CLASS 24 BUCKLES, BUTTONS, CLASPS, ETC.

1 MISCHELLOUSE

2 ALBUM FASTENERS

2.5 GUN BAND TYPE

3.1 ARTICLE HOLDER ATTACHABLE TO APPAREL OR BODY

4 .Chatelaine safety hooks
5 .Flower
6 ..Pin attached
7 .Napkin
8 ..Hook
9 ..Neck enclosing
10 R .Pencil
11 R ..Clasp attached
11 FE ..Finger ear, belt attached pencil holder
11 PP ..Pencil holder with paper clip
11 CC ..Combined and convertible pencil holder
11 CT ..Container type pencil holder
11 HC ..Separate pencil holder and pocket engaging clip
11 S ..Sliding jaw pencil holding clip
11 C ..Wire pencil holder
11 F ..Flexible shank pencil holder
11 M ..With movable catch (e.g., pin pivoted lever, roller, etc.)
11 P ..Pivoted jaw pencil holder
12 ..Pin attached
10 A ..Rule holder
15 ..Sleeve holder (e.g., for inner coat)
13 ..Pin attached
3.2 ..Arm or leg carried holder
3.3 ..Eyeglass holder including retaining means
3.4 ..Neck supported holder
3.5 ..Holder contains pocket engager (e.g., antitheft device, wallet protector)
3.6 ..Key ring holder
3.7 ..Receptacle type holder
3.8 ..Eyeglass or spectacle case
3.9 ..Open-ended holster type holder
3.11 ..Article held by clip with spring (e.g., leaf, coil) member
3.12 ..Article held by clip
3.13 ..Article held by flexible connector (e.g., chain)

16 R BALE AND PACKAGE TIES, HOSE CLAMPS

17 R ..Packet holders
18 ..Cord
17 A ..Adjustable bands
17 B ..Closed loops
17 AP ..Plastic bands
19 ..With tighteners
268 ..Wedge
269 ..Winder
270 ..Self-locking (dead center or snap action)
271 ..Adjustable girth
272 ..Rack bar
273 ..Lever
274 R ..Worm and tooth
274 P ..Pivotal worm band clamp
274 WB ..Radial worm band clamp
275 ..Integral thread
276 ..External thread
277 ..Both ends threaded
278 ..Radial screw
279 ..Tangential screw
280 ..Adjustable girth
281 ..Step adjustment
282 ..Plural separable parts
283 ..Wire
284 ..Plural separable parts
285 ..Pivotal strap parts
286 ..Plural wrap
20 R ..Metal bands
21 ..Separate connections
22 ..One piece
23 R ..Sheet metal
23 B ..Buckle band connection
23 W ..Swedged sheet metal band connection
23 EE ..End-to-end integral with band connecting means
24 ..Pivoted parts
25 ..Wedging parts
26 ..Wire
20 CW ..Circumferentially swagged band clamp
20 EE ..End-to-end integral band end connection
20 TT ..Ratchet and tool tightened band clamp
20 S ..Spring closed band clamp
20 LS ..Screw locked band clamp
20 W ..Swedged to lock band ends
27 ..Wire
28 ..Separate connections
29 ..Wire
30 ..Wooden bands
<table>
<thead>
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<th>Item</th>
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<td>16 PB</td>
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<td>30.5 W</td>
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<td>33 P</td>
<td>Pintle pin connected belt ends</td>
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<td>33 V</td>
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<td>33 L</td>
<td>Overlapped belt ends</td>
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<td>Multiple pintles interconnected V-belt type</td>
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<td>One piece</td>
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<td>Splices</td>
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<td>Wire</td>
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<td>31 B</td>
<td>Butt connected belt ends</td>
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<tr>
<td>31 C</td>
<td>V, round, trapezoidal belts</td>
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<tr>
<td>31 F</td>
<td>Flanged belt ends, connector hold ends</td>
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<tr>
<td>31 L</td>
<td>Lapped ends of endless belts</td>
</tr>
<tr>
<td>31 H</td>
<td>Hinged ends of endless belts</td>
</tr>
<tr>
<td>31 W</td>
<td>Wire strands reinforce belts</td>
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<tr>
<td>31 V</td>
<td>Hook and loop type fastener and zipper belt end connection</td>
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<td>41.1</td>
<td>CUFF HOLDER</td>
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<td>Sleeve clasp and button for cuff</td>
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<td>Sleeve clasp and clasp for cuff</td>
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<td>45</td>
<td>Sleeve clasp and hook for cuff</td>
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<td>Sleeve clasp and pin for cuff</td>
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<td>47</td>
<td>Sleeve pin and button for cuff</td>
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<td>49.1</td>
<td>NECKTIE FASTENER</td>
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<td>50</td>
<td>Bands</td>
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<td>51</td>
<td>End-securing pin</td>
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<td>52</td>
<td>Gripping</td>
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<td>Button engaging</td>
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<td>49.1</td>
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CLASS 24 BUCKLES, BUTTONS, CLASPS, ETC.

