

E05C

BOLTS OR FASTENING DEVICES FOR WINGS, SPECIALLY FOR DOORS OR WINDOWS (latching means for sideboard or tailgate structures for vehicles B62D [N: B62D33/02]; fastening devices for constructional or engineering elements E04, F16B; locks, fastening devices structurally or operatively combined or having significant cooperation with locks E05B; means for operating or controlling wing fasteners in conjunction with mechanisms for moving the wing E05F)

Definition statement

This subclass/group covers:

Bolts or fastening devices for swingable, slidable, or otherwise movable wings, e.g. doors or windows. This subclass has the following structure:

[E05C 1/00](#) - [E05C 5/00](#)

Fastening devices characterised by the way the bolt is moved.

[E05C 7/00](#)

Fastening devices specially adapted for two wings.

[E05C 9/00](#)

Arrangements of simultaneously actuated bolts or other securing devices at well separated positions on the same wing.

[E05C 17/00](#)

Fastening devices for holding wings open.

[E05C 19/00](#), [E05C 21/00](#)

Other devices specially designed for securing wings.

References relevant to classification in this subclass

This subclass/group does not cover:

Buckles; Similar fasteners for interconnecting straps or the like, e.g. for safety belts	A44B 11/00
Hinges or pivots	E05D 1/00 - E05D 7/00
Accessories for sliding or lifting wings	E05D 13/00

Suspension arrangements for wings	E05D 15/00
Closers or openers for wings, braking devices	E05F 1/00 - E05F 7/00
Operating mechanisms for wings	E05F 9/00 - E05F 17/00
Sealing arrangements for wings	E06B 7/16
Devices for fastening or securing constructional elements or machine parts together	F16B

Examples of places where the subject matter of this subclass is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Locking devices for vehicle seats	B60N 2/00
Latching means of sideboard or tailgate structures	B62D 33/037
Locking devices for container closures	B65D 55/02
Locking or fastening means for lids or covers of refuse receptacles	B65F 1/1615
Connections for building structures	E04B 1/38

Special rules of classification within this subclass

In this subclass, only the movement essential for securing the wing is considered, e.g. a sliding bolt which is rotated on its axis to prevent its withdrawal is classified as having only a sliding movement.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

In this subclass, the following terms are used with the meaning indicated:

Wing	General term for swingable, slidable,
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	or otherwise movable doors or windows. This term also includes other movable structures such as drawers, lids of chests, car boots, or car bonnets, to which the operating, mounting, latching, or locking means covered by this class may be applied.
Frame	Any member to which a wing may be held by a fastening device. It does not include a framework forming part of the wing, but it may be another wing.
Lock	Primarily a device for releasing or securing any member, which requires a key or a permutation mechanism for release.
Bolt	A sliding, pivoted, or otherwise movable member such as is normally carried by a door to hold it shut by engagement with a keeper on the frame. It may be operated by hand directly or through mechanism or by a key; it may be a latch (see below);
Latch	A bolt arranged to be moved to the releasing position against the force of a spring, or some other returning force, when a wing meets the frame on closing, so that it does not have to be operated by hand to secure the wing, but only to open it.
Hasp	A member hinged to the frame or wing so that it can be moved towards the face of the wing or frame and secured thereto, e.g. by a turn-button, by a padlock and staple.

Synonyms and Keywords

In patent documents the following expressions "espagnolette lock", "multi-point lock" and "multipoint locking system" are often used as synonyms to indicate locks with simultaneously actuated bolts, e.g. by means of transmission bars, at well separated positions on the same wing.

E05C 1/00

Fastening devices with bolts moving rectilinearly

Definition statement

This subclass/group covers:

Fastening devices comprising a rectilinearly movable bolt. The bolt can have either latching or non latching action. The bolt can be moved with an operating handle or equivalent member moving rigidly or non rigidly with the bolt. This group also cover cylindrical or tubular latches.

References relevant to classification in this group

This subclass/group does not cover:

Locks in which a sliding latch is used also as a locking bolt	E05B 55/00
Lock with a sliding bolt without provision of latching	E05B 63/0017
Vehicle locks with a rectilinearly movable bolt	E05B 85/22
Arrangements of simultaneously actuated bolts at well-separated positions on the same frame	E05C 9/00
Devices for holding a wing open comprising a sliding securing member	E05C 17/48
Automatic catches with sliding bolts	E05C 19/028

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cylindrical or tubular locks	E05B 55/005
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E05C 3/00

Fastening devices with bolts moving pivotally or rotatively

Definition statement

This subclass/group covers:

Fastening devices comprising a pivotally or rotatively movable bolt. The bolt can have either latching or non latching action. The bolt can be moved with an operating handle or equivalent member moving rigidly or non rigidly with the bolt.

References relevant to classification in this group

This subclass/group does not cover:

Locks in which a pivoted latch is used also as locking means	E05B 57/00
Locks with rotary bolt without provision for latching	E05B 63/0013
Locks for refrigerators with a bifurcated bolt	E05B 65/0046
Locks for sliding wings with pivoting bolts	E05B 65/0811 , E05B 65/0835
Locks for sliding wings with double hook-like pivoting members	E05B 65/0858
Locks for car boot lids	E05B 83/18
Locks for car bonnets	E05B 83/24
Vehicle locks with a bolt turning around an axis	E05B 85/24
Vehicle locks in which the member engaging the keeper is shaped as a toothed wheel or the like	E05B 85/28
Arrangements of simultaneously actuated bolts at well-separated positions on the same frame	E05C 9/00
Devices for holding a wing open comprising a single pivoting securing member	E05C 17/50
Automatic catches with a bifurcated latch	E05C 19/024

