

F41 WEAPONS

F41A FUNCTIONAL FEATURES OR DETAILS COMMON TO BOTH SMALLARMS AND ORDNANCE, E.G. CANNONS; MOUNTINGS FOR SMALLARMS OR ORDNANCE [5]

- (1) This subclass covers those features or details which are considered to be of a kind generally applicable to, or to be concerned with intrinsic functions common to, both smallarms and ordnance. [5]
- (2) Such features or details are classified in this subclass, even if they are stated to be applied only to smallarms or only to ordnance. [5]
- (3) Attention is drawn to the definitions given in Note (2) following the title of class F41. [5]

KINDS OF PROPULSION.....	1/00	FIRING OR TRIGGER MECHANISMS,	
BREECH MECHANISMS	3/00	COCKING	19/00
UNLOCKING MECHANISMS	5/00	BARRELS, GUN TUBES, MUZZLE	
GUN RECHARGERS, EXTERNALLY		ATTACHMENTS	21/00
POWERED GUNS.....	7/00	GUN MOUNTINGS, e.g. on vehicles	23/00
FEEDING OR LOADING, MAGAZINES	9/00	Permitting recoil.....	25/00
ASSEMBLY FEATURES, MODULAR		Permitting elevation or traversing.....	27/00
CONCEPTS, ARTICULATED OR		CLEANING OR LUBRICATING	29/00
COLLAPSIBLE GUNS	11/00	TESTING.....	31/00
COOLING, HEATING, VENTILATING,		ADAPTATIONS FOR TRAINING.....	33/00
BLOWING TROUGH	13/00	OTHER ACCESSORIES OR DETAILS	35/00
EXTRACTORS, EJECTORS	15/00	SUBJECT MATTER NOT PROVIDED FOR	
SAFETY ARRANGEMENTS	17/00	IN OTHER GROUPS OF THIS SUBCLASS	99/00

1/00 Missile propulsion characterised by the use of explosive or combustible propellant charges (projecting missiles without use of explosive or combustible propellant charge F41B; launching rockets or torpedoes F41F 3/00; missile self-propulsion F42B 15/00) [5]	3/14	. . Rigid bolt locks, i.e. having locking elements rigidly mounted on the bolt or bolt handle and on the barrel or breech-housing respectively [5]
1/02 . Hypervelocity missile propulsion using successive means for increasing the propulsive force, e.g. using successively initiated propellant charges arranged along the barrel length; Multistage missile propulsion [5]	3/16	. . . the locking elements effecting a rotary movement about the barrel axis, e.g. rotating cylinder bolt locks [5]
1/04 . Missile propulsion using the combustion of a liquid or gaseous fuel, e.g. hypergolic fuel [5]	3/18	 hand-operated [5]
1/06 . Adjusting the range without varying elevation angle or propellant charge data, e.g. by venting a part of the propulsive charge gases, or by adjusting the capacity of the cartridge or combustion chamber [5]	3/20	 Straight-pull operated bolt locks, i.e. the operating hand effecting only a straight movement parallel to the barrel axis [5]
1/08 . Recoilless guns, i.e. guns having propulsion means producing no recoil [5]	3/22	 the locking being effected by rotating the operating handle or lever transversely to the barrel axis [5]
1/10 . . a counter projectile being used to balance recoil [5]	3/24	 the locking elements forming part of the operating handle or lever [5]
3/00 Breech mechanism, e.g. locks [5]	3/26	 semi-automatically or automatically operated, e.g. having a slidable bolt-carrier and a rotatable bolt [5]
3/02 . Block action, i.e. the main breech opening movement being transverse to the barrel axis [5]	3/28	 having fixed locking elements on the non-rotating bolt and rotating locking elements mounted on the barrel or breech housing, e.g. rotatable rings [5]
3/04 . . with pivoting breech-block [5]	3/30	 Interlocking means, e.g. locking lugs, screw threads [5]
3/06 . . . about a horizontal axis transverse to the barrel axis at the rear of the block (F41A 3/08 takes precedence) [5]	3/32	. . . the bolt being rocked about a notional axis transverse to the barrel axis [5]