69 CF ..Cover fasteners
69 T ..Chain fasteners
69 TM ..Strap tightening machine
69 TS ..Toggle actuated sliding jaw
69 J ..Jewelry
69 AT ..Split ring with tightener
69 PP ..Concrete form panels
69 SB ..Seat belt buckles
69 WT ..Chain, cable, wire tighteners, and anchors
69 EF ..Envelope fasteners
69 SK ..Ski boot and garment fasteners
71 R ..Strap-attached folding lever
71 T ..Toggle latch
71 ST ..Strap tighter
71 TT ..Tire antiskid strap tighter
71 SB ..Seat belts
71 A ..Split ring fasteners
71 J ..Jewelry-watch straps
71 TD ..Tie downs (covers, articles)
71 CT ..Cable, wire, rope tighter
71 SK ..Ski boot and garment fasteners
71 SD ..Dress hem raisers
71.1 ..Midline
68 J ..Jewelry
68 SB ..Seat belt
68 AS ..Accordion straps
68 PP ..Parallel poles clamp
68 FP ..Form panels for walls
68 CD ..Cargo tie down
68 CT ..Chain fasteners
68 BT ..Split band with tightener
68 TT ..Tire chain fasteners
68 SK ..Ski, boot, and shoe fasteners
68 A ..Fixed jaw with sliding or pivoted jaw
68 B ..Rack and pinion and circular tightening
68 C ..Circular flange container clamp
68 D ..Strap stretching tools, tighteners, and sealers
68 E ..Buckle type
68 F ..Integral piece
68 T ..Toggle
68 SC ..Stocking top

TROUSER GUARDS, CLIPS, STRAPS
(E.G., ABOVE SHOETOPS)

72.1 ..Midline
72.5 ..Bedclothes holders
72.7 ..T-head nongripping, fabric engaging type

ZIPPER OR REQUIRED COMPONENT THEREOF

381 ..Plural zippers
383 ..Zipper chain
384 ..Having surface sealing structure
385 ..Having slider or interconnected sliders with access opening for diverse-art member
386 ..Plural independently movable sliders
387 ..With distinct, stationary means for anchoring slider
388 ..And for aligning surfaces or obstructing slider movement
389 ..With distinct member for sealing surfaces
390 ..With distinct separable-fastener
391 ..Having coiled or bent continuous wire interlocking surface
392 ..With stringer tape interwoven or knitted therewith
393 ..With stringer tape having specific weave or knit pattern
394 ..With core encircled by coils or bends
395 ..With mounting portion having structural formations complementary to stitching
396 ..Attached by stitching
397 ..String or stringer tape having distinctive property (e.g., heat sensitive)
398 ..With stringer tape having distinctive property (e.g., heat sensitive)
399 ..Having interlocking surface with continuous cross section
400 ..Opposed interlocking surface having dissimilar cross section
401 ..Having interlocking surface formed from single member with varying cross section
402 ..Opposed surface having dissimilar cross section
403 ..Interlocking surface constructed from plural elements in series
404 ..Having either noninterlocking element in, interrupted, or unequal length series
405 ..With element structural feature unrelated to interlocking or securing portion
406 ..Dissimilar opposed elements
407 ..Wire element
408 ..Preattached to mounting cord
409 ..Having interlocking portion with specific shape

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...Including symmetrical formations on opposite walls for engaging mating elements

...Including complementary formations on opposite walls for engaging mating elements

....Mating elements having reversed orientation of formations

...Having mounting portion with specific shape or structure

...Including embracing jaws

.Slider having specific configuration, construction, adaptation, or material

...Including relatively movable spaced wings (i.e., restraining walls)

...Including converging channel and relatively movable separator island

...Including position locking-means attached thereto

...Protrusion on pull tab directly engaging interlocking surfaces

...Having surface engaging element shifted by reorientation of pull tab

....Resilient or spring biased element

.....Selectively shifted by either of two pull tabs

.....With relatively movable link

.....Biased by distinct spring

.....Having aperture cooperating with guide post

...Including means preventing bunching of structure-to-be-secured or stringer

...Having specific contour or arrangement of converging channel, separator island, or wing

...Spaced segments of each wall of channel supported by different wings

...Including pull tab attaching means

...Including means for attaching components of slider together

...With ornamental slider

...With means for concealing surfaces

.Including complementary, aligning means attached to ends of interlocking surfaces

..Having specific mounting connection or reinforcing structure at connection

..Including means attaching interlocking surfaces together

..Including means for obstructing movement of slider

SLIT CLOSING MEANS INCLUDING GUIDES ON OPPOSITE EDGES OF SLIT AND SLIDABLE BRIDGING COMPONENT

..With hand-actuated lever for shifting bridging component

..Including structure linking and allowing variations in separation between opposite-guide-contacting portions of component

..Having bridging components attached in series along carrying element

..Having separate, independently movable, bridging components

INCLUDING READILY DISSOCIABLE FASTENER HAVING NUMEROUS, PROTRUDING, UNITARY FILAMENTS RANDOMLY INTERLOCKING WITH, AND SIMULTANEOUSLY MOVING TOWARDS, MATING STRUCTURE (E.G., HOOK-LOOP TYPE FASTENER)

..Combined with diverse fastener

..With distinct structure for sealing securement joint

..With feature facilitating, enhancing, or causing attachment of filament mounting surface to support therefor

..Having filaments formed from continuous element interwoven or knitted into distinct, mounting surface fabric

..Having filaments of varied shape or size on same mounting surface

..With feature facilitating or causing attachment of filaments to mounting surface

..Thermal or adhesive

..Having several, repeating, interlocking formations along length of filaments
Having opposed structure formed from distinct filaments of diverse shape to those mating therewith.

Having filaments constructed from coated, laminated, or composite material.

