

CLASS 30, CUTLERY**SECTION I - CLASS DEFINITION**

(1) This is the broad generic class for cutting implements including those for cutting by a sharp point, which are manipulable by hand so as to be movable in their entirety relative to the work during the cutting operation as distinguished from moving the work relative to the cutter. Such implements may be power operated and the motive power means may be built into the structure of the cutting implement.

(2) This class also includes some special machines which are not hand manipulable, as above defined, namely, special machines and fixed cutters in which the work moves relative to the machine or cutter, since these structures are too closely related to the hand cutters to separate; see necked receptacle seal cutters, can openers, carton openers, cigar tip cutters, cord cutters, and segmenters. (See Subclass References to the Current Class, below.)

(3) This class also includes hand manipulable scrapers having a sharpened scraping or cutting edge.

(4) This class also includes culinary and table forks and spoons due to their close relation to knives in use and manufacture.

(5) Many hand manipulable cutters under the above definition have not been placed in this class. Their location is set forth in the notes appended to the definitions of this class and the subclasses thereunder.

(6) Many hand manipulable instruments having structure for cutting and in addition structure for performing other functions, such that the combination is restricted to some special art use, are not in this class but with the appropriate art class, as set forth in References to Other Classes, below.

SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS

Search Notes fall into the following categories:

(1) KNIVES: Hand manipulable.

See Subclass References to the Current Class, below, and References to Other Classes, below.

(2) ABRADING MACHINE OR TOOL:

See Subclass References to the Current Class, below.

(3) BORING OR DRILLING MACHINES AND IMPLEMENTS:

(4) CUTTING BY HEAT:

(5) CHISELS:

(6) FILES AND RASPS:

(7) PLANING OR SHAVING MACHINES AND IMPLEMENTS:

(8) SAWS:

(9) TOOL HANDLES AND FASTENINGS THEREFOR:

(10) TOOL CLASSES:

(11) OTHER MAIN SEARCH CLASSES:

Attention is directed to classes comprised largely of cutting machines. See References to Other Classes, below.

For machines and implements having cutting features and in addition other structure limiting them to the art use, see References to Other Classes, below.

For Cutlery designs see References to Other Classes, below.

(12) Miscellaneous notes and index to all notes to the class definition:

See References to Other Classes, below.

SECTION III - SUBCLASS REFERENCES TO THE CURRENT CLASS

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 1.5, for necked receptacle seal cutters.
- 2, for carton openers.
- 35+, for the combination of a razor of this class with an accessory sharpener therefor.
- 109+, for cigar tip cutters.
- 114, for segmenters.
- 123 and 408, for knives combined with other things including other forms of cutlery.
- 138+, for the combination of a cutter device, generally, with an accessory sharpener therefor.

140, search this subclass and notes thereunder.
 143 and 151+, for pocket knives and other knives foldable or retractable into a handle or otherwise sheathed.
 165, 272.1 through 321, and 329 through 357 for other types of knives.
 168, search this subclass and notes thereunder.
 166.3, search this subclass and the notes thereunder.
 290 and 296.1, for cord cutters.
 340, search this subclass and the notes thereunder.
 400+, for can openers.

SECTION IV - REFERENCES TO OTHER CLASSES

SEE OR SEARCH CLASS:

- 7, Compound Tools, subclasses 118+ and 167+, when combined with some tool other than a tool defined as coming within this class (30). Pocket knives and other knives foldable or retractable into a handle or otherwise sheathed are in Class 7. See (1) KNIVES: Hand manipulable.
- 132, Toilet, subclasses 75.6 and 76.4 for a manicuring abrader, file, or buffer. See (2) ABRADING MACHINE OR TOOL:
- 451, Abrading, for a tool which cuts by the abrasive action of a natural cutting media (e.g., the sharp edges of randomly positioned crystals) as distinguished from an "artificial" cutting edge such as is formed on a file, milling tool, knife, shear, etc. Class 30 takes a blade holder designed to hold a specific blade relative to a stone or strop, generally. Class 451 takes a blade holder, generally; and takes a blade holder designed to hold a specific blade relative to a stone or strop only when including a "special feature" which renders the holder unsuitable for use with a general purpose knife. Examples of a "special feature" are: (1) Means for reversing a blade relative to a strop or abrading stone, (2) An opening or guide in a blade support or guide to determine the relationship of the blade to a strop or stone, (3) Means at or in front of the cutting edge to prevent improper contact between a blade edge and a strop or stone. Search particularly subclasses 419+ for an abrading device intended to be attached to a cutting machine where no significant feature of the cutlery device is claimed. Search subclasses 45+ for a process of sharpening a razor, knife, or scissors. See (2) ABRADING MACHINE OR TOOL.
- 29, Metal Working, particularly subclass 26. See (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 79, Button Making, particularly subclasses 6, 11 and 14. See (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 144, Woodworking, see (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 175, Boring or Penetrating the Earth, see (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 299, Mining or In Situ Disintegration of Hard Material, appropriate subclass. See (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 300, Brush, Broom, and Mop Making, particularly subclass 3. See (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 408, Cutting by Use of Rotating Axially Moving Tool, appropriate subclasses, for methods, apparatus, implements, or tools for cutting in the manner of that class. See (3) BORING OR DRILLING MACHINES AND IMPLEMENTS.
- 62, Refrigeration, subclasses 320+ for refrigerating means or a refrigerated mold having means for comminuting or cutting the product. See (4) CUTTING BY HEAT.
- 148, Metal Treatment, particularly subclass 194 for processes of chemical-heat removing (e.g., flames cutting, etc.) or burning (i.e., oxidizing) of a metal workpiece. See (4) CUTTING BY HEAT.
- 175, Boring or Penetrating the Earth, subclasses 11+ for processes or means for earth boring or penetrating by directly applying heat to fluidize or comminute the material of the earth. See (4) CUTTING BY HEAT.
- 219, Electric Heating, subclasses 68+ and 384 for cutting or disintegrating by the use of electric energy applied to the workpiece. See (4) CUTTING BY HEAT.
- 266, Metallurgical Apparatus, subclasses 48+. See (4) CUTTING BY HEAT.
- 12, Boot and Shoe Making, subclasses 41.7 and 104.5. See (6) FILES AND RASPS.
- 29, Metal Working, subclass 76.1. See (6) FILES AND RASPS.
- 132, Toilet, subclasses 75.6 and 76.4. See (6) FILES AND RASPS.
- 168, Farriery, subclasses 48.1+. See (6) FILES AND RASPS.
- 433, Dentistry, subclass 144. See (6) FILES AND RASPS.

- 29, Metal Working, particularly subclass 30. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 125, Stone Working, particularly subclass 9. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 144, Woodworking, particularly subclasses 114.1+ for a woodworking planer, subclasses 2.1+ for a special woodworking machine, and subclasses 1.1+ for a combined woodworking machine. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 147, Coopering, particularly subclass 33. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 241, Solid Material Comminution or Disintegration, appropriate subclasses for shaving machines for reducing a solid mass to smaller particles. See section 12 of the main class definition of Class 241 for the line. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 299, Mining or In Situ Disintegration of Hard Material, subclass 34.01 and see the search notes therein for a hard material disintegrating machine having a planer type cutter. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 409, Gear Cutting, Milling, or Planing, subclasses 288+. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 470, Threaded, Headed Fastener, or Washer Making: Process and Apparatus, appropriate subclass. See (7) PLANNING OR SHAVING MACHINES AND IMPLEMENTS.
- 7, Compound Tools, the miscellaneous class for combinations of two or more tools. See (10) TOOL CLASSES.
- 76, Metal Tools and Implements, Making, subclasses 12+ for forming cutting ribs in a file or rasp, subclasses 82+ for a cutting device for sharpening a tool, and subclasses 104.1+ for a blank for or process for making cutlery. See (10) TOOL CLASSES.
- 81, Tools, the generic class of hand manipulable tools, particularly subclasses 9.4+ for tools for stripping insulation from cables or conductors which have cutters and also structure performing additional functions, and subclasses 181+ for wrenches combined with or convertible to cutters where the parts which operate the jaws of the wrench also apply pressure to the cutters. See (10) TOOL CLASSES.
- 294, Handling: Hand and Hoist-Line Implements, for implements for engaging or supporting articles or materials for handling or manipulating purposes. See (10) TOOL CLASSES.
- 26, Textiles: Cloth Finishing, subclasses 7+ for cutting devices particularly designed for use in cloth finishing operations, particularly subclasses 15+ for devices for shearing the surface fibers of cloth and fur, including hand manipulable tools, and see Note (29). See (11) OTHER MAIN SEARCH CLASSES.
- 56, Harvesters, for hand manipulated or operated cutters having additional claimed structure specially useful for harvesting purposes, such as wheels or runners for guiding them a definite distance from the ground, or means for catching produce. Other hand manipulable cutters not having such additional means are in this class (30). Particular attention is called to the following subclasses in Class 56: subclasses 233+ for hedge trimmers having means to guide the cutter in a definite path relative to the hedge; subclasses 328.1+ for fruit gatherers having cutters and also means other than a mere stem gripping means, for holding or catching the fruit. The devices in Class 30 which may be used for harvesting purposes are structurally classified, for example, as shears, subclasses 194+, scythes, subclass 309; swinging stroke cutters, subclass 318, etc. See (11) OTHER MAIN SEARCH CLASSES.
- 83, Cutting, and see section III of the class definition for the line between these classes. See (11) OTHER MAIN SEARCH CLASSES.
- 433, Dentistry, and 128, Surgery, for cutting implements specially designed for dental and surgical use, particularly Class 433, subclasses 144+, and Class 606, subclasses 167+. Mere knives, even though called surgical knives, are in this class (30). See (11) OTHER MAIN SEARCH CLASSES.
- 452, Butchering, particularly subclasses 4, 6, 63+, 102+, 120+, 132+, 137, 148, 160+, 166+, and 171 for hand manipulated cutting tools specifically adapted and solely disclosed for use in the slaughtering or dressing of meat or fish and subclasses 145-147 for hand held meat tenderizers not having a continuous cutting edge so as to adapt them to a more general use as a cutter. See (11) OTHER MAIN SEARCH CLASSES.
- 82, Turning, for pertinent subclass(es) as determined by schedule review.

- 99, Foods and Beverages: Apparatus, subclasses 537+ for a food cutting machine of that class (99) type wherein there are two specifically distinct portions of a food item.
- 142, Wood Turning, where a base or work support has means for locating or guiding a hand manipulable instrument, the combination has been construed to be a machine. If it is not the type of machine classified in this Class (30), (see paragraph 2 of this class definition), it will be found in the appropriate machine class.
- 144, Woodworking, Where a base or work support has means for locating or guiding a hand manipulable instrument, the combination has been construed to be a machine. If it is not the type of machine classified in this Class (30), (see paragraph 2 of this class definition), it will be found in the appropriate machine class.
- 409, Gear Cutting, Milling, or Planing.
- 12, Boot and Shoe Making, particularly subclasses 27+, 40, 41.7, 46, 47, et seq. 50.1+, 57.5+, 58, 62+, 85+, 103, and 104.5.
- 15, Brushing, Scrubbing, and General Cleaning, subclass 105.53.
- 26, Textiles: Cloth Finishing, particularly subclasses 7+ and see Note (16.5).
- 28, Textiles: Manufacturing, subclasses 222+ for thread clearing apparatus using means to shear away fibrils and other unwanted, protruding material.
- 29, Metal Working, particularly subclasses 22 and 34, filing, subclasses 76.1+.
- 33, Geometrical Instruments, particularly subclasses 18.1+ and 628.
- 42, Firearms, particularly subclasses 53, 86 and 90.
- 47, Plant Husbandry, particularly subclasses 6+, 8 and 12.
- 53, Package Making, subclass 435 for methods and subclasses 513+ for apparatus to form packages combined with means to cut the contents; and subclasses 381.3+, for envelope opening apparatus.
- 65, Glass Manufacturing, subclasses 112+ for a process of glass treating combined with severing or perforating, and see the collection of "Search Notes" thereunder for a process of, or apparatus for glassworking or treating combined with cutting, scoring, scribing or perforating of glass; and subclass 334 for a gob cutting or scraping means that coacts with a surface of a glass melt dispenser or receiving means.
- 69, Leather Manufactures, particularly subclasses 2, 9+ and 20.
- 72, Metal Deforming, subclasses appropriate to cutting and deforming.
- 81, Tools, subclasses 15.2+. (54) 166, Wells, subclasses 54.5+ for means for cutting cable or rope below ground and subclasses 55+ for means for perforating, weakening, bending or separating pipe at any point.
- 86, Ammunition and Explosive-Charge Making, particularly subclass 21.
- 112, Sewing, particularly subclasses, 68, 122+ and 285-301.
- 114, Ships, particularly subclass 42.
- 131, Tobacco, particularly subclasses 233+, 248+, and 253+.
- 132, Toilet, particularly subclasses 75.4+.
- 139, Textiles: Weaving, particularly subclasses 43, 44, 260, 263+, and 302+.
- 140, Wireworking, particularly subclass 26 for slat cutting and subclasses 139+ for wire cutting in combination with straightening.
- 144, Woodworking, subclass 28.1.
- 168, Farriery, particularly subclasses 48.1+.
- 172, Earth Working, appropriate subclasses for implements for cutting the earth in situ such as colters, disks, hoes or weeders. An implement intended merely to make a slit in sod is classifiable in Class 30. Class 172 takes patents in which the claims are restricted to or the sole disclosed use is for earth working, except patents for those hand devices in which the cutting edge extends generally in the direction of the handle, and patents for a tool for merely cutting a plant below the surface of the earth.
- 206, Special Receptacle or Package, appropriate subclasses, for a receptacle particularly configured or modified to retain or enhance the packaging of a cutlery item. See especially subclasses: 204, 207+, 228, and 394+.
- 220, Receptacles, particularly subclasses 267 and 277+.
- 224, Package and Article Carriers, particularly subclasses 232+ for a receiver supported by an animate bearer for holding a knife, bayonet, sword, or ice pick, and subclass 234 for a receiver carried by an animate bearer for holding an axe, hatchet, or splitting wedge.
- 239, Fluid Sprinkling, Spraying, and Diffusing, for significantly claimed nozzle or sprinkler structure in combination with grass or sod cutting tools for coactive use therewith, e.g., where the sprinkler part serves as a ledger plate for the cutter.

