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(54) **LOCK**

(57) A lock comprises a mounting (1) including a flange (2) for attachment to a frame of a locker. An elongate hasp (6) is seated within a bore (5) of the mounting so as to protrude through a through-hole in a door that lies substantially at right angles to the frame. The hasp (6) has an eye (10) at a protruding end of the hasp, for locking the door with a padlock. The hasp (6) is rotatable about an axis of the hasp with respect to the mounting (1), so that in the event of a blow to the body of the padlock, the padlock and hasp will rotate to absorb the force.

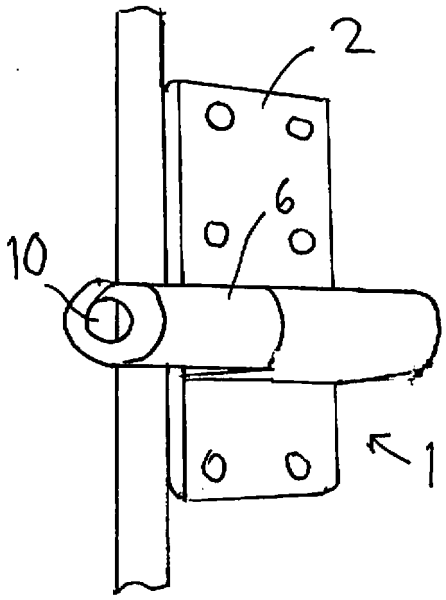

Fig. 3

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Description

[0001] This invention relates to a lock.

[0002] The lock is suitable, for example, for a locker or similar item of furniture. A known lock, shown in UK Registered Design No. 4006651, comprises a generally cylindrical hasp fixed with respect to the interior of a locker. The hasp protrudes through a through-hole in the door of the locker when the door is closed. The hasp has an eye in its end and a padlock can be locked to the eye, preventing opening of the door.

[0003] For about 100 years, it has been known to provide a rotatable staple, hasp or other fixture to which a padlock can be fixed. The rotatable fixture is more secure against a burglar, who is denied the leverage that would be required to break the fixture. GB 1914/13483, FR 1,403,086 and US 6,082,601 are examples of such rotatable fixtures. These known fixtures cannot facilitate locking at the edge of a locker disposed contiguously with another locker. In addition, they are impractical for retrofitting to a locker.

[0004] Accordingly, the present invention provides a lock comprising a mounting including a flange attached to a frame and a bore extending generally parallel to the flange; and an elongate hasp arranged to be seated within the bore and to protrude through a through-hole in a door that lies substantially at right angles to the frame, the hasp having an eye at a protruding end of the hasp, such that the hasp is rotatable about an axis of the hasp with respect to the mounting.

[0005] In the event of a blow to the body of the padlock the padlock and hasp will simply rotate to absorb the force.

[0006] The hasp may extend through the bore of the mounting. In particular, a portion of the hasp having a reduced diameter compared to the remainder of the hasp may extend through the bore. The hasp may be secured to the mounting by means of a fastener connectable to the hasp on an inner side of the mounting.

[0007] The invention also provides a locker comprising a frame, a door and a lock as described above.

[0008] The invention will now be described in more detail, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 shows a mounting for a lock according to an embodiment of the invention;

Figure 2 shows the mounting with a hasp and a fastener;

Figure 3 shows the lock in place in a locker; and

Figure 4 shows the lock with the door closed and with a padlock in place.

[0009] Figure 1 shows a mounting 1, e.g. of plastics material, for attaching to the inside of a locker. The mounting comprises a flange 2 having a plurality of screw holes 3 and a fin 4. A bore 5 is provided through the apex of the fin 4.

[0010] Figure 2 shows a hasp 6 of generally cylindrical form having a proximal part 7, with a diameter corresponding to the internal diameter of the bore 5, and a distal part 8, with a diameter corresponding to that of the radiused apex of the fin 4. The free end of the proximal part 7 is provided with a threaded recess (not shown) into which a screw 9 can be screwed. The distal part 8 has an eye 10 sized to receive the shackle of a padlock.