Having mounting surface and filaments constructed from common piece of material.

\[
\text{FREIGHT CONTAINER TO FREIGHT CONTAINER FASTENER}
\]

\[
\text{DRUM OR CAN SPACER FASTENER}
\]

\[
\text{TRIM MOLDING FASTENER}
\]

\[
\text{Having externally threaded attaching means}
\]

\[
\text{And laterally extending biasing appendage}
\]

\[
\text{Resilient metal type}
\]

\[
\text{Sheet metal formed}
\]

\[
\text{Wire formed}
\]

\[
\text{PLURAL FASTENERS HAVING INTERMEDIATE FLACCID CONNECTOR}
\]

\[
\text{Chain connector}
\]

\[
\text{Elastic connector}
\]

\[
\text{Strap connector}
\]

\[
\text{Strap connector}
\]

\[
\text{PLURAL MOUNTING Nhiều FASTENERS}
\]

\[
\text{Buckle}
\]

\[
\text{And buckles}
\]

\[
\text{Having separate material adjustment means}
\]

\[
\text{Having separate disconnect means}
\]

\[
\text{Pivotal lever type}
\]

\[
\text{Having disconnect structure}
\]

\[
\text{Resilient cooperating means}
\]

\[
\text{And pin}
\]

\[
\text{Crossed belt accommodating}
\]

\[
\text{And clasp}
\]

\[
\text{And pin}
\]

\[
\text{And hook}
\]

\[
\text{Having disconnect means}
\]

\[
\text{Having penetrating prong}
\]

\[
\text{Buckle having plural receiving slots}
\]

\[
\text{Including a button fastening element}
\]

\[
\text{And separable fastening means for attached fastener}
\]

\[
\text{Snap fastener}
\]

\[
\text{Having roller means}
\]

\[
\text{Clasp}
\]

\[
\text{Having pivoted members}
\]

\[
\text{Cam type member}
\]

\[
\text{Plural clasps}
\]

\[
\text{And toggle operator}
\]

\[
\text{Spring biased}
\]

\[
\text{Coil}
\]

\[
\text{And cam}
\]

\[
\text{Spring biased jaw}
\]

\[
\text{Circular work engageable}
\]

\[
\text{And pin attachment}
\]

\[
\text{And disconnect means}
\]

\[
\text{Spring biased jaw}
\]

\[
\text{Having intermediate connector allowing movement}
\]

\[
\text{Having gripping configuration on clasp jaw}
\]

\[
\text{Penetrating type}
\]

\[
\text{Having cam}
\]

\[
\text{Having separable jaws}
\]

\[
\text{And penetrating prong}
\]

\[
\text{And pin}
\]

\[
\text{Having separate pin loss prevention means}
\]

\[
\text{Pin coextensive, coplanar, and contiguous with clasp jaw}
\]

\[
\text{Pin coextensive, coplanar, and contiguous with clasp jaw}
\]

\[
\text{Pin forms part of clasp jaw}
\]

\[
\text{Pin}
\]

\[
\text{And pin}
\]

\[
\text{And disconnect means}
\]

\[
\text{Hook and eye type}
\]

\[
\text{And hook}
\]

\[
\text{And hook}
\]

\[
\text{Having intermediate connector allowing movement}
\]

\[
\text{And hook}
\]

\[
\text{Having intermediate connector allowing movement}
\]

\[
\text{And adjustment means}
\]

\[
\text{Hook having locking means}
\]

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CLASS 24 BUCKLES, BUTTONS, CLASPS, ETC.

367.1 Including a button fastening element
368 And penetrating prong
369 Hook
370 And hook
371 Having biasing spring
372 Separately connected
373 Having securing means
374 Sliding
375 Snap type
376 Pivoted
377 Having penetrating prong
378 Including a button fastening element
379 Button fastening element including another fastener element

Penetrating prong

INTERCHANGEABLE BUTTON LOOP AND PIN

90.1 BUTTON WITH FASTENER
90.5 Loss-preventing devices
91 Adjustable
92 Cloth shanks and covers
93 Multiple attachment
94 Deflecting prong or rivet
95 Anvil or plate
96 Integral
97 Hinged leaf
98 Axially rotating
99 Double
100 Sliding
100.5 Sliding bar
101 R Integral or rigid stud
101 B Bent sheet metal (integral)
102 R Link
102 A Integral rubber button, extendable shank
102 E Extensibly connected
102 PL Pivoted leaf
102 SL Releasably locked
102 FC French cuff
102 T Tufting
102 P Integral piece
103 Pin attached
104 Separable
105 Screw
106 Spring
107 Resilient head
108 Resilient socket
109 Rotating head
110 With operating devices
111 Separate thread bar
112 Spiral fastener

113 R Covers
113 MP Metal or plastic caps
114 Pads
114.1 Flexible button
114.2 Swivel button
114.3 Tufting type
114.4 Button with cavity for friction grip fastener
114.05 Button with shank for friction grip fastener
114.6 Heat or adhesive secured type
114.7 Thread or wire through apertured button
114.8 Eye shank type button
114.9 Ornamental type
114.11 For cuff or collar
114.12 Fabric embracing

INTERCHANGEABLE BUTTON LOOP AND PIN

712 DRAWSTRING, LACED-FASTENER, OR SEPARATE ESSENTIAL COOPERATING DEVICE THEREFOR

712.1 Includes separate device for holding drawn portion of lacing
712.2 Device engages tie in lacing
712.3 And fully covers tie
712.4 Device engages element or formation on lacing
712.5 Having relatively movable holding components or surfaces
712.6 With pivotal connection therebetween
712.7 With integral resilient linking structure therebetween
712.8 Formed from wire
712.9 Having lacing wound thereabout or wedged therein
713 With holding means fixedly mounted on lacing
713.1 And forming lacing tips
713.2 Includes lacing holding structure within directing means therefor
713.3 Having diverse shaped directing means for lacing
713.4 Having lacing directing means in particular pattern
713.5 Includes lacing guiding roller within directing means
713.6 Having eyelet type directing means
713.7 With permanently deformed mounting structure
713.8 Mounting structure formed from different material than directing passage

