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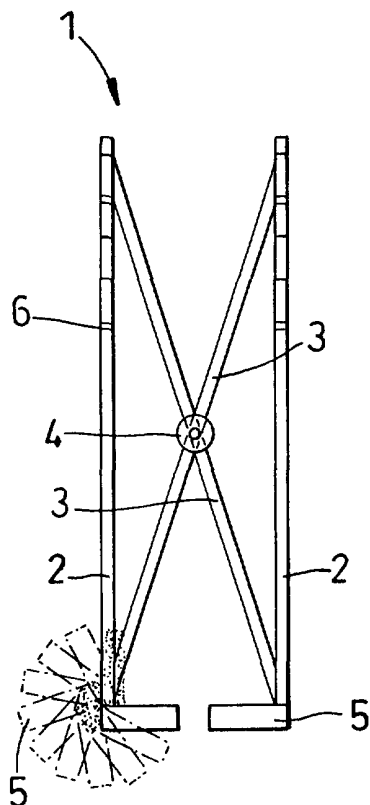
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(54) Title: ADJUSTABLE FRAME



(57) Abstract: An adjustable frame comprising primary (2) and secondary members (3), each end of each secondary member (3) being slidably engaged with a primary member (2) so that in use the two secondary members (3) extend substantially diagonally relative to the primary members (2). The secondary members (3) are pivotally secured to each other at a crossing point (4) whereby the resulting scissor-like movement of the secondary members (3) brings about a variation of a distance apart of the primary members (2).



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

ADJUSTABLE FRAME

This invention relates to portable, adjustable frames and in particular to frames for use in forming door and window openings during construction
5 of a building.

On the construction site window and door openings are usually formed from lengths of timber, which are braced in the corners or across the centre in order to keep square. A large plank is then spiked and placed
10 on top at an angle to the floor to form a strut for the frame. This enables the bricklayer to build around the frame, thereby forming the openings. When the mortar has set a hammer or saw is used to free the timber, taking care not to disturb the recently laid brickwork.

15 This procedure however, is relatively expensive, resulting in wasted time. Moreover, the timber used is generally scrapped or burnt.

This present invention aims to ameliorate this problem.

20 Accordingly the present invention provides a frame comprising a pair of elongate primary members adapted to be maintained in variable, spaced-apart, substantially parallel relationship by means of a pair of elongate secondary members, in which each end of each said secondary member is in sliding engagement with a primary member so that, in use the two
25 secondary members extend substantially diagonally relative to the two primary members, said secondary members crossing each other at a crossing-point intermediate said primary members, and said secondary members being pivotally secured to each other at said crossing point, whereby the resulting scissor-like movement of said secondary members
30 brings about a variation of the distance apart of said primary members.

The frame may include at least one foot member provided at at least one end of one or both primary members.

Alternatively, the frame may include a foot member provided at each end
5 of one or both primary members.

Each said foot member may be adapted for pivotal movement. Preferably, each foot member may be adapted to pivot through substantially 360°. Alternatively, each foot member may be adapted to
10 pivot through substantially 270°.

The frame may also comprise a brace member to engage the foot members on opposite primary members, to give additional rigidity to the frame.

15 The frame may be manufactured from mild steel, stainless steel, aluminium, wood or from a plastics material.

The frame may also comprise pegholes or notches on one or both primary members. The pegholes or notches fixedly locate a secondary member
20 such that a desired width apart of the primary members can be maintained.

The pegholes or notches may correspond to a distance in millimetres, centimetres or inches apart, these distances being indicated on one or both
25 primary members.

The ends of one or both secondary members may further include an indicator to show clearly the distance apart of the primary members.

30 One or both primary members may also comprise one or more telescoping portions.

The or each telescoping portion may have locating means to fixedly locate the or each telescoping portion. The locating means may be a clip, a peghole or a notch.

- 5 One or both secondary members may also comprise one or more telescoping portions.

The or each telescoping portion may have locating means to fixedly locate the or each telescoping portion in position. The locating means may be a
10 clip, a peghole or notch.

