

CPC**COOPERATIVE PATENT CLASSIFICATION****A44B**

BUTTONS, PINS, BUCKLES, SLIDE FASTENERS, OR THE LIKE (fastenings specially adapted for footwear [A43C](#))

NOTE

This subclass covers buckles or slide fasteners whether used as haberdashery or otherwise.

WARNING

The following IPC group is not used in the CPC scheme. Subject matter covered by this group is classified in the following CPC group:

- [A44B 1/16](#) covered by [A44B 1/14](#)

A44B 1/00

Buttons (setting on garments [A41H 37/10](#) ; setting on footwear [A43D 100/08](#) ; making buttons: see the relevant groups in the classes for making articles from particular materials)

A44B 1/02

- . characterised by their material

A44B 1/04

- . Ornamental buttons

A44B 1/06

- . Assembling of buttons (covering by braiding [D04D](#))

A44B 1/08

- . Constructional characteristics

A44B 1/10

- .. washable

A44B 1/12

- .. covered by fabric

A44B 1/123

- ... { with a removable fabric covering }

A44B 1/126

- ... { Manufacture not otherwise provided for }

A44B 1/14

- .. with replaceable { or protective } coverings { (removable fabric coverings [A44B 1/123](#) ; sleeve-links concealing a sewed-on button [A44B 5/007](#)) }

A44B 1/18

- . adapted for special ways of fastening

A44B 1/185

- .. { with quick, thread-like, anchoring means avoiding the use of a separate needle and thread }

A44B 1/20

- .. attached by thread visible to the front { ([A44B 1/185](#) takes precedence) }

A44B 1/22

- .. attached by thread not visible to the front { ([A44B 1/185](#) takes precedence) }

A44B 1/24

- ... Eye-buttons

A44B 1/26

- .. with resilient shank

A44B 1/28

- .. with shank and counterpiece

A44B 1/30

- ... Screw-buttons

A44B 1/32

- ... Shank inserted into counterpiece and locked by sliding or rotating

A44B 1/34

- ... with snap-action counterpiece

A44B 1/36

- ... with counterpiece in the form of cotter, split-pin, or the like

- A44B 1/38 . . Clamping by spring action
- A44B 1/40 . . with helical wire-shank screwed into material
- A44B 1/42 . . with deformable prongs
- A44B 1/44 . . with deformable counterpiece

A44B 3/00 Collar-studs

- A44B 3/02 . completely rigid
- A44B 3/04 . with head tiltable as a whole
- A44B 3/06 . with head formed as two tiltable flaps
- A44B 3/08 . with head and base separable

A44B 5/00 Sleeve-links

- A44B 5/002 . { with head tiltable as a whole }
- A44B 5/005 . { formed as two tiltable flaps }
- A44B 5/007 . { concealing a sewed-on button (buttons with replaceable coverings [A44B 1/14](#)) }
- A44B 5/02 . with separable parts

A44B 6/00 Retainers or tethers for neckties, cravats, neckerchiefs, or the like, e.g. tie-clips, spring clips with attached tie-tethers, woggles, pins with associated sheathing members tetherable to clothing (tie-pins [A44B 9/08](#) ; decorative or ornamental aspects [A44C](#))

A44B 7/00 Cards for buttons, collar-studs, or sleeve-links

A44B 9/00 Hat, scarf, or safety pins or the like (decorative or ornamental aspect [A44C](#) ; hair pins [A45D 8/02](#) ; sewing needles [D05B 85/00](#))

- A44B 9/02 . Simple pins
- A44B 9/04 . . Ordinary pins
- A44B 9/06 . . Hat-pins (other fastening means for head coverings [A42B 7/00](#))
- A44B 9/08 . . Tie-pins (pins with associated sheathing members tetherable to clothing [A44B 6/00](#))
- A44B 9/10 . . Safety devices
- A44B 9/12 . Safety-pins
- A44B 9/125 . . { made of plastics }
- A44B 9/14 . . Ordinary safety-pins
- A44B 9/16 . . Brooches ; Breast-pins

