

CPC**COOPERATIVE PATENT CLASSIFICATION****A43B****CHARACTERISTIC FEATURES OF FOOTWEAR; PARTS OF FOOTWEAR****WARNING**

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

- [A43B 21/10](#)-[A43B 21/16](#) covered by [A43B 21/06](#)
- [A43B 21/34](#) covered by [A43B 21/24](#)

Characteristic features of footwear**A43B 1/00****Footwear characterised by the material (layered products [B32B](#))**

- [A43B 1/0009](#) . {Footwear made at least partially of alveolar or honeycomb material}
- [A43B 1/0018](#) . {Footwear made at least partially of flexible, bellow-like shaped material}
- [A43B 1/0027](#) . {Footwear made at least partially from a material having special colours}
- [A43B 1/0036](#) . . {with fluorescent or phosphorescent parts}
- [A43B 1/0045](#) . {Footwear made at least partially of deodorant means}
- [A43B 1/0054](#) . {Footwear provided with magnets, magnetic parts or magnetic substances}
- [A43B 1/0063](#) . {Footwear made at least partially of material that can be recycled}
- [A43B 1/0072](#) . {Footwear made at least partially of transparent or translucent materials}
- [A43B 1/0081](#) . {Footwear made at least partially of hook-and-loop type material (hook and loop-type straps for fastening purpose [A43C 11/1493](#))}
- [A43B 1/009](#) . {Footwear made at least partially of washable material}
- [A43B 1/02](#) . Footwear made of animal or plant fibres or fabrics made therefrom
- [A43B 1/04](#) . . Braided, knotted, knitted, or crocheted footwear
- [A43B 1/06](#) . Footwear made of wood, cork, card-board, paper or like fibrous material (soles [A43B 13/00](#); making of wooden shoes [B27M 3/20](#))
- [A43B 1/08](#) . Footwear made of metal (soles [A43B 13/10](#))
- [A43B 1/10](#) . Footwear made of rubber
- [A43B 1/12](#) . . of rubber waste
- [A43B 1/14](#) . Footwear made of gutta-percha, celluloid, or plastics

A43B 3/00**Footwear characterised by the shape or the use**

- [A43B 3/0005](#) . {Footwear provided with electrical or electronic systems}
- [A43B 3/001](#) . . {Footwear provided with light source}
- [A43B 3/0015](#) . . {Footwear provided with generator}
- [A43B 3/0021](#) . . {Footwear provided with sound or music source}
- [A43B 3/0026](#) . {Footwear for use in minefields; Footwear protecting from landmine blast; Footwear preventing landmines from being triggered}

- A43B 3/0031 . {Footwear provided with a pocket, e.g. for keys or a card}
- A43B 3/0036 . {Footwear characterised by a special shape or design}
- A43B 3/0042 . . {with circular or circle shaped parts}
- A43B 3/0047 . . {Footwear parts having a male and corresponding female profile to fit together, e.g. form-fit}
- A43B 3/0052 . . {X-shaped or cross-shaped}
- A43B 3/0057 . . {S-shaped}
- A43B 3/0063 . . {U-shaped}
- A43B 3/0068 . . {V-shaped}
- A43B 3/0073 . . {Y-shaped}
- A43B 3/0078 . . {Footwear provided with logos, letters, signatures or the like decoration (A43B 23/24 takes precedence)}
- A43B 3/0084 . . . {Arrangement of flocked decoration on shoes}
- A43B 3/0089 . . . {with means to identify the size of the shoe}
- A43B 3/0094 . . {with means to differentiate between right and left shoe}
- A43B 3/02 . Top-boots; Leg-boots; Shoes with batwing tabs
- A43B 3/04 . . with rubber or elastic insertions or gussets
- A43B 3/06 . Shoes with flaps; Footwear with divided uppers
- A43B 3/08 . . with rubber or elastic insertions or gussets
- A43B 3/10 . Low shoes; Slippers (sandals A43B 3/12)
- A43B 3/101 . . {Slippers}
- A43B 3/102 . . . {Slippers leaving the heel of the foot bare (A43B 3/106 takes precedence; Slippers with an anklestrap. sling type shoes A43B 3/12)}
- A43B 3/103 {characterised by the attachment of the toestraps}
- A43B 3/105 {characterised by the shape or layout of the toestraps}
- A43B 3/106 . . {Disposable slippers; One piece slippers}
- A43B 3/107 . . {characterised by the material}
- A43B 3/108 . . {characterised by the sole}
- A43B 3/12 . Sandals {provided with an anklestrap}; Strap guides thereon {(footwear having only a toestraps, thong sandals A43B 3/10)}
- A43B 3/122 . . {characterised by the attachment of the straps}
- A43B 3/124 . . {Disposable sandals; One piece sandals}
- A43B 3/126 . . {characterised by the shape or layout of the straps}
- A43B 3/128 . . {characterised by the sole}
- A43B 3/14 . Moccasins, opanken, or like shoes
- A43B 3/16 . Overshoes {(A43B 23/30 takes precedence)}
- A43B 3/163 . . {Overshoes specially adapted for health or hygienic purposes, e.g. comprising electrically conductive material allowing the discharge of electrostatic charges}
- A43B 3/166 . . {Mud-guards}
- A43B 3/18 . . Devices for holding overshoes in position
- A43B 3/20 . . Heel-less overshoes

