United States Patent

[11] **3,574,964**

[72] Inventor **Lloyd C. Ownbey**
Vernon, Calif.

[21] Appl. No. **777,234**
[22] Filed **Nov. 20, 1968**
[45] Patented **Apr. 13, 1971**

[73] Assignee **Bevelite Mfg. Company**
Vernon, Calif.

---

[54] **TRACK FOR REMOVABLE SIGN LETTERS**
4 Claims, 9 Drawing Figs.

[52] **U.S. Cl.** **40/140,** 40/125, 248/223, 248/316
[51] **Int. Cl.** **G09f 1/00**
[50] **Field of Search** 228/223, 224, 225, 316.5, 226.5; 16/94; 40/125, 140, 142

[56] **References Cited**

UNITED STATES PATENTS

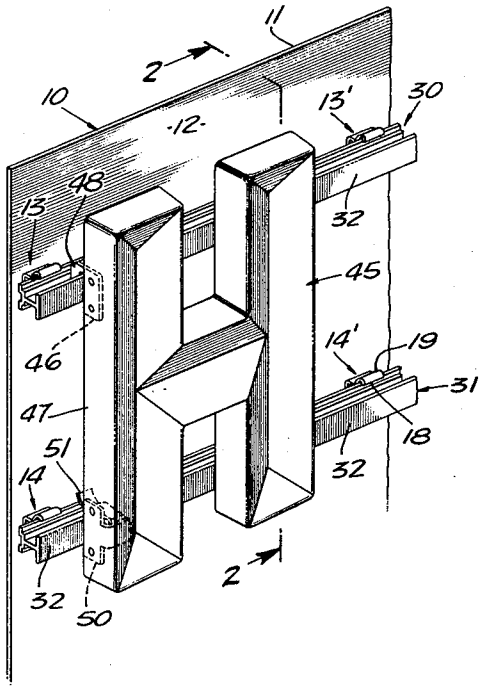
3,175,796	3/1965	Petrick	248/223
3,230,652	1/1966	McNair	40/140X
3,330,518	7/1967	Adler	248/223

FOREIGN PATENTS

519,379	5/1953	Belgium	40/142
251,227	12/1966	Germany	16/94
953,087	3/1964	Great Britain	40/140

Primary Examiner—Roy D. Frazier
Assistant Examiner—J. Franklin Foss
Attorney—Beehler & Arant

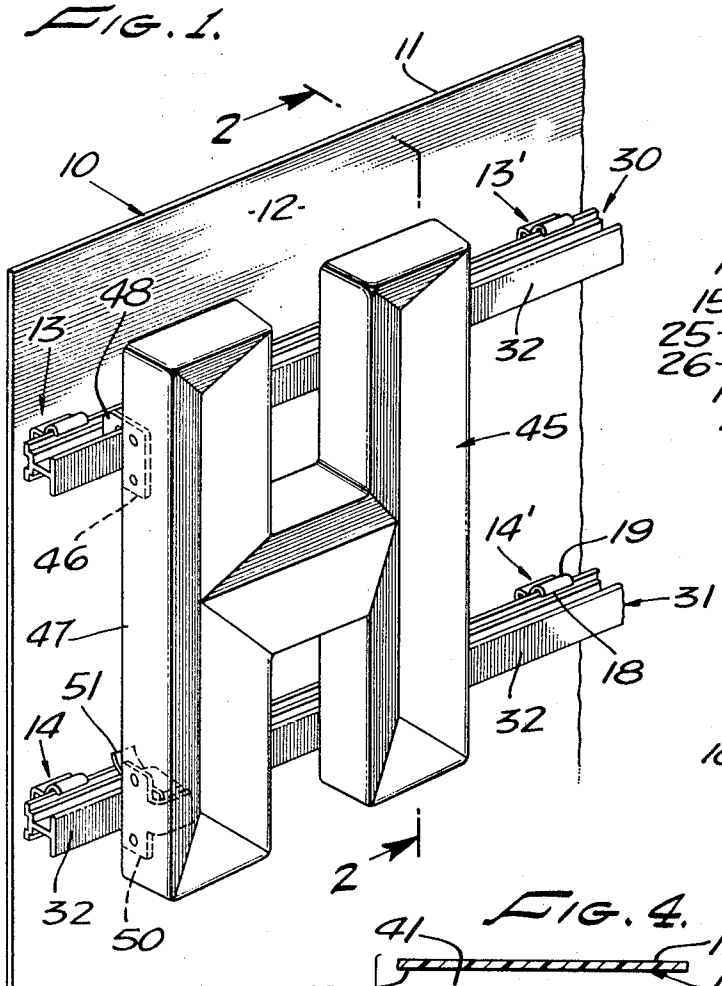
ABSTRACT: A track system comprising essentially two kinds of parts, namely a row of clips fastened to an appropriate sheet background wherein the legs of the clips stand forwardly away from the background, and one or more substantially H-shaped tracks wherein opposite edges of one leg of the H are attached to free ends of respective clips, whereby to mount the track clear of the sheet background, and wherein the leg which is held by the clip is at a location clear of fastening means used to attach the clip to the sheet background.