- A44B 9/18 . . Hinges ; Locking devices
- A44B 9/20 . Attaching heads of glass or the like to pin shafts
- A44B 11/00 Buckles ; Similar fasteners for interconnecting straps or the like, e.g. for safety belts**
- A44B 11/001 . { Ornamental buckles }
- A44B 11/003 . . { covered with cloth or other material; Making thereof }
- A44B 11/005 . { Buckles combined with other articles, e.g. with receptacles }
- A44B 11/006 . { Attachment of buckle to strap (for safety buckles [A44B 11/2553](#)) }
- A44B 11/008 . . { extensible }
- A44B 11/02 . frictionally engaging surface of straps
- A44B 11/04 . . without movable parts
- A44B 11/06 . . with clamping devices
- A44B 11/065 . . . { with strap tightening means ([A44B 11/125](#) takes precedence; tighteners for securing of load on vehicles [B60P 7/0823](#) ; buckles attached to the end of a strap for bundling articles [B65D 63/16](#)) }
- A44B 11/08 . . . roller displaceable in wedge-shaped slot
- A44B 11/10 . . . sliding wedge
- A44B 11/12 . . . turnable clamp
- A44B 11/125 { with strap tightening means }
- A44B 11/14 with snap-action
- A44B 11/16 . . Strap held by spring action
- A44B 11/18 . . Strap held by threading through linked rings
- A44B 11/20 . engaging holes or the like in strap
- A44B 11/22 . . Buckle with fixed prong
- A44B 11/223 . . . { fixed on a movable element }
- A44B 11/226 . . . { with cover plate }
- A44B 11/24 . . Buckle with movable prong
- A44B 11/25 . with two or more separable parts
- A44B 11/2503 . . { Safety buckles (safety belts in vehicles [B60R 22/00](#) ; safety belts for aircraft [B64D 25/02](#)) }
- A44B 11/2507 . . . { actuated by a push-button }
- A44B 11/2511 { acting perpendicularly to the main plane of the buckle, e.g. placed on the front face of the buckle }
- A44B 11/2515 { acting parallel to the main plane of the buckle and perpendicularly to the direction of the fastening action }
- A44B 11/2519 { with two buttons acting in opposite directions }
- A44B 11/2523 { acting parallel to the main plane of the buckle and in the same direction as the fastening action }
- A44B 11/2526 . . . { with an operating lever }

- A44B 11/253 { acting in the same plane or in a plane parallel to the main plane of the buckle }
- A44B 11/2534 . . . { with the sliding motion of the buckle providing the opening or closing action }
- A44B 11/2538 . . . { with a pivoting bar retaining a loop of the strap itself }
- A44B 11/2542 . . . { actuated by a rotatable element, e.g. combined with other actuating means }
- A44B 11/2546 . . . { Details }
- A44B 11/2549 { Fastening of other buckle elements to the main buckle (buckles with several tongues released by the same mechanism [A44B 11/2507](#) to [A44B 11/2542](#)) }
- A44B 11/2553 { Attachment of buckle to strap }
- A44B 11/2557 { with strap length adjustment }
- A44B 11/2561 { Tongue elements }
- A44B 11/2565 { Illuminated buckles }
- A44B 11/2569 . . . { Safety measures (buckles for releasing in a vehicle emergency [B60R 22/32](#) ; control, alarm, or interlock systems for the correct application of safety belt buckles in vehicles [B60R 22/48](#)) }
- A44B 11/2573 { Locking means preventing an unauthorised opening, e.g. by children }
- A44B 11/2576 { Buckle covers }
- A44B 11/258 . . { fastening by superposing one part on top of the other ([A44B 11/2503](#) takes precedence) }
- A44B 11/2584 . . . { followed by sliding in the main plane of the buckle }
- A44B 11/2588 . . . { combined with one buckle element rotating or pivoting }
- A44B 11/2592 . . { fastening by sliding in the main plane or a plane parallel to the main plane of the buckle ([A44B 11/2503](#) , [A44B 11/2584](#) take precedence) }
- A44B 11/2596 . . . { the movement being transverse to the longitudinal direction of the strap or chain }
- A44B 11/26 . . with push-button fastenings { ([A44B 11/2507](#) takes precedence; press-button fasteners [A44B 17/00](#)) }
- A44B 11/263 . . . { with a push-button acting perpendicularly to the main plane of the buckle }
- A44B 11/266 . . . { with at least one push-button acting parallel to the main plane of the buckle and perpendicularly to the direction of the fastening action }
- A44B 11/28 . . with hooks engaging end-pieces on the strap { ([A44B 11/2503](#) takes precedence) }

A44B 13/00**Hook or eye fasteners**

- A44B 13/0005 . { characterised by their material ([A44B 13/0052](#) and [A44B 13/0058](#) take precedence) }
- A44B 13/0011 . . { made of wire }
- A44B 13/0017 . . { made of metal plate }
- A44B 13/0023 . . { made of plastics }
- A44B 13/0029 . { characterised by their way of fastening to the support ([A44B 13/0052](#) and [A44B 13/0058](#) take precedence) }
- A44B 13/0035 . . { using prongs }
- A44B 13/0041 . . . { and a backing element on which prongs are bent over }
- A44B 13/0047 . . { welded or moulded }

