



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 921 232 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
09.06.1999 Bulletin 1999/23

(51) Int. Cl.⁶: **E01F 9/012**

(21) Application number: **98204088.3**

(22) Date of filing: **04.12.1998**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **05.12.1997 NL 1007714**

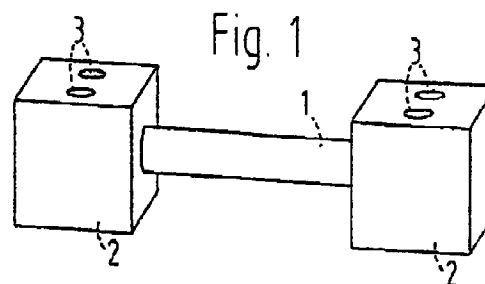
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(54) **A device for keeping sections, for example fencing, in an upright position**

(57) The invention relates to a device for keeping sections, such as fencing, in an upright position, which device comprises a base part on which or in which one or more posts can be placed. The device distinguishes itself in that the base part is made up of two heavy elements (2), which are interconnected by a light and rigid connecting piece (1), which can also function as a hand-grip. The heavy elements are provided with one or more facilities which function to receive thereon or therein a post of the section to be kept upright.



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Description

[0001] The invention relates to a device for keeping sections, for example fencing, in an upright position, which device comprises a base portion, on which or in which one or more posts can be placed.

[0002] It is customary to build up fencing, in particular fencing used in the construction industry, of separate sections, wherein each section is placed onto or into one or more base parts so as to keep said sections in the upright position. It is known to construct such base parts as concrete elements provided with a number of holes in their upper sides, into which the posts of the aforesaid sections can be placed.

[0003] Said concrete elements have two major drawbacks. The first drawback is their weight, which is necessary to keep the sections upright but which is objectionable upon transport and the cause of back trouble or other physical complaints among people who have to transport and place said fences. The second drawback is that said concrete bases are difficult to pick up. This is caused by the fact that there are only limited possibilities to form handgrips in concrete elements upon manufacture thereof.

[0004] Several inventions are known wherein the weight is reduced.

[0005] Thus, the hollowed-out concrete elements may be mentioned. Said base parts consist of a thin shell, and the shape of their upper sides and their side faces resembles that of the massive concrete elements. Said hollowed-out base parts are indeed lower in weight, but they have a number of intrinsic drawbacks. A first intrinsic drawback is the fact that only rudimentary handgrips are possible in the hollowed-out concrete elements, as is also the case with the massive concrete base parts. A second intrinsic drawback of the hollowed-out concrete elements is the fact that the minimization of the wall thickness leads to a vulnerable element, which easily cracks or breaks in use. A third intrinsic drawback is the fact that it performs its function, that is, keeping the fencing upright, significantly less well than massive concrete base parts, which is caused by the lower weight.

[0006] In addition to that, base parts of plastic material are known from Dutch patent application No. 9401555. Said document discloses base parts consisting of a hollow element of plastic material, which is filled with a mass such as water, sand, concrete or other material. The use of said hollow elements of plastic material involves a lot of manual work at the building site, because they need to be filled as yet there. Also variants made of massive plastic material are known. Said massive plastic elements, however, perform their function, that is, keeping the fencing upright, significantly less well than the usual massive concrete base parts, which is caused by their lower weight. In addition, both types of plastic base parts are much more expensive than the massive concrete base parts.

[0007] As a final example, the galvanized steel base

parts can be mentioned. Said base parts usually consist of horizontally extending plate material or strip material, to which one or more sleeves are secured, into which the sections can be placed. These base parts perform their function, that is, keeping the fencing upright, very well, but they are expensive and liable to be stolen. In order to make theft more difficult, the metal base parts are generally bolted to the posts of the sections they keep upright, which involves a great deal of manual work. That is why they are rarely used at unattended construction sites and the like.

[0008] The known alternatives for the massive concrete base parts thus fail to provide a solution for the problem their use in general involves. With all the above alternatives, the weight problem is substituted for other problems.

[0009] The objective of the invention is to provide a device of the kind referred to in the introduction, which does not exhibit the aforementioned drawbacks. This objective is accomplished with a device as defined in claim 1. The weight of the base parts is reduced to a level below the maximum weight of 25 kg which is allowed in accordance with the Dutch Occupational Health and Safety Act. Furthermore, the manner of construction makes it possible to integrate an ergonomically sound handgrip in the base parts, as a result of which they can easily be picked up with one hand. In addition, they do not perform their function, that is, keeping sections, for example of fencing, in an upright position, less well than the usual but problematic massive concrete base parts. Finally, the base parts are not more vulnerable than the massive concrete base parts that are usual at the moment.

