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(56) Documents Cited: GB 2144793 A BE 000906050 A2

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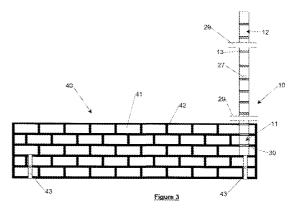
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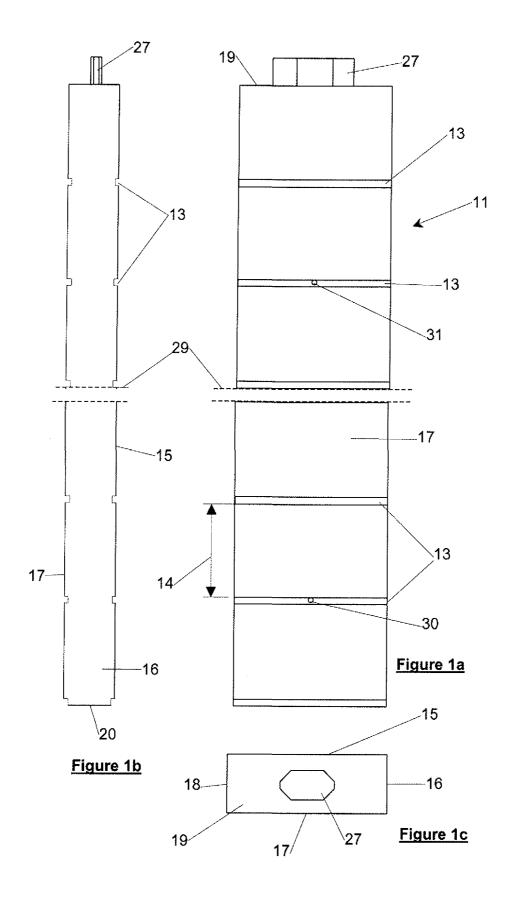
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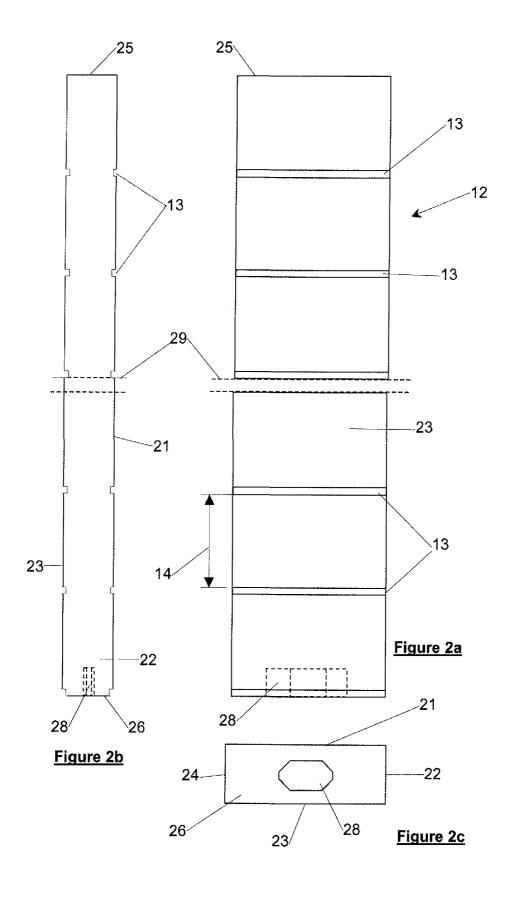
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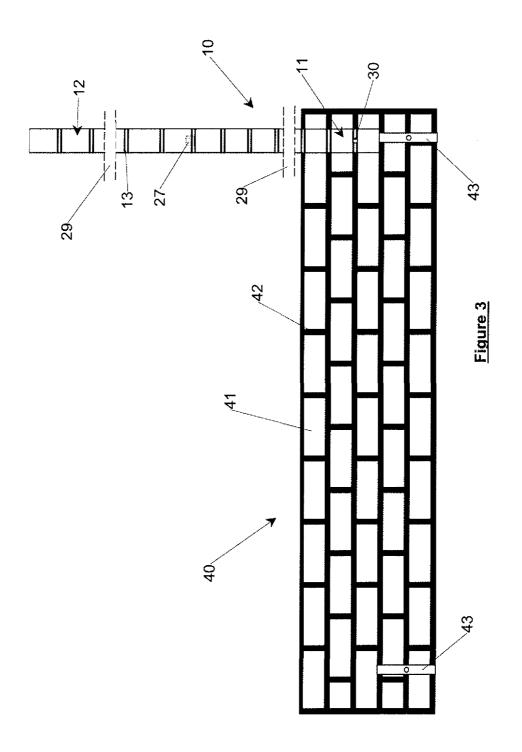
(54) Title of the Invention: Gauge rod Abstract Title: Bricklaying gauge rod

