Oct. 12, 1943. G. A. GUSTAFSON 2,331,390

TENSION OR STRETCHER BAND FOR FENCE POSTS AND THE LIKE

Filed Dec. 13, 1941

Fig. 1.

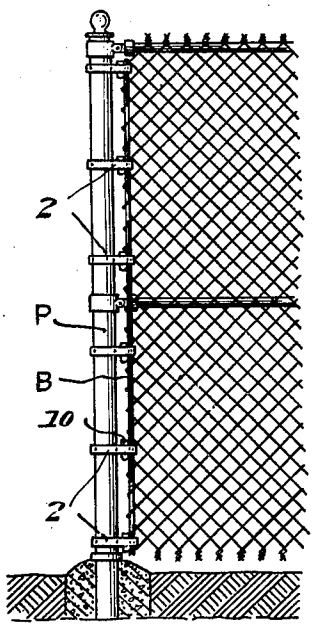


Fig. 2.

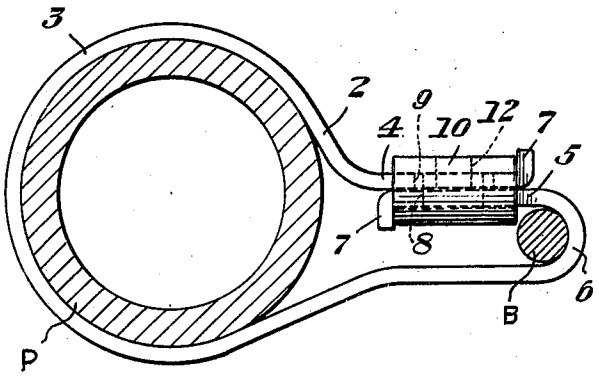


Fig. 3.

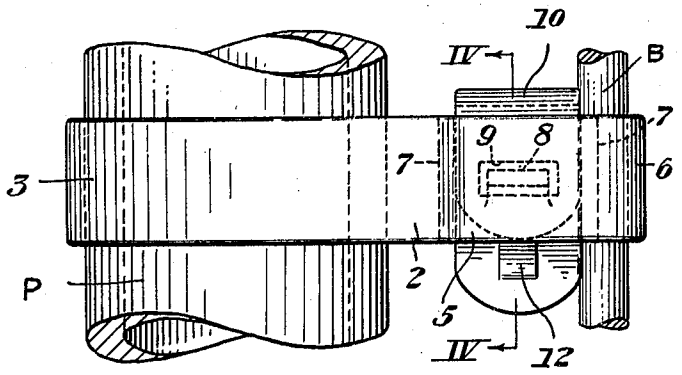


Fig. 5.

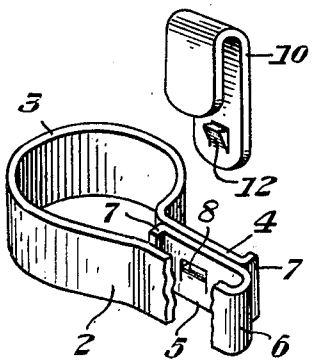
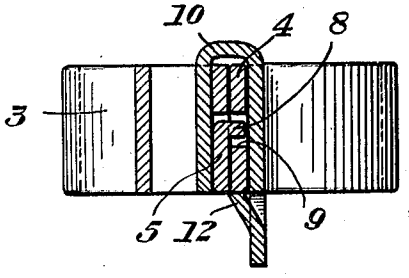


Fig. 4.



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TENSION OR STRETCHER BAND FOR FENCE POSTS AND THE LIKE

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7 Claims. (Cl. 256—47)

This invention relates to fencing and, particularly, to an improved tension or stretcher bar band for attaching the ends of fences to posts and the like.

It is the general practice in assembling fences, particularly of the chain link or mesh fabric type, to connect the ends thereof to the end, gate, and corner posts by means of tension bars and tension or stretcher bands. The tension or stretcher bands fit around each of the terminal posts and a tension or stretcher bar is slipped through and supported by the tension bands, with the tension bar being threaded through the mesh of the fence fabric or attached to the end picket of the fence. The fence is then stretched to the desired tension with the pulling force exerted thereon transferred to the post through the tension bar and bands.

