(12) UK Patent Application (19) GB (11) 2 383 805 (13) A

(43) Date of A Publication 09.07.2003

- (21) Application No 0200207.9
- (22) Date of Filing 05.01.2002
- (71) Applicant(s)

The Ornamental Iron Shop Limited (Incorporated in the United Kingdom) Dean Close, BLAKENEY, Gloucestershire, GL15 4AE, United Kingdom

- (72) Inventor(s)

 John Albert Neimes
- (74) Agent and/or Address for Service

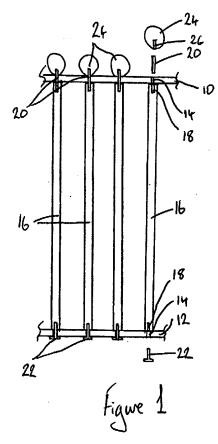
 Marks & Clerk

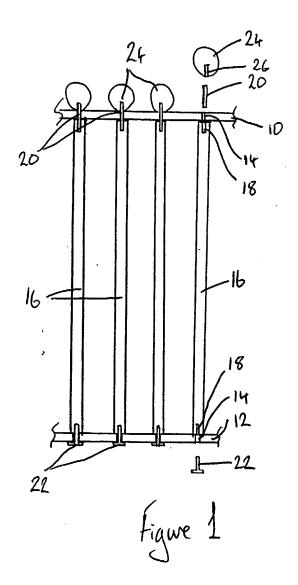
 27 Imperial Square, CHELTENHAM,
 GL50 1RQ, United Kingdom

- (51) INT CL⁷ **E04H 17/14**
- (52) UK CL (Edition V) E1D DLCKM D2036 D402
- (56) Documents Cited GB 1258468 A
- (58) Field of Search

UK CL (Edition T) E1D DCF DLCKM DLCQW DLEKMNV DLEKMNW DLEKMSV DLEKMSW DLEQWNV DLEQWNV DLEQWSW INT CL⁷ E04F, E04H Other: ONLINE: EPODOC, PAJ, WPI

- (54) Abstract Title Railing system
- (57) A railing system comprises upper and lower cross members 10, 12, a plurality of uprights 16 and a plurality of finials 24, wherein each finial 24 is in screw-threaded engagement with a corresponding one of the uprights 16, the screw threaded engagement securing each upright 16 and each finial 24 to the upper cross member 10. Similarly, bolts 22 secure the lower cross member 12 to each upright. As the components of the railing system are secured together by screw-threaded couplings, the system can be easily assembled.





Railing System

This invention relates to a railing system, and in particular to a railing system permitting self-assembly of railings, for example for use as boundary fences, gates or around patios, terraces and balconies.

Typically, railings used in these types of application are bespoke, make-to-measure railings manufactured by welding together steel bars or rods of appropriate shapes and dimensions. Such railings cannot readily be self-assembled. It is an object of the invention to provide a railing system which lends itself to self-assembly.

5

10

15

20

According to the present invention there is provided a railing system comprising upper and lower cross members, a plurality of uprights and a plurality of finials, wherein each finial is in screw-threaded engagement with a corresponding one of the uprights, the screw-threaded engagement securing each upright and each finial to the upper cross-member.

The lower cross-member is also conveniently secured to each upright by a screw-threaded coupling.

It will be appreciated that as the components of the railing system are secured to one another by screw-threaded couplings, the system can be easily assembled.

The invention will further be described, by way of example, with

reference to the accompanying drawing (Figure 1) which is a diagrammatic view of a railing system in accordance with an embodiment of the invention.

The railing system shown in Figure 1 comprises upper and lower steel cross-members 10, 12, each of which is formed with a series of spaced openings 14. The system further includes a plurality of steel uprights 16. Each end of each upright 16 is formed with an axially extending screw-threaded blind bore 18.

An end of a screw-threaded stud 20 is secured in the bore 18 at the upper end of each upright 16, the stud 20 extending through one of the openings 14 provided in the upper cross-member 10.

A screw-threaded bolt 22 extends through each opening 14 formed in the lower cross-member 12, each screw-threaded bolt 22 engaging in the bore 18 at the lower end of a respective one of the uprights 16 thereby securing each upright 16 to the lower cross-member 12.

The railing system further comprises a plurality of finials 24, each of which is provided with a screw-threaded blind bore 26. Each finial 24 is screwed on to a respective one of the studs 20 thereby securing the upper cross-member 10 to each of the uprights 16.

In the illustrated embodiment, the upper and lower cross-members 10, 12 20 are of rectangular section, the uprights 16 are of square section and the finials 24 are of substantially spherical form. It will be appreciated that this need not be the case. For example, the uprights could be of circular or other section, may include twists or other patterns, and may have a surface texture. Obviously other finials could be used, for example of fleur-de-lys or spike form.

Although it is envisaged that the system will be sold in a range of standard sizes, it will be appreciated that by cutting the upper and lower cross-members, railings of a range of sizes may be made.

5

10

It will be appreciated that the screw-threaded couplings could be modified, for example each upright could be provided with two screw-threaded studs, the lower of which could engage a nut, if desired.

CLAIMS

- 1. A railing system comprising upper and lower cross members, a plurality
- of uprights and a plurality of finials, wherein each finial is in screw-threaded engagement with a corresponding one of the uprights, the screw-threaded engagement securing each upright and each finial to the upper cross-member.
- 2. A railing system as claimed in Claim 1, wherein the lower cross-member10 is also secured to each upright by a screw-threaded coupling.
 - 3. A railing system as claimed in Claim 2, wherein the screw threaded coupling comprises a screw threaded bolt which extends through an opening formed in the lower cross-member and into a screw threaded bore formed in a corresponding one of the uprights.
 - 4. A railing system as claimed in any one of the preceding claims, wherein each upright is provided, at one end thereof, with a screw threaded stud arranged to be received within a screw threaded bore formed in the associated finial.

15

5. A railing system substantially as hereinbefore described with reference to the accompanying drawing.







Application No:

GB 0200207.9

Claims searched: 1-5

6 Examiner: Date of search: Tom Roberts 29 May 2002

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.T): E1D: DCF, DLEKMNV(-NW, -SV, -SW), DLEQWNV(-NW, -SV, -

SW), DLCKM, DLCQW; E1B

Int Cl (Ed.7): E04H, E04F

Other: Online: EPODOC, PAJ, WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	GB1258468	(PRATT) See fig. 2, page 2 lines 63-74, page 3 lines 59-74	1

- X Document indicating lack of novelty or inventive step
- Y Document indicating lack of inventive step if combined P with one or more other documents of same category.
- & Member of the same patent family

- A Document indicating technological background and/or state of the art.
- P Document published on or after the declared priority date but before the filing date of this invention.
- E Patent document published on or after, but with priority date earlier than, the filing date of this application.