3/08 . . . carrying a rotably mounted obturating plug of the screw-thread or the interrupted-thread type (F41A 3/30 takes precedence) [5]	3/34	. . . the bolt additionally effecting a sliding movement transverse to the barrel axis [5]
3/10 . . with sliding breech-block, e.g. vertically [5]	3/36	. . Semi-rigid bolt locks, i.e. having locking elements movably mounted on the bolt or on the barrel or breech housing [5]
3/12 . Bolt action, i.e. the main breech opening movement being parallel to the barrel axis [5]	3/38	. . . having rocking locking elements, e.g. pivoting levers or vanes [5]
	3/40	 mounted on the bolt (F41A 3/42 takes precedence) [5]
	3/42	 hand-operated [5]

- 3/44 . . . having sliding locking elements, e.g. balls, rollers [5]
- 3/46 mounted on the bolt (F41A 3/48 takes precedence) [5]
- 3/48 hand-operated [5]
- 3/50 Toggle-joint locks, e.g. crank-operated [5]
- 3/52 hand-operated [5]
- 3/54 . . Bolt locks of the unlocked type, i.e. being inertia operated [5]
- 3/56 . . . the bolt being provided with an additional slidable mass [5]
- 3/58 . Breakdown breech mechanisms, e.g. for shotguns [5]
- 3/60 . Breech mechanisms for guns having two or more barrels (F41A 3/58 takes precedence; for revolving-cannon guns F41F 1/10) [5]
- 3/62 . using combustion gas pressure for adding to the mechanical locking action, or for delaying breech opening movement [5]
- 3/64 . Mounting of breech-blocks; Accessories for breech-blocks or breech-block mountings [5]
- 3/66 . . Breech housings or frames; Receivers [5]
- 3/68 . . Bolt stops, i.e. means for limiting bolt opening movement [5]
- 3/70 . . Anti-rebound arrangements, i.e. preventing rebound of the bolt out of the firing position [5]
- 3/72 . . Operating handles or levers; Mounting thereof in breech-blocks or bolts [5]
- 3/74 . . Obturating or packing devices for gas leak prevention in breech mechanisms [5]
- 3/76 . . . specially adapted for sealing the gap between the forward end of the cartridge chamber and the rearward end of the barrel, e.g. sealing devices for revolvers or revolver-type guns [5]
- 3/78 . . Bolt buffer or recuperator means [5]
- 3/80 . . . Adjustable spring buffers [5]
- 3/82 . . . Coil spring buffers (F41A 3/80 takes precedence) [5]
- 3/84 mounted within the gun stock [5]
- 3/86 mounted under the barrel [5]
- 3/88 mounted around the barrel [5]
- 3/90 . . . Fluid buffers [5]
- 3/92 adjustable [5]
- 3/94 in combination with spring buffers [5]
- 5/00 Mechanisms or systems operated by propellant charge energy for automatically opening the lock [5]**
- 5/02 . recoil-operated [5]
- 5/04 . . the barrel being tilted during recoil [5]
- 5/06 . . the barrel being rotated about its longitudinal axis during recoil [5]
- 5/08 . . having an accelerator lever acting on the breech-block or bolt during the opening movement [5]
- 5/10 . . having a movable inertia weight [5]
- 5/12 . . . mounted in a gun having a fixed barrel [5]
- 5/14 . . Barrel stops, i.e. devices for holding the recoiling barrel in a predetermined position, e.g. the recoil position [5]
- 5/16 . . having a barrel moving forwardly after the firing of a shot [5]
- 5/18 . gas-operated [5]
- 5/20 . . using a gas piston arranged concentrically around the barrel [5]
- 5/22 . . having two or more gas pistons [5]
- 5/24 . . by direct action of gas pressure on bolt or locking elements [5]
- 5/26 . . Arrangements or systems for bleeding the gas from the barrel (F41A 5/20 F41A 5/24 take precedence) [5]
