## **CLASS 116, SIGNALS AND INDICATORS**

## **SECTION I - CLASS DEFINITION**

- (A) This class is limited to mechanical, as distinguished from electrical, devices for giving signals of the nature of either alarms or indicators, which signals are generally due to some movement of some part or element from a normal or nonsignaling or signal-controlling position. The signal may be of any type which appeals to any one or more of the senses, but is generally a bell, horn, whistle, semaphore, light-shutter, explosive device, pointer, or flag. Methods are classified in the appropriate subclasses with the signal devices unless specifically provided for by a method subclass.
- (B) The patents of this class are divided into several main groups:
- (1) Those for devices having combined functions, as signaling, and also some additional function, as igniting a lamp, fastening a door or window, etc.
- (2) Those adapted for some special purpose, as code signaling, ships telegraphs, vehicle motion and direction, street traffic, etc.
- (3) Those which are for alarms, such as bells, horns, whistles, rattles, etc.
- (4) Those for indicators, as pointers, semaphores, drop-annunciators, etc.
- (5) Those for novel horns, whistles, bells, flags, etc., per se.

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

- (A) Where the claims cover printed cards, or printed calendars, pictures, labels, tags or signs, either stationary or which may be made to appear at windows or apertures, the patents are placed in Class 40, Card, Picture, or Sign Exhibiting, with the exception of patents of the following functional subclasses of this class (116), viz., 21, 32, 35+, 63, and 72, when other than mere signs are present. Generally signs normally hidden and adapted to be made to appear at a window in a casing are in Class 40, Card, Picture, or Sign Exhibiting, subclasses 28+, but an exception is made in this class (116), subclasses 42+.
- (B) This class does not ordinarily include conventional signals and/or alarms applied to devices of other main

- classes where the structure of such devices is specifically claimed or is materially modified in order to cooperate with the conventional signal mechanism.
- (C) As between this class and any of the electrical classes, in the following cases the patents will be found classified in the appropriate electrical classes:
- (1) When an electrical means for transmitting the signal, which is to be indicated, is claimed, whether in combination with mechanical signalling means or not. The inclusion of a magnetic means (which acts in the nature of an adhesive or fastening) to hold a nonelectrical signal in position is not sufficient to exclude the device from Class 116.
- (2) When the indication is given by an electrical signal, such as an electric light, bell or meter, which indicator is claimed.
- (3) Electrical signals, per se, such as electric bells, horns, etc.
- (D) The class in general includes the communication of information, except when otherwise specifically classified as, for example, in classes 434, Education and Demonstration; 40, Card, Picture, or Sign Exhibiting; 178, Telegraphy; 181, Acoustics; 235, Registers; 246, Railway Switches and Signals; 250, Radiant Energy; 340, Communications: Electrical; 342, Communications: Directive Radio Wave Systems and Devices (e.g., Radar, Radio Navigation); 343, Communications: Radio Wave Antennas; 346, Recorders; 375, Pulse or Digital Communications; and 455, Telecommunications.
- (E) The production of sound, per se, is excluded; for which see Classes 42, Firearms; 446, Amusement Devices: Toys; 84, Music; 102, Ammunition and Explosive Devices, appropriate subclasses for explosive or ignitable devices and processes which may be useful for signal purposes; 181, Acoustics; 369, Dynamic Information Storage or Retrieval, and 623, Prosthesis (i.e., Artificial Body Members), Parts Thereof or Aids and Accessories Therefor, subclass 9 for larynxes.
- (F) The classes referred to under "Search Class" below which takes the combination where a signal or alarm is claimed are regarded as superior to this class.

# SECTION III - SUBCLASS REFERENCES TO THE CURRENT CLASS

- 21, 32, 35+, 63, and 72, (see Lines With Other Classes, section A, above).
- 42, (see Lines With Other Classes, section A, above).

# SECTION IV - REFERENCES TO OTHER CLASSES

### SEE OR SEARCH CLASS:

- 4, Baths, Closets, Sinks, and Spittoons, subclass 314 for an indicator combined with closet structure.
- 14, Bridges, subclass 49 for signals with features specific to bridges.
- 33, Geometrical Instruments, subclasses 300+ for methods of an apparatus for signaling direction by utilizing forces such as terrestrial gravitation or magnetism.
- 40, Card, Picture, or Sign Exhibiting, (see Lines With Other Classes, A and B, above for the line between Class 40 and Class 116).
- 42, Firearms, for producers of sound per se (see section (see Lines With Other Classes, E, for the line between Class 42 and Class 116).
- 43, Fishing, Trapping, and Vermin Destroying, subclasses 16 and 17 for signals for signaling that a fish has been hooked.
- 49, Movable or Removable Closures, subclasses 13+ for a device that signals the position of a closure.
- 52, Static Structures (e.g., Building), subclass 105 for signaling means combined with structure of the class type.
- 70, Locks, conventional or unmodified lock, latch, bolt, or knob structure when merely used to operate a signal, is placed in Class 116; also whenever any modification of the lock, latch, bolt, or knob is made in order to cooperate with a signal it is placed in this class (116). In Class 70, search subclasses 330+, for visual, contractual or audible signals for effecting the release of combination type locks and subclasses 432+, for devices to indicate the condition of locking mechanism.
- 73, Measuring and Testing, for signals or indicators combined with measuring apparatus Class 73, also includes measuring devices wherein response is made to a condition over a range or a series of indications are given which follow or vary with the variation of the condition. Class 116 includes devices for giving a signal

- (other than electrical) of the presence or absence of a condition.
- 81, Tools, subclass 479 for electric signal devices associated with wrenches or screwdrivers that indicate when a selected torque is reached on the work.
- 83, Cutting, subclass 522 for a signaling means and a cutting device.
- 84, Music, for devices for producing music and subclass 169 for signals associated with automatic musical instruments and subclasses 477+ for signals to be used with keyboards for teaching music.
- 99, Foods and Beverages: Apparatus, subclass 285 for beverage infuser with signaling means; and subclasses 342+ for cooking apparatus with signaling means.
- 109, Safes, Bank Protection, or a Related Device, subclass 21 for transaction and display partitions and counters with alarm signal, or indicator, subclass 31 for combined fluent material releasing, generating and/or distributing means with alarm, signal, or indicator and subclasses 38+ for signal, indictor, or alarm combined with miscellaneous structure.
- 114, Ships, subclass 246 for steering mechanism signaling means for locating the position of a ship in a tow train.
- 118, Coating Apparatus, subclasses 712+ for coating apparatus combined with signal or indicator means.
- 137, Fluid Handling, subclasses 227+, 524 and 551+ for fluid handling means combined with signaling devices.
- 149, Explosive and Thermic Compositions or Charges, appropriate subclasses for explosive or ignitable compositions which may be useful for signal purposes.
- 178, Telegraphy, for signaling means limited to use in telegraph systems or apparatus (see Lines With Other Classes and Within This Class, C and D above, for the line between Class 178 and Class 116).
- 182, Fire Escape, Ladder, or Scaffold, subclass 18 for signaling devices combined with a ladder, scaffold or fire escape.
- 185, Motors: Spring, Weight, or Animal Powered, subclass 14 for composite motor with spring winding indicator, subclass 36 for weight motor winding indicator and subclass 44 for spring winding indicator.
- 200, Electricity: Circuit Makers and Breakers, subclass 167 for electric switch operators which are provided with means to show either the

- location of the switch or the operated position (e.g., off or on) of the switch contacts, and appropriate subclasses for mere circuit controllers for electrical signals, and see Lines With Other Classes and Within This Class, C and D above.
- 206, Special Receptacle or Package, for a pill box or container with a label or indicia and nothing movable, adjustable, or selective with respect to the indicia.
- 210, Liquid Purification or Separation, subclasses 85+ for signaling means combined with a separator.
- 212, Traversing Hoists, subclasses 276+ for a crane having a random condition sensor which regulates an indicator or alarm device and subclasses 282+ for other cranes equipped with an indicator.
- 215, Bottles and Jars, subclasses 365+ for devices for indicating the nature of or quantity of the contents of receptacles.
- 221, Article Dispensing, subclasses 2+ for structure to facilitate dispensing or removal of particular dosage with a label or indicia and nothing movable, adjustable, or selective with respect to the indicator.
- 222, Dispensing, subclasses 14+ for indicators for presetting volume or rate of flow of dispensers of the cut-off type, subclasses 23+ for dispensers with recorder, register, indicator, signal or exhibitor and subclasses 154+ for dispensers with gauges and scales.
- 232, Deposit and Collection Receptacles, subclass 34 for sight signals, subclass 35 for door controlled sight signals, subclass 36 for door controlled sound signals and subclass 37 for door operated indicators.
- 234, Selective Cutting (e.g., Punching), subclasses 4+ for a typographical tape punch provided with means to indicate approach to and entry into the "justification zone"; and appropriate subclasses for a selective cutting machine with indicating means for various operating conditions.
- 235, Registers, for signaling means associated with calculating or registering equipment. (See Lines With Other Classes and Within This Class, D for the line between Class 116 and Class 235.)
- 241, Solid Material Comminution or Disintegration, subclass 101.01 for signaling means combined with comminuting apparatus.

- 242, Winding, Tensioning, or Guiding, subclasses 305+ for a fishing reel with an unwinding indicator; subclasses 534+ and 563+ for a winding machine and unwinding machine control, respectively, which may include an indicator; and subclass 912 for a cross reference-collection of indicators and alarms.
- 246, Railway Switches and Signals, for railway signals. (See Lines With Other Classes and Within This Class, D for the line between Class 116 and 246).
- 250, Radiant Energy, appropriate subclasses for electrical and nonelectrical detection of invisible electromagnetic or nuclear radiation, X-ray apparatus, the irradiation of material by electromagnetic or nuclear radiation, supports for irradiated material, detectors and sources, electro-magnetic energy generation and sources, radiation controlling elements, light wave communication systems, and photocell circuits and apparatus. See also Lines With Other Classes and Within this Class, sections C and D of the Class 116, Class Definitions.
- 340, Communications: Electrical, for electric signals. (See Lines With Other Classes and Within This Class, C and D above for the line between Class 116 and Class 340.)
- 342, Communications: Directive Radio Wave Systems and Devices (e.g., Radar, Radio Navigation), appropriate subclasses for radar signaling systems (see Lines With Other Classes and Within This Class, C and D for the line between Class 116 and Class 342).
- 346, Recorders, subclasses 3+ for steam engine indicators and 17+ for signals, indicators or alarms associated with recorders.
- 359, Optical: Systems and Elements, subclasses 515+ for signal reflectors and subclasses 436+ for scale or indicia reading devices
- 362, Illumination, subclasses 23.01 through 23.22 for illuminated scale or dial which may include a broad recitation of indicia on the scale or dial.
- 368, Horology: Time Measuring Systems or Devices, subclasses 272+ for clock-work-operated striking-trains, including different toned bells and subclasses 210+ for devices to signal when a timepiece needs winding or for showing the degree to which it is wound.
- 369, Dynamic Information Storage or Retrieval, for signalling associated with sound recording or reproducing devices. (See Lines With Other Classes, E for the line between Class 116 and Class 369).

- 374, Thermal Measuring and Testing, for a signal or indicator combined with a thermal measurement. Class 374 includes a measurement made by a series of indications to as to produce a quantitative indication.
- 385, Optical Waveguides, for light transmitting fibers, rods, or pipes.
- 400, Typewriting Machines, subclasses 610.1+ for billing devices with indicating scales, subclass 249 for ribbon mechanism signals and subclasses 703+ for miscellaneous indicators associated with typewriting machines.
- 401, Coating Implements With Material Supply, subclass 194 for signaling means combined with a coating implement.
- 402, Binder Device Releasably Engaging Aperture or Notch of Sheet, subclass 3 for visual identification means.
- 406, Conveyors: Fluid Current, subclasses 34+ for signals and indicators associated with pneumatic dispatching apparatus and other fluid current conveyors.
- 408, Cutting by Use of Rotating Axially Moving Tool, subclasses 16 and 116 for signaling means combined with structure of the class type.
- 414, Material or Article Handling, subclass 148 for the combination of a chamber of a type utilized for a heating function and material charging or discharging means therefor, and wherein is further provided an alarm, indicator, or signal, and subclass 289 for the combination of a static receptacle, and means for charging or discharging, or facilitating the charging or discharging of, the receptacle, and wherein is further provided an alarm, indicator, or signal.
- 415, Rotary Kinetic Fluid Motors or Pumps, subclass 116 for signaling means combined with structure of the class type.
- 416, Fluid Reaction Surfaces (i.e., Impellers), subclasses 31+ for signaling means combined with structure of the class type.
- 417, Pumps, subclass 63 for signaling means combined with structure of this class type.
- 418, Rotary Expansible Chamber Devices, subclass 2 for signaling means combined with structure of the class type.
- 424, Drug, Bio-Affecting and Body Treating Compositions, subclasses 9.1+ for a drug, bio-affecting, or body treating composition, according to the main Class 424 definitions, used for in vivo diagnosis or in vivo testing wherein no radionuclide is involved and subclasses 10.1+ for drug, bio-affecting, or body

- treating compositions with an identification or warning feature.
- 425, Plastic Article or Earthenware Shaping or Treating: Apparatus, subclass 169 for signaling means combined with structure of the class type.
- 431, Combustion, subclass 13 for signaling or inspection means combined with structure of the class type.
- 432, Heating, subclass 32 for signaling or inspection means combined with structure of the class type.
- 434, Education and Demonstration, subclasses 222+ for devices for teaching the art of signaling such as telegraphy or wigwagging (see Lines With Other Classes and Within This Class, D above for the line between Class 35 and Class 116).
- 441, Buoys, Rafts, and Aquatic Devices, subclasses 6+ for wreck signalling buoys.
- 446, Amusement Devices: Toys, has visual and audible devices whose purpose is for amusement or recreation, but not working models, or devices, even though called toys, which if made of sufficient size would be operative devices of the kind found in other classes. Mouth-operated devices for producing sound are in Class 446 except where the device is used in producing music. (See Lines With Other Classes and Within This Class, E above for the line between Class 446 and Class 116).
- 483, Tool Changing, subclass 12 for apparatus including a tool transfer means combined with either a tool support or storage means and combined with an alerting means.