- A43B 3/22 . . Protecting sheaths worn between shoe and overshoe
- A43B 3/24 . Collapsible or convertible footwear {(multipurpose skate boots [A43B 5/1633](#); exchangeable soles [A43B 13/36](#))}
- A43B 3/242 . . {characterised by the upper}
- A43B 3/244 . . {characterised by the attachment between upper and sole}
- A43B 3/246 . . {characterised by the sole}
- A43B 3/248 . . {Collapsible or foldable footwear, e.g. for travelling}
- A43B 3/26 . Footwear adjustable as to length or size {(adjustable ski boots or similar boots [A43B 5/0427](#); adjustable skating boots [A43B 5/1608](#))}
- A43B 3/28 . Footwear specially adapted for dolls
- A43B 3/30 . Footwear specially adapted for babies or small children

A43B 5/00

Footwear for sporting purposes (non-skid devices, e.g. ice-spurs, studs for football shoes, [A43C 15/00](#))

- A43B 5/001 . {Golf shoes}
- A43B 5/002 . {Mountain boots or shoes}
- A43B 5/003 . . {for free climbing}
- A43B 5/004 . {After-ski boots}
- A43B 5/005 . {for grinding, i.e. sliding on the sole or a part thereof}
- A43B 5/006 . {for horse riding (stirrups [B68C 3/00](#))}
- A43B 5/007 . {Footwear for car driving or racing}
- A43B 5/008 . {Bowling Shoes}
- A43B 5/02 . Football boots {or shoes, i.e. footwear for soccer, football or rugby}
- A43B 5/025 . . {characterised by an element which improves the contact between the ball and the footwear}
- A43B 5/04 . Ski boots; Similar boots
- A43B 5/0401 . . {Snowboard boots}
- A43B 5/0403 . . . {Adaptations for soles or accessories with soles for snowboard bindings}
- A43B 5/0405 . . {Linings, paddings, insertions; Inner boots (in general [A43B 19/00](#))}
- A43B 5/0407 . . . {inflatable}
- A43B 5/0409 . . . {with means for attaching inner boots or parts thereof to shells of skiboats}
- A43B 5/0411 . . {for cross-country}
- A43B 5/0413 . . . {Adaptations for soles or accessories associated with soles for cross-country bindings}
- A43B 5/0415 . . {Accessories ([A43B 5/0403](#), [A43B 5/0413](#), [A43B 5/0494](#) take precedence)}
- A43B 5/0417 . . . {for soles or associated with soles of ski boots; for ski bindings ([A43B 5/0411](#) takes precedence)}
- A43B 5/0419 {for walking aids}
- A43B 5/0421 {located underneath the sole}
- A43B 5/0423 {located on the sides of the sole}
- A43B 5/0425 . . . {Devices for carrying ski-boots or similar boots}
- A43B 5/0427 . . {characterised by type or construction details}

