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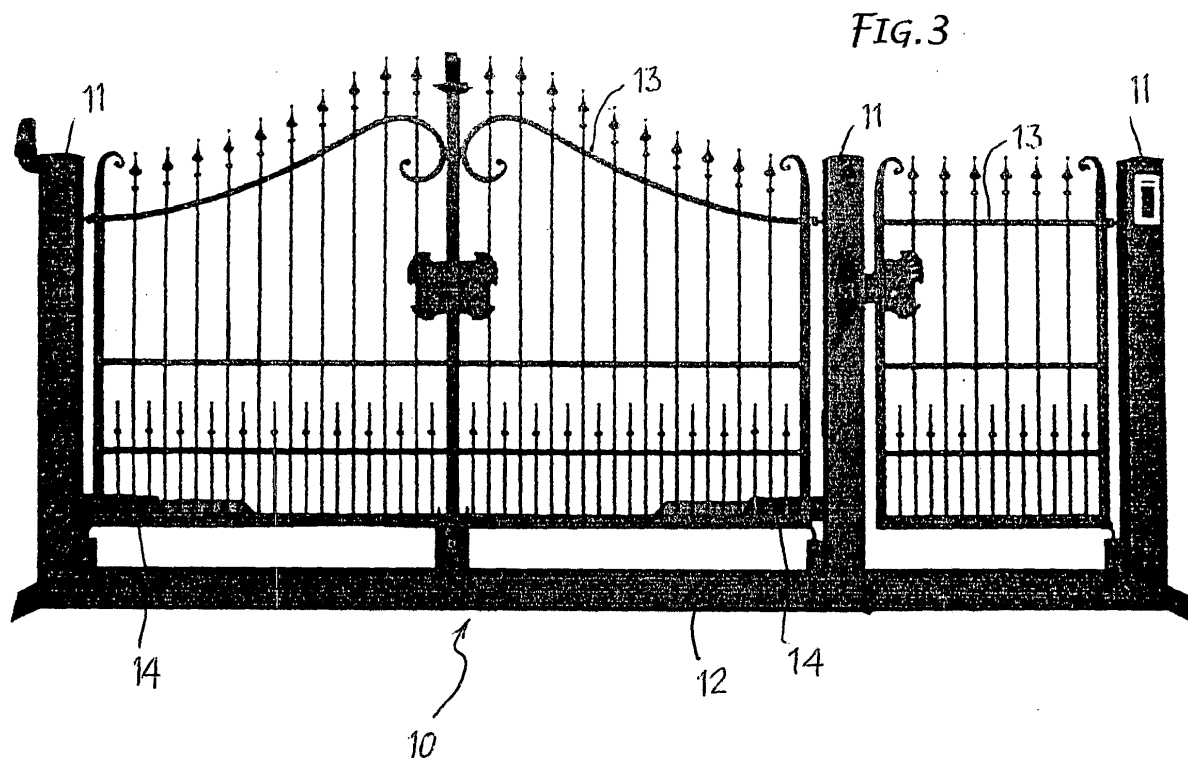
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(54) **Improved gate structure**

(57) This invention concerns a gate with or without powered leaves, both for driveways and pedestrians, which include an integral prefabricated supporting structure comprising vertical posts connected at the bottom

by at least one bottom beam. The posts are equipped with hinges for at least one gate leaf, whereas the bottom beam is designed to be placed in a trench and let into a concrete filling.



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Description

Field of the Invention

[0001] This invention concerns gates with or without powered leaves, both for drive ways and pedestrians, and refers in particular to an improved gate structure.

Prior Art

[0002] Gates with either one or two leaves are usually assembled and turn on hinges supported by fixed structures, usually gateposts. The placing of each gate therefore requires prior positioning of gateposts which can either be cement or metal. The gateposts with hinges must be perfectly spaced, parallel and vertical, otherwise the correct trim and matching of the leaves when closing will be jeopardised. In fact, more often than not it is the imprecision when positioning the posts that causes problems when installing a gate and which then requires several corrections, and it is only too well known how difficult it is to achieve this precision when building or positioning pre-made posts on site.

[0003] In addition, making a gate according to the present technique requires surveying, designing, offers and then assembly, etc, which means the cooperation and meeting together of different operators with specific functions, such as a smith, a mason, an electrician, all people difficult to coordinate.