Patented April 13, 1971 3,574,964

2 Sheets-Sheet 1

FIG. 1.



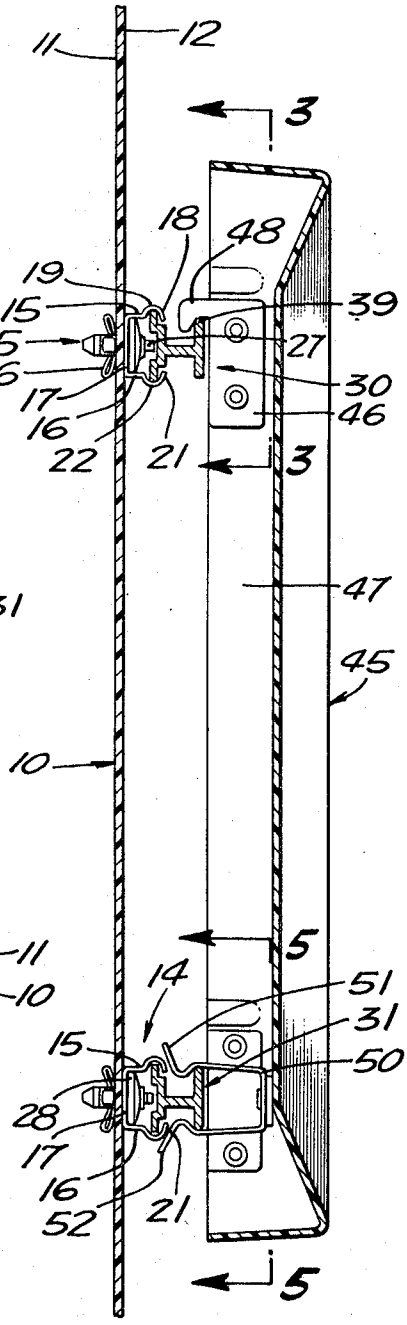
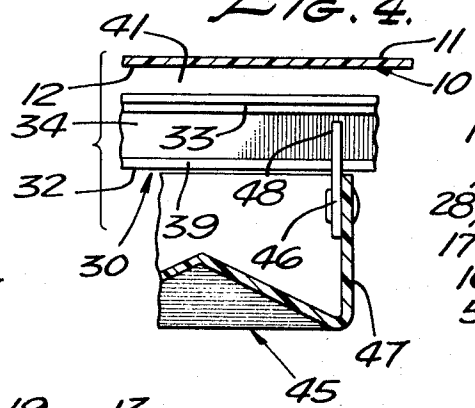


FIG. 2.

FIG. 4.



