#### CLASS 160, FLEXIBLE OR PORTABLE CLO-SURE, PARTITION, OR PANEL

#### SECTION I - CLASS DEFINITION

- A. This is the generic class for:
- (1) Devices in the form of one or more flexible panel units (see paragraph B of this section);
- (2) Devices in the form of panel units made up for plural strips, slats, or panels interconnected for relative motion (see paragraph C of this section);
- (3) Devices in the form of panel units or partitions, including those completely rigid and/or portable, having means combined therewith for facilitating the passage of insects therethrough in one direction and preventing or making their passage difficult in the reverse direction (see subclass 12 and the notes thereunder);
- (4) Devices in the form of portable partitioning panel units (see subclass 351 and the notes thereunder);
- (5) Combinations of (1) through (5) with each other, with rigid panel units, including rigid closures, or with other structure not elsewhere provided for (see subclass 127 and the notes thereunder).
- B. Flexible panel units are considered to be all those in which a flexible fabric or other flexible sheet material forms the panel portion, even though it may have a rigid frame, rigid enforcements, rigid support means for one or more edges thereof, or combinations of these features.
- C. Panel units made up of plural strips, slats or panels interconnected for relative motion include all units in which means are provided for directly connecting adjacent elements together to provide for relative motion therebetween. The individual strip, slat or panel elements may be rigid. The relative motion provided may be, for example, one or more relative swinging or pivotal motions, relative sliding motions, or combinations of such motions.

Panel units made up of plural rigid strips, slats or panels are not considered to be interconnected for relative motion and are, therefore, excluded (1) where a single strip, slat or panel is movably connected to a second strip, slat or panel which is immovably mounted or supported or (2) where the only connection therebetween is a common operator and/or a common support.

Such common support may be a single frame having either or both (1) rigid strips, slats or panels immovably mounted thereon, (2) rigid strips, slats or panels movably mounted thereon and connected only through the frame and/or by common operating means.

- D. These devices are termed, for example, closure, partition, weather protective, ventilation, ornamentation and like devices, more specifically called awnings, curtains, shades, blinds, gates, doors, windows, shutters, screens, roll tops for desks, picture screens, fire place screens, photographic backgrounds, vehicle storm fronts, shields, visors, robes or aprons, etc.
- E. Since this is the generic class, it takes the subject matter specified in paragraphs A to C only when of a character not provided for in some other main class, for which see the notes below.
- F. The devices classified in this class and detailed in paragraphs A C, supra, have been generically termed flexible and portable panels. Those closures and panels not of the flexible panel type, have been generically called rigid closures and rigid panels. See References to Other CLasses, below.

# SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS

The following notes are those considered necessary to stand out in connection with the main class definition. Many of them are repeated in connection with subclass definitions, and other notes to other main classes occur only under the particular subclasses to which they are pertinent.

- (1) Note. Combinations. In general, art devices of which a flexible or portable panel is but a part are classified with the appropriate art and cross-referenced in this class when the disclosure of structure of the panel, its mounting and/or operating means warrants the same. However, combinations of flexible or portable panels as above defined, with other closures or panels (herein called rigid closures or rigid panels) are in this class, subclasses 19+ and subclasses 87+.
- (2) Note. Enclosures. This class does not have flexible or portable panels related to each other or to other structure to form enclo-

sures. For such devices, see the class appropriate to the type of enclosure claimed, as the various receptacle, cabinet, building structure, tent, vehicle, etc., classes; and also Class 128, Surgery, subclass 205.26. Enclosures should be distinguished from this Class 160 subclasses 19+ and other nonplanar flexible and portable panel arrangements such as are in subclasses 45+ (including subclass 53 and subclasses 56+), 86, 88, 131+, 183, 262, and 352.

- (3) Note. Support Subcombinations. For classification of support subcombinations for flexible and portable panels of the hanging and drape type, see References to Other Classes.
- (4) Note. Other Subcombinations Elsewhere Classified. In general, elemental parts of flexible and portable panels, which are useful in other relations and which have attained a separate status in the art as separate subjects matter for invention are provided for in other main classes. When proper provision could not be found, such parts or subcombinations were left in this class (160). General notes to: Stock Material (e.g., web, sheet, strand) will be found in Class 428. Stock Material or Miscellaneous Articles.
- (5) Note. Joints, in general, will be found in Class 403, Joints and Connections. However, fabric fastening means and joints of flexible and portable panels are classified in this class (160), subclasses 382+ and related art is set forth in the notes to such subclasses.

Strand Guides will be found in either Class 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclasses 2.1+, 94+, 210+, 215, and 219; Class 74, Machine Element or Mechanism, when used in apparatus which transmits power between element of a machine or an adjustable article; or Class 254, Implements or Apparatus for Applying Pushing or Pulling Force, subclasses 389+ when used with the implements or apparatus which bodily

moves a load between two locations. See Class 15, Brushing, Scrubbing, and General Cleaning, subclass 246, where combined with means to wipe or clean cord or rope; and Class 24, Buckles, Buttons, Clasps, etc., subclasses 115+ where combined with cord and rope holding means.

- (6) Note. Making of closures, partitions and panels, flexible and portable. Single step methods and single operation apparatus for making devices here classified, and subcombinations thereof, will be found in the various manufacturing classes. Plural step methods and plural operation apparatus, not otherwise classified, are found in Class 29, Metal Working, particularly subclass 24.5 for the assembly or combined making and assembly of venetian blinds, and the Notes in that class (29) refer to other appropriate loci.
- (7) Note. For devices designed for covering a supporting surface to receive wear which could otherwise meet the definitions of this class, see References to Other Classes.
- (8) Note. Pistons and followers of the flexible panel type have been excluded from this class and may be found in the pertinent subclasses of Classes 217, Wooden Receptacles; 220, Receptacles; 222, Dispensing and 92, Expansible Chamber Devices.
- (9) Note. Where any device or combination of devices classifiable in this class has an associated roll or roller, the roll or roller operating means will be either classified or cross-referenced in subclasses 238+.
- (10) Note. For designs for flexible and portable closures, partitions, and panels, such as curtains, shades, screens, gates, etc., and for designs of parts usable therewith, see References to Other Classes.

LINE WITH CLASS 211, CLASS 160, AND CLASS 16

Class 211, Supports: Racks, particularly subclasses 87.01+ for the structure of both single and plural rods or other elongated elements claimed in combination with mounting means (including those of the bracket type) constructed to movably support the elongated element and having

operating means, and also takes nonmovably mounted single or plural rods where features or rod structure in addition to the connection between the rod and bracket are claimed (not pertaining to the means for fastening the hanging or drape fabric). Features in addition to the above, claiming the fabric either broadly or specifically, means to fasten the fabric to the elongated element, means to operate the fabric, etc., cause classification in Class 160. Flexible or Portable Closure, Partition, or Panel or Class 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.). (See Lines With Other Classes and Within This Class, (3) Note) LINE WITH CLASS 248, CLASS 211,

CLASS 160, AND CLASS 16

Class 248, Supports, particularly subclasses 251+ take the bracket mountings for both single and plural poles or other elongated elements both, per se, and in combination with the pole or elongated element where only those features pertaining to the connection with the bracket (see the reference in this note to Class 211) are claimed, and even though the bracket is adjustable, where no operating means (see the reference in this note to Class 211) are claimed. Where features other than above enumerated are claimed, see Classes 211, Supports: Racks; 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), and 160, Flexible or Portable Closure, Partition, or Panel. (See Lines With Other Classes and Within This Class, (3) Note, for related information.)

#### SECTION III - REFERENCES TO OTHER **CLASSES**

#### SEE OR SEARCH CLASS:

2, Apparel, appropriate subclasses for flexible fabric hangings, drapes and fabric filled frames forming portions of apparel, subclass 2.5 portable body worn or carried panels which have penetrating resistive features.

- 4, Baths, Closets, Sinks, and Spittoons, particularly subclass 588, and subclass 608 for shower baths with curtains.
- 5, Beds, for flexible panels combined with features of bed structure; subclasses starting with 186.1+ for bottoms, many of which are in the form of flexible panels, subclass 163 screens and curtains for upending bedsteads, subclass 492 for pillow-sham holders and subclass 512 for screens.
- Bridges, Particularly subclasses 50+ for rigid 14. bridge gates and for bridge gates of the flexible panel type where features of bridge structure or relation are claimed.
- 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), for miscellaneous types of subcombinations utilized in conjunction with flexible and portable panel combinations, see particularly subclasses 2.1+ for bushing or lining thimbles; subclasses 49+ for combined checks and closers; subclasses71+ for closers; subclasses 82+ for closure checks; subclasses 86.1+ and 87+ for panel hangers, travelers, and/or tracks (the lines with the last group of subclasses are set forth in note (3) of the main class definition of this class (160)); subclasses 110.1+ and the notes thereunder for handles; subclasses 193+ for sash, frame, or panel balances; subclasses 221+ for hinges; subclasses 403 and the notes thereunder, for paper weights; and subclass 404 and the notes thereunder, for weights of general application.
- 16. Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclasses 87+. subclasses take (a) nonmovably mounted tracks, both per se and in combination with their supporting means; (b) travelers, per se, (except as set forth in notes (4) to (6), subclass 87.2) and in combination with the track as in (a); and (c) either (a) or (b) in combination with the hanging fabric or other flexible sheet material where only those features thereof are claimed as pertain to connection with the travelers. Features claimed in addition to those enumerated above (such as movable mounting of track, fabric operating means, additional characteristics of the fabric, etc.) cause classification in Class 160, Flexible or Portable Closure, Partition, or Panel. (See Lines With Other

- Classes and Within This Class, (3) Note, for related information.)
- 27, Undertaking, subclass 27 for flexible and portable panels associated with casket carriers.
- 38, Textiles: Ironing or Smoothing, particularly subclass 66 for pressing machine roll or platen covers and ironing table covers and subclasses 102.1+ for a cloth-stretcher frame.
- 40, Card Picture, or Sign Exhibiting, for devices of the flexible or portable panel type specialized to display information by printing or other characters or combined with other card, picture or sign exhibiting features.
- 43, Fishing, Trapping, and Vermin Destroying, particularly subclasses 7+ for nets; subclass 59 for burglar traps; subclasses 60+ for imprisoning traps; subclasses 64+ for self and ever set traps and subclass 119 for window, screen or door insect traps.
- 47, Plant Husbandry, for flexible and portable panels specialized for the purposes of such class or combined with other plant husbandry features.
- 52, Static Structures (e.g., Buildings), subclasses 177+. (See Lines With Other Classes and Within This Class, (7) Note.)
- 55, Gas Separation, for flexible and portable panels designed and disclosed for gas separation.
- 69, Leather Manufactures, subclasses 19.1+ for a frame type skin or hide stretcher.
- 70, Locks, for flexible and portable panels combined with locks, where only those characteristics are claimed that are required for the application or operation of the lock.
- 105, Railway Rolling Stock, for flexible and portable panels combined with other features of rolling stock construction; subclasses 8.1+ for such panels combined with vestibule connections between adjacent cars; subclass 324 for sleeping car curtains and rods and subclasses 332+ for passenger cars convertible from open to closed types.
- 108, Horizontally Supported Planar Surfaces, subclasses 67+ for a horizontally supported planar surface having a flexible coplanar extension surface.
- 109, Safes, Bank Protection, or a Related Device, particularly subclasses 10+ for flexible panels in combination with a desk, counter or display surface, with or without a partition, arranged for protection against attack or having attack actuated operating means, and in the appropriate subclasses for nonfabric panels of penetrating resistive types.

- 112, Sewing, subclasses 402+ for sewn stock material including edging, ruffles or embroidery.
- 114, Ships, subclasses 102.1+ for a sail or control means therefor and rigging and subclasses 240+ for torpedo nets, where features specialized to ships are claimed, subclasses 117+ for doors, subclasses 173+ for ports and subclasses 201+ for hatches and covers of the flexible and portable panel type, where ship features in addition to those necessary for the mounting and operation of the panel are claimed.
- 126, Stoves and Furnaces, particularly subclasses 500+ and subclasses 201+ for flexible and portable panels where features of fireplace, stove, or furnace construction or particular relations thereto are claimed.
- 135, Tent, Canopy, Umbrella, or Cane, subclasses 87+ for flexible and portable panels organized to form a substantially complete enclosure with or without a roof and also for self-supporting portable roofs of flexible material.
- 165, Heat Exchange, subclasses 98+ for a radiator with an adjustable face covering means.
- 181, Acoustics, subclasses 148+ and 157+ for diaphragms and their mounting for acoustic purposes.
- 182, Fire Escape, Ladder, or Scaffold, subclasses 21+ for a ladder convertible to a shutter.
- 185, Motors: Spring, Weight, or Animal Powered, for spring motors of general application.
- 209, Classifying, Separating, and Assorting Solids, for flexible and portable panels designed for such purpose.
- 210, Liquid Purification or Separation, subclasses 483+ for a supported or shaped filter medium.
- 211, Supports: Racks, particularly subclasses 87.01+ for the structure of both single and plural rods or other elongated elements claimed in combination with mounting means (including those of the bracket type) constructed to movably support the elongated element and having operating means, and also takes nonmovably mounted single or plural rods where features or rod structure in addition to the connection between the rod and bracket are claimed (not pertaining to the means for fastening the hanging or drape fabric). (See Lines With Other Classes and Within This Class and Within This Class, above.)
- 220, Receptacles, subclasses 200+ and the notes thereto for the classification of closures in general.

- 220, Receptacles, for closures not of the flexible or portable panel type (called rigid closures), particularly subclasses 200+ and the notes to the definitions thereof.
- 223, Apparel Apparatus, subclass 105 for curtain rod threaders.
- 226, Advancing Material of Indeterminate Length, appropriate subclasses for methods of, and apparatus for, feeding material without utilizing the leading or trailing ends to effect movement of the material.
- 242, Winding, Tensioning, or Guiding, especially subclasses 594+ for a dispensing rack with multiple coil supporting stations.
- 245, Wire Fabrics and Structure, subclasses 2+ for patches for wire fabrics.
- 248, Supports, particularly subclasses 251+. These subclasses take the bracket mountings for both single and plural poles or other elongated elements both, per se, and in combination with the pole or elongated element where only those features pertaining to the connection with the bracket. (See Lines With Other Classes and Within This Class, above).
- 250, Radiant Energy, subclasses 483.1+ for fluorescent and phosphorescent screens.
- 256, Fences, appropriate subclasses for fences made of flexible panels.
- 271, Sheet Feeding or Delivering, for sheet feeding of general application.
- 280, Land Vehicles, subclasses 847+ for vehicle dust and mudguards in the form of flexible panels.
- 292, Closure Fasteners, for flexible panel type closures combined with closure fasteners, having those characteristics of the panel that are required for the fastener.
- 293, Vehicle Fenders, for vehicle fenders of the flexible panel type.
- 296, Land Vehicles: Bodies and Tops, for flexible panels combined with land vehicles, their bodies and tops, subclasses 97.1+ for flexible panels having (1) optical characteristics, (2) a particular location with respect to a car or its driver, or (3) in combination with auto body structure, and subclasses 210+ for land vehicle tops having openings therein and movable closures therefor; and particularly subclass 219 for closures which comprise hinged sections or foldable or rollable material. See also subclass 218 for closures which may be removed from the vehicle.
- 297, Chairs and Seats, appropriate subclasses, for a panel used in seat construction wherein the

- panel has means limiting its use as a component of a seat; especially subclasses 452.1+ where a configuration is provided conforming to the shape of the buttocks or back of the occupant.
- 312, Supports: Cabinet Structure, for flexible panels combined with features of cabinet structure in addition to those necessary for the mounting or housing of the panel. When the cabinet is a hood, canopy, shield or storage chamber whose sole function is to house the panel or a part thereof, it is found in this Class 160, subclasses 19+.
- 353, Optics: Image Projectors, for image projection apparatus in combination with a viewing screen.
- 359, Optical: Systems and Elements, subclasses 443+ for projection screens, subclass 445 for those with acoustical properties, subclasses 591+ for panels having reflecting or refracting characteristics for distributing light to a building and subclasses 885+ for optical filters.
- 362, Illumination, subclass 278, for light projectors having a foldable or collapsible light screen or for projectors having an operator for a light screen.
- 396, Photography, for flexible and portable panels (a) combined with features of photographic instrumentalities provided for in such class, or (b) having features specially adapting the same to instrumentalities of such class (as subclass 3 for photographic backgrounds where the surface characteristics or particular relation to the subject matter to be photographed are claimed, and subclasses 479+ for curtain-type shutters).
- 400, Typewriting Machines, subclass 714, for devices for screening the keyboard from view.
- 404, Road Structure, Process, or Apparatus, subclasses 34+ for a pavement made of modules or blocks. (See Lines With Other Classes and Within This Class, (7) Note, above)
- 405, Hydraulic and Earth Engineering, subclasses 16+ for revetments. (See Lines With Other Classes and Within This Class, (7) Note, above.)
- 428, Stock Material or Miscellaneous Articles, subclass 37 for a spirally flat, wound strand or strip (e.g., braided rug), subclasses 68+ for a sheet enclosed or covered and not found in any other class, subclasses 98+ for a structurally defined web or sheet stock material not specially provided for in any other class; subclasses 221+ for a web or sheet stock material having a structurally defined element or com-

- ponent and not specifically provided for in any other class; and subclasses 411.1+ for non-structural stock material in the form of a plural layer web or sheet.
- 454, Ventilation, appropriate subclass for flexible and portable panels with additional means (as pumps, valves, deflectors, etc.) for causing, directing or controlling air flow.
- 607, Surgery: Light, Thermal, and Electrical Application, particularly subclass 96 for enclosures specially designed for sun baths even though formed of flexible or portable panels.
- D5, Textile or Paper Yard Goods; Sheet Material, (See Lines With Other Classes and Within This Class, (10) Note, above.)
- D6, Furnishings, subclasses 332+. (See Lines With Other Classes and Within This Class, (10) Note, for related information.)
- D8, Tools and Hardware, (see Lines With Other Classes and Within This Class, (10) Note, above).
- D25, Building Units and Construction Elements, (See Lines With Other Classes and Within This Class, (10) Note, above.)

#### **SUBCLASSES**

#### 1 **AUTOMATIC CONTROL:**

This subclass is indented under the class definition. Devices having associated therewith some additional device for sensing a condition, e.g., temperature change, wind direction or velocity, rain, etc., and which sensing device in turn initiates operation of means which perform some controlling function.

(1) Note. Devices which stop the motion of movably mounted flexible panels at desired positions have been placed below with their operating mechanisms of the appropriate type of device.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 1+ for thermal releasers or actuators for a rigid closure and subclasses 21+ for a rigid closure responsive to or directly actuated by ambient fluid.
- 73, Measuring and Testing, subclasses 29.02+ for hygrometers and hygrostats, per se.