## **SUBCLASSES**

## 1 MISCELLANEOUS:

This subclass is indented under the class definition. Miscellaneous patents for devices pertaining to this class but not elsewhere classified.

## **2** COMBINED FUNCTIONS:

This subclass is indented under the class definition. Devices include combinations of different types of signals or combinations of a signal with some means for producing some function in addition to signaling or indicating--for example, a bell and horn, a horn and lamp, fire-

alarms added to fire-extinguishing systems, boot-scrapers used also to ring doorbells, etc.

# **3** Horns with lamps:

This subclass is indented under subclass 2. Devices include a horn and lamp combined in a unitary structure for use on vehicles.

#### 4 Alarms with indicators:

This subclass is indented under subclass 2. Devices for combined structures in which there is an alarm and also an indicator.

# 5 Burglar or fire:

This subclass is indented under subclass 4. Devices in which the combined alarm and indicator is of the burglar or fire alarm type.

 Note. For the alarm or indicator per se search should be made in the proper subclasses below.

## 6 Burglar alarms:

This subclass is indented under subclass 2. Devices in which the burglar-alarm is also combined with some additional function, as grasping or shooting the burglar, lighting a match or lamp, securing a door or window, exploding a blank cartridge, etc.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

77, through 83, for portable burglar alarms.

## 7 Light producing:

This subclass is indented under subclass 6. Devices which sound an alarm by a bell or cartridge explosion and also ignite a lamp or match.

#### SEE OR SEARCH CLASS:

431, Combustion, subclasses 13+ for a burner having a means indicating a condition of the burner or providing for inspection of the burner.

## 8 Locks:

This subclass is indented under subclass 6. Devices include locks combined with alarms, which are set off when the lock is operated. The alarm may be a bell or an explosive device.

### 9 Door-knob controlled:

This subclass is indented under subclass 8. Devices in which the alarm is controlled by the movement of the doorknob.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 92, for door knob operated clockwork bell.
- 96, for door knob operated single-stroke bell.
- 97, for door knob operated alarm.

### 10 Combined knob and bell:

This subclass is indented under subclass 9. Devices in which the doorknob and bell are more or less of a unitary or combined structure.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

153. for door knob contained bell.

## 11 Detonating:

This subclass is indented under subclass 8. Devices in which the operation of the lock releases a hammer, which explodes a cartridge.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 15, for door fastening devices with detonating cartridges.
- 17, for sash fastening devices with detonating cartridges.
- 23, for periodic detonating devices.
- 83, for portable burglar alarms of the detonating type.
- 87, for door and window actuated detonating devices.

# 12 Door securing:

This subclass is indented under subclass 6. Devices for fastening doors capable of also acting as burglar-alarms.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

82, for floor supported, portable, burglar alarms.

#### SEE OR SEARCH CLASS:

292, Closure Fasteners, appropriate subclasses, for closure fasteners having signals or indicators.

### 13 Braces:

This subclass is indented under subclass 12. Devices in which an inclined brace is used to secure the door and cooperates in setting of a burglar-alarm.

### SEE OR SEARCH CLASS:

292, Closure Fasteners, subclasses 338+ for braces to secure closures in adjusted positions.

## 14 Chain or link:

This subclass is indented under subclass 12. Devices in which the fastener is of the well-known chain or link type.

### SEE OR SEARCH CLASS:

292, Closure Fasteners, subclass 264 for chain devices to secure closures in adjusted positions.

# 15 Detonating:

This subclass is indented under subclass 12. Devices in which the alarm is of a detonating type, whereby a hammer is released to explode a cartridge.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 11, for lock actuated detonating devices.
- 17, for sash fastening detonating device.
- 23, for periodic detonating devices.
- 83, for portable detonating type burglar alarms.
- 87, for closure operated detonating burglar alarms.

## 16 Sash fastening:

This subclass is indented under subclass 6. Devices which include fasteners for window-sashes capable also of acting as burglar-alarms.

#### SEE OR SEARCH CLASS:

292, Closure Fasteners, appropriate subclasses, for closure fasteners having signals or indicators.

### 17 Detonating:

This subclass is indented under subclass 16. Devices include sash-fastening burglar-alarms which explode a cartridge when set off.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 11, for lock actuated detonating devices.
- 15, for door securing detonating devices.
- 23, for periodic detonating devices.
- 83, for portable detonating type burglar alarms.
- 87, for closure operated detonating burglar alarms.

## 18 CODE SIGNALING:

This subclass is indented under the class definition. Devices limited to the transmission of code messages by means of visual or audible indications.

(1) Note. This subclass includes signaling means on lighthouses, buoys, vessels, etc., for sending out signals in the form of codes as distinguished from mere sounds or light-flashes regularly repeated.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

22, for simple sound or light signals, repeated periodically.

## SEE OR SEARCH CLASS:

375, Pulse or Digital Communications, appropriate subclasses for electric code signalling.

## 19 Ship's course:

This subclass is indented under subclass 18. Devices include mechanically-operated means, sometimes automatically controlled by the position of the ship's rudder or the direction of motion of the ship and sometimes manually controlled, by which the ship's course is indicated by code-signals to other vessels.

### 20 Heliographic:

This subclass is indented under subclass 18. Devices in which the signals are given by mechanically controlled intermittent flashes of light, usually reflected sunlight.

#### 21 SHIP'S TELEGRAPHS:

This subclass is indented under the class definition. Devices by which the navigating officers of a vessel can mechanically transmit commands from various stations of the ship, as the pilot-house, bridge, etc., to various other stations, as the engine-room, the windlass-desk, etc.

(1) Note. This subclass includes devices using works and other indicia which would, if claimed alone, be placed in Class 40, Card, Picture, or Sign Exhibiting.

#### 22 PERIODIC:

This subclass is indented under the class definition. Devices include means for the automatic and periodic actuation of signals, usually by various types of motors--e.g., electric, clockwork, explosive gas, compressed air, etc. Fogsignals, danger-signals, and bird-scarers are here included.

- (1) Note. Continuously-ringing clock-work-bells, signals which can be repeating the operator's acts, and similar devices are not here included; but signals that are automatically repeated at successive periods so long as their operation is continued are included.
- (2) Note. When the claims cover any of the details of an electric motor, whether generally or specifically, the patent is excluded.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

18, for code-signals that may be periodically repeated.

## SEE OR SEARCH CLASS:

368, Horology: Time Measuring Systems or Devices, subclass 248 for an horological device including a repeating alarm.

#### 23 Detonating:

This subclass is indented under subclass 22. Devices include means for the periodic actuation of detonating signals, usually used as alarms for scaring animals, birds, etc., from fields, orchards, or gardens.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 11, for lock actuated detonating devices.
- 15, for door securing detonating devices.

- 17, for sash fastening detonating devices.
- 78, for portable drop detonated devices.
- 83, for portable detonating type devices.
- 87, for closure operated detonating devices.

### 24 Horns and whistles:

This subclass is indented under subclass 22. Devices include means for the periodic actuation of horns and whistles.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

137+, for general features of sound-producing devices, per se.

#### SEE OR SEARCH CLASS:

- 84, Music, subclasses 380+ for woodwind instruments, and 387+ for brasswind instruments.
- 446, Amusement Devices: Toys, subclasses 204+ for a whistle; and subclasses 207+ for a vibratory reed sounder.

## 25 Bells:

This subclass is indented under subclass 22. Devices include means for the periodic actuation of bells.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 150, for swinging bells.
- 151, for pneumatically actuated bells.
- 167, for fixed bells with pivoted striker.

## SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 392.1+ for electrically operated percussion type sound producers, such as bells.

### 26 NAUTICAL:

This subclass is indented under the class definition. Devices include miscellaneous signaling systems, devices, or methods especially adapted for use at sea.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 18, and 19, for code-signaling from or to ships.
- 22+, for periodic ship-signals.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 984+ for electrical nautical signaling.

### 27 Submarine:

This subclass is indented under subclass 26. Devices includes means for the mechanical production and reception of sound-vibrations transmitted through bodies of water.

(1) Note. The subclass does not include ordinary signals devised for use upon submarine vessels nor electric undersea signal devices.

#### SEE OR SEARCH CLASS:

- 114, Ships, subclasses 327+ for submarine vessels.
- 367, Communications, Electrical: Acoustic Wave System and Devices, subclasses 131+ for electrical underwater communication systems, such as compressional waves systems.

### 28 VEHICLE:

This subclass is indented under the class definition. Signals, indicators, and alarms especially adapted by structure for use upon or in connection with vehicles.

(1) Note. Those intended for railway use and provided for in Class 246, Railway Switches and Signals, are excluded.

## SEE OR SEARCH CLASS:

- 33, Geometrical Instruments, subclass 264 for vehicle alignment.
- 200, Electricity: Circuit Makers and Breakers, subclasses 61.27+, 61.54+, and 61.87 to 61.91 for signal type switches used in connection with vehicles.
- 246, Railway Switches and Signals, (see Note 1).
- 250, Radiant Energy, subclass 462.1 for self-luminous signaling means.
- 280, Land Vehicles, subclasses 93.5+ for a general utility land vehicle including occupant controlled steering having monitoring or indicating means thereof or subclasses 288.4+ for attachments or accessories of a gen-

- eral utility occupant propelled-type land vehicle which may be signaling or indicating means.
- 340, Communications: Electrical, subclasses 907+ for electrically operated signal systems utilized in connection with traffic or vehicles.

### 28.1 Transmission indicator:

This subclass is indented under subclass 28. Devices wherein the indicator indicates the position of a shift lever.

 Note. The indicator is for any type of vehicle.

### 29 Station indicators:

This subclass is indented under subclass 28. Indicators usually of the pointer-and-dial or pointer-and-scale type which indicate the station or street where the vehicle will make the next stop. The vehicle is usually a railway-car or a street-railway car, and the indicator-pointer is advanced by being geared to the caraxle or by an obstruction along the track or by manual operation by the conductor or other train employee.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

56+, for vehicle energy actuated signals.

### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclass 370 for indicators operated in this same way for the same purpose and which are of the type having a window at which words or numbers are made to appear.

### 30 Car and train markers:

This subclass is indented under subclass 28. Visual devices usually lights, flags, or display devices, marking the tail ends of cars or trains or giving signals to trains ahead or following or other information relating to a car or train.

## SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, appropriate subclasses for sign and plate holders.
- 248, Supports, for supports for train-markers and lanterns.

362, Illumination, subclass 253 for illuminating means combined with signs and plate holders.

# 31 Steering-wheel-position indicators:

This subclass is indented under subclass 28. Devices to indicate to the operator the position of the steering-wheels of the vehicle.

## 32 Collision-released identification tags:

This subclass is indented under subclass 28. Devices include license-tags, checks, or other means for identifying a vehicle, with means for automatically dropping or discharging them when the vehicle strikes a person or other object.

(1) Note. The mere presence of indicia upon the checks is not sufficient to exclude the patent from this subclass.

#### SEE OR SEARCH CLASS:

221, Article Dispensing, subclass 12 for article dispensers not otherwise provided for, having automatic control of article releasing outlet closures and see also subclass 13 for such dispensers having automatic control of discharge assistant operation.

# 33 Theft preventing:

This subclass is indented under subclass 28. Devices for indicating or preventing the theft or unauthorized use of a vehicle.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

8, for alarm-locks.

6+, and 77+, for burglar-alarms for general and other purposes.

## SEE OR SEARCH CLASS:

70, Locks, for locks, per se.

307, Electrical Transmission or Interconnection Systems, subclasses 10.2+ for electrical systems which prevent unauthorized entry or use of a vehicle.

340, Communications: Electrical, subclasses 426.1 through 426.36 for electrically operated vehicle burglar alarms.

### 34 Tire inflation or deflation:

This subclass is indented under subclass 28. Devices include means for giving warning when the pressure within the pneumatic tire of an automobile or other vehicle is either raised above or reduced below the normal pressure, either by puncture, leakage, or otherwise.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

24, and 137+, for signaling devices, per se.

### SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclasses 146.2+ for a fluid pressure gauge combined with a vehicle, tire or tire stem.
- 200, Electricity: Circuit Makers and Breakers, subclasses 61.22+ for mere circuit-controllers associated with a tire.
- 340, Communications: Electrical, subclasses 442+ for electrically operated tire deflation alarms.

#### 35 Motion and direction:

This subclass is indented under subclass 28. Devices placed upon a vehicle for indicating to others than the operator the motion or any change, either actual or intended, in the rate or direction of motion of the vehicle.

- (1) Note. Elevators are not considered vehicles within the meaning of this definition.
- (2) Note. This subclass includes devices using words and other indicia, which would otherwise be placed in Class 40, Card, Picture, or Sign Exhibiting.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 425.5+ for electric vehicle signals; note especially indented subclasses 463+ for signals which are automatically actuated in response to a particular condition (e.g., turning) of the vehicle, and subclasses 468+ for signals (e.g., turn signals, brake lights) which are manually actuated.

### **36** Combined with vehicle control:

This subclass is indented under subclass 35. Devices in which the signal-operating means is connected to the brake or clutch lever or the steering mechanism or to more than one of these, so the signal is operated whenever such controlling mechanism is operated.

 Note. For details of the signaling device, search this class, the appropriate subclass in this group.

## 37 Speed controlled:

This subclass is indented under subclass 35. Devices in which the signal is caused to operate, usually revolve, by connection with an axle or wheel of the vehicle. Generally a light flashes according to the speed of a rail-way-car.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

29, for vehicle station indicators.

56+, for vehicle energy actuated signals.

#### SEE OR SEARCH CLASS:

246, Railway Switches and Signals, subclass 182 for cab, signal, or train controls, speed control systems.

## **38** Governor actuated:

This subclass is indented under subclass 37. Devices in which the signal is governor-actuated, so that the particular signal changes with the speed.

(1) Note. Some automobile and some railway-car signals are here included.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

29. for vehicle station indicators.

56+, for vehicle energy actuated signals.

## 39 Pneumatically operated:

This subclass is indented under subclass 35. Devices in which the stop or direction signal is operated pneumatically.

## 40 Lazy-tong operated:

This subclass is indented under subclass 35. Devices in which the operating means includes lazy-tongs.

## 41 Fan type:

This subclass is indented under subclass 35. Devices in which the signal spreads out like a fan when operated.

# 42 Window-exhibited sign or shutter:

This subclass is indented under subclass 35. Devices in which a fixed casing, usually carrying a light within it for use at night and having a window or opening, which may be normally covered by some sort of an interior shutter movable to uncover the light, or a normally-hidden sign or transparency may be moved to the opening or window.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

45, for movable cover or screen indicators.

#### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 446+ for similar structure used for other purposes.

362, Illumination, subclasses 277+ for similar structure used for other purposes.

## 43 Rotatable:

This subclass is indented under subclass 42. Devices in which the shutter or sign is rotated to and from its position at the window of the casing.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

46+, for rotatable type signs.

# 44 Sliding:

This subclass is indented under subclass 42. Devices in which the shutter or sign is made to slide to and from its position at the casing-window.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

50, for sliding type signs.

#### 45 Movable cover or screen:

This subclass is indented under subclass 35. Devices in which a cover or screen external to a light-carrying casing or a sign is made to produce a signal either by being moved in front of

the light or sign or by being moved away, so as to reveal the light or sign.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

42+, for window-exhibited sign or shutter.

### 46 Rotatable:

This subclass is indented under subclass 35. The signal device is rotated to signaling position by suitable mechanical means.

(1) Note. The distinction between rotatable and pivoted signaling devices is rather vague. Generally an arm or swinging device pivoted at its edge or end adapted to be swung to a single signaling position through an angle of not over ninety degrees is regarded as a pivoted signal, while a device journaled at both ends or between its ends or even at one end or edge and adapted to be rotated to either of two signaling positions, generally through an angle of one hundred and eighty degrees, is regarded as a rotatable signal.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

43, for window-exhibited sign or shutter, rotatable type.

## SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 493+ for changeable exhibitors, rotatable type.

# 47 Pointer:

This subclass is indented under subclass 46. The signal device is of the pointer type, often simulates a hand or an arrow, and can be rotated to point to either the right or left.

### 48 Illuminated:

This subclass is indented under subclass 47. Devices in which the pointer carries a lamp for use at night.

## 49 Illuminated casing:

This subclass is indented under subclass 46. Devices in which a casing having a light therein and one or more transparent sides bearing letters, arrows, or other indicia is adapted to be rotated to bring the transparency into view.

### SEE OR SEARCH CLASS:

362, Illumination, subclass 35 for rotatable signal lanterns.

### 50 Sliding:

This subclass is indented under subclass 35. Devices in which the signal is adapted to be slid, generally out of a tube, to signaling position.

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

 for sliding window-exhibited sign or shutter.

#### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclass 491 for sliding plate changeable exhibitors.

#### 51 Pivoted:

This subclass is indented under subclass 35. Devices in which the signal is pivoted, so as to be swung to signalling position.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

46, for rotatable window-exhibited sign or shutter.

# 52 Laterally swinging arm:

This subclass is indented under subclass 51. Devices in which an arm is pivoted, usually at the side, but sometimes at the front or rear of the vehicle, so as to swing outward to signalling position.

## 53 Multiple arms:

This subclass is indented under subclass 52. Devices include several swinging arms, each bearing a different signal, are employed, together with means for moving any desired one of the arms to signaling position.

## SEE OR SEARCH CLASS:

 Card, Picture, or Sign Exhibiting, subclass 492 for pivoted plate changeable exhibitors.

### 54 Illuminated:

This subclass is indented under subclass 52. Devices in which the swinging arm carries a lamp for use at night.

## 55 Pneumatic train pipe:

This subclass is indented under subclass 28. Devices include compressed-air-train-pipe signaling arrangements.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

65, for pneumatic type signals.

70, for fluid pressure variation indicating alarms.

### SEE OR SEARCH CLASS:

137, Fluid Handling, subclasses 494+, particularly subclasses 505+ for fluid-pressure regulators, per se.

303, Fluid-Pressure and Analogous Brake Systems, subclass 1 for miscellaneous type systems, and subclass 86 for miscellaneous operations on control pipe.

## Vehicle-energy actuated:

This subclass is indented under subclass 28. Vehicle signals, usually warning alarms, actuated by the energy of the moving vehicle when thrown into engagement with some moving part thereof by the operator.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

29, for vehicle station indicators.

37, for vehicle motion and direction speed controlled signals.

174, for nonfouling flags.

## 57 Speed limit:

This subclass is indented under subclass 56. Signals actuated by the vehicle movement which indicate when a predetermined speed is reached.

## SEE OR SEARCH CLASS:

73, Measuring and Testing, subclass 493 for a speedometer installed on a structure and subclasses 514.39 through 535 for speed sensing means, per se.

### 58 Pneumatic:

This subclass is indented under subclass 56. Warning-whistles thrown at will into operative relation to some moving part of the vehicle, as the road-wheel, or some engine part.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

61, for friction-wheel signal-actuating features.

65, for pneumatically operated signals.

## 59 Diaphragm horns:

This subclass is indented under subclass 56. Audible signal devices in which a vibrating diaphragm is the source of sound.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

61, for friction-wheel signal-actuating features.

141+, for horns, per se.

### 60 Bells:

This subclass is indented under subclass 56. The audible signal usually used as a warning-signal, is a bell and is adapted to be at will thrown into operative relation to some moving part of the vehicle.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

25, for periodically actuated bells.

95, for closure operated single stroke bells.

148+, for bell structure and actuating means.

### 61 Friction wheel:

This subclass is indented under subclass 60. Devices in which the energy is imparted to the actuating mechanism by a frictionally-driven wheel.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

58, for vehicle energy actuated pneumatic type signals, and subclass 59 for vehicle energy actuated diaphragm horn signals.

## 62 Bicycle pedal:

This subclass is indented under subclass 60. Devices in which the bells are carried or operated by the bicycle-pedal or operated by the rider's foot while still engaging the pedal.

166, for bells clamped to bicycle handlebars, so as to be operated by the rider's hand.

## 62.1 Speedometer (e.g., odometer):

This subclass is indented under subclass 28. Devices wherein the indicator indicates speed and/or distance traveled.

### SEE OR SEARCH CLASS:

73, Measuring and Testing, subclasses 488+ for speed or accelerator indicators of the class type.

## **62.2** With scale conversion (e.g., english-metric):

This subclass is indented under subclass 62.1. Devices including means to change a scale from one form of quantity to another form of quantity.

## 62.3 With means to indicate range or set speed:

This subclass is indented under subclass 62.1. Devices including an indicator that is movable or fixed to indicate when a certain speed is reached or an indicator that shows when different speeds are reached.

# **62.4** With diverse indicators:

This subclass is indented under subclass 62.1. Devices having more than one type of indicator.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

62.3, for a diverse indicator to show maximum speed or range.

### 63 STREET TRAFFIC:

This subclass is indented under the class definition. Devices placed at street intersections for controlling and directing street traffic by movable signs or indicators.

## SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 446 through 537 for more general changeable-exhibitor features, subclasses 611.01-611.13 for stationary street-traffic signs, and subclasses 607.01-607.12 for post-attached-type signs.

340, Communications: Electrical, subclasses 907+ for electrically operated traffic signals.

#### 64 ELEVATOR:

This subclass is indented under the class definition. Devices include mechanical, as distinguished from electric, means for signaling the elevator from different floors or mine-levels or for signaling between the operator and the engineer.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

68, for automatically operated elevator or hoist alarms.

122, for devices for indicating the position of the elevator.

#### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 19+ for electrical elevator signaling systems.

## 67 ALARMS:

This subclass is indented under the class definition. Devices for giving audible indications, usually operated automatically.

(1) Note. Patents for burglar, fire, poisoncontainer, liquid-overflow, tide, fog, channel, and shoal-water alarms are here included.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

28+, for alarms peculiar to vehicles.

## SEE OR SEARCH CLASS:

- 99, Foods and Beverages: Apparatus, subclass 344 for alarms associated with cooking apparatus.
- 200, Electricity: Circuit Makers and Breakers, subclasses 52+ for alarm type switches actuated by or responsive to a condition.
- 242, Winding, Tensioning, or Guiding, subclasses 305+, 358, and 912 for an alarm or indicator in a winding, unwinding, tensioner, or guide device.
- 340, Communications: Electrical, subclasses 500+ for automatically actuated electrical alarm systems, and

subclasses 384.1+ for audible electrically actuated signals.

368, Horology: Time Measuring Systems or Devices, subclasses 43, 72+, 94, 98+, 109, and 244+ for an horological device including an alarm.

### 68 Elevator or hoist:

This subclass is indented under subclass 67. Alarms actuated by the motion of an elevator, mine-hoist, or similar mechanism.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

64, for elevator signals.

122, for elevator position indicators.

### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, when indicia are also displayed or pointed out.

### 69 Rain:

This subclass is indented under subclass 67. Alarms operated by the fall of rain.

#### SEE OR SEARCH CLASS:

73, Measuring and Testing, subclasses 170.01+ for a meteorological method or apparatus combined with an apparatus for measuring fluid flow direction and subclass 170.17 for a method or apparatus for measuring rain.

## 70 Fluid-pressure variation:

This subclass is indented under subclass 67. Alarms set off by a change in the pressure of a fluid, as a check in the flow of gas in a gasmain, a break in any of the hollow bars across jail, bank, or vault windows or doors, train airbrake pipes, etc. These alarms are generally fault or defect or burglar alarms as distinguished from signalling devices.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

55, for pneumatic-train-pipe signal arrangements.

### SEE OR SEARCH CLASS:

277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 318 for a seal combined with a fluid pressure indicator, sampler, or inspection feature.

### 71 Gristmill:

This subclass is indented under subclass 67. Alarms associated with the grain-feed or grinding-mills, or grain bins, set off to indicate some change in the feed-supply.

(1) Note. This subclass provides for comminutor-signal combinations only for those patents which do not include significant comminutor structure. The broad inclusion of a comminutor element was not considered to be a reference to significant comminutor structure. For patents including alarms or signals combined with significant disintegrator structure, see the search notes below. Class 241, Solid Material Comminution or Disintegration, subclass 101.01.

#### SEE OR SEARCH CLASS:

- 222, Dispensing, subclasses 23+ for signals combined with significantly claimed dispensers.
- 241, Solid Material Comminution or Disintegration, subclass 101.01 for patents including alarms or signals combined with significant disintegrator structure.

## **Poison container:**

This subclass is indented under subclass 67. Devices adapted to sound an alarm or make some noise when a bottle or other receptacle containing poison is moved or opened.

#### SEE OR SEARCH CLASS:

215, Bottles and Jars, subclass 113 for containers having merely some distinctive points or roughened portion on or blown in or otherwise made a part of the material.

## 73 Operation counting:

This subclass is indented under subclass 67. Devices include arrangements for giving an alarm when some device--as a shaft, wheel, or

work-carriage--rotates or moves a predetermined number of times.

### SEE OR SEARCH CLASS:

235, Registers, subclass 128 for register alarm mechanism.