- 5/28 . . . Adjustable systems [5]
- 5/30 . Gas- or recoil-operation, e.g. selection of gas- or recoil-operated systems [5]
- 5/32 . Energy accumulator systems, i.e. systems for opening the breech-block by energy accumulated during barrel or gas piston recoil [5]
- 5/34 . . with spring accumulators [5]
- 5/36 . . with fluid accumulators [5]
- 7/00 Auxiliary mechanisms for bringing the breech-block or bolt or the barrel to the starting position before automatic firing (operating handles or levers F41A 3/00); Drives for externally-powered guns (revolving-cannon guns F41F 1/00); Remote-controlled gun chargers [5]**
- 7/02 . Machine-gun rechargers, e.g. manually operated [5]
- 7/04 . . fluid operated [5]
- 7/06 . . electrically operated [5]
- 7/08 . Drives for externally-powered guns, i.e. drives for moving the breech-block or bolt by an external force during automatic firing [5]
- 7/10 . . using a rotating cylindrical drum having a camming groove [5]
- 9/00 Feeding or loading of ammunition (adaptations for feeding or loading missiles from magazines in air guns F41B 11/02); Magazines; Guiding means for the extracting of cartridges (cartridge extractors or ejectors F41A 15/00) [5]**
- 9/01 . Feeding of unbelted ammunition [5]
- 9/02 . . using wheel conveyers, e.g. star-wheel-shaped conveyers [5]
- 9/03 . . using screw or rotary-spiral conveyers [5]
- 9/04 . . using endless-chain belts carrying a plurality of ammunition [5]
- 9/05 . . . in tandem sequence [5]
- 9/06 . . using cyclically moving conveyers, i.e. conveyers having ammunition pusher or carrier elements which are emptied or disengaged from the ammunition during the return stroke [5]
- 9/07 . . . Reciprocating conveyers, i.e. conveyers pushing a plurality of ammunition during the feeding stroke [5]
- 9/09 . . . Movable ammunition carriers or loading trays, e.g. for feeding from magazines [5]
- 9/10 pivoting or swinging [5]
- 9/11 in a horizontal plane [5]
- 9/12 mounted within a smallarm [5]
- 9/13 in a vertical plane [5]
- 9/14 transverse to the barrel axis [5]
- 9/15 mounted within a smallarm [5]
- 9/16 parallel to the barrel axis [5]
- 9/17 mounted within a smallarm [5]
- 9/18 feeding from a magazine under the barrel [5]
- 9/19 feeding from a magazine mounted in the stock [5]
- 9/20 sliding, e.g. reciprocating [5]
- 9/21 in a vertical direction (F41A 9/23 takes precedence) [5]
- 9/22 in a horizontal direction (F41A 9/23 takes precedence) [5]
- 9/23 mounted within a smallarm [5]

- 9/24 . . . using a movable magazine or clip as feeding element [5]
 - 9/25 . . . using a sliding clip [5]
 - 9/26 . . . using a revolving drum magazine [5]
 - 9/27 in revolver-type guns [5]
 - 9/28 of smallarm type (in revolvers F41C 3/14) [5]
 - 9/29 . Feeding of belted ammunition [5]
 - 9/30 . . Sprocket-type belt transporters [5]
 - 9/31 . . . with cartridge stripping means [5]
 - 9/32 . . Reciprocating-slide-type belt transporters [5]
 - 9/33 . . . with cartridge stripping means [5]
 - 9/34 . . from magazines (magazines for belted ammunition per se F41A 9/79) [5]
 - 9/35 . Feeding multibarrel guns [5]
- Feeding elements or concepts of general interest, not specially adapted for feeding multibarrel guns, are classified in groups F41A 9/01 or F41A 9/29. [5]
- 9/36 . . Feed mechanisms for revolving-cannon guns [5]
 - 9/37 . Feeding two or more kinds of ammunition to the same gun; Feeding from two sides [5]