- 109, Safes, Bank Protection, or a Related Device, subclass 33 for related art.
- 200, Electricity: Circuit Makers and Breakers, appropriate subclasses under subclasses 61.62+, for flexible and portable panels which constitute circuit makers and breakers.
- 362, Illumination, subclass 276, for light projectors having an automatically operated light dimming means.
- 374, Thermal Measuring and Testing, subclasses 100+ for a thermometer.

#### 2 Nonthermal automatic initiator:

This subclass is indented under subclass 1. Devices in which at least one sensing device operates in response to other than a change in temperature.

#### **3** Force initiated:

This subclass is indented under subclass 2. Devices, where the sensing device is initiated by the application of an outside force.

#### 4 Weight:

This subclass is indented under subclass 3. Devices wherein the force applied to the sensing device is the weight of an animal, person, vehicle or other object.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 263+ for a closure operator initiated by an impact or by pressure on a pedal or treadle.
- 292, Closure Fasteners, subclasses 93 and 94, for panel and platform emergency operative means for closure fastener bolts.

#### 5 Weather and/or light initiated:

This subclass is indented under subclass 2. Devices wherein the sensing device is initiated by either or both (1) a change in weather condition (e.g., rain) or (2) variations in light intensity, including lack of light.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclasses 21+ for closures responsive to or directly actuated by ambient fluid, e.g., rain, and subclass 25 for radiant energy, e.g., light controlled closures.

250, Radiant Energy, subclasses 200+ and the classes specified in the Notes thereto, for photocell electric circuits and photocell apparatus. Indented subclass 205 includes those in which the photocell controls a shutter in the path between the light source and the photocell.

#### **6** Nonfusible thermal initiator:

This subclass is indented under subclass 1. Devices wherein the sensing device is a non-fusible, thermal means.

#### 7 With starting or driving means:

This subclass is indented under subclass 1. Devices wherein the flexible panel has a starting or driving means whose operation is initiated by the sensing device.

#### **8** With retarding means:

This subclass is indented under subclass 1. Devices, wherein the flexible panel has a retarding means to limit its speed after release by the sensing device.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

296, for speed limiting mechanism for roll type devices having no automatic control to initiate operation.

### 9 With releasing means for operator and/or counterbalance:

This subclass is indented under subclass 1. Devices wherein the sensing device either (1) releases the bias of a counter-balance means or (2) disconnects the flexible panel operator, to allow the panel to move under the control of gravity.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- for an additional automatically controlled starter or operator to assist gravity.
- for an additional retarding means in the combination to control the movement.

#### 10 WITH SIGNAL, INDICATOR, OR SIGN:

This subclass is indented under the class definition. Devices having a signal, a sign and/or an indicator.

#### SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, appropriate subclasses for devices of the flexible or portable panel type specialized to display information by printing or other characters, or combined with other card, picture or sign exhibiting features.
- 109, Safes, Bank Protection, or a Related Device, subclasses 38+ particularly 41-43 for flexible or portable panels in combination with alarm circuits and so arranged that contact, penetration and/or movement cause operation of the alarm.
- 116, Signals and Indicators, appropriate subclasses for mechanical signals.
- 340, Communications: Electrical, appropriate subclasses, for electrical signaling, especially subclasses 545.1+ for electrical automatic door or window movement and partition penetration responsive indicating systems.

#### 11 WITH WIPER OR CLEANER:

This subclass is indented under the class definition. Devices combined with (1) a wiping element for wiping some portion of the combination for either cleaning purposes, for material application or for both or (2) a device for cleaning some portion of the organization.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

40+, for filler and filler type devices which may also incidentally wipe some relatively movable portion of the organization.

#### SEE OR SEARCH CLASS:

15, Brushing, Scrubbing, and General Cleaning, for cleaners, per se, of the type there provided for.

#### 12 WITH INSECT EXITS:

This subclass is indented under the class definition. Devices combined with means for facilitating the exit of insects. These devices are intended to prevent or make difficult the reentrance of the insect.

#### SEE OR SEARCH CLASS:

43, Fishing, Trapping, and Vermin Destroying, subclasses 58+ for devices for trapping, particularly subclasses 107+ for insect traps and subclass 119 for insect traps combined with a window, screen or door.

# 13 Applied to slidably interconnected frames or panels:

This subclass is indented under subclass 12. Combinations in which the exit is applied to slidably connected frame or panel sections.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

222+, for such organization not having insect exits.

#### 14 Zigzag or crimped surface:

This subclass is indented under subclass 12. Combinations in which the exit comprises a zigzag surface formation.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

16, for conical or prismatic formations.

#### 15 Spaced or overlapping sections:

This subclass is indented under subclass 12. Combinations in which the exit structure includes at least two panels, strips or combinations of panels and strips spaced from each other in any direction and/or positioned in over-lapping relationship.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 13, and 130+ (especially subclasses 222+) for devices of the plural strip, slat or panel type having overlapping or spaced sections.
- 14, for such exit structure with a zigzag surface formation.
- 179, for single frames having plural fabrics.

#### 16 Conical, prismatic or other protuberances:

This subclass is indented under subclass 12. Combinations in which the exit passage structure is of conical or prismatic form or is at the apex of a protuberance.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

14, for such exit structure with a zigzag surface formation.

#### 17 Bar, grooved or apertured:

This subclass is indented under subclass 12. Combinations in which the exit is formed by means of grooves or apertures in a bar member.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

16, for such structures having conical or prismatic passage form.

#### 19 WITH HOOD, CANOPY, SHIELD STOR-AGE CHAMBER, OR OUTRIGGED RIGID PANEL:

This subclass is indented under the class definition. Devices combined with (1) a hood, canopy, shield or storage chamber, provided to conceal or protect flexible or portable panels, a part or parts thereof, or some part or device combined therewith or (2) an outrigged rigid closure.

- (1) Note. Such devices claimed for concealing or protecting a plurality of diverse types of flexible or portable partitions will be found in this subclass and in subclass 25.
- (2) Note. Such devices claimed in combination with means for mounting the flexible or portable panel are in this subclass or appropriate indented subclass, except subclasses 38+, which takes the structure of such hood, canopy, shield or storage chamber, per se.
- (3) Note. See Note (3) of the class definition of this class (160) for the line between this subclass, Class 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclasses 87.4+ and Class 211, Supports: Racks, subclasses 87.01+.
- (4) Note. For rigid outrigged closures, see particularly Class 52, Static Structures (e.g., Buildings), subclasses 74+; Class

217, Wooden Receptacles, subclass 60; and Class 220, Receptacles, subclasses 200+.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 32, for plural strip, slat or panel devices in which one or more of the slats are constructed to form a housing or container to receive other strips or slats.
- 87+, for structure wherein one device within the class definition is positioned in front of, or otherwise shields, one or more other devices (of either the same or different type) within the class definition, or a rigid closure.
- 382+, for hollow rods having means which substantially enclose a second elongated element over which a fabric hangs.

#### SEE OR SEARCH CLASS:

- 296, Land Vehicles: Bodies and Tops, subclasses 147+ for housed land vehicle doors and windows not of flexible or portable panel type.
- 312, Supports: Cabinet Structure, for cabinets for storing things in addition to the flexible or portable panel, this class (160) having cabinets solely for the purpose of housing such a panel.

### 20 Outrigged rigid panel, with flexible panel sides:

This subclass is indented under subclass 19. Devices wherein a rigid panel has an outrigger (as defined in subclass 45) and has associated therewith sides of flexible panels.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

45+, for outrigged flexible or portable panels.

#### 21 Changeable size:

This subclass is indented under subclass 19. Combinations in which the hood, canopy shield, storage chamber, outrigged rigid panel, or some combined part, is so constructed that all or part of the device may be changed in size by other than motion to or from operative positions.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 39, for such devices when only the structure of the hood, canopy, shield or storage chamber is claimed with no features of the flexible or portable panel or its supporting means are
- 64, for other changeable size devices in the class, and see the notes thereunder.

#### 22 For outrigged flexible panels (i.e., awnings):

This subclass is indented under subclass 19. Devices wherein the flexible or portable panel or some combined device has an outrigger (as defined in subclass 45).

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

45+, for outrigged flexible and portable panels.

#### 23.1 For roll type:

This subclass is indented under subclass 19. Combination combined with a flexible panel specially designed to be accumulated in the form of a roll.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 22, for an outrigged flexible panel which may be of the roll type.
- 238+, for other roll type devices and see the search notes thereunder.

#### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 515+ for a changeable exhibitor of the single reel and web type having a reel cabinet.

#### 24 Portable:

This subclass is indented under subclass 23.1. Devices having means peculiarly adapted to make the device portable, including those having legs or bases to support the device in upright position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

351, for other portable devices, and see the notes thereto.

#### With plural flexible or portable panels:

This subclass is indented under subclass 23.1. Devices in which two or more flexible or portable panels are claimed. At least one must be a roll type. The other or others may be of roll or other types, except outrigged, for which see subclass 22.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

50+, 54+, and 87+, for other plural flexible and portable panels without housings, etc.

#### 26 Casement housed roll:

This subclass is indented under subclass 23.1. Combinations in which the roll is housed in a chamber formed in the frame defining the opening to be closed by the roll type device.

#### 27 Fabric free edge connected to movable closure:

This subclass is indented under subclass 26. Combinations in which the free or leading edge of the fabric (i.e., material) that unwinds from the roll is secured to a movable rigid closure mounted in the same casement frame.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

28, for other fabric free edge connected structures and see the notes thereunder

### 28 Fabric free edge connected to movable closure:

This subclass is indented under subclass 23.1. Combinations in which the free or leading edge of the fabric (i.e., material) that unwinds from the roll is secured to a movable closure (other than the flexible or portable panel type) mounted in the same opening.

# 29 Movable hood, canopy, shield, storage chamber, or outrigged rigid panel:

This subclass is indented under subclass 23.1. Combinations in which the hood, canopy, shield, storage chamber or outrigged rigid panel is movable as a unit.

#### 30 Mounted upon movable closure:

This subclass is indented under subclass 29. Combinations in which the hood, canopy, shield or storage chamber is mounted on a movable closure, including those built into the movable closure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

102, for flexible panels connected to and moved by slidable rigid closures.

# Combined with frame or demountable side guides:

This subclass is indented under subclass 23.1. Combinations in which the fabric roll (1) is associated with a frame which is mountable and demountable as a unit or (2) is associated with guides which are mountable and demountable as a unit with the roll or the hood, canopy, shield, storage chamber or outrigged rigid panel.

(1) Note. The roll may be housed in a hollow frame part.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

239+, for other framed type mounted roll devices.

# For plural strip, slat, or panel and/or pleating type:

This subclass is indented under subclass 19. Combinations in which either (1) a pleating device as defined in subclasses 84.01+ or a plural strip, slat or panel type device as defined in subclass 130 is associated with a hood, canopy, shield, storage chamber or outrigged rigid panel.

(1) Note. This subclass includes plural strip, slat and panel devices in which one element constitutes a substantially complete housing for another element.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

23.1+, for plural slats or panels which are stored in the form of a roll and have a hood, canopy, shield or storage chamber; or are combined with an outrigged rigid panel.

84.01+, for other pleating devices.

130+, and see the notes thereunder for other plural strip, slat or panel devices.

#### 33 Casement housed:

This subclass is indented under subclass 32. Combinations in which the device is housed in a chamber formed in the frame defining the opening to be closed by the device.

#### **34** Venetian blind and/or collapsing:

This subclass is indented under subclass 32. Combinations in which (1) the plural strip, slat or panel device is a venetian blind as defined in subclass 166.1 or (2) the strips, slats or panels are arranged in substantially the same plane and the unit area is changed by moving the elements closer together or farther apart, for example, as in the parallelogram type (subclasses 136+).

(1) Note. The hood, canopy, shield or storage chamber must house more than the mere operating or adjusting means to justify classification in this subclass.

#### 35 Pleating or edge hinged gathering type:

This subclass is indented under subclass 32. Combinations in which there is (1) a pleating type device as defined in subclasses 84.01+ or (2) a plural strip, slat or panel device, as defined in subclass 130, having its elements hinged or swingable interconnected along adjacent edges and gathered or accumulated into a stack by adjacent elements swinging together into face to face relation in a pleating manner with the joints between adjacent elements on alternate sides of the stack.

#### 36 Edge hinged, slidably mounted:

This subclass is indented under subclass 32. Combinations in which a plural strip, slat or panel device slides in either straight or curved guides and has the elements thereof hingedly or swingably interconnected in side by side relation.

#### 37 Slidable into storage chamber:

This subclass is indented under subclass 19. Combinations in which the housed part slides into a storage chamber.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclasses 372+ for a closure of the type provided for movable into a storage housing and see the search notes thereto for the loci of other closures movable into a storage chamber.

#### 38 Structure:

This subclass is indented under subclass 19. Devices in which only the structure of the hood, canopy, shield or storage chamber, with or without its mounting and/or operating means, is claimed.

#### SEE OR SEARCH CLASS:

52, Static Structures (e.g., Buildings), subclasses 74+ for a rigid, fixed outrigged panel, e.g., awning.

#### 39 Extensible:

This subclass is indented under subclass 38. Devices where such structure is extensible.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for similar structures not disclosed for the purposes shown.

#### 40 WITH FILLER AND FILLER TYPE:

This subclass is indented under the class definition. Devices (1) combined with means to fill cracks or other spaces left when the flexible panel is mounted in position, and/or (2) small sized flexible or portable panels for mounting in cracks or other small spaces to fill same, for example, between sashes of a window. The usual disclosed purpose is to prevent entry of the insects through small spaces which are left due to structure of the panel window or other closure.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 11, for wipers and/or cleaners which may incidentally function as fillers.
- 94, and 222+, for filled combinations for the combinations and structures classified therein.
- 375+, for shiftable edge bar sections for frame type devices.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclasses 475.1+ for a closure seal, e.g., strippers gasket or weatherstrip, and see the search notes thereto for the loci of other seals.

#### 41 For roll type:

This subclass is indented under subclass 40. Devices associated with a roll type device.

#### 42 Between outrigged roll type:

This subclass is indented under subclass 41. Devices wherein the device spans the distance between two or more outrigged roll type devices.

# 43 Between parallel plane, relatively slidable panels:

This subclass is indented under subclass 40. Devices located in the space between two panels, which two panels lie in parallel planes, and at least one of which is slidable relative to the other.

# 44 WITH LIQUID SUPPLYING AND/OR DRAINING MEANS:

This subclass is indented under the class definition. Devices combined with (1) means provided to supply liquid to and/or (2) means to drain or otherwise direct or guide the flow of liquid upon or from the flexible or portable panel.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

11, for wiper devices which apply a liquid.

40+, for fillers for cracks or spaces which direct liquids past such cracks or spaces.

#### SEE OR SEARCH CLASS:

222, Dispensing, appropriate subclasses for liquid dispensing containers, per se.

#### 45 WITH OUTRIGGERS (I.E., AWNINGS):

This subclass is indented under the class definition. Devices in which some portion of the device is designed to mount upon a supporting surface and have an outrigger; i.e., some rigid bracing element which is both mounted at and contacts a portion of the device at a point remote from its connection with the mounting surface to hold such portion at an angle to such surface.

(1) Note. When an "awning" is recited without any structure necessary for an outrigger, see the appropriate succeeding subclasses.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

19+, for outrigged rigid panels combined with a flexible or portable panel.

#### SEE OR SEARCH CLASS:

- 52, Static Structures (e.g., Buildings), subclasses 74+ for a rigid outrigged, fixed panel, e.g., awning.
- 296, Land Vehicles: Bodies and Tops, subclasses 146.1+ for a door or window combined with rigid visors, and subclasses 77.1+, particularly subclasses 84.1+, for rigid outrigged panels, such as windshields.

#### 46 Floor or ground engaging outrigger:

This subclass is indented under subclass 45. Devices in which the outrigger engages the device and the floor or ground.

#### 47 With groove engaging mounting means:

This subclass is indented under subclass 45. Devices having means for engaging grooves in the walls defining the opening in the wall structure with which the device is associated for mounting the same.

(1) Note. These devices for the most part are mounted in the same grooves in which a closure slides.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

105, for other flexible panels mounted in sliding closure guides.

#### 48 With rigid closure:

This subclass is indented under subclass 45. Devices in which the outrigged device is associated with a rigid closure.

 Note. The closure may be applied to an opening in the fabric of the outrigged device.

#### 49 Movable rigid closure related:

This subclass is indented under subclass 48. Devices in which the outrigged device is claimed in a related position to a moving closure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

47+, for devices wherein this relation consists in that the mounting of the device is in the grooves in which a movable rigid closure slides.

#### With nonoutrigged flexible panel:

This subclass is indented under subclass 45. Devices where the outrigged device is combined with at least one other nonoutrigged flexible panel.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

57+, for structure wherein the nonoutrigged flexible panel constitutes a side for the device.

#### 51 Convertible:

This subclass is indented under subclass 50. Devices where at least one of the flexible panels is convertible to another form of device either within or without the class definition.

#### With nonoutrigged roll type:

This subclass is indented under subclass 50. Devices wherein the nonoutrigged device is of the roll type.

#### 53 Umbrella type:

This subclass is indented under subclass 45. Devices in which the fabric collapses upon a central rod-like support in the same manner as an umbrella.

#### Plural outrigged type:

This subclass is indented under subclass 45. Devices wherein two or more flexible panels are outrigged.

#### 55 One roll type:

This subclass is indented under subclass 54. Devices where at least one of the outrigged panels is of the roll type.

#### Nonplanar fabric arrangements:

This subclass is indented under subclass 45. Devices wherein the direction of the extended fabric is changed or may be changed to form two or more panels at an angle to one another.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

53, for those nonplanar devices which collapse upon a central supporting

66+, for a guide roller or similar device to direct the fabric in its rolling and unrolling motion onto and from its roller.

#### 57 Planar surface, with sides:

This subclass is indented under subclass 56. Devices in which the additional panels extend between the support and the outrigged panel.

#### 58.1 Sides foldable, rollable, or collapsible:

This subclass is indented under subclass 57. Device in which the additional panels are foldable, rollable or otherwise collapsible.

#### 59 Multi-positional:

This subclass is indented under subclass 45. Devices in which the outrigged device may be positioned in a plurality of different positions.

#### 60 Convertible:

This subclass is indented under subclass 45. Devices which by manipulation of parts may be converted to a second character of device.

(1) Note. Where the only result of the manipulation results in the closing of an opening in a wall, the device is not considered to be convertible and has been classified in the pertinent subclasses below.

#### 61 Plural strip, slat, or panel type:

This subclass is indented under subclass 45. Devices in which the fabric consists of a plurality of strips, slats or panels.

#### 62 Telescopic and/or collapsible:

This subclass is indented under subclass 61. Devices in which the plurality of strips, slats or panels may be accumulated to occupy a less amount of surface area when in either an outrigged position or in a nonoutrigged position.

#### With fabric having diverse areas:

This subclass is indented under subclass 45. Devices wherein the outrigged fabric has portions of diverse area such as a slit, slot or some rigid portion, e.g., glass etc.