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713.9 Having hook shaped directing means
714 And movable component or surface for closing throat
714.1 Mounted by structure allowing bodily movement thereof
714.2 Formed from wire
714.3 With mounting structure formed from different material
714.4 With permanently deformed mounting structure
714.5 Expanding stud
714.6 Having loop or sleeve shaped directing means
714.7 Entirely formed from flaccid material
714.8 Mounted by structure allowing bodily movement thereof
714.9 Formed from wire
715 With permanently deformed mounting structure
715.1 Loop or sleeve closed when mounted
715.2 Expanding stud
715.3 Having elastic segment in lacing
715.4 Having means covering tip of lacing
715.5 Tasseled
715.6 With plural components
715.7 With permanently deformed mounting structure
114.5 Strap Cable or Pipe Button
115 R Cord and Rope Holders
116 R Chain
116 A Bead chain fasteners
122.3 Sheathed strand
122.6 Plural-strand cord or rope
127 Friction disk
128 Knot engaging
129 R One-piece
130 One-piece
131 R Wire
131 C Cord runs through center of coil
129 B Sheet material
129 A Slack adjuster
129 D Rubber
129 C Wire
129 W Swagged, deformable
132 R Pivoted part
133 Lever tension
134 R Cam lever
134 KA Laterally shifted rope
134 KB Cam engaging or disengaging
134 L Fixed and movable jaws, movable jaw pulled
134 N Link-connected parallel jaws
134 P Dual cam
132 AA Pivotal means with plate aperture
132 WL Jaws locked together by cam, wedge, lever, or screw
135 R Screw clamp
135 A Screw clamp with snubber
135 K Tangential bolt
135 L J-shaped bolt
135 N Bolt perpendicular to cable axis
136 R Sliding part or wedge
136 K Rope looped about movable member
136 L Rope clamped between cone and socket
136 A Sliding ball
136 B Screw actuated
115 A Bendable, ductible
115 F Safety release
115 G Alignable aperture and spring pressed moving element
115 H Loop, adjustable
115 J Snubbers, cleats by dielectric loss
115 K Loop engaging
115 L Ball or roller
115 M Sliding wedge
115 N Helical preform
163 R Buckles
164 Harness
165 Combined buckles and snap hooks
166 Lock
167 Key
168 Clamping
169 One-piece
170 Pivoted part or lever
171 Sliding part or wedge
172 Cross bails
173 Pivoted stud plate
174 Rigid stud
175 Penetrating tongue
175 Guarded
176 One-piece
177 Multiple
178 Pivoted
179 Lever actuated
180 Stud
181 Sliding part or wedge
182 Strap loops and attaching devices
CLASS 24 BUCKLES, BUTTONS, CLASPS, ETC.

183  ..Loop shields
184  .Garment shielded
185  .Combined pressure bar and guard
186  ..Hook attached
187  .Penetrating prong
188  ..One-piece
189  ...Hook attached
190  ..Pivot
191  .Pivot
192  ..Hook attached
193  ..Looped strap
194  .Sliding part of wedge
195  ..Hook attached
196  ..Looped strap
197  .Looped strap
198  ..One-piece
199  ..Hook attached
200  ..Looped strap
163  FC  .Fabric covered
163  K  .Ornamental and/or object supported

PIERCED EARRING FASTENER
453  INDEPENDENT, HEADED, APERTURE PASS-THROUGH FASTENER
454  FASTENER WITH REVOLVING COMPONENT WRAPPING STRUCTURE-TO-BE-SECURED ABOUT FASTENER
455  CLASP, CLIP, SUPPORT-CLAMP, OR REQUIRED COMPONENT THEREOF
456  .Gripping member adapted for tool actuation or release
457  .With specific mounting means for attaching to rigid or semirigid supporting structure or structure-to-be-secured
458  ..For cooperating with aperture in supporting structure or structure-to-be-secured
459  .Dissociable gripping members
460  ..Channel and inserted bar
461  ...Having operator or locking means
462  ...Resilient channel or bar
463  .Having gripping member actuated by fluid force
464  .Having inserted and receiving interlocking members connected by bendable, nonbiasing strap
465  ..Discrete flaccid strap
466  ...With distinct means for preventing separation of members
467  ....Slidably mounted
468  ...With separate flaccid flap or pocket for protecting structure-to-be-secured
469  ...With separate, cavity-blocking gate on receiving member
470  ...Resilient inserted or receiving member
471  ....Inserted or receiving member substantially covered or coated for protection or to promote gripping
472  ....Resilient inserted member
473  ...Having engaging face formed from nonmetallic material
474  ......Having head and neck type engaging face
475  .......Having internal supporting or reinforcing element
476  ........Circular head or neck
477  ...Having wedge shaped, inserted and receiving members
478  ...With specific means for attaching to flaccid strap or supporting strap
479  ....On the inserted member
480  ...Having necked button sliding along length of closed, variable width loop
481  .Having flaccid gripping member
482  ..Formed from elastic material
483  .Encircling gripping member including semirigid band and operator for tightening
484  .Encircling gripping member including semirigid band and means for adjusting girth
485  .With specifically shaped, nongripping, rigid structure for connecting independently operable clasps, clips, or support-clamps
486  .Gripping member face integral with or rigidly affixed to screw-driving portion
487  .Having either discrete flaccid or thin, nonbiasing, integral, connecting hinge
488  .Having equally spaced or continual gripping faces revolving about central axis
489  .Including pivoted gripping member
490  ..Pivot member also slides
491  ...Tapered face
...Pivoting gripping member either supports or coacts with sliding engaging face