Latches with wedging action, tilt-plates	E05C 19/008
In which the securing part is formed or carried by a spring and moves only by distortion of the spring, e.g. snaps	E05C 19/06

Informative references

Attention is drawn to the following places, which may be of interest for search:

Locks with circular bolts	E05B 63/123
Hook-like fastening	E05C 19/10

E05C 5/00

Fastening devices with bolts moving otherwise than only rectilinearly and only pivotally or rotatively [N: (E05C9/1883, E05C19/009, E05B63/125, E05B63/126, E05B63/127 take precedence; pivotally-mounted hooks-like fastenings with toggle action E05C19/14; bayonet-type locks E05B63/125; locks for sliding wings, with additional movement E05B65/0817)]

Definition statement

This subclass/group covers:

Fastening devices with bolts moving otherwise than only rectilinearly and only pivotally or rotatively, e.g. bolts moving axially and turning about their axis to secure the wing.

References relevant to classification in this group

This subclass/group does not cover:

Fastening devices with means carried by the bolt for interlocking with the keeper comprising a sliding bolt rotating about its axis, i.e. of bayonet type	E05B 63/125
Fastening devices with means carried by the bolt for interlocking with the	E05B 63/126

keeper, the bolt having an additional sliding bolt or movement	
Fastening devices with means carried by the bolt for interlocking with the keeper, the bolt having an additional rotating bolt or movement	E05B 63/127
Locks for sliding doors with a pivoting bolt having an additional movement	E05B 65/0817
Espagnolette locks with a pivoting bolt on actuating bar	E05C 9/1883
Latches with floating bolts, e.g. rings, balls	E05C 19/009
Hook fastenings with toggle action	E05C 19/14

Informative references

Attention is drawn to the following places, which may be of interest for search:

Locks with circular bolts	E05B 63/123
Hook-like fastening	E05C 19/10

E05C 7/00

Fastening devices specially adapted for two wings

Definition statement

This subclass/group covers:

Fastening devices specially adapted for two wings. It includes locks for sluice doors, for doors having upper and lower wings, for doors which lie one behind the other when closed, and for doors which abut when closed.

References relevant to classification in this group

This subclass/group does not cover:

Locking one wing by shutting another in vehicles	E05B 77/52
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Locks for pillar-less vehicles	E05B 83/38
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Examples of places where the subject matter of this group is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Container apertures for pressure vessels of nuclear reactors	G21C 13/0285
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E05C 9/00

Arrangements of simultaneously actuated bolts or other securing devices at well-separated positions on the same wing ([N: Locking, cross or security bars [HYPERLINK "sfpluscla://ECLA/E05C19/003" E05C19/003](#); locks for safes or the like [HYPERLINK "sfpluscla://ECLA/E05B65/0075" E05B65/0075](#); of the vertical-rod type for panic or emergency doors [HYPERLINK "sfpluscla://ECLA/E05B65/1006" E05B65/1006](#)]; similar constructions for engineering closures [HYPERLINK "sfpluscla://ECLA/F16J13/08" F16J13/08](#))

Definition statement

This subclass/group covers:

Locks with simultaneously actuated bolts, e.g. by means of transmission bars, at well separated positions on the same wing.

This group has the following main structure:

Automatic, i.e. actuated by closing the wing	E05C 9/002
Faceplates; fixing the faceplates to the wing	E05C 9/004
Details of bars; bar guiding means	E05C 9/006
With one sliding bar for fastening when moved in one direction and unfastening when moved in opposite direction; with two sliding bars moved in the same direction when fastening or unfastening	E05C 9/02

With two sliding bars moved in opposite directions when fastening or unfastening	E05C 9/04
Actuating mechanisms for bars	E05C 9/10
Details of fastening means or of the fixed retaining means for the ends of the bars	E05C 9/18
Keepers	E05C 9/1808
Fastening means	E05C 9/1825
Coupling means for sliding bars, rods or cables	E05C 9/20

References relevant to classification in this group

This subclass/group does not cover:

Face plates or front plates for non-espagnolette locks	E05B 9/002
Striker plates for non-espagnolette locks	E05B 15/0205
Operation of locks by flexible means, e.g. by cables	E05B 53/003
Operation of locks by flexible means, e.g. by Bowden cables	E05B 53/005
Arrangements of several locks or locks with several bolts	E05B 63/14
Panic locks of the vertical rod type	E05B 65/1006
Locks for a plurality of drawers using a rotary lock bar	E05B 65/468
Drawer interlock mechanism with rotary locking bars	E05B 65/465
Connecting vehicle lock parts using	E05B 79/12

connecting rods	
Locks for vehicles with at least one elongated bar for actuating the fastening means	E05B 83/08
Locks for vehicles with a rotary bar for actuating the fastening means	E05B 83/10
Bolts extending nearly along the whole length of the wing	E05C 19/001
Locking bars, cross bars, security bars	E05C 19/003
Means for transmitting movements between vertical and horizontal sliding bars	E05F 7/08

Examples of places where the subject matter of this group is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Arrangements of watertight doors in bulkheads	B63B 43/24
Covers or similar closure members for pressure vessels	F16J 3/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Locks for safes	E05B 65/0075
Locks for lockers	E05B 65/025

E05C 17/00

Devices for holding wings open; Devices for limiting opening of wings or for holding wings open by a movable member extending between frame and wing; Braking devices, stops or

**buffers, combined therewith (combined with hinges
E05D11/00; combined with operating apparatus for wings
E05F; other braking devices, stops, buffers E05F5/00)**