- 242, Winding, Tensioning, or Guiding, subclasses 19, 21, 48, and 521+.
- 407, Cutters, for Shaping, appropriate subclasses for cutters.
- 460, Crop Threshing or Separating, particularly subclasses 19 and 31.
- 606, Surgery, subclasses 167+.
- D7, Equipment for Preparing or Serving Food or Drink Not Elsewhere Specified, subclasses 693+ for cutting type handtool; and subclasses 649+ for place setting or table service knife.
- D22, Arms, Pyrotechnics, Hunting and Fishing Equipment, subclasses 117+ for daggers and swords.
- 7, Compound Tools, see Notes 1 and 10. See Miscellaneous notes and index to all notes to the class definition.
- 12, Boot and Shoe Making, see Notes 6 and 26. See Miscellaneous notes and index to all notes to the class definition.
- 15, Brushing, Scrubbing, and General Cleaning, see Note 26a. See Miscellaneous notes and index to all notes to the class definition.
- 26, Textiles: Cloth Finishing, see Note 29. See Miscellaneous notes and index to all notes to the class definition.
- 28, Textiles: Manufacturing, see Note 30. See Miscellaneous notes and index to all notes to the class definition.
- 29, Metal Working, see Notes 3, 6, 7, and 31. See Miscellaneous notes and index to all notes to the class definition.
- 33, Geometrical Instruments, see Note 32. See Miscellaneous notes and index to all notes to the class definition.
- 42, Firearms, see Note 33. See Miscellaneous notes and index to all notes to the class definition.
- 47, Plant Husbandry, see Note 34. See Miscellaneous notes and index to all notes to the class definition.
- 53, Package Making, subclass 402 for methods and subclass 56 for apparatus to form packages combined with means to cut the contents. See Miscellaneous notes and index to all notes to the class definition.
- 56, Harvesters, see Note 19. See Miscellaneous notes and index to all notes to the class definition.
- 62, Refrigeration, see Note 4. See Miscellaneous notes and index to all notes to the class definition.
- 65, Glass Manufacturing, see Miscellaneous notes and index to all notes to the class definition.
- 69, Leather Manufactures, see Note 37. See Miscellaneous notes and index to all notes to the class definition.
- 72, Metal Deforming, see (38) Note. See Miscellaneous notes and index to all notes to the class definition.
- 76, Metal Tools and Implements, Making, see Note 11. See Miscellaneous notes and index to all notes to the class definition.
- 79, Button Making, see Note 3. See Miscellaneous notes and index to all notes to the class definition.
- 81, Tools, see Notes 12 and 53. See Miscellaneous notes and index to all notes to the class definition.
- 82, Turning, see Note 12. See Miscellaneous notes and index to all notes to the class definition.
- 83, Cutting, see (18) Note. See Miscellaneous notes and index to all notes to the class definition.
- 86, Ammunition and Explosive-Charge Making, see Note 39. See Miscellaneous notes and index to all notes to the class definition.
- 99, Foods and Beverages: Apparatus, see Note 22.5. See Miscellaneous notes and index to all notes to the class definition.
- 112, Sewing, see Note 44. See Miscellaneous notes and index to all notes to the class definition.
- 114, Ships, see Note 45. See Miscellaneous notes and index to all notes to the class definition.
- 125, Stone Working, see Note 7. See Miscellaneous notes and index to all notes to the class definition.
- 128, Surgery, see Notes 15 and 46a. See Miscellaneous notes and index to all notes to the class definition.
- 131, Tobacco, see Note 48. See Miscellaneous notes and index to all notes to the class definition.
- 132, Toilet, see Notes 2, 6 and 49. See Miscellaneous notes and index to all notes to the class definition.
- 139, Textiles: Weaving, see Note 50. See Miscellaneous notes and index to all notes to the class definition.
- 140, Wireworking, see Note 51. See Miscellaneous notes and index to all notes to the class definition.
- 142, Wood Turning, see Note 23. See Miscellaneous notes and index to all notes to the class definition.

- 144, Woodworking, see Notes 3, 7, 25, and 51a. See Miscellaneous notes and index to all notes to the class definition.
- 147, Coopering, see Note 7. See Miscellaneous notes and index to all notes to the class definition.
- 148, Metal Treatment, see (4) Note. See Miscellaneous notes and index to all notes to the class definition.
- 164, Metal Founding, appropriate subclasses for mold making and metal casting, especially subclasses 34+ (pattern removing from mold, e.g., lost wax, etc.), 286+ (centrifugal casting machines) and 376 (dental flasks). See Miscellaneous notes and index to all notes to the class definition.
- 166, Wells, see Note 54. See Miscellaneous notes and index to all notes to the class definition.
- 168, Farriery, see Notes 6 and 55. See Miscellaneous notes and index to all notes to the class definition.
- 172, Earth Working, see Note (55a). See Miscellaneous notes and index to all notes to the class definition.
- 173, Tool Driving or Impacting, appropriate subclass for subject matter directed to driving or impacting a tool, when such subject matter includes combined features peculiar to tool driving, but which does not include features limiting the subject matter to a specific tool art, such as specific shape of the work contacting portion of a tool, related tools, or an opposed work support. See Miscellaneous notes and index to all notes to the class definition. (Class 30 has not been cleared as to subject matter in conflict with this line.)
- 175, Boring or Penetrating the Earth, see Notes 3 and 4.
- 206, Special Receptacle or Package, see Note 58.
- 219, Electric Heating, see Note 4.
- 220, Receptacles, see Note 59.
- 224, Package and Article Carriers, see Note 60.
- 239, Fluid Sprinkling, Spraying, and Diffusing, see Note (61a).
- 241, Solid Material Comminution or Disintegration, see Note 7.
- 242, Winding, Tensioning, or Guiding, see Note (62).
- 266, Metallurgical Apparatus, see Note 4.
- 294, Handling: Hand and Hoist-Line Implements, see Note 14.
- 300, Brush, Broom, and Mop Making, see Note 3.
- 404, Road Structure, Process, or Apparatus, subclass 74 for process of providing an expansion joint including a step of cutting, subclass 75 for in situ treatment of earth or roadway including comminuting, subclasses 87+ for means to cut a joint in a roadway, and subclasses 90+ for means to comminute earth or road surface in situ.
- 409, Gear Cutting, Milling, and Planing, see Notes 7 and 22.
- 425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclass 289 for the combination of plastic material shaping or reshaping apparatus and preform severing means; see the search notes thereunder; and subclass 276 for an ice cream scoop or plugger including a shaping cavity.
- 433, Dentistry, see Notes 6 and 15.
- 451, Abrading, see Note 2.
- 460, Crop Threshing or Separating, see note 47.
- 470, Threaded, Headed Fastener, or Washer Making: Process and Apparatus, appropriate subclasses.
- D22, Arms, Pyrotechnics, Hunting and Fishing Equipment.

SUBCLASSES

1 MISCELLANEOUS:

This subclass is indented under the class definition. Inventions, not provided for below.

- (1) Note. This subclass includes inventions under the class definition which are not limited to any particular cutting tool provided for below nor to forks or spoons.
- (2) Note. For razor attachments and accessories, see this class, subclass 90.
- (3) Note. For elements for sheath knives, see this class, subclass 164.
- (4) Note. For inventions applicable to any of the cutlery implements provided for in this class but limited merely to the material from which the implement is made, see this class, subclass 345.

1.5 NECKED RECEPTACLE SEAL CUTTERS:

This subclass is indented under the class definition. Cutting devices provided with means for severing destructible and anti-tampering means applied to containers having a narrowing portion forming a closure receiving opening.

- (1) Note. Included herein are cutters for bottle closure seals, either in the form of (1) an encompassing thimble for the closure and bottle neck, or (2) a strand or wire, fastened to the bottle neck and passing over the closure.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 2, for carton openers.
- 94+, for external rod or pipe cutters.
- 173+, for plural cooperating blade cutters.
- 400, for can openers.

SEE OR SEARCH CLASS:

- 81, Tools, subclass 3.1 for receptacle closure removers.

2 CARTON OPENERS:

Cutting apparatus and tools specially designed for cutting open paper cartons.

- (1) Note. See this class, subclass 2.
- (2) Note. See this class, subclass 167.1 for devices for prying off the lids of boxes.
- (3) Note. This subclass includes apparatus and tools for cutting the carton contents as well as the carton.

SEE OR SEARCH CLASS:

- 229, Envelopes, Wrappers, and Paperboard Boxes, subclasses 120.011+ and 308 for a box or envelope combined with a cutter.
- 383, Flexible Bags, subclass 202 for a bag combined with a cutter.

26 MANICURE:

Cutting implements having structure specially adapting them for use in manicuring a person's nails or cutting corns or callouses.

SEE OR SEARCH CLASS:

- 132, Toilet, subclasses 75.4 and 75.5, for cutters combined with other manicuring implements.
- 606, Surgery, subclass 133 for tweezers for removing slivers, hair or parasites from the skin, subclass 210 for tweezers in general.

27 Guarded edge:

This subclass is indented under subclass 26. Cutters in which the cutting edge is guarded.

- (1) Note. For other guarded cutters, see this class, the razor subclasses and subclasses 278+ and 286+.

28 Nippers:

This subclass is indented under subclass 26. Cutters in which two cooperating blades or a blade and anvil meet edge to edge to perform the cutting operation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 175+, for other cutters of this type.

29 Shears:

This subclass is indented under subclass 26. Cutters in which the edges of two cooperating blades move past and in substantial contact with each other to perform the cutting operation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 194+, for shears of general utility.

29.5 HAIR CUTTERS FOR INSIDE NOSE OR EAR:

This subclass is indented under the class definition. Cutting implements having special configuration disclosed for cutting or shaving hair from the inside of small passages or cavities such as nostrils or ears.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 49, for curved edge razors, many of which are disclosed for use in removing hair from armpits.

30 HAIR PLANERS:

Devices having a sharp cutting edge utilizing guards having elongated teeth, projecting beyond the edge, which prevent cutting the hair adjacent the skin. Many of these patents involve the combination of a conventional comb or such comb modified to hold a blade.

- (3) Note. For combined combs and shears see this class (30), subclasses 233.5+, where the comb acts as a guard, guide or gauge for the shear, and Class 7, Compound Tools, subclass 136 where the comb and shear are independently used.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 32+, (and particularly 53+) for razors having comb type guard structure.
195, for hair thinners.
233.5, and see (3) Note, above.
286+, and see the Notes thereto for other cutlery with guards and/or guides.

SEE OR SEARCH CLASS:

- 7, Compound Tools, subclass 136, and see (3) Note, Above.
132, Toilet, subclasses 219+ for combs, per se, designed to be used by inserting the teeth into the hair of a person and for such combs combined with other structure not elsewhere provided for.

31 Convertible:

This subclass is indented under subclass 30. Devices constructed to be converted to a razor for ordinary shaving purposes.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 122, and the notes thereunder, for other convertible implements.

32 RAZORS:

This subclass is indented under the class definition. Devices comprising cutting and shearing implements particularly adapted to shaving of the beard, i.e., arranged to sever the hair of the beard close to the skin; parts thereof, attachments and accessories therefor, not specifically classified elsewhere.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 30+, for hair planers for trimming the hair at the back of the neck; and particularly subclass 31 for such planers which are convertible to razors.
196+, for hair clippers provided with plural teeth.
329+, for holders for detachable blades, which may be razor blades, arrangement of the holder being such that it is not adapted to shaving.
345, for blades in general characterized by the material of which the blade is made.
346+, for razor blades, per se.

SEE OR SEARCH CLASS:

- 76, Metal Tools and Implements, Making, subclasses 1 and 104.1+ for processes of and apparatus for making razors.
132, Toilet, subclasses 289+ for shaving kits.
206, Special Receptacle or Package, subclass 208 for a razor container or package including a contacting medium, subclass 228 for a razor kit, subclass 351 for a powered razor package and subclass 352 for a razor blade receptacle or package.
221, Article Dispensing, appropriate subclasses, for receptacles and packages including dispensing means of the type provided for in that class.
401, Coating Implements With Material Supply, subclasses 118+ for a shaving kit consisting of a supply of shaving material (i.e., soap) and an independent applicator therefor.

34.05 Combined:

This subclass is indented under subclass 32. Razor in combination with other structure, not directly associated therewith in the action of shaving of the beard.

- (1) Note. A razor combined with means to stretch the skin being shaved is included herein.
(2) Note. A razor combined with a distinct cutting device (which may be a distinct razor) is included herein.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 30+, for a hair planer, which may be combined with other structure.
- 42+, for a motor driven razor.
- 51+, for a razor having a guarded cutting edge.
- 123+, for cutlery, generally, in combination with distinct other structure not directly associated therewith in a cutlery function.
- 535, for a razor having a hollow handle, comprising a receptacle.

SEE OR SEARCH CLASS:

- 132, Toilet, subclasses 289+ for a shaving kit, which may include a razor.
- 362, Illumination, subclass 115 for the combination of a razor and a lamp.

34.1 With additional cutter means:

This subclass is indented under subclass 34.05. Razors wherein the "other thing" includes a second means, other than a second razor, for severing the beard or hair.

34.2 With means to raise the hair and/or stretch the skin:

This subclass is indented under subclass 34.05. Razors wherein the other thing includes either (1) means to lift the beard, permitting shaving thereof closer to the skin; or (2) means to pull the surface being shaved, holding the surface taut during the shaving operation.

35 With means to facilitate sharpening:

This subclass is indented under subclass 34.05. Razors, in which the razor is combined with structure which permits or assists in sharpening of the blade.

