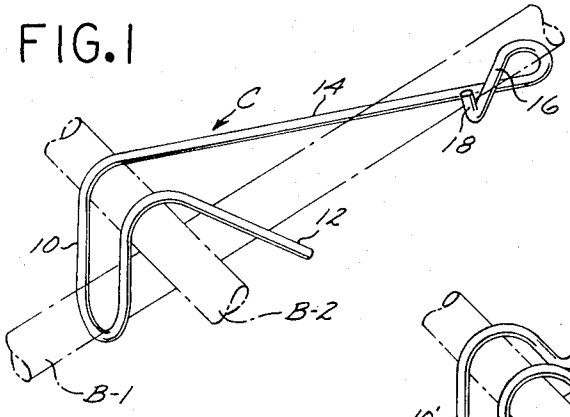
Dec. 19, 1967 C. C. PINKNEY 3,359,019

BAR CLIP

Filed Oct. 13, 1966

FIG. 1



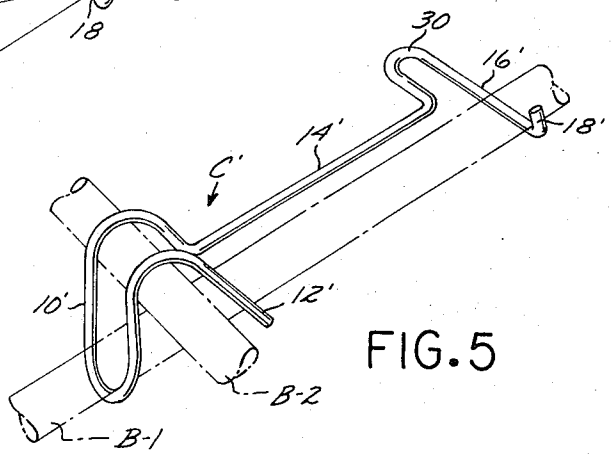
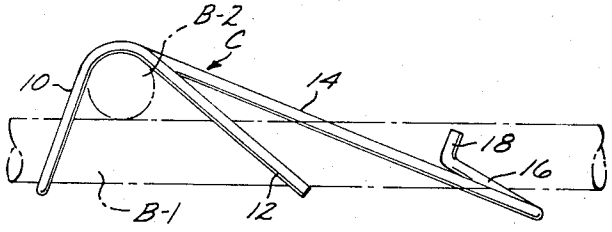


FIG. 5

FIG. 2



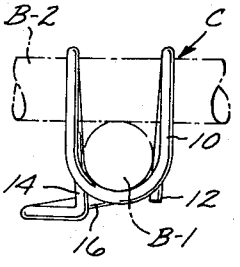
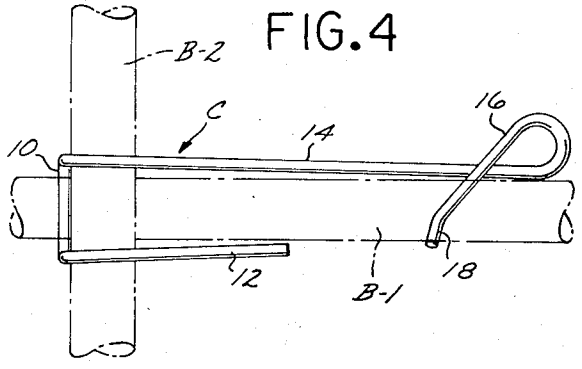


FIG. 3

FIG. 4



INVENTOR.
CHARLES C. PINKNEY
BY Fulwider, Patton, Rieber, Lee and Utecht
ATTORNEYS

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BAR CLIP

Charles C. Pinkney, Palos Verdes Peninsula, Calif., assignor to Wire King Products, Inc., Federal Way, Wash., a corporation of Washington

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2 Claims. (Cl. 287—50)

ABSTRACT OF THE DISCLOSURE

A clip for temporarily securing two steel reenforcing bars together until concrete is poured and cured around such bars or where the bars are to be welded together. The clip serves to temporarily restrain the bars against relative movement and eliminates the temporary securement of intersecting bars by means of hand twisted and tied lengths of wire.

This is a continuation-in-part of my patent application Ser. No. 429,851 filed Feb. 2, 1965, and now abandoned.

The present invention relates generally to the field of construction and more particularly to a new and novel clip for temporarily securing two bars together at the intersection of said bars.

In the construction of buildings and other structures, it is often necessary to temporarily secure two bars together. By way of example, in the construction of concrete floors and ceilings the intersection of the steel reinforcing bars must be held together until the concrete is poured and cured. Similarly, where two intersecting structural bars are to be welded together it is necessary to temporarily restrain such bars against relative movement.

Heretofore the temporary securement of intersecting bars has been effected by hand twisted and tied lengths of wire. This arrangement requires considerable time and manual labor. Furthermore, both hands of the workman must be utilized to effect the tie. This gives rise to a dangerous situation where the workmen are employed in the construction of tall structures. Another disadvantage of wire tying of the bars together is that the wire tie loses strength when the rods are walked upon, the wire loosening due to the workman's weight, and it is not practical to retighten such wire ties. Another serious disadvantage of the wire tie arrangement is the danger of the workman cutting his hands while effecting the wire tying operation.