(57) A gauge rod 10 for use when constructing a brick wall 40, comprises indicia 13 to indicate the desired spacing between bricks. The rod comprises first and second elongate sections 11, 12 which in use are releasably connected or hinged in an end-to-end fashion to allow collapsing or folding of the rod. The markings 13 are provided along both sections, and are preferably grooves in the surface of the sections, the width of each groove being equivalent to the desired spacing between bricks, and the between each groove being the width of a brick. The joining of the sections may be achieved by inter-engaging a slot (28, Fig 1c) and a peg (27, Fig 1b). The rod sections may be temporarily attached to a wall 40 being constructed. A kit of parts is also included which comprises the gauge rod and at least one datum peg (43, Fig 3).









#### **GAUGE ROD**

This invention relates to a gauge rod having markings to indicate the desired spacing between bricks when constructing a brick wall, and further relates to a kit of parts comprising a gauge rod and datum pegs.

When constructing a brick wall, it is important that the spacing between adjacent courses of bricks is uniform. This is required so that once complete, the wall is level, even and is of the correct height. Whilst there are industry standards for brick size and for the spacing between courses of bricks, there is nonetheless a slight variation in size between each brick. This difference of size needs to be compensated for by increasing or decreasing the spacing between each course of bricks by altering the thickness of mortar laid down in between.

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The spacing between courses of bricks can be measured using a tape measure whilst the bricklayer is working, but this method can be awkward and small mistakes made in the measurements quickly multiply over several courses into large variations in the spacing between bricks at various points in the wall. To overcome this problem, the spacing between bricks is often measured using a gauge rod. A gauge rod comprises a stick that measures up to three metres long onto which are cut or drawn markings to show the spacing for the bricks and the mortar. Gauge rods are normally made with spare wood, and are made shortly before use. These gauge rods can lack accuracy and once used, are too long to conveniently keep and are subsequently discarded after use.

There is therefore a requirement for a gauge rod that is accurate and portable, and which can be used repeatedly to ensure uniformity of brickwork. Therefore, according to the present invention there is provided a gauge rod having markings to indicate the desired spacing between bricks when constructing a brick wall, the rod comprising first and second elongate sections which in use are releasably conjoined or hinged end-to-end, the markings being provided along both sections.

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Although reference is made throughout this specification to bricks and brickwork, this invention may be adapted for use with breeze blocks or other building materials that require accurate spacing, which could include paving and tiling. The type and spacing of the markings provided on the gauge rod will be adapted to the specific use, and one or more different sets of marking can be provided on each rod.

Any suitable means to interconnect the first and second sections may be used, however it is preferred that the first section has a peg positioned on one end face, and the second section has corresponding slot at an end face which slot snugly or tightly receives the peg on the first section. Alternatively, the two sections could be hinged or otherwise pivoted together.

The gauge rod preferably has a rectangular cross section, with four side faces. The markings are preferably provided on two opposed or adjacent side faces, and the remaining two faces are preferably smooth, or have alternative markings such as a metric and/or imperial rule.

The markings should be clearly visible, and could be drawn onto the gauge rod. Preferably however the markings are grooves cut into the gauge rod. The width of each groove is preferably the desired spacing between

bricks, so therefore the same width as a standard thickness of mortar normally provided between courses. In one embodiment, which is consistent with an industry standard, the grooves are 10mm thick, and spaced apart by 65mm, a standard height of a brick. Preferably, an alternative set of markings will be provided on a different face of the gauge rod, with grooves 10mm thick spaced apart by 215mm, the standard height of a block or standard length of a brick.