[0011] Figure 3 shows the lock in place in the locker, with the flange 2 screwed to an internal surface adjacent a free edge. The hasp 6 is screwed to, but freely rotatable relative to, the mounting 1.

[0012] Figure 4 shows the lock with the door closed. The eye 10 protrudes from a hole in the door and a padlock 11 is secured to the eye, preventing the door from opening. If the padlock is moved the hasp 6 can rotate.

Claims

1. A lock comprising a mounting (1) including a flange (2) for attachment to a frame and a bore (5) extending generally parallel to the flange; and an elongate hasp (6) arranged to be seated within the bore and to protrude through a through-hole in a door that lies substantially at right angles to the frame, the hasp (6) having an eye (10) at a protruding end of the hasp, such that the hasp (6) is rotatable about an axis of the hasp with respect to the mounting (1).

2. A lock according to claim 1, wherein the hasp (6) extends through the bore (5) of the mounting (1).

3. A lock according to claim 2, wherein a portion (7) of the hasp (6), having a reduced diameter compared to the remainder (8) of the hasp, extends through the bore (5).

4. A lock according to claim 1, 2 or 3, wherein the hasp (6) is secured to the mounting (1) by means of a fastener (9) connectable to the hasp (6) on an inner side of the mounting.

5. A locker comprising a frame, a door and a lock according to any preceding claim.

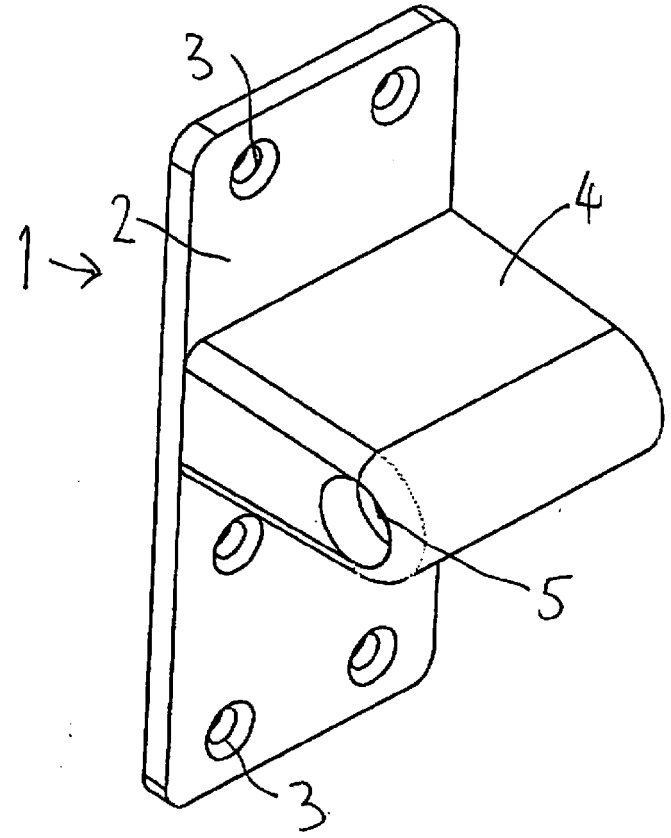

Fig. 1

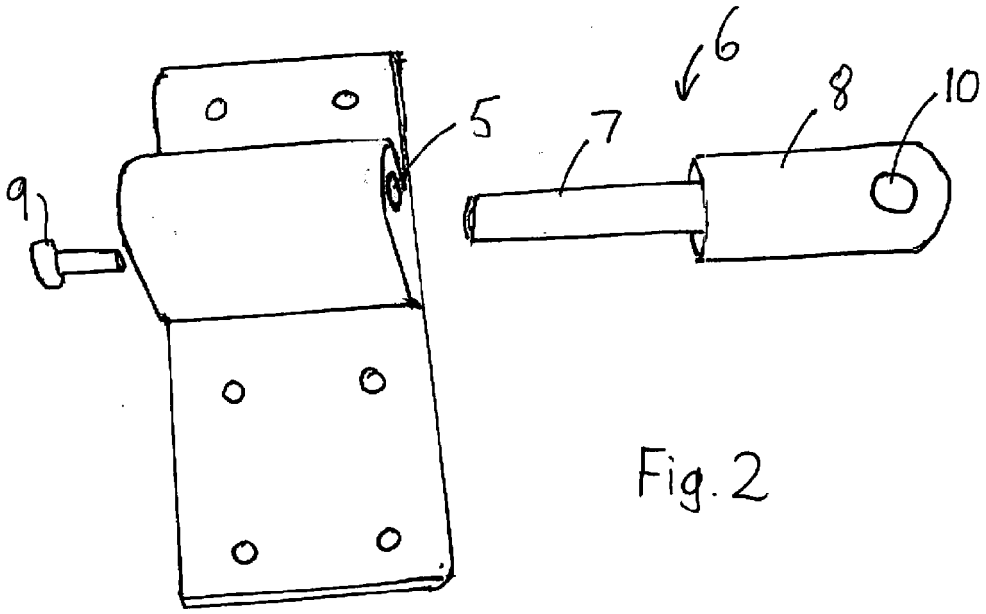

Fig. 2