# 74 Speed limit:

This subclass is indented under subclass 67. Devices which include arrangements whereby an alarm is sounded when a predetermined speed of rotation of a shaft or wheel or other movement is reached. Used on machines of various sorts, mills, cream-separators, grainelevators, etc.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

57, for vehicle energy actuated speed limit indicators.

116, for speed limit indicators.

### SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclass 494 for a speed responsive device installed on a rotary speed source.
- 235, Registers, subclasses 95 and 103, respectively, for odometers and rotation-counters.

# 75 Burglar:

This subclass is indented under subclass 67. Alarms set off by attempt at unauthorized entrance to buildings, safes, receptacles, money-tills, graves, pocket-books, or persons' pockets or the unauthorized attempt to remove articles of wear or ornament or to move things from their proper places, as fire-escape ladders, jewel-boxes, etc.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

2+, for devices which do something else in addition to sounding an alarm.

## SEE OR SEARCH CLASS:

200, Electricity: Circuit Makers and Breakers, subclasses 42.01+, 43.01+, 61.93, and 86.5 for electric burglar alarm type switches, and subclasses 61.69 to 61.83 for door or sash type operated switches.

340, Communications: Electrical, subclasses 500+ for automatically actuated alarm. Note particularly subclasses 541+ for burglar alarms, and the subclasses referred to in the search notes to that subclass.

### 76 Till:

This subclass is indented under subclass 75. Money-drawer or till alarms operated by the movement of or the attempt to open the till.

### SEE OR SEARCH CLASS:

200, Electricity: Circuit Makers and Breakers, subclass 61.61 for alarm type switches actuated concurrently with the movement of a drawer.

### 77 Portable:

This subclass is indented under subclass 75. Portable alarm devices, generally of a type to be carried by travelers and quickly applied to hotel or other room doors, windows, etc.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclass 546 for electrically operated portable alarms.

# 78 Drop detonating:

This subclass is indented under subclass 77. Devices in which the dropping of the device by being displaced from its support by an opening door or window detonates a signal.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 15, for combined burglar alarm, door securing detonating type.
- 23, for periodic detonating type signal.
- 83, for portable burglar alarms of the detonating type.
- 87, for closure operated detonating type alarms.

## 79 Knob attached:

This subclass is indented under subclass 77. Devices in which clamps or their equivalents are provided for attaching the device to the knobs or knob-spindles of doors or windows, the turning of the knob actuating the alarm.

# 80 Key or keyhole:

This subclass is indented under subclass 77. Devices in which means are provided whereby the key or keyhole is utilized in securing the device to the door, the alarm being actuated by the insertion, the attempt to insert, or the turning of the key in the keyhole.

## SEE OR SEARCH CLASS:

200, Electricity: Circuit Makers and Breakers, subclasses 61.64+, particularly subclass 61.66 for key operated switches.

### 81 Cord controlled:

This subclass is indented under subclass 77. Devices in which trains or clock-work or the triggers of detonating devices are released by the rupture or slackening of a cord stretched across pathways or connected to doors or windows.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

94, for closure operated clockwork bell, cable control alarms.

165, for pull cord or rod operated bell.

## 82 Floor supported:

This subclass is indented under subclass 77. Devices which are placed upon the floor of a room and are actuated by the impact of an opening door.

 Note. Many of these devices also act as door securers.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

12+, for combined operation of burglar alarms and door securers.

#### 83 Detonating:

This subclass is indented under subclass 77. Devices which include detonating alarms.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

23, for periodic detonating signals.

78+, for portable drop detonating type signals.

87+, for closure operated detonating type signals.

## 84 Pickpocket:

This subclass is indented under subclass 77. Pocket devices which are capable of giving an audible warning when an attempt is made to pick the pocket.

### SEE OR SEARCH CLASS:

Purses, Wallets, and Protective Covers, subclass 134 for safety devices for wallets.

222, Dispensing, subclass 39 for audible signaling means and structure of the class type.

## 85 Closure operated:

This subclass is indented under subclass 75. Devices in which the signal is actuated by the opening or attempted opening of a door, window, box-cover, shutter-slat, or other closure.

#### SEE OR SEARCH CLASS:

49, Movable or Removable Closures, subclasses 13+ for signaling means with structures of the class type.

160, Flexible or Portable Closure, Partition, or Panel, subclass 10 for signaling means with structure of the class type.

200, Electricity: Circuit Makers and Breakers, appropriate subclasses, for electrical switching devices, particularly subclass 61.62 for closure operated or accessory operated switches.

337, Electricity: Electrothermally or Thermally Actuated Switches, subclass 205 for signaling means with structure of the class type.

340, Communications: Electrical, subclasses 545.1+ for similar subject matter where the signal is electrically actuated.

#### **Door and window:**

This subclass is indented under subclass 85. Devices in which a door or window is the actuating means.

### SEE OR SEARCH CLASS:

200, Electricity: Circuit Makers and Breakers, subclasses 42+ for unauthorizeduse preventing switches, and subclasses 61.69 to 61.83 for door or sash operated switches.

## 87 Detonating:

This subclass is indented under subclass 86. Devices in which the alarm is detonating.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

23, for periodic detonating type devices.

78, for portable drop detonating type devices.

83, for portable detonating devices.

## 88 Reciprocating hammer:

This subclass is indented under subclass 87. Devices in which the firing pin or hammer reciprocates in a right line.

## 89 Rotary release:

This subclass is indented under subclass 88. Devices in which the firing pin or hammer is rotated when released.

### 90 Gear and friction wheel:

This subclass is indented under subclass 86. Signals and alarms actuated by gear or friction wheels attached to the moving door or window and in contact with the floor or window frame.

## 91 Clockwork bell:

This subclass is indented under subclass 86. Bells actuated by trains of clock-work controlled by doors or windows.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

25, for periodically actuated bells.

60+, for vehicle energy actuated bells.

98, for tread operated signals.

148, for bells.

### 92 Door knob:

This subclass is indented under subclass 91. Devices in which the train of clock-work is controlled by the motion of the doorknob.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

9, for doorknob controlled locks.

96, for doorknob controlled single stroke

97, for doorknob control alarms.

### 93 Automatic wind:

This subclass is indented under subclass 91. Bells actuated by clockwork which are automatically wound by the opening of a door or window.

### 94 Cable control:

This subclass is indented under subclass 91. Clockwork-bells controlled by cords or wires or other cables connected to the closures.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

81, for portable cord controlled burglar alarms.

104, for ignition controlled thermal alarms.

165, for pull cord or rod actuated bells.

### 95 Single-stroke bell:

This subclass is indented under subclass 86. Bells and gongs upon which a single stroke is given by each opening of a door or window.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

25, for periodically actuated bells.

60+, for vehicle energy actuated bells.

91, for closure operated clockwork bells.

148, for bells.

## 96 Door knob:

This subclass is indented under subclass 95. Devices in which the turning of the knob gives a single stroke upon the bell.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

9, for combined burglar alarm of the doorknob controlled type.

92, for doorknob controlled clockwork bell

97, for doorknob controlled alarm.

## 97 Door knob:

This subclass is indented under subclass 86. Devices in which the turning of the knob gives two or more strokes upon the bell.

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

9, for combined burglar alarm of the doorknob controlled type.

- 92, for doorknob controlled clockwork bell.
- 96, for doorknob controlled single stroke bell.

## 98 Tread operated:

This subclass is indented under subclass 75. Alarms, bell or detonating type, some of gun type, which are intended to kill, operated by a person treading on a mat, platform, step, or floor.

## 99 Portable receptacle:

This subclass is indented under subclass 75. Portable boxes, small safes, satchels, trunks, or other receptacles provided with alarms operated when the receptacle is moved by any unauthorized person.

## 100 Closure operated:

This subclass is indented under subclass 67. Miscellaneous closure-operated alarms not intended for burglar-alarm purposes. Some are to give a local alarm when a fire-alarm box is opened, others to operate as house-bells, etc.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

75, and appropriate indented subclasses, for burglar alarms, per se.

## 101 Thermal:

This subclass is indented under subclass 67. Alarms actuated by changes of temperature, usually for fire-alarms, for incubators, steamboilers, etc.

## SEE OR SEARCH CLASS:

- 200, Electricity: Circuit Makers and Breakers, subclasses 136+ for thermal circuit-closers.
- 236, Automatic Temperature and Humidity Regulation, appropriate subclasses, for automatic temperature-regulating devices controlled by temperature changes.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 319 for a seal combined with a fluid temperature indicator, sampler, or inspection feature.
- 340, Communications: Electrical, subclasses 577+, 584+, and 600+ for electric alarms which are automati-

- cally responsive to temperature or flame or radiant energy.
- 352, Optics: Motion Pictures, subclasses 143+ for fire prevention and isolation apparatus frequently including alarms for use with motion picture films.
- 374, Thermal Measuring and Testing, subclasses 100+ for thermometers.

## **Expansion control:**

This subclass is indented under subclass 101. Devices in which the actuating element expands with rise of temperature.

### SEE OR SEARCH CLASS:

374, Thermal Measuring and Testing, subclasses 187+ for a mechanical thermometer.

### **103** Fluid:

This subclass is indented under subclass 102. Devices in which the expanding element is normally in the liquid or gaseous state.

### SEE OR SEARCH CLASS:

126, Stoves and Furnaces, subclass 388.1 for an open-top liquid heating vessel that may include a lid having an indicator or signaler feature.

# 104 Ignition control:

This subclass is indented under subclass 101. Devices include systems of alarm based upon the ignition of inflammable substances--e.g., cord or fusible links--usually intended for use as fire-alarms.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 81, for portable cord controlled burglar alarms.
- 94, for cable controlled clockwork bells.

#### 105 Explosive:

This subclass is indented under subclass 104. Devices in which the inflammable substance is an explosive.

(1) Note. Devices in which the noise of the explosion constitutes the alarm are here included.

- for burglar or fire alarms with indicators.
- 83, for portable detonating type burglar alarms.
- 87, for closure operated detonating type alarms.

#### 106 Fusible control:

This subclass is indented under subclass 101. Devices include systems based upon the fusibility of a restraining member, usually the fusible link of a chain or wire.

#### SEE OR SEARCH CLASS:

169, Fire Extinguishers, subclass 26 for signaling means with a fire extinguisher receptacle; and subclass 42 for fusible connectors of the class type.

## **107 Buov:**

This subclass is indented under subclass 67. Devices in which the actuating and signal mechanism is placed upon a buoy, and the alarm is produced by the waves or the current.

## SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclass
  170.31 for determining a physical
  parameter or phenomenon by making
  a measurement of a moving ridge or
  swell on the surface of a naturally
  occurring body of water.
- 441, Buoys, Rafts, and Aquatic Devices, appropriate subclasses for buoy structure.

## 108 Whistling:

This subclass is indented under subclass 107. Devices in which air is periodically compressed by the motion of the buoy and utilized for blowing the whistle.

## SEE OR SEARCH CLASS:

441, Buoys, Rafts, and Aquatic Devices, appropriate subclasses for buoy structure.

## 109 Liquid level:

This subclass is indented under subclass 67. Devices in which the change of a liquid-level sets up an alarm.

(1) Note. Leak, low-water, or overflow alarms are here included.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

112, where a flow of the fluid or the check in the flow sets up an alarm.

### SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclasses 290+ for liquid level gauges combined with liquid level alarms.
- 137, Fluid Handling, subclass 558 for fluid handling apparatus combined with a liquid level responsive indicator or alarm.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 320 for a seal combined with a fluid leakage indicator, sampler, or inspection feature.

## 110 Float:

This subclass is indented under subclass 109. Devices include float-actuated audible warnings of a liquid-level condition.

(1) Note. For float actuated and controlled alarms or indicators see the Search Class notes below.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

107, for buoy alarms.

108, for whistling buoy alarms.

### SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclasses 307 and 308, for float gauges combined with signals, and subclass 322.5, for floats, per se.
- 137, Fluid Handling, subclasses 386+, particularly subclasses 409+ for float operated valves, and subclass 558, for fluid handling apparatus combined with a liquid level responsive indicator or alarm.

- 200, Electricity: Circuit Makers and Breakers, subclass 84 for float controlled switches.
- 340, Communications: Electrical, subclasses 612+ for electrically operated alarms automatically responsive to liquid level.

#### 111 Clockwork bell:

This subclass is indented under subclass 110. Devices include float-controlled clock-workbells.

### 112 Fluid flow:

This subclass is indented under subclass 67. Devices in which the flow of a current of fluid or the check of its flow in a pipe or between confining walls controls an alarm.

 Note. Boiler-feed alarms are here included.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 70, for fluid pressure variation actuated alarms.
- 117, for fluid flow indicators.
- 109+, for mere liquid-level alarms.

## SEE OR SEARCH CLASS:

277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 320 for a seal combined with a fluid leakage indicator, sampler, or inspection feature.

## 113 Shoal water:

This subclass is indented under subclass 67. Devices include systems based upon the varying depth of water, used on moving vessels to give warning when the water is shoaling.

### SEE OR SEARCH CLASS:

Geometrical Instruments, subclass
 for distance sounding type devices.