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The gauge rod should be of a suitable length for use when the first and second sections are joined end-to-end, but can be stored and handled conveniently when the first and second sections are separated. It has been found that the optimum length for both the first and second sections is 1200mm, which sections are connectable to produce a gauge rod of 2400mm overall. This combined length is long enough for 32 courses of standard bricks. Alternatively, the gauge rod can comprise three or more sections.

So that it may be used accurately, it is preferred that the gauge rod will be held in a particular position during use. It may be inserted into the ground or in a stand. Ideally however, attachment means are provided so that the gauge rod can be attached to the wall as it is built. It is preferred that the attachment means include one or more nail hole provided in at least the first section thereof. The nail hole or holes are preferably provided in the grooves, so that when the nail is hammered in to attach the gauge rod to the wall, the nail enters the mortar and not the brick.

The gauge rod is preferably made from a strong material such as plastic, so that is can withstand repeated use and adverse weather.

When constructing a wall or building, datum pegs are often used to ensure that each of the corners thereof are of uniform height relative to the

ground. Therefore there is also provided a kit of parts comprising a gauge rod as previously described and at least two datum pegs, though more preferably four datum pegs will be provided. Each datum peg will preferably have at least one nail hole to attach it to the wall.

So that it may be better understood, one embodiment of the present invention will now be described, by way of example only, with reference to the following drawings in which:

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**Figures 1a, 1b and 1c** show alternative side views and a top-end view of a first section of a gauge rod of this invention;

Figures 2a, 2b and 2c show alternative side views and a rear-end view of a second section of a gauge rod of this invention; and

Figure 3 shows a gauge rod comprised of the first section of Figures 1a-c and a second section of Figures 2a-c rod in use in the construction of a brick wall.

The following description is made with reference to all of the Figures. In Figure 3, there is shown a gauge rod generally indicated 10, for use when constructing a brick wall to ensure that the brick courses are uniformly spaced. The gauge rod 10 comprises first section generally indicated 11 (and individually shown in Figure 1a-c) and a second section generally indicated 12 (and individually shown in Figure 1a-c), which are interconnectable to form a single rod 10.

Each section 11, 12 has a generally rectangular cross section and is constructed from a lightweight but durable plastics material. First section 11 has four side faces 15, 16, 17 and 18, and two end faces 19 and 20. Second section 12 has four side faces 21, 22, 23 and 24, and two end faces 25 and 26.

Marked out on opposed side faces 15, 17 on first section 11 and opposed side faces 15, 17 on the second section 12 are a series of grooves 13. The spacing between each groove (indicated by arrow 14) equates to a standard height of brick, and the width of each groove 13 is equivalent to the standard depth of a mortar join to be used. The first and second sections 11, 12 are each long enough to measure sixteen courses, so as shown in these Figures the length of each section has been broken with dashed lines 29.

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Two nail holes 30, 31 are provided through the first section 11 so that the gauge rod 10 can in use be attached to a wall using one or more nail. The nail holes 30, 31 are provided in the grooves 13 of the first section 11 so that nails inserted therethrough attach the gauge rod 10 to a wall through the mortar and not the bricks.

On end face 19 of section 11 is a generally octagonal peg 27, and in end face 26 of second section 12 is a corresponding octagonal slot 28, adapted to snugly receive peg 27 to interconnect the two sections 11, 12 during use.

Figure 3 shows the gauge rod 10 in use when constructing a brick wall (generally indicated 40) comprising courses of bricks 41 and joined using mortar 42. A building, for example a building having four walls in a rectangular arrangement, generally is built by first constructing the corners, and then laying courses of bricks between each corner. To ensure that each corner is of the correct height, a datum peg 43 is attached to each corner. The relative height of each datum peg 43 can then be established using a dumpy or laser level, and minor adjustments if necessary can be made to the height of each corner to ensure that all are uniform. Datum pegs 43 at three of the corners can be calibrated against a first datum peg at one corner, or if present from a main

datum in a worksite. Once the user is satisfied that the corners are of uniform height, they may continue with the construction of the brick wall 40.