A43B 5/0429	. . . {Adjustment of the boot to calf or shin, i.e. fibula, tibia}
A43B 5/0431	. . . . {to the length of calf or shin, i.e. fibula, tibia}
A43B 5/0433	. . . . {to the width of calf or shin, i.e. fibula, tibia}
A43B 5/0435	. . . {Adjustment of the boot to the foot}
A43B 5/0437	. . . . {to the arch of the foot (A43B 5/0441 takes precedence)}
A43B 5/0439	. . . . {to the heel; Heel clamping devices; Heel supports}
A43B 5/0441	. . . . {by lifting the insole}
A43B 5/0443	. . . . {to the instep of the foot, e.g. metatarsals; Metatarsal clamping devices}
A43B 5/0445	. . . . . {directly actuated by non flexible means, e.g. screws, levers}
A43B 5/0447	. . . . . {actuated by flexible means, e.g. cables, straps}
A43B 5/0449	. . . . . {with the actuator being disposed at the rear side of the boot}
A43B 5/045	. . . . {to the width of the foot}
A43B 5/0452	. . . {Adjustment of the forward inclination of the boot leg}
A43B 5/0454	. . . . {including flex control; Dampening means}
A43B 5/0456	. . . . . {with the actuator being disposed at the rear side of the boot (A43B 5/0464 takes precedence)}
A43B 5/0458	. . . . . {with the actuator being disposed at the front side of the boot (A43B 5/0464 takes precedence)}
A43B 5/046	. . . . . {with the actuator being disposed at the lateral or medial side of the boot (A43B 5/0464 takes precedence)}
A43B 5/0462	. . . . . {with the actuator being disposed at the lower side of the boot (A43B 5/0464 takes precedence)}
A43B 5/0464	. . . . . {with exchangeable parts}
A43B 5/0466	. . . {Adjustment of the side inclination of the boot leg; Canting}
A43B 5/0468	. . . {Adjustment of the angle of the boot to the ski}
A43B 5/047	. . . {provided with means to improve walking with the skiboot}
A43B 5/0472	. . . . {having a flexible toe portion; provided with a hinge at the ball of the foot}
A43B 5/0474	. . . . {having a walk/ski position (A43B 5/0472 takes precedence)}
A43B 5/0476	. . . {Front-entry skiboots}
A43B 5/0478	. . . {Mid-entry skiboots, hybrid skiboots}
A43B 5/048	. . . {Rear-entry skiboots}
A43B 5/0482	. . . {made from materials with different rigidities}
A43B 5/0484	. . . {permitting easy replacement of parts}
A43B 5/0486	. . {characterized by the material}
A43B 5/0488	. . . {with an upper made of flexible material, e.g. leather (A43B 5/0401 , A43B 5/002 take precedence)}
A43B 5/049	. . . {with an upper made of composite material, e.g. fibers or core embedded in a matrix}
A43B 5/0492	. . {Telemark boots}
A43B 5/0494	. . . {Adaptations for soles or accessories associated with soles for telemark bindings}
A43B 5/0496	. . {boots for touring or hiking skis}

- A43B 5/0498 . . {For ski jumping}
- A43B 5/06 . Running boots
- A43B 5/08 . Bathing shoes; {Aquatic sports shoes}
- A43B 5/10 . Tennis shoes
- A43B 5/12 . Dancing shoes
- A43B 5/14 . Shoes for cyclists
- A43B 5/145 . . {Boots for motorcyclists}
- A43B 5/16 . Skating boots
- A43B 5/1608 . . {size adjustable (skates with special foot-plates for the boot divided into two parts permitting adjustment to the size of the foot [A63C 1/26](#))}
- A43B 5/1616 . . {Inner boots}
- A43B 5/1625 . . {made from materials with different rigidities}
- A43B 5/1633 . . {Multipurpose skate boots (roller skates convertible to ice skates [A63C 17/18](#), with fixable wheels permitting walking [A63C 17/20](#))}
- A43B 5/1641 . . {characterised by the sole (skates with special foot-plates for the boot [A63C 1/22](#)); characterised by the attachment of the skate ([A43B 5/1633](#) takes precedence; skates rigidly mounted to the sole of the boot [A63C 1/02](#))}
- A43B 5/165 . . . {with ventilation means in the sole}
- A43B 5/1658 . . . {provided with resilient means in the sole or between the chassis and the sole}
- A43B 5/1666 . . {characterised by the upper}
- A43B 5/1675 . . . {with ventilation means in the upper}
- A43B 5/1683 . . . {characterised by the lower part of the upper or by the shell}
- A43B 5/1691 . . . {characterised by the higher part of the upper, e.g. surrounding the ankle, by the quarter or cuff}
- A43B 5/18 . Attachable overshoes for sporting purposes
- A43B 5/185 . . {with a sole covering spikes or cleats}

