

| | | | |
|------|---|--------|---|
| 2.1 | BUSHING | 40 | .Rigid wheel supports |
| 2.2 | .Providing a restricted or insulated environment (i.e., sealable) for internal elements | 41 | .Scrapers |
| 2.3 | .Bung or tap | 42 R | .Sliding |
| 2.4 | ..Threaded | 42 T | ..For tubular leg |
| 2.5 | .Providing strain relief | 43 | .Sockets |
| 4 | CARPET FASTENERS | 44 | .Spring supported |
| 5 | .Combined fasteners and stretchers | 18 A | .Inclined axle |
| 6 | .Hook | 18 CG | .Caster guard |
| 7 | .Moldings | 18 B | .Obstruction climbing aid |
| 8 | .Rug | 48.5 | THERMALLY RELEASED CHECK OR CLOSER |
| 10 | .Stair | 49 | CHECKS AND CLOSERS |
| 11 | ..Risers | 51 | .Liquid |
| 12 | ..Rods | 52 | ..Concentric spring chamber |
| 13 | ...Catches | 53 | ...Cam |
| 14 |Sliding | 54 | ..Hinge |
| 15 |Swinging | 55 | ...Floor pivot |
| 9 | .Sliding | 56 | ..Multiple piston |
| 16 | .Strips | 57 | ..Oscillating cylinder |
| 17 | .Swinging | 58 | ..Oscillating piston |
| 17.1 | CARPET STIFFENER OR ANTI-SLIP DEVICE, PER SE | 59 | ..Side spring chamber |
| 18 R | CASTERS | 60 | ...Cam |
| 19 | .Adjustable | 61 | ..Spring and flexible link |
| 45 | .Wheels | 62 | ..Spring and gear |
| 46 | ..Antifrictionally mounted | 66 | .Pneumatic |
| 47 | ..Multiple | 67 | ..Flexible link |
| 48 | ...Antifrictionally swivelled | 68 | ..Hinge |
| 20 | .Antifrictionally swivelled | 69 | ..Spring and gear |
| 21 | ..Ball | 70 | ..Spring and lever |
| 22 | ..Cylinder | 63 | .Spring and flexible link |
| 23 | ...Pivoted | 64 | .Spring and gear |
| 24 | .Ball | 65 | .Spring and lever |
| 25 | ..Antifrictionally mounted | 50 | .Hinge |
| 26 | ...Ball | 86.1 | GATE HANGERS |
| 27 | ...Cylinder | 86.2 | .Sliding and swinging |
| 28 | ..Pivoted | 87 R | PANEL HANGERS, TRAVELERS AND/OR TRACKS |
| 29 | .Bracket supports | 87.2 | .With flexible panel attaching means |
| 30 | .Detachable | 87.4 R | ..Covered, hollow or slotted track |
| 32 | .Leg elevators | 87.6 R | ...With antifriction means |
| 33 | ..Sliding | 87.6 W | ...Wood track |
| 34 | ..Swinging | 87.4 W | ...Wood track |
| 35 R | .Locked | 87.8 | ..With antifriction means |
| 35 D | ..Shimmy dampening | 88 | .Ball |
| 36 | .Lubricators | 89 | .Cylinder |
| 37 | .Pintles | 90 | .Guide brackets |
| 38 | .Pintle retainers | 91 | .Guide rollers |
| 39 | ..Frame | 92 | .Link and lever |
| 31 R | .Frame | 93 R | .Sliding shoe |
| 31 A | ..Single leg frame or fork | 93 D | ..Drapery supports |
| | | 94 R | .Track and bracket |

CLASS 16 MISCELLANEOUS HARDWARE (E.G., BUSHING, CARPET FASTENER,
 CASTER, DOOR CLOSER, PANEL HANGER, ATTACHABLE OR ADJUNCT HANDLE,
 HINGE, WINDOW SASH BALANCE, ETC.)

