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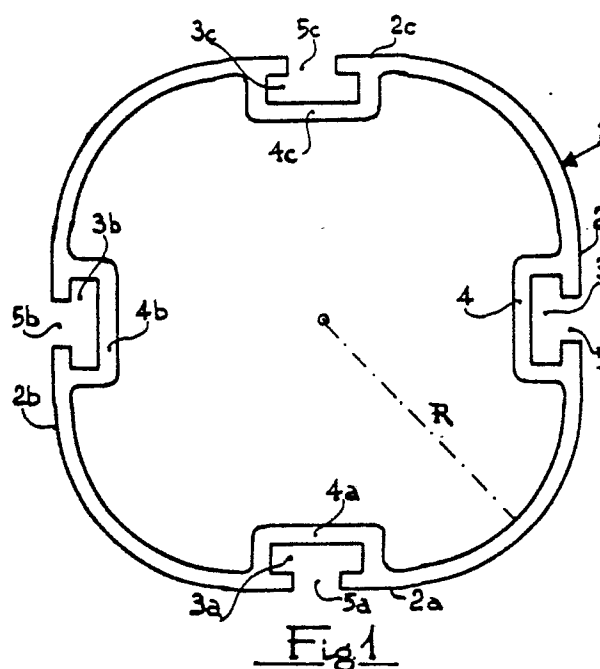
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54 Multifunctional extruded section of aluminum, its alloys, and the like, constituting a modular element particularly suitable for urban furnishings.

57 Multifunctional modular extruded section, particularly suitable for urban furnishings and similar uses, constituted by a hollow extruded body of aluminum, its alloys, or other material suitable to be extruded, of long shape, on the outer surface of said hollow section there being provided with longitudinal grooves angularly spaced apart from each other, such as to constitute continuous means for the anchoring, with possibility of removal, tools and services for urban furnishings such as lighting lamps, traffic signs and advertising placards, traffic divider barriers, garden-seats, litterbins, and other infrastructures used preferably in the field of street furniture.



"MULTIFUNCTIONAL EXTRUDED SECTION OF ALUMINUM, ITS ALLOYS, AND THE LIKE, CONSTITUTING A MODULAR ELEMENT PARTICULARLY SUITABLE FOR URBAN FURNISHINGS"

The present invention relates to an extruded section of aluminum, its alloys, or other material suitable to be extruded, constituting a modular support element particularly suitable for urban furnishings and precisely for supporting, with anchoring with possibility of removal, traffic signs, module and various services forming street fittings and urbanistic equipment.

It is well known that the equipment and the fittings, both fixed and movable, which constitute a normal street furniture, are formed by a plurality of separate elements, such as lighting posts, various types of street barriers, posts and various types of supports for traffic signs and advertising placards, garden-seats and litterbins, flower-pots, as well as other fittings for supporting signs and particular services. The whole of all of these fittings and equipment normally constitutes a type of particular furniture for streets and squares which, whilst can be regarded as agreeing with the function it must perform, not always, better, nearly never, is able to confer to the environment a rational, agreeable from the aesthetical point of view, appearance. Furthermore, as these fittings and equipment are stably anchored to the ground, or to other fixed supports (such as posts, walls and the like), do not obviously allow easy and quick displacements or replacements of the same elements in case of need. In practice, hence, the street furniture fittings and equipment, as they are conceived and realized at present, show a rather poor fitness to the various situations, which unavoidably are changing over time, as a consequence of changes in both functional and use needs, as well as of purely aesthetical requirements.

In fact, for example, the street lighting and the (vertical) street signs are generally accomplished by using fixed posts or poles, with lamps and signs stably anchored at certain heights so that, in case of changes of the lighting field, or of more correct positioning of the advertising messages or of street signs, it is always necessary to move the supports, or install additional supports in the desired areas; this, in practice, can cause a not much acceptable distribution of the fittings from an aesthetical point of view, especially in certain areas, such as, e.g., the historical city centres, and the like.

A purpose of the present invention is hence to provide, and place at disposal of the municipal administrations, and of other concerned boards, a particular modular section, substantially having the shape of a hollow post or support, structured in such a way as to result multifunctional, in the meaning of allowing any equipment, tools or ser-

vices normally used for the street furniture to be supported, by anchoring with possibility of removal, and at the desired heights, with self-explanatory advantages, both economic and practical, as well as aesthetic and ornamental, over the systems of the prior art.

Another purpose of the invention is to provide an extruded section, substantially of aluminum and its alloys, for use in street furniture, so conceived as to receive a plurality of modules, and/or modular equipment, of various types and for different purposes, for example architectural and engineering purposes, and also such as to result highly reliable, unalterable over time, and suitable to be realized in the most suitable dimensions as required by the expected use.