- A43B 7/00** **Footwear with health or hygienic arrangements**
- A43B 7/005 . {Footwear with cooling arrangements}
- A43B 7/02 . Footwear with heating arrangements (footwarmers [A61F 2007/0045](#); electric heating elements [H05B](#))
- A43B 7/025 . . {heated by an electric current from an external source, e.g. car batteries}
- A43B 7/04 . . Footwear with electric batteries, generators, or the like
- A43B 7/06 . Ventilated footwear {(ventilated skating boots [A43B 5/165](#), [A43B 5/1675](#); ventilated socks or inserts [A43B 17/08](#))}
- A43B 7/08 . . Footwear with air-holes, with or without closures
- A43B 7/081 . . . {the air being forced from outside}
- A43B 7/082 . . . {the air being expelled to the outside}
- A43B 7/084 . . . {characterised by the location of the holes}
- A43B 7/085 {in the upper}
- A43B 7/087 {in the bottom of the sole}
- A43B 7/088 {in the side of the sole}

- A43B 7/10 . . . with closable air-slots near the waist
- A43B 7/105 . . . {with pumping means or valves}
- A43B 7/12 . Special watertight footwear ([overshoes A43B 3/16](#))
- A43B 7/125 . . {provided with a vapour permeable member, e.g. a membrane ([A43B 23/022 takes precedence](#))}
- A43B 7/14 . Footwear with foot-supporting parts
- A43B 7/1405 . . {provided with pads or holes on one or more locations, or having an anatomical or curved form}
- A43B 7/141 . . . {having an anatomical or curved form}
- A43B 7/1415 . . . {characterised by the location under the foot}
- A43B 7/142 {situated under the medial arch, i.e. the navicular or cuneiform bones}
- A43B 7/1425 {situated under the ball of the foot, i.e. the joint between the first metatarsal and first phalange}
- A43B 7/143 {situated under the lateral arch, i.e. the cuboid bone}
- A43B 7/1435 {situated under the joint between the fifth phalange and the fifth metatarsal bone}
- A43B 7/144 {situated under the heel, i.e. the calcaneus bone}
- A43B 7/1445 {situated under the midfoot, i.e. the metatarsal}
- A43B 7/145 {situated under the toes, i.e. the phalange}
- A43B 7/1455 . . . {with special properties}
- A43B 7/146 {provided with acupressure points or means for footmassage}
- A43B 7/1465 {with removable or adjustable pads to allow custom fit}
- A43B 7/147 {for sick or disabled persons, e.g. persons having osteoarthritis or diabetes}
- A43B 7/1475 . . . {characterised by the type of support}
- A43B 7/148 {Recesses or holes filled with a support or pad}
- A43B 7/1485 {Recesses or holes, traversing partially or completely the thickness of the pad}
- A43B 7/149 {Pad, e.g. protruding on the foot facing surface}
- A43B 7/1495 . . {Footwear with arch-supports of the bracelet type}
- A43B 7/16 . . Footwear with elevated heel parts inside
- A43B 7/18 . . Joint supports, e.g. instep supports
- A43B 7/19 . . . engaging the ground directly
- A43B 7/20 . . . Ankle-joint supports or holders
- A43B 7/22 . . Footwear with fixed flat-foot insertions, metatarsal supports, ankle flaps, or the like ([orthopaedic insertions A61F 5/14](#))
- A43B 7/223 . . . {characterised by the constructive form}
- A43B 7/226 . . . {characterised by the material}
- A43B 7/24 . . Insertions or cap supports preventing the foot canting to one side, {preventing supination or pronation}
- A43B 7/26 . . Footwear with toe-spacers or toe-spreaders
- A43B 7/28 . . Adapting the inner sole {or the side of the upper} of the shoe to the sole of the foot
- A43B 7/30 . . Protecting the ball-joint against pressure while standing

- A43B 7/32 . Footwear with shock-absorbing means {Safety footwear} (resilient soles [A43B 13/18](#))
- A43B 7/34 . Footwear with protection against heat or cold
- A43B 7/36 . with earthing or grounding means
- A43B 7/38 . Elevating, i.e. height increasing, footwear (with elevated heel parts inside {[A43B 7/14](#)}; lengthening pieces for natural legs [A61F 3/00](#); orthopaedic insertions for conventional shoes [A61F 5/14](#))