Having three or more pivotally connected gripping members

Having toggle operator for moving

Having rigid linking arm pivotally connected to each gripping member

...With extended lever portion

....Having lever end modified for attachment to support

...Pivoted gripping member applies camming force

...Spring or resiliently biased about pivot

...Distinct spring

....Attached solely by spring

....With operator for moving pivoted member

......Camming or wedging element

.......Pivoted or rotated element

.......With position locking-means for gripping members

.....Including pivoted arm

....Having specific surface material or irregularity on or along engaging face

....Having specific handle structure

.....Coil spring

.....Having coil portion coaxial or parallel with pivotal axis

....Flat or leaf spring

..Closed by gravity or weight of structure-to-be-secured

..With operator means for moving pivoted member

....Threaded cylindrical rod and mating cavity

....Camming or wedging element

....Pivoted or rotated element

....With position locking-means for gripping members

...Integral locking-means

...Having inserted and receiving interlocking engaging faces

...Resilient gripping member

...Having specific surface material or irregularity on or along engaging face

Including track or way guided and retained gripping member

...Biased by distinct spring

...With operator for moving guided member

...Threaded cylindrical rod and mating cavity

..Track or way oblique to path of gripping member

..With position locking-means for gripping members

...Integral locking-means

..With specific mounting means for attaching to flaccid supporting structure or structure-to-be-secured

..Having gripping member formed from, biased by, or mounted on resilient member

..Integrally combined, independently operable, diverse clasps, clips, or support-clamps

..With specific means for mounting to flaccid supporting structure or structure-to-be-secured

...Mounting means made entirely from integral wire portion of resilient gripping member

....Wire coiled about flaccid supporting structure

..With operator for moving biased engaging face

....Camming or wedging element

....Encircling sleeve type element

....Pivoted or rotated element

......Element pivots or rotates in plane parallel to plane bisecting opposed engaging faces

.....Elongated element with pivot between cam and handle portions

......For moving engaging face of U-shaped gripping member

..With position locking-means for engaging faces

...Integral locking-means

...Pivoted lock member

..Opposed engaging faces on gripping member formed from single piece of resilient material
CLASS 24 BUCKLES, BUTTONS, CLASPS, ETC.

546  ...Piece totally forms clasp, clip, or support-clamp and has shaped, wirelike, or bandlike configuration with uniform cross section throughout its length
547  ...Opposed faces located in and bias towards common plane in nonuse position
548  ...Resilient gripping member having tightly twisted portion
549  ...Resilient gripping member having coiled portion
550  ...Convolutions of coil form faces
551  ...Relatively movable segments of resilient gripping member contact and cross in nonuse position
552  ...Segments form opposed engaging faces
553  ...Having specific handle structure
554  ...Having specific handle structure
555  ...Terminal end of resilient member having engagement or disengagement enhancing structural modifications
556  ...Having specific surface irregularity on or along engaging face
557  ...Having specific handle structure
558  ...Movably attached to gripping member
559  ...Interlocking faces
560  ...With reinforcing member
561  ...Having specific surface irregularity on or along engaging face
562  ...Corrugated or toothed face
563  ...Clasp, clip, or support-clamp cut or shaped from a single sheet of resilient, uniformly thick, planar material
564  ...Having specific surface material or irregularity on or along engaging face
565  ...Having specific handle structure
566  ...Including resilient biasing wire
567  ...Coiled wire