 Note. The line between this subclass and subclass 237, where no outrigged feature is claimed, is one of disclosure. See the notes thereto for other devices with diverse areas.

#### 64 Adjustable size:

This subclass is indented under subclass 45. Devices having means by which the size of the outrigged device may be changed other than by motion to its outrigged position or to its non-outrigged position.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

13, 21, 39, 221, 222+, 240, 263, and 372, for other changeable size devices.

#### With braced outrigger:

This subclass is indented under subclass 45. Devices in which the outrigger is braced.

#### 66 Roll type:

This subclass is indented under subclass 45. Devices in which the outrigged device is of the roll type.

#### 67 Shiftable position roll:

This subclass is indented under subclass 66. Devices in which there is means for changing the position of the roll in addition to its rotation about its own axis.

SEE OR SEARCH THIS CLASS, SUBCLASS:

242, for nonoutrigged changeable position roll type devices.

#### 68 Fabric free edge connected operator:

This subclass is indented under subclass 66. Devices wherein an operating means for causing the rolling and/or unrolling of the fabric is connected to the fabric free or leading edge, i.e., the edge first to leave the roll as it unrolls. Included are means for operating the outrigger which in turn is connected to the fabric free edge.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

265, for nonoutrigged roller type with fabric free edge operation.

#### 69 Multi-part outrigger:

This subclass is indented under subclass 66. Devices in which at least one of the outriggers is composed of a plurality of movable parts.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

78+, for nonroll type multipart outriggers.

#### 70 Two part, intermediate pivot:

This subclass is indented under subclass 69. Devices in which the outrigger consists of two parts pivoted together at an intermediate point.

#### 71 Telescopic:

This subclass is indented under subclass 69. Devices wherein the outrigger consists of two or more telescopic members which may be extended longitudinally in a straight line.

SEE OR SEARCH THIS CLASS, SUBCLASS:

75, for structure wherein the outrigger as a whole telescopes into a guide.

80, for nonroll type multipart rigger.

#### **Swinging outriggers:**

This subclass is indented under subclass 66. Devices wherein the outrigger is pivoted to the support.

#### 73 With pivotal motion preventing means:

This subclass is indented under subclass 72. Devices wherein some means, other than mere friction, holds the outrigger in its normally extended position.

#### 74 Sliding pivot:

This subclass is indented under subclass 72. Devices wherein the pivot has a sliding motion along the support.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

82, for nonroll type sliding pivoted outriggers.

#### 75 Sliding outriggers:

This subclass is indented under subclass 66. Devices in which the outrigger slides relative to the support, without any pivotal movement.

#### **76** With fabric frame:

This subclass is indented under subclass 45. Devices in which a fabric frame is outrigged.

#### 77 Pivoted:

This subclass is indented under subclass 76. Devices in which the frame is pivoted.

#### 78 Multi-part outrigger:

This subclass is indented under subclass 45. Devices in which at least one of the outriggers is composed of a plurality of movable parts.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

69+, for this device in disclosed roll type structure, whether or not claimed.

#### 79 Two part, intermediate pivot:

This subclass is indented under subclass 78. Devices in which the outrigger consists of two parts pivoted together at an intermediate point.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

70, for this device with roll type structure, whether or not claimed.

#### 80 Telescopic:

This subclass is indented under subclass 78. Devices in which the outrigger consists of two or more telescopic members which may be extended longitudinally in a straight line.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

71, for this device with disclosed roll type structure whether or not claimed.

#### 81 Swinging:

This subclass is indented under subclass 45. Devices in which the outrigger is pivoted to the support.

#### 82 With sliding pivot:

This subclass is indented under subclass 81. Devices wherein the pivot has a sliding motion along the support.

#### SEE OR SEARCH THIS CLASS, SUB-CLASS:

74, for this device with disclosed roll type structure, whether or not claimed.

#### 83.1 Rigid or nonmovable:

This subclass is indented under subclass 45. Device in which the outrigger is rigid or non-movable.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

46, for such an outrigger which engages the ground.

#### 84.01 PLEATING TYPE:

This subclass is indented under the class definition. Subject matter in which the constructive material for a flexible closure may be contracted or expanded by imparting folds therein or by straightening or tending to straighten such folds and where means is provided for causing such folds to occur at or along predetermined lines by engaging the material at points at opposite ends of the fold lines or by securing an elongated element at each predetermined fold line.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

130+, for interconnected slats or panels which do not form pleats.

340+, for devices of the hanging type which are freely suspended from their upper edge and also have folds imparted by lateral gathering or other gathering means.

370.23, for automotive windshield weather protectors or sunshields which are pleated or folded.

#### SEE OR SEARCH CLASS:

- 92, Expansible Chamber Devices, subclasses 34+ for a bellows-type expansion chamber device.
- 105, Railway Rolling Stock, subclasses 18+ for a bellows-type diaphragm between two articulated railroad cars.

#### 84.02 With power operating means:

This subclass is indented under subclass 84.01. Subject matter which employs electrical, pneumatic, hydraulic, or mechanical means to cycle a closure between an open and closed or closed and open position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

331, for devices of the hanging or drape type which have an operating means.

#### 84.03 Multiple section unit:

This subclass is indented under subclass 84.01. Subject matter in which there are two or more separately operable segments in a single flexible closure.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

115+, for plural strip, slat, or panel devices having sections separately operable from each other.

#### 84.04 With preformed pleats:

This subclass is indented under subclass 84.01. Subject matter in which the constructive material is a fabric that has creases, lines of weakening, or the like formed therein to facilitate forming folds in the flaccid fabric when the closure is cycled from closed to open.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

for devices of the hanging or drape type which have an operating means.

#### 84.05 Honeycomb type:

This subclass is indented under subclass 84.04. Subject matter in which the means for facilitating folding includes a series of interconnected closed cells.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

115+, for plural strip, slat, or panel devices having sections separately operable from each other.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 116+ for structurally defined honeycombed webs.

#### 84.06 With side guides:

This subclass is indented under subclass 84.01. Subject matter which has means provided to maintain or constrain the position of (a) the traveling end of the closure, (b) the lateral edges of the closure, or (c) a combination of end and edge constraint during closure movement.

#### 84.07 Fan type (e.g., for arched windows):

This subclass is indented under subclass 84.01. Subject matter in which a flaccid fabric closure is arranged in a generally semicircular shape when deployed about an apparent center.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

134, for plural strip, slat, or panel devices deployable about an apparent pivot.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 116+ for structurally defined honeycombed webs.

#### 84.08 Plural panel type:

This subclass is indented under subclass 84.01. Subject matter in which a single unit is formed from a plurality of rigid panels that are interconnected for relative flexing motion, but which will move as a group.

# 84.09 Lazy-tong links pivot about axes transverse to panel:

This subclass is indented under subclass 84.01. Pleating-type device wherein the means which causes or straightens the folds in the fabric, during the contraction or extension thereof, consists of a framework in which a series of jointed bars which engage the fabric pivot about axes that are perpendicular to the plane formed by the fabric when it is fully extended

(i.e., extensible lazy-tong-type device) on the framework.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

for plural strip, slat, or panel devices deployable about an apparent pivot.

### 84.11 Lazy-tong links pivot about axes parallel to panel:

This subclass is indented under subclass 84.01. Pleating-type device wherein the means which causes or straightens the folds in the fabric, during the contraction or extension thereof, consists of a framework in which a series of jointed bars which engage the fabric pivot about axes that are parallel to the plane formed by the fabric when it is fully extended (i.e., extensible lazy-tong-type device) on the framework.

#### **85 PLURAL RUN TYPE:**

This subclass is indented under the class definition. Devices in which a single flexible panel is looped over or under at least one pole, or other guide roller to cover the same or portions of the same area, and has means for moving the flexible panel relative to such pole roller or other guide.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

124, and 386, for single fabrics unmovably draped over a pole.

#### 86 Endless:

This subclass is indented under subclass 85. Devices having a flexible fabric in the form of an endless web.

#### 87 PLURAL AND/OR WITH RIGID CLO-SURE:

This subclass is indented under the class definition. Devices wherein (1) two or more flexible or portable panels are claimed in combination, or (2) at least one such panel is claimed in combination with a rigid closure or rigid panel.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

19+, and 45, where one or more of the panels or closures is outrigged.

40+, for filler type combinations.

130+, for structures there provided for being excluded from this subclass (87), except when two or more of such units are claimed in combination, or when one or more of such units are in combination with a rigid closure or panel. The definition and notes to subclass 130 set out the line in greater detail.

179, for plural fabrics in a single frame.

#### 88 Nonplanar, nonparallel arrangement:

This subclass is indented under subclass 87. Devices where at least two or more of the panels are arranged in different planes and at least two panels are not parallel. They are usually so arranged as to form a partial enclosure.

#### 89 Diverse types:

This subclass is indented under subclass 87. Plural devices, in which at least two of the panels are of different types, or at least two of them are of the same type but have different characters of motion, e.g., one swingable and one slidable.

Note. Patents illustrating, but not claiming a rigid closure are in this subclass and are cross referenced below when it is deemed advisable.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for vehicle windshields made of plural rigid panels at least two of which are interconnected for relative motion and have been treated as plural strip, slat or panel devices. A windshield in the form of (1) a single rigid panel, or (2) plural rigid panels not interconnected for relative motion, whether rigidly or movably mounted, has been considered a rigid closure.

#### 90 With rigid closure:

This subclass is indented under subclass 89. Combinations in which a flexible or portable panel is claimed in combination with a rigid closure or a rigid panel.

(1) Note. A rigid closure is, by definition, a closure not of the flexible or portable panel type.

(2) Note. Shutter, grille and register type closures, even though the vane elements are axially pivoted to the frame or supporting structure have been treated as rigid closures and are in this or the indented subclasses, if combined with a flexible or portable panel.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

- 19+, for outrigged rigid closures combined with flexible or portable panels;
- 47, and 48+, for the combination of outrigged flexible or portable panels with nonoutrigged rigid panels.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 61+ for facially opposed primary and auxiliary closures of the type provided for, and see the search notes thereto for the loci of other facially opposed closures.
- 454, Ventilation, subclasses 214+ for flexible and portable panel devices combined with windows and with some additional means for causing, directing or controlling the flow of air.

#### 91 Diverse rigid closures:

This subclass is indented under subclass 90. Combinations in which there are two or more rigid closures.

#### 92 Swinging rigid closures:

This subclass is indented under subclass 90. Combinations in which the rigid closure or rigid panel is mounted for a swinging motion.

#### SEE OR SEARCH CLASS:

296, Land Vehicles: Bodies and Tops, subclass 139, for flexible panels in the form of automobile side curtains combined with the automobile door so that the curtain opens and closes with door.

#### 93 Intermediate axis:

This subclass is indented under subclass 92. Combinations in which the rigid closure or rigid panel is pivoted to swing about an axis intermediate its ends.

### 94 With opposite, parallel, offset flexible panels:

This subclass is indented under subclass 93. Combinations in which, when the rigid closure or rigid panel is in one position, a flexible panel on one side or face of said rigid closure or rigid panel extends from adjacent the axis to one end of the rigid closure or rigid panel, and a similar second flexible panel extends parallel to, in the opposite direction from, and on the other side or face of said rigid closure or rigid panel from adjacent the axis to the other end of the rigid closure or panel.

(1) Note. This subclass may include in the above combination a filler type device within the meaning of subclass 40, as set forth in the search notes thereto.

# 95 Flexible or portable panel related to rigid closure operating or fastening means:

This subclass is indented under subclass 92. Devices in which the flexible or portable panel has some feature designed to coact with or otherwise be related to the operating or fastening means of the rigid closure, e.g., apertures through which the handle passes.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

103, for corresponding devices associated with other types of rigid closure.

# 96 Facing flexible or portable panel and mounted for optional or conjoint movement:

This subclass is indented under subclass 92. Devices in which the flexible or portable panel and the rigid closure or rigid panel are mounted in facing relation and are so mounted that they can be moved either separately or together.

# 97 Flexible or portable panel complementary to form complete closure:

This subclass is indented under subclass 92. Devices in which the flexible or portable panel closes a part of an opening and the rigid closure or rigid panel closes the remainder of the opening.

#### 98 Roll type flexible panel:

This subclass is indented under subclass 90. Devices in which the rigid closure or rigid panel is combined with a roll type flexible panel.

#### 99 Connected to slidable rigid closure:

This subclass is indented under subclass 98. Combinations in which some interconnection between a roll type and a rigid sliding closure is claimed.

(1) Note. For the most part the roll is (1) mounted on a sliding closure or (2) so interconnected therewith as to follow its motion.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

29+, for such devices having a hood, canopy, shield or storage chamber.

242+, particularly 243+ and 246+, for other movably mounted devices of the roll type.

#### 100 Fabric free edge connected closure:

This subclass is indented under subclass 99. Combinations in which the free or leading edge of material as it unrolls is connected to the rigid sliding closure.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

27, and 28, for free edge-fastening means, when fastened to a movable closure.

290.1+, for such devices when not so fastened.

# 101 Flexible panel between slidable parallel plane rigid closures:

This subclass is indented under subclass 90. Combinations in which the flexible panel is mounted in any way between two or more sliding rigid closures.

# 102 Flexible panel connected to and moved by slidable rigid closure:

This subclass is indented under subclass 90. Devices in which the flexible panel is connected to and caused to move by slidable movable closure. The connection may be through operating means that transmits motion between the two.

# 103 Flexible or portable panel related to rigid closure operating or fastening means:

This subclass is indented under subclass 90. Devices in which the flexible or portable panel has some feature designed to coact with or otherwise be related to the operating or fastening means of the rigid closure, e.g., apertures through which the handle passes.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

95, for other flexible or portable panels.

#### 104 Grille or shutter type:

This subclass is indented under subclass 90. Devices in which the rigid closure or panel is of the grille or shutter type.

#### 105 Flexible panel removably mounted in slidable rigid closure guides:

This subclass is indented under subclass 90. Devices in which the flexible or rigid panel is removably mounted in or on the guides that guide the rigid-closure or panel.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

47, for outrigged devices disclosed for this combination.

375+, for frame type devices with shiftable side bars, many of which are disclosed for this combination.

#### 106 Removably mounted over fabric in frame:

This subclass is indented under subclass 90. Devices in which the flexible panel is in the form of a fabric in a frame and the rigid closure or panel is mounted (usually removably) on or in the frame and over the fabric.

#### 107 Plural strip, slat, or panel type:

This subclass is indented under subclass 90. Devices in which the flexible panel is of the plural strip, slat or panel type in which (1) a plurality of strips, slats and/or panels utilizing flexible material in their construction are claimed in combination or (2) a plurality of rigid strips, slats and/or panels are interconnected with each other for relative motion and form a single unit, or (3) both.

#### 108 Roll and hanging or drape type only:

This subclass is indented under subclass 89. Diverse devices of two types only, one being of the roll type and one of the hanging or drape type.

(1) Note. There may be two or more roll type and/or two or more of the hanging or drape type, but no other type of devices.

#### 109 Shiftable position:

This subclass is indented under subclass 108. Diverse devices in which either the entire organization or at least one complete type of device is so mounted as to be movable as a unit.

(1) Note. A unit is the fabric and the pole, roller, bar or other means which carries the fabric.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

368.2, for other shiftable position devices and see the notes thereto.

### 110 With extensible pole, roller, bar, or support therefor:

This subclass is indented under subclass 109. Diverse devices in which at least one pole, roller or bar which carries a fabric or at least one support means for a pole, roller or bar is so constructed that the length thereof may be changed.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 64, for other extensible structures and see the notes thereto.
- 112, for diverse devices having an adjustable support, but not of this roll hanging or drape type.

#### 111 Vertically slidable:

This subclass is indented under subclass 109. Diverse devices in which a unit is slidable in a vertical direction only.

### With extensible pole, roller, bar, or support therefor:

This subclass is indented under subclass 108. Diverse devices in which at least one pole, roller or bar which carries a fabric, or at least

one support means for a pole, roller or bar, is so constructed that the length thereof may be changed.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

110, for this device with disclosed roll and hanging or drape type whether or not claimed.

#### 113 Plural strip, slat, or panel assemblies:

This subclass is indented under subclass 87. Plural devices, all of the plural strip, slat or panel type, in which (1) a plurality of strips, slats and/or panels utilizing flexible material in their construction are claimed in combination or (2) a plurality of rigid strips, slats and/or panels are interconnected with each other for relative motion and form a single unit, or (3) both.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 115+, for two or more groups or strips, slats or panels separately operable in a single device, which device has been treated as a plurality of devices of the plural strip, slat or panel type.
- 130+, for single devices of the plural strip, slat or panel type.
- 136+, for plural strip, slat or panel type devices with parallelogram type operators.
- 137, for a plurality of parallelogram units in which two sections thereof are so pivoted to a common side as to move in different manners when operated.

#### 114 Nonplanar:

This subclass is indented under subclass 113. Devices in which at least one plural strip, slat or panel unit lies in a plane different from at least one additional plural strip, slat or panel unit.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

88, where one of the units is also nonparallel with respect to at least one of the others.

#### 115 Multiple section unit:

This subclass is indented under subclass 113. Devices wherein a single unit has a plurality of sets of strips, slats or panels, at least one set of which may be adjusted or operated separately from the others.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for single units in which all the strips, slats or panels operate together.

#### 116 One closing passage through another:

This subclass is indented under subclass 115. Devices wherein one set of strips, slats or panels covers a passage through the other.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

180, for a single strip, slat or panel covering an opening in a plural strip, slat or panel unit and see the notes thereto.

#### 117 Mounted on opposite sides of single opening:

This subclass is indented under subclass 113. Devices wherein the units are mounted on the opposite sides of a single opening, these units usually being extensible toward one another for the purpose of closing the opening.

#### 118 Track guided:

This subclass is indented under subclass 117. Devices where the units are guided on or in track means.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

201+, for single units which are track guided.

#### 119 Mounted on opposite sides of single support:

This subclass is indented under subclass 113. Devices wherein the units are mounted to extend from opposite sides of a single support.

#### 120 Roll type:

This subclass is indented under subclass 87. Plural devices, all of the roll type.

(1) Note. Single rollers with plural distinct fabric panels wound thereon are in subclass 121.1, indented hereunder, but single rollers having one fabric thereon are

in subclasses 238+ even though such single fabric has different characteristics at different areas.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

238+, for single devices of the roll type.

241, for such single devices of the roll type combined with a plurality of rollers.

#### SEE OR SEARCH CLASS:

242, Winding, Tensioning, or Guiding, subclasses 474.3+, 530+, 533+, 558+, and 594+ for a winding or unwinding device which may include plural roll supports.

#### 121.1 Single roll:

This subclass is indented under subclass 120. Device wherein at least two distinct panels are windable into a single roll and are either superimposed coextensively or overlapped.

(1) Note. One or more of the separate fabrics may wind in separate rolls, as long as a plurality of fabrics wind into a single roll in one position.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

133, for plural strips, slats or panels of the roll type in side by side nonoverlapping relation.