## 137 HORNS, WHISTLES AND COMPRES-SIONAL WAVE GENERATORS:

This subclass is indented under the class definition. Devices limited to structure of horns, whistles, and compressional wave generators and the means for their actuation, automatic means being excluded. This is the generic place for mechanical sonic and supersonic generators for wave transmission through media.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

24, for periodically operated horns and whistles.

#### SEE OR SEARCH CLASS:

- 84, Music, subclasses 349+ for pipe organ pipes, subclasses 363+, for reed organ reeds, subclass 375, for minor reeds, subclass 380, for woodwinds, subclass 387, for brasses, and subclass 456, for tuning devices for pipes and reeds.
- 340, Communications: Electrical, subclasses 384.1+ for audible electric signals
- 367, Communications, Electrical: Acoustic Wave Systems and Devices, subclasses 140+ for underwater and geophysical electric vibration transducers.
- 446, Amusement Devices: Toys, subclasses 202+ for a mouth-actuated whistle or siren.

## 138 Motor exhaust or suction:

This subclass is indented under subclass 137. Devices wherein the exhaust or suction intake of a fluid-pressure motor is utilized for sounding the horn or whistle, diaphragm-horns being excluded.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

58, for vehicle energy actuated pneumatic signals.

216+, for pneumatic signals.

## 139 Manually actuated air compressor:

This subclass is indented under subclass 137. Devices in which manually or pedally actuated air-compressors are used for sounding the horn or whistle, diaphragm-horns being excluded.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

- 39, for mechanically operated motion and direction indicators.
- 58, for vehicle energy actuated pneumatic signals.

70, for fluid pressure variation indicating alarms.

151, for pneumatically actuated bells.

216+, for pneumatic signals.

#### 140 Variable tone:

This subclass is indented under subclass 137. Devices include whistles and horns provided with devices whereby the pitch of the note can be gradually varied during its sounding.

#### SEE OR SEARCH CLASS:

84, Music, subclass 350 for reed type organ pipes, subclass 364 for tuneable reeds, and subclass 375, for minor reeds.

### **141** Chime:

This subclass is indented under subclass 137. Devices in which two or more horns or whistles are adapted to be sounded in unison, the same having different but usually concordant tones.

### SEE OR SEARCH CLASS:

84, Music, appropriate subclasses.

## 142 Diaphragm horns:

This subclass is indented under subclass 137. Devices include audible alarms in which a vibrating diaphragm is the source of sound.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

58, for vehicle energy actuated pneumatic signals.

## 143 Rotary striker:

This subclass is indented under subclass 142. Devices in which the diaphragm is caused to vibrate by the blows of a rotating body, usually pivoted or sliding hammers, on a rotating disk or wheel.

(1) Note. The means for rotating the wheel may be a manually-operated arrangement or a conventional electric motor.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

58, for vehicle energy actuated pneumatic signals.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 390.1+ for similar subject matter where the rotating hammers are electrically actuated.

## 144 Toothed wheel:

This subclass is indented under subclass 143. Devices in which the striker has the form of a toothed wheel, the teeth being fixed or rigid with the wheel.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

58, for vehicle energy actuated pneumatic signals.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 390.1+ for similar subject matter where the rotating hammers are electrically actuated.

## 145 Parallel diaphragm:

This subclass is indented under subclass 144. Devices in which the plane of the toothed wheel is parallel to the plane of the diaphragm.

## 146 Ball contacts:

This subclass is indented under subclass 143. Device in which the ball-contacts are used either on the striker or on the diaphragm.

### **147 SIRENS:**

This subclass is indented under the class definition. Sound-producing devices provided with diaphragms capable of rotation and pierced with holes, whereby, when rotated, by escaping gas a succession of sound-producing puffs or impacts is produced.

### SEE OR SEARCH CLASS:

446, Amusement Devices: Toys, subclass 205 for a mouth-actuated whistle or siren.

# **148 BELLS:**

This subclass is indented under the class definition. Devices usually metallic, supported at one point and used to produce sound when struck or otherwise thrown into vibration. They are generally of the well-known bell or gong type.

 Note. This subclass also includes rods, bars, tubes, spiral springs, disks, and other shapes when so used and supported.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

25, for periodically operated bells.

35+, for motion direction indicating bells.

91+, for closure operated clockwork bells.

95+, for closure operated single stroke bells.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 392.1+ for similar subject matter electrically operated.

### 149 Sound modification:

This subclass is indented under subclass 148. Devices are used to raise, lower, muffle, or otherwise modify the sound of the bell.

## 150 Swinging:

This subclass is indented under subclass 148. Devices in which the bell is so hung as to swing freely upon an axis or from a single point of suspension. The clapper is usually inside the bell and is also pivoted to swing.

 Note. Bells on spiral springs are here included.

### 151 Pneumatic actuation:

This subclass is indented under subclass 148. Bells in which pneumatic means are used for moving the bell or controlling its motion.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

58, for vehicle energy actuated pneumatic signals.

65, for pneumatic signals.

70, for fluid pressure variation operated alarms.

139, for motor exhaust or suction actuated horns or whistles.

### SEE OR SEARCH CLASS:

91, Motors: Expansible Chamber Type, for expansible-chamber type motors intended to operate bells. Where any significant structure of the bell operated by the motor is claimed, the patent is provided for in Class 116. Merely reciting the bell by name only or stating that the bell has a striker movable into and out of engagement with the bell is not considered significant structure such as would exclude patents from Class 91. A recitation that the bell is mounted so as to be swung or is provided with crank means for moving the bell is considered to be sufficient structure to cause classification in Class 116.

418, Rotary Expansible Chamber Devices, appropriate subclasses for rotary expansible chamber motor actuated bells and see the search note to Class 91 above for the line between this class (116) and Class 91, for line between this class (116) and Class 418 being the same.

# 152 Gong type:

This subclass is indented under subclass 148. Bells of the so-called "gong" type, having the form of a round shallow cup or dish and of flat curvature.

## 153 Door knob contained:

This subclass is indented under subclass 152. Devices in which the bell is placed within a hollow doorknob or itself forms the knob.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

 for doorknob gongs which are operated by turning the knob and latch.

## 154 Rotary:

This subclass is indented under subclass 152. Bells in which the gong is rotated while being sounded.

#### 155 Pivoted striker:

This subclass is indented under subclass 152. Bells in which the striker or hammer is pivoted and may be either inside or outside the gong.

# 156 Multiple:

This subclass is indented under subclass 155. Bells in which two or more separate striking-faces are provided for the hammer.

## 157 Multiple stroke:

This subclass is indented under subclass 155. Bells in which two or more strokes of the striking-hammer are given.

## 158 Rotary striker:

This subclass is indented under subclass 157. Devices in which the striker makes one or more complete revolutions about its pivot.

## 159 Lever operated:

This subclass is indented under subclass 158. Levers which are used for operating the bells.

### 160 Plunger operated:

This subclass is indented under subclass 158. Plungers which are used for operating the bells.

### 161 Escapement:

This subclass is indented under subclass 157. Devices in which the striker is attached to pallet mechanism actuated by an escapement-wheel similar to that usually found in clocks.

## 162 Clockwork type:

This subclass is indented under subclass 161. Devices in which energy stored up by previous winding or a spring is released when required for actuating the striker through the clockwork and its escapement.

### 163 Double:

This subclass is indented under subclass 157. Devices in which two and only two distinct strokes are given, one on the initial and the other on the return motion of the operating device.

# 164 Spring impact:

This subclass is indented under subclass 155. Devices in which a single stroke is given by the impact of a hammer driven by a spring placed in tension or compression by the actuating device.

# 165 Pull cord or rod:

This subclass is indented under subclass 155. Devices in which a single stroke is given by pulling upon a cord, rod, or chain, the mechanism being returned to normal position by springs or gravity without giving a second stroke.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 81, for cord controlled portable burglar alarms.
- 94, for cable controlled clockwork bell of the closure operated type.

### 166 Bicycle clamp:

This subclass is indented under subclass 152. Devices in which the novelty resides solely in the clamp by which the bell is attached to the frame of a bicycle or tricycle, the clamp being more or less modified for that particular use.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

61. for friction wheel actuated bells.

### 167 Fixed, with pivoted striker:

This subclass is indented under subclass 148. Devices in which the bell is fixed in position, the clapper being moved by the actuating mechanism.

## 168 Spiral-spring type:

This subclass is indented under subclass 148. Devices in which a spiral metallic spring is used as a sounding element, the type being frequently used in clocks.

# 169 Tube or rod type:

This subclass is indented under subclass 148. Devices in which a metallic tube or rod is used as a sounding element.

## 170 Animal and sleigh type:

This subclass is indented under subclass 148. Devices include bells of the well-known cowbell and sleigh-bell types, and also other small bells, provided with means for attaching same, often in grouped units, to vehicles or animals.

#### 171 Hand:

This subclass is indented under subclass 148. Bells of various types provided with handles, whereby they may be grasped and rung.

## 172 Bell pulls, cranks and push buttons:

This subclass is indented under subclass 148. Devices include bellpulls, bellcranks, push buttons, and other similar devices used for distant actuation of bells.

- 58, for vehicle energy actuated pneumatic signals.
- 70, for fluid pressure variation operated alarms.
- 139, for motor exhaust or section actuated horns or whistles.
- 151, for pneumatically actuated bells.

## 173 FLAGS AND FLAGSTAFFS:

This subclass is indented under the class definition. Devices limited to the structure of flags and fittings and their supports when especially adapted to the display of flags.

### SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, appropriate subclasses for flags and banners displaying pictures, words or insignia, and particularly subclass 218 for devices for causing flags to wave so as to attract attention thereto for advertising or exhibiting purposes.
- 73, Measuring and Testing, subclasses 170.01+ for fluid flow direction indicators, and subclasses 170.07 and 170.09 for fluid flow direction indicators with velocity determination, for example, wind socks, weather vanes, and the like.

## 174 Nonfouling:

This subclass is indented under subclass 173. Devices designed to prevent the flag from wrapping around its support or otherwise fouling or becoming entangled with it or with the halyards.

## 175 Metallic flags:

This subclass is indented under subclass 173. Devices include flags of metal, generally for railway use or where great wearing qualities are needed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

132, for hand set semaphore indicators.

### 200 INDICATORS:

This subclass is indented under the class definition. Devices having means to convey information to one of the senses.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

67+, for reel alarms and alarm signaling.

#### SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, subclass 446 and appropriate indented subclasses for signs and indications which appear at a window and are concealed when moved away from such openings.
- 47, Plant Husbandry, subclass 33 for plant labeling devices.
- 91, Motors: Expansible Chamber Type, subclass 1 for signaling means with structure of the class type.
- 92, Expansible Chamber Devices, subclass 5 for signaling means with structure of the class type.
- 222, Dispensing, subclasses 41+ for dispensers with position or extent of motion signaling means.
- 242, Winding, Tensioning, or Guiding, subclasses 305+, 534+, 563+, and 912 for an indicator in a winding, unwinding, or similar environment.
- 336, Inductor Devices, subclass 45 for transformers and inductive reactors having a movable element and a position or extent of motion signaling means.
- 338, Electrical Resistors, subclass 196 for signal means with structure of the class type.
- 343, Communications: Radio Wave Antennas, subclass 760 for antennas with signaling means which is responsive to the scan, sweep, or orientation of the antenna; and subclass 894 for antennas with signaling means responsive to some other condition of the antenna. See (4) Note, C, 3, under subclass 700 of this class (343) for certain classification lines involving antennas and signaling means.
- 353, Optics: Image Projectors, subclasses 40+ for signaling means with structure of the class type.
- 359, Optical: Systems and Elements, subclasses 246+, 281+, and 301+ for light wave modulators of polarized light.

- 360, Dynamic Magnetic Information Storage or Retrieval, subclasses 132 and 137 for signaling means with structure of the class type, e.g., tape recorder.
- 369, Dynamic Information Storage or Retrieval, subclasses 19+ for control of reproduction by external condition; and subclasses 53.1-53.45 for indication of condition of storage or retrieval device.

### 201 Methods:

This subclass is indented under subclass 200. Processes which includes the step of indicating.

#### SEE OR SEARCH CLASS:

299, Mining or In Situ Disintegration of Hard Material, subclass 10 for mine safety processes.

### **202** Visual light signal:

This subclass is indented under subclass 200. Devices wherein illumination is used to provide a visual indication of a condition.

- (1) Note. Any source of illumination may produce the light, e.g., flame, artificial light, sun, etc.
- (2) Note. Illumination merely to light a scale, dial, pointer, or etc., is provided for in subclasses below.
- (3) Note. Where the light signal is disclosed as being electrical, the patents are in Class 340.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

250, for an indicator with illumination means and see search notes for other areas.

### SEE OR SEARCH CLASS:

- 102, Ammunition and Explosives, subclass 334 for smoke-generating means; and subclasses 336+ for flare means which are used for signalling.
- 340, Communications: Electrical, subclasses 815.4+ for visual electric signal means.

# 203 Impact type:

This subclass is indented under subclass 200. Devices having means to indicate shock or acceleration of an object.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

215, for an indicator which is moved by tilting an object and gravity causes it to move.

### SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclass 492 for reading maximum acceleration.
- 346, Recorders, subclass 7 for recording impact and see search class notes for other areas of search.

## 204 Magnetically actuated:

This subclass is indented under subclass 200. Devices wherein the indicator is moved by the force of a permanent magnet.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

267, for a permanent magnet used to prevent actuation until a certain pressure is reached.

# SEE OR SEARCH CLASS:

- 324, Electricity: Measuring and Testing, subclass 419 for reed switch testing; and subclass 228 for an electric or permanent magnet to test material.
- 340, Communications: Electrical, appropriate subclass for a permanent magnetic with structure of the class type.

# 205 By touch:

This subclass is indented under subclass 200. Devices where an indication is perceived by the sense of feeling.

### SEE OR SEARCH CLASS:

340, Communications: Electrical, subclasses 407.1+ for tactual signaling means of the class type.

## 206 Chemically activated type:

This subclass is indented under subclass 200. Devices wherein the indication is given by a chemical reaction, e.g., change in color, smoke, odor, etc., and means to hold the chemicals.

214, for smoke or odor as an indicator where no chemical reaction holding means is used.

### SEE OR SEARCH CLASS:

- 252, Compositions, subclass 408 for compositions designed for indicating.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 321 for a seal combined with a wear, proper seating or presence indicator, sampler, or inspection feature
- 285, Pipe Joints or Couplings, subclasses 13 and 45 for signaling means with structure of the class type.
- 422, Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing, subclasses 50+ for determining qualitatively or quantitatively the presence of chemical compound.
- 423, Chemistry of Inorganic Compounds, subclass 264 for changing color characteristic of impurity.
- 436, Chemistry: Analytical and Immunological Testing, subclasses 1 through 183 for determining qualitatively or quantitatively the presence of chemical compound.

## **207** By heat:

This subclass is indented under subclass 206. Device wherein the chemical reaction is caused by a raise in temperature.

## SEE OR SEARCH CLASS:

- 374, Thermal Measuring and Testing, subclasses 106 and 162 for quantitative color change thermometers.
- 436, Chemistry: Analytical and Immunological Testing, subclasses 1 through 183 for determining qualitatively or quantitatively the pressure of chemical compound by heat.

## 208 Element wear type:

This subclass is indented under subclass 200. Devices having means to indicate a structure exceeds a predetermined minimum use or to show amount of material consumed by use.

### SEE OR SEARCH CLASS:

- 138, Pipes and Tubular Conduits, subclass 36 for pipes having wear indicator.
- 188, Brakes, subclass 1.11 for brake wear indicator.
- 192, Clutches and Power-Stop Control, subclass 30 for an indicator and clutch.
- 340, Communications: Electrical, subclass 454 for a brake wear indicator of the class type.
- 436, Chemistry: Analytical and Immunological Testing, subclasses 1 through 183 for corrosion tests.

## 209 By location:

This subclass is indented under subclass 200. Devices wherein the indicator shows the place of a person, a particular boundary, or an object with respect to the surface of the earth, i.e., to the ground or to body of water.

 Note. This subclass does not include indicators wherein a pointer moves relative to a dial or scale so as to give information with reference to elements within the structure of the indicator itself.

## SEE OR SEARCH CLASS:

- 52, Static Structures (e.g., Buildings), subclass 103 for markers that are permanently placed in the ground.
- 102, Ammunition and Explosives, subclass 21 for pyrotechnics signalling devices.

## 210 Inflatable type:

This subclass is indented under subclass 209. Devices wherein the indicator is a hollow receptacle of an elastic and impervious material that is filled with a gas so that said receptacle will expand and float in the atmosphere or in a body of water.

## SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, subclass 214 for balloon devices as signs.
- 244, Aeronautics and Astronautics, subclass 98 for inflatable devices of the class type.
- 446, Amusement Devices: Toys, subclasses 220+ for an inflatable toy.

## 211 Dye marker type:

This subclass is indented under subclass 209. Devices wherein the indicator is a brightly colored material, e.g., dye stuff, pigment, chemiluminescent matter, etc., that is released from said indicator and spreads over the surface of the ground or body of water.

## 212 Stress type:

This subclass is indented under subclass 200. Devices having means to indicate that a force exerted upon a body has strained or deformed its shape.

(1) Note. If the force is only to move an indicator to show fluid flow or pressure, see subclasses 222 and 266+.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

220, and 266+, for a fluid force to cause an indicator to move.

## SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclasses 760+ for stress or strain measuring a general and see search note for other areas.
- 411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 8+ for a stress or stain indicator combined with a fastener of the Class 411 type.

## 213 Camera type:

This subclass is indented under subclass 200. Devices wherein the indicator forms part of a camera.

(1) Note. Only camera structure to support the indicator is proper for this subclass; if camera structure which cooperates or moves elements of the camera are claimed, the patent is placed in the proper camera class.

# SEE OR SEARCH CLASS:

- 352, Optics: Motion Pictures, subclasses 170+ for indicating means and motion picture camera structure.
- 396, Photography, subclasses 281+ for indicating means and camera structure.

## 214 By smoke or odor:

This subclass is indented under subclass 200. Devices wherein the indicator is a gas with particles suspended in it to make it visible or with a characteristic of a substance which makes it perceptible to the sense of smell.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

206, for chemically activated means which may cause a smoke or odor.

### SEE OR SEARCH CLASS:

- 246, Railway Switches and Signals, subclass 169 for hot bearing detectors.
- 340, Communications: Electrical, subclass 628 for an electrical smoke indicator.

## 215 Gravity type:

This subclass is indented under subclass 200. Devices wherein the indicator moves by its own weight or has a tendency to move without artificially applied force.

- (1) Note. Included here are means to release an indicator for movement from a non-indication to an indication position.
- (2) Note. If the indicator has positive means to move it, the patents are placed below in the schedule even if the indicator could move by gravity.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

203, for impact indicator where the indicator is moved by gravity after the impact.

# SEE OR SEARCH CLASS:

169, Fire Extinguishers, subclasses 30+ for fire extinguisher and indicator.

# 216 Temperature responsive or compensating means:

This subclass is indented under subclass 200. Devices having means to sense warmth or coldness, to indicate or cause the indicator to move, or other means including warmth or coldness sensing means to cause the indicator to move

- 101, for thermal means to actuate an alarm.
- 205, for temperature sensing which uses the sense of touch.
- 207, for a chemical reaction caused by heat.

### SEE OR SEARCH CLASS:

- 246, Railway Switches and Signals, subclass 169 for hot bearing detectors of the class type.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 319 for a seal combined with a fluid temperature indicator, sampler, or inspection feature.
- 374, Thermal Measuring and Testing, subclasses 100+ for quantitative indicating thermometers.
- 426, Food or Edible Material: Processes, Compositions, and Products, subclass 88 for food temperature indicator devices of the class types.

### 217 Fusible substance:

This subclass is indented under subclass 216. Devices having a material which melts at a known temperature.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

214, for a smoke or odor indicator which may include a fusible material.

### SEE OR SEARCH CLASS:

- 169, Fire Extinguishers, subclass 42 for fusible connections of the class type.
- 374, Thermal Measuring and Testing, subclasses 106 and 160 for indicative devices wherein the fusible element constitutes the indicator.

# 218 With resilient or fluid pressure biased means:

This subclass is indented under subclass 217. With resilient or fluid pressure biased means: Devices including means to apply a force by an element seeking to restore its shape, or a liquid or gas, to an element whose movement is restrained by the fusible substance.

# 219 With absorbing or diffusing material:

This subclass is indented under subclass 217. Devices including a material to suck up, drink in, or spread out the fusible substance.

## 220 And fluid pressure indicator:

This subclass is indented under subclass 216. Devices including means responsive to the force of a liquid, gas, or vapor to give an indication.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

266+, for pressure indicators.

#### 221 Bimetal element:

This subclass is indented under subclass 216. Devices having a sensing means which has a composite structure of at least two materials abutted and fixed together and having different expansion coefficients.

# 222 Game type:

This subclass is indented under subclass 200. Devices having means to indicate the progress of a contest for amusement.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 209, for location indicators, e.g., position, foul line, or etc.
- 306+, for operator movable indicators of general use.

## SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, subclasses 2+ for checks, label, or tag.
- 235, Registers, subclass 90 for game boards provided with means for counting the game scores.
- 273, Amusement Devices: Games, for game apparatus combined with a means to indicate the progress of the game.
- 463, Amusement Devices: Games, for game apparatus combined with a means to indicate the progress of the game.
- 473, Games Using Tangible Projectile, for game apparatus combined with a means to indicate the progress of the game.

## 223 Rotary:

This subclass is indented under subclass 222. Devices wherein the indicator turns about a point or axis.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

309+, for an operator movable rotary indicator of general use.

### With rectilinear indicator:

This subclass is indented under subclass 223. Devices including an indicator movable along a straight path or along a two-dimensional path.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

225, for a game-type indicator movable in a rectilinear path.

323+, for an indicator which is moved by an operator in a rectilinear path.

## 225 Rectilinear:

This subclass is indented under subclass 222. Devices wherein the indicator is movable along a straight path or along a two-dimensional path.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

323+, for an indicator which is moved by an operator in a rectilinear path.

## **Elevator position:**

This subclass is indented under subclass 200. Devices wherein the indicator is operated by or simultaneously with an elevator or hoist to show position in the elevator shaft.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

64, for means to signal the elevator operator at which floor or mine level to stop.

68, for alarms sounded by the movement of the elevator or hoist.

## 227 Liquid level:

This subclass is indented under subclass 200. Devices having means to indicate the plane of the surface of a body of a nongaseous fluid.

(1) Note. The plane of surface is usually determined to be above, below, or at a given vertical position.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

264+, for fluid flow and/or the arrival of fluid at a point in a flow path.

#### SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclasses 290+ for liquid level gauges combined with liquid level indicators.
- 141, Fluent Material Handling, With Receiver or Receiver Coacting Means, subclasses 94+ for indicators combined with filling means, particularly subclasses 95+ for receiver level or pressure indicators.
- 220, Receptacles, subclasses 662+, and see the notes thereto, for structures wherein a transparent panel is mounted in a wall.
- 222, Dispensing, subclass 51 for dispensers with float level indicators; and subclasses 155+ for dispensers with external gauge tubes.
- 277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 320 for a seal combined with a fluid leakage indicator, sampler, or inspection feature.

### 228 Float:

This subclass is indented under subclass 227. Devices wherein a buoyant body is the indicator or controls the position of the indicator.

## 229 On pivoted arm:

This subclass is indented under subclass 228. Devices wherein the float is attached to a level that turns about a point or axis.

## 230 Machine tool position:

This subclass is indented under subclass 200. Devices having means to show the relative movement of a shaping tool in relation to a work support or the relative movement of a work support to a shaping tool.

(1) Note. For machines having the same type of indicators search the classes listed in the search notes below.

(2) Note. A tool support or disclosure of relative movement of tool and work is proper for this subclass.

#### SEE OR SEARCH CLASS:

- 29, Metal Working, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 74, Machine Element or Mechanism, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 82, Turning, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 83, Cutting, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 142, Wood Turning, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 144, Woodworking, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 408, Cutting by Use of Rotating Axially Moving Tool, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 409, Gear Cutting, Milling, or Planing, appropriate subclasses for machines having the same type of indicators as the subclass above (200).
- 451, Abrading, appropriate subclasses for machines having the same type of indicators as the subclass above (200).

### 231 Plural scales:

This subclass is indented under subclass 230. Devices having more than one element, each having a series of marks and/or numerical notations used to indicate the relative travel.

# 232 Scale conversion (e.g., english-metric):

This subclass is indented under subclass 231. Devices wherein the scales have marks to indicate different forms of quantity.

### 233 Machine tool variable transmission:

This subclass is indented under subclass 200. Devices having means to indicate the ratio between toothed wheels, or the angular speed output, of a shaping machine changeable speed device.

### 234 Page type:

This subclass is indented under subclass 200. Devices having means for indicating a particular leaf of a stack.

(1) Note. Many patents are to book markers and particularly to indicate a page of a closed book.

### SEE OR SEARCH CLASS:

- 24, Buckles, Buttons, Clasps, etc., subclasses 67+ for a clip-type temporary paper holding clamp; subclasses 336+ for a combined Clasp.
- 281, Books, Strips, and Leaves, subclass 42 for similar subject matter of the class type.

#### 235 With line indicator:

This subclass is indented under subclass 234. Devices including means to indicate a row or column of indicia on a leaf.

(1) Note. The line indicator can also be the page indicator.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

240, for a line indicator.

## SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 352+ for an indicator (e.g., line guide) movably attached to a copy holder to indicate a portion of the copy supported thereon.

## With resilient gripper:

This subclass is indented under subclass 235. Devices including means to press or grasp the leaf or a cover to hold the line indicator at a particular position.

## With resilient gripper:

This subclass is indented under subclass 234. Devices including means to press or grasp the leaf or a cover to hold the page indicator on the leaf or cover.

### 238 With means to secure to book back:

This subclass is indented under subclass 234. Devices including means to fix the page indicator to a part of a book binding that ties the covers of a book together.