A preferred embodiment of the invention will now be described, merely by way of example and with reference to the accompanying drawings, in which:-

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FIGURE 1 is a perspective view of the frame in a closed condition;

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FIGURE 2 is the frame of Figure 1 in an open condition, with a pivoting foot member;

FIGURE 3 is a front elevation of the frame of Figure 1;

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FIGURE 4 is a back elevation of the frame of Figure 1; and;

FIGURE 5 shows the frame of Figure 1 in use.

Referring to the drawings (in which like numerals denote like parts), the frame 1 comprises a pair of elongate primary members 2, adapted to be
30 maintained in variable spaced-apart parallel relationship by means of a pair of elongate secondary members 3. Each end of each secondary

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member 3 is located in sliding engagement with a primary member 2. The secondary members 3 cross each other at a crossing point 4, at which crossing point 4 the secondary members 3 are pivotally secured to each other.

5

Foot members 5 are provided at the ends of the primary member 2. The foot members 5 are pivotally secured to the primary members 2. The foot member 5 is adapted to pivot through 360°. The foot members serve to locate the frame onto a surface e.g. the ground or existing brickwork (see

10 Figure 5).

The primary members 2 have pegholes or notches 6 so as to locate the secondary members 3 in a fixed position and set a desired width of the primary members 2 and therefore the frame 1.

CLAIMS

1. A frame comprising a pair of elongate primary members adapted to be maintained in variable, spaced-apart, substantially parallel relationship by means of a pair of elongate secondary members, in which each end of each said secondary member is in sliding engagement with a primary member so that, in use, the two secondary members extend substantially diagonally relative to the two primary members, said secondary members crossing each other at a crossing-point intermediate said primary members, and said secondary members being pivotally secured to each other at said crossing point, whereby the resulting scissor-like movement of said secondary members brings about a variation of the distance apart of said primary members.
2. A frame as claimed in claim 1 in which at least one foot member is provided at at least one end of one or both primary members.
3. A frame as claimed in claim 1 or claim 2, in which a foot member is provided at each end of one or both primary members.
4. A frame as claimed in any one of claims 2 to 4, in which the or each foot member is adapted to pivot through 360°.
5. A frame as claimed in claim 4, in which the or each foot member is adapted to pivot through 270°.
6. A frame as claimed in claim 2 or claim 3, in which the frame further comprises a brace member to engage the foot members on opposite primary members.

7. A frame as claimed in claim 1, in which one or both of said primary members is provided with pegholes or notches.

8. A frame as claimed in claim 7, in which the pegholes or notches
5 fixedly locate a secondary member such that a width apart of the primary members can be maintained.

9. A frame as claimed in claim 7 or claim 8, in which the pegholes or notches correspond to a distance in millimetres, centimetres or inches
10 apart, these distances being indicated on one or both primary members.

10. A frame as claimed in claim 9, in which one or both of said secondary members is provided with an indicator to show clearly the distance apart of the primary members.

15

11. A frame as claimed in claim 1, in which one or both primary members comprises one or more telescoping portions.

12. A frame as claimed in claim 11, in which the or each telescoping
20 portion has a locating means to fixedly locate the or each telescoping portion.

13. A frame as claimed in claim 12, in which the locating means comprises clips, pegholes or notches.

25

14. A frame as claimed in claim 1, in which one or both secondary members comprises one or more telescoping portions.

15. A frame as claimed in claim 14, in which the or each telescoping
30 portion has a locating means to fixedly locate the or each the telescoping portion.

16. A frame as claimed in claim 15, in which the locating means comprises clips, pegholes or notches.
17. A frame as claimed in any one of the preceding claims in which
5 said frame is manufactured from mild steel, stainless steel, aluminium wood or from a plastics material.
18. A frame substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