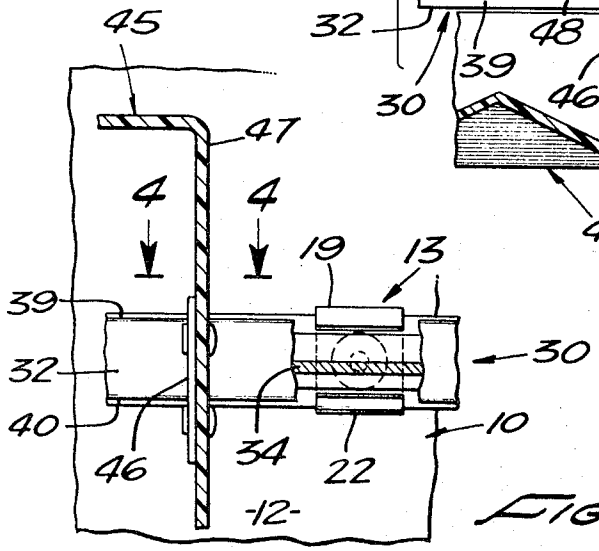


FIG. 3.

LLOYD C. OWNBEY
INVENTOR.

BY Beehler & Arant

ATTORNEYS

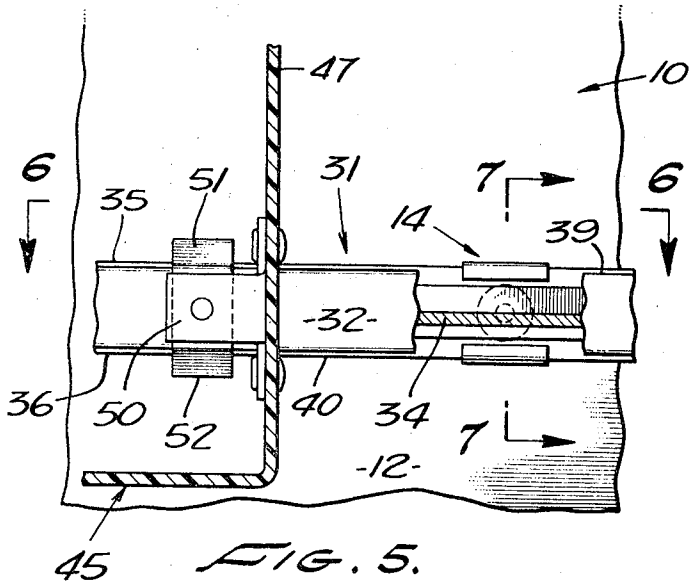


FIG. 5.

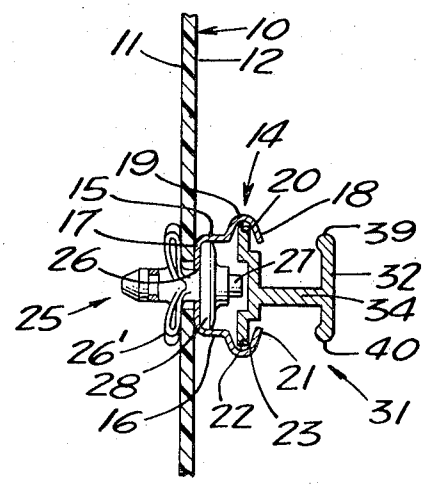


FIG. 7.

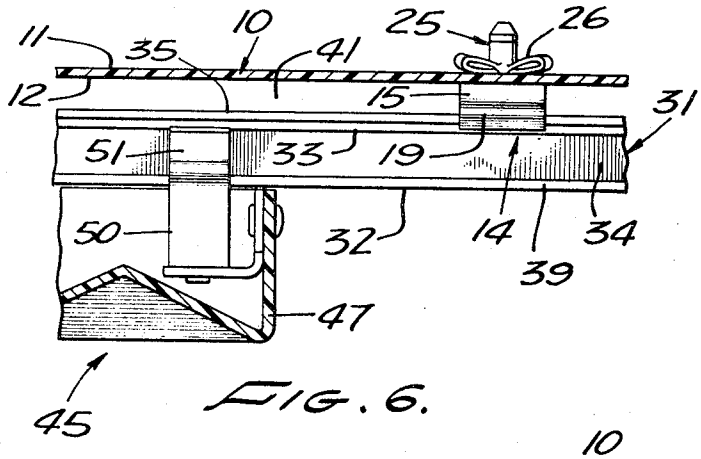


FIG. 6.