568  .Having gripping member shifted by operator
569  ..Threaded cylindrical rod and mating cavity
570  .Formed from single rigid piece of material
571  ..Having specific surface irregularity on or along engaging face
572  .SEPARABLE-Fastener or REQUIRED COMPONENT THEREOF (E.G., PROJECTION AND CAVITY TO COMPLETE INTERLOCK)
573  .With third detached member completing interlock (e.g., hook type)
574  ..Quick connect or release (e.g., spring and detent)
575  .For jewelry
576  ..Including eyelet (e.g., shoes)
577  .For key holder
578  ..For tire chain, strap, etc. (e.g., rotatable or sliding spring gate)
579  .For apparel and related accessories
580  ..Button, button related
581  ..Snap (e.g., key hole type)
582  ..Post and receiver (e.g., pin and slot)
583  ..Hook (e.g., within cavity)
584  ..Belt, strap, etc. (e.g., buckle or snap fastener)
585  ..Glove
586  ..Purse, wallet, etc.
587  ..Belt, strap, harness, etc.
588  ..Sliding or rotating element
589  ..Element having key slot
590  .Resilient element (e.g., snap type)
591  ...For upholstery, panel, trim strip, etc. (e.g., spring biased)
592  ...For upholstery, panel, trim strip, etc. (e.g., spring biased)
593  ...Link with pivoted gate
594  ..Hook
595  ..Snap with spring bias (e.g., gate)
596  ...For connecting chains (e.g., opposed pivoted hook)
597  ...For heavy load bearing device (e.g., chain, rope, cable, etc.)
582.14 ....Hain, harness, whiffletree, rein, etc.
583.1 ...For chain, rope, cable, etc.
583.11 ...Coupler with sliding socket to complete interlock
584.1 ...Each mating member having similarly shaped, sized, and operated interlocking or intermeshable face
585.1 ...Zipper-type (e.g., slider)
585.11 ...For garment (e.g., with ribs and grooves interlocking elements)
585.12 ...For container (e.g., bag)
586.1 ...Resilient element
586.11 ...Snap (e.g., identical elements)
587.1 ...Clasp (e.g., spring type)
587.11 ...For jewelry (e.g., buckle type)
587.12 ...For belt or strap
588.1 ...Hook
588.11 ...For belt, strap, etc. (e.g., with pivoted gate locking member)
588.12 ...For apparel
589.1 ...Slot and tab or tongue
590.1 ...Sliding or rotating element
591.1 ...Including member having distinct formations and mating member selectively interlocking therewith
592.1 ...Hook
592.11 ...Multiple catch (e.g., with pivoted gate)
593.1 ...Slot and tab or tongue
593.11 ...Having teeth or serrations (e.g., sliding with respect to each other)
594.1 ...Resilient element (e.g., with spring)
594.11 ...Snap with cavity
595.1 ...Pin, post and receiver
596.1 ...Notched clasp (e.g., with receiving slot)
598.1 ...Projection passes through cavity then moves toward noninserted portion of its member to complete interlock (e.g., snap hook)
598.2 ... Entire projection member forms loop or ring when interlocked
598.3 ... Includes slidable gate closing entrance throat
598.4 ... Hook type projection member
598.5 ... Plural hooks entering opposite sides of same cavity
598.6 ... Hooks formed solely from wire
598.7 ... Noninserted portion of projection member includes movably connected gate for closing access throat
598.8 ... Threaded gate
598.9 ... Revolvably mounted disc shaped gate
599.1 ... Pivotedly connected gate
599.2 ... Gate swings transversely to plane of hook
599.3 ... Gate also slides relative to pivot
599.4 ... Having means biasing gate about pivot
599.5 ... And position locking-means for gate
599.6 ... Includes distinct biasing spring
599.7 ... Coil type spring
599.8 ... Coiled about pivotal axis of gate
599.9 ... Having position locking-means for gate
600.1 ... Locking-means pivotally connected
600.2 ... Locking-means slidably mounted
600.3 ... Gate closes when structure-to-be-secured is tensioned
600.4 ... Track or way guided gate
600.5 ... Having means biasing gate
600.6 ... Guide of gate encircles shank
600.7 ... Cavity in shank forms track or way
600.8 ... With position locking-means for gate
600.9 ... Resilient, self-biased gate
601.1 ... With position locking-means for gate
601.2 ... Gate and hook formed from plastic
601.3 ... Gate and hook formed solely from wire
601.4 ... Gate and hook formed from single piece of sheet metal
601.5 ... Projection pivotally attached to shank or mounting structure
601.6 ... Projection slidably mounted to shank or mounting structure
601.7 ...Projection self-biased towards shank or mounting structure
601.8 ...And formed solely from wire
601.9 ...Cooperating with relatively stationary wire gate
602 ...Interlocking portion actuated or released responsive to preselected condition (e.g., heat, pressure)
603 ...Having electric or fluid powered, actuation or release, of interlock
604 ...Projection having movable connection between components thereof or variable configuration
605 ...With additional, similar projection for engaging different cavity
606 ...And operator therefor
607 ...Including camming or wedging element on projection member
608 ...Pivoting attached element
609 ...Including pivotal connection between projection components
610 ...Component slides relative to connection
611 ...And spring or resilient extension biasing about pivot
612 ...Including slidably guided connection between nonself-biasing projection components
613 ...And distinct spring biasing component
614 ...Including resiliently biased projection component or surface segment
615 ...Requiring manual force applied against bias to interlock or disengage
616 ...Having connected leading edge and separated trailing arms
617 ...Cooperating with cavity having side walls and axially biased component capping end
618 ...Forming total external surface of projection
619 ...And encircling hollow central area
620 ...Having separate mounting means inserted into area
621 ...Plastic deformation of means or surface required for mounting
622 ...Having separate mounting means encompassing cross section of projection
623 ...Having dome-shaped head and expansion slit along side
624 ...And connected surface at tip of head
625 ...Having inserted end formed by oppositely biased surface segments
626 ...Constructed from wire
627 ...Having both resiliently biased and rigid components forming external surface of projection
628 ...Projection member including noninserted spring for engaging and pushing against receiving member
629 ...Receiving member includes either movable connection between interlocking components or variable configuration cavity
630 ...With additional cavity for engaging different projection
631 ...Having common means actuating or releasing interlocking components or surfaces
632 ...And interlocking with independently associated or dissociated projection members
633 ...And operator therefor
634 ...For plural, oppositely shifting, similar interlocking components or segments
635 ...Operator includes camming or wedging element
636 ...Including pivotally connected element on receiving member
637 ...For shifting pivotally connected interlocking component
638 ...Element and component pivot about same axis
639 ...For shifting slidably connected and guided, nonself-biasing interlocking component
640 ...Including slidably connected and guided element on receiving member
For shifting pivotally connected interlocking component

For shifting slidably connected and guided, nonself-biasing, interlocking component

Having pivotally connected interlocking component

Blocking removal of formation on projection from complementary formation on side wall of cavity

And position locking-means therefor

And relatively movable handle therefor

Requiring manual force thereon to interlock or disengage

Plural, oppositely shifting, similar interlocking components

Having aperture therein alignable with parallel access opening

Having interlocking portion thereof housed continuously within cavity

Having cavity with side walls and axially biased component capping end

Having slidably connected, nonself-biasing interlocking component

Blocking removal of formation on projection from complementary formation on side wall of cavity

And position locking-means therefor

And relatively movable handle therefor

Requiring manual force thereon to interlock or disengage

Plural, oppositely shifting, similar interlocking components

Component formed solely by flaccid cord

With nonflaccid component

Having resiliently biased interlocking component or segment

Cavity or projection rotates about axis of cavity to dissociate

Requiring manual force applied against bias to interlock or disengage

And partially blocking separate, nonresilient access opening of cavity

And closed elongated access opening for guiding transverse projection travel after insertion

Nonresilient walls define opening

Formed from wire

And access opening with gapped perimeter for allowing movement of noninserted projection support therepast

Cavity constructed solely from wire

Partially blocking separate, nonresilient, access opening of cavity

And bodily shifted into or out of interlock location by manual force thereon

Formed from wire

Having curved or bent engaging section conforming to contour of projection

Similar, distinct sections

Having distinct sections engaging projection at spaced points

Including separate, nonprojection-engaging spring for biasing

Biased component or segment entirely formed from wire

Having portion of cavity deformed during mounting

And cooperating with separate mounting component

Having axially extending expansion slit along side of cavity

Formed from wire

Having curved or bent engaging section conforming to contour of projection

Similar, distinct sections

Having distinct sections engaging projection at spaced points
CLASS 24 BUCKLES, BUTTONS, CLASPS, ETC.

