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GB 2150880 A

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(71) Applicant(s):
South Lincs Plant Hire & Sales Limited
Enterprise Way, Pinchbeck, Spalding, Lincolnshire, PE11 3YR, United Kingdom

(72) Inventor(s):
Brett William Maddison

(74) Agent and/or Address for Service:
Nigel Brooks
Hill Hampton, East Meon, PETERSFIELD, Hampshire, GU32 1QN, United Kingdom

(54) Title of the Invention: **Builders clamp**
Abstract Title: **Builders brick cutting clamp**

(57) A clamp for securing a brick 20 or the like to be cut comprises a support platform 4 on a base 1, with a clamp member 10 arranged over the platform 4 to secure the brick 20 between the member 10 and the platform 4. The clamp member 10 is connected to a shaft 9 through the platform 4 and is urged down on to the platform 4 by a spring 17. A pedal 16 is provided for releasing the spring 17 and raising the clamp member 10 to enable the brick 20 to be inserted or removed.

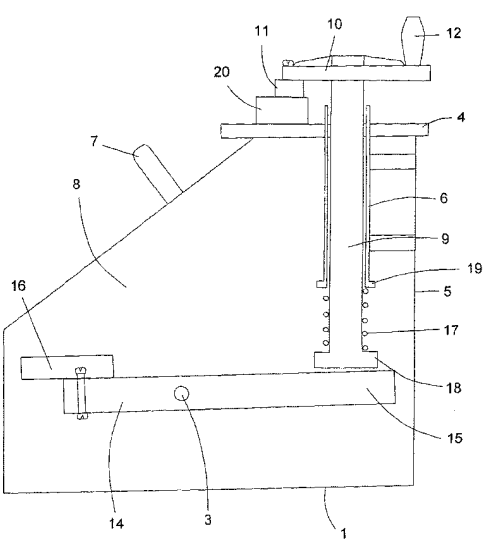

Figure 1

GB 2482872 A

This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 2007.