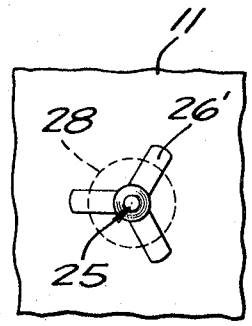


FIG. 8.

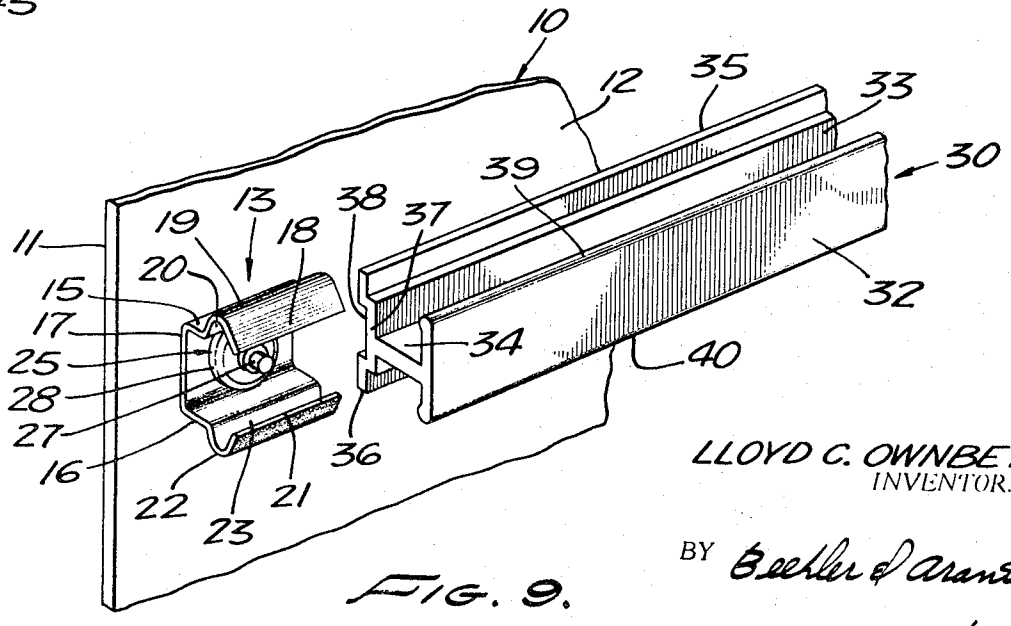


FIG. 9.

LLOYD C. OWNBEY
INVENTOR.

BY Beehler & Arant

ATTORNEYS

TRACK FOR REMOVABLE SIGN LETTERS

A common use heretofore made of relatively large interchangeable plastic letters has been in signs for such things as motion picture houses, supermarkets, public buildings, and many comparable locations, where the background of the sign itself is substantially permanent and is equipped to receive interchangeable sign characters mounted thereon, with an attachment which readily permits the character to be removed and replaced by another. One of the things which characterizes such installations is the substantially permanent character of the background and the tracks which form a part of the background assembly.

There are, however, an increasing number of locations where it would be advantageous to make use of removable sign characters against virtually any type of background, provided that there were adequate tracks for accepting the interchangeable letters which could be attached to such a background. Characteristic backgrounds are plastic sheet sidewalls, corrugated metal sidewalls, plywood partitions, and virtually any more or less flat vertical surface which would serve as a means for supporting a sign.

It is therefore an object of the invention to provide a new and improved track system for interchangeable sign characters which can be readily mounted on virtually any type of vertically standing sheet background material.

Another object of the invention is to provide a new and improved track system for interchangeable sign characters which is simple and inexpensive in cost and particularly easy to attach in proper position upon a sheet background which is already in place.