- A44B 13/0052 . { Strips of hook or eye fasteners }
- A44B 13/0058 . { Eyelets or grommets }
- A44B 13/0064 .. { characterised by their material }
- A44B 13/007 ... { made of plastics }
- A44B 13/0076 .. { characterised by their way of fastening to the support }
- A44B 13/0082 ... { by riveting }
- A44B 13/0088 ... { by separable snap connection }
- A44B 13/0094 ... { welded or moulded }
- A44B 13/02 . with spring closure of hook
- A44B 15/00 Key-rings**
- A44B 15/002 . { Separable rings }
- A44B 15/005 . { Fobs }
- A44B 15/007 . { Openers }
- A44B 17/00 Press-button or snap fasteners**
- A44B 17/0005 . { Fastening of press-button fasteners ([A44B 17/0017](#) and [A44B 17/0035](#) take precedence) }
- A44B 17/0011 . { Press-button fasteners in which the elastic retaining action is obtained by a spring working in the plane of the fastener }
- A44B 17/0017 .. { Their fastening }
- A44B 17/0023 . { Press-button fasteners in which the elastic retaining action is obtained by the own elasticity of the material constituting the fastener }
- A44B 17/0029 . { Press-button fasteners made of plastics }
- A44B 17/0035 .. { Their fastening }
- A44B 17/0041 . { Press-button fasteners consisting of two parts ([A44B 17/0029](#) takes precedence) }
- A44B 17/0047 . { Press-button fasteners consisting of three parts ([A44B 17/0029](#) takes precedence) }
- A44B 17/0052 . { Press-button fasteners consisting of four parts ([A44B 17/0029](#) takes precedence) }
- A44B 17/0058 . { Strips of press-button fasteners }
- A44B 17/0064 . { Details }
- A44B 17/007 .. { Stud-member }

- A44B 17/0076 .. { Socket member }
- A44B 17/0082 .. { Decoration }
- A44B 17/0088 .. { made from sheet metal }
- A44B 17/0094 .. { made from solid metal }

A44B 18/00**Fasteners of the touch-and-close type ; Making such fasteners ([making pile fabrics D03](#) , [D04](#))**

- A44B 18/0003 . { Fastener constructions ([A44B 18/0023](#) , [A44B 18/0046](#) take precedence) }
- A44B 18/0007 .. { in which each part has similar elements }
- A44B 18/0011 .. { Female or loop elements ([A44B 18/0007](#) takes precedence) }
- A44B 18/0015 .. { Male or hook elements ([A44B 18/0007](#) takes precedence) }
- A44B 18/0019 ... { of a mushroom type }

- A44B 18/0023 . { Woven or knitted fasteners }
- A44B 18/0026 .. { Devices for cutting loops into hooks (cutting pile loops [D06C 13/08](#)) }
- A44B 18/003 .. { in which each part has similar elements }
- A44B 18/0034 .. { Female or loop elements ([A44B 18/003](#) takes precedence) }
- A44B 18/0038 .. { Male or hook elements ([A44B 18/003](#) takes precedence) }
- A44B 18/0042 ... { of a mushroom type }

- A44B 18/0046 . { Fasteners made integrally of plastics }
- A44B 18/0049 .. { obtained by moulding processes (compression moulding or articles of indefinite length characterised by the shape of the surface [B29C 43/222](#) ; screen moulding [B29C 67/08](#)) }
- A44B 18/0053 .. { in which each part has similar elements }
- A44B 18/0057 .. { Female or loop elements ([A44B 18/0053](#) takes precedence) }
- A44B 18/0061 .. { Male or hook elements ([A44B 18/0053](#) takes precedence) }
- A44B 18/0065 ... { of a mushroom type }

- A44B 18/0069 . { Details }
- A44B 18/0073 .. { Attaching means }
- A44B 18/0076 .. { Adaptations for being fixed to a moulded article during moulding }
- A44B 18/008 .. { Hooks or loops provided with means to reinforce the attachment, e.g. by adhesive means (tab fastener elements for absorbent pads combining adhesive and mechanical fastening [A61F 13/581](#)) }

- A44B 18/0084 .. { Double-sided }
- A44B 18/0088 .. { Mixed male and female members }
- A44B 18/0092 .. { flame retardant }
- A44B 18/0096 .. { Shape memory materials }

A44B 19/00**Slide fasteners**

- A44B 19/02 . with a series of separate interlocking members secured to each stringer tape
- A44B 19/04 .. { Stringers arranged edge to edge when fastened, e.g. abutting stringers }