[0004] Furthermore, the present tendency when designing, even in the building sector, is to use standardized structures able to guarantee users quality and convenience.

Object and Summary of the Invention

[0005] This invention has the dual objective of efficiently avoiding the above known drawbacks in the technique and to fully meet the requirements of standardization also in regard to gates.

[0006] To this aim, this invention proposes a gate with an integral supporting structure made up of vertical posts connected at the bottom by at least one bottom beam and equipped with hinges for the leaves of the gate.

[0007] This innovative supporting structure for gates becomes particularly advantageous from several points of view. It, in fact, facilitates the making of gates always with the correct trim for matching the leaves when closing and with a wide range of solutions, models and sizes, eliminating surveys, designing and many operations which would require carrying out on site. Furthermore, it avoids the need for: the contemporary presence of several operators, each with a different specific job; it facilitates the positioning of each gate by simply digging a trench and filling it with concrete to let the bottom rail into it; it guarantees the verticality and parallelism of the posts, plus greater stability and robustness of the clo-

suring action; and after all it supplies a product, that is to say a complete and finished gate, with a saving in time and money and with the possibility of different types of powering systems and installations which can also be carried out directly, privately with no need for labour or specialised personnel.

Brief Description of the Drawings

[0008] Further details of the invention will become clearer in the description that follows made with reference to the attached drawings, which are indicative and not limiting, in which:

Fig. 1 shows an example of a gate with two leaves according to the invention;

Fig. 2 shows an example of a wicket for pedestrians; and

Fig. 3 shows an example of a gate with two leaves associated with a wicket for pedestrians.

Detailed Description of the Invention

[0009] As shown, each gate includes a supporting structure 10 made up of vertical posts 11 and of at least one horizontal bottom beam 12 connected rigidly to the bottom part of the posts.

[0010] Posts and bottom beam 11, 12 are joined together either by welding or by some other system. They can be in steel or however in coated or galvanised metal, and possibly, at least the posts may be coated or shielded using some other building material. The posts 11 are equipped with hinges to apply the leaf or leaves 13 of the gate to, whereas the bottom beam 12 is to be placed in a trench and let into a concrete filling.

[0011] For a two leaf gate, the supporting structure has two posts connected by at least one bottom beam of a length equal to three width of the gate as shown in Fig. 1. In the same way for a wicket for pedestrians, there are two posts connected by a bottom beam as shown in Fig. 2. In a closing system including at the same time a gate for a driveway and a wicket for pedestrians, the structure has three posts connected by a bottom beam as shown in Fig. 3.

[0012] In each case, an appropriate control actuator 14 can be connected to each leaf for remote opening and closing, and the resulting group benefits from the abovementioned structural prerogatives and advantages which prominently differentiate it from traditional gates.

Claims

1. Gate with or without powered leaves, both for drive ways and pedestrians, **characterised by** an integral prefabricated supporting structure comprising vertical posts connected at the bottom by at least

one bottom beam and equipped with hinges for at least one gate leaf, the bottom beam being designed to be placed in a trench and let into a concrete filling.

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2. Gate according to claim 1, in which the posts and bottom beam of the supporting structure are joined together either by welding and/or other systems.

3. Gate according to claims 1 and 2, in which the posts and the bottom beam of the supporting structure are coated or galvanised steel and may be of any cross-section.

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4. Gate according claims 1 to 3, in which the integral supporting structure includes two posts connected at the bottom by at least one bottom beam for a one or two leaf closing.

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5. Gate according to the previous claims from 1 to 3, in which the integral supporting structure has three posts connected at the bottom by at least one bottom beam for associated driveway gates and wickets for pedestrians.