Still another object of the invention is to provide a new and improved track system for mounting interchangeable sign characters wherein means for fastening individual tracks against a sheet background is of such character that the tracks when mounted thereon stand clear of the background and therefore minimize the accumulation of dirt which might otherwise collect on the upper surface of the track.

Still another object of the invention is to provide a new and improved track system for mounting interchangeable sign characters wherein the track itself is specially formed so that not only does it clear the sheet background upon which it may be attached, but also effectively clears any fastening means which might protrude outwardly from clips which are used to mount the track on the background.

With these and other objects in view, the invention consists in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter set forth, pointed out in the appended claims and illustrated in the accompanying drawings.

In the drawings:

FIG. 1 is a front perspective view of a fragment of sheet background showing the track system in place and a typical sign character mounted thereon.

FIG. 2 is a longitudinal sectional view on the line 2–2 of FIG. 1.

FIG. 3 is a fragmentary cross-sectional view on the line 3–3 of FIG. 2.

FIG. 4 is a fragmentary cross-sectional view on the line 4–4 of FIG. 3.

FIG. 5 is a fragmentary longitudinal sectional view on the line 5–5 of FIG. 2.

FIG. 6 is a cross-sectional view on the line 6–6 of FIG. 5.

FIG. 7 is a fragmentary longitudinal sectional view on the line 7–7 of FIG. 6.

FIG. 8 is an elevational view of the rear of one of the fastening elements.

FIG. 9 is an exploded view of the clip on a sheet background and a fragment of track in the position occupied immediately prior to engagement.

In an embodiment of the invention chosen for the purpose of illustration there is shown a sheet background **10** which may be a sheet of fiber reinforced plastic, plywood, sheet metal, or virtually any upright structural plane surface material, and which has a rear face **11** and a front face **12**. In the chosen embodiment there are two horizontal lines of clips consisting of clips **13**, **13'** forming one line, and clips **14**, **14'** forming another line. All of the clips **13**, **13'**, **14**, **14'** are substantially identical and a description of one will therefore suffice for all. Each clip consists of a pair of spaced legs **15** and **16** joined at captive ends by a web **17**. The leg **15** at its forward or free end **18** has a bent portion **19** which forms an inwardly facing concave recess **20**. The bent portion **19** and accordingly the concave recess **20** is spaced a substantial distance forwardly from the plane of the web **17** as clearly shown in FIGS. **2**, **7**, and **9**. Similarly, on a free end **21** of the leg **16** there is a bent portion **22** forming an inwardly facing concave recess **23**, similar to the concave recess **20**. A rivet **25** extending through a hole **26** in the web **17** has an expanded portion **26'** extending over the rear face **11** of the sheet background **10** and a head **27** retaining a washer **28** against the web **17**, thereby to hold the clip in each instance in engagement with the sheet background **10**.

Tracks **30** and **31** are retained respectively by the clips **13**, **13'**, and **14**, **14'**. In practice, the clips are customarily set on about 18-inch centers and the tracks may come in lengths as long as 10 feet each, or any cut section of such lengths.

Each track, as for example the track **30**, has an outside web **32**, an inside web **33** substantially parallel to each other, and a transverse web **34** interconnecting intermediate portions of the outside and inside web. The inside web **33** is specially formed with oppositely extending substantially parallel upper and lower flanges **35** and **36** and an interconnecting section **37** between the upper and lower flanges. The upper and lower flanges lie substantially in the same plane and have outside and inside surfaces. It is significant to note further that the interconnecting section **37** is offset relative to the plane of the upper and lower flanges **35** and **36**, whereby to provide a longitudinally extending groove **38** having a depth in the chosen embodiment about equal to the thickness of the flanges **35**, **36**. It should be further noted that the outside web **32** has an upper flange **39** substantially wider than a lower flange **40**, the flanges lying on opposite sides of the transverse web **34**.

