June 30, 1925. 1,543,839

F. G. GALE

CORNER FASTENING FOR MATTRESS FRAMES

Filed Jan. 23, 1924 2 Sheets-Sheet 1

Fig. 1.

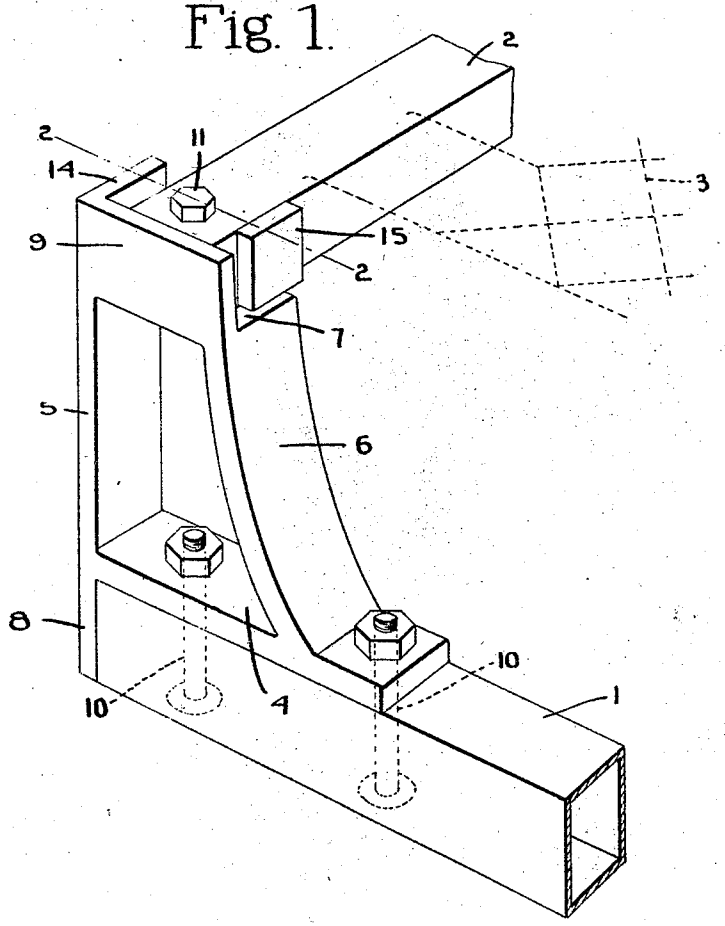
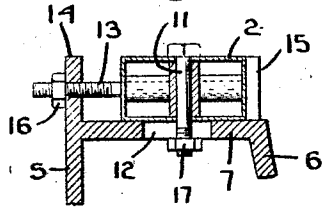



Fig. 2.




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Filed Jan. 23, 1924 2 Sheets-Sheet 2

Fig. 3.

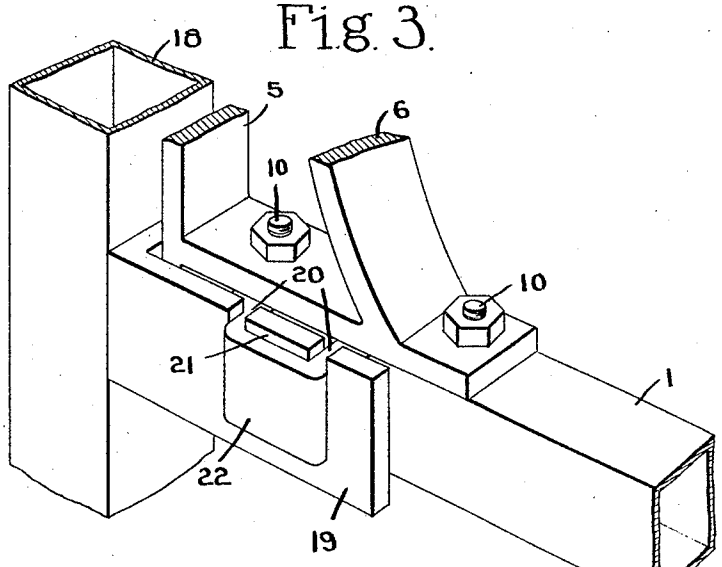



Fig. 5.