## With means to secure to book cover:

This subclass is indented under subclass 234. Devices including means to fix the page indicator to that part of a book that touches the outermost leaves of the book when it is closed.

### 240 Line indicator:

This subclass is indented under subclass 200. Devices having means to indicate a row or column of indicia on a leaf.

(1) Note. The line indicators are for open pages or a page which indicators are not adapted because of bulk or other attributes to be used as page indicator, e.g., bookmark.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

235, for a line indicator which can also be used as a page indicator.

## SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 352+ for an indicator (e.g., line guide) movably attached to a copy holder to indicate a portion of the copy supported thereon.

## 241 Frequency tuner type:

This subclass is indented under subclass 200. Devices wherein the indicator conveys information as to a particular band or portion within a band of frequencies to show where a tuner is adjusted to.

 Note. The tuner is usually a sign type, e.g., for television or dial type, e.g., for radios.

### SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, appropriate subclasses for card, picture, or sign either stationary or which may be made to appear at windows or apertures.
- 74, Machine Element or Mechanism, subclasses 10+ for mechanical dial operators and see (3) Note of subclass 10 for the line between these classes.
- 334, Tuners, subclasses 86+ for a tuner with indicating means.
- 336, Inductor Devices, subclass 45 for transformers and inductive reactors having a movable element and a position or extent of motion indicator.
- 340, Communications: Electrical, subclasses 539.1 through 539.32 for electrically actuated condition responsive indicating system including a radio
- 361, Electricity: Electrical Systems, and Devices, subclass 300 for a capacitor having an indicating means.
- 455, Telecommunications, subclasses
  154.1+ for receivers with indication
  of the frequency or channel to which
  it is tuned.

# 242 Plural scales and indexes:

This subclass is indented under subclass 241. Devices having more than one element each having a series of marks and/or numerical notations and more than one element having index structure wherein there is relative movement between the element and index structure to relate information.

## 243 Indicia on movable web:

This subclass is indented under subclass 241. Devices having means to move the indicator, and the indicator is an element than can bend without breaking and has markings as signs that indicate information.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

278, for a flexible ribbon with indicia of general use and see search notes.

## 244 Pipette type:

This subclass is indented under subclass 241. Devices wherein one or more transparent elongated structures, e.g., rods, fibers, or pipes, are used to transmit light rays for indicating information.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

202, for a visual light signal.

### SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 502 and 541+ for illuminated exhibitors and signs using pipettes.

340, Communications: Electrical, subclasses 815.4+, particularly subclasses 815.42+ for light piping used in electrically controlled visual signal indicators.

385, Optical Waveguides, appropriate subclasses for light transmitting rods, fibers, or pipes.

## 245 Rotary scale or index:

This subclass is indented under subclass 241. Devices having an element with indicia on it which turns about an axis with respect to a stationary index, e.g., mark, pointer, etc., or an element which turns about an axis with respect to a stationary dial to point to information of the dial.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

284+, for rotary indicators in general.

# 246 Projection type:

This subclass is indented under subclass 245. Devices in which an image of a selected portion of a tuner is projected onto a screen.

 Note. The projected image can be either the scale or index element.

SEE OR SEARCH THIS CLASS, SUBCLASS:

200, for indicator projection of general use.

### 247 With color variations:

This subclass is indented under subclass 246. Devices wherein different hues or tints are used to indicate different positions of the tuner.

### 248 Plural scales:

This subclass is indented under subclass 245. Devices having more than one dial each of which are rotatably mounted for independent operation.

### 249 On concentric axes:

This subclass is indented under subclass 248. Devices wherein the dials turn about axes having a center in common or a common axis.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

301, for pointers that turn on a common axis.

### 250 With illumination means:

This subclass is indented under subclass 249. Devices including artificial light means.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

251, 256, 257, 263, 286+, and 310, for indicators wherein indicia is made visible by a source of artificial light.

### SEE OR SEARCH CLASS:

362, Illumination, subclasses 23.01 through 23.22 for artificial lighting of a scale or dial of general use.

## With illumination means:

This subclass is indented under subclass 248. Devices including artificial light means.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

250, for illumination of an indicator and see search notes for other search areas.

# **Drum structure:**

This subclass is indented under subclass 245. Devices wherein the dial has a cylindrical shape and has indicia thereon.

299, for a drum with indicia of general use.

#### With illumination means:

This subclass is indented under subclass 252. Devices including artificial light means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

250, for illumination of an indicator and see search notes for other search areas.

## 254 Single scale:

This subclass is indented under subclass 245. Devices wherein only one dial is used.

## 255 With plural groups of indicia:

This subclass is indented under subclass 254. Devices wherein the dial has more than one set of recognizable information thereon.

## 256 And illumination means:

This subclass is indented under subclass 255. Devices including artificial light means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

250, for illumination of an indicator and see search notes for other search areas.

### With illumination means:

This subclass is indented under subclass 254. Devices including artificial light means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

250, for illumination of an indicator and see search notes for other search areas.

## 258 Dish-shaped scale:

This subclass is indented under subclass 257. Devices wherein the dial has a shallow concave or angular shape, e.g., plate shape.

# 259 Rectilinear moving scale:

This subclass is indented under subclass 241. Devices wherein a dial is movable only in a straight line.

SEE OR SEARCH THIS CLASS, SUBCLASS:

281+, for a rectilinear movable indicator.

## 260 Hinged scale:

This subclass is indented under subclass 241. Devices wherein a dial is pivotally connected to its support structure.

### **Rotary input to linear index movement:**

This subclass is indented under subclass 241. Devices having means that turns about an axis to give rectilinear motion to an index element.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

282, for a rectilinear movable indicator with rotary input.

## 262 Draw cord type:

This subclass is indented under subclass 261. Devices wherein the index element is connected to a flexible element, e.g., chain, cable, string, etc.

### **263** With illumination:

This subclass is indented under subclass 241. Devices including artificial light means.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

250, for illumination of an indicator and see search notes for other search areas.

## 264 Fluid flow:

This subclass is indented under subclass 200. Devices wherein the indicator is caused to move or is made visible by the motion or force of a liquid, gas, or vapor.

- (1) Note. This subclass includes indicators that are moved directly by the fluid or indirectly by some effect resulting from the fluid movement.
- (2) Note. The indicator does not have to be in the flow path.
- (3) Note. The indication of arrival of a fluid at a point in a flow path is in this subclass.

112, for fluid flow alarms.

227, for liquid level indicators.

## SEE OR SEARCH CLASS:

- 73, Measuring and Testing, subclasses 170.01+ for a device which determines fluid flow direction, in particular subclass 170.05 for fluid flow direction determination utilizing a fluid actuated alignment means, and subclasses 861+ for a volume or rate of flow meter.
- 220, Receptacles, subclasses 662+, and see the notes thereto, for structures wherein a transparent panel is mounted in a wall.
- 222, Dispensing, subclass 40 for dispensers with signal indicator; and subclass 159 for dispensers with transparent flow rate section.
- 406, Conveyors: Fluid Current, subclass 36 for conduits with material motion.

### 265 At exterior of fluid-craft:

This subclass is indented under subclass 264. Devices wherein the indicator is moved by fluid flow along or from outside a craft which is kept buoyant by a liquid, gas, or vapor, e.g., aircraft, boat, etc.

#### SEE OR SEARCH CLASS:

73, Measuring and Testing, subclass 170.05 for a weather vane or wind sock.

### 266 Pressure:

This subclass is indented under subclass 264. Devices having means responsive to the force of the fluid to cause the indicator to move or to release an element to allow the indicator to move.

## SEE OR SEARCH CLASS:

- 15, Brushing, Scrubbing, and General Cleaning, Digest II for filter of the class type with indicators.
- 73, Measuring and Testing, subclasses 146.2+ for tire inflation indicators.
- 96, Gas Separation: Apparatus, subclass421 for gas separation apparatus having a pressure indicator.

277, Seal for a Joint or Juncture, for a generic sealing means or process, subclass 318 for a seal combined with a fluid pressure indicator, sampler, or inspection feature.

## With magnetic means:

This subclass is indented under subclass 266. Devices including a magnetic field to control the actuation of the indicator.

(1) Note. The indicator may be a magnet which is moved by the fluid to give a signal.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

204, for a magnetically actuated indicator.

### 268 Differential:

This subclass is indented under subclass 266. Devices wherein the indicator is responsive to fluid forces that are not the same and the fluid forces are acting on the indicator at all times.

- Note. A fluid force that is applied to move an indicator in one direction and no fluid pressure to return it, or the same fluid pressure is directed to return the indicator in the opposite direction is not proper for this subclass.
- (2) Note. An indicator which senses the pressure drop across a filter which is an indication of the flow and resistance to flow through the filter is proper for this subclass.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

70, for fluid pressure variation with an

269, for plural fluid pressure inputs with a single pressure applied.

## **269** Plural input with single readout:

This subclass is indented under subclass 266. Devices wherein the same fluid pressure is applied to different fluid openings of an indicator to cause the indicator to move in different directions.

268, for different fluid pressures to cause an indicator to move.

### 270 Flexible indicator:

This subclass is indented under subclass 266. Devices where the pressure is applied to a material that causes it to bend or expand to give an indication.

## 271 Rotary indicator:

This subclass is indented under subclass 266. Devices wherein the pressure is applied to an element which causes the indicator to turn about a point or axis.

SEE OR SEARCH THIS CLASS, SUBCLASS:

284+, for a rotary indicator with mechanical means to move it.

### 272 Rectilinear indicator:

This subclass is indented under subclass 266. Devices wherein the pressure is applied to an element which causes the indicator to move in a straight line.

SEE OR SEARCH THIS CLASS, SUB-

281+, for a rectilinear indicator with mechanical means to move it.

## 273 Movable means in flow path:

This subclass is indented under subclass 264. Devices wherein the indicator is moved by an element directly in the flow path.

- (1) Note. The flow of the fluid causes the indicator to move whereas in subclasses 266+ a force moves the indicator.
- (2) Note. The element in the flow path may be integral with the indicator or connected to the indicator by an element.

# SEE OR SEARCH CLASS:

73, Measuring and Testing, subclasses 170.01+ for a device which determines fluid flow direction, in particular subclass 170.05 for fluid flow direction determination utilizing a fluid actuated alignment means, and

subclasses 861+ for a volume or rate of flow meter.

# 274 Rotary only:

This subclass is indented under subclass 273. Devices wherein the indicator turns about an axis in one direction only.

### 275 Lever or cantilever:

This subclass is indented under subclass 273. Devices wherein either the indicator is part of or connected to the element and turns about a fulcrum or pivot, or the indicator is flexible.

## 276 Sight glass:

This subclass is indented under subclass 264. Devices wherein the fluid may be directly viewed through a clear material.

#### SEE OR SEARCH CLASS:

229, Envelopes, Wrappers, and Paperboard Boxes, subclasses 162.1 through 162.7 and 125.015 for a paperboard box having a viewing window.

## 277 Valve position:

This subclass is indented under subclass 200. Devices wherein the indicator shows the location of a valve closure that can be adjusted with respect to the associated seat of the valve, e.g., in a closed, open, or intermediate position.

(1) Note. When the valve is broadly recited, e.g., when there is an insufficient number of parts thereof to make a complete working valve, these patents are proper for Class 116; when a complete working valve is claimed, e.g., including a valve closure plus a valve seat or passage, etc., these patents are in Class 251.

## SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, subclass 332 for valves carrying indicia to merely denote the substance to be dispensed through the valve.
- 126, Stoves and Furnaces, subclass 295 for indicators combined with a damper device.
- 251, Valves and Valve Actuation, for indicators combined with a complete valve.

## 278 Flexible ribbon, band, or link with indicia:

This subclass is indented under subclass 200. Devices having means to move the indicator, wherein the indicator is part of or mounted on an element that can bend without breaking and has markings, colors, or signs that indicate information.

(1) Note. An index, e.g., single mark, pointer, etc., which is mounted on or part of a flexible band, string, cord, etc. without indicia is not proper for this subclass.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 243, for a movable web for a frequency tuner.
- 322, for a flexible operator movable indicator.

## 279 Push-button type:

This subclass is indented under subclass 200. Devices wherein an indicator is caused to appear either within or adjacent to a button or knob that is linearly moved from a normal position to a depressed or activated position or vice versa.

## SEE OR SEARCH CLASS:

- 74, Machine Element or Mechanism, subclass 483 for push-button elements of the class type and indicators.
- 200, Electricity: Circuit Makers and Breakers, subclasses 308+ and 333 for indicator with elements of the class type.
- 235, Registers, subclass 145 for keyboard with an indicator.
- 250, Radiant Energy, subclass 465.1 for manual operators or luminous attachment for self-luminous device.
- 334, Tuners, subclasses 86+ for push-button tuners with indicators.

## 280 Diverse:

This subclass is indented under subclass 200. Devices having more than one type of indicator within a support structure.

(1) Note. This subclass will take a rotary pointer and/or rotary disk and/or rectilinear indicator, etc., where any two do not cooperate to form a single readout. Also

included are operator movable indicator and actuated indicator.