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

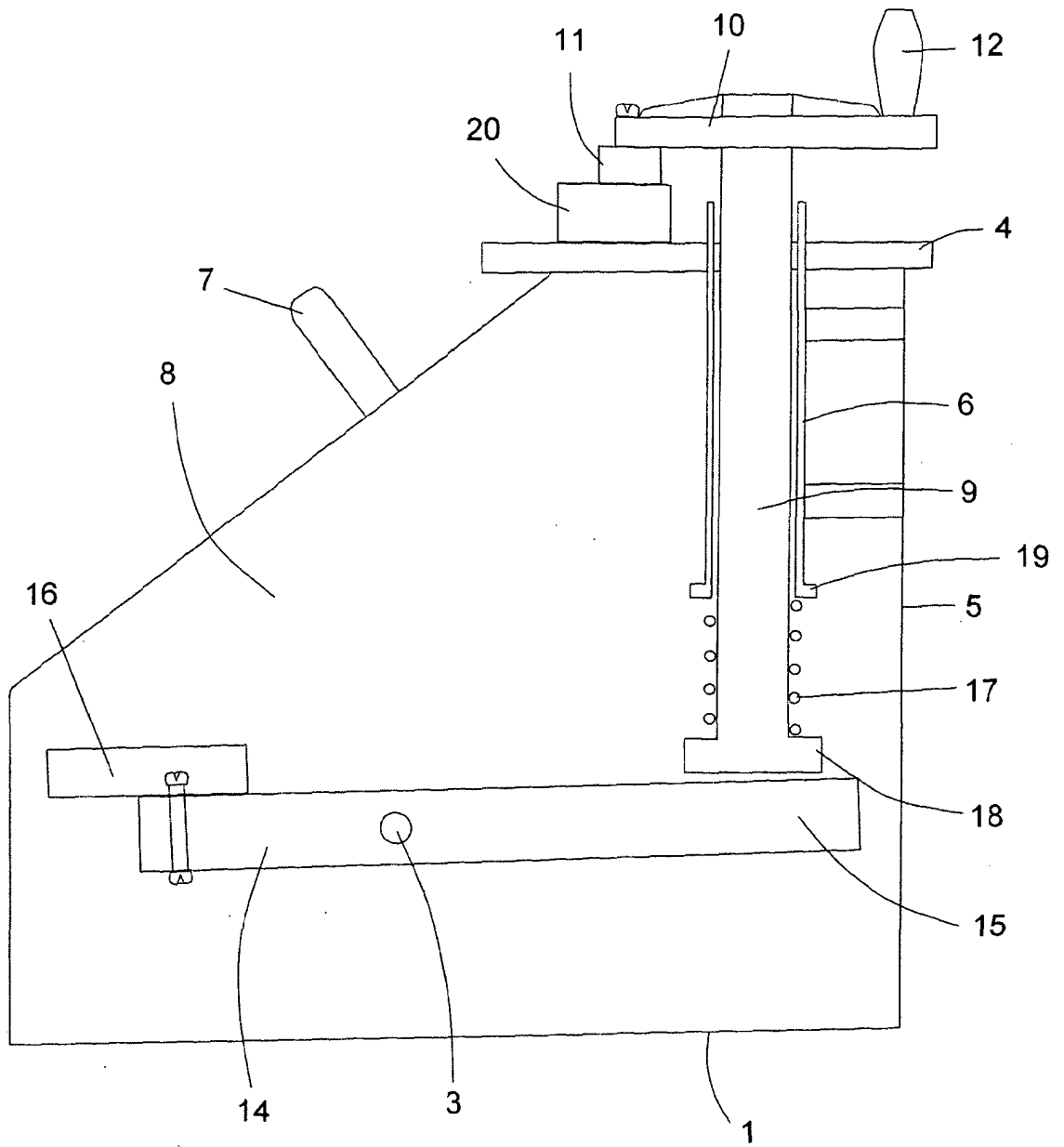

Figure 1

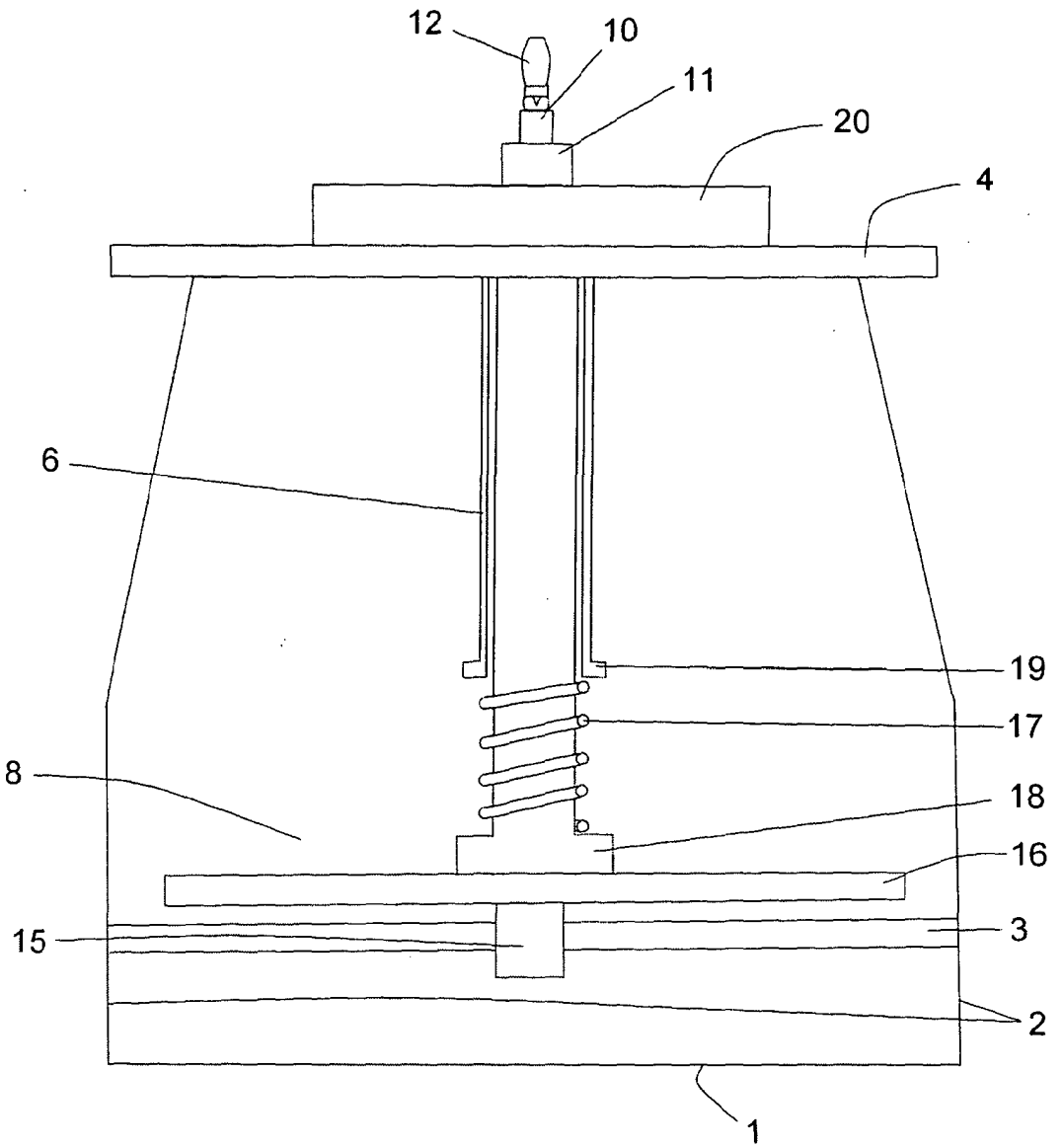

Figure 2

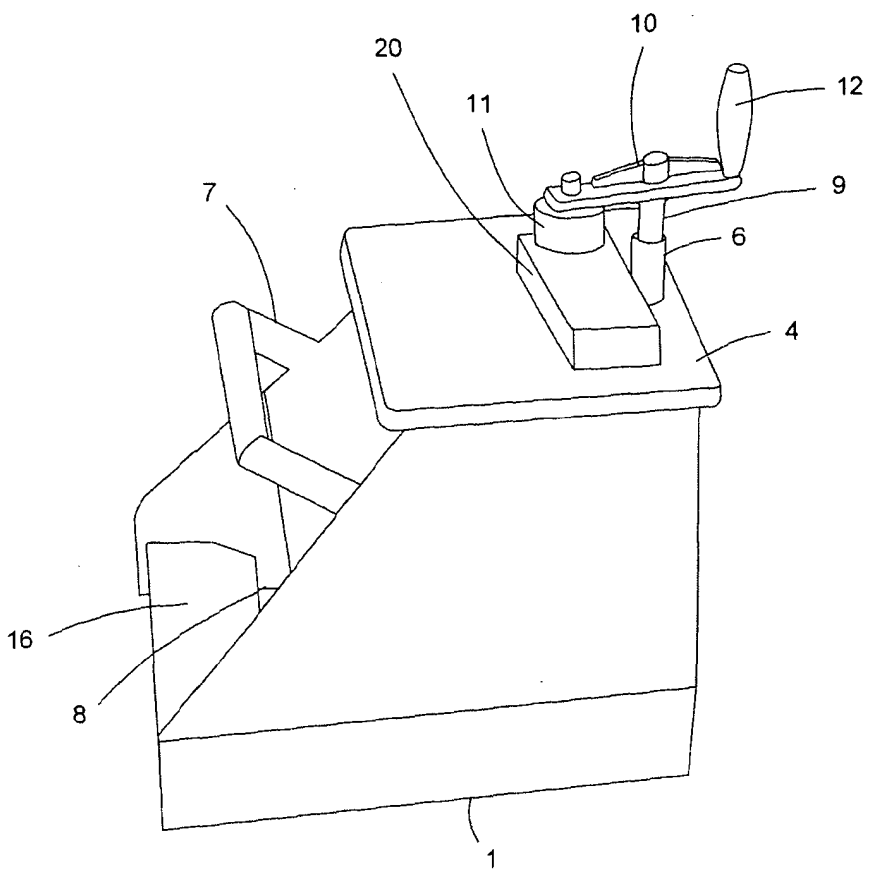

Figure 3

BUILDERS CLAMP

The present invention relates to a clamp for use by builders for clamping bricks and the like during cutting.

Traditionally, bricks have been cut with a bricklayer's trowel or a bolster and hammer. More recently masonry disc cutters have come into use. These are very effective, but potentially dangerous, especially when the brick is on the ground and possibly held by the user's boot.

The object of the present invention is to provide an improved clamp for use by builders for clamping bricks.

According to the invention there is provided a builder's clamp for clamping a workpiece of building material for its cutting, the clamp comprising:

- a base,
- a support platform mounted on the base,
- a clamp member arranged over the support platform for clamping a workpiece between itself and the platform,
- a resilient mechanism for drawing the clamp member down towards the platform, the mechanism having:
    - a spring acting to draw the clamp member down and
    - a pedal for releasing the spring.

Whilst it is envisaged that the clamp member can be pivotally attached to the base at an edge of the platform and drawn down by the clamp spring, with a second spring pivotally lifting the clamp member on release of the clamp spring; in the preferred embodiment, the clamp member is rigidly attached to a shaft arranged to be axially lifted by the pedal and urged down by the clamp spring when the pedal is released.

