spring roller, vertically adjustable means carried by the foot of the bed for detachable engagement by said bar, said means comprising guide sleeves secured upon the foot of the bed in spaced relation, a frame including side rods slidable through said guide sleeves and including a transverse member, hooks on said frame for engagement by said transverse bar, a tubular guide secured upon the foot of the bed between said first named guide sleeves and having a longitudinal slot and a plurality of lateral notches communicating therewith, a rod depending from the transverse member of said frame and slidable through said tubular guide, and a lateral handle on said rod movable within said slot and engageable within a selected one of said notches.

3. In a canopy attachment for beds comprising a canopy connected at one end with the head of the bed and carrying a transverse bar at its free end, means for holding said free end at adjusted positions with re-

spect to the foot of the bed comprising guide sleeves secured upon the foot of the bed in spaced relation, a frame including side rods slidable through said sleeves and including a transverse member, hooks on said frame for engagement by said transverse bar, a tubular guide secured upon the foot of the bed between said guide sleeves, a rod depending from the transverse member of said frame and slidable within said last named tubular guide, and means for holding said rod in selected positions within its associated sleeve.

In testimony whereof I affix my signature.

ARTHUR SCHOONMAKER.