A43B 9/00

Footwear characterised by the assembling of the individual parts
 {(assembling parts of upper together [A43B 23/0245](#); assembling sole parts together [A43B 13/12](#))}

- A43B 9/02 . Footwear stitched or nailed through
- A43B 9/04 . Welted footwear (welts [A43B 15/00](#))
- A43B 9/06 . . stitched or nailed through
- A43B 9/08 . Turned footwear
- A43B 9/10 . Footwear with out-turned uppers
- A43B 9/12 . Stuck or cemented footwear
- A43B 9/125 . . {using a temporary protective insole or innersole}
- A43B 9/14 . Platform shoes
- A43B 9/16 . Footwear with soles moulded on to uppers or welded on to uppers without adhesive
- A43B 9/18 . . moulded {(moulding soles or heels to preformed uppers [B29D 35/06](#))}
- A43B 9/20 . . welded

A43B 11/00

Footwear with miscellaneous arrangements to facilitate putting-on or removing, e.g. with straps

- A43B 11/02 . with built-in shoe-horns

Parts of footwear**A43B 13/00**

Soles ({Skating boots characterised by the sole [A43B 5/1641](#),} socks [A43B 17/00](#));
Sole and heel units

- A43B 13/02 . characterised by the material
- A43B 13/023 . . {Soles with several layers of the same material (soles with several layers of different materials [A43B 13/12](#))}
- A43B 13/026 . . {Composites, e.g. carbon fibre or aramid fibre; the sole, one or more sole layers or sole part being made of a composite}
- A43B 13/04 . . plastics, rubber or vulcanised fibre
- A43B 13/08 . . wood
- A43B 13/10 . . metal
- A43B 13/12 . . Soles with several layers of different materials
- A43B 13/122 . . . {characterised by the outsole or external layer}
- A43B 13/125 . . . {characterised by the midsole or middle layer}
- A43B 13/127 {the midsole being multilayer}
- A43B 13/14 . characterised by the constructive form

- A43B 13/141 . . {with a part of the sole being flexible, e.g. permitting articulation or torsion}
- A43B 13/143 . . {provided with wedged, concave or convex end portions, e.g. for improving roll-off of the foot}
- A43B 13/145 . . . {Convex portions, e.g. with a bump or projection, e.g. 'Masai' type shoes}
- A43B 13/146 . . . {Concave end portions, e.g. with a cavity or cut-out portion}
- A43B 13/148 . . . {Wedged end portions}
- A43B 13/16 . . Pieced soles (with several layers of different material [A43B 13/12](#))
- A43B 13/18 . . Resilient soles {(skating boots provided with resilient means [A43B 5/1658](#))}
- A43B 13/181 . . . {Resiliency achieved by the structure of the sole}
- A43B 13/182 {Helicoidal springs}
- A43B 13/183 {Leaf springs}
- A43B 13/184 {the structure protruding from the outsole}
- A43B 13/185 {Elasticated plates sandwiched between two interlocking components, e.g. thrustors}
- A43B 13/186 {Differential cushioning region, e.g. cushioning located under the ball of the foot (resilient heel not included in the sole [A43B 21/26](#); resilient supports for the heel of the foot [A43B 21/32](#))}
- A43B 13/187 . . . {Resiliency achieved by the features of the material, e.g. foam, non liquid materials}
- A43B 13/188 {Differential cushioning regions}
- A43B 13/189 . . . {filled with a non-compressible fluid, e.g. gel, water}
- A43B 13/20 . . . Pneumatic soles {filled with a compressible fluid, e.g. air, gas (inflatable linings for skiboots [A43B 5/0407](#))}
- A43B 13/203 {provided with a pump or valve}
- A43B 13/206 {provided with tubes or pipes or tubular shaped cushioning members}
- A43B 13/22 . . Soles made slip-preventing or wear-resisting, e.g. by impregnation or spreading a wear-resisting layer
- A43B 13/223 . . . {Profiled soles}
- A43B 13/226 {the profile being made in the foot facing surface}
- A43B 13/24 . . . by use of insertions
- A43B 13/26 projecting beyond the sole surface
- A43B 13/28 . characterised by their attachment, also attachment of combined soles and heels (attachment of heels [A43B 21/36](#); attachment of heel parts [A43B 21/42](#))
- A43B 13/30 . . by screws
- A43B 13/32 . . by adhesives
- A43B 13/34 . . Soles also attached to the inner side of the heels
- A43B 13/36 . . Easily-exchangeable soles (of metal [A43B 13/10](#); protecting-soles [A43C 13/12](#))
- A43B 13/37 . Sole and heel units
- A43B 13/38 . Built-in insoles joined to uppers during the manufacturing process, e.g. structural insoles; Insoles glued to shoes during the manufacturing process
- A43B 13/383 . . {pieced}
- A43B 13/386 . . {multilayered}

