(No Model.)

A. COX.

BED CLOTHES FASTENER.

No. 267,498. Patented Nov. 14, 1882.

Fig. 1.

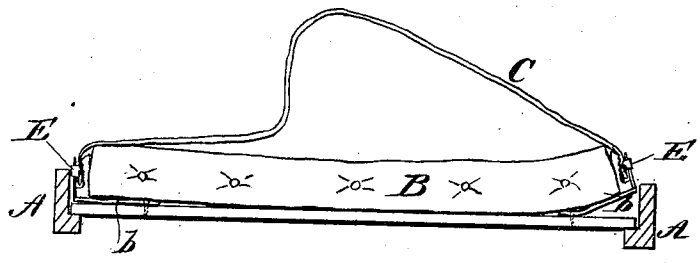


Fig. 2.

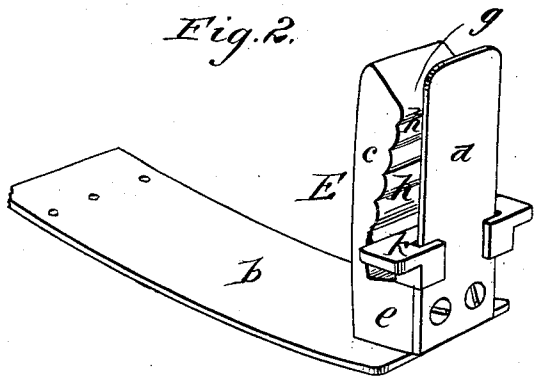


Fig. 3.

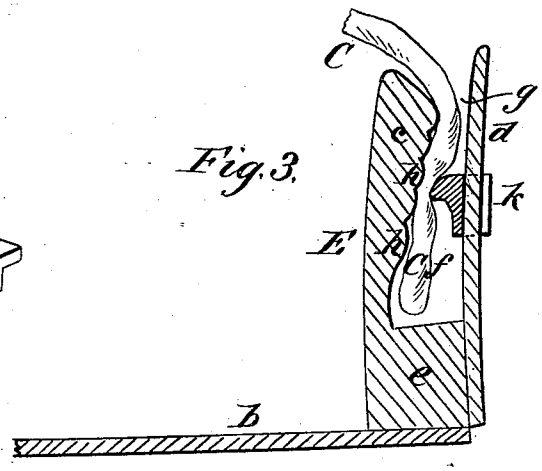
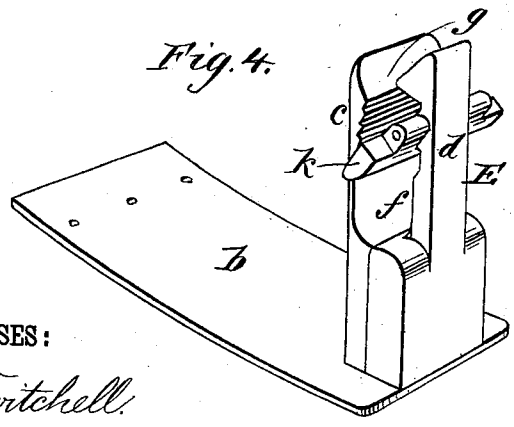


Fig. 4.



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BED-CLOTHES FASTENER.

SPECIFICATION forming part of Letters Patent No. 267,498, dated November 14, 1882.

Application filed September 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALLYN COX, of the city, county, and State of New York, have invented certain new and useful Improvements in Bed-Clothes Fasteners, of which the following is a full, clear, and exact description.

This invention relates to devices for preventing the bed-clothes on a sleeping child or person from being worked off or displaced, so as to expose the body to cold, by the restlessness of the occupant of the bed. While such devices are more especially advantageous for protecting the persons of sleeping children, whom it is very difficult to keep covered by simply tucking in the bed-clothes, as is usually done, they are also applicable to adults, particularly invalids suffering from fevers or otherwise disposed to be restless in their beds. Ordinary jaw-clamps are not sufficient of themselves to retain the bed-clothes in position on the bed, nor is simply tucking in the bed-clothes under the sides or edges of the mattress or bed, and such mode of securing the clothes in place has a restricting and oppressive effect upon the sleeper.

The object of this invention is to provide a bed-clothes fastener which, while it shall insure a firm hold of the bed-clothes and is capable of being easily applied, will, in its connection with the bed or mattress, have a yielding or spring-like action that will relieve the hold of the bed-clothes from much or all restricting and oppressive effect upon the occupant of the bed when turning thereon.

To these and other ends the invention comprises a clamp, one or more of which are designed to be applied to opposite sides of the bed for grip on the bed-clothes, and a flexible strap-connection with said clamp for attachment to the mattress or bed or surface on which the bed lies, substantially as hereinafter described.

It also consists in a clamp of special construction and ready adaptability to the purpose for which it is designed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a transverse section of a bedstead with bed thereon, and showing my improved bed-clothes fastener applied. Fig. 2 is a perspective view of the fastener; Fig. 3, a vertical section of the same, showing the bed-clothes as held by it; and Fig. 4 is a perspective view of a modified construction of the clamping portion of the fastener.

Referring in the first instance to Figs. 1, 2, and 3 of the drawings, A indicates a bedstead, B the bed or mattress thereon, and C the bed-clothes, applied to cover a sleeping form, and raised on the one side, as by the act of a person turning.