Heretofore it was the usual custom to provide tension or stretcher bands with each of them having the free ends thereof secured together by means of a bolt. In such construction, the tension bar is disposed between the free ends of the band and bears against the bolt. While such a tension band satisfactorily supported the tension bar and the end of the fence, the placing and tightening of the bolts therein was tedious and consumed considerable time. Furthermore, such bolts were expensive, and it was difficult to maintain the tension bar and the bands in their proper positions while the bolts were being tightened so as to securely clamp the tension bar, together with the bands, to the post.

In the present invention there is provided a tension or stretcher band which is assembled without the use of a bolt, thereby providing a band wherein all of the above named disadvantages are eliminated.

Accordingly, it is one of the objects of the present invention to provide an improved tension or stretcher bar band for fences and the like which is simple and inexpensive in its construction and, at the same time, a band which is efficient and effective in its use.

It is another object of the invention to provide a tension or stretcher band which may be easily and conveniently fabricated from flat metallic material.

It is a further object of this invention to provide an improved tension or stretcher band which can be easily and quickly assembled in position on the post, and a band which securely holds the tension bar and connects the end of the fence to the post.

It is still another object of the present invention to provide an improved tension or stretcher band having means arranged therewith for maintaining the free ends of the band in alignment with each other at all times, and an improved means for securely holding the free ends of the band together in engagement with each other.

Various other objects and advantages of this invention will become more apparent during the course of the following specification and will be particularly pointed out in the appended claims.

In the accompanying drawing there is shown, for the purpose of illustration, one embodiment which my invention may assume in practice.

In the drawing:

Figure 1 is an elevational view of a portion of a fence showing one of the post members thereof with the improved tension or stretcher band of my invention incorporated therewith;

Figure 2 is a plan view of the improved tension or stretcher band of my invention;

Figure 3 is a side elevational view thereof;

Figure 4 is a sectional view taken on the line IV—IV of Figure 3; and

Figure 5 is a perspective view of my improved tension or stretcher band partly in section showing the locking clip disengaged from the band.

Referring more particularly to the drawing, the improved tension or stretcher band of my invention consists preferably of a flat metallic member 2 bent upon itself so as to provide preferably a circular band portion 3 which is adapted to fit around the post or other member with which the band is to be used. As shown in Figure 2 of the drawing, the free ends 4 and 5 of the metallic member extend outwardly to one side of the circular portion 3. One of the outwardly extending free ends of the metallic member 2, namely, free end 5 in the present instance, is preferably longer than the opposed free end 4 and is bent back upon itself and inwardly toward the circular post attaching portion 3 so as to provide a substantially U-shaped loop portion 6 therein directly opposite the circular portion 3. The free ends 4 and 5 are adapted to lie directly next to each other in juxtaposition, with the free end 4 extending outwardly away from the circular portion 3 and the free end 5 extending inwardly toward the same in overlapping relation. The extreme outer ends of each of the free ends 4 and 5 are preferably turned or bent outwardly away from each other so as to provide a flange portion 7 on the extreme end of each of them.

There is struck up from the metal of one of the free ends of the metallic band member 2, namely,

free end 5 in the present instance, preferably centrally thereof, an outwardly projecting elongated portion 8 which extends toward the opposed free end. There is arranged in the other free end, namely, free end 4 in the present instance, preferably an elongated opening or hole 9 in which the projecting portion 8 is adapted to be disposed. It is the purpose of the projecting portion 8 to cooperate with the opening 9 so as to maintain the free ends of the band member in alignment with each other at all times.

There is provided a means for securely holding the free ends of the band member in engagement with each other, preferably in the form of a U-shaped resilient clip-like member 10, with the leg portions thereof being spaced apart a distance slightly greater than the combined thickness of both of the free ends of the band member. The clip-like member is preferably made from a piece of flat resilient metallic material and preferably has a width slightly less than the distance between the flange portions 7 arranged on the extreme outer free ends of the band member between which the clip member is adapted to be disposed in a manner hereinafter to be described.

One of the leg portions of the clip-like member 10 is preferably longer than the other and has an outwardly projecting portion 12 struck up from the surface of the metal thereof, which is adapted to be disposed next to at least one of the free ends of the band member at a point either above or below the same and in abutting relation therewith so as to hold the clip member securely in position over and around the free ends 4 and 5 of the metallic band member.