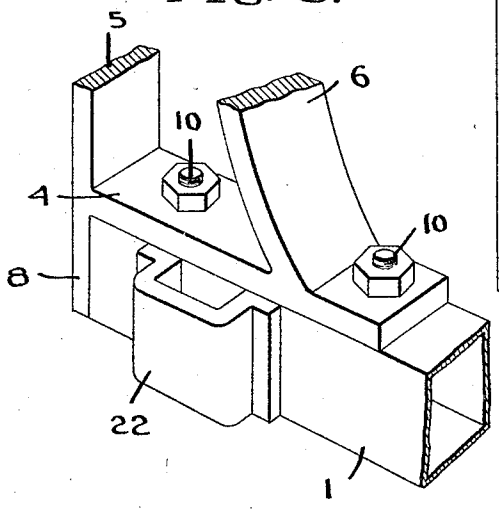
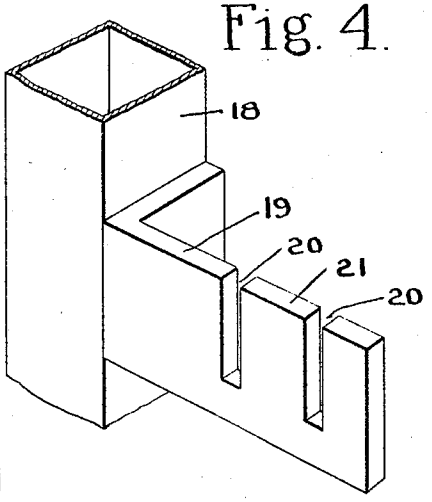



Fig. 4.




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# UNITED STATES PATENT OFFICE.

FRANCIS G. GALE, OF WATERVILLE, QUEBEC, CANADA.

## CORNER FASTENING FOR MATTRESS FRAMES.

Application filed January 23, 1924. Serial No. 687,941.

*To all whom it may concern:*

Be it known that I, FRANCIS G. GALE, a subject of the King of Great Britain, and resident of Waterville, Province of Quebec, Dominion of Canada, have invented an Improvement in Corner Fastenings for Mattress Frames, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to the corner fastening for mattress frames by which the side rails and end rails of the mattress frame are properly secured together and one of the objects of the invention is to provide an improved corner fastening which is specially adapted for use in connection with tubular end and side rails, which can be inexpensively manufactured and which is sufficiently rigid to hold the mattress frame from twisting.

In order to give an understanding of the invention I have illustrated in the drawings a selected embodiment thereof which will now be described after which the novel features will be pointed out in the appended claims.

Fig. 1 is a perspective view of the corner of a mattress frame showing my improved corner fastening;

Fig. 2 is a section on the line 2—2, Fig. 1.

Fig. 3 is a view showing a form of the invention wherein the mattress frame is connected directly to the under frames of the bed and in which the side rails of the mattress frame take the place of the usual anchor iron side rails;

Fig. 4 is a view of the bed post shown in Fig. 3;

Fig. 5 is a view showing the attaching loop on the side rail.

In the drawings 1 indicates one of the side rails of a mattress frame and 2 one of the end rails to which the bed bottom fabric indicated generally at 3 is attached. The side rails and end rails herein shown are in the form of rectangular tubing, although the invention is not necessarily limited to tubular end and side rails. The advantage of rectangular tubing for this purpose, however, is that sufficient strength can be secured with the use of a light gauge tube thereby providing an extremely light mattress frame.

