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GB 0921415 GB 0609276 GB 0577547
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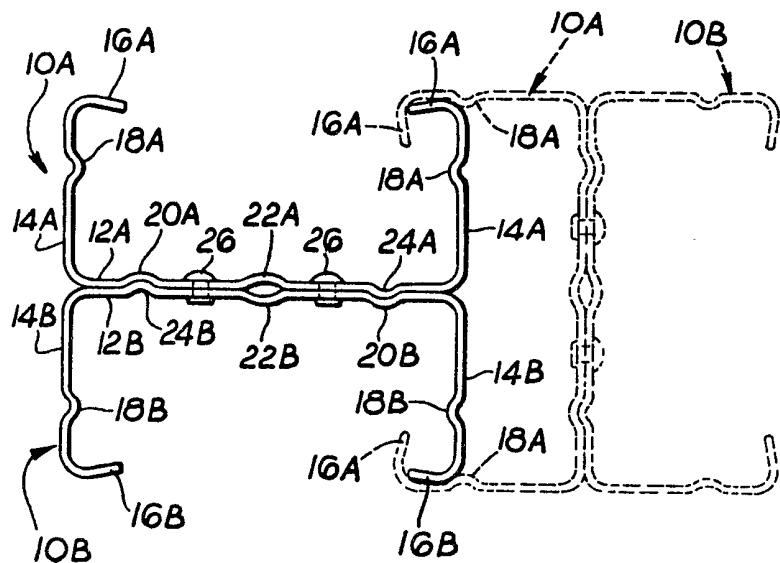
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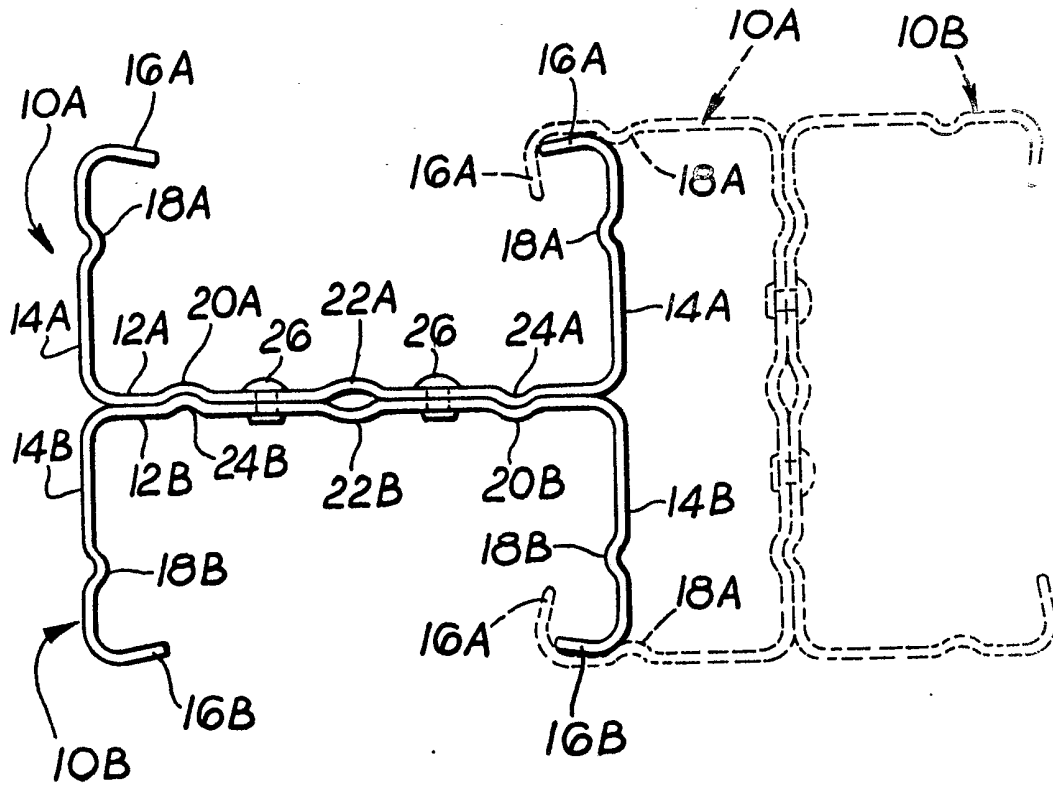
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(54) Supporting posts

(57) A fencing panel supporting post comprises a pair of metal channel members (10A, 10B) secured back-to-back to form an H-section for reception of a pair of panel edges. The side walls (14A, B) of the channels are so dimensioned that one post can be telescopically engaged within one channel of an adjacent post whereby right angle intersections can be made between pairs of panels.



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SPECIFICATION

Supporting posts

5 This invention relates to posts for supporting panels such as fencing panels.

Conventional fencing posts generally comprise wooden stakes which tend to snap relatively easily in high winds or concrete posts which are heavy and usually require handling by more than one person during fence erection.

The object of the present invention is to provide an improved post which, when used for fencing, is less prone to breakage and is lightweight compared with concrete posts.

According to the present invention there is provided a post for supporting panels, which post is of H-section and is formed by a pair of metal channel section members secured together back to back.

Preferably the internal width of each channel from side wall to side wall is substantially equal to the combined depth of the channel side walls so that a first post can be interfitted in telescopic fashion with a second post by turning the first post to 90° relative to the second post, means being provided to trap part of one post within a channel mouth of the other post.