| | | | |
|-------|---|-----|---|
| 94 D | ..Drapery supports | 418 | ...Swinging |
| 95 R | .Covered, hollow or slotted track | 419 | ..Loop type |
| 95 W | ..Wood | 420 | ..Ring type |
| 95 D | ..Drapery supports | 421 | .Handle having mounted grip means (e.g., bicycle handlebar grips, etc.) |
| 95 DW | ..Wood | | |
| 96 R | .Tracks | | |
| 96 D | ..Drapery supports | 422 | .Detachable handle |
| 96 L | ..Laminated | 423 | ..For battery |
| 97 | .Wheel mounts | 424 | ..For casket |
| 98 | ..Antifrictionally mounted wheels | 425 | ..For container |
| 99 | ..Door elevating | 426 | ..Auxiliary handle |
| 100 | ..Floor | 427 | ..Extension |
| 101 | ..Reciprocating track | 428 | ..Cord or rope related |
| 102 | ..Traveling wheel | 429 | .Extensible handle |
| 103 | ..Swinging | 430 | .Handle with ergonomic structure (e.g., finger engagement structure such as indents, grooves, etc.) and handle user-interaction (human engineering) enhancements such as improved handle dimensions and handle positioning |
| 104 | ..Swiveling | | |
| 105 | ..Vertically adjustable | | |
| 106 | ..Wheel and guide roller | | |
| 107 | .Wheels | | |
| 87 B | .Overlapping doors, common track | | |
| 108 | FERRULES, RINGS, AND THIMBLES | | |
| 109 | .Ring ferrules | | |
| 110.1 | HANDLE, HANDLE COMPONENT, OR HANDLE ADJUNCT | 431 | INSULATED HANDLE |
| | | 432 | .Handwheel |
| 111.1 | .Having receptacle within | 433 | .Knob type |
| 112.1 | .For plow | 434 | .Wire type |
| 113.1 | .Length adjustable pull handle for luggage or luggage cart (e.g., wheeled suitcase handle, etc.) | 435 | .Unshaped or unattached pad |
| | | 436 | .Bar-type handle |
| | | 437 | ..For lawnmower |
| | | 438 | ..Swinging |
| 114.1 | .Luggage-type (loop style) handgrip for carrying (e.g., suitcase, handbag, briefcase, shopping bag, package, etc.) | 439 | ...Casket handle |
| | | 440 | .Braced handle |
| | | 441 | .Knob-type handle |
| | | 442 | ..With flexible suspending means |
| 405 | ..Extensible handle | 443 | .Lift |
| 406 | ..Detachable handle | 444 | .Loop-type handle |
| 407 | ..Welded or adhesively attached handle | 445 | ..Swinging |
| | | 446 | .Ring-type handle |
| 408 | ..Swinging handle | 221 | HINGE |
| 409 | ..With means permanently connecting the handle to a carried article | 222 | .Including frangible or fusible portion |
| | | 223 | .With diverse art portion or attachment |
| 410 | ..With means permanently connecting the handle to a carried article | 224 | .Ball and socket |
| | | 225 | .Pliant or elastic hinge |
| 411 | ..With carrier handle including a user enhanced grip attachment | 226 | ..Metallic |
| | | 227 | ..Snap or X hinge |
| 412 | .Door handle | 228 | .Eyeglass hinge |
| 413 | ..Detachable handle | 229 | .Retractable pintle |
| 414 | ..Knob type | 230 | ..Latch hinge |
| 415 | .Drawer pull | 231 | .Latch hinge |
| 416 | ..Lift | 232 | ..Resilient securing means |
| 417 | ..Knob type | | |