- Feeding elements or concepts of general interest, not specially adapted for feeding two or more kinds of ammunition or from two sides, are classified in groups F41A 9/01 or F41A 9/29. [5]
- 9/38 . Loading arrangements, i.e. for bringing the ammunition into the firing position [5]
 - 9/39 . . Ramming arrangements [5]
 - 9/40 . . . the breech-block itself being the rammer [5]
 - 9/41 pushing unbelted ammunition from a box magazine on the gun frame into the cartridge chamber [5]
 - 9/42 . . . Rammers separate from breech-block [5]
 - 9/43 Chain rammers [5]
 - 9/44 Fluid-operated piston rammers [5]
 - 9/45 . . the cartridge chamber or the barrel as a whole being tiltable between a loading and a firing position [5]
 - 9/46 . . the cartridge chamber being formed by two complementary elements, movable one relative to the other for loading [5]
 - 9/47 . . using forwardly-sliding barrels or barrel parts for loading [5]
 - 9/48 . . by gravitational force [5]
 - 9/49 . Internally-powered drives, i.e. operated by propellant charge energy, e.g. couplings, clutches, energy accumulators [5]
 - 9/50 . External power or control systems [5]
 - 9/51 . . Boosters, i.e. externally-powered motors [5]
 - 9/52 . Arrangements for changing from automatic or magazine-loading to hand-loading [5]
 - 9/53 . Charged-condition indicators, i.e. indicating the presence of a cartridge in the cartridge chamber [5]
 - 9/54 . Cartridge guides, stops or positioners, e.g. for cartridge extraction [5]
 - 9/55 . . Fixed guiding means, mounted on, or near, the cartridge chamber [5]
 - 9/56 . . Movable guiding means [5]
- 9/57 . . . Flexible chutes, e.g. for guiding belted ammunition from the magazine to the gun [5]
 - 9/58 . . Cartridge stops; Cartridge positioners [5]
 - 9/59 . Ejectors for clips or magazines, e.g. when empty [5]
 - 9/60 . Empty-cartridge-case or belt-link collectors or catchers (F41A 9/81 takes precedence) [5]
 - 9/61 . Magazines [5]
 - 9/62 . . having means for indicating the number of cartridges left in the magazine, e.g. last-round indicators (last-round safeties F41A 17/40) [5]
 - 9/63 . . specially adapted for releasable connection with other magazines [5]
 - 9/64 . . for unbelted ammunition [5]
 - 9/65 . . . Box magazines having a cartridge follower [5]
 - 9/66 Arrangements thereon for charging, i.e. reloading (apparatus or tools for reloading magazines F41A 9/83) [5]
 - 9/67 having means for depressing the cartridge follower, or for locking it in a depressed position [5]
 - 9/68 Plural magazines, e.g. tandem magazines [5]
 - 9/69 characterised by multiple-row or zigzag arrangement of cartridges [5]
 - 9/70 Arrangements thereon for discharging, e.g. cartridge followers or discharge throats [5]
 - 9/71 Arrangements thereon for varying capacity; Adapters or inserts for changing cartridge size or type [5]
 - 9/72 . . . Tubular magazines, i.e. magazines containing the ammunition in lengthwise tandem sequence [5]
 - 9/73 . . . Drum magazines [5]
 - 9/74 with radially disposed cartridges [5]
 - 9/75 having a spiral cartridge channel [5]
 - 9/76 . . . Magazines having an endless-chain conveyer [5]
 - 9/77 . . . Magazines having a screw conveyer [5]
 - 9/78 . . . Magazines having a reciprocating conveyer [5]
 - 9/79 . . for belted ammunition [5]
 - 9/80 . . . having provision for quick-coupling of the belts of adjacent magazines [5]
 - 9/81 . . . having provision for collecting belt links or empty cartridge cases [5]
 - 9/82 . Reloading of magazines [5]
 - 9/83 . . Apparatus or tools for reloading magazines with unbelted ammunition, e.g. cartridge clips [5]
