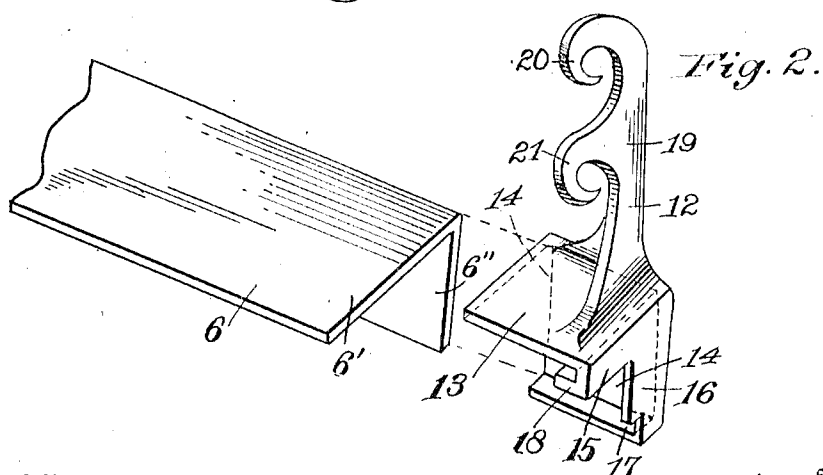


1,061,483.

Fig. 1.



Witnesses:
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17
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UNITED STATES PATENT OFFICE.

AUGUST J. KREUZKAMP, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO CHARLES J. WITZEL, OF BROOKLYN, NEW YORK.

SIDE-GUARD-HOLDING MEANS.

1,061,483.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed June 28, 1911. Serial No. 635,756.

To all whom it may concern:

Be it known that I, AUGUST J. KREUZKAMP, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Side-Guard-Holding Means, of which the following is a specification.

This invention relates to spring mattresses, and more particularly to side guards thereof, the object of the invention being to provide an improved means for supporting and imparting tension to such side guards.

In the drawings accompanying and forming part of this specification, Figure 1 is a perspective view of a portion of the mattress and its supporting frame, illustrating the present improvement, and Fig. 2 is a detail perspective view of the corner supporting bracket.

Similar characters of reference indicate corresponding parts in the several figures of the drawing.

Side guard spring mattresses have now become commercially well known and have proven themselves a meritorious article of manufacture, and usually comprise a spring mattress bottom 2 of woven or other fabric. When made of woven fabric, as herein shows, the ends of the fabric have attached thereto a binding or retaining strip 3, and by means of helical springs 4 the bottom is stretched between end supports 5 forming part of the mattress supporting frame. This frame in the form shown comprises angle iron transverse bars or supporting members 6 attached to brackets 7 carrying the usual side bars 8. In practice the side guards 9, which may be of any suitable structure, are either bent up from the bottom or attached to the bottom in any suitable manner.

The side guards may be, as stated, of various forms, but are shown herein as of woven fabric, and when so made the ends are inclosed by binding or retaining strips 10, which may be bent up from the bottom binding strips 3 or attached thereto in any suitable manner. The side guards are stretched under tension in order that they may automatically take up the slack, and for increasing this tension helical springs 11 are preferably used. These helical springs are shown each as having one end thereof connected to a side guard binding strip 10, the

opposite end having been heretofore usually connected to an upstanding lug or projection secured to the transverse angle iron supports 6 by hooking the ends of such helical spring in an opening provided in such upstanding lug. This, however, has proved a serious disadvantage, for the reason that these hooked ends catch in the bed clothing and frequently tear the same.

The present improvement therefore consists in part in providing a suitable bracket or side guard support located at each corner of the bottom and so formed that helical springs with closed loops may be used, thereby preventing the bed clothing from being torn and destroyed. This improved bracket in the present instance comprises a supporting member 12, shown as conforming, in the present embodiment, to the angle iron transverse bar and therefore comprises a horizontal plate or support 13 and a depending plate 14 adapted to overlap the horizontal and vertical members 6' and 6'' of this bar, the said plates having edge or flange portions 15, 16 and 17 for engagement with the end and lower edge of the angle bar, the edge portion 15 being also provided with an inturned portion 18 adapted to underlap the end of the horizontal member 6' of the angle bar. By this formation of bracket it will be observed that the same can be readily and firmly clamped to the angle bar, so that the tremendous strain under which the same is placed when the side guards are attached will not bend or displace the bracket. The supporting portion of the bracket is provided with an upstanding arm or member 19 having inwardly formed or turned projections forming hooks 20 and 21, extending in the direction of the side guards, for the reception of the closed loops 22 of the helical springs.

In practice usually three helical springs are provided at the end of each side guard, which is usually about two and a half inches high and therefore of less height than a stuffed mattress, which is usually about five inches. The lower helical spring is shown in the present improvement attached at one end to the side guard, while its opposite end is hooked into an opening 23 in the transverse angle iron bar 6, while the upper two helical springs have their looped ends attached to the upstanding arm of the bracket. Thus a part of the strain

on the side guards is carried by the angle iron bars 6 and consequently a more durable structure obtained. In other words, by having the lower helical spring connected at one end to the side guard and at its opposite end to the transverse iron 5 instead of to the upstanding bracket a large amount of the strain which would ordinarily come upon the bracket is carried by the angle iron 5, so that the necessity of making the upstanding bracket of a heavy and massive construction is avoided and at the same time a larger number of helicals may be used at each end of the side guard for imparting to it greater tension, since all of these helicals do not have to be carried by the upstanding bracket.

By this improvement a very simple, rigid, inexpensive and practicable means is provided for holding and maintaining the side guards under constant longitudinal tension, while enabling helical springs to be used which may have closed loops, so that mutilation and destruction of the bed clothing is avoided.

I claim as my invention:

1. A spring mattress comprising a supporting frame including transverse end irons, a spring bottom supported by said irons, vertical side guards for the bottom one extending along each side edge thereof under tension, upstanding brackets secured to said irons one adjacent to each corner of the frame and each of said brackets having a base portion overlapping different portions of said transverse irons and also having an upstanding part provided with one or more downwardly and inwardly

turned hooks each projecting toward the end of the side guard for the reception of closed loops of helical springs, and helical springs between the ends of the side guards and said hooks.

2. A spring mattress comprising a supporting frame including a pair of angle iron transverse bars, a bottom connected thereto under tension, side guards secured to the bottom, one extending along each side edge thereof and stretched under tension, brackets secured one at the end of each bar, each of said brackets comprising a base portion consisting of a horizontal and a vertical member having inturned flanges, one of said flanges having an inturned portion underlapping the horizontal portion of the angle bar, said base portion having an upstanding arm provided with one or more hooked projections, and a helical spring or springs connected to the end of each side guard and each having a closed loop for attachment to the hooked projection of a bracket.

3. A spring mattress side guard bracket comprising a base portion having a horizontal and a vertical member, each having inturned flanges, one of said flanges having an inturned edge, and an upstanding arm carried by said base portion and having one or more hooked projections.

Signed at 1821 Park Row Building, New York, N. Y., this 27th day of June, 1911.

AUGUST J. KREUZKAMP.

Witnesses:

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