The corner fastening forming the subject of the present invention is one which is adapted to be made of cast metal, preferably malleable iron. This corner fastening is formed with a base portion 4 adapted to rest on the top of the side rail 1, two arms or legs 5 and 6 which rise from the base member and a rest portion 7 at the upper ends of the arms on which the end rail 2 is supported. The device is also provided with a depending apron or flange 8 adapted to close the open end of the end rail 1 and the corner fastening further has a curb 9 rising from the rest 7 and situated to close the end of the end rail 2.

The corner fastening may be secured to the side rail 1 by any suitable means. I have herein shown for this purpose bolts 10 which extend through the base 4 and through the side rail. The end rail is secured to the rest by means of a bolt 11 which extends through the end rail and through a slot 12 formed in the rest 7. The purpose of the slot 12 is to provide for adjustment of the end rail to place the wire fabric 3 under proper tension. This adjustment is effected by means of an adjusting bolt 13 which extends transversely through the end rail 1 near the end and through a curb 14 rising from the rest 7.

In practice I propose to so construct the curbs 9 and 14 that they will join each other thus making the right angular curb.

The adjusting bolt 13 has a head 15 of a size to engage the rest 7 so that the bolt will be locked from turning movement by the engagement of said head with the rest. The bolt is provided with an adjusting nut 16 on the outside of the curb 14 and a proper adjustment of the fabric 3 can be effected by simply manipulating the nut 16. The engagement of the head 15 with the rest 3 prevents the bolt from turning during such adjusting operation.

It will be understood, of course, that when the end rail is to be adjusted the nut 17 on the hold-down bolt 10 is loosened, said bolt being tightened again after the end rail is properly adjusted.

The form of corner fastening herein shown can readily be made of cast metal and because of its skeleton structure it is comparatively light in weight. Furthermore it is so designed that notwithstanding the skeleton structure it is sufficiently rigid to hold the mattress frame from twisting or warping.

It will be noted that the legs 5 and 6 extend the full width of the base and are, therefore, very rigid. The apron 8 and curb 9 close tightly the ends of the tubular side and end rails, thus making it impossible for dirt to gather within the tubular elements.

The structure is strengthened and made additionally rigid by reason of the fact that the curbs 9 and 14 meet and thus constitute an integral structure.

In some bed structures the head and foot frames are connected together by side rails and the mattress frame rests on the side rails.

In Figs. 3, 4 and 5 I have illustrated a construction wherein the mattress frame is arranged to be connected directly to the head and foot frames of the bed thus obviating the necessity of the side rails. The bed posts 18 are each provided with a supporting flange 19, said flanges being formed with two vertical slots 20 to form an upstanding finger 21 between the slots. The side rail 1 has a loop member 22 secured thereto by some suitable means, either riveting or welding and the loop member is arranged to receive the finger 21, the sides of the loop fitting into the slots 20 as shown in Fig. 3. With this construction the mattress frame forms the means for connecting the head and end frames and the use of the regular angle iron side rails for this purpose is not necessary.

I claim.

A mattress frame comprising one piece tubular side rails and end rails which are rectangular in cross section, a corner fastening connecting the side rail and end rail at each corner, said corner fastening having a base portion to rest on the top of the side rail which base portion is of substantially the same transverse dimension as the side rail, two separate legs rising from the base portion, a rest supported by said legs and on which the end rail is supported, one of the legs being extended downwardly to form a depending apron which overlies and closes the open end of the side rail and also being extended upwardly beyond the rest, said corner fastening having a flange or curb rising from the rest at right angles to said upward extension and connected thereto, said curb or flange engaging and closing the open end of the end rail, said rest being slotted, a hold-down bolt extending through the end rail and slot of the rest and an adjusting bolt extending horizontally through the end rail and through the upward extension of the leg, the engagement of the end of the end rail with the curb or flange and the engagement of the end of the side rail with the depending apron serving to stiffen the mattress frame and prevent it from twisting.

In testimony whereof, I have signed my name to this specification.

FRANCIS G. GALE.