Aug. 22, 1961 A. PINSON 2,997,278

TENSION BAND

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FIG. 1

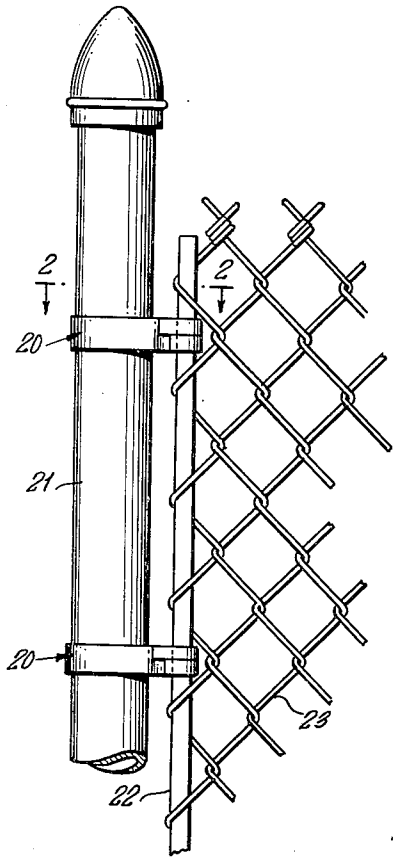


FIG. 2

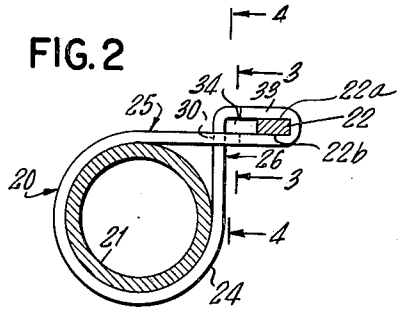


FIG. 5

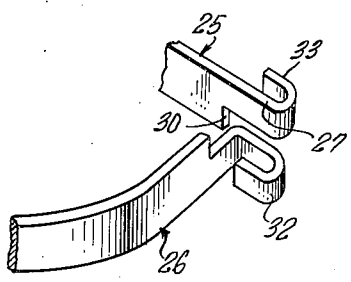


FIG. 6

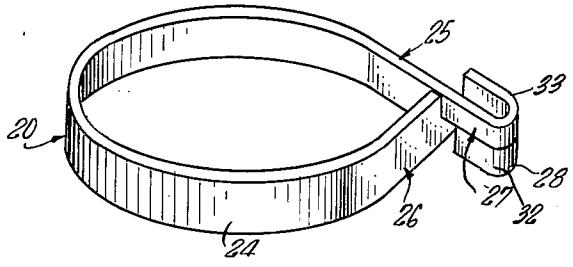
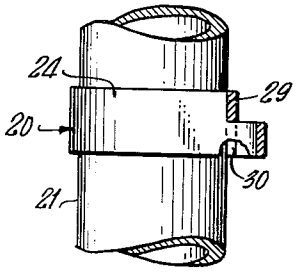


FIG. 3



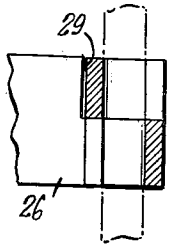


FIG. 4

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FIG. 7

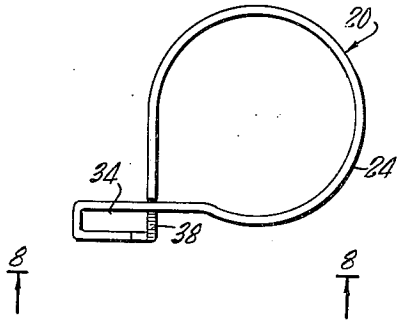


FIG. 8

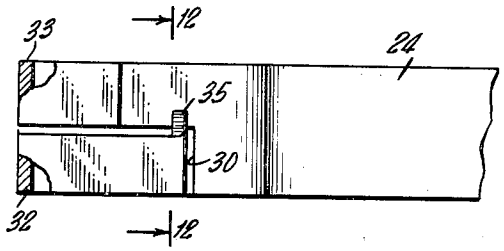


FIG. 9

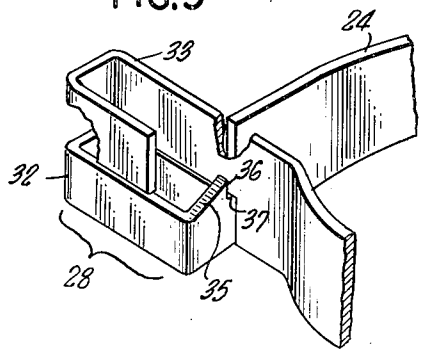
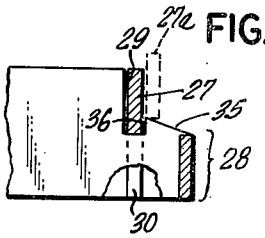