237, for a fabric having different characteristics in different areas and considered as a single fabric.

#### SEE OR SEARCH CLASS:

242, Winding, Tensioning, or Guiding, subclasses 590+ for a mounted roll support.

#### 122 Differently directed fabrics:

This subclass is indented under subclass 120. Plural roll type devices in which the fabrics as they unroll move in different directions, as one up and one down, one vertically and one horizontally, etc.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

120, where the rolls are positioned at an angle to each other but the fabrics move in the same direction.

121.1+, for fabrics movable in different directions from the same roll.

#### 123 Hanging or draped type:

This subclass is indented under subclass 87. Plural devices, in which all are of the hanging or drape type.

 Note. See note (3) to the main class definition for the location of support subcombinations.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

84.01+, for hanging or drape type devices which pleat when gathered.

85, for fabrics looped over a pole or roller so that the fabric may be moved to change the area on the two sides thereof.

327+, for a single fabric combined with a plurality of poles.

330+,for single devices of the hanging or drape type, where two fabrics are hung from a single support means in side-by-side relationship and the structure does not provide for the adjacent edges to overlap, the patents have been treated as single devices of the hanging type. However, if the structure provides for overlapping of the fabrics, if more than two fabrics are claimed, if two or more support means are provided, or if there is a relationship other than side-by-side, the patents have been classified as plural.

#### SEE OR SEARCH CLASS:

428, Stock Material or Miscellaneous Articles, subclasses 44+, 53, 54+, and 57+ for plural, joined webs or sheets which make up stock material, rather than a "unit" of the type referred to in the definition of subclass 130.

# 124 Side-by-side arranged, on single pole or track:

This subclass is indented under subclass 123. Plural devices in which one fabric hangs in front of another and both are supported on a single pole or track.

(1) Note. This subclass includes single fabrics supported at an intermediate line so that part of the fabric hangs in front of another part.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

126, where the single support constitutes both a track for one fabric and a pole for another fabric, or where two separate tracks are supported on a single pole one in front of the other.

#### 125 Shiftable pole:

This subclass is indented under subclass 123. Plural devices in which means are provided for changing the position of at least one fabric carrying pole.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

333+, for shiftable position devices of the single hanging or drape type.

# 126 Laterally overlapping fabrics and/or co-elevational parallel tracks:

This subclass is indented under subclass 123. Plural devices in which (1) some means are provided for causing the adjacent edges of fabrics hung from substantially the same height to overlap or (2) two tracks or supporting rods, whether separate or integral are provided at substantially the same elevation arranged parallel to each other. The tracks or rods may merely overlap each other laterally or may be coextensive.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

124, for fabrics arranged one in front of another, instead of merely in laterally overlapping relation at the edges.

#### 127 COMBINED:

This subclass is indented under the class definition. Flexible and portable panels in which some additional device or means is claimed in combination therewith, which device or means is in addition to mounting or supporting means, operating means, the structure of the flexible or portable panel, locking or latching means, or other features which are required for the complete and successful functioning of the device itself for its intended purpose and not provided for above.

(1) Note. This subclass includes surface simulation of house construction.

#### SEE OR SEARCH CLASS:

- 2, Apparel, subclass 4 for hand screens or veils attached to or depending from or made a part of a hat or head covering; subclasses 15+ for an eye shield or goggle device, or attachment thereto.
- 108, Horizontally Supported Planar Surfaces, subclasses 50.01+ for a horizontally supported planar surface member which is combined with a flexible panel.
- 211, Supports: Racks, subclasses 2+ and subclass 180 for racks convertible to and combined with flexible and portable panels, and see this class (160), subclass 19 for the line.
- 222, Dispensing, for flexible and portable panels combined with dispensing structure, but a mere opening is not considered limited to dispensing and will be found in the pertinent subclasses in this class (160).
- 312, Supports: Cabinet Structure, subclasses 3+ for canopy or curtain type cabinets, subclass 210 for cabinets having the function of a mask or screen to partially enclose an independently supported object, subclasses 271+ for cabinet components interconnected to cause constrained relative motion and subclass 297 for cabinets with movable components of flexible or fabric material or of plural strips, slats or panels connected one to another; and see Class 160, subclasses 19+, for the line.
- 353, Optics: Image Projectors, for an image projector in combination with a viewing screen.
- 359, Optical: Systems and Elements, subclasses 443+ for screens, per se, having surface characteristics especially designed to receive projected images.

#### 128 CONVERTIBLE:

This subclass is indented under the class definition. Devices which by manipulation of parts may be changed to a second character of device, which second character of device may or may not come within the class definition.

(1) Note. Structures for converting a single type of device within the class definition to a plural type of device, or plural types within the class definition to other things, are in subclasses 19+, subclass 51, subclass 60 or subclasses 87+ and see particularly the notes to subclass 87.

#### SEE OR SEARCH CLASS:

- 108, Horizontally Supported Planar Surfaces, subclasses 11+ for a horizontally supported planar surface convertible to a flexible panel.
- 182, Fire Escape, Ladder, or Scaffold, subclasses 21+ for a ladder convertible to a shutter.
- 211, Supports: Racks, subclasses 2+ for support racks convertible to flexible and portable panels.
- 312, Supports: Cabinet Structure, subclasses 3+ for cabinets convertible to flexible and portable panels.

# 129 Plural movably interconnected strip, slat, or panel type:

This subclass is indented under subclass 128. Devices in which the device is of the plural strip, slat or panel type, and the strips, slats or panels are interconnected for relative motion, as set forth in paragraph C of the main class definition.

#### 130 PLURAL STRIP, SLAT, OR PANEL TYPE:

This subclass is indented under the class definition. Devices in which (1) a plurality of strips, slats and/or panels utilizing flexible material in their construction are claimed in combination or (2) a plurality of rigid strips, slats and/or panels are interconnected with each other for relative motion and form a single unit, or (3) both.

 Note. Plural rigid strips, slots or panels interconnected only by a common operator or support (including a frame) will be found in Class 49, Movable or Removable Closures and Class 454, Ventilation.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 39, for similar subject matter disclosed as a hood, canopy, shield or storage chamber for a flexible or portable panel device.
- 84.01+, and 85+, for related subject matter as defined therein.
- 113+, for the combination of a plurality of units as defined in this subclass (130); and see the notes to said subclass (113) for the stated line between these two subclasses.
- 123+, (and the notes to subclass 123), for a plurality of separate hanging or drape type flexible panels.
- 332, for a plurality of chain cables or strands which hang from a support.
- 349.1+, for bottom holding means, <u>per se</u>, even if disclosed with a device for this subclass (130).
- 353, for plural frames for single flexible panels.
- 371+, for framed or panel type devices; usually distinguished from this subclass (130) in that only a single fabric is used.
- 372+, for adjustable frames for single flexible panels, including those slidably interconnected U-shaped frame members with a single flexible fabric.
- 375+, for single frame type devices with slidable rigid edge sections, such devices not having been treated as plural strip, slat or panel type.
- 379, for those single frame type devices with intermediate reinforcing bars and members where there is but a single fabric for the frame.
- 380, for single fabrics clamped between two frame elements.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 73.1+ for closures interconnected for concurrent movement. See (1) Note above.
- 52, Static Structures (e.g., Buildings), subclasses 660+ for rigid fabric or lattice openwork, e.g., slatted floor covering.

- 296, Land Vehicles: Bodies and Tops, subclasses 210+ for land vehicles having top with openings therein and movable panels as closures therefor.
- 428, Stock Material or Miscellaneous Articles, subclasses 44+, 53, 54+, and 57+ for plural, joined webs or sheets which make up stock material, rather than a "unit" of the type referred to in the definition of subclass 130.

# 131 Longitudinally crooked strip, slat, or panel: This subclass is indented under subclass 130. Devices wherein at least one strip, slat or panel has its major axis in other than a straight line.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 32+, where one strip, slat or panel houses another.
- 57+, and subclasses 61+ for outrigged flexible panels of the plural strip, slat and panel type with separate side units not a part of the main panel.

#### Bow or U-shape, pivoted together at ends:

This subclass is indented under subclass 131. Devices in which plural strips, slats or panels, each of bow or U-shape, have the ends of corresponding arms adjacent and pivoted together.

#### 133 Roll type:

This subclass is indented under subclass 130. Plural strip, slat or panel devices in which the strips, slats or panels are accumulated in the form of a roll.

(1) Note. Many of these devices have no roller upon which they are accumulated, the end bar, strip, slat or panel being the element about which the others are rolled.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 121.1+, for single roll having panels wound thereupon in superimposed or overlapping relation so that at least portions of adjacent panels wind up together.
- 238+, for other roll type devices and see the notes thereunder.

#### 134 Fan type:

This subclass is indented under subclass 130. Devices wherein at least two of the elements are arranged either in the same plane or in parallel planes so that they may swing around a single actual or virtual pivot which is at right angles to such plane or planes.

#### 135 Portable:

This subclass is indented under subclass 130. Devices having means peculiarly adapted to make the device portable including those having legs or bases to support the device in upright position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

351, and see the note thereto for other portable devices.

#### 136 Parallelogram type:

This subclass is indented under subclass 130. Devices wherein two intersecting sets of parallel strips, slats or panels are interconnected by pivots at their intersections.

 Note. The parallelogram type of device may be a mere operator for another type of plural strip, slat or panel device.

### 137 Plural differently movable parallelogram section with a common side:

This subclass is indented under subclass 136. Devices wherein at least two sections of a parallelogram unit are pivotally interconnected through a common side, and which sections move differently when the device is operated. The different movements may take place concurrently and usually consist of pivotal movements in opposite directions.

#### 138 With operator:

This subclass is indented under subclass 136. Devices having an operator for either moving the device with respect to its mounting means and/or collapsing the device.

- (1) Note. Counterbalances have been considered as operators within this definition.
- (2) Note. Where both moving and collapsing operators are claimed, the patent is

placed here and cross referenced into subclasses 139+.

#### 139 Unit collapsing only:

This subclass is indented under subclass 138. Devices wherein the operator effects the collapsing of the device only and does not move the unit as a whole with respect to its support.

(1) Note. Since the majority of parallelogram type devices expand in one direction when they collapse in another, the term "collapse" has been used generically in referring to any motion about the parallelogram pivots.

#### 140 Diverse types of operators:

This subclass is indented under subclass 139. Devices where there are two diverse types of operators.

#### 141 One operator a spring:

This subclass is indented under subclass 140. Devices wherein one of the operators is a spring.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

144+, for other spring type operators.

#### 142 One operator a weight:

This subclass is indented under subclass 140. Devices wherein one of the operators is a weight.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

146+, for other weight type operators.

#### 143 Weighted parallelogram element extension:

This subclass is indented under subclass 142. Devices wherein an extension of one of the parallelogram elements is weighted.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

148, for additional weighted parallelogram extensions.

#### 144 Spring:

This subclass is indented under subclass 139. Devices wherein the operator is a spring.

#### 145 In brace:

This subclass is indented under subclass 144. Devices wherein the spring is part of a brace for the parallelogram unit.

#### 146 Weight:

This subclass is indented under subclass 139. Devices wherein the operator is a weight.

#### 147 Strand carried:

This subclass is indented under subclass 146. Devices wherein the weight is carried by a strand.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

150, for other operators utilizing a strand and pulley.

#### 148 Weighted parallelogram element extension:

This subclass is indented under subclass 146. Devices wherein an extension of one of the parallelogram elements is weighted.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

143, for this feature with disclosed diverse type of operator whether or not claimed.

#### 149 With gearing:

This subclass is indented under subclass 139. Devices wherein the operator includes gearing to either change the mechanical advantage of the operator, or to allow the operator to be controlled from a remote point.

#### 150 With strand and pulley:

This subclass is indented under subclass 139. Devices wherein the operator includes a strand and pulley.

#### 151 Unit carried operator:

This subclass is indented under subclass 139. Devices wherein the operator is completely carried by the unit.

# With means to hold unit in partially collapsed or collapsed position:

This subclass is indented under subclass 136. Devices having means to hold the unit in either partially or completely collapsed position.

#### 153 Combined tension and compression means:

This subclass is indented under subclass 152. Devices wherein the holding means comprises both tension and compression means.

#### 154 Pivoted compression bar:

This subclass is indented under subclass 152. Devices wherein the holding means is a pivoted compression bar.

#### 155 Friction catch:

This subclass is indented under subclass 154. Devices wherein the compression bar is frictionally fastened in adjustable position.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

158, for similar catches for tension members.

#### 156 Tension members:

This subclass is indented under subclass 152. Devices wherein the holding means is a tension member.

#### 157 Flexible member foreshortened at end:

This subclass is indented under subclass 156. Devices wherein a flexible end of a tension member is foreshortened to change the effective length of the member.

#### 158 Friction catch:

This subclass is indented under subclass 156. Devices wherein the tension member is frictionally fastened in adjustable position.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

155, for similar friction devices on compression members.

#### 159 Unit collapsing on guides:

This subclass is indented under subclass 136. Devices wherein the unit collapses on guides.

#### 160 Unit pivoted to support:

This subclass is indented under subclass 136. Devices wherein the unit is pivoted to its support.

#### 161 Unit structures:

This subclass is indented under subclass 136. Parallelogram structures wherein no structure of the operator or mounting means is claimed.

### With additional set of plural strips, slats or panels:

This subclass is indented under subclass 161. Devices wherein at least one additional set of plural strips, slats or panels is mounted on the device for movement therewith.

#### 163 Plural diverse additional sets:

This subclass is indented under subclass 162. Devices wherein there are a plurality of diverse sets of plural strips, slats or panels.

# 164 Additional set composed of interconnected strips, slats or panels:

This subclass is indented under subclass 162. Devices wherein one additional set is composed of interconnected strips, slats or panels.

#### 165 Pivots parallel to unit plane:

This subclass is indented under subclass 162. Devices wherein the pivots of the parallelogram type are parallel to the plane of the unit as a whole.

#### 166.1 Venetian blind type:

This subclass is indented under subclass 130. Plural strip, slat or panel device in which the elements are mounted in parallel spaced relation (and in other than edge to edge or overlapping substantially coplanar relation) so that their surfaces may be projected onto a single plane so as to be either coincident or in overlapping relation.

(1) Note. Where the elements are in edge to edge or overlapping substantially coplanar relation, see subclasses 130 particularly subclasses 218+, note particularly subclasses 222+ and subclasses 229.1+.

#### 167 Changeable position assemblies:

This subclass is indented under subclass 166.1. Devices in which the position of the entire assembly is changeable.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 61+, for similar position changes effected by means of outriggers.
- 113, for related devices and see the notes thereto.
- 168.1+, for such devices having means only for accumulating the slats in a bunch and/or for guiding the slats in unit form into and out of operative position
- 368.2, and see the notes thereunder for other changeable position devices within the class.

#### 168.1 With accumulating means:

This subclass is indented under subclass 166.1. Device having means for accumulating the elements and decreasing the effective area of the device, i.e, moving toward each other to form a bunch or maintaining or holding them so accumulated.

#### 169 Accumulated at stationary end:

This subclass is indented under subclass 168.1. Devices in which the elements are accumulated by first moving the element nearest the stationary end to the said end, and then repeating the process so that the nonaccummulated elements remain in their spaced relation at the moving end until they reach the bunched end of the unit.

(1) Note. Where the strips, slats, or panels may be accumulated at either end of the panel, the patents have been placed here.

#### 170 Drum or roller wound strand:

This subclass is indented under subclass 168.1. Devices in which means are accumulated by means of strands, which strands are wound up on drums or rollers. The drums or rollers may be rotated by any character of means.

#### 171 Axially traversed drum or roller:

This subclass is indented under subclass 170. Devices in which means are provided to cause the drum or roller to have axial motion during the winding or unwinding operation.

#### SEE OR SEARCH CLASS:

242, Winding, Tensioning, or Guiding, subclasses 484+ for a traverse device for shifting a drum for distributing convolutions being wound.

#### 172 With side guides:

This subclass is indented under subclass 168.1. Devices in which means are provided to guide the ends of the elements during the accumulating operation.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

266+, for guides for roller type devices.

#### 173 Units and subcombinations thereof:

This subclass is indented under subclass 168.1. Subject matter relating to the structure of the plural strip, slat or panel unit and subcombinations thereof having claimed features restricting the same to devices as defined in subclass 168.

(1) Note. The primary feature restricting the unit to this subclass are features providing for accumulation. Slats with openings for the accumulating strands are considered restricted for accumulation. However, where the mounting means are claimed, see subclass 168.1 or other appropriate preceding indented subclass.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

161+, 218+ and 236, for other type units.177, and 178.1+, for other venetian blind type units.

#### 174 Adjustable strip, slat, or panel angle:

This subclass is indented under subclass 166.1. Devices in which means is provided independent of the accumulating means for adjusting the angular position of the strip, slat or panel elements. Such means may be merely the manner in which they are mounted permitting such adjustment.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

168.1+, where the angular adjustment features have combined therewith features for accumulation of the slats.

#### 175 With latch or detent:

This subclass is indented under subclass 174. Devices, having latch or detent means for securing the strips, slats or panels in their angularly adjusted position.

#### 176.1 With angle adjusting means:

This subclass is indented under subclass 174. Device having operating means for performing the angle adjusting operation of the strip, slat or panel elements.

#### 177 Units and subcombinations thereof:

This subclass is indented under subclass 174. Subject matter relating to the structure of the plural strip, slat or panel unit and subcombinations thereof.

(1) Note. The primary features restricting the unit to this subclass are those providing for adjustment of the unit angle. However, where the mounting means are claimed, see subclass 174 or the appropriate preceding indented subclasses.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

161+, 218+, and 236, for other type units.
173, and 178.1+, for other venetian blind type units.

#### 178.1 Subcombination or structure thereof:

This subclass is indented under subclass 166.1. Subject matter relating either to the physical structure of a venetian blind type unit or to a subcombination thereof having claimed features restricting the same to such a venetian blind type unit.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 161+, and subclasses 218+, for units of other than venetian blind type.
- 166.1, or the appropriate preceding indented subclasses where mounting means are claimed.
- 173, for slats, per se, having features for accumulation, e.g., with openings for accumulation stands.
- 177, for a venetian blind structure or subcombination thereof having features for tilting.

236, for strips or slats having features for tilting.

#### 178.2 Cord lock:

This subclass is indented under subclass 178.1. Subcombination or structure relating to means for locking the lift cord operating the accumulation means of a cord operated venetian blind unit so as to hold the slats at a selected elevation.

#### 178.3 Slat support (e.g., tape ladder):

This subclass is indented under subclass 178.1. Subcombination or structure relating to means associated with each slat of a venetian blind type unit for supporting the slats in suspended, vertically spaced-apart relation to one another.

#### SEE OR SEARCH CLASS:

139, Textiles: Weaving, subclass 384 for woven fabric ladder webbing for supporting venetian blind slats.

#### 179 Plural fabrics in a single frame:

This subclass is indented under subclass 130. Framed type devices having a single frame with plural fabrics therein.