- (1) Note. Where the structural feature merely permits of the separate removal of the guard so that sharpening of the blade is possible, see this class, subclasses 51+; and where the mere action of shearing incidentally serves to sharpen and/or maintain the cutter in sharpened condition, see this class, subclass 43.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 43+, and see (1) Note above.
- 51+, and see (1) Note above.
- 138+, for other types of cutlery combined with means to facilitate sharpening.
- 329+, for mere holders for unguarded blades which are capable of operation against a sharpening device.

SEE OR SEARCH CLASS:

- 76, Metal Tools and Implements, Making, subclasses 81 through 89.2.
- 451, Abrading, for grinding a workpiece, generally. For a statement of the line between Class 451, Abrading, and this class, see Paragraph (2) under "Notes" of the Class Definition of Class 30. Search particularly subclass 45 for a method of sharpening a razor, subclasses 126 and 322 for a machine for sharpening a razor blade by reversing the blade as it is presented to an abrading tool, subclass 191 for an abrading machine having a rotary grinding tool for sharpening a razor blade, and subclass 556 for a razor hone.

36 Permanently attached sharpener:

This subclass is indented under subclass 35. Razors in which the sharpening element is built in as a permanent part of the organization.

SEE OR SEARCH CLASS:

- 132, Toilet, subclass 292 for magnets used for sharpening.
- 335, Electricity: Magnetically Operated Switches, Magnets, and Electromagnets, subclass 283 for blade sharpening or conditioning type magnets and subclasses 285+ for magnets holding sharpening devices which devices are separate from the razors that they are used to sharpen.

37 Means for holding or guiding sharpener:

This subclass is indented under subclass 35. Razors in which the razor is provided with means to hold or guide an independent sharpener relative to the razor blade.

38 Blade-shifting mechanism:

This subclass is indented under subclass 37. Razors in which mechanism, operated by relative motion between the sharpener and razor, operates to shift the blade relative to the sharpener to cause the blade edge to always have trailing contact.

SEE OR SEARCH CLASS:

451, Abrading, subclasses 126 and 322 for a machine for sharpening a razor blade by reversing the blade as it is presented to an abrading tool.

39 Safety impulse:

This subclass is indented under subclass 38. Razors, in which mechanism is provided to insure that the blade is moved out of contact with the sharpener prior to a reversal of relative motion to prevent cutting of the sharpener.

40 With blade magazine:

This subclass is indented under subclass 34.05. Razors in which a magazine holding blades is claimed in combination with the razor, the structure being such that blades may be positioned in the razor without touching the same with the hands. The magazine may be built into the razor structure or be separate therefrom.

SEE OR SEARCH THIS CLASS, SUBCLASS:

536, for a razor having a hollow handle, comprising a receptacle for receiving razor blades.

SEE OR SEARCH CLASS:

206, Special Receptacle or Package, subclasses 352+ for a blade magazine or package, per se.

221, Article Dispensing, appropriate subclasses for such structures including article dispensing features.

312, Supports: Cabinet Structure, particularly subclasses 35+ for removal facilitating magazine type cabinets.

40.1 Strip feed:

This subclass is indented under subclass 40. Razors including means to store an elongated blade and means to support the blade so that a selected portion of the blade is exposed for

shaving, which storage means and supporting means will allow the elongated blade to move parallel to the cutting edge thereof to expose another selected portion of the blade.

40.2 Detachable magazine:

This subclass is indented under subclass 40. Razors wherein the blade storage means (i.e., magazine) is secured to the razor while a blade is being positioned in the razor and wherein the blade storage means is removed from the razor during the shaving operation.

SEE OR SEARCH CLASS:

221, Article Dispensing, subclass 232 for magazines for supplying razor blades, not combined with structure for cooperatively engaging with razor structure.

41 With waste-collecting, razor-cleaning and/or dispensing:

This subclass is indented under subclass 34.05. Razors, combined with any one or any combination of the following three features:

- (a) With means for collecting the waste material, as lather and hair, resulting from the shaving operation:
- (b) With means for cleaning the razor including means for removing lather from the blade and reapplying the same to the face; means for whirling to throw off water, etc.
- (c) With means to dispense fluent materials as water or lather.

41.5 With fluid-current disposal means:

This subclass is indented under subclass 41. Razors having means to create and/or direct the flow of fluent material to and/or from the region of shaving action for collecting or dispersing hair clippings and/or lather or other shaving preparations.

SEE OR SEARCH THIS CLASS, SUBCLASS:

133, and see the notes thereto, for suction disposal means combined with multiple shearing position type shears.

41.6 Hair-collecting means:

This subclass is indented under subclass 41. Razors having means for receiving the loose hair that results from the shaving operation.

- (1) Note. The razors of this subclass are usually “dry shavers”.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

41.5, for dry shavers which are provided with fluid means for flowing the cut hair into a collecting chamber.

41.7 With blade usage indicator:

This subclass is indented under subclass 34.05. Razor wherein the addition structure comprises designation means setting forth a particular portion of the cutting member or of the sharp edge thereof or setting forth the number of times the cutting member or the sharp edge thereof has been used.

41.8 With blade flexure indicator:

This subclass is indented under subclass 34.05. Razor including means to bend the cutting blade within its elastic limit and wherein the additional structure comprises designation means setting forth the amount of the bend.

41.9 With cooperating nipping blades:

This subclass is indented under subclass 32. Razors including at least two opposed cutting edges having relative movement bringing the cutting edges into abutment to sever the hair.

42 With blade-moving means:

This subclass is indented under subclass 32. Razors having mechanism for moving the blade during the shaving operation.

- (1) Note. For other motor driven cutlery implements, see this class, subclass 408, and the notes thereunder.
- (2) Note. For other nippers, see this class, subclasses 175+.

43 With cooperating shearing blades:

This subclass is indented under subclass 32. Razors including two or more cutters, which cutters have cutting edge that cooperate by

moving past and in substantial contact with each other to perform the shaving operation.

- (1) Note. The cutters of a typical razor in this subclass and the subclasses indented hereunder are positioned in use so that one cutter is closer to the surface being shaved than the other cutter. The cutter closer to the surface being shaved is referred to as the “outer cutter” and the cutter farther from the surface being shaved is referred to as the “inner cutter”.

43.1 With razor-adjusting means:

This subclass is indented under subclass 43. Razors including means to vary the position of one part of the razor structure with respect to another part of the razor structure.

43.2 Adjusting spacing between blades:

This subclass is indented under subclass 43.1. Razors including means to vary the distance between the cutting edge of the outer cutter and the cutting edge of the inner cutter.

43.3 With compound movement of blade:

This subclass is indented under subclass 43. Razors wherein a plurality of simple motions are given to one of the cutters simultaneously.

43.4 Rotary blade:

This subclass is indented under subclass 43. Razors wherein one of the cutters turns continuously about an axis.

43.5 Rotary inner blade:

This subclass is indented under subclass 43.4. Razors having a pair of cutters positioned during use such that one of the cutters is closer to the surface being shaved than the other wherein the cutter which is farther from the surface being shaved (i.e., the inner cutter) turns continuously about an axis.

43.6 And stationary outer blade:

This subclass is indented under subclass 43.5. Razors wherein the other cutter (outer) is fixed against movement.

43.7 Oscillating blade:

This subclass is indented under subclass 43. Razors wherein one of the cutters moves to and fro about an axis such that any point on the

- movable cutter moves back and forth in a circular path.
- 43.8 Oscillating inner blade:**
This subclass is indented under subclass 43.7. Razors wherein the cutter which moves to-and-fro about an axis is the inner of a pair.
- 43.9 And stationary outer blade:**
This subclass is indented under subclass 43.8. Razors wherein the other cutter (outer) is fixed against movement.
- 43.91 Reciprocating inner blade:**
This subclass is indented under subclass 34.05. Razors wherein the inner of a pair of cutters moves rectilinearly to-and-fro.
- 43.92 And stationary outer blade:**
This subclass is indented under subclass 43.91. Razors wherein the other cutter (outer) is fixed against movement.
- 44 Vibratory:**
This subclass is indented under subclass 42. Razors having only one blade, which is moved to reciprocate rectilinearly.
- 45 Electric:**
This subclass is indented under subclass 44. Razors having electrical means for imparting motion to the blade edge.
- (1) Note. Many patents in this class, subclass 210, have electrical vibratory mechanisms applied to analogous devices and search should be continued there.
- SEE OR SEARCH CLASS:
310, Electrical Generator or Motor Structure, subclasses 15+ for vibratory electric motors, and subclass 47 for rotary magnetic motors, for hand tools or dry shavers.
335, Electricity: Magnetically Operated Switches, Magnets, and Electromagnets, subclasses 220+ for magneto-mechanical devices; e.g., electromagnet with armature.
- 46 Traction:**
This subclass is indented under subclass 44. Razors in which the blade edge is given its motion by means receiving its actuating power by frictional engagement with the surface being shaved.
- (1) Note. Some patents in this class, subclass 247, show a traction drive for other types of cutting implements.
- 47 Knockdown and/or folding:**
This subclass is indented under subclass 32. Razors in which the claimed features provide for positioning the parts in compact form. The parts may be (1) separated and reassembled, (2) merely folded together, or (3) both.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
40+, for razors provided with magazines having means to feed blades into cutting positions.
532, for means to assemble and disassemble blades pivotally connected to handle.
534, for handles connected to blades by threaded connection means.
- 48 Inclined edge:**
This subclass is indented under subclass 32. Razors in which the blade edge is straight and structure is provided by which the blade edge is inclined relative to the shaving stroke, resulting in a draw cut.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
527, for razors provided with means for adjusting the head and handle relative to each other.
- 49 Curved edge:**
This subclass is indented under subclass 32. Razors having curved edge blades.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
42, for circular rotary blade razors.
347 and 356, for blades, per se, having curve edges.

50 Multiple blade:

This subclass is indented under subclass 32. Razors provided with a plurality of blades which may be arranged in tandem.

SEE OR SEARCH THIS CLASS, SUBCLASS:

42+, for plural blade razors provided with means for moving the blade during shaving.

299+, for other cutlery devices provided with a plurality of blades.

51 Detachable blade, guarded cutting edge:

This subclass is indented under subclass 32. Miscellaneous razor organizations having a guarded cutting edge in which the blade or other part is separable for removal from the organization.

- (1) Note. The razors of this and the indented subclasses are provided with securing or clamping mechanism for holding a detachable blade in position on the razor, consisting of a blade support which remains fixed with respect to the razor during blade removal and replacement cooperating with a clamping plate or cap which moves to grip the blade against the blade support.

SEE OR SEARCH THIS CLASS, SUBCLASS:

77+, for guards claimed as subcombinations of razors.

286+, for other cutting tools with guarded cutting edges.

329+, for devices not adapted to shaving that detachably hold razor blades.

52 Tensioned blade edge:

This subclass is indented under subclass 51. Razors in which the blade edge is tensioned. The usual purpose alleged is to improve the shaving characteristics.

53 Longitudinal or old style:

This subclass is indented under subclass 51. Razors of the longitudinal or "old style" razor type.

- (1) Note. The razors in this subclass and the indented subclasses are of both the single and the multiple guarded edge type.

- (2) Note. All longitudinal or old style razors appear either originally or as cross-references in this class (30) in the following subclasses: 30+, 53+, 77+, 85+, 329+, and 346+. No razors of the longitudinal type should appear originally in the following subclasses: 51, 57-76.

54 With relative blade and guard adjustment:

This subclass is indented under subclass 53. Razors in which the blade edge and guard are adjustable relative to each other, to vary the closeness of the cut.

- (1) Note. Compare this class, subclasses 283+.

55 Separable guard:

This subclass is indented under subclass 53. Razors in which the guard is movable independently of the blade to provide an unguarded blade edge. The device may then be used as an unguarded razor or it may be stropped. The guard may be separately removable, or it may be pivoted or otherwise arranged for movement away from the blade edge.

- (1) Note. Search should be completed in this class, subclass 54, most of the patents therein being arranged so that an unguarded blade edge may be provided.

- (2) Note. Compare this class, subclasses 284 and 285.

57 Pivoted blade:

This subclass is indented under subclass 51. Razors in which the blade or its holder is pivoted, means being provided for securing the blade in stationary position.

- (1) Note. The major portion of these patents show but do not claim razors of the type in subclasses 38+, of this class, in which subclasses the search must be completed.

- 58 Pivoted cap:**
This subclass is indented under subclass 51. Razors in which the cap is pivoted to some portion of the razor organization and is arranged to swing about its pivots for detachment of the blade or other parts.
- 59 Multiple guard:**
This subclass is indented under subclass 58. Razors in which there is a blade having a plurality of cutting edges and guard means providing a guard for a plurality of such edges.
- 60 With operator and relative blade and guard adjustment:**
This subclass is indented under subclass 59. Razors in which there is provided either or both (a) means, other than a mere lever or projection fastened to the cap, to operate the cap to cause it to swing about its pivots and (b) structure by which the blade edge and guard may be adjusted relative to each other.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
61, for razors of similar construction provided with a single guarded edge.
- 60.5 Sectional cap:**
This subclass is indented under subclass 60. Razors in which the cap is formed by a plurality of cap members pivoted to the razor.
- 61 With operator and relative blade and guard adjustment:**
This subclass is indented under subclass 58. Razors in which there is provided either or both or (a) means, other than a mere lever or projection fastened to the cap, to operate the cap to cause it to swing about its pivots and (b) structure by which the blade edge and guard may be adjusted relative to each other.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
59+, for razors provided with multiple guards.
- 62 Slidable blade:**
This subclass is indented under subclass 51. Razors in which the blade is positioned in or removed from the organization with a simple sliding motion.
- (1) Note. Compare this class, subclasses 335+.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
335, for other cutlery devices having blades that can be detached by a simple sliding motion.
- 63 With relative blade and guard adjustment:**
This subclass is indented under subclass 62. Razors in which means are provided by which the blade edge and guard may be adjusted relative to each other.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
41+, for razors provided with waste receiving means.
- 64 With blade lock:**
This subclass is indented under subclass 62. Razors in which means are provided to hold or lock the blade in the position to which it is slid.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
63, for other razors having a lock.
- 65 Multiple guard:**
This subclass is indented under subclass 62. Razors having blades with a plurality of cutting edges, at least two of which are guarded.
- 66 Slidable lock:**
This subclass is indented under subclass 51. Razors in which the separable parts are held together by means of a slidable member, generally of U-shape.
- 67 Hook and lock:**
This subclass is indented under subclass 51. Razors in which a plurality of hooks engage one edge of the blade, the blade being swingable about such hooks as pivots so that an opposite edge of the blade may be engaged by some locking device.
- 68 Bolt-connected:**
This subclass is indented under subclass 51. Razors in which a bolt extends through the separable parts to hold the same together.