| | | | |
|-----|--|-----|--|
| 233 | .Including lever for shifting one member of hinge relative to another | 262 |Pintle removable from remainder of hinge |
| 234 | .Having staggered leaves | 263 |And additional connector for pintle or separate pintle sections |
| 235 | .Including adjustment for changing relative orientation of hinged members | 264 |Screw-threaded connector |
| 236 | ..Having plural independent adjustments | 265 | ...Axially shifting hinge sections |
| 237 | ...All rectilinear | 266 | ...At specific angular orientation of hinge sections |
| 238 |Including screw-operated means to move hinged members | 267 | ...Hook and pin |
| 239 | ..Pivotal adjustment | 268 | ...Hook in aperture |
| 240 | ...Including screw-operated means to move hinged members | 269 | ...Hook to hook |
| 241 |About hinge axis | 270 | ..And discrete movable or removable connector to fasten one hinge section to another |
| 242 | ..Including means to move hinged members | 271 | ..By relatively sliding connection (e.g., dovetail) |
| 243 | ...Along or parallel to hinge axis | 272 | ...Including receiving connector attachable to hinged member |
| 244 |Including threaded hinge pin | 273 | .Having means to reduce friction between hinge parts |
| 245 | ...Screw-operated | 274 | ..By fluid lubricant |
| 246 |To shift plate toward or away from hinged member | 275 | ..Ball or roller bearing |
| 247 | ..Having adjustable spacer between leaf and hinged member (e.g., shim) | 276 | ...Circularly distributed balls or rollers |
| 248 | ..Adjustable along or parallel to hinge axis | 277 | .Resiliently biased hinge |
| 249 | ..Having interdigitated surfaces or slot for hinge-to-member fastener | 278 | ..Including means to render spring ineffective through all or a portion of swing |
| 250 | .Having cover | 279 | ...Comprising manipulatable element or portion |
| 251 | ..Leaf cover | 280 | ..Biased from either direction toward neutral position (e.g., double acting) |
| 252 | .Having clamp for attaching hinge to hinged member | 281 | ...Helical spring transverse to hinge axis |
| 253 | ..Circumferential clamp | 282 | ...Plural hinge axes (e.g., multiple pintle) |
| 254 | .Having means to facilitate assembly and disassembly of hinge sections to join or disjoin hinged members | 283 |And barrels for helical springs on separate axes |
| 255 | ..Resiliently biased hinge | 284 | ...Resiliently biased rolling or sliding cam surface |
| 256 | ...Having helical spring along hinge axis | 285 | ...By helical spring along hinge axis |
| 257 | ..Resiliently biased retaining means | 286 | ..Having transverse helical spring or elastic strip |
| 258 | ..Having discrete latch and spring to slide or pivot latch | 287 | ...Plural hinge axes (e.g., multiple pintle) |
| 259 | ...Discrete retaining means for pivotal contacting surfaces | 288 |Four or more axes |
| 260 | ..Separation of pivotal contacting surfaces | 289 | ...To counterbalance weight of hinged member (e.g., closure biased to open position) |
| 261 | ...Having movable or removable connector | 290 |Including pivoted coaxial spring retaining bar |

CLASS 16 MISCELLANEOUS HARDWARE (E.G., BUSHING, CARPET FASTENER,
 CASTER, DOOR CLOSER, PANEL HANGER, ATTACHABLE OR ADJUNCT HANDLE,
 HINGE, WINDOW SASH BALANCE, ETC.)

