(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 609 929 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
28.12.2005 Bulletin 2005/52

(51) Int Cl.[7]: **E04H 17/12**

(21) Application number: **05380124.7**

(22) Date of filing: **10.06.2005**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR LV MK YU

(30) Priority: **14.06.2004 ES 200401431 U**

(71) Applicants:
- **Lajos Gascue, Julian**
  31191 Barbatain - Cendea de Galar (ES)
- **Ruiz de Zuazu Prados, Francisco J.**
  31191 Barbatain - Cendea de Galar (ES)
- **Tornaria Iguelz, Francisco J.**
  31191 Barbatain - Cendea de Galar (ES)
- **Torres Arregui, Francisco J.**
  31191 Barbatain - Cendea de Galar (ES)

(72) Inventors:
- **Lajos Gascue, Julian**
  31191 Barbatain - Cendea de Galar (ES)
- **Ruiz de Zuazu Prados, Francisco J.**
  31191 Barbatain - Cendea de Galar (ES)
- **Tornaria Iguelz, Francisco J.**
  31191 Barbatain - Cendea de Galar (ES)
- **Torres Arregui, Francisco J.**
  31191 Barbatain - Cendea de Galar (ES)

(74) Representative: **Carvajal y Urquijo, Isabel et al**
Clarke, Modet & Co.,
C/ Goya No. 11
28001 Madrid (ES)

(54) A post for supporting a mesh for fencing formation

(57) A post for supporting a mesh for fencing made up of a tubular profile having on the side adjusting to the mesh fixing means made up of pairs of pins (5,5') which are offset both in the transverse and longitudinal directions, arranged in opposition, creating a Z-shaped passage (6) capable of allowing passage of one of the horizontal strips of the mesh, said strip remaining between said pins (5,5') and the side of the post, for which purpose said pins are slightly separated from said side.

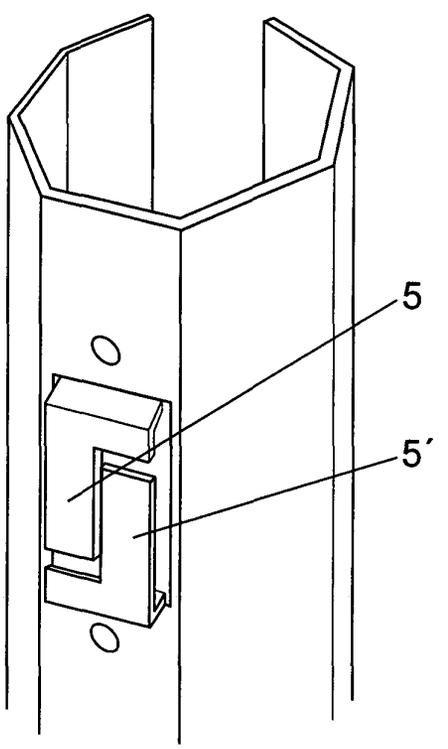

FIG. 1

EP 1 609 929 A1

Description

OBJECT OF THE INVENTION

[0001] The present invention refers to a post, of those intended for constituting the support means for a mesh, the latter in turn of those used in fencing formation, such as for fences in construction, plots of land, etc.

[0002] The object of the invention is to achieve structurally simple and functionally effective means for assembly of the mesh for said post, such that said assembly is quick, safe and effective.

BACKGROUND OF THE INVENTION

[0003] The use of meshes is known in the practical application scope mentioned above and in other irrelevant types of fencing; these are generally plastic and mainly perforated, there being defined vertical and longitudinal single-piece strips upon them, where the longitudinal strips are usually overly thick in order to provide the whole mesh with greater structural rigidity both with respect to the effects of its own weight and to those of the wind or any other external agent, while at the same time as corresponding with its "knots" or its crossover points between said strips they incorporate expansions which reinforce said knots which, with rounded edges minimise the risk of mesh breakage.

[0004] Metal posts are normally used for supporting these meshes incorporating, on the side or edge adjusting to the mesh and usually distributed along the length thereof, a plurality of die-cuttings configured as hooks open at the top, allowing easily hanging the mesh.

[0005] However, this solution does not provide the mesh assembly with due stability, such that it may easily unhook with an upward movement thereof.

[0006] This problem is resolved in practice by either bending the hooks inward, which makes the posts unfit for a subsequent use, or rather by tying up the mesh with wires or other similar elements, which implies a slow and laborious solution, while at the same time the wire knots imply a risk of scratches for people passing close to the mesh.

DESCRIPTION OF THE INVENTION

[0007] The post set forth by the invention resolves the previously mentioned drawbacks in an entirely satisfactory manner, such that with an assembly almost as fast as that of the conventional posts just mentioned, it ensures the total impossibility of accidental uncoupling of the mesh from the post.