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FIG.1

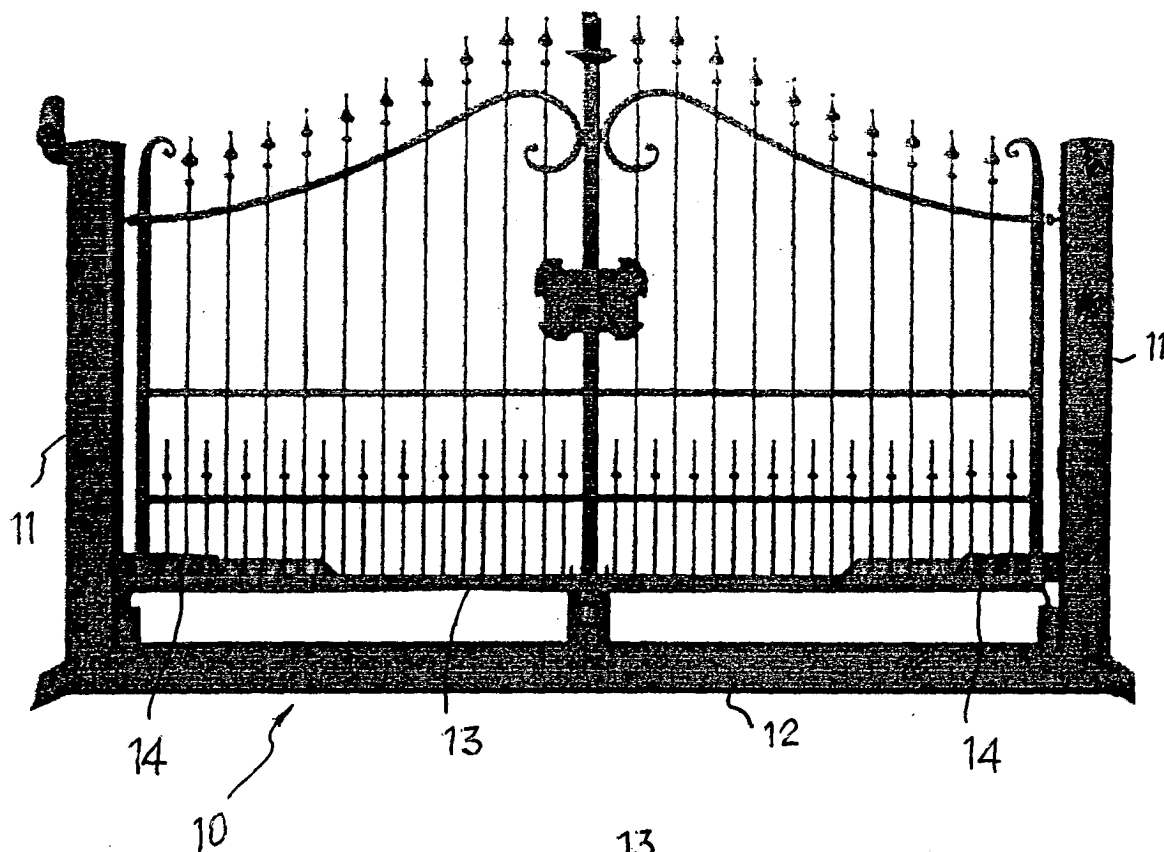


FIG.2

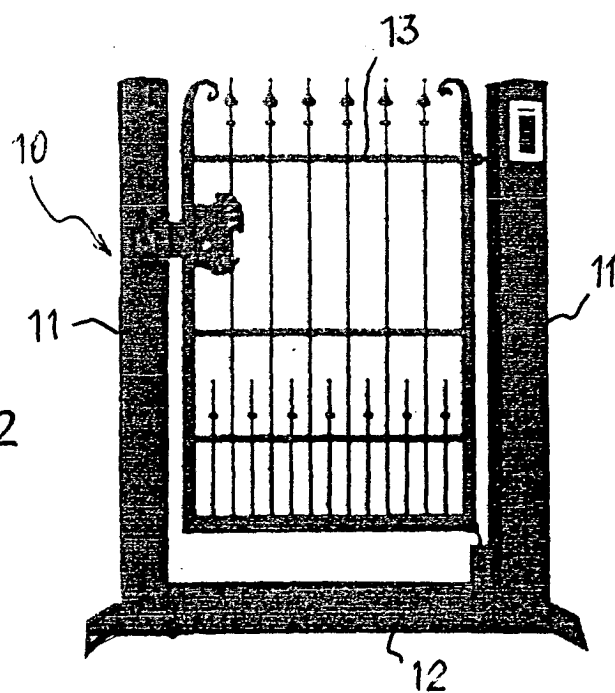


FIG. 3