- 69 Threaded:**
This subclass is indented under subclass 68. Razors in which the bolt is threaded.
- 70 Multiple guard:**
This subclass is indented under subclass 69. Razors having a single blade with a plurality of cutting edges, at least two of which are guarded.
- 71 With relative blade and guard adjustment:**
This subclass is indented under subclass 70. Razors in which the blade edge and guard may be adjusted relative to each other.
- 72 Flexible blade:**
This subclass is indented under subclass 71. Razors in which the blade may be flexed to provide the relative adjustment.
- 73 Spaced guard edge:**
This subclass is indented under subclass 72. Razors in which structure is provided to maintain at all times a definite space between blade edge and guard.
- 74 Magnetic:**
This subclass is indented under subclass 51. Razors in which the separable parts are held together by magnetic force.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
36, for razors provided with sharpening means attached by magnetic means.
- 74.1 Multiple guard:**
This subclass is indented under subclass 51. Razors involving a blade having a plurality of cutting edges and a guard means providing a guard for a plurality of such edges.
- 75 Aligning means:**
This subclass is indented under subclass 51. Subcombinations of devices claiming the means for aligning blade edge and guard.
- (1) Note. Substantially all patents having detachable blades and guards have some form of aligning means.
- 76 Corner construction:**
This subclass is indented under subclass 51. Subcombinations of devices claiming means for guarding or shielding the corner or end of a sharpened blade edge.
- 77 Guards:**
This subclass is indented under subclass 51. Subcombinations of devices claiming guard structure, per se. The mere specifying of the blade in the claim does not exclude the patent from this or indented subclasses.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
36, for razors provided with blade sharpening elements which also act as guards.
48, for razors having guard structures which provide a blade edge inclined to the shaving stroke of the razor.
286, for other cutter organizations having guards.
- 78 Blade-supported:**
This subclass is indented under subclass 77. Devices in which the guard is constructed for mounting on the blade.
- 79 With relative blade and guard adjustment:**
This subclass is indented under subclass 78. Devices in which structure is provided for adjusting the position of the guard relative to the blade edge.
- 80 Rail guard:**
This subclass is indented under subclass 79. Devices in which the guard has an edge portion of rail form.
- 81 Edge structure:**
This subclass is indented under subclass 77. Devices in which the edge structure, per se, of the guard is claimed.
- 82 Modified teeth:**
This subclass is indented under subclass 81. Devices claiming the guard tooth structure.
- 83 Rail:**
This subclass is indented under subclass 81. Devices claiming guard rail structure.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
27 and 80, for similar devices.
- 84 Caps:**
This subclass is indented under subclass 51. Subcombinations of devices claiming modified cap or clamping plate structure.
- 90.1 MEANS FOR CUTTING ELONGATE, STRAND-ENCIRCLING SHEATH:**
This subclass is indented under the class definition. Device having a cutter specifically adapted to slice through a flexible, strand-encompassing cover of indeterminate length without slicing into the encompassed strand.
- (1) Note. A rigid conduit into which wires are placed is not considered to be a sheath.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
92+, for a device adapted to slice through a rigid conduit.
286+, for a device of similar characteristics for cutting material other than a sheath.
- SEE OR SEARCH CLASS:
81, Tools, subclasses 9.4+ for a similar device which, in addition to a sheath cutter, is provided with means to remove the sheath from the strand.
- 90.2 Helically wound metal sheath:**
This subclass is indented under subclass 90.1. Device for cutting a metallic cover which cover is formed by a strip(s) wrapped in screw-thread fashion about the encircled strand.
- 90.3 Including rotary cutter:**
This subclass is indented under subclass 90.2. Device including a cutting tool that turns, during the cutting operation, about an axis which is not coextensive with the central axis of the elongate cover.
- 90.4 Longitudinally:**
This subclass is indented under subclass 90.1. Device wherein the cutter is specifically adapted to slice the strand cover in a direction parallel to the centerline of the strand.
- (1) Note. A device adapted to make a spiral slice in a strand cover is not considered to cut longitudinally.
- 90.6 With additional means for cutting sheath other than longitudinally:**
This subclass is indented under subclass 90.4. Device including an additional cutter adapted to slice the strand cover in a direction other than parallel to the centerline of the strand without slicing the strand.
- 90.7 Adjustable to also cut sheath other than longitudinally:**
This subclass is indented under subclass 90.4. Device wherein the cutter is adapted to be used alternatively to slice the cover in a direction parallel to the centerline of the strand or to slice it in some other direction.
- 90.8 With cutter-opposing, sheath-engaging surface:**
This subclass is indented under subclass 90.4. Device with structure adapted to bear against the cover on a surface thereof directly opposite the surface engaged by the cutter so that such cover-engaging structure resists movement of the cover away from the cutter.
- 90.9 Roller surface:**
This subclass is indented under subclass 90.8. Device wherein the cover-engaging structure has a generally cylindrical periphery and is mounted for rotation so that such periphery may roll along the cover.
- 91.1 Pivotaly connected to cutter:**
This subclass is indented under subclass 90.8. Device wherein the cutter is joined to the cover-engaging structure by means which permits relative arcuate movement between the cutter and the cover-engaging structure.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
91.2, for similar structure for cutting a sheath other than longitudinally.
- 91.2 With cutter-opposing, sheath-engaging surface pivotaly connected to cutter:**
This subclass is indented under subclass 90.1. Device with structure adapted to bear against the cover on a surface thereof directly opposite

the surface engaged by the cutter so that such cover-engaging structure resists movement of the cover away from the cutter, wherein the cutter is joined to the cover-contacting structure by means which permits relative arcuate movement between the cutter and the cover-engaging structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

91.1, for similar structure wherein the cutter is specifically adapted to cut the sheath in a direction parallel to the longitudinal dimension of the sheath.

92 PIPE AND ROD CUTTERS:

This subclass is indented under the class definition. Cutting devices and implements, specially designed for cutting cylindrical pipes or rods and which are supported in their entirety by the work and/or manually during the cutting operation.

- (1) Note. Cutting tools adapted for this purpose but of more general application will be found in the structure subclasses of this class.
- (2) Note. In the above definition the term "work" may include work parts adjacent to the pipe or rod, e.g., a boiler head carrying pipes, or one of the several pipes forming a boiler.

SEE OR SEARCH CLASS:

- 72, Metal Deforming, subclasses 70+ for disclosure of tube cutting and flaring.
- 81, Tools, particularly subclasses 300+ for tool-jaw(s) positioned by relatively movable plural handles (e.g., pliers).
- 82, Turning, subclasses 46+ for cut-off devices wherein the work rotates.
- 83, Cutting, appropriate subclasses for pipe, rod, or tube cutters which are neither supported in their entirety by the work nor manually supported during the cutting operation.
- 166, Wells, subclasses 55+ for apparatus for cutting and perforating apparatus which operates on well pipe in situ.
- 175, Boring or Penetrating the Earth, subclasses 2+ for a device for firing a bullet or exploding a shaped charge in

an inaccessible bore to penetrate the earth formation or perforate or cut a tubular casing or other wall member in the bore.

408, Cutting by Use of Rotating Axially Moving Tool, appropriate subclasses, for cutting of screw threads of tubular or rod-like work by a rotating, axially moving tool having no additional motion during operation; especially subclass 28, for means for cutting in the manner of that class (408) combined with means for cutting tubular or rod-like work to length in the manner of this class (30).

470, Threaded, Headed Fastener, or Washer Making: Process and Apparatus, subclasses 183+ for implements for cutting threads except as provided for in Class 408. See the note below.

92.5 Adapted to cut pipe or rod longitudinally:

This subclass is indented under subclass 92. Device specifically adapted to cut the cylindrical member (pipe or rod) in a direction parallel to the centerline of the member.

93 Rotary:

This subclass is indented under subclass 92. Cutters in which the cutting element is rotated relative to the pipe or rod.

94 External:

This subclass is indented under subclass 93. Cutters in which the cutting element is rotated about the exterior of the tube or rod.

95 Pipe- or rod-encircling:

This subclass is indented under subclass 94. Cutters in which the cutter completely encircles the pipe or rod.

96 With clamping means:

This subclass is indented under subclass 95. Cutters in which means is provided for clamping a part of the cutter to the pipe or rod and on which the part carrying the cutter rotates.

97 Rotary power source:

This subclass is indented under subclass 96. Cutters in which the cutter element is rotated about the pipe by means of some rotary power source such as a motor or hand operated crank.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
400, for motor driven can openers.
- 98 Ratchet:**
This subclass is indented under subclass 96. Cutters in which the cutter element is moved by a pawl and ratchet mechanism.
- 99 Ratchet:**
This subclass is indented under subclass 95. Cutters in which the cutter element is moved by a pawl and ratchet mechanism.
- 100 Chain link type:**
This subclass is indented under subclass 95. Cutters in which the pipe or rod encircling structure is in the form of a plurality of chain-like links.
- SEE OR SEARCH CLASS:
81, Tools, subclasses 65.2+ for flexible link wrenches.
- 101 Disc cutter:**
This subclass is indented under subclass 95. Cutters in which the cutting element is in the form of a rotatable disc.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
347, for rotary blades, per se, for use in tools found in this class.
- 102 Disc cutter:**
This subclass is indented under subclass 94. Cutters in which the cutting element is in the form of a rotatable disc.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
347, for rotary blades, per se, and see the notes thereunder for other rotary blade cutters.
- 103 Internal:**
This subclass is indented under subclass 93. Cutters in which the cutter element is rotated internally of the pipe.
- SEE OR SEARCH CLASS:
166, Wells, subclass 55.8.
- 104 Eccentrically pivoted:**
This subclass is indented under subclass 103. Cutters in which the cutter element is pivoted eccentrically of the tool axis.
- (1) Note. This subclass is to be distinguished from subclass 108 of this class, where the cutter element is mounted on a pivoted lever but not pivoted eccentrically of the tool axis.
- 105 Slidably projected:**
This subclass is indented under subclass 103. Cutters in which the cutter element is slidably projected to working position.
- 106 Wedge:**
This subclass is indented under subclass 105. Cutters in which a wedge is provided for projecting the cutter element to its cutting position.
- SEE OR SEARCH CLASS:
166, Wells, subclass 55.3.
- 107 Screw feed:**
This subclass is indented under subclass 106. Cutters in which screw means is provided to move the wedge.
- 108 Pivoted lever mounted:**
This subclass is indented under subclass 103. Cutters in which the cutter element is mounted on a pivoted lever.
- (1) Note. This subclass is to be distinguished from subclass 104, in this class, where the cutter element is pivoted eccentrically of the tool axis.
- 109 CIGAR TIP CUTTERS:**
Cutting devices and implements specially constructed for cutting the tips of cigars.
- (1) Note. Many of the patents in this and indented subclasses have receptacles for catching the clippings and in many patents the cutting is done by a shearing action. For other cutters with material holders, see this class, subclasses 124+ and for shears of general application, see subclasses 194+.

- (3) Note. Cigar tip cutters combined with other things and tools other than cutlery will be found in Classes 7, Compound Tools, appropriate subclass and 131, Tobacco, subclasses 233 and 248+.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 124, and see (1) Note, above.
 142, for cigar tip cutters combined with other cutlery implements.
 194, and see (1) Note, above.

SEE OR SEARCH CLASS:

- 7, Compound Tools, and see (3) Note, above.
 40, Card, Picture, or Sign Exhibiting, subclass 461 for advertising devices provided with cigar end cutters in which the operation of the cutter controls the actuation of the advertising device.
 99, Foods and Beverages: Apparatus, subclasses 635, 636, and 643 for cutting the end from food.
 131, Tobacco, and see (3) Note, above.
 206, Special Receptacle or Package, subclasses 238+ for a tobacco product package combined with cutting means.

110 Rotary power source:

This subclass is indented under subclass 109. Cutters in which the cutter element is driven from a rotary power source.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 400+, and the notes thereunder, for motor driven cutting tools generally.

111 Hand:

This subclass is indented under subclass 109. Cutters in which the cutter is hand held and manipulated.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 234+,

112 Pivoted blade:

This subclass is indented under subclass 111. Cutters in which the cutting blade is pivoted.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
 244+,

113 Reciprocating blade:

This subclass is indented under subclass 111. Cutters in which the cutting blade reciprocates during the cutting operation.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 241+,

113.1 CORE-PIT REMOVERS:

This subclass is indented under the class definition. Device including a cutting implement constructed to disconnect, divide, or otherwise disunite that portion of food that is located in and around the geometrical center of the food (e.g., the "stone" in a peach) from the rest of the food.

SEE OR SEARCH CLASS:

- 99, Foods and Beverages: Apparatus, subclass 547 for machines which remove a core-pit.

113.2 Including pivoted tool-pair members:

This subclass is indented under subclass 113.1. Device including two co-operating core-pit removing members which are mounted on hinges or flexible portions of the implement so that they can be made to approach one another during the core-pit removing operation.

113.3 Combined:

This subclass is indented under subclass 113.1. Device including a core-pit remover combined with some other structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 123, for other combinations, and see Note (5) for other places to search.

