United States Patent

[11] 3,582,031

[72] Inventor **William W. Scott**
Raleigh, N.C.

[21] Appl. No. **822,567**
[22] Filed **May 7, 1969**
[45] Patented **June 1, 1971**
[73] Assignee **Aerotron, Inc.**
Raleigh, N.C.

[54] **WIRING HARNESS BRACKET**
4 Claims, 5 Drawing Figs.

[52] **U.S. Cl.** **248/216,** 24/73, 24/130, 248/71
[51] **Int. Cl.** **F16l 3/00**
[50] **Field of Search** ..... 248/216, 217, 300, 71; 85/11, 49; 24/73.7, 73 B, 85 B, 130

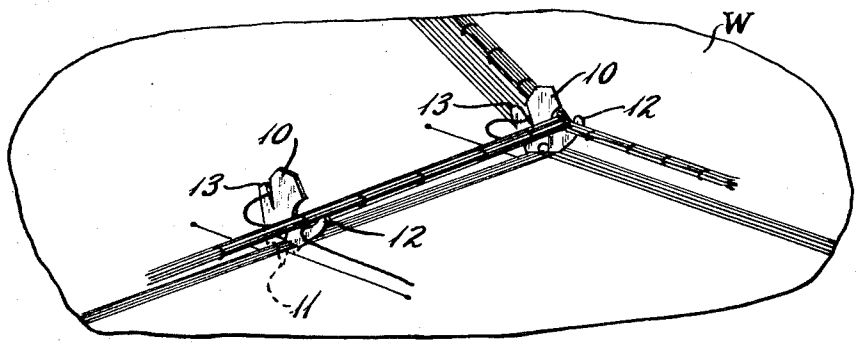
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Primary Examiner—Roy D. Frazier
Assistant Examiner—J. Franklin Foss
Attorneys—A. Yates Dowell and A. Yates Dowell, Jr.

ABSTRACT: A bracket for a harness board has a three-part main body and a prong for driving into a board, the main body having on one side a partial enclosure for holding a wire bundle and on the other side a wedge-shaped notch for holding the ends of one or more wires, the central portion having a flattened raised area for driving the point, the body having auxiliary points of lesser length, and an engageable prying portion.



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Fig. 1

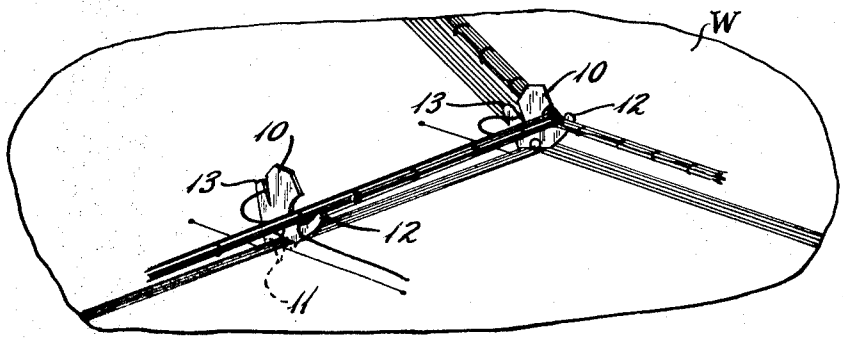


Fig. 3

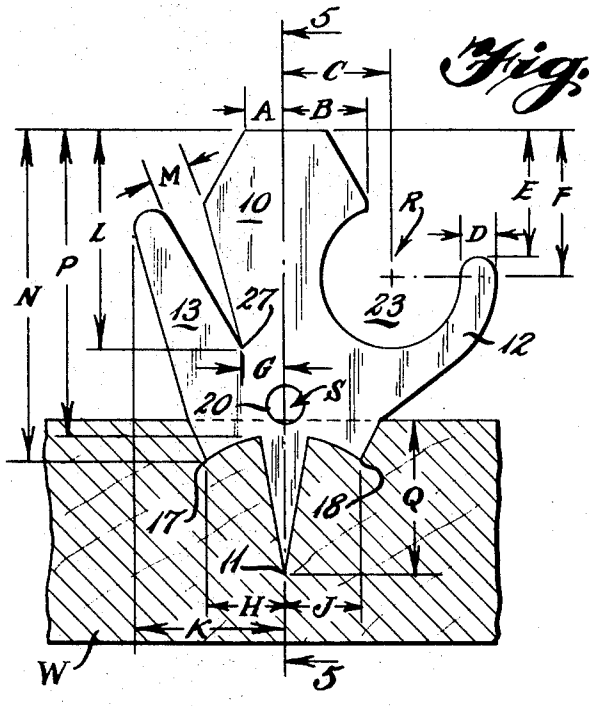


Fig. 2

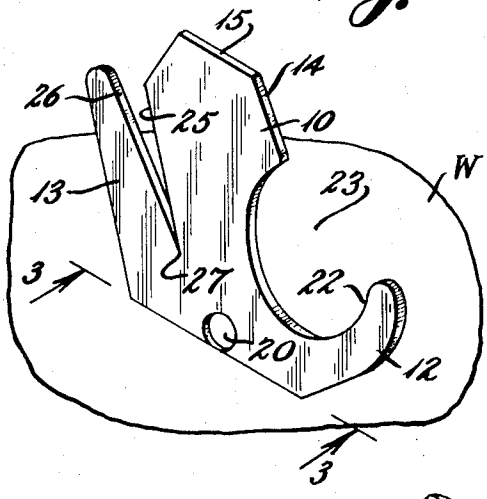
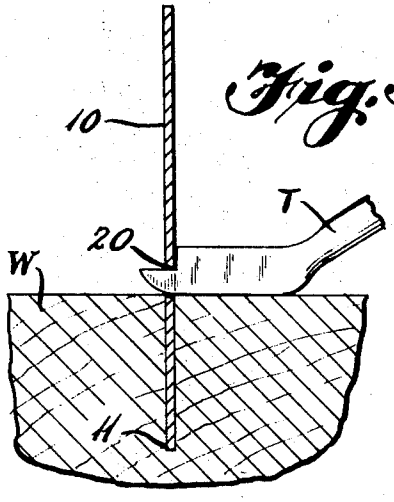