682.1 ..Means for mounting projection or cavity portion
683 ...Allows bodily movement facilitating interlock
684 ....About pivotal connection
685 ....Includes resilient component separate from portion
686 ...Allows relocation of portion
687 ...Having component of means permanently deformed during mounting operation
688 ....And formed from or fixedly attached to projection or cavity portion
689 .....Cooperates with detached component of means
690 .....Having shape facilitating impaling of mounting surface
691 ....And inserted into or through cavity or projection
692 ....And encircling cavity or projection
693 ...Consisting of thermally fusible substance
694 ...Having threaded formation
695 ...Having specific structure for cooperating with stitching
696 ...Having shape facilitating impaling of mounting surface
697.1 ..Plural distinct cavities or projections
697.2 ...Hook type
698.1 ..Hook-shaped projection member passing through cavity
698.2 ...Formed from single piece of sheet metal
698.3 ...Formed solely from wire
700 ...Cavity having specific shape
701 ...Including closed elongated access opening for guiding transverse projection travel after insertion
702 ...Having access opening with gapped perimeter for allowing movement of noninserted projection support therepast
706 PIN OR SEPARATE ESSENTIAL Cooperating DEVICE THEREFOR
706.1 .With separately operable, manually releasable, nonpenetrating means for mounting (e.g., drapery hook)
706.2 .Having distinct guiding, holding, or protecting means for penetrated portion
706.3 ..Means detachable from or flaccidly connected to pin (e.g., hatpin type)
706.4 ...For pin having plural penetrating portions
706.5 ...Including relatively movable guiding, holding, or protecting components or surfaces
706.6 ....Having operator for moving holding component or surface
706.7 ......Moves pivoting holding component
706.8 .....Moves slidably guided, nonself-biasing, holding component
706.9 ....Having pierceable (e.g., cork) or naturally resilient (e.g., rubber) surfaces
707 .......With pivotal connection therebetween
707.1 .......With slidable connection between nonself-biasing components
707.2 ......Having resiliently biased component or surface
707.3 .........Coiled about longitudinal axis of held portion
707.4 ........And aperture therein alignable with another spaced aperture of means
707.5 .........And nonresilient structure for guiding portion thereto
707.6 ........Including structure for cooperating with formation (e.g., cavity) formed on penetrating portion
707.7 ....For pin having plural penetrating portions
707.8 ......Each independently movable towards and into cooperation with means
707.9 ........Including relatively movable guiding, holding, or protecting components or surfaces
708 ......With connection allowing component to revolve about axis of held penetrating portion
708.1 .......With pivotal connection therebetween
708.2 ........Having position locking means therefor
708.3 .........Spring or resiliently biased
..With slidable connection between nonself-biasing components

..Component slides parallel to axis of held penetrating portion

..Means engages formation formed on penetrating portion

..Having nonresilient and resilient components

..Means formed from single resilient wire

..Means formed from resilient sheet metal

..With independent, spaced, intermediate connections, or formations (e.g., coils), about which portion or means move

#include connection

..With pivotal connection between penetrating portion and means

..Connection also permits sliding movement

..Resiliently biased about connection

..With slidable connection intermediate penetrating portion and means

..Having resilient bridging structure between portion and means

..Means includes structure for cooperating with formation (e.g., cavity) formed on portion

..And penetrating portion formed from wire

..Bridging structure includes elongated nonwire element

..Wire also forms coiled bridging structure about which portion moves

.....Including distinct device for cooperating with coil

.....Having means also formed from same wire

..With cavity for guiding structure-to-be-secured towards penetrating portion (e.g., stocking support)

..Having penetrating portion retractable or of changeable length

.Having interconnected distinct penetrating portions

..Connection allows movement therebetween

..Slidable connection

..Resilient connection

..Formed from common wire

..And pointing in same direction

..Penetrating portion includes relatively movable structure for resisting extraction

..Having specific wire penetrating portion

..Wire curved or bent

..Having distinct head structure

..Movably connected to penetrating portion

..Including slidable connection

..With pivotal connection between penetrating portion and means

..Connection also permits sliding movement

..Resiliently biased about connection

..With slidable connection intermediate penetrating portion and means

..Having resilient bridging structure between portion and means

..Means includes structure for cooperating with formation (e.g., cavity) formed on portion

..And penetrating portion formed from wire

..Bridging structure includes elongated nonwire element

..Wire also forms coiled bridging structure about which portion moves

.....Including distinct device for cooperating with coil

.....Having means also formed from same wire

..With cavity for guiding structure-to-be-secured towards penetrating portion (e.g., stocking support)

..Having penetrating portion retractable or of changeable length

.5. Having interconnected distinct penetrating portions

.6. Connection allows movement therebetween

.7. ..Slidable connection

.8. ..Resilient connection

.9. ..Formed from common wire

11. ..And pointing in same direction

11.1. ..Penetrating portion includes relatively movable structure for resisting extraction

11.2. ..Having specific wire penetrating portion

11.3. ..Wire curved or bent

11.4. ..Having distinct head structure

11.5. ..Movably connected to penetrating portion

.3. Bendable sheet material

.4. ..Watch pintle connected

.5. ..Webbing to tube (lawn chair)

.6. ..Buckle connected

.7. ..End clasp

.8. ..Hook

.9. ..Ring-loop

10. ..Cargo tiedown

11. ..Watch strap

11.1. ..Enlarged end epoxy

Pivoted Edge Stays

Fastener destructively secured by reshaping distortion force (e.g., ductile fastener)

..Distorted structure having shape facilitating impaling

..And distinct fastener structure cooperating with impaled structure

..Detached cooperating structure

..Including plural impaling elements

..Elements form single aperture (e.g., split shank type)

Readily interlocking, two-part fastener requiring either destructive or tool disengagement