- A43B 13/39 . . with upset sewing ribs
- A43B 13/40 . . with cushions
- A43B 13/41 . . combined with heel stiffener, toe stiffener, or shank stiffener
- A43B 13/42 . Filling materials located between the insole and outer sole; Stiffening materials

A43B 15/00**Welts for footwear****A43B 17/00**

{Inserted} insoles, e.g. footbeds or inlays, for attachment to the shoe after the upper has been joined (special medical insertions for shoes [A61F 5/14](#))

- A43B 17/003 . {characterised by the material (made of wood [A43B 17/12](#), made of sponge, rubber or plastic materials [A43B 17/14](#))}
- A43B 17/006 . . {multilayered}
- A43B 17/02 . wedge-like or resilient
- A43B 17/023 . . {wedge-like ([A43B 17/03](#) takes precedence)}
- A43B 17/026 . . {filled with a non-compressible fluid, e.g. gel, water}
- A43B 17/03 . . filled with a gas, e.g. air
- A43B 17/035 . . . {provided with a pump or valve}
- A43B 17/04 . with metal insertions or coverings
- A43B 17/06 . with metal springs
- A43B 17/08 . ventilated
- A43B 17/10 . specially adapted for sweaty feet; waterproof; Waterproof socks
- A43B 17/102 . . {Moisture absorbing socks; Moisture dissipating socks}
- A43B 17/105 . . . {Disposable}
- A43B 17/107 . . {waterproof}
- A43B 17/12 . made of wood
- A43B 17/14 . made of sponge, rubber, or plastic materials
- A43B 17/16 . with heel or toe caps
- A43B 17/18 . Arrangements for attaching removable insoles to footwear

A43B 19/00

Shoe-shaped inserts; Inserts covering the instep {(for ski boots or similar boots [A43B 5/0405](#), for skating boots [A43B 5/1616](#))}

- A43B 19/005 . {Weighted inserts for shoes, i.e. insert comprising an additional weight}

A43B 21/00

Heels; Top-pieces, {e.g. high heels, heel distinct from the sole, high heels monolithic with the sole (sole and heel units [A43B 13/37](#))}

- A43B 21/02 . characterised by the material
- A43B 21/025 . . {Metal}
- A43B 21/03 . . wood
- A43B 21/04 . . leather
- A43B 21/06 . . rubber
- A43B 21/08 . . . combined hard and soft rubber
- A43B 21/18 . . combined rubber and leather
- A43B 21/20 . . plastics

- A43B 21/22 . Heels or heel attachments specially designed to prevent splashing
- A43B 21/24 . characterised by the constructive form
- A43B 21/26 . . Resilient heels
- A43B 21/265 . . . {filled with a non-compressible fluid, e.g. gel, water}
- A43B 21/28 . . . Pneumatic heels {filled with a compressible fluid, e.g. air, gas}
- A43B 21/285 {provided with a pump or valve}
- A43B 21/30 . . Heels with metal springs
- A43B 21/32 . . Resilient supports for the heel of the foot
- A43B 21/36 . characterised by their attachment; Securing devices for the attaching means
(combined with soles [A43B 13/28](#))
- A43B 21/37 . . by hook-shaped or bent attaching means
- A43B 21/38 . . by screws only
- A43B 21/39 . . by rib groove
- A43B 21/40 . . . by dovetail
- A43B 21/42 . . Heels with replaceable or adjustable parts, {e.g. top lift}
- A43B 21/433 . . . rotatably mounted
- A43B 21/437 . . . with axially-adjustable rod-like top-pieces
- A43B 21/44 . . by claw-like means
- A43B 21/45 . . . with special tensioning means
- A43B 21/46 . . by bolts
- A43B 21/47 . . by resilient means
- A43B 21/48 . . . by press-buttons
- A43B 21/50 . . by bayonet catches or the like
- A43B 21/51 . . with keyhole-shaped opening and pin
- A43B 21/52 . . Interchangeable heel parts without special attachments
- A43B 21/54 . . by adhesion or the like