The gauge rod 10 is assembled by inserting the peg 27 on first section 11 into the slot 28 in second section 12. The gauge rod 10 can then be placed on top of a datum peg 43, and attached to the wall 40 by hammering a nail through nail hole 30 into the mortar 42 between two bricks 41.

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The wall 40 can then be constructed according to normal practice, with the user able to check that the bricks 41 laid at the correct height, and that the mortar 42 is being laid at the correct thickness by comparison with the grooves 13 on the gauge rod 10.

#### **CLAIMS**

- 1. A gauge rod having markings to indicate the desired spacing between bricks when constructing a brick wall, the rod comprising first and second elongate sections which in use are releasably conjoined or hinged end-to-end, the markings being provided along both sections.
- 5 2. A gauge rod as claimed in claim 1, wherein the first section has a peg at one end face thereof, and the second section has a complimentary slot at an end face thereof to receive the peg to conjoin the first and second sections.
- A gauge rod as claimed in claim 1 or claim 2, wherein the first and second sections are each generally rectangular in cross-section so that the
  gauge rod has four side faces.
  - 4. A gauge rod as claimed in claim 3, wherein the markings are provided on opposed side faces.
  - 5. A gauge rod as claimed in any of the preceding claims, wherein attachment means are provided to removably attach the gauge rod to the wall during use.

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- 6. A gauge rod as claimed in claim 5, wherein the attachment means are nail holes provided in the first section.
- A gauge rod as claimed in any of the preceding claims, wherein the markings are grooves in the surface of the sections, the width of each groove
  being equivalent to the desired spacing between bricks, and the distance between each groove being the width of a brick.

- 8. A gauge rod as claimed in any of the preceding claims, wherein the first and second sections are each 1200mm long and are connectable to produce a gauge rod 2400mm.
- 9. A gauge rod as claimed in any of the preceding claims, wherein the sections of the gauge rod are made of plastics material.
  - 10. A gauge rod as claimed in claim 1 and as substantially herein described with reference to and as illustrated in the accompanying drawings.
  - 11. A kit of parts comprising a gauge rod as provided in any of the preceding claims and at least one datum peg.
- 10 12. A kit of parts as claimed in claim 11, comprising four datum pegs.
  - 13. A kit of parts as claimed in claim 11 or claim 12, wherein the or each datum peg has at least one nail hole to attach the or each datum peg to a wall.



**Application No:** GB0900231.2 **Examiner:** Mrs Judith Peake

Claims searched: 1-13 Date of search: 23 February 2010

## Patents Act 1977: Search Report under Section 17

#### **Documents considered to be relevant:**

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X,Y	· · · · · · · · · · · · · · · · · · ·	DE3505049 A1 (DERER) See WPI Abstract Accession Number 1986-219546 [34] and Fig 1
X	1, 3-6, 8-9	BE906050 A2 (FABEL) See WPI Abstract Accession Number 1987-136234 [20] and drawings
X	1, 3, 4, 8-9	AU6305299 A (NELSON) See Whole document and Figure 1
X	1-3, 8-9	NL1004480 C2 (SCHUDEKO V.O.F. METSELWERKEN) See WPI Abstract Accession Number 1998-425351 [36] and Figs 3A, 3B and 4
Y	11-13	GB2144793 A (SNELLING) See Fig 3 particularly

#### Categories:

X	Document indicating lack of novelty or inventive	A	Document indicating technological background and/or state
	step		of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of	Р	Document published on or after the declared priority date but before the filing date of this invention.
	same category.		
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

#### Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC<sup>X</sup>:

Worldwide search of patent documents classified in the following areas of the IPC

E04G; G01B

The following online and other databases have been used in the preparation of this search report

Online: WPI, EPODOC



### **International Classification:**

Subclass	Subgroup	Valid From	
E04G	0021/18	01/01/2006	
G01B	0003/04	01/01/2006	٦
G01B	0003/06	01/01/2006	