FIG. 12



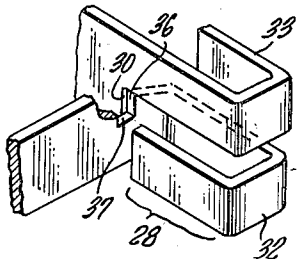


FIG. 11

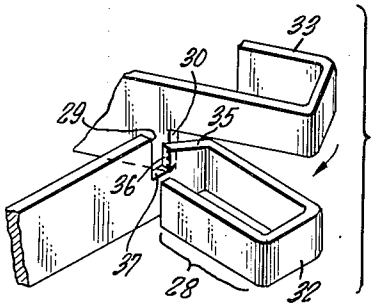


FIG. 10

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United States Patent Office 2,997,278 Patented Aug. 22, 1961

2,997,278

TENSION BAND

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Filed Apr. 20, 1959, Ser. No. 807,684
3 Claims. (Cl. 256—47)

This invention relates generally to wire fencing and particularly to tension bands employed for connecting such fencing to fence posts.

Heretofore it has been customary in assembling fences, particularly of the wire fabric type, to insert a vertical tension bar at one end of the fence fabric and, after subjecting such fence fabric to suitable tension, to connect said tension bar to a fence post by means of one or more tension bands. However, these bands have frequently included a multiplicity of separate fittings, and have required skilled labor and an undue length of time for their assembly. Moreover, they are frequently quite complicated and expensive, and in some instances require specially formed tension bars for use therewith.

Accordingly, it is an object of the present invention to provide an improved tension band which is simple and inexpensive in its construction and which may be assembled in a minimum of time with tension bars of standard cross-section.

Another object of the invention is to provide a one-piece tension band which requires no nuts, bolts or other fittings.

A further object of the invention is to provide a tension band which may be easily assembled without the use of any special tools or equipment.

A still further object of the invention is to provide a tension band which may be assembled without the use of skilled labor.

Other and further objects of the invention will be apparent from the following description as read in connection with the accompanying drawings.

In the drawings:

FIGURE 1 is an elevational view showing one embodiment of the invention assembled in operative position;

FIGURE 2 is a cross-sectional view taken on the line 2—2 of FIGURE 1;

FIGURE 3 is a fragmentary elevational view taken on the line 3—3 of FIGURE 2, wherein a portion of the aforesaid embodiment of the invention is shown in cross-section;

FIGURE 4 is a cross-sectional view taken on the line 4—4 of FIGURE 2;

FIGURE 5 is a fragmentary perspective view of a portion of the said embodiment of the invention;

FIGURE 6 is a perspective view of the said embodiment of the invention;

FIGURE 7 is a plan view of a modified form of the invention;

FIGURE 8 is a fragmentary elevational view taken on the line 8—8 of FIGURE 7, wherein a portion of the modified form of the invention is shown in cross-section;

FIGURE 9 is a fragmentary perspective view depicting a portion of the modified form of the invention in a fully contracted position;

FIGURE 10 is a fragmentary perspective view depicting a portion of the modified form of the invention in an expanded position;

FIGURE 11 is a fragmentary perspective view illustrating the portion of the modified form of the invention shown in FIGURE 10 in a partially contracted position; and

FIGURE 12 is a fragmentary cross-sectional view taken about the line 12—12 of FIGURE 8.

Referring more particularly to the drawings, a number of the improved tension bands comprised by the present invention, and generally designated by the numeral 20, may be mounted at intervals on a fence post 21 of conventional design, as illustrated in FIGURE 1. Said tension bands are connected with a vertical tension bar 22 secured in a conventional manner with wire fence fabric 23.

As will be seen by reference to FIGURE 2, the tension bar 22 has a rectangular cross-section. It is to be understood, however, that the invention is adapted for use with tension bars having other cross-sectional conformations.

The tension band, illustrated in FIGURES 2–4, comprises a flat metallic band having a curved portion 24 encircling the aforesaid fence post 21 and two expandable or separable ends, generally designated by the numerals 25 and 26. As initially formed said ends may be displaced from each other. It will be seen from FIGURE 2 that said ends are generally complementary and when in registration with each other form an enclosure adapted to receive the aforesaid tension bar 22. The said ends have horizontal projecting elements, generally designated by the numerals 27, 28, formed as hereinafter described. As shown in FIGURES 4–6, each of the ends also has a substantially vertical face 29, 30 extending approximately halfway through the height of the tension band.

The lower of the aforesaid horizontal projecting elements 28 is bent at right angles, as at 31, and is further bent back upon itself to form a substantially J-shaped hooked portion 32. The upper of the said horizontal projecting elements 27 is bent back upon itself to form a substantially reverse-J-shaped hooked portion 33. As may be seen in FIGURE 6, the said hooked portions 32, 33 are disposed in overlapping relation when in a closed position, i.e., a position wherein the tension bar may be received within the enclosure 34 formed by said overlapping hooked portions.

As may be best seen from FIGURE 2, that portion of the said horizontal elements comprised by the said hooked portions extends substantially tangentially of that part of the curved portion 24 of the tension band immediately adjacent to separable ends 25. However, where desired, the said hooked portions may be disposed substantially radially of the curved portion 24.