| | | | |
|-----|---|-----|--|
| 291 | ...Over-center spring or linkage travel (e.g., "holdback hinge") | 318 | ...Having aperture for slidably receiving pintle (e.g., camming knuckle) |
| 292 | ...Having means to hold hinged members against pivotal movement about hinge axis (i.e., catch) | 319 | .Including means to hold or retard hinged members against pivotal movement (e.g., catch) |
| 293 | ..Over-center spring or linkage travel (e.g., "holdback hinge") | 320 | ..Magnetic |
| 294 | ...Plural hinge axes | 321 | ..Resiliently biased catch |
| 295 | ..Coil spring having axis along or parallel to hinge axis | 322 | ...Having spring force adjustment |
| 296 | ...Including camming or sliding surface to deflect spring perpendicularly to the hinge axis | 323 | ...Including toggle linkage |
| 297 | ..Having means to hold hinged members against pivotal movement about hinge axis (e.g., catch) | 324 | ...Having discrete manipulatable release means (e.g., lever) |
| 298 | ..Having force adjustment | 325 |Including cam or eccentric |
| 299 | ...Rotatable spring-engaging collar | 326 |Sliding release means or lever-actuated sliding catch |
| 300 |Having detention aperture or protuberance | 327 | ...Sliding |
| 301 |Having tool-receiving aperture | 328 |Movement along or parallel to hinge axis |
| 302 | ..Plural hinge axes (e.g., multiple pintle) | 329 |Interdigitated or plural sockets |
| 303 | ..Having axially biased camming surface | 330 |Opposed interdigitated sliding collars on hinge axis |
| 304 | ..Coil | 331 |And catch receiving socket |
| 305 | ...Plural coils | 332 |And catch receiving socket |
| 306 | ...To counterbalance weight of hinged member (e.g., horizontal closure biased to open position) | 333 | ...Pivoted |
| 307 | ...On pintle | 334 | ...Plural alternately useable detents |
| 308 | ..Torsion spring | 335 | ...Spring arm |
| 309 | .Gravitating hinge having vertical axis | 336 |Plural opposed arms |
| 310 | ..Having lift rod | 337 | ..By friction |
| 311 | ..Having plural spaced hinge axes | 338 | ...Screw-threaded adjustment |
| 312 | ..Including cam surface and follower | 339 |Along or parallel to hinge axis |
| 313 | ...And rolling element | 340 |Threaded pintle |
| 314 |Between opposing surfaces | 341 | ...Cam or wedge actuator |
| 315 |And detent in cam surface | 342 | ...On hinge pin or between surfaces surrounding hinge axis |
| 316 | ...On axially twisted or helically fluted element | 343 | ..Pivoted |
| 317 | ..Including means to hold hinged members against pivotal movement | 344 | ...Plural alternately useable detents |
| | | 345 | ..And sliding |
| | | 346 | ...Serially connected pivoted arms between leaves (e.g., brace) |
| | | 347 | ...About axis along or parallel to hinge axis |
| | | 348 | ..By transversely moving pin in slot |
| | | 349 | ..Having discrete manipulatable release means (e.g., lever operated) |
| | | 350 | ..By shifting hinged members |
| | | 351 | ...Along hinge axis |
| | | 352 | ..Sliding |

| | | | |
|-----|---|------|---|
| 353 | ...Along or parallel to hinge axis | 383 | ..By expandable connector |
| 354 | .Including toothed gear | 384 | ..Self-penetrating fastener |
| 355 | .Comprising nested open curved portions attached to hinged members | 385 | .Specified material |
| 356 | ..Including hinge pin | 386 | .Specific pintle structure |
| 357 | .Including transversely moving pin in slot | 387 | .Specific leaf structure |
| 358 | ..Plural noncollinear pins and slots | 388 | .Having prongs or cooperating structure on leaf |
| 359 | ...Parallel slots | 389 | ..Angular leaf sections |
| 360 | ..Having pin fixed to pivoted arm or plate | 390 | ...Parallel sections |
| 361 | ..Hinge pin movable along slot | 391 | ...Coplanar sections |
| 362 | .Including sliding surfaces to permit relative translation of hinged members | 392 | ...Including planar section perpendicular to hinge axis |
| 363 | ..And stop or abutment for pivotal movement | 71 | CLOSERS |
| 364 | ..Movement transverse to hinge axis | 78 | .Spring and flexible link |
| 365 | .Three-hinged members | 79 | .Spring and gear |
| 366 | .Having plural hinge axes (e.g., multiple pintle) | 80 | .Spring and lever |
| 367 | ..Having transverse or skewed axes | 72 | .Spring |
| 368 | ..Connected by serially arranged pivoted links between hinged members | 73 | ..Bow |
| 369 | ...Plural sets of serially arranged pivoted links | 74 | ..Rubber |
| 370 | ..Four or more axes | 75 | ..Torsional |
| 371 | ..Including stop or latch | 76 | ...Coil |
| 372 | .Including laminated leaf | 77 | ..Volute |
| 373 | .Wire hinge | 81 | .Weight |
| 374 | .Having stop or abutment | 82 | CLOSURE CHECKS |
| 375 | ..Adjustable or resilient | 83 | .Inertia |
| 376 | ..Comprising relieved axially opposed relatively rotating surfaces | 84 | .Pneumatic |
| 377 | ..Comprising platelike bearing portion curved about hinge axis | 85 | .Spring |
| 378 | .Hinge axis passes through hinged member (e.g., floor hinge) | 86 R | ..Rubber |
| 379 | ..Pintle or pivot concealed in hinged member | 86 A | ...Rubber cushioned |
| 380 | .Including means to retain pintle in hinge (e.g., tamper proof, nonrising pintle, etc,) | 86 B | ...Multiple or opposed buffer surfaces |
| 381 | ..Threaded or slotted pintle or knuckle | 86 C | ...Link type |
| 382 | .Including means to fasten leaf to member | 193 | SASH BALANCES |
| | | 194 | .Cord and counterweight |
| | | 196 | .Sash and cord |
| | | 197 | .Spring |
| | | 198 | ..Drum and cord |
| | | 199 | ..Friction roller |
| | | 200 | ..Lever |
| | | 201 | ..Rack and pinion |
| | | 195 | .Rack and pinion |
| | | 202 | SASH-CORD FASTENERS |
| | | 203 | .Bendable |
| | | 204 | .Chain |
| | | 205 | .Clamps |
| | | 206 | .Hooks |
| | | 207 | .Knot |
| | | 208 | .Slack-cord holders |
| | | 209 | .Weight |
| | | 210 | SASH-CORD GUIDES |
| | | 215 | .Wheel and casing |
| | | 211 | .Casings |
| | | 212 | ..Sheet metal, single piece |
| | | 213 | .Multiple wheel |

