

Drawing pages of GB766164 A



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Improvements in or relating to padlocks

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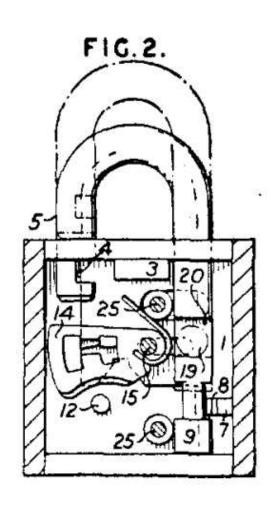
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Abstract of GB766164 (A)

766,164. Padlocks. COVENEY, F. W. Aug. 31, 1955 [May 31, 1954], No. 16110/54. Class 44. Relates to padlocks of the kind having a U- shape shackle of which one limb is longer than the other and serves for mounting the shackle within the casing of the padlock, the shorter limb being received at its free end within a socket in the top of the casing when the padlock is in the closed condition and adapted to be locked therein by a dead-bolt or the like locking member mounted within the casing, the shackle being displaceable outwardly from the casing to open the padlock. According to the present invention, the dead-bolt consists of a plate 1 guided for sliding movement laterally of the casing of the padlock between a locking position and a free position and formed with two projections 3 and 7 adapted in the locking position of the bolt to engage respectively in two grooves 4 and 8 formed one in each of the limbs 5 and 9 of the shackle. The bolt is movable to the locking and unlocking positions by key-operated spring- loaded tumblers 14 pivoted on a pin 15, the key (not shown) being engaged over a pin 12 on the rear wall of the lock casing. Outward movement of the shackle is limited by the engagement of a stud 19 on a bar in the casing, with a recess 20 in the limb 9. The lock casing is formed of two channel section parts secured together by pins 25, the upper one of which and the pin 15 also act as guides for the bolt.



Description: GB766164 (A) — 1957-01-16

## Improvements in or relating to padlocks

## **Description of GB766164 (A)**

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## PATENT SPECIFICATION

766,164 Date of filing Complete Specification: August 31, 1955

Application Date: May 31 1954.

Complete Specification Published: Januar': 16 1957

No 16110/54 1, FRANK WILLIAM COVENEY, of 6, Cherry Orchard Road, Bromley, Kent, a British subject, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed to be particularly described in and by the following statement: This invention relates to padlocks of the kind having a U-shape shackle of which one limb is longer than the other and serves for mounting the shackle within the casing of the padlock, the shorter limb being received at its free end within a socket in the top of the casing when the padlock is in the closed condition, and being adapted to be locked therein by a dead bolt or like deadlocking member mounted within the casing, and the shackle being displaceable outwardly from the casing to open the padlock.

The present invention aims to provide an improved padlock of this character which is of strong and compact construction and which has increased security and resistance to tampering or damage.

According to the invention there is provided a padlock of the kind described having a dead bolt or like deadlocking member under the control of a keyoperated tumbler mechanism, said bolt consisting of a plate guided for sliding movement laterally of the casing of the padlock between a locking position and a free position and formed with two projections adapted in the locking position of the bolt to engage respectively in two grooves formed one in each of the limbs of the shackle.

Reference will now be made to the accompanying drawings which illustrate a padlock constructed according to the invention, and in which Fig I is a front elevation of the

padlock with the front of the casing removed and showing the padlock in the closed conlPrice 3 s 9 d l dition, Fig 2 is a view similar to Fig 1 but showing the padlock in the open condition, Fig 3 is a sectional side view taken on 50 the line III-III of Fig 1 with the front of the casing in place, and Fig 4 is a sectional plan view taken on the line IV-IV of Fig 1, also with the front of the casing in place 55 In the embodiment illustrated the padlock has a bolt constructed in the form of a plate 1 which is guided for lateral sliding movement upon the rear wall 2 of the casing of the padlock and which is formed at 60 its upper end and towards one side thereof with a lug or equivalent projection 3 which.

in the operative position of the bolt, as shown in Fig 1, engages within a groove 4 cut in the shorter limb 5 of the shackle 65 6 of the padlock adjacent the end thereof.

In addition, the bolt is formed at its lower end and towards the other side thereof with a second lug or equivalent projection 7 which in like manner, and when the bolt 70 is in the operative position, engages within a groove 8 cut in the longer limb 9 of the shackle adjacent the end thereof The bolt is movable laterally, that is, from the locking position to the free position and vice 75 versa, by a key (not shown) inserted through a keyhole 10 in the front wall 11 of the casing onto a locating pin 12 on the rear wall thereof, and engageable with a recess 13 in the lower edge of the bolt 80 The movement of the bolt is controlled by a series of slotted levers or tumblers 14 which are pivotally mounted on a fixed pin 15 and co-operate with a stump 16 on the bolt to lock the latter in engagement 85 with the shackle, and which are adapted to be lifted in known manner against the action of return springs 17 by the rotation of the key, so as to free the bolt for lateral movement by the key during the inter 90 mediate stage of its rotation Thus, when the padlock is closed and locked, the Index at acceptance:-Class 44, A( 4 A 2:5 A).

International Classification:-E 05 b.

## COMPLETE SPECIFICATION

Improvements in or relating to Padlocks 2 C' \_\_\_ , P, 766,164 shackle is positively held by the engagement of the bolt with both of its limbs and so provides the maximum security.

The shackle is guided in its opening and closing movement inwardly and outwardly of the casing by a bar 18 of right-angled cross-section fixed on the inside of the casing For limiting the outward movement of the shackle there is provided a stud 19 which is fixed to the bar 18 so as to project into an elongated recess 20 in the longer limb 9 of the shackle and provide an abutment for a shoulder 21 thereon.

The shackle is preferably made from round-section steel bar so that in the open position it can be swung round the axis of its longer limb to facilitate mounting the padlock on a staple or other member to be secured.

The casing of the padlock is formed in two parts each cut from channel-section metal strip of relatively heavy gauge, one part constituting the rear wall 2 of the casing and the upper and lower end walls 22 and 23 respectively and carrying the shackle, bolt and tumbler mechanism, and the other part forming the front wall 11 and two side walls 24 and emrbacing with a close fit the edges of the first part The The two parts can conveniently be secured together by pins 25 fixed on the rear wall and which pass through holes in the front wall and are rivetted over, the front face of the casing being

finally machined smooth This provides a simple and inexpensive method of constructing an extremely strong and robust casing which cannot be "forced" or prised open except with the aid of such tools as would completely destroy the padlock The upper of the two pins 25 and the pin 15 on which the tumblers 14 are mounted are also conveniently employed as guides for the bolt in its lateral movement, the bolt being formed with slots 26 to engage said pins.