[0008] To this end and more specifically said post focuses its features in incorporating one or more coplanar pins at suitably distributed points along its length, corresponding to fixing points provided for fixing the mesh, forwardly projecting with respect to the wall of the post they project from, in opposition and offset with one another in both the transverse and vertical directions, such that defined between said pins there is a Z-shaped slot forming a labyrinthine passage for one of the horizontal strips of the mesh, a passage requiring a notable straining of said mesh in order to achieve coupling thereof to the post and consequently making it impossible for accidental uncoupling thereof to occur.

[0009] The distance of said pins with respect to the side of the post they project from must be notably greater than the thickness of the strip of mesh that it must house inside, and the width of the crooked slot defined by said pins must in turn be suitable for allowing the passage of the strip with certain difficulty, that necessary so that the uncoupling thereof may not occur without a similar straining, a straining which may not occur accidentally, as mentioned above.

[0010] In all other respects the post shall be materialised, as is conventional, in a tubular profile with any polygonal, circular, oval, etc. section and preferably open on the side opposite that of the formation side of said pins, which shall be obtained by cutting and stamping.

DESCRIPTION OF THE DRAWINGS

[0011] In order to complement the description being made and so as to aid towards a better understanding of the features of the invention, according to a preferred practical embodiment thereof, a set of drawings is enclosed as an integral part of said description, where the following has been represented in an illustrative and non-limiting manner:

Figure 1 shows a partial perspective view of a mesh support post carried out according to the object of the present invention, at the level of one of the points thereof provided for fixing the fencing mesh.
Figure 2 shows a front elevational view of the assembly shown in Figure 1.
Figure 3 shows a side elevational view of the same assembly.
Figure 4 shows a plan view.

PREFERRED EMBODIMENT OF THE INVENTION

[0012] In view of the figures described it may be observed how the post proposed by the invention is made up of a tubular and open profile (1), preferably of galvanised sheet although it may be of any other suitable material, which in the chosen practical embodiment adopts an octagonal section, open on one of its sides but which may adopt any other configuration without this affecting the essence of the invention.

[0013] Said body or tubular profile (1) incorporates, at points suitably distributed along one of its sides (2), such as for example opposite to the opening (3), respective die-cuttings forming essentially rectangular windows (4) within which two pins (5-5') are arranged adopting an L-configuration, said pins (5-5') being in opposition and

offset as can be perfectly seen in Figure 2, a crooked slot (6), specifically a Z-shaped slot, being defined between them and notably offset with said side (2) of the tubular profile (1), since in said die-cutting operation the initial area (7) of said pins (5-5') is orthogonally bent outwards, before said pins are again orthogonally bent downwards to configure the pins themselves (5-5'), which are coplanar and located on an imaginary plane parallel to the side (2) of the tubular body (1).

[0014] This frontal spacing of the pins (5-5') with respect to the corresponding side (2) of the tubular profile (1) configures a housing (8) for the mesh, not shown, as observed especially in Figure 3, and assembly of the mesh is carried out by means of straining one of its horizontal strips, essential for said strip to be able to pass through the crooked passage of the slot (6), such that once said strip has reached the housing (8) it rests on the bottom (9) thereof and the accidental removal or decoupling from the post is rendered practically impossible, requiring for its disassembly a similar but reversed operation than that of its assembly, which due to its complexity can only deliberately occur.

Claims

1. A post for supporting a mesh fencing formation of the type incorporating a tubular profile (1), with any suitable section, preferably open, having on the side (2) adjusting to the mesh fixing means for the latter, **characterised in that** said means are materialised, corresponding with each one of the fixing points provided, in one or more coplanar pins (5-5') that are offset with one another both in vertical and transverse directions, projecting in opposition and as a single piece from the very tubular profile and defining between them a crooked passage (6) having a Z-shaped trajectory wide enough so as to allow passage therethrough of one of the horizontal strips of the mesh with a parallel manual straining thereof.

2. A post for supporting a mesh for fencing formation according to claim 1, **characterised in that** said pins project from the upper and lower ends of a die-cut window (4) in the tubular profile and have a first section projecting orthogonally outwards, suitably spacing the pins themselves from the wall of the tubular body they project from in an appropriate distance such as to accommodate the mesh between said pins and said wall, the crooked passage (6) opening at various heights corresponding to the side edges of said window (4).