..Including additional fastener structure linking parts

Hanger on portable article support for manual attachment thereof to overhead support (e.g., drapery hook)
CROSS-REFERENCE ART COLLECTIONS

900.1 SHIRT COLLAR HOLDERS
901 PENEetrATING-TYPE PAPER FASTENER
902 TUFTING BUTTON FASTENER
903 ARMPIT SHIELD FASTENER
904 GLOVE FASTENER
905 WATCH CHAIN FASTENER (E.G., SWIVEL HOOK)
906 FASTENER FOR ATTACHING BAND TO WATCH OR SIMILAR ARTICLE (E.G., NAME PLATE)
907 PLASTIC HOOK
908 FISHLINE SUPPORTED ATTACHMENT HOOK
909 WINDERS FOR FLEXIBLE MATERIAL
910 ONE-PIECE

FOREIGN ART COLLECTIONS

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or nonpatent literature from subclasses that have been reclassified have been transferred directly to the FOR Collections listed below. These Collections contain ONLY foreign patents or nonpatent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 SEPARABLE-FASTENER OR REQUIRED COMPONENT THEREOF (24/572)

FOR 101 .With third, detached member completing interlock (24/573.1)
FOR 102 .And linking cavities in adjacent parallel panels (24/573.2)
FOR 103 .Third member includes independently engaged hooks for linking spaced cavities (24/573.3)
FOR 104 .And movably connected, noninserted gate for closing access throat of hook (24/573.4)

FOR 105 .Third member includes relatively movable, separate components (24/373.5)
FOR 106 .For parachute harness (24/573.6)
FOR 107 .Third member consists of unitary elongated element (24/573.7)
FOR 108 .Each mating member having similarly shaped, sized, and operated interlocking face (24/575)
FOR 109 .Including elongated face having identical, parallel cross sections throughout its length (24/576)
FOR 110 .Including elongated face having varying, parallel cross sections throughout its length (24/577)
FOR 111 .Including complementary shaped and alternately useable interlocking faces (24/578)
FOR 112 .Single piece hook-shaped member (e.g., mating garment hooks) (24/579.1)
FOR 113 .Including member having distinct formations and mating member selectively interlocking therewith (24/580)
FOR 114 .Formations positioned along wall forming mating-member-guiding cavity (24/581)
FOR 115 .Formations member having movably attached or biased interlocking structure (24/582)
FOR 116 .Formations member having movably attached or biased interlocking structure (24/583)
FOR 117 .Selectively interlocking member having movably attached or biased interlocking component (24/584)
FOR 118 .And cavity for guiding movement of formations (24/585)
FOR 119 .Having mounting means allowing repositioning of member for facilitating interlock (24/586)
FOR 120 .Including member having elongated, resilient, interlocking face with identical, parallel cross sections throughout its length (24/587)

FOR 121 .Including receiving member having cavity and mating member having insertable projection guided to interlock thereby (24/588)

FOR 122 ..Having divergent interlock means distinct from cavity or projection of its member (24/589)

FOR 123 ..Projection or cavity rotates about axis of cavity access opening to interlock (24/590)

FOR 124 ...Having projection rotatably connected to its member (24/591)

FOR 125 ....And operator therefor (24/592)

FOR 126 ....And position locking-means therefor (24/593)

FOR 127 .....Including notch or hump on projection axially biased by spring (24/594)

FOR 128 .....Including radially biased element engaging against relatively rotating surface at connection (24/595)

FOR 129 ....And spring for axially biasing projection (24/596)

FOR 130 ...Receiving member includes either movable connection between cavity components or variable configuration cavity (24/597)

DIG 30 SEPARABLE-FASTENER OR REQUIRED COMPONENT THEREOF

DIG 31 ..With third, detached member completing interlock

DIG 32 ..And linking cavities in adjacent parallel panels

DIG 33 ..Third member includes independently engaged hooks for linking spaced cavities

DIG 34 ...And movably connected, noninserted gate for closing access throat of hook

DIG 35 ..Third member includes relatively movable, separate components

DIG 36 ...For parachute harness

DIG 37 ..Third member consists of unitary elongated element

DIG 38 .Each mating member having similarly shaped, sized, and operated interlocking face

DIG 39 ..Including elongated face having identical, parallel cross sections throughout its length

DIG 40 ..Including elongated face having varying, parallel cross sections throughout its length

DIG 41 ..Including complementary shaped and alternately useable interlocking faces

DIG 42 ..Single piece hook-shaped member (e.g., mating garment hooks)

DIG 43 .Including member having distinct formations and mating member selectively interlocking therewith

DIG 44 ..Formations positioned along wall forming mating-member-guiding cavity

DIG 45 ...Formations member having movably attached or biased interlocking structure

DIG 46 ..Formations member having movably attached or biased interlocking structure

DIG 47 ..Selectively interlocking member having movably attached or biased interlocking component

DIG 48 ...And cavity for guiding movement of formations

DIG 49 ..Having mounting means allowing repositioning of member for facilitating interlock
DIG 50 . Including member having elongated, resilient, interlocking face with identical, parallel cross-sections throughout its length

DIG 51 . Including receiving member having cavity and mating member having insertable projection guided to interlock thereby

DIG 52 . Having divergent interlock means distinct from cavity or projection of its member

DIG 53 . Projection or cavity rotates about axis of cavity access opening to interlock

DIG 54 . Having projection rotatably connected to its member

DIG 55 ....And operator therefor

DIG 56 ....And position locking-means therefor

DIG 57 .....Including notch or hump on projection axially biased by spring

DIG 58 .....Including radially biased element engaging against relatively rotating surface at connection

DIG 59 ....And spring for axially biasing projection

DIG 60 ... Receiving member includes either movable connection between cavity components or variable configuration cavity