#### SEE OR SEARCH CLASS:

52, Static Structures (e.g., Buildings), subclasses 455+ for plural panels within a single frame, e.g., a plural light window sash.

#### 180 One closing opening in another:

This subclass is indented under subclass 130. Devices in which at least one of the strips, slats or panels has an opening within its confines, and there is at least one other strip, slat or panel movably interconnected with the first and closing the opening therein. Included are those devices having an opening formed in two or more adjacent strips, slats or panels and a single additional one closing such opening.

(1) Note. The opening may be permanently closed by a foraminous fabric or a rigid panel, e.g., glass.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

116, where there are at least two plural strip, slat or panel units associated together, at least one such unit having

an opening within its confines and the other forming a closure therefor.

353, for additional frames for a single fabric-filled frame, where the additional frames are not necessary for fastening the fabric.

#### SEE OR SEARCH CLASS:

- 49, Movable or Removable Closures, subclasses 169+ for a closure movable with and independently of the closure on which it is mounted.
- 296, Land Vehicles: Bodies and Tops, subclasses 146.1+ for a land vehicle door or window coming within the above definitions.

#### 181 With mounting or supporting means:

This subclass is indented under subclass 130. Devices in combination with means to mount or support the same.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for mounting or supporting means for the special types there provided for.

#### 182 Removable frame-type support:

This subclass is indented under subclass 181. Devices in which the plural strip, slat or panel device is mounted or supported in a frame, which is intended for removable mounting on some other support.

(1) Note. Two or more framed panels do not go in this subclass unless there is an additional mounting frame for the combination.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 180, for those in which a single strip, slat or panel closes an opening in one other or in a plurality of other strips, slats or panels.
- 353, for additional frames for a single fabric filled frame, where the additional frames are not necessary for fastening the fabric.

# 183 Nonplanar nonparallel arrangement on support:

This subclass is indented under subclass 181. Devices in which the strips, slats, or panels are positioned in different nonparallel planes when in operative position relative to the support or mounting means.

(1) Note. Those devices in which the strips, slats, or panels are in planar arrangement when in operative position, but fold or otherwise assume a nonplanar arrangement when moved to inoperative position, are in the appropriate subclasses below.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

233, for plural strip, slat or panel units with means for maintaining them in other than planar forms.

### 184 Strip, slat, or panel not interconnected for relative motion:

This subclass is indented under subclass 181. Devices in which the strips, slats or panels are not interconnected for relative motion.

 Note. These devices are plural strip, slat or panel devices utilizing flexible fabrics in their structure, and are usually interconnected only by a common operator or support.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

130+, for such devices having no mounting or supporting means claimed.

### 185 Strip, slat, or panel interconnected for diverse relative motions:

This subclass is indented under subclass 181. Devices in which at least two of the elements are so interconnected with others or with each other as to have at least two different relative motions. Such different motions may be, for example, one pivotal and one sliding; both pivotal but about nonparallel axes; both slidable but along angularly related lines.

# 186 Arranged to provide plural passageways on opening:

This subclass is indented under subclass 181. Devices in which the mounting or supporting means is such that when the device is moved from an operative or closing position to an inoperative or opening position at least two passageways are provided.

#### 187 Strip, slat, or panel pivotally interconnected:

This subclass is indented under subclass 186. Devices in which the strips, slats or panels are pivotally interconnected.

#### 188 With operating means:

This subclass is indented under subclass 181. Devices in which there are means (including counterbalance means) to either (1) cause motion of one or more of the strips, slats or panels relative to others of the unit, (2) cause motion of the unit or some portion thereof relative to the support or mounting means or (3) both. The operating means must be more than a mere hand hold or handle.

(1) Note. Means to force the unit against its support or against portions of the structure having an opening to be closed by the unit are not considered operators but are in appropriate coordinate subclasses below, e.g., subclass 209.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

181+, for the combination with operating means for the particular types of devices there provided for.

218+, for the structure of the unit both with and without means to cause relative motion of the strips, slats or panels where no supporting or mounting means are claimed.

#### 189 Counterbalance and additional operator:

This subclass is indented under subclass 188. Devices having both a counterbalance and some additional operating means which is not a counterbalance.

#### 190 Counterbalance only:

This subclass is indented under subclass 188. Devices having some means usually in the form of weights or springs to counterbalance the weight of the plural strip, slat or panel device, in whole or in part, or to more than counterbalance the weight of the device.

#### 191 Spring:

This subclass is indented under subclass 190. Devices in which the counterbalance means includes the use of springs.

 Note. Weight means may be used in addition.

#### 192 Spring:

This subclass is indented under subclass 188. Devices in which the operating means involves the use of springs.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

189, and 191, for devices wherein the spring operates to counterbalance the weight of the device.

#### 193 Strand:

This subclass is indented under subclass 188. Devices in which the operating means involves the use of strands.

#### 194 Movably mounted track:

This subclass is indented under subclass 181. Devices in which the mounting or supporting means involves the use of a track on or by which the device is mounted or guided, which track or some portion of the track system is in turn mounted for motion relative to the support on which the track is mounted.

#### 195 Pivotally mounted:

This subclass is indented under subclass 194. Devices in which the track is mounted for pivotal motion.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclass 196 for pivoted guides for slidable flexible or portable panels.

#### 196.1 Unit hung from horizontal track:

This subclass is indented under subclass 181. Device in which the plural strip, slat or panel unit is suspended from a horizontally disposed track.

(1) Note. Where the unit is so suspended, there may be in addition a track or guide means for the bottom edge thereof.

### 197 Strips, slats, or panels slidably interconnected:

This subclass is indented under subclass 196.1. Devices in which the strips, slats or panels are slidably interconnected.

# 198 Track parallel to axis of interconnection pivots:

This subclass is indented under subclass 196.1. Devices in which the strips, slats or panels are pivotally interconnected, the axes of such pivots being parallel to the track.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

204, for similar devices not hung from horizontal tracks.

217, for pivotally interconnected units where such pivotal interconnection is necessary for removal from the support.

# 199 Strip, slat, or panel constrained for pivotal folding:

This subclass is indented under subclass 196.1. Devices in which the interconnection between the strips, slats and panels and the track and other portions of the supporting means is such that the only possible motion of the strips, slats or panels, when moved from an operative to an inoperative position is that of pivotal folding.

# 200 With independently movable strip, slat, or panel:

This subclass is indented under subclass 196.1. Devices in which one of the strips, slats or panels may be moved independently of the other strips, slats or panels; that is, it may be moved while the other strips, slats or panels are maintained stationary.

(1) Note. These arrangements are usually for the purpose of providing an opening less in area than the total area covered by the unit.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

116, for combinations of plural strips, slats or panel units, one unit of which may be moved independently of another.

205, for similar structures where the device is not hung from a track.

#### 201 Track guided:

This subclass is indented under subclass 181. Devices in which the strip, slat or panel unit is guided by tracks.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

214, for devices where one of the strips, slats or panels is slotted and engages guide pins, or where one or more edges of one or more of the strips, slats or panels engage guide wheels or other nontrack guide means for sliding motion.

#### SEE OR SEARCH CLASS:

362, Illumination, subclass 278 for light projectors having a flexible light screen.

### 202 Strips, slats, or panels slidably interconnected:

This subclass is indented under subclass 201. Devices in which the strips, slats or panels are slidably interconnected.

# 203 Unit pivoted to support, pivot displaced from unit plane:

This subclass is indented under subclass 201. Devices in which means are provided to pivot the unit to a support, said pivot being displaced from the plane of the unit.

(1) Note. These devices usually have arms connected at right angles to the plane of the individual strips, slats or panels and extending at an angle from the track.

#### 204 Track parallel to interconnection pivot axis:

This subclass is indented under subclass 201. Devices in which the interconnection pivot axis is parallel to the track as in subclass 198.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

217, for plural strip, slat or panel type devices where the pivotal connection must be used to remove the device from its support.

# 205 With independently movably strip, slat, or panel:

This subclass is indented under subclass 201. Devices in which one strip, slat or panel is mounted for motion independently of the other strips, slats or panels; that is, it may be moved while the other strips, slats, or panels are maintained stationary.

# 206 Strip, slat, or panel constrained for pivotal folding:

This subclass is indented under subclass 201. Devices in which the strips, slats or panels are so connected that the only possible motion of the strips, slats or panels, when moved from an operative to an inoperative position, is that of pivotal folding.

#### 207 Vertical track:

This subclass is indented under subclass 206. Devices in which at least a portion of the track is positioned in a substantially vertical direction.

### 208 A single strip, slat, or panel connected to track:

This subclass is indented under subclass 201. Devices in which one only of the strips, slats or panels is connected to the track to be guided thereby.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

206+, for such devices constrained for pivotal folding.

215+, where the device is removable as a unit, even though it has sliding motion.

# 209 With means to force against mount or support:

This subclass is indented under subclass 201. Devices having some means to force the unit against the structure on which it is mounted or supported and usually in a direction away from the track.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

194+, where the track is movably mounted for this purpose.

206+, for such means for devices having constrained pivotal motion.

#### 210 Pivotally mounted unit:

This subclass is indented under subclass 181. Devices in which the unit or at least one strip, slat or panel thereof is connected for pivotal motion relative to the mounting or supporting means.

### 211 Strips, slats, or panels slidably interconnected:

This subclass is indented under subclass 210. Devices in which the strips, slats or panels are slidably interconnected.

### 212 Support pivot at angle to interconnection pivot axis:

This subclass is indented under subclass 210. Devices in which the strips, slats or panels are interconnected with each other for pivotal motion and the axis of such interconnection pivot is at an angle to the axis of the pivot which interconnects the unit with the support or mounting means.

#### 213 Constrained for pivotal folding:

This subclass is indented under subclass 210. Devices in which the strips, slats or panels are so interconnected that the only possible motion, when moving from operative to inoperative position, is that of pivotal folding.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

134, for fan type plural strip, slat and panel devices.

#### 214 Slidably mounted unit:

This subclass is indented under subclass 181. Devices in which the unit or at least one strip, slat or panel thereof is mounted to slide relative to the support or mounting means.

#### 215 Removable unit:

This subclass is indented under subclass 181. Devices in which the unit has structure providing for inserting into or over and removing from an opening in the mounting or supporting

means but has no other connection for motion relative thereto.

#### 216 Strip, slat, or panel slidably interconnected:

This subclass is indented under subclass 215. Devices in which the strips, slats or panels are slidably interconnected.

### 217 Pivotal interconnection necessary to removal and insertion:

This subclass is indented under subclass 215. Devices in which the strips, slats or panels are pivotally interconnected, and relative pivotal motion between two or more of the strips, slats or panels is necessary for the operation of removal and/or insertion.

#### 218 Movably interconnected:

This subclass is indented under subclass 130. Devices relating only to the mode of interconnecting two or more strips, slats or panels for relative motion.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for the structure of a unit formed of two or more strips, slats or panels utilizing flexible material where they are not interconnected for relative motion.

184, for such a unit combined with its mounting means.

#### 219 Unit having diverse areas:

This subclass is indented under subclass 218. Devices wherein the unit has portions of diverse characteristics.

(1) Note. Units wherein the size and/or shape of the individual strips, slats or panels constitutes the only variation, and units in which the strips, slats or panels are modified only for a support fastener or operator are not considered to have diverse characteristics.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

237, and see the notes thereto for other devices with diverse areas.

#### 220 Interconnected for plural relative motions:

This subclass is indented under subclass 218. Devices in which the elements are interconnected for plural motions relative to one another.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

185, for plural strip, slat or panel devices mounted or supported for plural relative motions.

#### 221 Doubly extensible by sliding only:

This subclass is indented under subclass 220. Devices in which the elements are slidably interconnected so that the area of the unit may be varied in more than one direction, such as both laterally and longitudinally, to increase or decrease the unit area.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

374+, for single frames having side bars so adjustable.

#### 222 Slidably interconnected:

This subclass is indented under subclass 218. Devices in which the strips, slats or panels are interconnected so as to be slidable relative to each other.

(1) Note. This subclass includes filling means (as defined in subclass 40) between the strips, slats or panels; filling means in other relations will be found in subclass 40.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 197, and 202, when the device is slidable in a trackway.
- 214, for such devices when mounted or supported to be slidable relative to a fixed support.
- 220+, for similarly connected devices.
- 372+, for two U-shaped slidably interconnected frames with a single fabric covering.
- 375+, for frame type devices with slidable rigid end panels.

#### SEE OR SEARCH CLASS:

52, Static Structures (e.g., Buildings), subclasses 660+ for rigid fabric or lattice openwork, e.g., a slatted floor covering.

# 223 Plural individually interconnected strips, slats, or panels:

This subclass is indented under subclass 222. Devices in which two parts each constituted of two or more spaced strips, slats or panels, are slidably interconnected by having individual strips, slats or panels of one part slidable on (including telescoping within) individual strips, slats or panels of the second part.

#### With operator and/or anti-friction means:

This subclass is indented under subclass 222. Devices having (1) means to cause relative sliding motion between the elements of the unit, (2) antifriction means for the slidable interconnection or (3) both thereof.

# 225 With relative slidable motion preventing means:

This subclass is indented under subclass 222. Devices having means to prevent undesired relative sliding motion between the elements of the unit.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

233+, for means for preventing relative pivotal motion between panels.

#### SEE OR SEARCH CLASS:

292, Closure Fasteners, subclasses 262+ for extension link type devices adapted to hold a closure member in adjusted position.

#### 226 Embracing type:

This subclass is indented under subclass 222. Devices in which one strip, slat or panel, or means secured thereto or mounted thereon, embraces the edge of a partially overlapping relatively slidable strip, slat or panel to effect the slidable interconnection.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

32+, for devices in which one strip, slat, frame or panel constitutes a substan-

tially complete housing for a second strip, slat, frame or panel.

228, where the means to effect such slidable interconnection rides in a slot in the side of the relatively movable strip, slat or panel, without embracing the edge of the relatively movable strip, slat or panel.

#### 227 Integral embracing means:

This subclass is indented under subclass 226. Devices in which the embracing means is integral with one of the elements of the unit.

### 228 Tongue, bead, bolt, or dog into groove or slot:

This subclass is indented under subclass 222. Devices in which the slidable connection is comprised by a protrusion on one element entering a groove or slot in a second element of the unit. The protrusion may be of any form and may be either integral or attached.

#### 229.1 Edge-to-edge interconnected:

This subclass is indented under subclass 218. Device in which the strip, slat or panel elements are movably interconnected in side-by-side, i.e., edge-to-edge relation.

- (1) Note. The elements maybe in the form of tubes, wires or strands, straight or bent.
- (2) Note. Plural strips, slats or panels having their edges formed so as to interengage for relative pivotal motion are here, or in the appropriate indented subclasses.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

220, for similarly interconnected strip, slat or panel elements.

#### SEE OR SEARCH CLASS:

- 52, Static Structures (e.g, Buildings), subclasses 660+ for rigid slatted or fabric openwork, e.g., a slatted floor covering.
- 296, Land Vehicles: Bodies and Tops, subclass 55 for pivotally interconnected sections claimed with a vehicle bed or side board for rearward removal.

#### 230 Single covering fabric:

This subclass is indented under subclass 229.1. Devices in which there is a single covering fabric for at least two of the elements of the unit. The covering fabric may form the flexible joint between adjacent strips, slats or panels in addition to covering the units. For the most part these are devices having two three-sided incomplete frames, the ends of the side pieces of the two frames abutting each other, and there being a single fabric.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

231.1+, for fabric joints between adjacent strips, slats or panels only.

379, for single frames having single fabrics with intermediate reinforcing bars, members or braces.

#### SEE OR SEARCH CLASS:

105, Railway Rolling Stock, subclasses 16+ for similar structures used as diaphragms between two articulated railroad cars.

### 231.1 Interconnected by strand, fabric, rubber, or plastic:

This subclass is indented under subclass 229.1. Plural strips, slats or panels wherein a strand, band, fabric or any material made of rubber or plastic is the interconnecting means.

#### SEE OR SEARCH CLASS:

52, Static Structures (e.g., Buildings), subclasses 660+ for rigid fabric or lattice openwork, e.g., a slatted floor covering.

#### 231.2 Interconnected by rubber or plastic:

This subclass is indented under subclass 231.1. Plural strips, slats or panels wherein a material made of rubber or plastic is the interconnecting means.

#### 232 Hollow, filled, or covered elements:

This subclass is indented under subclass 229.1. Devices in which the elements have any one or any combination of the following features: (1) are of hollow form, (2) are of hollow form with filling material or (3) are in two or more layers, i.e., the basic element has some character of

covering material thereon. Fabric filled frames are not considered to be in layers.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

179, for plural fabrics for single frames.

#### SEE OR SEARCH CLASS:

109, Safes, Bank Protection, or a Related Device, appropriate subclasses.

### 233 With relative pivotal motion preventing means:

This subclass is indented under subclass 229.1. Devices having means to prevent undesired pivotal motion between the panels or at least two of them.

### SEE OR SEARCH THIS CLASS, SUBCLASS:

225, for means for preventing relative sliding motion between panels.

#### SEE OR SEARCH CLASS:

296, Land Vehicles: Bodies and Tops, subclass 55 for vehicle end gates having pivotally connected sections.

#### 234 Acting to keep unit planar only:

This subclass is indented under subclass 233. Devices wherein the motion preventing means holds the panels in a planar position and does not hold them in any other position.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

217, for related art.

#### 235 By curled or bent side edges:

This subclass is indented under subclass 229.1. Devices in which the side edges are bent or curled to form the interconnecting means.

#### 236 Strip or slat structure:

This subclass is indented under subclass 130. Subject matter relating to the structure of the strip or slat, per se.

(1) Note. Claims to single strips or slats of the venetian blind type having the special features there provided for are in subclasses 166.1+ especially subclasses 173, 177, and 178.1+, e.g., those having features for guiding the same in grooves are in subclass 172; those with features of structure providing for accumulating the same, e.g., openings for the accumulating strands, are in subclass 173 and those with features of structure providing for angular adjustment are in subclass 177.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

229.1+, for single strips or slats having features for side by side interconnection.

232, for such strips or slats which are also hollow, filled or covered.

# 237 WITH FABRIC HAVING DIVERSE AREAS:

This subclass is indented under the class definition. Devices having fabrics with portions of diverse characteristics, including, for example, such things as a slit, a slot or some rigid portion, such as glass, etc.

(1) Note. Where the fabric or unit is modified only for supporting or operating means, see the appropriate subclasses for these means.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

12+, for openings in flexible and portable panels designed as insect exits.

48+, for rigid closures applied to openings in the fabric of an outrigged flexible panel.

63, for this feature with outrigged structure, whether or not claimed.

219, for plural strip, slat or panel units having portions of diverse characteristics.

385+, for mere hems in the edges of fabric or mere modification of the fabric for fastening or supporting the same.

#### 238 ROLL TYPE:

This subclass is indented under the class definition. Devices in which material is accumulated in the form of a roll.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

66+, for outrigged roll type devices.