These and still other purposes, which shall be evidenced more clearly from the following disclosure, are advantageously reached practically by a multifunctional modular section, particularly suitable for street furniture and similar uses, which section is constituted, according to the present invention, by an extruded hollow body, of aluminum, its alloys or other suitable material for extrusion, of long shape, and such as to substantially constitute an element having the form of a post or of a similar support having a cross section constant, or gradually varying from one end to the other end, on the outer surface of said hollow section longitudinal grooves or raceways being provided, angularly spaced apart from each other, deepset into the same section, and having a substantially dovetail-shaped, arched or prismatic cross section, such as to constitute continuous means for the anchoring, with possibility of removal, at heights variable at will, and by means of brackets or bolts having their head shaped according to the cross-sectional shape of the said grooves, of tools and services for street furniture, such as lighting lamps, street signs and advertising placards, traffic-divider and pedestrian barriers, garden-seats, litterbins, and other infrastructures used in the field of the street furniture.

More particularly, said hollow section has a substantially ring-shaped, preferably quadrangular with well-rounded corners according to equal bending radii, cross section.

Further structural and use characteristics of the subject section of the invention shall be evidenced by the following detailed disclosure, referring to the hereto attached drawing tables, given to purely indicative and non-limitative purposes, wherein:

Fig. 1 shows a cross-sectional view of an extruded modular section, realized according to the invention, with four longitudinal grooves equidistant from each other;

Figs. 2 and 2a are respectively a side view and a front view of a bracket or T-headed bolt, suitable to be anchored inside the grooves as of Fig. 1, and useable for supporting miscellaneous tools and services;

Fig. 3 is a view of another form of practical embodiment of the grooves of an extruded section according to the invention, and

Figs. 3a and 3b are respectively a side view and a perspective view of a type of anchoring bolt fit to the shape of the grooves as of the section of Fig. 3.

Referring to such Figures, the multifunctional cross-section, modular section of the instant invention is substantially constituted by a long-shaped tubular body 1, of constant thickness, obtained by the extrusion of a metal material, such as aluminum or its alloys, other metal alloys having similar characteristics, or also other materials suitable to be extruded, such as plastic materials, or the like. The external appearance of the section results hence that of an aesthetically agreeable and smooth-surfaced post or support.

The constant cross section of the section is annular or substantially circular in shape; in Figs. 1 and 3, said section has the shape of a square, with the four corners rounded according to long bending radii R, equal to each other, so that the section assumes the appearance of a cylindrical body partly flattened in correspondence of four equidistant zones, indicated with the numerals 2, 2a, 2b, and 2c in Fig. 1. In the central portion of each one of the said flattened zones 2, 2a, 2b and 2c, a groove, longitudinal relatively to the section, is provided; thereby, four grooves result, one groove per each flattened zone, which are indicated by the numerals 3, 3a, 3b and 3c.

Each groove is substantially constituted by a length 4, 4a, 4b and 4c, having the same thickness as of the same section, and shows a substantially rectangular inner area or hollow 5, 5a, 5b and 5c of reduced length relatively to that of the respective hollow.

The lengthwise extension of the grooves or raceways is substantially equal to the length of the post; they can also be shorter, if required, as well as have different dimensions, for possibly different use requirements. Furthermore, three of said grooves, spaced by 120° from each other, or also a smaller number thereof, can be provided.

Always according to the invention, in order to allow, as already said, various tools and services, to section 1, a type of bracket or bolt 6 is provided (Fig. 2), constituted by a threaded stem, with a T-

shaped, lozenge-shaped head 6a at an end. The head 6a has such a size as to allow it to be introduced, according to its smaller section 6b, into the groove 4, passing through the inlet 5, whilst its rotation by 90° inside the hollow 3, to the purpose of accomplishing its latching inside the same hollow against its drawing out, is allowed by the lozenge-shape of the same head. Thus, after slipping the head 6a into a groove, and locking it by a nut screwed down on the stem 6, anchoring onto the same stem 6 miscellaneous tools and services, such as those forming a customary street fitting, is possible, with the same being positioned at different heights, with possibility of shifts according to the functional, as well as purely aesthetical, requirements. Furthermore, the stem 6 can be accomplished in an arched or anyway orientatable shape, so to allow a wider range of possibilities of positioning and orientation of the hanging tools.