114 SEGMENTERS:

Cutting devices and implements specially designed to cut segments from cylindrical material, such as pies and cakes.

- (1) Note. The cutters may be attached to an ordinary baking pan and have gages to gage the size of the segment.

- (2) Note. For such gages, per se, see Class 33, Geometrical Instruments.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

302, for combined segmenters and corers.

115 PLASTIC MATERIAL CUTTERS:

Cutters specially designed for cutting plastic materials.

- (1) Note. Traveling roller cutters, radiating or crossed blade cutters, and annular blade cutters which may be used for cutting dough, will be found in this class, subclasses 128, 130, 292, 301+, 303, 316, and 319.

- (2) Note. Plastic material cutters which are not hand manipulable or have structure for performing functions other than mere cutting, will be found in Class 425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclasses 289+ for molding apparatus for plastic material combined with preform severing means; (see the search notes thereunder).

SEE OR SEARCH CLASS:

225, Severing by Tearing or Breaking, subclasses 93+ for a hand device that penetrates, and then breaks apart light textured, fluffy foods, such as cakes and breads.

241, Solid Material Comminution or Disintegration, subclasses 168+ for dividing or mashing light-textured or fluffy foods.

116 Wire:

This subclass is indented under subclass 115. Cutters in which the cutting element is in the form of a wire or wires.

117 Plural:

This subclass is indented under subclass 116. Cutters in which a plurality of cutting elements of wire are provided.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

299+, and the notes thereunder, for other plural blade cutters.

118 BUTTONHOLE TYPE:

Cutting implements specially constructed to cut buttonholes.

SEE OR SEARCH CLASS:

83, Cutting, appropriate subclasses and especially subclass 905 for an art collection of machines for cutting buttonholes.

112, Sewing, subclass 68 for sewing machines for making buttonholes and also having cutting features.

223, Apparel Apparatus, subclasses 2+.

119 With punch:

This subclass is indented under subclass 118. Cutting implements in which a cutter is provided to cut a hole at the end of the buttonhole slit.

120 Shears:

This subclass is indented under subclass 118. Cutting implements in which the edges of two cooperating blades move past and in substantial contact with each other.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

194+, for other shears.

120.1 SHELL OPENERS:

This subclass is indented under the class definition. Device including a sharp edged, pointed, blunt or other stress applying member for severing, piercing or fracturing a friable outer covering of food.

SEE OR SEARCH CLASS:

99, Foods and Beverages: Apparatus, subclasses 498 and 568+ for shell breaking machines.

452, Butchering, subclass 17 for a hand tool for opening bivalves.

120.2 Nutcrackers:

This subclass is indented under subclass 120.1. Device especially adapted to fracture the shell of a nut.

120.3 Arcuately moved jaws:

This subclass is indented under subclass 120.2. Device having two stress applying members and a pivot about which the members may rotate towards each other.

120.4 Plural or relatively movable pivot:

This subclass is indented under subclass 120.3. Device having more than one point about which parts rotate or a point which is positionable relative to other parts of the device.

120.5 Lever-actuated jaws:

This subclass is indented under subclass 120.2. Device having at least one movable stress applying member which member is moved by another member which rotates about a pivot point.

121 TREE HACKS:

Cutting implements especially designed for cutting or scraping the bark from trees or logs or for grooving the same.

SEE OR SEARCH THIS CLASS, SUBCLASS:

280 and 317, for similar tools.

SEE OR SEARCH CLASS:

144, Woodworking, subclass 208.1 for a machine for crossing bark.

121.5 CORN STRIPPERS:

This subclass is indented under the class definition. Device having an edge that engages the circumferential periphery of the cob portion of an ear of corn and scrapes the kernels from the cob by relative movement between it and the ear of corn in the direction of the longitudinal axis of the ear.

122 CONVERTIBLE:

This subclass is indented under the class definition. Implements in which the parts are relatively movable or interchangeable to convert the implement from one cutlery implement to another such implement.

- (1) Note. This subclass is to be distinguished from subclasses 142+, where cutlery implements are combined, i.e., each implement always retains its distinctive characteristics.

- (2) Note. Compare this class, subclasses 31 and 203.

- (3) Note. Where the implement is convertible from a cutlery implement into some other noncutlery implement, search should be made in Classes 7, Compound Tools, and 81, Tools, subclasses 181+.

SEE OR SEARCH CLASS:

294, Handling: Hand and Hoist-Line Implements, subclass 54 for convertible hand forks and shovels.

123 COMBINED CUTLERY OR COMBINED WITH ANCILLARY FEATURE:

Cutlery implements combined with other structure, except as otherwise provided for.

- (1) Note. See this class, subclasses 200+ for hair clippers combined with a cut regulator.

- (2) Note. See this class, subclasses 34.05+ for razors combined with other structure, and appropriate subclasses below, for cutters with guards or guides or with supports.

- (3) Note. Cutters combined with motive power, such as motors, have been placed elsewhere in this class. See subclasses 400+, and the notes thereunder.

- (4) Note. See Class 7, Compound Tools, appropriate subclass, for cutlery implements combined with some other noncutlery tool provided both such tools are not classified in the same class.

- (5) Note. Search the following classes for cutters combined with other structure for performing an additional function within the definition of the noted class.

SEE OR SEARCH CLASS:

- 7, Compound Tools, and see (4) Note above.
12, Boot and Shoe Making, subclass 103.
15, Brushing, Scrubbing, and General Cleaning, subclasses 105+.
33, Geometrical Instruments, appropriate subclasses, especially subclass 628.

- 42, Firearms, subclass 53 for pistol swords; 86 for bayonets, and 90, for wire cutters combined with guns or bayonets.
- 47, Plant Husbandry, appropriate subclasses.
- 56, Harvesters, especially subclasses 324+, 327.1+, 328.1+, and 400.05+.
- 69, Leather Manufactures, subclass 20.
- 81, Tools, subclasses 9.3, 9.4+, 13, 15.2+, and 181+ for hand tools having a cutting device combined with a specific type of work manipulating means.
- 86, Ammunition and Explosive-Charge Making, subclasses 21+.
- 114, Ships, especially subclasses 221+.
- 131, Tobacco, especially subclasses, 233+, 248+, and 253+.
- 132, Toilet, subclasses 75.4 and 75.5.
- 135, Tent, Canopy, Umbrella, or Cane, subclass 66.
- 140, Wireworking, subclasses 123 and 123.6.
- 168, Farriery, subclasses 45+.
- 171, Unearthing Plants or Buried Objects, particularly subclasses 5, 21+, 24, 29, 30, 31+, 40, and 41+ for cutters for plants or plant parts combined with machines for unearthing such plants or plant parts.
- 172, Earth Working, appropriate subclasses, especially subclasses 133+ and 371+ for cutting tools which work the earth combined with other types of earth working tools.
- 220, Receptacles, subclass 278 for can openers combined with claimed structure for fastening the opener to the can so that the cutters may be capable of repeated use as a closure for the opening formed thereby.
- 221, Article Dispensing, subclasses 30+ for article dispensing means not otherwise provided for having cutting or punching means combined therewith for cutting the supply container or the wrapper therefor.
- 222, Dispensing, subclasses 5 and 80+ for fluent material and gas dispensing means with cutting or punching means for material or containers.
- 225, Severing by Tearing or Breaking, subclasses 7 and 94+.
- 227, Elongated-Member-Driving Apparatus, subclass 21 for combined apparatus for driving a member; e.g., nail, into work and means for cutting the work or member, see "Search This Class, Subclass", thereunder for other loci of the above combination in Class 227.
- 229, Envelopes, Wrappers, and Paperboard Boxes, subclasses 120.011+ and 308 for a box or envelope combined with a cutter and subclass 401 for a cup with an attached spoon.
- 289, Knots and Knot Tying, subclass 17.
- 294, Handling: Hand and Hoist-Line Implements, subclasses 2 and 51.
- 299, Mining or In Situ Disintegration of Hard Material, appropriate subclasses.
- 401, Coating Implements With Material Supply, subclass 52 for a cutlery device combined with, or attachable to, a pencil; and subclass 195 for such a device combined with, or attachable to, a pen.
- 404, Road Structure, Process, or Apparatus, see (41) under class definition of Class 30.
- 408, Cutting by Use of Rotating Axially Moving Tool, appropriate subclasses, for cutting of screw threads on tubular or rod-like work by a rotating, axially moving tool having no additional motion during operation; especially subclass 28 for means for cutting in the manner of that class (408) combined with means for cutting tubular or rod-like work to length in the manner of this class (30).
- 425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclasses 289+ for a preform severing means combined with a shaping or reshaping apparatus for plastic material, especially subclass 292 for a pie-type crimper and trimmer.
- 452, Butchering, appropriate subclasses.
- 463, Amusement Devices: Games, subclass 47.4 for police clubs combined with cutters.

123.3 With means to apply transient fluid to tool:
This subclass is indented under subclass 123. Implement provided with means secured thereto for supplying a liquid medium to the implement.

SEE OR SEARCH CLASS:

83, Cutting, subclass 169 for a cutting machine having means to direct a lubricant to the tool or work.

123.4 To chain saw chain or guide therefor:
This subclass is indented under subclass 123.3. Implement including a plurality of cutter elements pivotally interconnected, one with another, forming a closed loop, said loop being wrapped about guide means, and wherein said liquid supply means supplies a friction reducing substance to said cutter elements or guide means.

SEE OR SEARCH CLASS:

83, Cutting, subclasses 830+ for a cutter assemblage or cutter element therefor; e.g., for a chain saw chain, per se.

123.5 With skin-removal means:
This subclass is indented under subclass 123. Device constructed to remove from the rest of an article of food, that portion of the outer periphery of the article of food that is dissimilar with respect to the inner portion in at least one of the following respects: color, consistency, density, firmness, flexibility, hardness, texture or toughness.

123.6 Including relatively movable parts:
This subclass is indented under subclass 123.5. Device in which there are at least two food-contacting portions, the position of one of which can be varied with respect to the other.

123.7 Including a pointed blade:
This subclass is indented under subclass 123.5. Device in which there is at least one cutter which consists of two cutting edges that intersect at an acute angle.

124 With material-holder or disposal:
Cutlery implements combined with means to hold or dispose of material to be cut, being cut or which has been cut.

(1) Note. This group includes cutlery implements with a receptacle in the handle for holding material, for which see this class, subclass 125.

(2) Note. This group also includes means to grip the material being cut before, during or after it is cut, for which see this class, especially subclasses 134+.

(3) Note. Compare this class, subclasses 40, 41, 535, and 537.

(4) Note. Many cigar tip cutters in this class, subclasses 109+, have means for catching the clippings.

(5) Note. Compare Class 56, Harvesters, subclasses 324+, 327.1+, and 328.1+. Fruit picking cutters which have means for merely gripping the stem of the fruit being cut are in Class 30 while cutters with baskets, chutes, etc., are in Class 56.

(6) Note. See Class 229, Envelopes, Wrappers, and Paperboard Boxes, appropriate subclasses, for paper receptacles combined with spoons or having spoons formed integrally with a portion of the receptacle structure, particularly subclasses 8, 401, and 800.

(7) Note. See Class 294, Handling: Hand and Hoist-Line Implements, subclasses 50.6+ for hand shovels or similar blade-like members having means coacting with the shovel or blade member to retain a load therein or thereon. The line between these classes is that the grippers in this class act to hold the material independently of the cutting blade.

(8) Note. Search Class 7, Compound Tools, subclasses 114+ for cutters combined with hand operable beet lifters or beet pullers.

(9) Note. Search Class 83, Cutting, subclasses 649+ for all patents including a cutting tool and means to support a reserve supply of work in which the work supply is in the form of a web or

strand wrapped upon itself and the supply is supported for rotation upon an axis. Note that the usual lines between this class (30) and Class 83 do not apply in this situation. (See the third paragraph under III A in the definition of Class 83). A patent directed to the same type work supply means combined with a breaking or tearing, as distinguished from a cutting tool, will be found in Class 225.

- (10) Note. Search Class 225, Severing by Tearing or Breaking, for patents including a tearing edge or a breaking device and means to support a reserve supply of work.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 410, for can openers combined with means for holding the lid that is being severed to prevent it from dropping into the can.

125 Handle receptacle:

Cutlery implements having receptacles in their handles for holding material.

- (1) Note. Includes salt and pepper shakers when forming the handle.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 40 and 535.

SEE OR SEARCH CLASS:

- 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclass 111.1 and the notes thereto appended for handles which also serve as receptacles.

127 Twine guide:

Cutters combined with means to hold or guide the strand of twine or thread to be cut.

SEE OR SEARCH CLASS:

- 225, Severing by Tearing or Breaking, subclass 55 for a fixed-blade carrier slidably supported on running length work in which the work is manually

forced against the blade edge for severing.

- 242, Winding, Tensioning, or Guiding, subclasses 125+ for guides for bobbins and spools.

128 Ejectors or strippers:

Cutlery implements combined with means to eject or strip the material from the implement and/or the material holder.

SEE OR SEARCH CLASS:

- 294, Handling: Hand and Hoist-Line Implements, subclasses 50+ for strippers for hand forks and shovels.
425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclasses 282+ for a shaping means of the ice-cream scoop type combined with product release means, especially subclasses 284+ for such apparatus including a movable blade.

129 Fork:

This subclass is indented under subclass 128. Implements in which the implement is a culinary or table fork.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 322+, for such forks without a stripper.

SEE OR SEARCH CLASS:

- 56, Harvesters, subclasses 400.08+ for rakes with cleaning or stripping members.
294, Handling: Hand and Hoist-Line Implements, subclass 50 for fork or shovel implements with cleaning means.

130 Annular cutter:

This subclass is indented under subclass 128. Implements in which the implement is an annular cutter.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 301 and 316, for annular cutters, per se.

SEE OR SEARCH CLASS:

294, Handling: Hand and Hoist-Line Implements, subclass 50.5 for annular fork or shovel implements with clearing means.