CLASS 16 MISCELLANEOUS HARDWARE (E.G., BUSHING, CARPET FASTENER, CASTER, DOOR CLOSER, PANEL HANGER, ATTACHABLE OR ADJUNCT HANDLE, HINGE, WINDOW SASH BALANCE, ETC.)

| | | | |
|---|---|---------|---|
| 214 | .Sliding | FOR 101 | .Counterbalanced (16/1 C) |
| 216 | SASH WEIGHTS | FOR 102 | BRUSHING OR LINING THIMBLES (16/2) |
| 217 | .Composite | FOR 103 | .Wooden receptacle (16/3) |
| 218 | .Sectional | FOR 104 | HANDLES (16/110 R) |
| 219 | .Weight and wheel | FOR 105 | .Receptacle (16/110.5) |
| 220 | WINDOW-BEAD FASTENERS | FOR 106 | .Bar (16/111 R) |
| 400 | COUNTERBALANCE DEVICE, PER SE | FOR 107 | ..Swinging (16/112) |
| 401 | .Spring | FOR 108 | ..Lawn mower (16/111 A) |
| 402 | DOOR ESCUTCHEON OR SIMILAR ELEMENT | FOR 109 | .Braces (16/113) |
| 403 | PAPER WEIGHT | FOR 110 | .Detachable (16/114 R) |
| 404 | MISCELLANEOUS ELEMENT OR ATTACHMENT | FOR 111 | ..Pot (16/114 A) |
| | | FOR 112 | ..Cord (16/114 B) |
| | | FOR 113 | .Extensible (16/115) |
| | | FOR 114 | .Insulated (16/116 R) |
| | | FOR 115 | ..Handwheels (16/117) |
| | | FOR 116 | ..Knob (16/118) |
| | | FOR 117 | ..Loop (16/119) |
| | | FOR 118 | ..Wire (16/120) |
| | | FOR 119 | ..Unshaped and unattached pads (16/166 A) |
| | | FOR 120 | .Knob (16/121) |
| | | FOR 121 | ..Flexible suspending means (16/122) |
| | | FOR 122 | ..Swinging (16/123) |
| | | FOR 123 | .Lifts (16/124) |
| | | FOR 124 | .Loop (16/125) |
| | | FOR 125 | ..Swinging (16/126) |
| | | FOR 126 | .Ring (16/127) |
| | | FOR 127 | .Pot or pan (16/110 A) |
| <u>CROSS-REFERENCE ART COLLECTIONS</u> | | | |
| 900 | HANDLE WITH ANGULARLY ADJUSTABLE COMPONENT | | |
| 901 | HANDLE WITH MANIPULATION THEREOF BY HUMAN BODY PART OTHER THAN THE HAND | | |
| 902 | UNITARY HANDLE COMPOSED OF DIFFERENT COOPERATING MATERIALS | | |
| 903 | HANDLE WITH DIVERSE ART ENHANCEMENT (ILLUMINATOR, HEATER, ETC.) | | |
| 904 | HANDLE MEANS HAVING SANITARY CHARACTERISTIC (E.G., TO PREVENT TRANSMISSION OF GERMS, ETC.) | | |
| 905 | .Toilet seat lifter | | |
| 906 | LIGHT HANDLE COVER | | |