 - 9/84 . . . Clips [5]
 - 9/85 for reloading revolver-type magazines [5]
 - 9/86 . . Feeding belted ammunition into magazines [5]
 - 9/87 . Ammunition handling dollies or transfer carts (F41A 9/86 takes precedence) [5]
- 11/00 Assembly or disassembly features; Modular concepts; Articulated or collapsible guns** (F41A 3/64, F41A 19/10 F41A 19/15, F41A 21/48, F41A 25/26 take precedence) [5]
- 11/02 . Modular concepts, e.g. weapon-family concepts [5]
 - 11/04 . Articulated or collapsible guns, i.e. with hinged or telescopic parts for transport or storage (breakdown shotguns or rifles F41C 7/11; folding or telescopic stocks or stock parts F41C 23/04) [5]
 - 11/06 . . Telescopic guns [5]

- 13/00 Cooling or heating systems** (barrels or gun tubes with fins or ribs F41A 21/00); **Blowing-through of gun barrels; Ventilating systems** [5]
- 13/02 . Heating systems [5]
- 13/04 . Injecting fluids into barrels or cartridge chambers (F41A 13/08 takes precedence) [5]
- 13/06 . Evacuating combustion gas from barrels (F41A 13/10 takes precedence) [5]
- 13/08 . . Bore evacuators, i.e. chambers disposed around barrels for storing part of the combustion gas and subsequently injecting it into the barrel to provide suction [5]
- 13/10 . Blowers or turbines for evacuating or cooling guns, e.g. driven by combustion gas pressure or recoil [5]
- 13/12 . Systems for cooling the outer surface of the barrel (F41A 13/10 takes precedence) [5]
- 15/00 Cartridge extractors, i.e. devices for pulling cartridges or cartridge cases at least partially out of the cartridge chamber; Cartridge ejectors, i.e. devices for throwing the extracted cartridges or cartridge cases free of the gun** (F41A 9/54 takes precedence) [5]
- 15/02 . for revolver-type guns, e.g. revolvers [5]
- 15/04 . specially adapted for cartridge cases being deformed when fired, e.g. of plastics [5]
- 15/06 . for breakdown guns [5]
- 15/08 . for block-action guns [5]
- 15/10 . . of sliding-block type [5]
- 15/12 . for bolt-action guns [5]
- 15/14 . . the ejector being mounted on, or within, the bolt [5]
- 15/16 . . the ejector being mounted on the breech housing or frame [5]
- 15/18 . for guns with forwardly slidable barrels [5]
- 15/20 . specially adapted for caseless-ammunition duds [5]
- 15/22 . Tools for extracting cartridges [5]
- 17/00 Safety arrangements, e.g. safeties** [5]
- 17/02 . Key-operated safeties [5]
- 17/04 . Safeties of the combination-lock type (F41A 17/02 takes precedence) [5]
- 17/06 . Electric or electromechanical safeties (F41A 17/04, F41A 17/08 take precedence) [5]
- 17/08 . for inhibiting firing in a specified direction, e.g. at a friendly person or at a protected area (F41A 27/02 takes precedence) [5]
- 17/10 . . Firing mechanisms with elevation stop [5]
- 17/12 . . Firing mechanisms with anti-canting safety [5]
- 17/14 . Double-loading prevention [5]
- 17/16 . Cook-off prevention, i.e. prevention of spontaneous firing of a cartridge by chamber wall heat [5]
- 17/18 . Hang-fire prevention [5]
- 17/20 . Grip or stock safeties, i.e. safeties disengaged by clasping the grip or stock (thumb-operated sliding safeties F41A 17/52, F41A 17/62, F41A 17/70, F41A 17/80) [5]
- 17/22 . . acting on the trigger [5]
- 17/24 . . acting on the firing pin [5]
- 17/26 . . acting on the hammer [5]
- 17/28 . . acting on the sear [5]
- 17/30 . Multiple safeties, i.e. safeties acting on at least one element of the firing mechanism and at least one other element of the gun, e.g. the moving barrel [5]