(2) Note. Plural indicators of the same type with a single readout or plural readouts will be found in the appropriate subclasses below, e.g., plural pointers, disks, etc.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

300, for plural rotary actuated indicators.

316, for plural rotary operator movable indicators.

### 281 Rectilinear indicator with actuating means:

This subclass is indented under subclass 200. Rectilinear indicator with actuating means: Devices wherein the indicator is restricted to move in a straight path and means for applying a mechanical force to cause the indicator to move in said straight path.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

- 224, and 225, for a game-type indicator movable in a rectilinear path.
- 226, for a rectilinear indicator to show the position of an elevator.
- 321, for an indicator moved by an operator in a straight path.

# With rotary input means:

This subclass is indented under subclass 281. Devices including means that rotates about an axis and applies a force to the indicator to cause it to move in a straight path.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

261, for rotary input to linear index movement of a tuner.

#### With rectilinear input means:

This subclass is indented under subclass 281. Devices including means that moves in a straight line and applies a force to the indicator to cause it to move in a straight line.

## 284 Rotary indicator with actuating means:

This subclass is indented under subclass 200. Devices having means to apply a mechanical force to the indicator to cause it to turn about an axis so as to indicate information.

(1) Note. The indicator is a scale, pointer, index, dial, or any means information can be obtained from.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

226, for a rotary indicator to show position of an elevator.

309, for a rotary indicator moved directly by an operator.

328+, for a pointer mounted for movement.

334+. for a scale mounted for movement.

### SEE OR SEARCH CLASS:

177, Weighing Scales, subclasses 45+ for a weigher with a signal means.

## 285 With rectilinear input means:

This subclass is indented under subclass 284. Devices including means that moves in alternate directions in a straight line to cause the indicator to rotate.

## With illumination means:

This subclass is indented under subclass 284. Devices including artificial light means.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

250, for illumination means for a tuner and see search notes for other search areas.

### 287 Edge:

This subclass is indented under subclass 286. Devices wherein rays of light are picked up at an end part of a light modifying means and are conducted or transmitted internally of said light modifying means in a direction generally transverse to a scale, dial, pointer, etc.

(1) Note. If the rays of light are passed straight through the scale dial, pointer, etc., the patents are placed in subclass 286.

# 288 Pointer:

This subclass is indented under subclass 287. Devices wherein the light rays are conducted internally of an elongated element that turns about a point or axis.

# With means to change rate of movement of pointer:

This subclass is indented under subclass 284. Devices including an elongated element and means to cause the element to turn at different speeds.

### 290 Scale and pointer move during indication:

This subclass is indented under subclass 284. Devices wherein an elongated element and an element with indicia on it both change position at the same time so that information is indicated from them as a single readout.

# 291 Including means to adjust index position (e.g., zeroing, etc.):

This subclass is indented under subclass 284. Devices having means to align an elongated element with an element having indicia on it so that when the elongated element moves the correct information can be read from them as a single readout.

# 292 Including means to adjust scale position:

This subclass is indented under subclass 284. Devices having means to align an element with indicia on it with respect to a mark, pointer, etc., so that correct information can be read when there is relative movement between them as a single readout.

(1) Note. Included here are means to adjust one scale to another scale or a scale to a point, mark, pointer, etc.

# Plural pointers, one of which moves the other (e.g., maximum-minimum, etc.):

This subclass is indented under subclass 284. Devices having more than one elongated element each movable about an axis or point and means on one of the elements to cause the other element to move.

(1) Note. The pointer moved by another pointer usually will stay at the position it is moved to until it is released or reset.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

296, for means to indicate the maximum and minimum distance an indicator should move.

# 294 Including means to lock indicator in position:

This subclass is indented under subclass 284. Including means to lock indicator in position: Devices having means to hold the indicator from movement.

 Note. Usually the means to lock the indicator is for preventing damage or misalignment of indicator during movement, inadvertent rotation caused by vibration, or from manipulation by an operator.

### **295** Scale:

This subclass is indented under subclass 294. Devices wherein an element with indicia on it is held from movement.

# 296 Including maximum and minimum indicating means:

This subclass is indented under subclass 284. Devices having means to show or point out the lower limit and the upper limit of a scale.

(1) Note. The means to indicate the maximum and minimum usually do not stop the movable indicator from moving but are markings, adjustable index, etc.

# SEE OR SEARCH THIS CLASS, SUBCLASS:

293, for a pointer moved to show the maximum distance another pointer has moved.

## 297 Including stop means for pointer:

This subclass is indented under subclass 284. Devices having means to prevent an elongated element from moving past a certain point.

### 298 Disk with indicia:

This subclass is indented under subclass 284. Devices having a flat-shaped element that turns about an axis through its center and has markings, signs, or colored areas that indicate information.

(1) Note. The disk is usually called a dial and a reading is taken directly off it.

### 299 Drum with indicia:

This subclass is indented under subclass 284. Devices having a cylindrical-shaped element that turns about an axis through its center and has printed marking, signs, or colored areas that indicate information.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

252. for drum indicator for a tuner.

## 300 Plural indicators:

This subclass is indented under subclass 284. Devices having more than one indicator.

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

280, for different types of indicators mounted in a single structure.

## 301 Coaxial pointers:

This subclass is indented under subclass 300. Devices having more than one elongated element that turns about a common axis.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

249, for indicators that turn on concentric axes.

# 302 Including mask means:

This subclass is indented under subclass 284. Devices having means to cover a portion of a scale.

 Note. The mask can act as an index, e.g., pointer, if as it moves over a scale the leading edge is used to indicate information.

#### 303 Pivoted:

This subclass is indented under subclass 284. Devices wherein the indicator rotates about a fixed axis less than 360°.

## 304 With scale reading aid:

This subclass is indented under subclass 284. Devices having means to help see or read the indicator.

### SEE OR SEARCH CLASS:

359, Optical: Systems and Elements, subclasses 436+ for scale or indicia reading in general.

## 305 Specified housing structure:

This subclass is indented under subclass 284. Devices having a particularly described structure to hold the indicator.

### SEE OR SEARCH CLASS:

73, Measuring and Testing, subclass 431 for instrument casing.

## **306** Operator movable:

This subclass is indented under subclass 200. Devices wherein the indicator is moved to its indicating position directly by a living being so that information can be obtained.

- (1) Note. There is no mechanical advantage in this or indented subclasses, e.g., gears, linkage, drive belts, etc., a knob or handle to help turn the indicator is proper for this area.
- (2) Note. An index or scale structure, per se, are placed lower in the schedule.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

222+, for game type operator movable indicator.

281+, for rectilinear actuated indicator.

284+, for rotary actuated indicator.

327+, for index structure, per se.

334+, for scale structure, per se.

## SEE OR SEARCH CLASS:

40, Card, Picture, or Sign Exhibiting, subclasses 446+ for hand-set or changeable signs.

434, Education and Demonstration, for hand set indicators which serve an educational purpose.

# 307 With diverse art device:

This subclass is indented under subclass 306. Devices wherein the indicator is combined with other devices or structure having an added purpose or independent utility other than to perfect the indicator.

### SEE OR SEARCH CLASS:

242, Winding, Tensioning, or Guiding, subclasses 305+, for devices that indicate spool rotation in fishing reels.

### 308 Time scale:

This subclass is indented under subclass 306. Devices wherein the information shown relates to hour, day, week, year, etc.

## **309** Rotary indicator:

This subclass is indented under subclass 306. Devices wherein the indicator turns about an axis or point.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

223+, for a rotary indicator of the game type.

#### 310 Illuminated scale:

This subclass is indented under subclass 309. Devices including artificial light means whereby indicia on an element is made visible.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

250, for illumination means of a tuner and see search notes for other search areas.

### 311 Including means to restrain movement:

This subclass is indented under subclass 309. Devices having means to hold the indicator in a position or to limit the indicator to a range of position.

 Note. This subclass must have positive structure to restrain motion as against inherent friction between the rotary indicator and contiguous support structure.

# SEE OR SEARCH THIS CLASS, SUB-CLASS:

324, for a sliding indicator with means to restrain movement.

### 312 By resilient means:

This subclass is indented under subclass 311. Devices wherein the restraining means is an element which tends to return to its original form after it has been deformed to bias the indicator.

(1) Note. The resilient element may bias another element which is in contact with the indicator.

#### 313 Pivoted indicator:

This subclass is indented under subclass 312. Devices wherein the indicator turns about an axis or point less than 360°.

### 314 Helical spring type:

This subclass is indented under subclass 312. Devices wherein the resilient means has the shape of a spiral moving around a cone, cylinder, etc.

# 315 By a protrusion in notch, slot, or gap:

This subclass is indented under subclass 311. Devices wherein the restraining means is a projection adapted to be confined in an indentation, a narrow elongated aperture, or a space between other projections.

### 316 Plural:

This subclass is indented under subclass 309. Devices having more than one rotary indicator.

#### 317 Indicia on contoured surface:

This subclass is indented under subclass 316. Devices wherein markings, signs, or colored areas are displayed on a continuously bending form of the indicator body, e.g., a cylindrical, conical, etc., surface.

### 318 Indicia on flat surface of disk:

This subclass is indented under subclass 316. Devices wherein markings signs, or color areas are displayed on a planar area of the indicator body.

# 319 Tab, arm, sector, or pointer:

This subclass is indented under subclass 309. Devices wherein the rotary indicator is elongate, oblong, or has an axis of rotation at its periphery.

# 320 With scale:

This subclass is indented under subclass 319. Devices including indicia on a stationary element with respect to the rotatable tab, arm, etc.

## 321 Sliding indicator:

This subclass is indented under subclass 306. Devices wherein the indicator moves along a surface and is in constant frictional contact with the surface.

## 322 Flexible type:

This subclass is indented under subclass 321. Devices wherein the indicator is formed of pliant material or a portion is pliant.

SEE OR SEARCH THIS CLASS, SUBCLASS:

278, for a flexible indicator with indicia on it

## 323 With guide:

This subclass is indented under subclass 321. Devices including means to confine and direct motion of the indicator.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

225, for a game indicator with guide means.

#### **And means to restrain movement:**

This subclass is indented under subclass 323. Devices including means to hold the indicator to a position or to limit the indicator to a range of position.

 Note. This subclass must have positive structure to restrain motion as against inherent friction between guide and indicator.

## 325 Peg type:

This subclass is indented under subclass 306. Devices wherein the indicator has an elongated portion that enters a surface of an element or the surface of the element has an elongated portion that enters the indicator.

SEE OR SEARCH THIS CLASS, SUBCLASS:

222, for a peg used as a game indicator.

### 326 Piercing:

This subclass is indented under subclass 325. Devices wherein the elongated portion is sharp and punctures the surface of the element or the indicator.

### 327 Index structure:

This subclass is indented under subclass 200. Devices having means which only points out but does not give information by itself.

- (1) Note. The index structure is used with a scale to point to indicia on the scale.
- (2) Note. A movable pointer that is not used with a scale, etc., will be found in the above appropriate subclasses.
- (3) Note. Structure to support the index, e.g., for movement, stationary, is proper for this and indented subclasses.

#### SEE OR SEARCH CLASS:

250, Radiant Energy, subclass 463.1 for self-luminous index means.

## 328 Pointer type:

This subclass is indented under subclass 327. Devices wherein the index is an elongated element which turns about an axis when in use.

### 329 Plural:

This subclass is indented under subclass 328. Devices having more than one separate pointer.

# With balance means:

This subclass is indented under subclass 328. Devices including means to cause the pointer when mounted to be in a state of equilibrium.

 Note. Weights are added or adjusted to a point to distribute the overall weight of the point equally about the axis it turns on.

SEE OR SEARCH THIS CLASS, SUBCLASS:

333, for balance means, per se.

## With angular adjusting means:

This subclass is indented under subclass 328. Devices including means operatively connected to a pointer for changing the angle of said pointer with respect to a shaft which carries said pointer so as to initially situate said pointer at such a position that during the operation of an instrument a correct reading can be achieved.

## 332 Specified shape:

This subclass is indented under subclass 328. Devices wherein the pointer has a particular configuration, structure, material, etc.

### 333 Balance means:

This subclass is indented under subclass 200. Devices which only cause a pointer to be in a state of equilibrium.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

330, for a pointer and balance means.

#### 334 Scale structure:

This subclass is indented under subclass 200. Devices having means with a series of marks, numerical notations, and/or areas of color, but does not give information by itself.

- (1) Note. The scale structure is used with index structure to point out information.
- (2) Note. A movable scale that is not used with a pointer will be found in the above appropriate subclasses.

## SEE OR SEARCH CLASS:

250, Radiant Energy, subclass 463.1 for self-luminous scale.

### 335 Color:

This subclass is indented under subclass 334. Devices wherein different hues or tints are used to indicate different positions of the tuner.

 Note. Color and indicia can be on the same scale.

# 336 Frequency tuner type:

This subclass is indented under subclass 334. Devices wherein the scale conveys information as to a particular band.

SEE OR SEARCH THIS CLASS, SUB-CLASS:

241+, for frequency tuner to show where the tuner is adjusted to.

## 337 Drum type:

This subclass is indented under subclass 334. Devices wherein the scale support is a cylindrical-shaped element.

END