Always according to the invention, according to another form of practical embodiment, the section 1 can be provided with grooves with their inner hollow having the shape of an arc of a circle, as indicated with the numeral 7 to exemplifying purposes in Fig. 3; in such case, the anchoring bolt 6b (Figs. 3a and 3b) is provided with a head 6c which is still flat, but of substantially semicircular shape, so to allow the same head to rotate inside the interior of the arched hollow of the groove 7, and its stopping to be accomplished by contrast against the inner edges of the opening 5. Obviously, realizing an extruded section fully or partly provided with quadrangular or circular grooves, and with a number of grooves different from four, is possible.

The practical use of the above disclosed section can be carried out by positioning it vertically or horizontally, or also with various inclinations, and this in accordance with the function the individual services and tools must perform in a given environment with the advantage of allowing, by means of combinations of more sections and different tools or pieces of equipment, the obtainment of particular aesthetical and ornamental effects matching the characteristics of the environment the furniture is intended for. Furthermore, the selection of such a highly light and unalterable material as aluminum and its alloys for the modular section of the present invention, has shown to be particularly suitable for aesthetically and functionally matching all of the tools (parapets, barriers, garden-seats, etc.) and of the services (lamps, signs, and still others), which are essential for the best use of the landscape and for fulfilling the requirements of public communication and information.

Of course, in the practical embodiment, to the invention as above disclosed for indicative purposes, modifications and variants can be supplied as regards the materials used, the shape and the

dimensions of the modular section and of the related grooves, as well as the number of these latter and the shape of the anchoring bolts, without going out the protection scope of the same invention.

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Claims

1. Multifunctional modular section, particularly suitable for street furniture and similar uses, characterized in that it is constituted by an extruded hollow body, of aluminum, its alloys or other material suitable for extrusion, of long shape, and such as to constitute an element having the form of a post or of a similar support having a constant cross section, on the outer surface of said hollow section longitudinal grooves or raceways being provided, angularly spaced apart from each other, deep-set into the same section, and having a substantially dovetail-shaped, arched or prismatic cross section, such as to constitute continuous means for the anchoring, with possibility of removal, at heights variable at will, and by means of brackets or bolts having their head shaped according to the cross-sectional shape of the said grooves, of tools and services for urban furnishings, such as lighting lamps, traffic signs and advertising placards, traffic-divider and pedestrian barriers, garden-seats, litter-bins, and other infrastructures used in the field of the street furniture.

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2. Section according to claim 1, characterized in that it shows a cross section substantially ring-shaped and partly flattened in correspondence of four zones equidistant from and opposite to each other.

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3. Section according to claim 1, characterized in that said anchoring bolts have their head substantially of T-shape, with its greater section substantially having the shape of a lozenge or of a sector of a circle, such as to allow it to rotate, with stopping, inside said longitudinal grooves.

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4. Section according to the preceding claims, characterized in that said bolts with T-shaped head are accomplished with arched, or anyway jointed and orientatable stem.

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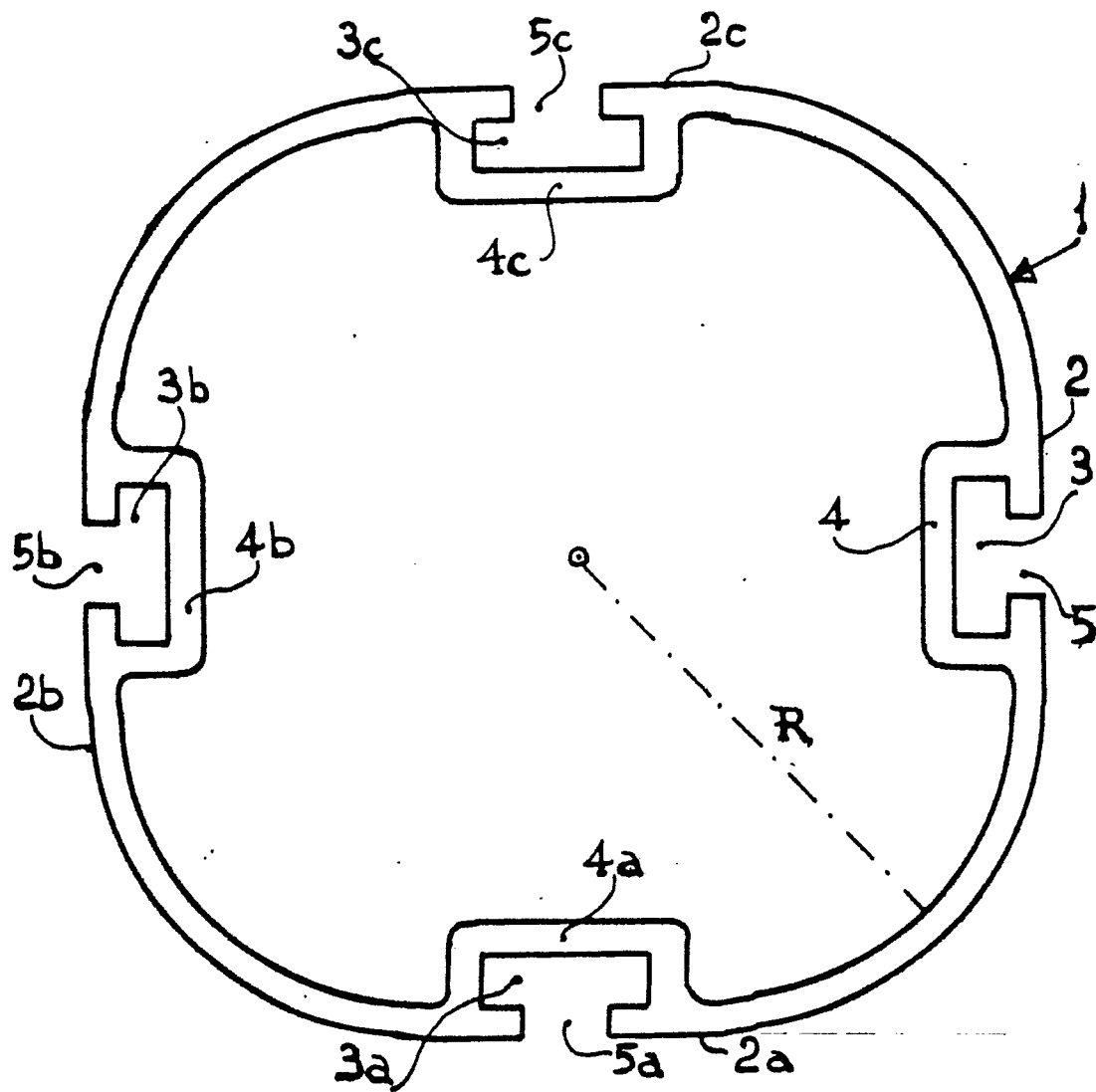