131 Shears:

This subclass is indented under subclass 124. Implements in which the implement is in the form of a shear; i.e., plural cooperating blade edges move past and in substantial contact to perform the cutting operation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

194+, for shears, per se.
233.5, and see the Notes thereto for shears combined with hair combs where the comb comprises a guide, guard or gauge for the material being cut.

132 Multiple shearing position:

This subclass is indented under subclass 131. Implements in which the implement has a plurality of positions for simultaneously cutting material at all such positions. Usually a plurality of fingers are provided for guiding the material into position to be cut.

(1) Note. These are of the type usually designated hair clippers or hedge trimmers.

SEE OR SEARCH THIS CLASS, SUBCLASS:

196+, for other shears of this type.

133 Suction-disposal means:

This subclass is indented under subclass 132. Implements in which the material is drawn away from the cutter by suction.

SEE OR SEARCH THIS CLASS, SUBCLASS:

41.5, for fluid current disposal means combined with razors.

SEE OR SEARCH CLASS:

15, Brushing, Scrubbing, and General Cleaning, subclasses 300.1+ for devices for the purpose of dislodging and/or removing up wanted foreign material from a work piece or work

surface by contact with a draft of air, steam, or equivalent gaseous fluid.

134 Grip type:

This subclass is indented under subclass 131. Implements in which the material, usually a fruit stem, wire, tree branch or twine, is gripped, usually between two jaws on the cutting blade.

(1) Note. In some patents one blade enters a slot in the other so as to wedge the wire, etc., between the first blade and one wall of the slot. For similar structure, search should be made in this class, subclass 258.

SEE OR SEARCH CLASS:

56, Harvesters, subclasses 328.1+ for other fruit pickers having means other than a mere gripping means for catching the fruit.

135 Spring-opened:

This subclass is indented under subclass 134. Implements in which the blades are spring urged to open position.

SEE OR SEARCH THIS CLASS, SUBCLASS:

261+,

136 Knives and scrapers:

This subclass is indented under subclass 124. Implements in which the material holder is applied to a knife or scraper.

SEE OR SEARCH CLASS:

294, Handling: Hand and Hoist-Line Implements, subclass 51 for hand implements in which a scraper or chipper is combined with a scoop or shovel adapted for use apart from the scraper or chipper.

136.5 With closure or portable receptacle support:

This subclass is indented under subclass 136. Implements, in which (1) the material holder comprises a receptacle provided with a closure, or (2) the knife or scraper is provided with means to support a material holder which is removable from the support for use.

- (1) Note. Most of the implements in this group are ice shavers or scrapers provided with means to receive and hold the removed ice.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 128, for implements of the above defined type, in which the holder closure is combined with means to eject the material from the holder.
164.5+, for ice picks and chippers.

SEE OR SEARCH CLASS:

- 53, Package Making, subclasses 513+ for cutting machines provided with supports for portable receptacles.
220, Receptacles, subclasses 200+ and the notes thereunder, for receptacles provided with closures.
294, Handling: Hand and Hoist-Line Implements, subclass 51 for similar devices in which the chipper or shaver is combined with a scoop or shovel adapted for use apart from the chipper or scraper.

137 Forks:

This subclass is indented under subclass 124. Implements in which the material holder is applied to a culinary or table fork.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 322, for other forks.

138 With sharpening feature:

This subclass is indented under subclass 123. Implements in which a cutter is combined with means to sharpen the cutter or with means to facilitate sharpening.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 35+, for a razor with means to facilitate sharpening the blade thereof.

SEE OR SEARCH CLASS:

- 69, Leather Manufactures, subclass 38.
335, Electricity: Magnetically Operated Switches, Magnets, and Electromagnets, subclass 283 for magnetic cutting blade sharpeners where the cut-

ting edge is held in contact with a magnetic pole piece.

- 451, Abrading, particularly subclasses 28+ for a process of abrading and subclasses 64+ for an abrading machine.

139 Rotary sharpener:

This subclass is indented under subclass 138. Implements in which the sharpener consists of a rotary sharpening element.

SEE OR SEARCH CLASS:

- 451, Abrading, subclasses 420+ for an attachment to a cutting device to sharpen the blade thereof, which attachment uses a rotary abrading tool.

140 With heater:

This subclass is indented under subclass 123. Implements in which a cutter is combined with means to heat the same.

- (1) Note. See Classes 126, Stoves and Furnaces, subclasses 226+ and 401+; and 219, Electric Heating, subclasses 221+ for heated tools in general. The general line is that where significant structure of the cutting tools is claimed other than a mere modification thereof, for the purpose of applying the heater, tool will be found in Class 30 and the heater plus the mere application thereof to a cutter will be found with the heating classes.

141 Spoons with fluid conductors:

Spoons combined with fluid conductors. Usually the conduit runs through the handle and it may or may not communicate with the bowl of the spoon.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 324+, for other spoons.

SEE OR SEARCH CLASS:

- 239, Fluid Sprinkling, Spraying, and Diffusing, subclass 33, and see the notes thereto for fluid conductors designed to be carried around by the user and to be applied to a fluid source of supply for drinking purposes.

- 425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclass 277 for an ice-cream scoop or plugger having a shaping cavity and including integral heat exchange means.
- 142 Cutlery:**
Combined implements in which one cutlery implement is combined with another such implement.
- (1) Note. This group of subclasses is to be distinguished from subclass 122 of this class, where one cutlery implement is changeable into another such implement, but not combined.
- (2) Note. Where two or more of the same type of cutlery are combined, they will be found in this class with that particular type. See especially subclasses 152, 176, 197, 226+, 279.2, 287, 299+, and 412.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
34.05, for razors combined with other cutlery.
90.6, for a first cutter means for cutting a strand-encircling sheath in a longitudinal direction combined with a second cutter means for cutting the sheath in another direction.
408, for can openers combined with other cutlery.
- 143 Sheathed:**
This subclass is indented under subclass 142. Implements in which the various implements or some of them are foldable or otherwise retractable into the handle or have some other form of sheath to protect the blades when not in use.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
154, and the notes thereunder, for other sheathed cutlery.
- 144 Saws:**
Hand manipulated implements in which a saw is combined with some other form of cutter.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
166.3+, and the notes thereunder, for saws, per se.
- 145 Nippers and shears:**
Hand implements having at least two sets of cutters, one of which is in the form of two cooperating blades having edges which meet to perform the cutting operation, and the other is in the form of two cooperating blades having edges which move past and in substantial contact with each other to perform the cutting operation.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
176, 197, and 226+.
- 146 Shears and knives:**
Hand implements in which two cooperating blades having edges which move past and in substantial contact with each other to perform the cutting operation are combined with a knife blade.
- 147 Knives, forks, and spoons:**
Knives, culinary forks and spoons combined in one implement.
- 148 Knives and forks:**
Knives and culinary forks combined in one implement.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
147, for knives, culinary forks and spoons combined in one implement.
- SEE OR SEARCH CLASS:
7, Compound Tools, subclass 115 for pitch forks combined with cutters.
- 149 Knives and spoons:**
Knives and spoons combined in one implement.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
147, for knives, culinary forks and spoons combined in one implement.

150 Forks and spoons:

Culinary forks and spoons combined in one implement.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

147, for knives, culinary forks and spoons combined in one implement.

SEE OR SEARCH CLASS:

294, Handling: Hand and Hoist-Line Implements, subclass 51.

151 SHEATHED:

Cutlery implements which are foldable or otherwise retractable into the handle or have some other form of sheath to protect the blade while not in use.

(1) Note. Pocket knives are in this group.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

143 and 90.

SEE OR SEARCH CLASS:

7, Compound Tools, subclasses 118+ and 167+ for sheathed compound tools. The line is as follows: Class 30 takes pocket tools showing and claiming handles for cutlery implements or showing cutlery and other tools but claiming only features limited to cutlery. Class 7 takes patents showing and claiming cutlery implements combined with other implements and handles for tools showing cutlery implements and other tools.

16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclass 111.1 for handles which include in the handle structure a storage cavity or other receptacle.

81, Tools, subclass 3.35 for sheathed receptacle closure removing tools and subclasses 177.2 and 177.6 for a wrench having a portion which is foldable or retractable into the handle.

132, Toilet, subclass 143 for hair combs combined with a teeth guard or

sheath, subclass 76.2 for manicure tools where a portion of the device is folded, withdrawn, or otherwise sheathed when not in use, including sheaths, per se, subclasses 286+ for toilet kits, and subclasses 328+ for tooth picks in which the tooth engaging part of the tool is folded, slid or retracted into the handle when not in use.

152 Plural blade:

This subclass is indented under subclass 151. Implements in which the handle or sheath is specially designed to sheathe a plurality of cutlery implements of the same or unspecified nature.

(1) Note. This subclass is not intended to take patents where a plurality of blades are provided either at opposite ends or at the same end when this amounts to a mere duplication, but some structure must be claimed; e.g., a division plate, etc., which limits the invention to a plural blade tool.

(2) Note. See this class, subclasses 299+, and the notes thereunder, for other plural blade tools.

(3) Note. Where a plurality of blades are provided but different characters of implements are specified, they will be found in this class, subclass 143, or in Class 7, Compound Tools, subclasses 118+ and 167+.

153 Folding sheath:

This subclass is indented under subclass 151. Implements in which the sheath, usually the handle, has pivoted parts whereby it may be folded over the blade to protect it.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

255 and 330+.

154 Compound blade movement:

This subclass is indented under subclass 151. Implements in which the blade has more than one simple movement, such as pivoting or reciprocating, in being moved into or from retracted position in the sheath or handle.

155 Pivoted blade:

This subclass is indented under subclass 151. Implements in which the blade is pivoted to the sheath or handle so as to be folded into the sheath or handle.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

258, where a pivoted shear blade moves into a slot in the second blade during the cutting operation.

321, and the notes thereto.

527, for razor handles pivotally connected to blade, especially subclass 528 for blades extending longitudinally to the handle, where the blade is designed to fold into the sheath or handle.

SEE OR SEARCH CLASS:

132, Toilet, subclass 76.2.

156 Detachable blade type:

This subclass is indented under subclass 155. Implements in which the blade is detachable from the sheath or handle or from a separate holder.

(1) Note. For unsheathed detachable blade knives, see this class, subclasses 329+ and Class 279, Chucks or Sockets, appropriate subclasses.

157 End tang connected:

This subclass is indented under subclass 156. Implements in which the blade has an end tang which is detachably connected to the sheath or handle.

(1) Note. Compare this class, subclasses 236 and 260.

158 With blade-opening means:

This subclass is indented under subclass 155. Implements in which means is provided for positively moving the blade from the sheath, either partially or wholly.

(1) Note. Does not include mere nicks in the blade to be engaged by the finger nail or some pointed instrument for the purpose of opening the blade.

159 Spring-opened:

This subclass is indented under subclass 158. Implements in which a spring is provided for projecting the blade from its sheath or handle.

160 Locked blade:

This subclass is indented under subclass 156. Implements in which means is provided to lock or latch the blade either in closed or open position or both.

(1) Note. Practically all the patents in this class, subclass 159, show blade locking means and search should be continued there.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

161,

161 Locked blade:

This subclass is indented under subclass 155. Implements in which means is provided to lock or latch the blade either in open or closed position, or both.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

159 and 160.

162 Sliding blade:

This subclass is indented under subclass 151. Implements in which the blade may be slid to or from retracted position in the sheath or handle.

(1) Note. This subclass is to be distinguished from subclass 320 of this class, which takes patents in which structure is provided to hold the blade in a plurality of positions intermediate the retracted and open position, whereas in this subclass the blade is either wholly retracted or wholly open.

SEE OR SEARCH CLASS:

401, Coating Implements With Material Supply, subclasses 99+ for an implement including a coating tool with material supply which is slidably projectable and retractable between an exposed and a concealed position.

163 Gravity-opened:

This subclass is indented under subclass 162. Implements in which when the implement is held in a vertical position and a latch released, the blade will drop by gravity to extended position from the sheath or handle.

164 Elements:

Elements, such as handles, scales, linings, etc., limited by structure to use with sheathed cutlery.

- (1) Note. Elements limited to a particular type of sheathed cutlery will be found in the appropriate subclass in this class.
- (2) Note. Handles and blades of more general utility will be found in this class, subclasses 340+ and 346+.
- (3) Note. Elements and accessories of other cutlery will be found in this class with the particular type. See especially subclass 537, except where not limited to any type, for which see subclass 1.

164.5 ICE PICK OR CHIPPER TYPE:

Implements of the type especially adapted for picking or chipping ice or similar hard material, not provided for elsewhere.

- (1) Note. Most of these implements are provided with sharp points for engaging the material as distinguished from a cutting edge.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 122, for ice picks or chippers provided with a plurality of blades adapted for interchangeable use.
- 124, for ice picks and chippers provided with means to hold the removed ice.
- 136+, for ice shavers or scrapers provided with means to receive and hold the removed ice.
- 164.9, for pointed scratching implements.
- 142, for implements having a plurality of ice picking, chipping or shaving portions.
- 151+, for ice picks and chippers provided with means to sheath the operating part of the implement.

- 366+, for pointed perforating or indenting implements.

SEE OR SEARCH CLASS:

- 7, Compound Tools, for ice picks or chippers combined with other tools, one of which is not of the type provided for in Class 30, Cutlery, particularly subclass 158 for ice handling tongs combined with ice picks or chippers.
- 15, Brushing, Scrubbing, and General Cleaning, subclasses 236.01+ for hand manipulable scrapers for cleaning ice coatings from miscellaneous objects.
- 30, Cutlery, subclasses 478+ for a hand operated plane.
- 37, Excavating, subclasses 266+ for hand manipulable scrapers for removing ice from pavements and analogous surfaces.
- 125, Stone Working, appropriate subclasses, for machines for trimming, scoring or splitting ice blocks and subclass 36 for implements limited by structure to use as splitters or scorers or cutters combined with splitters for ice.
- 175, Boring or Penetrating the Earth, subclass 18 for means to bore a hole in ice.
- 241, Solid Material Comminution or Disintegration, appropriate subclasses, for machines for comminuting ice by shaving or crushing.
- 294, Handling: Hand and Hoist-Line Implements, subclass 61 for pointed implements for impaling articles for the purpose of handling, subclass 51 for ice chippers or scrapers combined with material handling means such as scoop or shovel, subclass 54 for shovels combined with scrapers or chippers for removing ice from pavements, et cetera.
- 299, Mining or In Situ Disintegration of Hard Material, subclasses 24+ for a machine or cutter specifically adapted to work ice in situ.