84.01+, for the pleating type.

85+, for the plural run type.

- 87+, for combinations of two or more flexible or portable panels, particularly subclasses 98+, 108+ and 120+.
- 133, for plural strip, slat or panel devices of the roll type.

#### SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, subclass 348 for a copyholder comprising a roll to which the leading edge of copy is secured to accumulate the copy on the roll.
- 114, Ships, subclasses 106 and 107 for roll type sails.
- 242, Winding, Tensioning, or Guiding, subclasses 520+ for convolute winding on a roll.
- 492, Roll or Roller, for a roll, per se, not elsewhere provided for, and see the notes thereunder.

#### 239 Framed:

This subclass is indented under subclass 238. Roll type devices in which the roll together with its panel is associated with a frame mountable and/or demountable as a unit.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 31, for corresponding devices in which there is also a housing for the roller.
- 266+, for roll type with guides or fabric edge holders.
- 371+, for framed type devices, particularly subclass 378.

### 240 Adjustable size frame:

This subclass is indented under subclass 239. Roll type devices in which the size of the frame may be varied.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 21, for changeable size devices wherein there is a hood, canopy, shield or storage chamber for a roll.
- 64, for a changeable size outrigged device.
- 372+, for a flexible panel having an adjustable size frame.

#### 241 Plural roll:

This subclass is indented under subclass 238. Roller type devices with means by which the fabric may be wound into a roll or unwound therefrom from either of two or more edges.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 85+, for devices where the single panel hangs in plural runs.
- 89+, for two or more roll type devices claimed in combination including particularly subclass 121.1 for two or more panels windable into a single roll
- 266+, for idler rollers which guide the fabric but do not receive it.

#### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 347, 471, 478, 483, and 518+ for changeable exhibitors so constructed.

### 242 Shiftable position roll:

This subclass is indented under subclass 238. Roll type devices having means for changing the position of the roll in addition to rotating about its own axis.

(1) Note. Those rolls having two or more distinct types of position changing motion are in this subclass, even though a single one of such motions is below provided for.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 29+, for a roll associated with a movable hood, canopy, shield or storage chamber.
- 99+, for a roll mounted on a slidable rigid closure.
- 109+, for shiftable combined roll and hanging or drape types.

# 243 Roll translated for winding or unwinding operation only:

This subclass is indented under subclass 242. Roll type devices in which translatory motion of the roll causes winding or unwinding thereof; i.e., the roll has a motion at right angles to its own axis in addition to rotation about its axis.

### Fabric free edge adjustable:

This subclass is indented under subclass 243. Roll type devices in which the position of the free or leading edge of the fabric, i.e., the edge which is first to leave the roll as the fabric is unwound, maybe adjusted to various positions.

(1) Note. This subclass takes devices so organized that in normal operation the roll is translated to cause winding and unwinding, but the leading fabric edge has means for holding it in any of a plurality of adjusted positions.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

290.1+, for other fabric free edge holding means.

### 245 Spring roller:

This subclass is indented under subclass 243. Roll type devices in which there is a spring operated roller.

# 246 Straight line non-axial translation in fabric plane only:

This subclass is indented under subclass 242. Roll type devices in which the only motion of the roll other than rotation about its own axis, is a straight line motion in the plane of the fabric that is unwound therefrom and in a direction at right angles to the axis of the roll.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 30, and 99+, for roll type devices mounted on sliding rigid closures.
- 242, for all other single types of translatory roll motion and for all rolls having two or more types of translating motion.
- 243+, for arrangements in which roll-translation is necessary to cause the winding and unwinding operation.

### 247 Center operated, roll support:

This subclass is indented under subclass 246. Roll type devices in which the immediate support for the roll is operated for translation by means engaging said immediate support at a point intermediate the length of the roll.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 29+, for movable roll type devices in combination with hoods, canopies, shields, storage chambers or outrigged rigid panels.
- 99, for movable roll type devices in combination with nonpivoted rigid closures.

#### 248 Rack and pinion operated:

This subclass is indented under subclass 246. Roll type devices in which the translating means comprises a rack and pinion.

### 249 One side, nonstrand operated:

This subclass is indented under subclass 246. Roll type devices in which the immediate support for the roll is operated for the translation from one end of the roll only, by means other than a strand.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

252+, for strand operated devices under subclass 246.

### 250 Extensible roller and/or roll support:

This subclass is indented under subclass 246. Roll type devices in which (1) the roller itself is extensible or (2) the immediate support for the roll is extensible to take rolls of different lengths or (3) both.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 64, and the subclasses there noted for other changeable size devices in the class.
- 263. for extensible roller structures.

#### 251 Step-by-step:

This subclass is indented under subclass 246. Roll type devices in which means are provided at spaced points along the line of translation to secure the roll at such points.

#### 252 Strand shifted:

This subclass is indented under subclass 246. Roll type devices in which strand means such as elongated flexible elements such as cords, ropes, tapes, chains, are used to cause roll translation.

#### 253 Pulley or drum lift on roller:

This subclass is indented under subclass 252. Roll type devices in which there is a pulley or drum mounted on the roll supporting means which pulley or drum is necessary to the roll translation operation.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

254+, for drums not on the roll supporting means.

### Winding drum:

This subclass is indented under subclass 252. Roll type devices in which the strands which cause roll translation are wound upon and unwound from a drum.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

253, for pulleys or drums on the roll supporting means.

### 255 With roll guide:

This subclass is indented under subclass 254. Roll type devices in which means to guide the roll during its translation are provided.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

256, 259, and 260, for other roll guides. 266+, for fabric and stick guides.

# 256 Roll intermediate guides for translating strands:

This subclass is indented under subclass 252. Roll type devices in which the translating strands are provided with at least two spaced guides, so positioned that the roll which is intermediate these guides moves toward one in one direction of translation and toward the other in the other direction of translation. For example, where the roll is vertically translated, strand guides are provided both above and below the limiting positions of the roll.

### With position holding means:

This subclass is indented under subclass 252. Devices having means for holding the roll in its adjusted position.

#### 258 Strand holder:

This subclass is indented under subclass 257. Roll type devices in which the position holding means acts directly on the translating strand or strands to hold such strand or strands.

### 259 Roll guided:

This subclass is indented under subclass 258. Roll type devices provided with means to guide the roll during its motion of translation.

(1) Note. Included are devices wherein addition to the connection between the strands and the roll to cause translation, there is a second distinct interconnection so that the strands also guide the roll during translation.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

255, 256, and 260, for other roll guides. 266+, for fabric and stick guides.

### 260 Roll guided:

This subclass is indented under subclass 252. Roll devices having means for guiding the roll during its translation.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

255, 256, and 259, for other roller guides.266+, for fabric and stick guides.

#### With elevator rod:

This subclass is indented under subclass 246. Roll type devices utilizing rods for causing roll translation.

### 262 Crooked roll, noncylindrical flexible roller:

This subclass is indented under subclass 238. Roll type devices in which (1) the axis of the unit is not a straight line, (2) the roller upon which the device rolls is not cylindrical or (3) the roller upon which the device rolls is flexible.

### 263 Adjustable dimension roll:

This subclass is indented under subclass 238. Roll type devices in which at least one dimension of the roll unit is variable, other than by unrolling or rolling up the fabric. The change in lineal dimension may be made by perma-

nently shortening a part definitely constructed to be shortened.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 21, for extensible flexible or portable panels (including roll type panels) combined with hoods, canopies, shields storage chambers or outrigged rigid panels.
- 250, for shiftable position extensible rollers.

#### SEE OR SEARCH CLASS:

- 211, Supports: Racks, subclasses 105.3+ for extensible rod racks.
- 242, Winding, Tensioning, or Guiding, subclasses 529, 571+, and 578+ for adjustable winding or unwinding spool or mandrel.

#### With fabric reinforcements:

This subclass is indented under subclass 238. Roll type devices having some means for reinforcing the fabric panel. Such means may be mounted on the fabric, or on the structure to which the roll type device is applied for engagement with the fabric.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 266+, for guide means for the fabric or means cooperating with the guide means where such means are the only reinforcement for the fabric.
- 349.1+, for hanging or drape type with similar reinforcing means.
- 379, for framed type with similar reinforcing means.

### 265 With fabric free edge connected operator:

This subclass is indented under subclass 238. Roll type devices in which an operating means for causing the rolling and/or unrolling of the fabric is connected to the fabric free or leading edge, i.e., the edge first to leave the roll as it unrolls.

(1) Note. In some of these devices the operating means is guided and acts as a guide for the fabric.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

68, for outrigged roll type with fabric leading edge operator.

#### 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.), subclasses 110.1+, especially subclass 442 for handles, per se.
- 428, Stock Material or Miscellaneous Articles, subclass 28 for a tassel, per se.

#### With guides or fabric edge holders:

This subclass is indented under subclass 238. Roll type devices in which means are provided to guide the traveling end of the panel in its movements and/or to guide the lateral edges of the panel in their movements.

### 267.1 Fabric side edge and stick:

This subclass is indented under subclass 266. Roll type device in which both the side edge of the fabric panel and the stick at the traveling end thereof are guided.

### 268.1 Fabric side edge:

This subclass is indented under subclass 266. Roll type device in which the side edge of the fabric is guided or held.

#### 269 Clamping:

This subclass is indented under subclass 268.1. Roll type devices in which some means is provided for clamping the fabric side edge.

### 270 Slot or channel type:

This subclass is indented under subclass 268.1. Roll type devices in which the guide is in the form of a slot or channel substantially coextensive with the maximum travel of the fabric.

### 271 Fabric receiving:

This subclass is indented under subclass 270. Roll type devices in which the fabric edge travels in the slot or channel.

#### 272 Guide mounted in a channel:

This subclass is indented under subclass 271. Roll type devices in which there are provided channel means in which the grooved or channel-shaped fabric receiving guide is mounted.

## 273.1 With interlock between fabric and guide:

This subclass is indented under subclass 271. Roll type device in which there is a slidable interlock between the fabric edge and the guide slot or channel whereby the fabric edge is prevented form separating laterally from the guide slot or channel under the influence of ordinary forces.

#### 274 Stick guided only:

This subclass is indented under subclass 266. Roll type devices in which only the stick at the traveling end of the fabric is guided.

#### With positive stop or detent:

This subclass is indented under subclass 274. Roll type devices having some means, other than mere friction means, which engages the stick or some other element carried by the fabric or stick to hold it in adjusted position.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

290.1+, and the subclasses there noted for other fabric free edge holding means.

### 276 Reciprocable detent:

This subclass is indented under subclass 275. Roll type devices in which a detent element is mounted on the fabric or stick for reciprocating release motion.

### 277 Guides of bar or strand form:

This subclass is indented under subclass 274. Roll type devices in which the guides are in the form of nonchanneled bars or strands. These strands are usually nontranslating.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

265, and 319+, for strands which are anchored to the fabric free edge and move therewith.

274+, for channeled or grooved guides.

#### 278 With release mechanism:

This subclass is indented under subclass 277. Roll type devices in which there is provided some nonpositive holding means and in addition, means for operating the holding means to release it.

### 279 Guide strand axially through or into stick:

This subclass is indented under subclass 277. Roll type devices in which the guiding strand passes axially through or into the stick.

## 280 Leading edge holders movable axially of stick:

This subclass is indented under subclass 274. Roll type devices having some device carried by the stick and movable axially thereof for holding the leading edge in adjusted position.

#### With release mechanism:

This subclass is indented under subclass 280. Roll type devices having means to operate the holding device to cause it to release.

# 282 With guide engaging rollers and friction elements:

This subclass is indented under subclass 281. Roll type devices in which the portions which engage the guides have both friction elements and rollers.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

284, for similar devices without friction elements.

285+, for similar devices not having release mechanism.

288, for such devices with neither release mechanism nor rollers and which are axially movable.

289, for friction elements which do not move axially of stick.

### 283 And roll brake:

This subclass is indented under subclass 282. Roll type devices in which there are brake means for the roll.

### SEE OR SEARCH THIS CLASS, SUB-CLASS:

286, for similar devices without release mechanism.

### With guide engaging rollers:

This subclass is indented under subclass 281. Roll type devices in which the portions which engage the guides have rollers.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

282+, for devices which also disclose friction elements.

287, for devices having rollers but no release mechanism.

## 285 With guide engaging rollers and friction elements:

This subclass is indented under subclass 280. Roll type devices in which the portion which engages the guides has both rollers and friction elements.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

282+, for such devices which also disclose release mechanism, whether or not claimed.

287, for such devices with rollers only.

288, for such devices with axially movable friction elements only.

289, for friction elements which do not move axially of stick.

#### 286 And roll brake:

This subclass is indented under subclass 285. Roll type devices in which there are brake means for the roll.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

283, for such devices which also disclose release mechanism.

#### With guide engaging rollers:

This subclass is indented under subclass 280. Roll type devices in which the portions which engage the guides have rollers.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

282+, for such devices which also have release mechanism and friction elements.

284, for such devices which also have release mechanism.

285+, for such devices which also have friction elements.

### With axially acting friction elements:

This subclass is indented under subclass 280. Roll type devices in which the portions which engage the guides have axially movable friction elements.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

281, for such devices which also have release mechanism.

282+, for such devices having also release mechanism and rollers.

285+, for such devices having also rollers.

289, for friction elements which do not move axially of stick.

#### With friction elements:

This subclass is indented under subclass 274. Roll type devices in which the portion which engages the guides has friction elements.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

281, through 283, 285+, and 288, for other devices having friction elements in which the friction elements move axially of the stick.

### 290.1 With fabric leading edge fastening means:

This subclass is indented under subclass 238. Roll type device in which fastening means are provided for the edge of the fabric which first leaves the roll as the fabric is unrolled.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

27, 28 and 100, for a device in which the fabric leading edge is connected to a movable rigid closure.

243+, for fabric leading edge holding means having rolls which are translated for winding or unwinding.

265, for fastening means connecting the fabric leading edge to an operator.

274+, for a guided stick having holding means.

327+, for a plural-edge held nonframe type fabric.

#### With brake or stop:

This subclass is indented under subclass 238. Roll type devices having means for retarding or stopping the rotation of the roll, or for holding the roll to prevent undesired rotation.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

8, for retarding means combined with automatic control.

269, 275+, 278, 281+, 288, and 289, for brake and stop mechanisms with guides.

290.1, and the subclasses there noted for fabric leading edge holding means.

#### SEE OR SEARCH CLASS:

188, Brakes, pertinent subclasses for brakes of general utility.

#### 292 Plural:

This subclass is indented under subclass 291. Roll type devices in which two or more brakes or stops for the roll are provided.

#### 293.1 Limit of travel:

This subclass is indented under subclass 291. Roll type device in which means are provided to stop the fabric at the desired limit of winding travel or unwinding travel.

## For spring operated roller:

This subclass is indented under subclass 293.1. Roll type devices in which there is a spring operated roller.

### 295 Screw operated brake or stop:

This subclass is indented under subclass 294. Roll type devices in which the brake or stop is operated by means of a screw.

#### 296 Speed limiting:

This subclass is indented under subclass 291. Roll type devices in which the brake or stop prevents the roll from rotating at undesired speeds.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

 for this subcombination combined with automatic means to initiate operation of the device. 300+, for pawl or detent means which hold the roll when stopped, but are maintained out of engagement with keeper means during rotation.

### 297 Ball or roller, form brake or stop:

This subclass is indented under subclass 291. Roll type devices in which the brake or stop is in the form of a ball or roller operating on the roll supporting means or some part secured to and rotating with the roll.

#### SEE OR SEARCH CLASS:

188, Brakes, subclass 82.84 for one-way brakes in which retrograde rotation is prevented by rolling an element into jamming position between converging surfaces one of which is the rotating member.

#### 298 Friction:

This subclass is indented under subclass 291. Roll type devices in which the brake or stop is in the form of friction means acting on the roll supporting means or on some part carried by the roll.

#### 299 For spring operated roller:

This subclass is indented under subclass 298. Roll type devices in which there is a spring operated roller.

#### 300 Pawl or detent:

This subclass is indented under subclass 291. Roll type devices in which the brake or stop is in the form of a pawl or detent acting on the roll supporting means or some part carried thereby and rotating therewith.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

297, for brakes or stops of ball or roller form.

#### SEE OR SEARCH CLASS:

188, Brakes, subclasses 82.7+ for one-way brakes in which a tongue-like element is mounted to swing into braking position upon retrograde motion of the rotating member.

#### 301 For spring operated roller:

This subclass is indented under subclass 300. Roll type devices in which there is a spring operated roller.

(1) Note. Includes freely or loosely mounted detents which move in an unrestrained manner.

### 302 Spring urged pawl or detent:

This subclass is indented under subclass 301. Roll type devices in which the pawl or detent is spring operated.

#### 303 Pawl or detent mounted off the roller:

This subclass is indented under subclass 301. Roll type devices in which the pawl or detent is not carried by the roll supporting means or any part which rotates with the roll.

#### 304.1 Sliding pawl or detent:

This subclass is indented under subclass 301. Roll type device in which the pawl or detent moves with a sliding motion.

### **305** For spring operated roller:

This subclass is indented under subclass 291. Roll type devices in which there is a spring operated roller.

# With means to prevent uncoiling of spring on removal from support:

This subclass is indented under subclass 305. Roll type devices in which means are provided to prevent motion of the spring operated roller driving spindle when the roller is removed from its mounting means.

### **307** For strand operated roll:

This subclass is indented under subclass 291. Roll type devices in which the roll is strand operated.

### 308 Strand operated brake or stop:

This subclass is indented under subclass 307. Roll type devices in which the brake or stop is also operated by means of a strand.

## 309 With rotating means:

This subclass is indented under subclass 238. Roll type devices having means to operate the roll to cause it to rotate.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

243+, for arrangements in which the roll must translate to cause it to rotate.

265, for devices in which the operator is connected to the fabric leading edge.

### 310 Electric operation or control:

This subclass is indented under subclass 309. Roll type devices in which the rotating means is electrically operated or electrically controlled.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

331, for similar operating and control means for hanging and drape type devices.

### 311 Motor or fluid pressure control:

This subclass is indented under subclass 309. Roll type devices in which the rotating means is motor operated or fluid pressure controlled.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

310, for electric motors and electrical control.

313+, and 320, for spring and weight operators.

331, for similar operating and control means for hanging and drape type devices.

#### 312 Plural, diverse:

This subclass is indented under subclass 309. Roller type devices having two or more means to cause the roller to operate, at least two being of different kinds.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

320, for strand operators with weights or hand grips.

### 313 Spring:

This subclass is indented under subclass 309. Roll type devices in which the roll is caused to rotate by spring means.

#### 314 External of roll:

This subclass is indented under subclass 313. Roll type devices in which the actuating spring is mounted externally of the roll.

#### With winding or tensioning means:

This subclass is indented under subclass 313. Roll type devices in which means other than the operation of the flexible or portable panels are provided for tightening or regulating the tension of the operating spring.