Preferably, the clamp member is rotatable about the shaft for varying the position at which the clamp member acts on the workpiece. Conveniently the clamp

member is provided with a handle for this. A guide tube for the shaft can be fixed to the base and extend up through the platform.

Gripping of the workpiece can be enhanced by providing the clamp member with a foot for abutting the workpiece.

In the preferred embodiment the spring acts on the shaft to draw it and the clamp member down. Conveniently the spring is a coil spring around the shaft acting between collars on the tube and the shaft. The pedal is a centrally pivoted lever having foot end and a shaft-abutting end.

To help understanding of the invention, a specific embodiment thereof will now be described by way of example and with reference to the accompanying drawings, in which:

Figure 1 is a cross-sectional side view of the clamp with a brick gripped in the clamp;

Figure 2 is a cross-section front view of the clamp in a similar arrangement to that of Figure 1; and

Figure 3 is a perspective view of the clamp also in a similar arrangement to Figure 1.

Referring to the drawings the builder's clamp has a base 1 of steel plate, including two side plates 2, between which a pedal shaft 3 extends at a low level. The sides taper in to support a sacrificial wooden platform 4. A back 5 between the side supports a shaft tube 6 extending up through the platform. A carrying handle 7 is provided at the front above a foot well 8.

A shaft 9 is movably arranged in the tube 6 and carries a clamp member 10 across the top of the shaft. One end of the clamp member has a rubber clamp foot 11 and the other an adjustment handle 12.

A pedal lever 14 is mounted on the pedal shaft and is arranged to abut under the bottom end of the shaft at its inner end 15 and has a foot plate 16 access in the

well for foot operation. A compression coil spring 17 is carried on the shaft between a bottom collar 18 fast with the shaft and an upper collar 19 fast with the tube.

For use, the pedal is depressed against the action of the spring and lifts the clamp, for positioning of a workpiece, for instance a brick 20, between the clamp foot and the platform. Release of the pedal causes the spring to act to clamp the brick. This can now be cut with a disc-cutter. It will be noted that for stability, the sides extend forwards from beneath the platform.

CLAIMS:

1. A builder's clamp for clamping a workpiece of building material for its cutting, the clamp comprising:

- a base,
- a support platform mounted on the base,
- a clamp member arranged over the support platform for clamping a workpiece between itself and the platform,
- a resilient mechanism for drawing the clamp member down towards the platform, the mechanism having:
  - a spring acting to draw the clamp member down and
  - a pedal for releasing the spring.

2. A builder's clamp as claimed in claim 1, wherein the clamp member is rigidly attached to a shaft arranged to be axially lifted by the pedal and urged down by the clamp spring when the pedal is released

3. A builder's clamp as claimed in claim 1, wherein the clamp member is pivotally attached to the base at an edge of the platform and drawn down by the clamp spring, with a second spring pivotally lifting the clamp member on release of the clamp spring.

4. A builder's clamp as claimed in claim 1, claim 2 or claim 3, wherein the clamp member is rotatable about the shaft for varying the position at which the clamp member acts on the workpiece.

5. A builder's clamp as claimed in claim 4, wherein the clamp member includes a handle.

6. A builder's clamp as claimed in any preceding claim wherein a guide tube for the shaft is fixed to the base and extends up through the platform.

7. A builder's clamp as claimed in any preceding claim, wherein the clamp member further includes a foot for abutting the workpiece.

8. A builder's clamp as claimed in any preceding claim, wherein the spring acts on the shaft to draw it and the clamp member down.

9. A builder's clamp as claimed in any preceding claim, wherein the spring is a coil spring around the shaft acting between collars on the tube and the shaft.

10. A builder's clamp as claimed in any preceding claim, wherein the pedal is a centrally pivoted lever having foot end and a shaft-abutting end.

11. A builder's clamp substantially as hereinbefore described with reference to the Figures 1 to 3 of the accompanying drawings.

Application No: GB1013717.2 **Examiner:** Mr Philip Osman

Claims searched: 1-11 **Date of search:** 25 October 2011

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	1, 2, 5-8, 10	GB2150880 A (PARKES) See abstract and figures

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	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^{X} :

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

B25B; B25H

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

EPODOC, WPI

International Classification:

Subclass	Subgroup	Valid From
B25H	0001/10	01/01/2006
B25B	0005/02	01/01/2006