It is a major object of the present invention to provide a unique clip for temporarily securing two bars together at the intersection of said bars. The clip of the present invention eliminates all of the aforedescribed disadvantages of the heretofore employed wire tie.

Another object of the present invention is to provide a clip of the aforedescribed nature which is extremely economical of manufacture.

A further object of the present invention is to provide a clip of the aforedescribed nature which will rigidly secure two intersecting bars against relative movement.

An additional object of the present invention is to provide a clip of the aforedescribed nature usable with various sizes and shapes of bars and bars of various materials.

These and other objects and advantages of the present invention will become apparent from the following detailed description of a preferred embodiment thereof, when taken in conjunction with the appended drawings wherein:

FIGURE 1 is a perspective view showing a first form of clip embodying the present invention;

FIGURE 2 is a side elevational view of said clip;

FIGURE 3 is a front view of said clip;

FIGURE 4 is a top plan view of said clip; and

FIGURE 5 is a perspective view of a second form of clip embodying the present invention.

Referring to the drawings and particularly FIGURES 1–4 thereof, a first preferred form of clip C embodying the present invention is shown temporarily securing a first bar B–1 and a second bar B–2 together at the intersection of these bars. The second bar B–2 is seen to overlie the first bar B–1. Preferably, the clip C is formed of a length of spring wire, however it should be understood that other flexible material could be employed.

The clip C includes a generally U-shaped nose **10** at its front end. A rearwardly and downwardly extending finger **12** extends away from the upper end of the right-hand side of the nose **10** generally normal to the plane of the nose. It will be apparent that the upper portion of the finger **12** is curved so as to generally conform to the cross sectional shape of the second rod B–2. Similarly, as indicated particularly in FIGURE 3, the lower portion of the nose **10** is curved into the approximate configuration of the cross-section of the lower bar B–1.

A rearwardly and downwardly extending leg **14** extends away from the upper end of the left-hand side of the nose **10** at a lesser angle than that of the finger **12**. An upwardly projecting retainer **16** is formed at the rear of the leg **14**. The retainer **16** extends generally laterally across the space behind the nose **10**. The end of the retainer **16** is provided with an upwardly extending hook **18**.

To apply the clip C to the intersecting bars B–1 and B–2 the retainer **16** is held in the fingers of one hand. The clip C is moved nose down alongside lower bar B–1 until the rear end of finger **12** clears bar B–1. The clip C is then moved sidewards until it is centered with bar B–1. Next, clip C is raised until the rear surface of nose **10** abuts the underside of bar B–1 at the intersection of the two bars. Now the clip C is rotated to permit the retainer **16** to be engaged with the bar B–2. At this time longitudinally spaced points on the first bar B–1 will be disposed within the lower portion of the nose **10** and the upper surface of the retainer **16**, the hook **18** abutting one side of the bar B–1. Longitudinally spaced points on the second bar B–2 will be disposed between the upper portion of the finger **12** and the front portion of the leg **14** just rearwardly of the nose **10**. The dimensions of the clip should be so chosen that it is temporarily flexed out of its normal configuration when it is applied to the intersecting bars B–1 and B–2. Attachment of the clip C to the bars may be effected easily, quickly and by the use of only one hand. Once applied to these bars the clip C will securely retain the bars against relative movement. The clip will remain firmly in position even if the bars are walked upon.

Referring now to FIGURE 5 there is shown a second form of clip C′ embodying the present invention. Clip C′ is generally similar to the clip C of FIGURES 1–4 and like parts bear primed reference numerals. The major difference between clip C and clip C′ is that the retainer **16′** is formed with a laterally extending, hook-shaped finger hold **30** which facilitates positioning of the clip C′ on the bars B–1 and B–2.

Various modifications and changes may be made with respect to the foregoing detailed description without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. A spring wire clip for temporarily securing two bars together at the intersection of said bars, the second of said bars overlying the first of said bars, comprising:

a generally U-shaped nose formed at the front of said clip;

a rearwardly and downwardly extending finger that extends away from the upper end of one side of said

nose generally normal to the plane of said nose, the upper portion of said finger being curved;

a rearwardly and downwardly extending leg that extends away from the upper end of the other side of said nose at a greater angle than that of said finger;

a generally laterally extending retainer formed at the rear of said leg, said retainer extending across the space behind said nose, with longitudinally spaced points on said first bar being received within the lower portion of said nose and between the upper surface of said retainer, while longitudinally spaced points on said second bar are received between the upper portion of said finger and the front portion of said leg just rearwardly of said nose;

and the dimensions of said clip being so chosen that it is temporarily flexed out of its normal configuration when it is applied to said intersecting bars to thereby retain said bars against relative movement, the end of said leg being formed with a closed loop

portion which terminates in an upwardly extending hood that is normal to the plane of said looped portion and is dimensioned so that the looped portion serves as a support for said first bar and the hook serves as a stop to limit movement of said first bar relative to said second bar.

2. A clip as set forth in claim 1 wherein said loop provides a laterally extending finger hold.

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CARL W. TOMLIN, *Primary Examiner.*

A. KUNDRAT, *Assistant Examiner.*