### 316 Nested helical springs:

This subclass is indented under subclass 313. Roll type devices in which there are a plurality of helical springs one nested within another or in which the succeeding sections of a spring are each wound back over the previous inner section.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

317, for other plural springs.

#### 317 Plural:

This subclass is indented under subclass 313. Roll type devices in which there are a plurality of springs or spring sections for operating a single roll.

SEE OR SEARCH THIS CLASS, SUBCLASS:

316, for plural nested helical springs.

#### 318 With spring anchor:

This subclass is indented under subclass 313. Roll type devices in which the means for connecting an end of the roll actuating spring to its associated element is claimed.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

315, for this feature in spring winding or tensioning means.

### 319 Strand:

This subclass is indented under subclass 309. Roll type devices in which the means for rotating the roll consists of a strand.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

243+, for roll type devices where the strand causes a roller to translate to cause winding or unwinding.

307+, for other strand operated rollers, which are combined with strand holders to hold the roller against undesired rotation.

### 320 With weight or handgrip:

This subclass is indented under subclass 319. Roll type devices in which the strand form rotating means has either a weight, a handgrip or both.

#### 321 Endless:

This subclass is indented under subclass 319. Roll type devices in which the operating strand is endless. Includes sprocket chains.

# 322 With compensating and shock absorbing spring:

This subclass is indented under subclass 319. Roll type devices in which a spring is provided which compensates for the uneven rate of winding of the fabric or absorbs shocks due to suddenly applied force tending to change the speed of the roll.

# 323.1 With supporting or journaling means or with roller end structure:

This subclass is indented under subclass 238. Roll type device claiming (a) a means for supporting the roll, (b) the journaling means or (c) the roller end structure which provides for rotation in its support.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

242+, for shiftable roll features.

#### SEE OR SEARCH CLASS:

242, Winding, Tensioning, or Guiding, subclasses 590+ for a mounted roll holder to permit winding or unwinding.

248, Supports, subclasses 251+ particularly subclasses 266+ for brackets of the shade roller type where only so much of the roller structure is claimed as is necessary to fit the bracket.

### With pintle clamping or holding means:

This subclass is indented under subclass 323.1. Roll type devices in which a clamp or holding means is provided to keep the pintle in its proper assembled relation with its bracket.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

315, for devices which rotate the pintle for the purpose of tensioning the spring.

### With pintle journaled in rolled:

This subclass is indented under subclass 323.1. Roll type devices in which a roller pintle is journaled for relative rotary movement in a roller or at one end thereof.

## 326 With roller gudgeons:

This subclass is indented under subclass 323.1. Roll type devices in which a roller and its gudgeon is claimed.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

323.1+, or the preceding indented subclasses for these devices in combination with support means.

### SEE OR SEARCH CLASS:

464, Rotary Shafts, Gudgeons, Housings, and Flexible Couplings for Rotary Shafts, subclass 184 for a gudgeon, per se, and so much of roller structure as is necessary to support the gudgeon.

# 327 NONFRAMED PLURAL EDGED HELD FABRIC:

This subclass is indented under the class definition. Devices in which means in the form of elongated elements, not a complete frame, are provided to which two or more edges of the fabric are attached to hold the same extended.

(1) Note. The elongated element for the bottom edge may be for weighting purposes only.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

84.01+, for pleating type devices where elongated elements are found at the fold.

- 349.1+, (1) for hanging or drape type bottom or side edge holding means not of elongated form, (2) for holding means intermediate the width, whether or not of elongated form and whether or not the hanging or drape type features are claimed and (3) the subcombination of bottom holding means, even if it is an elongated element.
- 371+, for framed type, i.e., where a complete surface is enclosed by an integral frame element or by interconnected frame elements, even though the fabric is connected thereto along fewer than all of its edges.

#### 328 With fabric stretching means:

This subclass is indented under subclass 327. Hanging or drape devices in which means are provided for stretching the fabric.

#### 329 Resilient stretching means:

This subclass is indented under subclass 328. Hanging or drape devices in which the stretching means are resilient devices.

#### 330 HANGING OR DRAPE TYPE:

This subclass is indented under the class definition. Devices in which flexible fabrics hang suspended.

- Note. Where only two fabrics are claimed, there is no overlapping and the devices are hung from a single support in edge to edge relation, the devices have been treated as single and are in this subclass (330).
- (2) Note. For the line between this series of subclasses and Class 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.); Class 211, Supports: Racks; and Class 248, Supports; see note (3) to the main class definition of this class (160).

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

123+, for plural hanging or drape type devices hung from a single support in side by side relationship where the

structure provides for overlapping of the fabrics.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclass 493 for devices of this type associated with bed mattresses.
- 223, Apparel Apparatus, subclass 105 for curtain rod threaders and subclass 50, for tape inserting.
- 294, Handling: Hand and Hoist-Line Implements, subclasses 19.1+ for devices for handling curtain poles, with or without the curtain hanging thereon.
- 428, Stock Material or Miscellaneous Articles, subclasses 44+, 53, 54+, and 57+ for plural, joined webs or sheets which make up stock material, rather than a "unit" of the type referred to in the definition of subclass 130 above in this class (160).

# Motor operating means or electric or fluid pressure control:

This subclass is indented under subclass 330. Hanging or drape type devices having anyone or any combination of (1) motor operating means (other than mere springs or spring devices); (2) electric control means or (3) fluid pressure operated control means.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

310, and 311, for similar operating and control means for roller type devices.

### 332 Chain, cable, and/or strand type:

This subclass is indented under subclass 330. Hanging or drape type devices in which the fabric is in the form of or is formed by chains, cables or strands of any form.

#### SEE OR SEARCH CLASS:

- 57, Textiles: Spinning, Twisting, and Twining, subclasses 200+ for strand structure, per se, formed by a twisting, twining and/or untwisting operation.
- 59, Chain, Staple, and Horseshoe Making, subclasses 78+ for chain structure, per se.

### 333 Shiftable position pole:

This subclass is indented under subclass 330. Hanging or drape type devices in which the fabric is hung or draped from a pole, where there are means provided for changing the position of the pole.

#### 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 92 for rigid panels which slide back and forth and are supported by a link and lever.
- 294, Handling: Hand and Hoist-Line Implements, subclasses 19.1+ for independent devices adapted for grasping and moving a pole (with or without the curtain thereon).

#### 334 Plural motions:

This subclass is indented under subclass 333. Hanging or drape type devices in which the means provides for the pole having at least two directions of motion.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

242+, for rollers having at least two directions of motion in addition to rotation.

#### 335 Swingable:

This subclass is indented under subclass 333. Hanging or drape type devices in which the pole has swinging motion.

### 336 Vertical swing:

This subclass is indented under subclass 335. Hanging or drape type devices in which the pole swings about a horizontal axis.

#### 337 With pole operating means:

This subclass is indented under subclass 335. Hanging or drape type devices in which means are provided for causing the pole to swing.

#### 338 Vertically shiftable:

This subclass is indented under subclass 333. Hanging or drape type devices under subclass in which the pole is vertically shiftable.

#### 339 With strand operator:

This subclass is indented under subclass 338. Hanging or drape type devices in which strand form means are provided for shifting the pole vertically.

### 340 With fabric operating means:

This subclass is indented under subclass 330. Hanging or drape type devices in which means are provided for causing the fabric or some part thereof to move, either relative to itself or to a support.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

for devices in which the fabric motion is caused by motion of the pole.

### 341 Laterally gathered fabric:

This subclass is indented under subclass 340. Hanging or drape type devices in which the fabric is caused to gather in the plane of the fabric due to a horizontal or sidewise motion.

### 342 Lazy tongs:

This subclass is indented under subclass 341. Hanging or drape type devices in which lazy tongs are used in the gathering means.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

130+, and especially subclasses 136+ for lazy tong structures combined with plural strip, slat or panel devices.

### 343 Spring or screw:

This subclass is indented under subclass 341. Hanging or drape type devices utilizing springs, screws and/or worms in the gathering means.

#### 344 Strand:

This subclass is indented under subclass 341. Hanging or drape type devices in which the gathering means utilizes elements of strand form.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

370, for mere supports combined with strand guides.

#### 345 Hollow or slotted track:

This subclass is indented under subclass 344. Hanging or drape type devices in which the track is an elongated element, longitudinally slotted or hollow, in which the traveler portion moves and from which the panel or panel carrying portion extends to the exterior of the hollow or slotted elongated element.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

19+, for tracks combined with shields or hoods.

#### 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.), subclasses 87.4+ for similar devices without fabric operating means, and subclass 95 for the track structure, per se.

#### 346 With anti-friction means:

This subclass is indented under subclass 345. Hanging or drape type devices having antifriction means between the hollow or slotted element and the portion of the traveler received therein.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

347, for other antifriction means for travelers.

#### 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.), subclasses 87.6 and 87.8, for travelers with antifriction means, per se.

## 347 With anti-friction means:

This subclass is indented under subclass 344. Hanging or drape type devices having antifriction means between the fabric carrying travelers and the element which move along the travelers.

#### 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.), subclasses 87.6 and 87.8, for travelers with antifriction devices, per se.

#### 348 With pleating means:

This subclass is indented under subclass 330. Hanging or drape type devices having some means engaging the fabric to form pleats.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 84.01+, for fabrics constructed to be contracted by imparting pleats or folds thereto and having means to cause the folds to occur along predetermined lines.
- 341+, for drape type devices where the pleating is caused by lateral gathering means.
- 349.1+, for drape type devices where the only pleating effect is caused by a bottom or intermediate holding means.
- 385+, for fastening means of the modified fabric type, and especially subclasses 388, 389, and 390 for fastening means without pleating features.

# 349.1 With bottom or intermediate holding, weighting, or draping means:

This subclass is indented under subclass 330. Device having (a) means to engage the hanging device intermediate its top and bottom to hold it in place, (b) means to engage the hanging device at the bottom thereof to hold it in place.

- (1) Note. The subcombination of a bottom held fabric is here, even though the holding means is of elongated form.
- (2) Note. Many of these devices cause the fabric to drape.
- (3) Note. Where the holding means, per se, is claimed, see the class appropriate to the form of the holding means. See the Search Class notes below.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 290.1, for a roller type device with bottom holding means.
- 327+, for a plural-edge held nonframe type fabric.
- 340+, for operators to cause the devices to drape.

#### SEE OR SEARCH CLASS:

- 2, Apparel, subclass 273 for weights, per se, and weights for other uses.
- 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclass 404 for miscellaneous weights.
- 24, Buckles, Buttons, Clasps, etc., subclasses 1, 343+ and 455+, for holding means, per se.
- 211, Supports: Racks, particularly subclasses 41.1-41.2, 65, 85.3 through 85.6, 87.01+, 120 and 123+, for holding means, per se.
- 248, Supports, particularly subclasses 200+, for holding means, per se.
- 411, Expanded, Threaded, Driven, Headed, and Tool-Deformed, or Locked-Threaded Fastener, particularly subclasses 373+, for holding means, per

#### 349.2 Intermediate holding means:

This subclass is indented under subclass 349.1. Device having means to engage the hanging device either (a) intermediate its top and bottom to hold it in place or (b) intermediate its width.

#### 350 Portable:

This subclass is indented under subclass 330. Hanging or drape type devices which are portably mounted, as defined in subclass 351.

### 351 PORTABLE:

This subclass is indented under the class definition. Devices having means peculiarly adapted to make the device portable, including those having legs or bases to support the device in upright position.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

24, 135 and 350, for other portable devices.

#### SEE OR SEARCH CLASS:

- Apparel, subclass 2.5 for penetration resistive shields which are worn or carried by the body.
- 109, Safes, Bank Protection, or a Related Device, subclass 49.5 for portable panels utilized as shields or protectors.

# 352 NONPLANAR (E.G., THREE DIMENSION):

This subclass is indented under the class definition. Devices of other than planar form.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 15, for spaced or overlapping panel with insect exits.
- 53, for an umbrella type outrigged device.
- 56+, for nonplanar outrigged device.
- 88, for nonplanar plural panels.
- 114, for nonplanar plural strip slat or panel assemblies.
- 131+, for a plural strip, slat or panel assembly with a nonplanar strip, slat or panel.
- 183, for a plural strip, slat or panel assembly in which the strips, slats or panels are positioned in different nonparallel planes in operative position.
- 262, for a roll type device with a nonplanar axis.

#### 353 WITH PLURAL FRAMES:

This subclass is indented under the class definition. Devices wherein a single fabric filled frame is combined with one or more additional frames not necessary to the fastening of the fabric.

(1) Note. The auxiliary frame may be for the purpose of causing the assembly to fit different sized openings.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 128, for frames which may alternately receive either a fabric filled frame or a rigid panel.
- 130+, for plural strip, slat or panel type devices, including plural framed type devices, particularly subclass 180 for such devices where one closes an opening in another, subclass 182 for such devices mounted in a removable frame type support and subclass 230, for such devices having edge to edge movably interconnected frames having a single fabric.
- 380, for single frames made of two superimposed frame elements between which the fabric is secured.

# 354 WITH NONRIGID FRAME OR BORDER ELEMENTS:

This subclass is indented under the class definition. Framed devices in which the frame or some portion thereof is claimed as made of resilient, elastic or other nonrigid material.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

372+, for extensible telescopic frames.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclass 192 for elastic or resilient side edges or bed bottoms.
- 40, Card, Picture, or Sign Exhibiting, subclasses 700+ for resilient or elastic picture frames.

# 368.1 WITH MOUNTING, FASTENING, OR SUPPORTING MEANS:

This subclass is indented under the class definition. Devices having mounting, supporting or fastening means except those provided for above.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 105, for devices of the flexible or portable panel type removably mounted in sliding rigid closure guides.
- 351, for portably mounted devices.
- 372+, for adjustable size frames. Many such devices are to cause the frames to fit different size openings, but are classi-

fied in subclasses 372+ unless some means for mounting, supporting or fastening the frame in place (in addition to the adjustment of the frame size) is claimed.

#### 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.), subclasses 265+ for separable hook type hinges, per se.

# 368.2 Shiftable support for overlooking shield; e.g., pillow sham type:

This subclass is indented under subclass 368.1. Devices comprising a mechanism movable to a position to hold and sustain a concealing mask in proper position to cover an object when it is not in use, and to lift and hold the mask out of the way when it is desired to use the object.

(1) Note. Included here are pillow sham holders which support a sham in pillow covering position or which lift and hold the sham out of the way when it is desired to use the pillows.

### SEE OR SEARCH CLASS:

5, Beds, subclass 401 for a pillow sham combined with a bed.

#### **369** For framed type:

This subclass is indented under subclass 368.1. Devices in which the supported device is of the frame type.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

182, for a plurality of framed devices mounted in a removable frame.

#### With guide for strand:

This subclass is indented under subclass 368.1. Devices combined with one or more strand guides.

### 370.1 Grain car type temporary closure:

This subclass is indented under subclass 368.1. Device comprising an auxiliary closure member specially adapted to be temporarily installed across a door opening of a freight vehicle so that bulk grain, small packages,

boxes or other granular bulk material may be retained within the vehicle without leakage.

(1) Note. Generally, such inner load retaining doors also function to prevent the dry, flowable material within a railway box car from coming into contact with the permanent outside sliding door of the car.

## 370.21 Automobile windshield weather protector or sunshield:

This subclass is indented under subclass 368.1. Subject matter comprising means readily attachable to and removable from an automotive-type vehicle for either (a) covering or shielding the outside surface of a vehicle window so as to protect it from accumulations of snow, frost, ice, rain, dust, etc. while the vehicle is parked and exposed to the weather, or (b) for shielding the vehicle interior from sunlight.

#### SEE OR SEARCH CLASS:

296, Land Vehicles: Bodies and Tops, subclasses 97.1+ for glare screens or visors.

#### **370.22** Roll type:

This subclass is indented under subclass 370.21. Subject matter which is contracted or accumulated by coiling the shade material about itself to form a generally cylindrical shape, a roll.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 121.1+, for single roll-type devices having panels wound thereon in superimposed or overlapping relationship.
- 133, for plural strip, slat, or panel roll-type devices.
- 238+, for other roll-type devices.

#### 370.23 Pleating type:

This subclass is indented under subclass 370.21. Subject matter in which the constructive material for a sunshade may be contracted or expanded by imparting folds therein or by straightening or tending to straighten such folds and where means is provided for causing such folds to occur at or along predetermined lines by engaging the material at points at opposite ends of the fold lines or by securing

an elongated element at each predetermined fold line.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

84.01+, for pleating-type devices which are normally associated with a static structure.

#### 371 FRAMED TYPE:

This subclass is indented under the class definition. Devices either in the form of a single, flexible fabric filled or covered frame or a frame for such use.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

239+, for framed roller type devices.

327+, for nonframed, plural edge held fabric type.

383+, for patents which disclose a framed type device but claim only a single side and the means for fastening a fabric thereto.

#### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 700+ for picture frames.

### 372 Adjustable frame size:

This subclass is indented under subclass 371. Framed type devices in which means are provided for adjusting the frame size, i.e., increase or decrease the outside frame dimension.

(1) Note. Two slidaby engaged U-shaped frame type devices with a single fabric are here.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 130+, (especially subclass 230), for two pivotally engaged U-shaped frame type devices with a single fabric; and (especially subclasses 218+) for two U-shaped frame type devices, each with its separate fabric whether slidably or pivotally engaged.
- 353, for devices where the fabric is attached to one frame and an adjustable supplementary frame surrounds the first frame.
- 378, for fabric stretching means not involving adjustable frame size.

#### SEE OR SEARCH CLASS:

38, Textiles: Ironing or Smoothing, subclasses 102.4+ for a cloth stretcher frame including means for adjusting the frame size.

#### 373 With excess or extensible fabric:

This subclass is indented under subclass 372. Framed type devices having either (1) a fabric of greater area than is required when the frame is of the smallest adjusted size or (2) a fabric which is extensible to cover the frame when adjusted. Many of these devices have means for taking up the excess of fabric.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

31, and 240, for framed roller type devices in which the roller provides for excess fabric including those in which the roller is solely for such purpose.

### 374 Double extensible:

This subclass is indented under subclass 372. Framed type devices in which the overall size may be changed both laterally and longitudinally of the frame.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

221, for plural strip, slat and panel units which are doubly extensible.

#### SEE OR SEARCH CLASS:

38, Textiles: Ironing or Smoothing, subclasses 102.5+ for a cloth stretcher frame in which the overall size may be changed both laterally and longitudinally of the frame.

# 374.1 Expandable at corner joint (e.g., artists's canvas stretcher frame):

This subclass is indented under subclass 374. Device wherein the size adjustment of the device is accomplished by means associated with one or more joints of the frame to force the adjacent members apart.

### 375 Shiftable edge bar section only:

This subclass is indented under subclass 372. Framed type devices in which an edge bar of the frame has a portion shiftable to change the frame size.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

130+, especially subclasses 222+ for rigid closures with shiftable side bars which have been considered plural strip, slat or panel devices.

#### 376 With spring thrust:

This subclass is indented under subclass 375. Framed type devices having spring means to bias the shiftable side bar section.