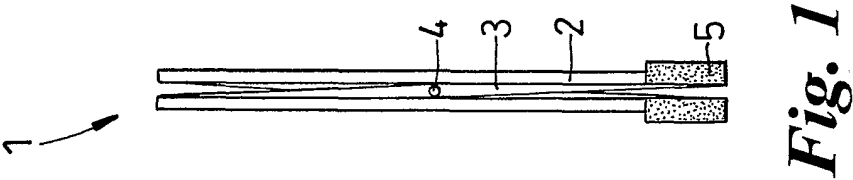


Fig. 1

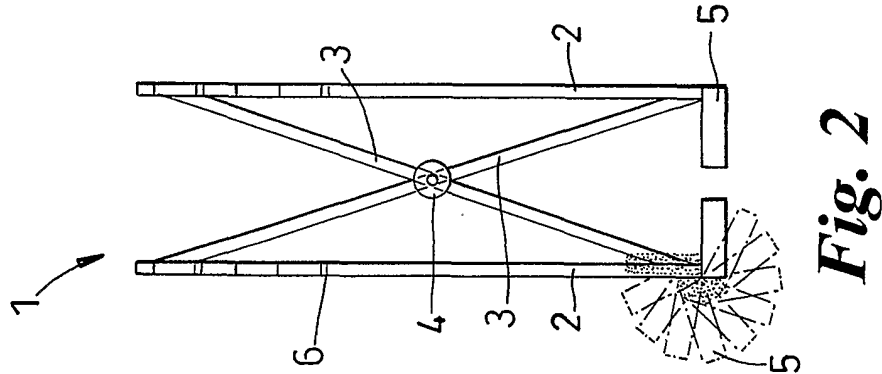


Fig. 2

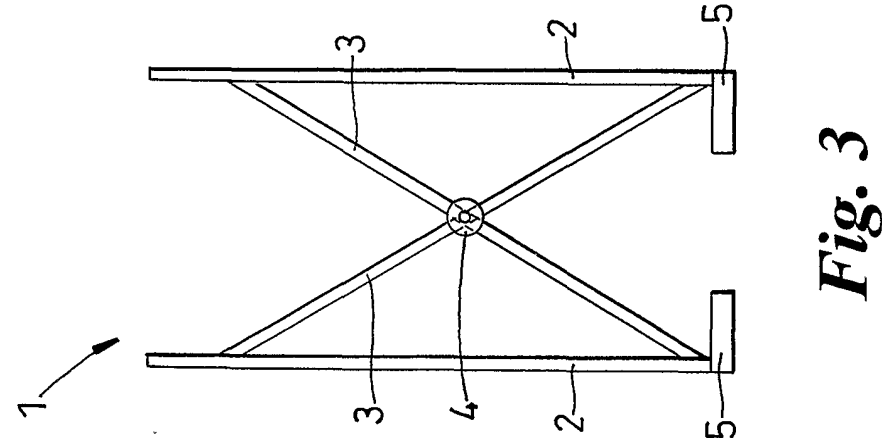


Fig. 3

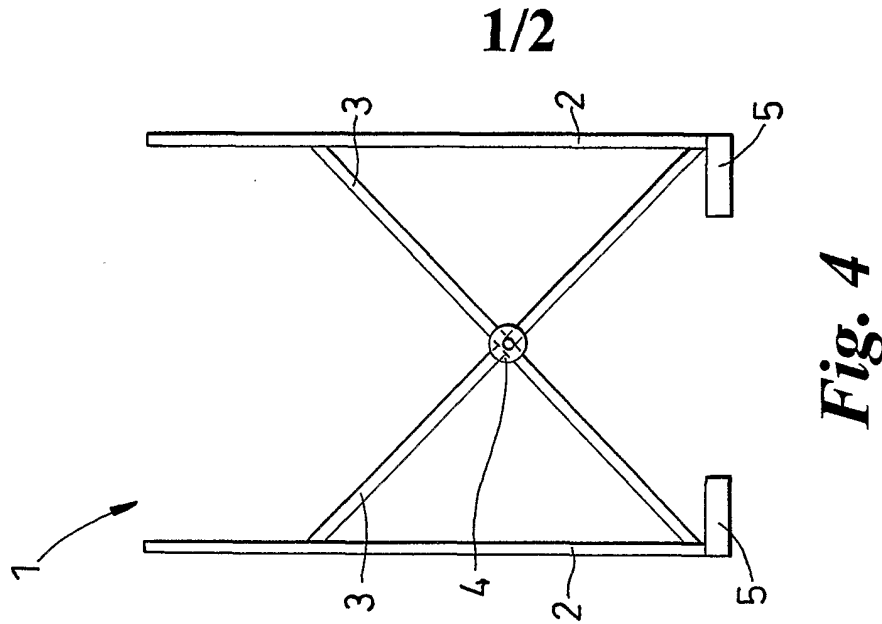


Fig. 4

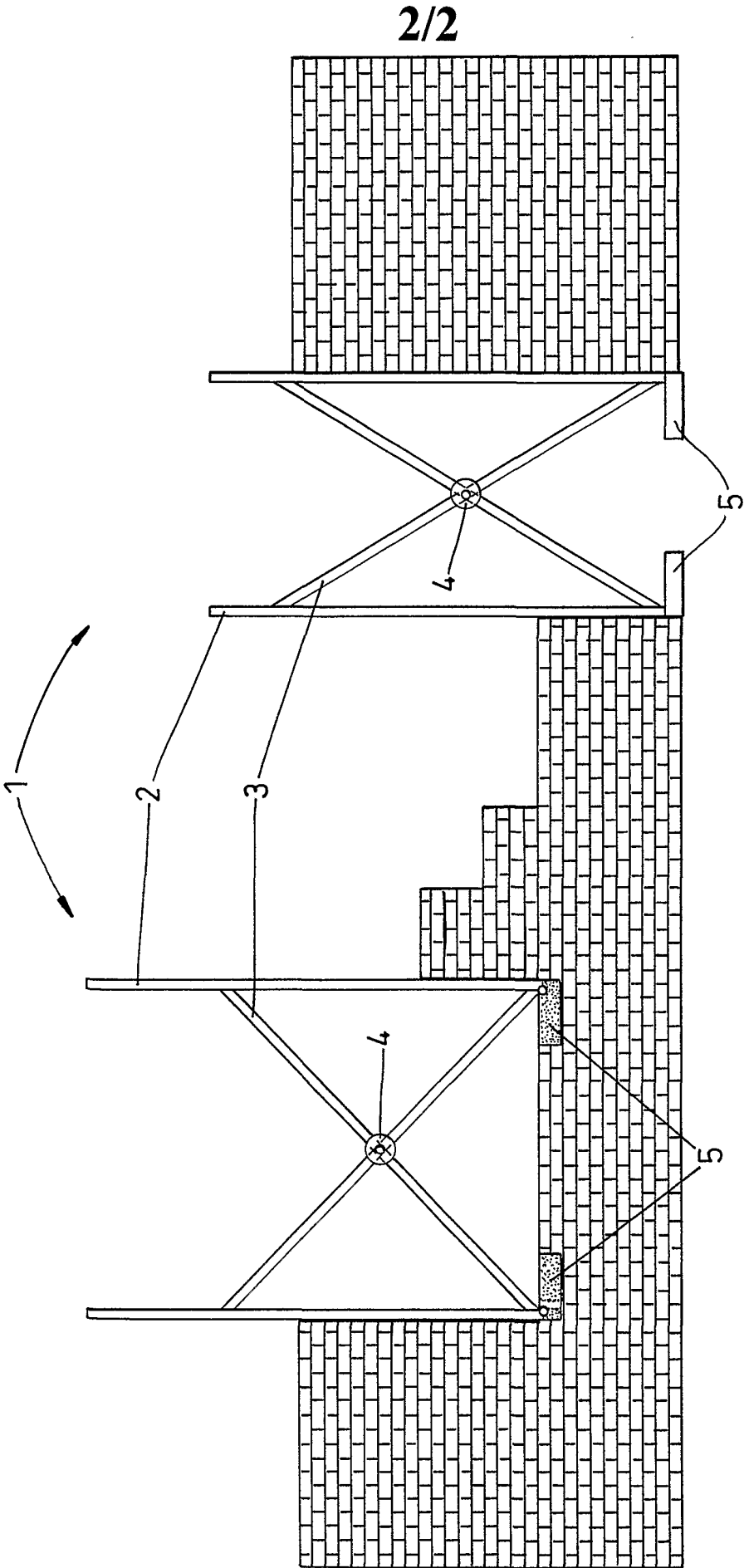


Fig. 5

INTERNATIONAL SEARCH REPORT

Int'l Application No

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 E04G21/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E04G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	DE 539 601 C (KAU) the whole document	1,2 11,12, 14,15,17
Y	DE 816 455 C (SEIFERT) the whole document	11,12, 14,15,17



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

In

Application No

PCT/GB 01/02059

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 539601	C	NONE	
DE 816455	C	NONE	