Fig. 1

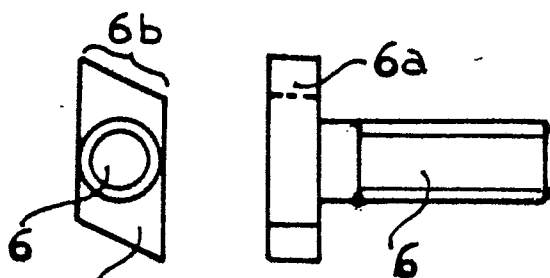
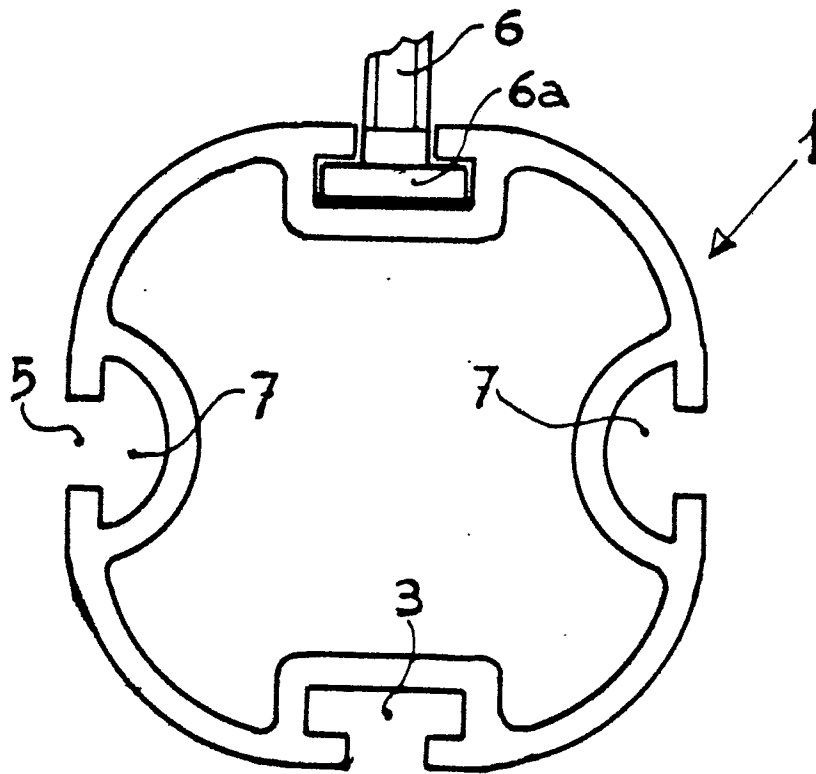


Fig. 2a

Fig. 2

Fig. 3