164.6 With impact-moving means:

This subclass is indented under subclass 164.5. Implements in which there is provided means to impart a blow to the operating portion of the pick or chipper to effect movement thereof.

SEE OR SEARCH THIS CLASS, SUBCLASS:

277, for cutting tools provided with impact blade moving means.

164.7 With guard and/or guide:

This subclass is indented under subclass 164.5. Implements in which there is provided (1) means to guide the operating part of the chipper or pick in a predetermined relation to the ice, or (2) a guard to control the movement of the removed ice.

SEE OR SEARCH THIS CLASS, SUBCLASS:

124+, for ice picks or chippers provided with means to hold the removed ice particles.

162+, for ice picks or chippers provided with means to sheath the pick member which means may constitute a guide therefor while in use.

286+, for cutting tools provided with guards or guides.

164.8 Plural points or edges:

This subclass is indented under subclass 164.5. Implements in which the portion of the ice pick or chipper which operates on the ice comprises a plurality of points or edges.

SEE OR SEARCH THIS CLASS, SUBCLASS:

172, 279.2, 287, and 299+, for cutting tools provided with plural blades or cutting edges.

164.9 SCRATCHING IMPLEMENTS:

This subclass is indented under the class definition. Devices for marking by means of a point or cutting edge.

(1) Note. These devices are often called scoring tools, scribes, or scratch awls.

(2) Note. A patent for a brush having glass bristles for scratching, and thereby eras-

ing indicia from, a surface will be placed in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

164.5, for ice picks.

366+, for pointed perforating or indenting implements.

SEE OR SEARCH CLASS:

15, Brushing, Scrubbing, and General Cleaning, subclasses 435+ for dip-pen type marking devices.

33, Geometrical Instruments, subclasses 18.1+ for marking devices combined with structure to make a geometrical instrument.

81, Tools, subclass 9.2 for an indenting or a manifolding stylus (i.e., respectively, one which makes an impression by grooving without removing material; or by transfer to an underlying surface); and subclass 9.21 for a stamp scarifier.

83, Cutting, subclasses 879+ for machines and/or processes of scoring material; see the "Search Notes" under subclass 6 for other classes providing for scoring of material.

401, Coating Implements With Material Supply, appropriate subclasses, for a marking device with material supply; e.g., subclasses 49+ for a pencil.

164.95 Having traction-rotated tool (e.g., glass cutters):

This subclass is indented under subclass 164.9. Device wherein the marking means comprises a disk having a cutting edge on the radially outer periphery thereof and turnable about its central axis during operation, which disk is driven by frictional engagement with the work-piece.

(1) Note. Many of the patents in this subclass are particularly adapted to mark hard glass or hard glass-like material. See Class 65, Glass Manufacturing, subclass 112 and the collection of notes thereunder for glassworking or treating combined with cutting.

165 CUTTING TOOLS:

This is the generic subclass for hand manipulated cutting tool of general utility not provided for in the subclasses below.

- (1) Note. An organized cutter must be claimed to cause classification in this or the indented subclasses. Inventions within the class definition but which may be applied to cutters, spoons, or forks, are placed in subclass 1 as are sub-combinations not provided for in subclasses 340+ and 346+.
- (2) Note. Where the invention resides solely in the material from which the cutting tool is made, it will be found in this class, subclass 345.
- (3) Note. For cutters limited to a special use, see this class, subclasses 2-121.
- (4) Note. For convertible cutlery, see this class, subclass 122.
- (5) Note. For combined cutlery and cutlery combined with other things, see this class, subclasses 123+ and the notes thereunder.
- (6) Note. For sheathed cutlery, see this class, subclasses 151+.

SEE OR SEARCH CLASS:

- 144, Woodworking, subclass 28.11 for a hand-manipulable pencil-sharpening device including a cutter and a work holder or guide relatively movable thereto so as to facilitate the sharpening operation.

166.3 Saw:

This subclass is indented under subclass 165. Cutting tool, including a blade carrying a set of cutting teeth, adapted to cut relatively hard material; e.g., wood or metal.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 144, for the combination of a saw with a distinct cutlery device.

SEE OR SEARCH CLASS:

- 19, Textiles: Fiber Preparation, subclasses 55+ for a saw adapted for use in fiber preparation.
- 33, Geometrical Instruments, subclass 202 for an indicating gauge for use with a saw.
- 76, Metal Tools and Implements, Making, subclasses 25.1+ for a method or apparatus for making a saw.
- 83, Cutting, subclasses 13+ for a method of cutting, generally, including cutting with a saw; appropriate subclasses for apparatus for cutting, generally, with a base mounted machine, especially subclasses 835+ for a saw blade, per se, or the component parts thereof.
- 125, Stone Working, subclasses 12+ for the method or apparatus for sawing stone.
- 128, Surgery, appropriate subclasses for method or apparatus for sawing in the inspection or treatment of diseases or abnormal conditions of the body of a man or of a lower animal.
- 144, Woodworking, subclasses 1.1+ for the method of shaping wood, generally, particularly for the method of sawing wood and appropriate other subclasses for apparatus for cutting wood, generally, with a saw mounted on a fixed base not provided for elsewhere, particularly for sawing to give a desired surface configuration to a workpiece and for combined wood-working operations. Note especially subclasses 8, 18, 35.1+, 48.1+, 189, and those subclasses under the title "cutters".
- 147, Coopering, appropriate subclasses for the method or apparatus of using a saw in making a barrel.
- 452, Butchering, subclasses 160+ for carcasses splitting saws.

167 Chisel:

This subclass is indented under subclass 165. Device including an elongated shank having a cutting edge at one end.

SEE OR SEARCH CLASS:

- 125, Stone Working, subclasses 40+ for an impact-driven tool adapted to cut stone or a stone-like material.

- 144, Woodworking, for a chiseling machine.
- 167.1 Compound:**
This subclass is indented under subclass 167. Device having two or more cutting edges.
- 167.2 With gauge:**
This subclass is indented under subclass 167. Device including a member adapted to either limit depth of cut or measure a dimension.
- 168 Cold chisels:**
This subclass is indented under subclass 165. Cutting tools commonly known as cold chisels for cutting metal in a cold state.
- (1) Note. This subclass is not intended to take tools intended for use with organized machines such as are not hand manipulable under the class definition.
- (2) Note. Compare this class subclass 277.
- (3) Note. For other chisels attention is directed to the following classes:
- SEE OR SEARCH CLASS:
- 76, Metal Tools and Implements, Making, subclass 28.
- 125, Stone Working, subclass 41.
- 142, Wood Turning, subclasses 21, 35, and 42+.
- 144, Woodworking, subclasses 75+ for a chiseling machine.
- 147, Coopering, subclass 39.
- 173, Tool Driving or Impacting, appropriate subclasses for subject matter directed to driving or impacting a tool or the like, and particularly subclasses 90+ for an impacting device adapted to drive a cold chisel.
- 299, Mining or In Situ Disintegration of Hard Material, subclasses 69+ and 100.
- 169 Scrapers:**
This subclass is indented under subclass 165. Cutting tools in which the blade edge or the blade edges are so formed and so related to the handle that the tool is especially adapted to be moved over a single surface and/or a plurality of adjacent or contiguous surfaces to remove material from such surface or surfaces by a scraping action of the edge or edges of the tool.
- (1) Note. Cutting tools having a more general cutting function will be found in the structure subclasses of this class, even though called scrapers.
- (2) Note. Cutting tools with single movable blades, even though called "scrapers", will be found in this class, subclasses 272.1+.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
- 136, for scrapers with means to catch the material, and subclasses 329+ for holders for detachable scraping blades.
- SEE OR SEARCH CLASS:
- 7, Compound Tools, subclass 124 for a scraper, used for erasing, combined with a burnishing tool which restores the disturbed area to smooth condition.
- 15, Brushing, Scrubbing, and General Cleaning, appropriate subclass, under subclasses 104.001+ for special scraping implements and for scrapers combined with other general cleaning implements, and subclass 236.01 for scraping tools for a general cleaning purpose.
- 425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclass 458 for a putty-type knife compressing a hand movable, substrate traversing, plural dimension shaping means.
- 452, Butchering, subclasses 102+ for scraping implements specialized for use in the butchering art.
- 170 Wheeled:**
This subclass is indented under subclass 169. Scrapers in which the implement is provided with wheels whereby it can be more readily drawn over the surface to be scraped.
- 171 Hoe type:**
This subclass is indented under subclass 169. Scrapers in which the blade is set at a substantial angle to the handle somewhat in the manner of an ordinary hoe so that the blade can be

pulled over the surface to be scraped to perform the scraping action.

- (1) Note. See this class, subclass 317, and the notes thereunder, for other pull cutters.

172 Plural blade:

This subclass is indented under subclass 169. Scrapers which are provided with more than one blade. Usually all of the blades are operative at the same time.

- (1) Note. See this class, subclasses 299+ and the notes thereunder, for other plural blade cutting tools.
- (2) Note. Single scraper blades having plural edges are not here, but are in subclass 169 or other appropriate indented subclasses.

173 Plural cooperating blades:

Cutting tools in which two or more blades cooperate to perform the cutting operation; at least one of the blades must be movable relative to the other.

- (1) Note. Does not include plural blade knives even though all such blades operate simultaneously, for which see this class, subclasses 299+, and the notes thereto.

SEE OR SEARCH CLASS:

433, Dentistry, subclass 1 for veterinary crown slitters; and subclasses 144+ for other crown slitters.

174 Corer type:

This subclass is indented under subclass 173. Implements in which the two blades move toward one another and are of such a shape as to cut a depression in the surface of the material, usually for the purpose of cutting a core from fruit.

- (1) Note. Search should be continued in this class, subclasses 113.1+, and for other coring tools, search should be continued in subclasses 278, 301+, 316, and 352.

175 Nippers:

This subclass is indented under subclass 173. Implements in which the cooperating blades have edges which meet edge to edge or in which one of the blades has a cutting edge which contacts an anvil on the other blade to perform the cutting operation.

- (1) Note. For combined nippers and shears, see this class, subclass 145.
- (2) Note. Search this class, subclass 28.
- (3) Note. Many tools in Class 81, Tools, subclasses 52+ and 300+ have structures similar to those in this group of subclasses, except for the cutting edges, and search for the general organization should be continued there.

SEE OR SEARCH CLASS:

81, Tools, particularly subclasses 300+ for tool jaw(s) positioned by relatively movable plural handles (e.g. pliers), and see (3) Note above.

176 Multiplex:

This subclass is indented under subclass 175. Nippers in which two or more independent cutter organizations of the nipper type are provided.

SEE OR SEARCH THIS CLASS, SUBCLASS:

145, for similar organizations where one of the cutter organizations is of the nipper type and the other of the shear type.

226+, where both are of the shear type, and compare subclasses 197 and 226+.

177 Adjustable-position cutter:

This subclass is indented under subclass 175. Nippers in which the cutter organization is adjustable to a plurality of positions relative to the handle.

- (1) Note. Compare this class, subclass 320, and see the search notes thereunder.

178 Form cutter:

This subclass is indented under subclass 175. Nippers in which the blades are so formed as to make a particular shaped cut.

- (1) Note. Compare this class, subclasses 229+, 301, 316, and 355.

179 With guide and/or gauge:

This subclass is indented under subclass 175. Nippers which are provided with a material or cutter guide or gage.

- (1) Note. Compare this class, subclasses 233 and 286+.

180 With motor:

This subclass is indented under subclass 175. Nippers provided with a motor as the blade moving means.

- (1) Note. See this class, subclass 401, and the notes thereunder, for other cutting tools with motor driving means.

SEE OR SEARCH CLASS:

60, Power Plants, subclasses 632+ for one shot explosion actuated expansible chamber type motors.

181 Compound blade movement:

This subclass is indented under subclass 175. Nippers in which the blades move relative to each other, other than in a simple pivoting or straight line reciprocating movement toward one another during the cutting operation.

- (1) Note. Compare this class, subclasses 204, 237+, and 259.

SEE OR SEARCH CLASS:

83, Cutting, subclasses 642 through 647.5 for compound movement cutters of that class (83) type.
241, Solid Material Comminution or Disintegration, subclasses 201+ for compound movement comminutors of that class (241) type.

182 Reciprocating blade:

This subclass is indented under subclass 175. Nippers in which the blades move in a straight line reciprocating movement toward one another during the cutting operation.

- (1) Note. Compare this class, subclasses 208+, 241+, and 272.1+.

183 Lever and cam:

This subclass is indented under subclass 182. Nippers in which motion is imparted to the blade or blades by means of a lever and cam.

- (1) Note. Compare this class, subclasses 189 and 219.

184 Lever and link:

This subclass is indented under subclass 182. Nippers in which motion is imparted to the blade or blades by means of a lever and link.

- (1) Note. Compare this class, subclasses 190, 242, and 251.

185 Toothed slide and lever:

This subclass is indented under subclass 182. Nippers in which motion is imparted to the blade or blades by means of teeth on the sliding part and a toothed lever to cooperate therewith.

- (1) Note. Compare this class, subclass 243.

186 Pivoted blade:

This subclass is indented under subclass 175. Nippers in which the blades are pivoted together so as to move toward each other in the cutting operation.

- (1) Note. Compare this class, subclasses 208+, and 244+.