Preferably the side walls of each channel section member are each formed with an inwardly extending lip or flange along the mouth of the channel and an inwardly deformed formation spaced from the lip or flange. In this way the first post can be assembled to the second post in telescoping fashion with one lip of each channel of the first post engaged within the space between the lip and formation of a respective channel side wall of the second post whereby the channel mouths of the first post are presented at right angles to the channel mouths of the second post.

Each channel member is conveniently formed with parallel longitudinal ribs/grooves to strengthen the section and in the preferred embodiment, the base of each channel is formed with two such formations, one of which comprises the rib when viewed externally and the other of which comprises a groove when viewed externally, the arrangement being such that the rib and groove on one channel base respectively interfit with the groove and rib on the other channel base so that the two channels can be fitted back to back with their faces fully contacting. In practice, this can be achieved employing only one sectional shape by arranging for the rib and groove to be equally spaced from the adjacent side walls of the channel and reversing one channel with respect to the other so that the ribs engage with the grooves.

The channel members may each be formed with an additional longitudinal groove (as

viewed externally) which additional grooves confront one another when the channels are located back to back to form a longitudinal passage between the two channels for reception of a nail, self-tapping screw or like fastener which can be used to secure a capping post to at least one end of the post.

One embodiment of the invention will now be described by way of example only with reference to the accompanying drawing, the sole figure of which is a transverse section through a pair of posts, one of which is shown in phantom outline to illustrate coupling together of the posts at corners and T-junctions.

As shown, each post comprises a pair of substantially identical channel section members 10A, 10B which may be cold rolled mild steel sections galvanised or otherwise treated to resist corrosion. Each channel 10A, 10B comprises a base 12A, 12B and a pair of side walls 14A, 14B each terminating in an inwardly directed lip or flange 16A, 16B. Each side wall 14A, 14B is formed with a longitudinal internal rib 18A, 18B which, as well as strengthening the section, also plays an important role in the interconnection of one post to another as will be explained hereinafter.

The base 12A, 12B of each channel is similarly formed with a plurality of parallel longitudinal ribs 20A, B, 22A, B, and 24A, B. It will be noted that the ribs 20A, B and 22A, B are internal ribs and appear as grooves when viewed externally of the channel whilst the ribs 24A, B are external ribs. The spacing of the ribs 20A, B with respect to the adjacent side walls is substantially the same as the spacing of the ribs 24A, B from their adjacent side walls. This enables the two channels to be assembled back to back as shown (in reverse relation) with each rib 24A, B seated in the groove corresponding to a respective rib 20A, B, thereby ensuring that the channel bases are firmly in face to face contact. The channels are secured back to back by appropriate means such as rivets 26.

It will be seen that this arrangement of the channels provides a post of H-section and, in use, panels to be supported by the posts are slotted into the mouths of the channels and each panel will be supported at each end by such a post. Where a corner or T-junction is required in the panelling structure, this can be readily achieved by connecting two or more posts together in the manner illustrated. In this way, the panel assembled to the second post shown in phantom outline will be supported at right angles to those panels assembled to the first post.

Such interconnection of the posts is provided for by designing the channel sections so that the internal width measured from side wall to side wall of each channel is slightly greater than the external dimension between the flanges 16A and 16B. In addition, the

width of each flange 16A, B is slightly less than the spacing between each flange 16A, B and the adjacent internal rib 18A, 18B so that when the first post is assembled to the second

5 as shown, the flanges of the first post are trapped firmly by the flanges and internal ribs 18A, B of the second post thereby securely locating the posts relative to one another.

10 The grooves corresponding to the internal ribs 22A, B form a longitudinal hole extending between the bases of the channels. This hole serves to receive a fastener, such as a nail or self-tapping screw for securing a cap to the top of each post.

15 The post described herein is particularly suitable for fencing panels and is intended to be used in place of conventional wooden and concrete posts. By appropriate selection of the gauge, the strength of the post can easily exceed that of a conventional wooden post whilst at the same time allowing the post to flex in bending when the fencing panels are subject to high winds. This is especially advantageous when compared with wooden

20 posts which tend to snap when subject to bending loads.

25 When compared with concrete posts, it will be seen that the steel posts of the invention are considerably lighter and can be handled easily by one person even when relatively thick gauge steel strip is employed for channel production.

CLAIMS

35 1. A post for supporting panels, which post is of H-section and is formed by a pair of metal channel section members secured together back to back.

40 2. A post as claimed in Claim 1 in which the internal width of each channel from side wall to side wall is substantially equal to the combined depth of the channel side walls so that a first post can be interfitted in telescopic fashion with a second post by turning the first

45 post to 90° relative to the second post, means being provided to trap part of one post within a channel mouth of the other post.

50 3. A post as claimed in Claim 1 or 2 in which the side walls of each channel section member are each formed with an inwardly extending lip or flange along the mouth of the channel and an inwardly deformed formation spaced from the lip or flange.

55 4. A post as claimed in Claim 1, 2 or 3 in which each channel is formed with parallel longitudinal ribs/grooves to strengthen the section.

60 5. A post as claimed in Claim 4 in which the base of each channel is formed with two such formations, one of which comprises the rib when viewed externally and the other of which comprises a groove when viewed externally, the arrangement being such that the rib and groove on one channel base respectively

65 interfit with the groove and rib on the other

channel base so that the two channels can be fitted back to back with their faces fully contacting.

70 6. A post as claimed in Claim 4 or 5 in which the channel members are each formed with an additional longitudinal groove (as viewed externally) which additional grooves confront one another when the channels are located back to back to form a longitudinal

75 passage between the two channels for reception of a nail, self-tapping screw or like fastener which can be used to secure a capping post to at least one end of the post.

80 7. A post substantially as hereinbefore described with reference to, and as shown in, the accompanying drawing.

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