The improved tension or stretcher band of my invention is used and assembled in the following manner. The band is placed around a post P with which it is to be used, as shown in Figure 2 of the drawing, with the free ends 4 and 5 overlapping each other. The free ends 4 and 5 are then moved and held together so that the projecting portion 8 on the free end 5 passes into and is positioned in the opening 9 of the free end 4. The U-shaped clip member 10 is then placed over the free ends 4 and 5 of the band between the flanges 7 carried thereby and forced downwardly over the free ends. As the clip-like member is moved to position, the legs thereof tend to spring apart, due to the resiliency thereof. After the clip 10 has been moved to position over the free ends of the metallic member, it will be seen, as shown in Figures 3 and 4 of the drawing, that the projecting portion 12 carried by one of the legs thereof is disposed immediately below one of the free ends of the metallic member and in abutting relation therewith, thereby locking the clip in position thereon so as to prevent accidental movement of the same from its position therearound. It will be seen then that the projecting portion 8 carried by the free end 5 is disposed and securely held in the opening 9 of the opposed free end 4, by the clip 10, and that the projecting portion 8 acts as a pilot for centering the free ends when the clip is forced on the free ends. That is, the projecting portion 8, in cooperation with the opening 9, maintains the free ends in horizontal alignment while the clip is being driven to position thereon. It will also be seen that the sides of the clip 10 abut against the flanges 7 so as to prevent longitudinal movement of the free ends 4 and 5.

After the desired number of tension bands has been disposed around any particular post in the manner above described, a tension or stretcher bar B, which is usually flat or round in shape, is then threaded through the mesh of the fence and slipped through the U-shaped loop portions 6 of the band members 2, with the tension bar adapted to bear against the inside portion of the loop portion 6 of each of the tension bands, as shown in Figures 1 and 2 of the drawing. After the tension or stretcher bar B has been moved to the position that it will assume in the finished assembled fence, the fence fabric is stretched by pulling on the opposite end thereof so that the fence will be taut. While the fence fabric is being stretched, it will be seen that as the pull or tension increases, the projecting portion 8 carried by each of the bands 2 will tend to move outwardly in its respective opening 9 with which it cooperates, and finally bears against the outer wall of its respective opening 9. Accordingly, it will be seen that the projecting portion 8 of each of the clips acts as a locking means when the fence is under tension, so as to maintain the free ends securely in engagement with each other and to prevent the free end 5 of each of the bands from being pulled through the clip 10 when force is exerted on the loop portion 6 of the bands.

When it is desired to remove the band from engagement with the fence and the post, it will be understood that the longer leg of the clip 10 is driven outwardly and upwardly so as to spring the clip and so that the projecting portion 12 carried thereby is moved from its position in under the free end of the band against which it abuts in the assembled position of the clip. The tension bar B is then removed from the bands. The clip is then removed from the post by bending the free ends 4 and 5 outwardly away from each other so as to disengage the projecting portion 8, carried by one of the free ends, from the opening 9, carried by the opposed free end.

As a result of my invention, it will be seen that there is provided a tension or stretcher band which can be inexpensively fabricated and one which consists of a minimum number of parts. It will also be seen that my improved tension band can be conveniently assembled and removed from the post with which it is to be used, without the aid of expensive tools. Furthermore, the tension or stretcher bar to be used therewith can be easily placed in position therethrough after the bands have been assembled on the post, thereby eliminating the necessity of handling both the tension bands and the tension or stretcher bar at one and the same time, which is a decided advantage.

While I have shown and described one specific embodiment of my invention, it will be understood that this embodiment is merely for the purpose of illustration and description and that various other forms may be devised within the scope of my invention, as defined in the appended claims.

I claim:

1. A tension band for fence posts and the like comprising a metallic member bent upon itself so as to provide a portion which is adapted to fit around a post or other member with which the band is to be used with the free ends of said member arranged to one side thereof, one of the free ends of said member being bent back upon itself and inwardly toward the post attaching portion so as to provide a substantially U-shaped loop portion therein directly opposite said post attaching portion so that the free ends lie in

juxtaposition directly next to each other in overlapping relation with the U-shaped loop portion adapted to receive a vertically disposed fence element, and removable means arranged over and around the free ends of the metallic member and extending transversely thereof for holding the free ends of the metallic member securely in engagement with each other.