- A44B 19/06 . . . with substantially rectangular members having interlocking projections and pieces
- A44B 19/08 . . Stringers arranged side-by-side when fastened, e.g. at least partially superposed stringers
- A44B 19/10 . with a one-piece interlocking member on each stringer tape
- A44B 19/12 . . Interlocking member in the shape of a continuous helix
- A44B 19/14 . . Interlocking member formed by a profiled or castellated edge
- A44B 19/16 . . interlocking member having uniform section throughout the length of the stringer { (for sacks or bags [B65D 33/2508](#)) }
- A44B 19/18 . with a third member or members, other than the slider, connected to the edges of adjacent stringers when closed, e.g. third member moved into position by a slider
- A44B 19/20 . . the third member being embraced by the stringers
- A44B 19/22 . . the third member embracing the stringers
- A44B 19/24 . Details
- A44B 19/26 . . Sliders
- A44B 19/262 . . . { Pull members; Ornamental attachments for sliders }
- A44B 19/265 . . . { with means for preventing the accidental intrusion of material into the slider body, e.g. with shield or guard }
- A44B 19/267 . . . { for slide fasteners with edges of stringers having uniform section throughout the length thereof (for sacks or bags [B65D 33/2591](#)) }
- A44B 19/28 . . . constructed to be removable from at least one stringer; { Sliders with movable parts to permit releasing of the slider in the event of jamming or obstruction }
- A44B 19/285 { Tools for opening or closing slide fasteners }
- A44B 19/30 . . . with means for locking in position
- A44B 19/301 { at the end of their upward travel with any suitable device, e.g. pull member combined with a press-button, a hook, a key-operated lock }
- A44B 19/303 { Self-locking sliders, e.g slider body provided with locking projection or groove, friction means }
- A44B 19/305 { in the form of a locking prong protruding from the pull member }
- A44B 19/306 { in the form of a locking spring member actuated by the pull member }
- A44B 19/308 { in the form of a spring-actuated locking member actuated by the pull member }
- A44B 19/32 . . Means for making slide fasteners gas or watertight
- A44B 19/34 . . Stringer tapes ([A44B 19/40](#) takes precedence) ; Flaps secured to stringers for covering the interlocking members ([A44B 19/32](#) takes precedence; { setting slide or glide fastener elements on garments [A41H 37/06](#) })
- A44B 19/343 . . . { Knitted stringer tapes }
- A44B 19/346 . . . { Woven stringer tapes ([weaving of tapes D03D 1/00](#)) }
- A44B 19/36 . . Means for permanently uniting the stringers at the end ; Means for stopping movement of slider at the end
- A44B 19/38 . . Means at the end of stringer by which the slider can be freed from one stringer, e.g. stringers can be completely separated from each other
- A44B 19/382 . . . { "Two-way" or "double-acting" separable slide fasteners }
- A44B 19/384 . . . { Separable slide fasteners with quick opening devices }

- A44B 19/386 { Top end stop means for quick opening slide fasteners }
- A44B 19/388 { Bottom end stop means for quick opening slide fasteners }
- A44B 19/40 . . Connection of separate, or one-piece, interlocking members to stringer tapes ;
Reinforcing such connections, e.g. by stitching
- A44B 19/403 . . . { Connection of separate interlocking members }
- A44B 19/406 . . . { Connection of one-piece interlocking members }

- A44B 19/42 . Making by processes not fully provided for in one other class, e.g. [B21D 53/50](#) ,
[B21F 45/18](#) , [B22D 17/16](#) , [B29D 5/00](#) { (attaching closure devices, e.g. slide
fasteners, to bags [B31B 19/00](#) ; making package opening by applying or incorporating
profile strips, e.g. for reclosable bags [B65B 61/188](#)) }
- A44B 19/44 . . Securing metal interlocking members to ready-made stringer tapes (making metal
slide fastener parts combined with attaching [B21D 53/52](#))
- A44B 19/46 . . . Securing separate interlocking members
- A44B 19/48 Arranging interlocking members before securing (article handling devices
associated with conveyers in general [B65G 47/00](#) , e.g. [B65G 47/14](#))
- A44B 19/50 . . . Securing one-piece interlocking members
- A44B 19/52 . . Securing the interlocking members to stringer tapes while making the latter
- A44B 19/54 . . . while weaving the stringer tapes
- A44B 19/56 . . . while knitting the stringer tapes
- A44B 19/58 . . Removing interlocking members to produce gaps
- A44B 19/60 . . Applying end stops upon stringer tapes
- A44B 19/62 . . Assembling sliders in position on stringer tapes
- A44B 19/64 . . . Slider holders for assemblage of slide fasteners

- A44B 99/00 Subject matter not provided for in other groups of this subclass**

- A44B 99/005 . { Turn-button fasteners }