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

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

FOR 100 **MISCELLANEOUS (16/1 R)**

DIGESTS

| | |
|--------|---|
| DIG 1 | OVERHEAD DOOR |
| DIG 2 | PAINT GUARD, KICK GUARD |
| DIG 3 | HOLDDOWN |
| DIG 4 | MIRROR MOUNT |
| DIG 5 | PUSH AND PULL BAR |
| DIG 6 | ANTI-RATTLE |
| DIG 7 | DOOR OPENING APPARATUS |
| DIG 8 | WEIGHTS |
| DIG 9 | HYDRAULIC ACTUATED CHECKS, CLOSERS |
| DIG 10 | SPRING ACTUATED CHECKS AND CLOSERS |
| DIG 11 | FIREPLACE SCREEN |
| DIG 12 | HAND GRIPS, PREFORMED AND SEMI-PERMANENT |
| DIG 13 | PLASTIC HINGE |
| DIG 14 | MAGNETIC HINGE |
| DIG 15 | BATTERY HANDLES |
| DIG 16 | WINDOW BRAKES, COUNTERBALANCES |

CLASS 16 MISCELLANEOUS HARDWARE (E.G, BUSHING, CARPET FASTENER, CASTER, DOOR CLOSER, PANEL HANGER, ATTACHABLE OR ADJUNCT HANDLE, HINGE, WINDOW SASH BALANCE, ETC.)

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DIG 17 **CHECKS AND CLOSERS, HOLDING MEANS**
DIG 18 **COMPOSITION HANDLES**
DIG 19 **CAST OR MOLDED HANDLES**
DIG 20 **DOOR BRAKES (TRACK OR GUIDEWAY)**
DIG 21 **CHECKS, CLOSERS, CHECK VALVE
CONSTRUCTION**
DIG 22 **EXPANSION BOLT**
DIG 23 **REVERSIBLE**
DIG 24 **HANDLE FASTENING MEANS**
DIG 25 **HANDLE FASTENING MEANS, CLAMP
BAND**
DIG 26 **HEADLIGHT HINGE**
DIG 27 **BEARINGS**
DIG 28 **MATTRESS HANDLE**
DIG 29 **NESTING HINGE LEAVES**
DIG 30 **KNOB, CONTROL LEVER**
DIG 31 **PULLEY (DOOR GUIDES AND HANGERS)**
DIG 32 **DOOR LATCH**
DIG 33 **RUBBER SLEEVE BEARINGS AND HINGES**
DIG 34 **ECCENTRIC ADJUSTMENTS**
DIG 35 **SKIDWAYS**
DIG 36 **SPRING**
DIG 37 **NUT LOCK**
DIG 38 **LAWN MOWER TYPE TONGUE AND CROSS
ARM**
DIG 39 **ADJUSTMENT MEANS**
DIG 40 **ATTACHING MEANS**
DIG 41 **COUPLING (HANDLE, ROD, SHAFT)**
DIG 42 **METHODS (MISC.)**
DIG 43 **HINGE MOUNTING BRACKET**

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CLASS 16 MISCELLANEOUS HARDWARE (E.G., BUSHING, CARPET FASTENER, CASTER, DOOR CLOSER, PANEL HANGER, ATTACHABLE OR ADJUNCT HANDLE, HINGE, WINDOW SASH BALANCE, ETC.)