[0010] The device distinguishes itself in that the base part is made up of two heavy elements, which are interconnected by a light and rigid connecting piece. The heavy elements are provided with one or more facilities which function to receive thereon or therein a post of the section to be kept upright.

[0011] The invention will be explained in more detail hereafter with reference to the accompanying figures, which show a number of embodiments.

Figure 1 is a perspective view of a first embodiment comprising rectangular heavy elements, which are interconnected by a round connecting piece. In this embodiment the facilities for receiving a post of the section to be kept upright consist of a hole in the massive, heavy parts.

Figures 2 - 5 are schematic plan views of a number of embodiments, wherein the part of the connecting piece which is present in the elements is hatched for easy reference.

Figures 6 and 7 are schematic side views of a number of embodiments.

[0012] In the figures, numeral 1 consistently indicates the light-weight, rigid connecting piece, and numeral 2

is used to indicate the relatively heavy elements, which are comprise one or more facilities 3.

[0013] The base part is made up of two relatively heavy elements (2), which are interconnected by a relatively light and rigid connecting piece (1), which can also function as a handgrip. The connecting piece (1) may consist of metal, wood, plastic material or combinations thereof, and may have various sectional configurations, for example circular, triangular, quadrangular or multi-angular, or have an I, H, U or T-shape, for example. The connecting piece (1) may furthermore be slightly curved.

[0014] The heavy elements (2) consist of a heavy material, such as concrete or steel, and they are fixed to the ends of the connecting piece for example by casting, glueing, screwing, clamping or the like.

[0015] In the embodiment wherein the heavy elements are fixed to the section by casting, the connecting piece may comprise a deformed portion at its ends, as is shown in Figure 2, or a wider piece of material, as is shown in Figures 3 and 4, in order to prevent the element from sliding off the connecting piece. Said wider piece of material is for example secured to the connecting piece by screwing (Figure 3), glueing or welding (Figures 4 and 5).

[0016] The heavy elements (2) may have various shapes, such as (multi-)angular, whether or not with rounded corners, round, oval or the like. In order to enhance the stability of the base part, the underside thereof is usually arched, in such a manner that the ends of the elements are supported on the ground. This is schematically illustrated in Figure 6.

[0017] The heavy elements are provided with one or more facilities (3) which function to receive thereon or therein a post of the section to be kept upright. Said facilities may for example consist of holes in the material of the elements (as shown in Figures 1 - 4 and in Figure 6), but also of tubular elements, for example, which are fully integrated in the heavy elements, and which are for example welded to the connecting pieces (Figure 5). Said facilities (3) may extend to the bottom surface of the heavy elements (Figure 6), but it is also conceivable to use embodiments wherein said facilities do not extend as far as the bottom surface (Figure 7). Furthermore, embodiments are conceivable wherein the facilities project above the heavy elements, as is schematically shown in Figure 7. In such an embodiment, the post of the section to be kept upright is hollow at the bottom side, and said facility (3) has the same shape as the cavity on the bottom side of the aforesaid post. Furthermore it is possible to provide a handgrip in the holes (3) to make it easier to move the individual elements (2).

[0018] The invention is not limited to the above-described embodiments.

Claims

1. A device for keeping sections, such as fencing, in an upright position, said device comprising a base part on which or in which one or more posts can be placed, characterized in that said base part consists of two heavy elements, which are interconnected by a light and rigid connecting piece, whilst the two heavy elements are provided with one or more vertically oriented facilities for receiving one or more posts of the section to be kept upright.
2. A device according to claim 1, characterized in that elements are cast onto said light and rigid connecting piece.
3. A device according to claim 2, characterized in that said light and rigid connecting piece is deformed at its ends so as to prevent the elements coming loose.
4. A device according to claim 2, characterized in that other parts are fixed to said light and rigid connecting piece so as to prevent said heavy elements coming loose.
5. A device according to claim 1, characterized in that the heavy elements are fixed to said light and rigid connecting piece by means of additional fixing material.
6. A device according to any one of the preceding claims, characterized in that the underside of said base part is arched.
7. A device according to any one of the preceding claims, characterized in that said connecting piece has an ergonomically sound shape, for example curved and round or oval.
8. A device according to any one of the claims 1 - 7, characterized in that said base part is (can be) provided with a handgrip.
9. A device according to claim 8, characterized in that said handgrip can be provided in said facilities (3).