A43B 23/00**Uppers; Boot legs; Stiffeners; Other single parts of footwear**

- A43B 23/02 . Uppers; Boot legs {(ski boots with an upper made of flexible material [A43B 5/0486](#);
skating boots characterised by the uppers [A43B 5/1666](#))}
- A43B 23/0205 . . {characterised by the material (material of the lining [A43B 23/07](#), material of toe
stiffeners or heel stiffeners [A43B 23/08](#))}
- A43B 23/021 . . . {Leather}
- A43B 23/0215 . . . {Plastics or artificial leather}
- A43B 23/022 {with waterproof breathable membranes}
- A43B 23/0225 . . . {Composite materials, e.g. material with a matrix}
- A43B 23/023 . . . {Metal}
- A43B 23/0235 . . . {Different layers of different material}
- A43B 23/024 . . . {Different layers of the same material}
- A43B 23/0245 . . {characterised by the constructive form}
- A43B 23/025 . . . {assembled by stitching}

- A43B 23/0255 . . . {assembled by gluing or thermo bonding}
- A43B 23/026 . . . {Laminated layers}
- A43B 23/0265 . . . {having different properties in different directions}
- A43B 23/027 {with a part of the upper particularly flexible, e.g. permitting articulation or torsion}
- A43B 23/0275 {with a part of the upper particularly rigid, e.g. resisting articulation or torsion}
- A43B 23/028 {Resilient uppers e.g. shock absorbing}
- A43B 23/0285 {filled with a non-compressible fluid, e.g. gel or water}
- A43B 23/029 {Pneumatic upper, e.g. gas filled}
- A43B 23/0295 {Pieced uppers}
- A43B 23/04 . . Uppers made of one piece; Uppers with inserted gussets
- A43B 23/042 . . . {Uppers made of one piece (one piece slippers [A43B 3/106](#); one piece sandals [A43B 3/124](#))}
- A43B 23/045 . . . {Uppers with inserted gussets}
- A43B 23/047 {the gusset being elastic}
- A43B 23/06 . . Waterproof legs
- A43B 23/07 . Linings therefor {(for ski boots or similar boots [A43B 5/0405](#), lining laminated with upper [A43B 23/026](#))}
- A43B 23/08 . Heel stiffeners; Toe stiffeners (footwear with shock-absorbing means [A43B 7/32](#))
- A43B 23/081 . . {Toe stiffeners}
- A43B 23/082 . . . {made of metal}
- A43B 23/083 {light-alloys}
- A43B 23/085 {made of leather}
- A43B 23/086 {made of impregnated fabrics, plastics or the like}
- A43B 23/087 {made of plastics}
- A43B 23/088 . . {Heel stiffeners ([A43B 23/10](#), [A43B 23/14](#), [A43B 23/16](#), [A43B 23/17](#) take precedence)}
- A43B 23/10 . . made of metal {([A43B 23/082](#) takes precedence)}
- A43B 23/105 . . . {light-alloys}
- A43B 23/14 . . made of leather {([A43B 23/085](#) takes precedence)}
- A43B 23/16 . . made of impregnated fabrics, plastics or the like {([A43B 23/086](#) takes precedence)}
- A43B 23/17 . . . made of plastics
- A43B 23/20 . Nails, pegs, pins, clamps, or tacks, for footwear
- A43B 23/22 . Supports for the shank or arch of the uppers (for health or hygienic purposes [A43B 7/14](#))
- A43B 23/222 . . {characterised by the attachment to the sole}
- A43B 23/225 . . . {by integrated teeth}
- A43B 23/227 . . {fixed on the outside of the shoe}
- A43B 23/24 . Ornamental buckles; Other ornaments for shoes without fastening function
- A43B 23/25 . . Arrangement of ribbons on footwear
- A43B 23/26 . Tongues for shoes

A43B 23/28

- . Devices to put in shoes in order to prevent slipping at the heel or to prevent abrading the stockings

A43B 23/30

- . Heel-protectors for car-drivers