#### 377 Collapsible or knockdown:

This subclass is indented under subclass 371. Framed type devices having means by which they may be reduced to a more compact arrangement or bundle when not in operative position.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for plural frames or panels interconnected for relative motion by means of which the unit or assembly may be so reduced, particularly subclasses 222+ for those slidably interconnected and subclasses 229.1+ for those pivotally interconnected at their adjacent edges.

372+, for framed devices having means by which the frame dimensions may be changed.

## 378 Fabric stretching:

This subclass is indented under subclass 371. Framed typed devices having means for applying tension to the fabric therein.

(1) Note. Since all fabric fastening means of the type in which one element provides a channel or groove into which a second fastening element is forced to have an inherent tendency to apply a stretching force to the fabric, such devices have not been placed here but will be found below and cross referenced to subclass 382 and indented subclasses (particularly subclasses 395+); and when the fabric fastening means, per se, (as defined in subclass 382 and explained in the notes) is recited, the patents have been placed there (subclasses 382+), as originals.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 239+, for a roll type device where the fabric stretching is due to a roller in the frame upon and from which the fabric winds and unwinds.
- 328+, for hanging or drape type with fabric stretching means.
- 354, for devices where the fabric stretching is due to an elastic frame or border.
- 372+, for a framed device where the fabric stretching is due to adjusting the frame size.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclasses 211+ for bed bottom tighteners.
- 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclass 5 for combined carpet fasteners and stretchers.
- 38, Textiles: Ironing or Smoothing, subclasses 102.1+ for a cloth stretcher frame.
- 69, Leather Manufactures, subclasses 19.1+ for a frame type skin or hide stretcher.
- 254, Implements or Apparatus for Applying Pushing or Pulling Force, subclasses 199+ for portable implements or apparatus for tensioning flexible material from which the implements or apparatus are detached after tensioning.

# With intermediate reinforcing bars, members, or braces:

This subclass is indented under subclass 371. Framed type devices in which a bar or other elongated member is provided to connect the intermediate portions of two sides of the frame. These are usually for the purpose of either reinforcing the frame or preventing bulging of the fabric.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

130+, especially subclasses 130, 182 and 184 for plural frame devices of similar structure. Rigid frames with cross bars and two or more fabrics covering different areas defined by the outer frame members and cross bars are classified as plural frame type.

381. for corner structures.

#### SEE OR SEARCH CLASS:

 Beds, subclass 203 for intermediate reinforcing bars or braces in bed bottom frames.

# 380 Two superimposed frame elements, fabric clamping:

This subclass is indented under subclass 371. Framed type devices in which the frame is made of two sections, each in the form of a complete frame, arranged in superimposed relation and between which a fabric is secured.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

130+, for plural strip, slat or panel type devices including plural framed type devices especially subclass 182 for such devices mounted in a removable frame type support and subclass 230, for such devices having edge to edge movably interconnected frames having a single fabric.

353, for single framed fabric filled panels with one or more additional frames not necessary to the fastening of the fabric.

#### 381 With corner structure:

This subclass is indented under subclass 371. Framed type devices in which the structure of a frame corner is claimed.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

372+, especially subclass 374 for corners for adjustable sized frames.

#### SEE OR SEARCH CLASS:

403, Joints and Connections, subclass 231 for a frame corner joint wherein the end of one member is joined to the

side of another and subclass 403 for frame corner joint in general.

#### 382 FABRIC FASTENING MEANS:

This subclass is indented under the class definition. Devices directed to means to fasten one edge only of a fabric to its immediate support.

#### 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.), appropriate subclasses particularly subclasses 4+ for carpet fasteners.
- 24, Buckles, Buttons, Clasps, etc., appropriate subclasses for numerous types of fastening devices useful for fastening a fabric to its support, especially subclasses 31+ for belt fasteners; 67+, for paper clips and fasteners; 72.5, for bed clothes holders and subclasses 343+ for combined fasteners.

### **383** To elongated element:

This subclass is indented under subclass 382. Fabric fastening means claiming a bar, rod, roller, stick, frame side or other elongated element with means for fastening one edge only of a fabric thereto, whether or not the fabric is claimed as a part of the combination (subclass 385 indented thereunder having both the elongated element claimed in combination with the fabric and the fabric, <u>per se</u>, when the fabric is modified for fastening purposes).

- (1) Note. Where the fastening of a fabric to a plurality of elongated elements is recited, but no further characteristics of the relation of the elements is recited, the patents have been placed here.
- (2) Note. This and the indented subclasses take fastening means where only the elongated element fastening means and/ or the fabric is claimed. Where additional characteristics are claimed which limit the same to a type of flexible or portable panel, see the appropriate type group above. The mere recitation that the fabric is rolled, hangs from or is stretched from the elongated element

will not keep the patent from this subclass.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

381, for fabric fastening means for frame corners.

#### SEE OR SEARCH CLASS:

- 5, Beds, subclasses 194+ for means to bind and fasten bed bottoms to frame rails and subclasses 402+ for means to secure an upholstery cover(s) to a bed bottom(s).
- 15, Brushing, Scrubbing, and General Cleaning, subclasses 231+ for fabric sheet holders.
- 16, Miscellaneous Hardware (e.g., Bushing, Carpet Fastener, Caster, Door Closer, Panel Hanger, Attachable or Adjunct Handle, Hinge, Window Sash Balance, etc.), subclasses 7, 12+ and 16, for carpet fasteners of elongated element form and subclasses 87.2+ for fabric fastening means which provide for suspending the fabric in such a way as to permit the fabric to travel along the length of the device from which it is suspended.
- 38, Textiles: Ironing or Smoothing, subclasses 66 and 140 for covers for ironing platens, ironing rolls and ironing tables and subclass 102.91 for a cloth stretcher frame including means for fastening the cloth to the frame.
- 52, Static Structures (e.g., Buildings), appropriate subclasses for various structures which involves retaining a panel in position, particularly subclasses 459+ and 474+.
- 55, Gas Separation, appropriate subclasses beginning with subclasses 482+ for reticulate screen mechanisms.
- 84, Music, subclasses 122+, (especially subclass 162) for ends and joints for note sheet selectors.
- 101, Printing, subclass 415.1 for flexible sheet securing means.
- 108, Horizontally Supported Planar Surfaces, subclass 90 for a horizontally supported planar surface having a detachable enlarging or substitute surface which includes a flexible cover.

- 150, Purses, Wallets, and Protective Covers, pertinent subclasses, particularly subclasses 124+ for fastening purse fabrics to purse frames.
- 198, Conveyors: Power-Driven, subclass 846 for means for fastening together opposite ends of a strip, or for fastening together a series of tandem strips to form an endless belt conveyor.
- 206, Special Receptacle or Package, subclasses 389+ for a roll or reel package which may include means for holding material in the wound form.
- 209, Classifying, Separating, and Assorting Solids, subclasses 395, 399 and 403, for attaching sifting element fabrics
- 210, Liquid Purification or Separation, subclasses 483+ for a supported filter medium.
- 220, Receptacles, subclasses 610+, 677+ for seams and joints.
- 242, Winding, Tensioning, or Guiding, subclasses 579+ for means to attach an elongated material to a spool or similar take-up.
- 346, Recorders, subclasses 136 and 138 for means for gripping a web in combination with a recorder.
- 402, Binder Device Releasably Engaging Aperture or Notch of Sheet, appropriate subclasses, for a sheet binder device of that class (402) which may include a fastener of this class (160) for the retention of a flaccid sheet.
- 451, Abrading, for a holder for flexible abrading sheets.
- 473, Amusement Devices: Games, subclass 30 for a cloth securing device for a billiard or pool table.
- 492, Roll or Roller, subclasses 22+ for a roll, per se, not elsewhere provided for, having a work surface and means to hold a sheet in the roll assembly by gripping or impaling an edge portion of the sheet.

### 384 Additional things fastened:

This subclass is indented under subclass 383. Fastening means in which two or more things are fastened to the same elongated member, at least one of them being a fabric.

(1) Note. The additional thing fastened must be in addition to the bar, frame side, et cetera, and the means which fastens the fabric thereto, which means may itself be in the form of an elongated element engaging the fabric.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

124, for fastening means for side by side arranged hanging or drape type fabrics hung on a single elongated element.

#### 385 With modified fabric:

This subclass is indented under subclass 383. Fabric fastening means in which the fabric is in some way modified to aid in securing the same to its elongated element.

#### 386 Plural layers in panel portion:

This subclass is indented under subclass 385. Devices in which the panel portion of the fabric has a plurality of layers.

#### 387 With fabric hem:

This subclass is indented under subclass 385. Devices wherein one edge of the fabric is folded back upon itself and fastened to the fabric to form a narrow elongated tube or pocket known as a "hem".

#### SEE OR SEARCH CLASS:

5, Beds, subclass 407 for an upholstery cover held to a frame by means of a hem having a bead or core therein.

### 388 With loops:

This subclass is indented under subclass 385. Devices where the fabric is modified by the formation of a series of parallel straps or loops, so that the fabric may be threaded onto a bar, rod or other elongated element.

### 389 With strips or strands:

This subclass is indented under subclass 385. Devices wherein the fabric is modified (1) by the formation of, or (2) for the attachment of, a series of strands or strips.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

293.1+, for roll type devices, where strips constitute an unwinding limit stop.

#### 390 With fabric openings or pockets:

This subclass is indented under subclass 385. Devices wherein the fabric is modified by the formation of openings or pockets.

# 391 Longitudinally divided or with fabric receiving externally exposed channel or groove:

This subclass is indented under subclass 383. Fabric fastening means in which (1) the elongated element has a channel or grove therein exposed to the exterior of the elongated element, which channel or groove receives a portion of the fabric, or (2) the elongated element is divided longitudinally into at least two parts between which the fabric is received. These devices may be of slit tube form.

# 392 Internal fastener larger than groove or channel fabric exit:

This subclass is indented under subclass 391. Fabric fastening means in which fastener members are used to connect the fabric and the elongated member, the groove or channel in the elongated member having an internal dimension parallel to and greater than the width of the exit of the channel or slot, the fasteners being positioned in the enlarged position of the groove or channel and at least in the fabric securing position having a dimension greater than the width of the exit.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

23.1+, for rollers upon which the fabric winds journaled in a housing with an exit slot of less width than the roller diameter.

395+, for elongated fasteners not larger than the exit.

### 393 With end cap and/or sleeve:

This subclass is indented under subclass 392. Fabric fastening means having either or both (1) caps positioned on and enclosing the ends of the elongated element or (2) sleeves (usually slotted to provide for a passage of the fabric) surrounding the elongated element.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

396, and 401, for other end caps and sleeves.

#### 394 Sheet material elongated element:

This subclass is indented under subclass 392. Fabric fastening means in which the elongated element to which the fabric is secured is made of sheet material.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

397, for other sheet material elongated elements.

### 395 Elongated fastener in channel or groove:

This subclass is indented under subclass 391. Fabric fastening means in which a fastener of elongated form is positioned in and extends axially of the groove or channel.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

392+, for such devices in which the fastener member is larger than the channel or slot fabric exit.

### 396 With end cap and/or sleeve:

This subclass is indented under subclass 395. Fabric fastening means having either or both (1) caps positioned on and enclosing the ends of the elongated element or (2) sleeves (usually slotted to provide for passage of the fabric) surrounding the elongated element.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

393, and 401, for other caps and sleeves.

## 397 Sheet material elongated element:

This subclass is indented under subclass 395. Fabric fastening means in which the elongated element to which the fabric is secured is made of sheet material.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

394, for other sheet material elongated elements.

# 398 With pointed, piercing, and/or hook elements:

This subclass is indented under subclass 391. Fabric fastening means having any one type or any combination of pointed, piercing or hook elements to fasten the fabric in the channel or groove.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

404, for other pointed, piercing or hook elements.

# 399 Externally applied clamp, clasp, sleeve, or end cap:

This subclass is indented under subclass 391. Fabric fastening means in which a clamp, clasp, sleeve or end cap fits upon the exterior of the elongated element to hold the fabric.

(1) Note. A portion of the clamp or clasp usually extends into the groove or slot.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

393, 396, and 401, for other sleeves or end caps.

402, for other externally applied clamps or clasps.

#### 400 Sheet or strand:

This subclass is indented under subclass 383. Devices wherein an unmodified fabric is attached to its mounting by strips or strands.

### 401 By sleeve and/or end cap:

This subclass is indented under subclass 383. Fabric fastening means having either or both (1) caps positioned on and enclosing the ends of the elongated element or (2) sleeves (usually slotted to provide for passage of the fabric) surrounding the elongated element.

## SEE OR SEARCH THIS CLASS, SUB-CLASS:

393, 396, and 399, for other end caps and sleeves.

402, for externally applied clasps and clamps not of sleeve or end cap form.

#### SEE OR SEARCH CLASS:

492, Roll or Roller, subclasses 22+ for a roll, per se, not elsewhere provided

for, having a work surface and means to hold a sheet in the roll assembly by gripping or impaling an edge portion of the sheet.

### 402 By externally applied clamp or clasp:

This subclass is indented under subclass 383. Fabric fastening means having clamps or clasps applied to the exterior of the elongated element for securing the fabric thereto.

(1) Note. Such clasps or clamps may act to press the fabric between a portion of their structure and the elongated element, or may have one portion secured to the elongated element on the exterior thereof and separate clamp or clasp portion for the fabric.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

383+, and 399, for other clamps or clasps not so applied.

393, 396 and 401, for end caps and sleeves which may clamp or clasp the fabric.

#### 403 By elongated fastener:

This subclass is indented under subclass 383. Fabric fastening means having an elongated fastener applied to the exterior of the elongated element.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

392+, and 395+, for elongated fasteners having grooves or channels with elongated fasteners.

### 404 By pointed, piercing, and/or hook elements:

This subclass is indented under subclass 383. Fabric fastening means having any one type or any combination of pointed, piercing or hook elements to fasten the fabric to the elongated element.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

398, for other pointed piercing and/or hook elements.

#### SEE OR SEARCH CLASS:

492, Roll or Roller, subclasses 22+ for a roll, per se, not elsewhere provided for, having a work surface and means

to hold a sheet in the roll assembly by gripping or impaling an edge portion of the sheet.

## 405 MISCELLANEOUS AND PROCESSES OF USING:

This subclass is indented under the class definition. Devices having a claim to either (1) a method of using, and/or (2) any devices under the class definition not otherwise provided for.

(2) Note. For making of devices falling within the class definition, and see (7) Note to the class definition of this class.

#### SEE OR SEARCH CLASS:

29, Metal Working, subclass 24.5 for assembling or combined making and assembling slats with ladders of venetian blinds.

#### CROSS-REFERENCE ART COLLECTIONS

The documents in the following collections contain only cross-references which have been placed without regard to their original classification or to their claimed subject matter and are therefore not exhaustive of the art or subject matter but are only examples thereof. Consequently, a complete search for art or subject matter provided for here would require a review of the higher portions of the classification schedule.

#### 900 VERTICAL TYPE VENETIAN BLIND:

This subclass is indented under the class definition. Venetian blind type unit in which the parallel strips, slats or panels are suspended or supported at one end from a horizontally disposed elongated track or support so that the long dimensions of the strips, slats or panels are disposed vertically.

(1) Note. In addition to the horizontally disposed track or support for the upper ends of the vertically disposed strips, slats or panels; there may be another horizontally disposed track, support or guide means for the bottom ends of the strips, slats or panels.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

172, for an accumulation type of venetian blind unit having side guides by which the ends of the parallel strips, slats or panels are guided during the accumulating operation.

196.1+, for the combination of a plural strip, slat or panel unit (other than a venetian blind type unit) and a horizontal track from which the strip, slat or panel unit is suspended.

# 901 LAZY-TONG CONNECTED PLURAL STRIPS, SLATS OR PANELS:

This subclass is indented under the class definition. A single unit formed from a plurality of strips, slats or panels interconnected with each other for relative motion by a series of pivoting links in the manner of a lazy-tong type extensible framework.

## 902 VENETIAN BLIND TYPE BRACKET MEANS:

This subclass is indented under the class definition. Bracket means specially adapted to removably engage and support the headrail of a horizontal type venetian blind unit (i.e., one with horizontal slats) from a ceiling or wall structure.

#### 903 ROLL TYPE BRACKET MEANS:

This subclass is indented under the class definition. Bracket means specially adapted to support a roll type device provided in which material is accumulated in the form of a roll.

# 904 ELECTRIC OR PNEUMATIC AWNING OPERATOR:

This subclass is indented under the class definition. An electrically or pneumatically operated means for causing or enabling an outrigger or thorn awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled.

### 905 LAZY-TONG-LINK AWNING OPERA-TOR:

This subclass is indented under the class definition. A series of jointed bars pivoting in the manner of a lazy-tong type of extensible framework comprises means for causing or enabling an outrigger or other awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled.

### 906 SCREW-THREADED AWNING OPERA-TOR:

This subclass is indented under the class definition. A screw-thread operated means for causing an outrigger or other awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled.

# 907 SPRING (OTHER THAN SPRING ROLLER) AWNING OPERATOR:

This subclass is indented under the class definition. A spring or other elastically operated means for causing an outrigger or other awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled.

(1) Note. Spring operated rollers for roll type devices are excluded from this cross-reference art collection.

#### 908 STRAND AWNING OPERATOR:

This subclass is indented under the class definition. A cord, rope, cable, chain or other flexible strand operated means for causing an outrigger or other awning type device under the ... to be folded, rolled up or otherwise collapsed or to be extended or unrolled.

### 909 Endless strand:

Outrigger or other awning operator means under cross-reference art collection 908 in which the cord, rope, cable, chain or other flexible strand has its ends joined to form a closed flexible loop.

### 910 Drum wound strand:

Outrigger or other awning operator means under cross-reference art collection 908 in which the cord, rope, cable, chain or other flexible strand is wound upon a drum or roller.

(1) Note. The drum or roller may be driven by an additional means.

### 911 WORM GEAR AWNING OPERATOR:

This subclass is indented under the class definition. A means for causing an outrigger or other awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled comprises a gear system in which a peripherally toothed gear wheel is driven by the rotation of a screw or threaded shaft (the worm) whose helical thread forms a continuous tooth which meshes with the peripheral teeth of the gear wheel.

### 912 RACK-AND-PINION AWNING OPERA-TOR:

This subclass is indented under the class definition. A means for causing an outrigger or other awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled comprises a gear system in which the teeth of a straight toothed bar (the rack) meshes with the teeth of a wheel having a toothed rim (the pinion) for the interconversion of rotary and linear motion.

#### 913 GEAR AWNING OPERATOR:

This subclass is indented under the class definition. A means for causing an outrigger or other awning type device to be folded, rolled up or otherwise collapsed or to be extended or unrolled comprises a system of two or more toothed wheels wise teeth mesh with one another for the purpose of transmitting rotary motion or power from one shaft to another or for the purpose of changing speed or direction.

**END**