187 With blade-moving means:

This subclass is indented under subclass 186. Nippers in which some means is provided for multiplying the power applied to the handles in moving the blades or some other mechanism is provided for moving the blades other than handles rigid with the blades.

- (1) Note. Compare this class, subclasses 245+.

- (2) Note. See this class, subclass 272.1, and the notes thereunder, for other cutting implements with blade moving means.
- 188 One movable blade:**
This subclass is indented under subclass 187. Nippers in which only one of the blades is movable during the cutting operation.
- (1) Note. Compare this class, subclasses 249+.
- 189 Lever and cam:**
This subclass is indented under subclass 188. Nippers in which motion is imparted to the blade by means of a lever and cam.
- (1) Note. Compare this class, subclasses 183 and 219.
- 190 Lever and link:**
This subclass is indented under subclass 188. Nippers in which motion is imparted to the blade by means of a lever and link.
- (1) Note. Compare this class, subclasses 184, 242, and 251.
- 191 Pivoted handles:**
This subclass is indented under subclass 187. Nippers in which the power applying means are pivoted handles suitably connected to the blades.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
211, 250+, and 252.
- 192 Handles interlinked or geared:**
This subclass is indented under subclass 191. Nippers in which the operating handles have separate pivots but are interconnected between the pivots so as to move in unison.
- 193 Common pivot:**
This subclass is indented under subclass 191. Nippers in which the operating handles have a common pivot.
- 194 Shears:**
This subclass is indented under subclass 173. Implements in which the blades have edges which move past and in substantial contact with each other to perform the cutting operation.
- (1) Note. For combined nippers and shears and combined shears and knife, see this class, subclasses 145 and 146.
- (2) Note. Many patents in this class, subclass 109, cut by a shearing action and search should be continued there.
- (3) Note. Many patents in Class 81, Tools, subclasses 52+ and 300+ have structure similar to this group in so far as the operating mechanism is concerned, and search for the operating mechanism should be continued there.
- (4) Note. Search this class, subclasses 29, 43, 120, 131, and 428.
- (5) Note. For shears adapted for use on portions of the human body, see Class 606, Surgery, subclasses 174+, for shear cutting devices used on human or other animal body portions.
- SEE OR SEARCH CLASS:
81, Tools, particularly subclasses 300+ for tool-jaw(s) positioned by relatively movable plural handles (e.g., pliers), and see (3) Note above.
- 195 Hair thinners:**
This subclass is indented under subclass 194. Shears which are specially designed to thin hair. The blades usually have noncutting portions.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
30+, for hair planers.
- 196 Multiple shearing position:**
This subclass is indented under subclass 194. Shears in which the implement has a plurality of positions for simultaneously cutting material at all such positions. Usually a plurality of fingers are provided for guiding the material into position to be cut.
- (1) Note. Hair clippers and hedge trimmers have been placed in this and indented subclasses.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
132+, for similar shears combined with a material holder or disposal.
258, for single blade and slot cutters which cut out a narrow strip of material.
- 197 Multiplex:**
This subclass is indented under subclass 196. Shears which have a plurality of independent cutter organizations.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
145, 176, and 226+.
- 198 Body-supported:**
This subclass is indented under subclass 196. Shears which are provided with means whereby they may be supported from the body of the operator or the person's body whose hair is being cut.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
231+, 290+, and 296.1+ and the notes thereto.
- 199 Adjustable angle:**
This subclass is indented under subclass 196. Shears in which the cutter organization is adjustable relative to the handles.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
320+, and the notes thereunder, for other cutters which are adjustable relative to the handle.
- 200 With cut regulator:**
This subclass is indented under subclass 196. Shears in which the cutter is provided with some means by which the length of cut may be regulated. The majority of the patents are hair clippers and the length of cut is regulated by means of the regulator contacting the head of the person whose hair is being cut.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
233.5, for shears of the single position type combined with hair combs where the comb comprises a guide, guard or gauge for the material being cut.
286, and see the notes thereto for other cutlery with guards and/or guides.
- 201 Adjustable:**
This subclass is indented under subclass 200. Shears in which the regulator is adjustable relative to the cutter organization.
- 202 Automatic:**
This subclass is indented under subclass 201. Shears in which the regulator is adjusted automatically, usually by the operation of the clipper.
- 203 Convertible, power- or manual-operated:**
This subclass is indented under subclass 196. Shears which have structure whereby they may be operated by hand and also means whereby they may be power operated.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
122, and the notes thereto.
- 204 Compound blade movement:**
This subclass is indented under subclass 196. Shears in which the blades move relatively, other than in a simple pivoting or straight line reciprocating movement, during the cutting operation.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
181, 237+, and 259.
- 205 Rotary blade:**
This subclass is indented under subclass 196. Shears in which at least one of the blades has a rotary motion during the cutting operation.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
347, for rotary blades, per se, and see the notes thereunder for other rotary blade cutting tools.
- 206 With motor:**
This subclass is indented under subclass 205. Shears in which the blade or blades are moved by means of a motor.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
401, and the notes thereunder, for other motor driven cutting tools.
- 207 With blade-tension means:**
This subclass is indented under subclass 205. Shears in which there is provided means for applying the proper pressure between the cooperating blades.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
213, 214, 221+, and 266+.
- 208 Reciprocating and/or oscillating blade:**
This subclass is indented under subclass 196. Shears in which at least one of the blades reciprocates or oscillates relative to the other.
- 209 Reciprocating or oscillating power source:**
This subclass is indented under subclass 208. Shears in which the blades are moved by the application of a reciprocating or oscillating power source.
- SEE OR SEARCH CLASS:
74, Machine Element or Mechanism, appropriate subclasses, for the mechanical movements, per se.
- 210 With motor:**
This subclass is indented under subclass 209. Shears in which the reciprocating or oscillating power source is in the form of a motor.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
401, and the notes thereunder, for other motor driven cutting tools.
- 211 Pivoted handles:**
This subclass is indented under subclass 209. Shears in which the reciprocating or oscillating power source is in the form of pivoted handles.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
191+, 250+, and 252.
- 212 With spring return:**
This subclass is indented under subclass 211. Shears in which the handles are returned to initial position by means of a spring.
- (1) Note. Compare this class, subclasses 261+.
- 213 And blade-tension means:**
This subclass is indented under subclass 212. Shears in which means is provided to apply the proper pressure between the cooperating blades.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
207, and the notes thereunder.
- 214 With blade-tension means:**
This subclass is indented under subclass 211. Shears in which means is provided to apply the proper pressure between the cooperating blades.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
207, and see the notes thereunder.
- 215 Rotary power source:**
This subclass is indented under subclass 208. Shears in which movement is imparted to the blade or blades from a rotary power source.
- (1) Note. See this class, subclass 401, and the notes thereunder, for motor driven tools generally.
- SEE OR SEARCH CLASS:
74, Machine Element or Mechanism, subclass 25, or appropriate subclass thereunder.
- 216 With motor:**
This subclass is indented under subclass 215. Shears in which the rotary power source is in the form of a rotary motor.
- (1) Note. See this class, subclass 401, and the notes thereunder, for other motor driven cutting tools.

217 Crank or cam, pitman and lever:

This subclass is indented under subclass 215. Shears in which the movement is imparted to the blades by means of a crank or cam, a pitman and a lever.

SEE OR SEARCH CLASS:

74, Machine Element or Mechanism, subclasses 42+.

218 Crank or cam, lever and slide:

This subclass is indented under subclass 215. Shears in which movement is imparted to the blade or blades by means of a crank or cam, a lever and a sliding element, which latter may be the blade.

SEE OR SEARCH CLASS:

74, Machine Element or Mechanism, subclasses 45+.

219 Crank or cam and lever:

This subclass is indented under subclass 215. Shears in which movement is imparted to the blade or blades by means of a crank or cam and a lever.

(1) Note. Compare this class, subclasses 183 and 189.

SEE OR SEARCH CLASS:

74, Machine Element or Mechanism, subclasses 47+, and 54.

220 Crank or cam and slide:

This subclass is indented under subclass 215. Shears in which movement is imparted to the blade or blades by means of a crank or cam and a sliding element, which latter may be the blade.

SEE OR SEARCH CLASS:

74, Machine Element or Mechanism, subclasses 49+ and 55.

221 With blade-tension means:

This subclass is indented under subclass 208. Shears in which means is provided to apply the proper pressure between the cooperating blades.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

207, and see the notes thereunder.

222 And friction reducing feature:

This subclass is indented under subclass 221. Shears in which some friction reducing feature is provided including lubrication.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

224 and 267.

223 Blade assembly:

This subclass is indented under subclass 196. Inventions in which the claimed invention resides in the relationship and form of both cooperating blades.

(1) Note. Many patents in this class, subclasses 196+, show blade assemblies but claim in addition some other feature and to make a complete search on the subject matter of this subclass, the above subclasses should also be searched.

(2) Note. Compare Class 56, Harvesters, subclasses 289+.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

225, for the structure of a single multiple position blade.

224 With friction reducing feature:

This subclass is indented under subclass 223. Inventions in which means is provided to reduce the friction of the moving blades including lubricating features.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

222 and 267.

225 Blades:

Inventions in the multiple shearing position blade, per se.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

346+, for other cutting blades.

- 226 Multiplex:**
This subclass is indented under subclass 194. Shears in which a plurality of independent cutter organizations are provided for independent cutting operations.
- (1) Note. For combined shears and nippers, see this class, subclass 145.
- (2) Note. Where the shears have two sets of handles and/or blades or where the handles are reversible and both edges of the blades are sharpened for the purpose of adapting them for use in either hand, see this class, subclass 256.
- (3) Note. Compare this class, subclasses 176 and 197.
- 227 With blade-moving means:**
This subclass is indented under subclass 226. Shears in which some means is provided to multiply the power applied to the handles.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
245+, and see subclass 272.1 and the notes thereto, for other cutting tools with blade moving means.
- 228 With motor:**
This subclass is indented under subclass 194. Shears in which a motor is provided to move the blade or blades.
- (1) Note. See this class, subclass 401 and the notes thereunder, for other motor driven cutting tools.
- SEE OR SEARCH CLASS:
60, Power Plants, subclasses 632+ for one shot explosion actuated expansible chamber type motors.
- 229 Form cutter:**
This subclass is indented under subclass 194. Shears in which the blades are so formed or the work held in such a position that a particular shaped cut can be made.
- (1) Note. See this class, subclass 178 and the notes thereunder.
- 230 Zigzag:**
This subclass is indented under subclass 229. Shears in which the form of cut is of zigzag or wavy shape.
- (1) Note. Pinking shears are here.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
355, for wavy blades, per se.
- 231 With supports:**
This subclass is indented under subclass 194. Shears combined with a support therefor.
- (1) Note. Compare this class, subclasses 290+ and 296.1+, and see the notes to the last subclass for other supported cutters.
- SEE OR SEARCH CLASS:
248, Supports, for supports of general utility.
269, Work Holders, appropriate subclasses for supports for holding work for the disclosed purpose of treating the work.
- 232 Hand or finger:**
This subclass is indented under subclass 231. Shears in which some means other than the ordinary handles are provided to attach the shears to the hand or fingers of the operator.
- SEE OR SEARCH THIS CLASS, SUBCLASS:
291 and 298.
- 233 With guard, guide and/or gauge:**
This subclass is indented under subclass 194. Shears which have means (1) so related to an edge as to prevent cutting other than in a desired manner, (2) to cause the shears to move in a predetermined relation to the material being cut, (3) to cause the material being cut to move in a predetermined relation to the shears, (4) to protect the hand from injury by either the shears or the material being cut, and/or (5) comprising a work table or other support for the material being cut.
- (1) Note. The same device may function as either guard, guide, or gauge.

- SEE OR SEARCH THIS CLASS, SUB-CLASS:
179, for guards and/or guides for nippers.
286+, and see the notes thereto, for other cutlery with guards and/or guides.
- 233.5 Comb type:**
This subclass is indented under subclass 233. Shears wherein the guide, guard or gauge is in the form of a hair comb.
- (1) Note. Many of these combs serve as gauges for determining the length of hair being sheared.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
200+, for comb type guards or guides for multiple position type shears.
- SEE OR SEARCH CLASS:
7, Compound Tools, subclass 136 for combined shears and hair combs, where the two devices are independently used.
132, Toilet, subclasses 219+ for toilet combs, per se, and combined with other structure when not elsewhere provided for.
- 234 Spring joint:**
This subclass is indented under subclass 194. Shears in which the blades and/or handles are connected together by a spring independently of any pivot or other such attaching means.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
111,
- 235 Offset handles and blade:**
This subclass is indented under subclass 234. Shears in which the plane of the blades is offset from that of the handles.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
248, 257, and 318.
- 236 Detachable blade:**
This subclass is indented under subclass 234. Shears in which the blade is detachable from the handle.
- (1) Note. Where the blade edge is detachable from the blade and substantially coextensive therewith, search should be made in this class, subclass 349.
- (2) Note. Compare this class, subclasses 157 and 260.
- 237 Compound blade movement:**
This subclass is indented under subclass 194. Shears in which the blades move relatively, other than in simple pivoting or straight line reciprocating movement, during the cutting operation. This is usually for the purpose of giving the shears a draw cut. Where the pivot is offset for the same purpose, see this class subclass 259.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
181 and 204.
- SEE OR SEARCH CLASS:
83, Cutting, appropriate subclasses, especially subclasses 638, 642+, and 644+ for "draw-cut" devices in that class.
- 238 One movable blade:**
This subclass is indented under subclass 237. Shears in which movement is imparted to but one of the blades.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
188+ and 249+.
- 239 Intermediate pivot:**
This subclass is indented under subclass 237. Shears in which the blades are rigid with the handles and pivoted intermediate the handles and blade ends.
- SEE OR SEARCH THIS CLASS, SUB-CLASS:
254+,
- 240 Rotary blade:**
This subclass is indented under subclass 194. Shears in which a rotary movement is imparted to the blade or blades.