2. A tension band for fence posts and the like comprising a flat metallic band member bent upon itself so as to provide a relatively large portion which is adapted to fit around a fence post or other member with which the band is to be used with the free ends of said member extending outwardly therefrom, one of the free ends of said member being bent back upon itself and inwardly toward the post attaching portion so as to provide a relatively small substantially U-shaped loop portion therein directly opposite said post attaching portion and which is adapted to receive a bar-like member, said free ends adapted to lie directly next to each other in juxtaposition, and a U-shaped metallic clip-like member disposed over and around the free ends of said metallic band member for holding the same securely in engagement with each other, said clip having means arranged therewith for securely locking the same in position over said free ends of said metallic band member.

3. A tension band for fence posts and the like comprising a flat metallic member bent upon itself so as to provide a relatively large portion which is adapted to fit around a fence post or other member with which the band is to be used with the free ends of said member extending outwardly therefrom, one of the free ends of said member being bent back upon itself and inwardly toward the post attaching portion so as to provide a relatively small substantially U-shaped loop portion therein directly opposite said post attaching portion and which is adapted to receive a bar-like member, said free ends adapted to lie directly next to each other in juxtaposition, one of the free ends of said metallic member having an outwardly projecting portion struck up from the surface thereof with the opposed free end having an opening arranged therein for receiving said outwardly extending portion whereby the free ends are maintained together in alignment with each other, and means for holding the free ends securely together whereby said outwardly projecting portion is disposed in said opening.

4. A tension band for fence posts and the like, as defined in claim 3, wherein the means for holding the free ends of the metallic band member securely together so that the outwardly projecting portion of one of the free ends is disposed in the opening in the opposed free end consists of a flat metallic substantially U-shaped clip-like member.

5. A tension band for fence posts and the like, as defined in claim 3, wherein the means for holding the free ends of the metallic band securely together whereby the outwardly projecting portion of one of the free ends is disposed in the opening in the opposed free end, consists of a flat resilient metallic substantially U-shaped clip-like member, said clip-like member having an outwardly projecting portion struck up therefrom adjacent the end of at least one of the leg portions thereof which is adapted to be disposed next to the free ends at a point either above or below the same and in abutting relation therewith so as to securely lock the clip-like member in position over and around the free ends of the metallic band member.

6. A tension band for fence posts and the like comprising a flat metallic member bent upon itself so as to provide a relatively large portion which is adapted to fit around a fence post or other member with which the band is to be used with the free ends of said member arranged to one side of said large portion, one of the free ends of said member being bent back upon itself and inwardly toward the post attaching portion so as to provide a U-shaped loop portion therein directly opposite said post attaching portion and which is adapted to receive a bar-like member, with the extreme end of said free end overlapping the other free end and disposed directly next to the same in juxtaposition, an outwardly extending flange portion arranged on the extreme end of each of said free ends, each of said flange portions extending outwardly in opposite directions and being spaced apart from each other, and a U-shaped clip member disposed around the free ends of the metallic member between the opposed flange portions thereof for holding the overlapped free ends of said metallic member securely in engagement with each other, said flange portions disposed to either side of said clip member and adapted to guide the clip to position over the free ends and to prevent slidable movement or displacement of the same thereon.

7. A tension band for fence posts and the like comprising a flat metallic member bent upon itself so as to provide a portion which is adapted to fit around a post or other member with which the band is to be used, one of the free ends of said member being bent back upon itself and inwardly toward the post attaching portion so as to provide a U-shaped loop portion therein directly opposite the post attaching portion, with the extreme end of said free end disposed inwardly of the extreme outer end of the loop portion, the other free end extending outwardly from the post attaching portion and overlapping the inwardly extending last-mentioned free end and lying directly next to the same in juxtaposition on the outer side of said U-shaped loop portion, and a U-shaped clip member arranged around the overlapped free ends and disposed transversely thereof at a point between the post attaching portion and the extreme outer end of the loop portion for holding the free ends securely in engagement with each other.

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