E E are clamps arranged on opposite sides of the bedstead against the longitudinal sides or marginal portions of the mattress, and serving to hold the overhanging portions of the bed-clothes C within them. These clamps, of which there may be one or more down each side of the bed, are not directly attached either to the bedstead or bed, but are connected therewith by flexible straps *b*, of leather or any other suitable material, arranged to pass under the bed or mattress B, and secured at their inner ends to the bottom thereof or to one or more of the slats of the bedstead on which the mattress lies. By this arrangement and attachment of the clamps or bed-clothes fasteners, of which the clamps form a part, not only are said devices always in place and ready for insertion of the overhanging portions of the bed-clothes within them to keep the child or person in the bed securely covered, but the arrangement is such that on any effort on the part of the occupant of the bed to turn or toss during sleep the clamps, by means of their flexible connections or attachments *b*, will have a yielding or elastic effect by reason of the yielding nature of the bed or mattress hugged by said straps and in a measure supported by them, so that in case of any strenuous effort on the part of the sleeper to draw off the clothes from either side the mattress will be more or less raised at said side. This does away with or reduces that restricting and oppressing effect which a positive or unyielding hold of the bed-clothes naturally produces.

It is not absolutely necessary that the strap *b* should be of leather or other soft material, as it might be made of brass or other hard material and be hinged or jointed to one of the slats, it only being requisite that it should form a

flexible connection with the bedstead or its mattress to lift and work with the latter as described. I prefer, in fact, to attach said strap to the bed-slats or other bed-bottom under the mattress, or to a bracket projecting inward from the bed-side and under the mattress, in order that the following objects may be attained, namely: first, to secure the flexible or elastic hold on the bed-clothes which has been described, and at the same time to furnish a fixed positive hold on the bedstead itself; secondly, to allow the bed-clothes to be tucked under the edge of the mattress both inside and outside of the fastener; and, thirdly, to allow the mattress to be removed or turned when the bed is not in use without affecting the position of the fastener. It is important, however, that, while the clamps thus yield in common with the mattress, they should securely grip the edge or fold of the bed-clothes introduced within them, and also that their construction and action should be such as to admit of ready and convenient manipulation under the conditions of actual use. I therefore make the clamp (see Figs. 2 and 3) so that its action is substantially that of a wedge, against which the bed-clothes are held by a clip or slide, *k*, and I greatly increase the efficiency of the wedge by the introduction of a stout spring, (see the upright side or jaw *d*,) which, by reason of its elasticity, allows the clip *k* to be forced outward by its action against the wedge-surface, so as to change its line of direction and make the wedge-angle sharper as the clip is forced upward. The application of the spring has the further advantage that it enables me to give to the wedge-surface a corrugated form, (see the upright side *c*, Figs. 2 and 3,) which serves to lock the clip *k* in position at different points, according to the thickness of the material inserted and the degree of force applied. It will also be seen that since the clip *k* moves freely upon its own bearings, and its movement for effective action is in the same direction as the strain which it is intended to resist, any pull upon the bed-clothes will tend to tighten the hold of the clamp rather than otherwise.

The clamp E, which may be made either in part or in whole of metal or any other suitable material, and which is firmly secured to the outer end of the strap *b*, is made with two upright sides, *c d*, their inner surfaces having a general inclination toward each other as they rise from the base *e*, where they are united, but shaped or arranged to leave a space, *f*, between them of sufficient capacity to receive the edges of the bed-clothes within it, and with a contracted mouth, *g*, at the upper end of said receiving-space. One of the sides, *c*, of the clamp has or may have internal corrugations, *h*, while the other side, *d*, is plain; and either or both of the sides may be stout springs, or they may be united at the base by a spring. In the present instance the side *c* is rigid, while the side *d* is a spring. As before indicated, the inner surface of the side *c* is shaped to increase its distance in a downward direction from the opposite side, *d*, which is fitted with a sliding clip or locking device, *k*, that, after the clothes have been inserted within the sides or jaws of the clamp, is drawn upward to grip the clothes against the sloping or wedging interior surface of the side *c*, as shown in Fig. 3, so that by reason of the free movement of the clip *k* upon its own bearings and the yielding of the side *d* under pressure any pull upon the bed-clothes tends to tighten the clamp, and the farther the clip is forced upward between the jaws or sides *c* and *d* the sharper will be the wedge-angle and the stronger the grasp of the clamp, resulting from a given force applied in an upward direction upon the clip. By pressing down on said clip or locking device, however, the clothes may readily be taken out of the clamp when required.

Fig. 4 of the drawings represents a substantially similar clamp, but shows the movable locking device or clip *k* as pivoted to its one side, *d*, for operation within the clothes-holding space *f*, with a curvilinear locking action on the clothes against the opposite side, *c*, which is or may be corrugated. I do not, however, restrict my invention to either special construction of clamp herein described.

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

1. In a bed-clothes fastener, the combination, with a clamp for holding the clothes, of an attached flexible connection for securing the fastener to the bottom of the mattress or to the bedstead beneath the bed or mattress, substantially as specified.

2. The combination, with the bed or mattress B, of the flexible strap or connection *b* and a clamp, E, essentially as shown and described.

3. In a bed-clothes-fastening clamp, E, the jaws or sides *c d*, united at their base, but constructed to form a contracted space or mouth at their opposite ends for reception of the clothes, and a wedging-surface within them for the hold of the clothes, in combination with the movable clip or locking device *k*, essentially as specified.

4. The combination, in the clamp E, of an elastic stand or holder, consisting of the two sides *c* and *d*, united at their base *e* and inclining toward each other as they rise from said base, with a moving clip, *k*, arranged to work upon or against one of the sides, *d*, and having an elastic bearing, as produced by the elastic construction of said holder, substantially as specified.

5. The combination of the rigid internally-corrugated side *c* of the clamp, the elastic side or jaw *d*, and the sliding clip *k*, substantially as specified.

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Witnesses:
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EDW. M. CLARK.