Fig. 4



Fig. 5



INVENTOR
William W. Scott

BY
ATTORNEYS

WIRING HARNESS BRACKET

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to supports and more particularly to bracket holders which are temporarily positioned on harness boards on which electrical wiring systems are arranged prior to being mounted in their permanent installation.

2. Description of the Prior Art

Heretofore various holding means have been provided on harness boards. These have usually consisted of tempered headless pins or of plastic or wire brackets of various shapes. The pins have involved disadvantages, such as inability to maintain a bundle of wires in circular form, inability to support the wires out of contact with the board, thereby making the application of lacing cord or plastic strap for bundling difficult, and the difficulty of removal of the pins. Furthermore, the pins do not provide any means for holding the ends of the wires which, therefore, tend to become disarranged.

Wire fixtures and various molded fixtures have been difficult to use because they are ordinarily held in place by screws which require time to secure and remove from the board and the plastic fixtures have tended to break under pressure.

SUMMARY OF THE INVENTION

The invention includes a relatively simple bracket member which may be easily manufactured, is adapted for easy driving into the board, and has provision for holding above the board's surface, a bundle of wires in circular form and for holding the ends of one or more wires as required, the bracket having a main and auxiliary points for stability and having an engageable portion near its base in order that it may be easily removed.

The foregoing objects of the invention will be readily understood from the following description in conjunction with the accompanying drawing in which:

FIG. 1 is a perspective illustrating the manner of use of the invention;

FIG. 2 is a perspective to a larger scale of a bracket in accordance with the invention;

FIG. 3 is an elevation of the bracket with the wood base into which it is driven shown in section;

FIG. 4 illustrates a typical prying tool for removing the bracket, and FIG. 5 is a section on the line 5–5 of FIG. 3, and with the prying tool shown fragmentarily to illustrate the manner of removal of the bracket.

With further reference to the drawing, the fixture or bracket of the invention includes a body having a main portion **10**, a main point **11**, arm members **12** and **13**, and a head portion **14**.

The main portion extends in alignment with the point **11** and has at its remote end the head portion having a flattened extremity **15** for receiving the blows of a hammer or other impact tool for driving the bracket into an underlying panel member W. Extending laterally and downwardly from each side of the base of the main point **11** are auxiliary points **17**, **18**, these being of substantially less length than that of point **11**. In normal use all three points are driven into the panel as indicated in FIGS. **2** and **3**, thereby increasing the stability of the bracket member.

In order to facilitate removal of the bracket member, an engageable portion such as aperture **20** is formed in the member directly over the base of the point **11**. When it is desired to remove the bracket member, the point of a prying tool T, indicated in FIGS. **4** and **5**, may be inserted into the aperture for easy removal of the bracket from the panel.

In order to hold a bundle of wires in substantially circular form, the main portion **10** and arm **12** define a circular opening **22**, the mouth **23** of which is sufficiently wide to readily receive and permit the removal of wires in a bundle. Hence, it will be apparent that the opening **22** preferably encompasses an arc of more than 180°.

On the other side of the main portion, arm **13** extends away from the main portion to provide a wedge-shaped opening which is defined by a straight side **25** on a side of the main body and a straight side **26** on the inner side of the arm, the opening terminating at a point **27**.

While various dimensions are usable, for purposes of illustration the following are satisfactory in one example of use (letter references are to those appearing on the drawing:

A—0.125
B—0.250
C—0.325
D—0.150
E—0.450
F—0.500
G—0.125
H—0.250
J—0.250
K—1.05
L—0.750
M—0.125
N—1.35
P—1.25
Q—0.625
R—0.250 (radius)
S—0.150 (diameter).

The size of the bracket may, of course, be proportioned to that of the wire being used.

While the bracket may be made of various materials, **16** guage steel, preferably nickel-plated, performs satisfactorily. The bracket may be readily stamped, with all portions lying in the same plane, however, the major elements thereof may be formed by other means and the invention is not limited thereby.

What I claim is:

1. A wiring harness bracket for temporarily positioning a plurality of wires in a predetermined layout on a base member comprising a relatively thin flat body, said body having at least one penetrating point for removably mounting the body on the base member and having stabilizing means adjacent to said penetrating point, the end of said body remote from said penetrating point being flattened to facilitate the driving of the penetrating point into the base member, a first arm extending laterally from one side of said body and forming therewith an arcuate opening to hold a plurality of wires, a second arm extending laterally from the other side of said body and forming therewith a narrow wedge shaped opening to receive at least one wire, and means on said body to facilitate removal of the body from the base so that a plurality of wires can be received within said arcuate opening and tied together to form a bundle in a predetermined configuration after which said bracket can be removed from the base member.

2. The structure of claim 1 in which said arcuate opening is greater than 180°.

3. The structure of claim 1 in which said means on said body to facilitate removal includes an opening through said body disposed generally in alignment with said penetrating point.

4. The structure of claim 1 in which said stabilizing means includes auxiliary point means spaced laterally from said penetrating point, said auxiliary point means being substantially shorter than said penetrating point.