- 17/32 . . the other element being the breech-block or bolt [5]
- 17/34 . Magazine safeties [5]
- 17/36 . . locking the gun in a safety condition when the magazine is empty or removed [5]
- 17/38 . . locking the magazine in the gun [5]
- 17/40 . Last-round safeties (F41A 17/34 takes precedence) [5]
- 17/42 . Safeties for locking the breech-block or bolt in a safety position (F41A 17/32, F41A 17/36, F41A 17/40 take precedence) [5]
- 17/44 . Safety plugs, e.g. for plugging-up cartridge chambers [5]
- 17/46 . Trigger safeties, i.e. means for preventing trigger movement (F41A 17/02 F41A 17/40 take precedence) [5]
- 17/48 . . Automatically operated trigger safeties, i.e. operated by breech opening or closing movement [5]
- 17/50 . . . by breakdown action [5]
- 17/52 . . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
- 17/54 . . Protecting-caps for trigger guards; Trigger locking pieces mounted on, or within, the trigger guard [5]
- 17/56 . Sear safeties, i.e. means for rendering ineffective an intermediate lever transmitting trigger movement to firing pin, hammer, bolt or sear (F41A 17/02 F41A 17/40 take precedence) [5]
- 17/58 . . automatically operated, i.e. operated by breech opening or closing movement [5]
- 17/60 . . . by breakdown action [5]
- 17/62 . . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
- 17/64 . Firing-pin safeties, i.e. means for preventing movement of slidably-mounted strikers (F41A 17/02 F41A 17/40 take precedence) [5]
- 17/66 . . automatically operated, i.e. operated by breech opening or closing movement [5]
- 17/68 . . . by breakdown action [5]
- 17/70 . . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
- 17/72 . . trigger-operated, i.e. the movement of the trigger bringing a firing-pin safety into inoperative position during the firing [5]
- 17/74 . Hammer safeties, i.e. for preventing the hammer from hitting the cartridge or the firing pin (F41A 17/02 F41A 17/40 take precedence) [5]
- 17/76 . . automatically operated, i.e. operated by breech opening or closing movement [5]
- 17/78 . . . by breakdown action [5]
- 17/80 . . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
- 17/82 . . trigger-operated, i.e. the movement of the trigger bringing a hammer safety into inoperative position during firing [5]
- 19/00 Firing or trigger mechanisms; Cocking mechanisms** [5]
- 19/01 . Counting means indicating the number of shots fired [5]
- 19/02 . . Burst limiters (F41A 19/67 takes precedence) [5]
- 19/03 . Shot-velocity control (F41A 3/78, F41A 5/28, F41A 19/05, F41A 19/66 take precedence) [5]
- 19/04 . . by regulating the time of release of the firing pin or hammer [5]
- 19/05 . Synchronising for firing through the propeller of an aircraft [5]
- 19/06 . Mechanical firing mechanisms (F41A 19/01 F41A 19/05, F41A 19/59 take precedence) [5]
- 19/07 . . press-button actuated, e.g. with thumb rest [5]

- 19/08 . . remote actuated; lanyard actuated [5]
- 19/09 . . Auxiliary trigger devices (F41A 19/08 takes precedence) [5]
- 19/10 . . Triggers; Trigger mountings [5]
- 19/11 . . Trigger guards; Trigger-guard mountings (F41A 19/15 takes precedence) [5]
- 19/12 . . Sear; Sear mountings [5]
- 19/13 . . Percussion or firing pins, i.e. fixed or slidably-mounted striker elements; Mountings therefor [5]
- 19/14 . . Hammers, i.e. pivotably-mounted striker elements; Hammer mountings [5]
- 19/15 . . Modular firing mechanism units [5]
- 19/16 . . Adjustable firing mechanisms; Trigger mechanisms with adjustable trigger pull (F41A 19/17 takes precedence) [5]