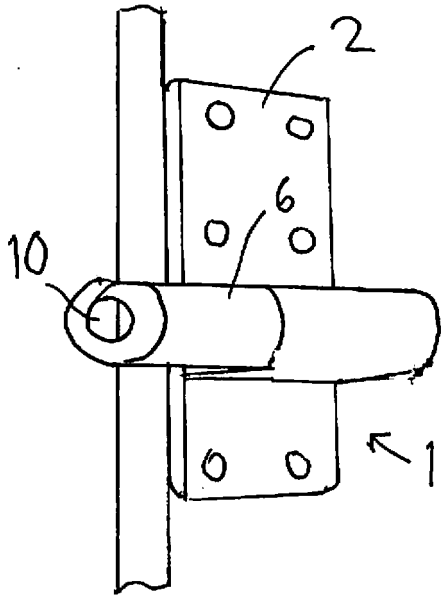

Fig. 3

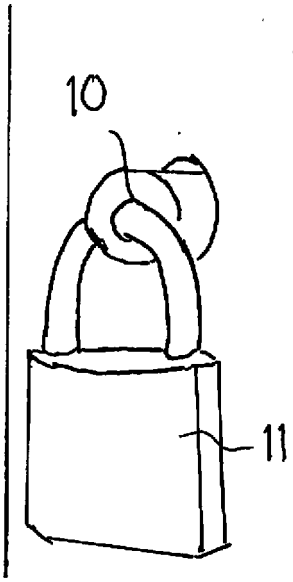

Fig. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 15 16 6830

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 886 308 A (BOWMAN ROBERT [US]) 12 December 1989 (1989-12-12) * column 3, line 10 - column 4, line 12; figures 1-8 *	1-5	INV. E05B67/38 ADD. E05B65/02 E05B15/16
A	FR 2 623 070 A1 (LECLERC HUBERT [FR]) 19 May 1989 (1989-05-19) * page 4, line 9 - page 8, line 33; figures 1-6 *	1,5	
A	DE 345 113 C1 (HERMANN GIERLICHS) 5 December 1921 (1921-12-05) * page 1, line 31 - line 81; figures 1-5 *	1-3	
A	US 2004/107745 A1 (WILLIAMSON ROBERT J [US]) 10 June 2004 (2004-06-10) * paragraph [0020]; figures 1-4 *	1-4	
A	KR 2010 0010386 U (-) 22 October 2010 (2010-10-22) * figure 1 *	1,5	

TECHNICAL FIELDS SEARCHED (IPC)
E05B
E05C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	6 October 2015	Pérez Méndez, José F

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
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P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 15 16 6830

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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06-10-2015

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US 4886308 A	12-12-1989	NONE	
FR 2623070 A1	19-05-1989	NONE	
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KR 20100010386 U	22-10-2010	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- GB 4006651 A **[0002]**
- GB 191413483 A **[0003]**
- FR 1403086 **[0003]**
- US 6082601 A **[0003]**