It will also be noted from FIGURE 2 that when the tension bar 22 is received within the enclosure formed by the hooked portions 32, 33, the said horizontal projecting elements are contactable with the sides 22*a*, 22*b* of said tension bar. Such contact is effective to prevent slippage and accidental displacement of the tension bar.

The tension band is formed so that before the tension bar is received in said enclosure, the horizontal projecting elements are in a separated displaced position. When it is desired to assemble the said tension bar with the tension band, the said horizontal projecting elements may be contracted by manual pressure so as to form the previously mentioned enclosure 34. Said contraction is limited by the aforesaid substantially vertical faces 29, 30 which are contactable with the inner lateral portions of the separable ends 25, 26, such limitation corresponding with the overlapping position of the hooked portions 32, 33, whereby the desired enclosure 34 is formed. Thus, by simply pressing the separable ends 25, 26 together until they are in contact with the substantially vertical faces 29, 30, the tension band is put into a position whereby the said enclosure is formed and ready to receive the tension bar. It is to be understood, of course, that when the tension bar is inserted through the aforesaid enclosure, said tension bar will also be in the process of assembly with the end portion of the wire fence fabric in the conventional manner. The band may also be applied by separating the ends so as to permit the entry of

the fence post or similar element into the post encircling portion thereof. A band thus operatively positioned is subjected to strain and torque which would normally tend to cause it to become distorted. However, in the instant construction each of the ends is positioned in positive abutment with the vertical face formed in the complementary end portion. The abutment surfaces thus provided in this symmetrically balanced arrangement resist the distortive forces referred to above resulting in a stable and effective band. The band is highly effective even when the fence fabric is placed under abnormally high tension.

FIGURES 7 through 11 illustrate a modified form of the invention where, in lieu of the necessity of exerting the aforesaid manual pressure for the formation of enclosure **34** until the tension bar is inserted therein, a tooth having an inclined face **35** is formed on the upper portion of the lower horizontal projecting element **28**. The rear face **36** of said tooth is substantially vertical and forms, together with the substantially vertical face **29** and connecting base **37**, a pocket for the reception of the upper projecting element **27**. Since, as may be seen in FIGURE 8, the slope of said inclined face **35** is slight, it will require little manual pressure to force the upper projecting element from an expanded position, such as shown in FIGURE 10, along said inclined face, wherein said element will assume positions such as **27***a* (FIGURE 12) and thence above the said pocket, as shown in FIGURE 11, and snap into the pocket where it will be securely retained in the position depicted in FIGURES 7 and 9, in which position the tension bar may be inserted as desired.

It will be seen from the foregoing that each form of the invention is inherently simple, efficient and easy to use without any special skill or tools being required; and that the objects of the present invention have been achieved in an ingenious and effective manner.

The embodiments of the invention illustrated and described hereinabove have been selected for the purpose of clearly setting forth the principles involved. It will be apparent, however, that the present invention is susceptible to being modified in respect to details of construction, combination and arrangement of parts which may be restorted to without departure from the spirit and scope of the invention as claimed.

I claim:

1. A tension band for interconnecting a tension bar with a fence post comprising a band having a fence post encircling portion terminating in free end portions, each of said end portions being provided with a horizontal projecting element of reduced width, thereby defining a vertical face at the juncture of said projecting element with the body of said band, said projecting elements being complemental, a substantially J-shaped hooked portion formed on one of said projecting elements and an oppositely directed J-shaped hooked portion formed on the other of said projecting elements whereby an enclosure adapted to receive a tension bar is formed when said hooked portions are brought into overlapping relation with each other, a pocket formed in one of said projecting elements for receiving a portion of the complementary projecting element whereby said projecting elements are releasably retained against displacement from one another.

2. A tension band for a fence, comprising a strip of material having a curved portion for encircling a post and terminating in separable end portions, said end portions being formed thereon, complementary hook-shaped elements disposable in registered relation to define an enclosure adapted to receive a fence tension bar, one of said end portions having formed thereon an inclined locking tooth, the other of said end portions being formed with a complementary locking notch, whereby said complementary hook-shaped elements are retained against displacement from each other in the plane of the band when in the locked position, and whereby said hook-shaped elements may be unlocked by separating said elements in the directions generally perpendicular to the plane of said band.

3. A tension band for interconnecting a tension bar with a fence post comprising a band having a fence encircling portion terminating in free end portions, each of said end portions being provided with a horizontal projecting element of reduced width, thereby defining a vertical face at the juncture of said projecting element with the body of said band, said projecting elements being complemental, a substantially J-shaped hooked portion formed on the other of said projecting elements whereby an enclosure adapted to receive a tension bar is formed when said hooked portions are brought into overlapping relation with each other, the lower of said horizontal projecting elements being provided with an inclined tooth on the upper surface thereof, the upper of said horizontal projecting elements being disposable between the said inclined tooth and one of the said substantially vertical faces of one of said expandable ends, whereby the said horizontal projecting elements are biased against expansion.

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