In operation the clips **13**, **13'**and **14**, **14'** are fastened to the sheet background **10** by appropriate fastening means such as the rivets **25**, the clips being in vertically spaced horizontal lines. Then the track **30** or **31**, as the case may be, is extended between the legs of the respective clips with upper and lower flanges **35** and **36** being retained in the respective concave recess **20** and **23**. When the track is in place, it may be found advisable to crimp the clips and in particular the bent portions **19** and **22**, as the case may be, to more snugly grip the flanges of the track. Mounted in this fashion, the inside web **33** of the track stands clear of the sheet background, there being a space **41** therebetween as clearly shown in FIGS. **4** and **6**. The tracks are then ready for mounting thereon a sign character, like the character **45**, which in the chosen embodiment chances to be the letter H. The character **45** has upper brackets **46** riveted or otherwise attached to a lateral vertically extending flange **47** of the character **45**, the bracket having a rearwardly extending hook **48** which engages over the upper flange **39** of the outside web **32** of the track. At the lower portion of the character **45** is a spring clip **50** which has upper and lower spring fingers **51** and **52**, respectively, which engage over respective opposite upper and lower flanges **39** and **40** of the track **31** which is in the lower position. The character **45** can be readily removed by merely pulling the lower end loose, whereupon the spring fingers **51** and **52** spread while disengaging from the track **31** and the hook **48** can be lifted from the upper track **30**. Conversely, when applying the character **45** the hook **48** is first hooked over the upper track and then the spring fingers **51** and **52** engaged with the lower track **31**. Should lateral spacing of the character not be precisely as wished, the character can be shifted toward the left or toward the right along the tracks.

While the invention has herein been shown and described in what is conceived to be a practical and effective embodiment, it is recognized that departures may be made therefrom within the scope of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices.

I claim:

1. A track system for mounting removable individual sign characters on a stationary background sheet comprising a plurality of horizontally spaced clips fastened to the sheet along a horizontal line, each clip comprising a pair of vertically spaced legs and a web connecting together the ends of said legs adjacent the sheet and a hole in said web for reception of a fastening member having a forwardly projecting head, inwardly facing concave recesses on respective free ends of said legs, and a horizontal track element carried by said clips, said track element comprising an outside web for temporary engagement with the removable individual sign characters, an inside web substantially parallel to said outside web and a transverse web interconnecting intermediate portions of said outside and inside webs, said inside web having oppositely extending substantially parallel flanges on respective opposite sides of said transverse web and in engagement with respective recesses in said legs of the clip, said inside web having an inwardly facing concave groove intermediate said flanges providing a clearance between said track and said heads of the fastening members and said track being spaced from said sheet, at least two vertically spaced horizontal lines of clips and a track for each line of clips, each sign character having at least one pair of vertically spaced respective upper and lower brackets, the upper bracket comprising a hook overlying the upper side of the upper of said tracks when in use, and the lower bracket comprising spring fingers in engagement with opposite edges of the lower of said tracks when in use.

2. A track system as in claim 1 wherein said flanges of the inside web of the track have front and rear substantially flat faces and the flanges lie in the same plane.

3. A track system as in claim 1 wherein said outside web has an upper flange on one side of said transverse web wider than a lower flange on the opposite side of said web.

4. A track system for mounting removable individual sign characters on a stationary background sheet comprising a plurality of horizontally spaced clips fastened to the sheet along a horizontal line, each clip comprising a pair of vertically spaced legs and a web connecting together the ends of said legs adjacent the sheet and a hole in said web for reception of a fastening member having a forwardly projecting head, inwardly facing concave recesses on respective free ends of said legs, and a horizontal track element carried by said clips, said track element comprising an outside web for temporary engagement with the removable individual sign characters, an inside web substantially parallel to said outside web and a transverse web interconnecting intermediate portions of said outside and inside webs, said inside web having oppositely extending substantially parallel flanges on respective opposite sides of said transverse web and in engagement with respective recesses in said legs of the clip, said inside web having an inwardly facing concave groove intermediate said flanges providing a clearance between said track and said heads of the fastening members and said track being spaced from said sheet, each sign character having a bracket comprising spring fingers in engagement with opposite edges of the lower of said tracks when in use.