(12) UK Patent Application (19) GB (11) 2 399 333 (13) A

(43) Date of A Publication

15.09.2004

(21) Application No: 0305763.5

(22) Date of Filing: 13.03.2003

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(51) INT CL7: B66C 1/48 1/66, F16B 45/04

(52) UK CL (Edition W): **B8H** HKK HKX E2A A201 A205 A414 A417 A418

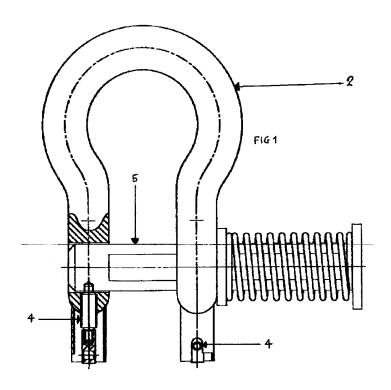
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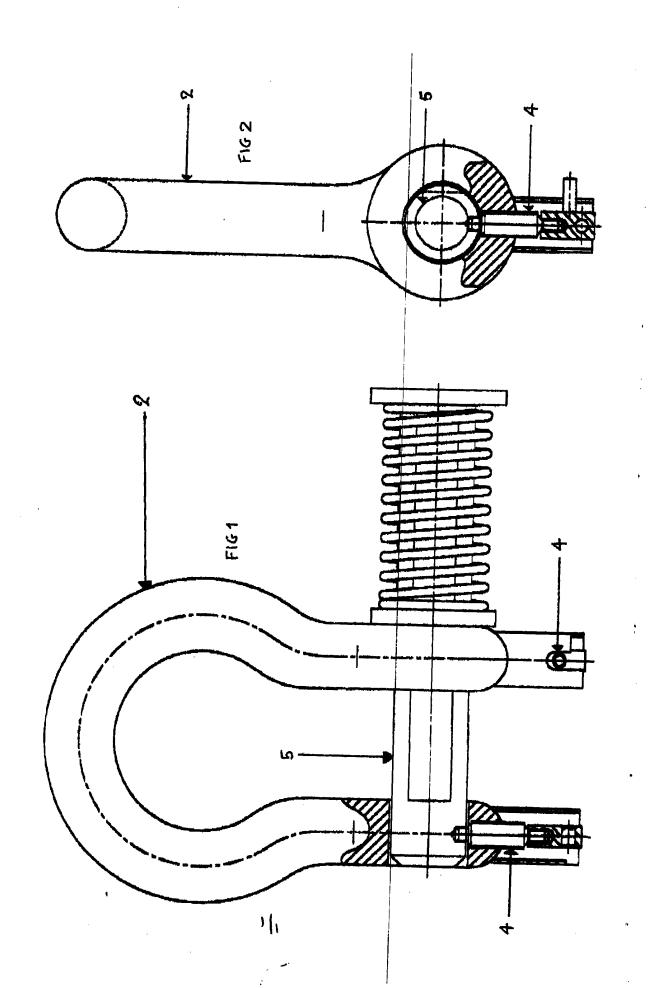
FR 002488232 A JP 2003321189 A US 4453622 A US 4358146 A

(58) Field of Search: UK CL (Edition W) B8H, E2A INT CL⁷ B66C Other: Online: JAPIO, WPI, EPODOC

(54) Abstract Title: Quick release column lifter incorporating springs

(57) A quick release column lifter comprises a bow shaped shackle 2, a main support shaft 5, a compression spring and two spring loaded locating pins 4. The compression spring is located around the main support shaft 5 and biases the shaft 5 to the open position. The spring loaded locating pins 4 hold the main support shaft 5 in the closed position. The column lifter is attached to a column and the column lifted by connecting a crane to the shackle 2. A rope is attached to each spring loaded locating pin 4, pulling on the ropes releases the spring loaded pins 4 and allows the main shaft 5 to spring open and allows the column to be released.





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QUICK RELEASE COLUMN LIFTER

This Invention relates to noval safety devices for use by workmen on steel or like structures.

Once the column has been attached and connected to the required position, you then have to release the column from the crane in which it is attached to.

As a column could be 30 foot or more above a person when erected into its position this invention can help release it safely and quickly.

It Is designed to attach to a top of a column, you then attach the crane to the lifting eye 2, It Is then ready to be hoisted up by the crane.

Once erected you lower down the crane, you then pull 2 ropes which are attached to the spring loaded pins 4 on the invention, which in turn lets the large pin 5 spring back, the column is now released and this now enables you to slew the crane away from the column and back to the ground.

Figure 1 Shows in perspective the Quick Release Column Lifter.

Figure 2 - Shows a side view of the device.

CLAIMS

- 1) THE QUICK RELEASE COLUMN LIFTER COMPRISING OF ONE BOW SHAPED SHACKLE, ONE COMPRESSION SPRING, ONE MAIN SUPPORT SHAFT TWO SPRING LOADED LOCATING PINS.
- 2) THE QUICK RELEASE COLUMN LIFTER AS CLAIMED IN CLAIM 1, A BOW SHAPED SHACKLE.
- 3)THE QUICK RELEASE COLUMN LIFTER AS CLAIMED IN CLAIM 1, A COMPRESSION SPRING.
- 4) THE QUICK RELEASE COLUMN LIFTER AS CLAIMED IN CLAIM 1, ONE MAIN SUPPORT SHAFT.
- 5) THE QUICK RELEASE COLUMN LIFTER AS CLAIMED IN CLAIM 1, TWO SPRING LOADED LOCATING SPRINGS.
- 6)THE QUICK RELEASE COLUMN LIFTER AS DESCRIBED HEREIN WITH REFERENCE TO FIGURE 1 AND FIGURE 2 OF THE ACCOMPANYING DRAWING.







Application No:

GB0305763.5

Examiner:

Hayley Yates

Claims searched:

1-5

Date of search:

21 June 2004

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Documents considered to be relevant:				
Relevant to claims	Identity of document and passage or figure of particular reference			
1-5	FR2488232 A Muller; see abstract translation and figures 1-3			
1-5	US4453622 A Betz; see figures 1-6			
1	US4358146 A Goudey; see figures 3-5			
1	JP2003321189 A Nippon; see abstract translation and figure 1			
	Relevant to claims			

Categories:

X	Document indicating lack of novelty or inventive		Document indicating technological background and/or state
Y	step Document indicating lack of inventive step if combined with one or more other documents of	Р	of the art. 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 UKCW:

B8H; E2A

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

B66C

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

Online: JAPIO, WPI, EPODOC