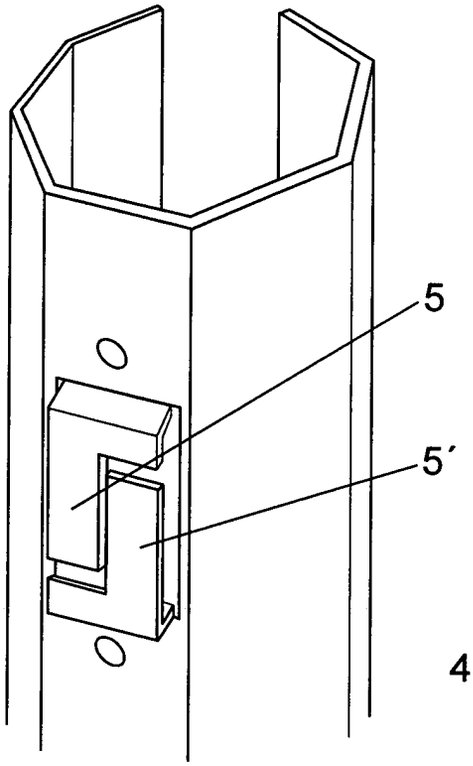

FIG. 1

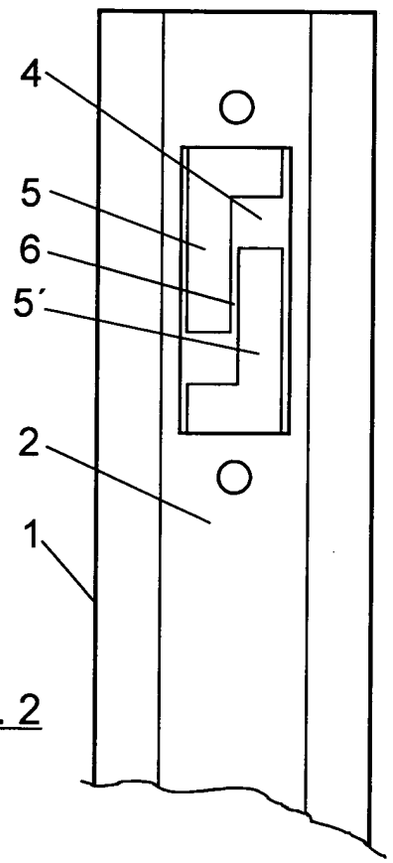

FIG. 2

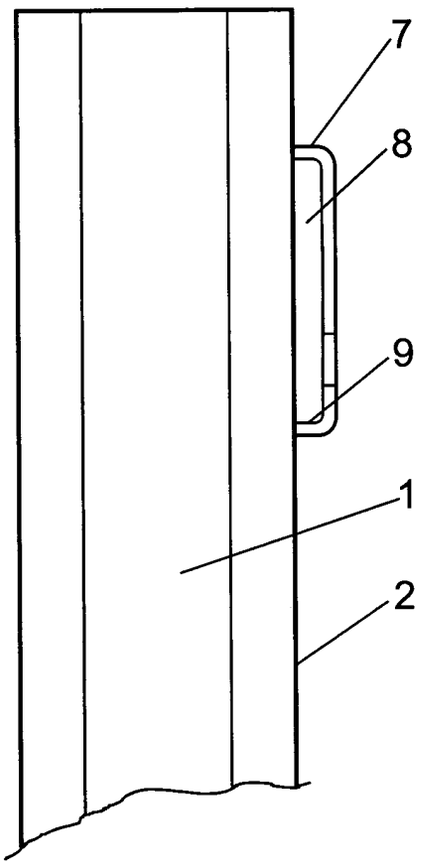

FIG. 3

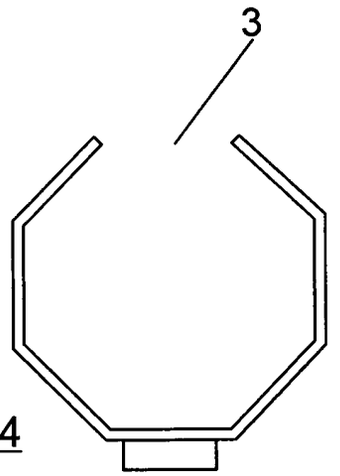

FIG. 4

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 38 0124

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 4 619 440 A (THEVENIN ET AL) 28 October 1986 (1986-10-28) * column 3, line 58 - column 5, line 9; figures 8-16 *	1,2	E04H17/12
A	US 2 386 129 A (MAACK WALTER HENRY) 2 October 1945 (1945-10-02) * page 1, right-hand column, line 26 - page 3, right-hand column, line 2; figures 1-16 *	1	
A	US 3 411 754 A (FAHRENHOLZ MARTIN H) 19 November 1968 (1968-11-19) * column 2, line 15 - column 4, line 17; figures 1-6 *	1	
A	EP 0 258 157 A (SOCIETE DUNOIS) 2 March 1988 (1988-03-02) * abstract; figures 1-3 *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E04H

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	23 September 2005	Stefanescu, R

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 38 0124

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-09-2005

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4619440 A	28-10-1986	DE 3467013 D1	03-12-1987
		EP 0117781 A2	05-09-1984
		FR 2540169 A1	03-08-1984
US 2386129 A	02-10-1945	NONE	
US 3411754 A	19-11-1968	NONE	
EP 0258157 A	02-03-1988	DE 3776609 D1	19-03-1992
		FR 2602537 A1	12-02-1988

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82