- 19/17 . . Hair-trigger mechanisms [5]
- 19/18 . . for multibarrel guns (F41A 19/68 takes precedence) [5]
- 19/19 . . . with single-trigger firing possibility [5]
- 19/20 Double-trigger arrangements having the possibility of single-trigger actuation [5]
- 19/21 having only one trigger [5]
- 19/22 and only one striker element [5]
- 19/23 rotatable about an axis parallel to the barrel axis for firing subsequent barrels [5]
- 19/24 . . Release-trigger mechanisms, i.e. the striker element being released during the return movement of the trigger subsequent to trigger pull [5]
- 19/25 . . having only slidably-mounted striker elements, i.e. percussion or firing pins [5]
- 19/26 . . . the percussion or firing pin and the breech-block or bolt forming one piece [5]
- 19/27 . . . the percussion or firing pin being movable relative to the breech-block [5]
- 19/28 propelled by a cam or lever when the breech-block or bolt arrives at a closing position [5]
- 19/29 propelled by a spring under tension [5]
- 19/30 in bolt-action guns [5]
- 19/31 Sear arrangements therefor (F41A 19/33 takes precedence) [5]
- 19/32 for catching the percussion or firing pin after each shot, i.e. in single-shot or semi-automatic firing mode [5]
- 19/33 Arrangements for the selection of automatic or semi-automatic fire [5]
- 19/34 Cocking mechanisms [5]
- 19/35 Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
- 19/36 in block-action guns [5]
- 19/37 Cocking mechanisms [5]
- 19/38 Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
- 19/39 Cocking mechanisms for other types of guns, e.g. fixed breech-block types, forwardly-slidable barrel types [5]
- 19/40 Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
- 19/41 for breakdown guns [5]
- 19/42 . . . having at least one hammer [5]
- 19/43 in bolt-action guns [5]
- 19/44 Sear arrangements therefor (F41A 19/46 takes precedence) [5]
- 19/45 for catching the hammer after each shot, i.e. in single-shot or semi-automatic firing mode [5]
- 19/46 Arrangements for the selection of automatic or semi-automatic fire [5]
- 19/47 Cocking mechanisms [5]
- 19/48 Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
- 19/49 in block-action guns [5]
- 19/50 Cocking mechanisms [5]
- 19/51 Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
- 19/52 Cocking mechanisms for other types of guns, e.g. fixed breech-block types, revolvers [5]
- 19/53 Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
- 19/54 for breakdown guns [5]
- 19/55 . . Fluid-operated firing mechanisms [5]
- 19/56 . . Ignition of the propellant charge by contact with air heated by adiabatic compression [5]
- 19/57 . . Firing mechanisms operating with primer cartridge [5]
- 19/58 . . Electric firing mechanisms (F41A 17/10, F41A 17/12 take precedence) [5]
- 19/59 . . Electromechanical firing mechanisms, i.e. the mechanical striker element being propelled or released by electric means [5]
- 19/60 . . characterised by the means for generating electric energy [5]
- 19/61 . . . Inductive generators [5]
- 19/62 . . . Piezo-electric generators [5]
- 19/63 . . . having means for contactless transmission of electric energy, e.g. by induction, by sparking gap [5]
- 19/64 . . . for automatic or burst-firing mode [5]
- 19/65 for giving ripple fire, i.e. using electric sequencer switches for timed multiple-charge launching, e.g. for rocket launchers [5]
- 19/66 Electronic shot-velocity control (F41A 19/65 takes precedence) [5]
- 19/67 Burst limiters [5]
- 19/68 . . . for multibarrel guns (F41A 19/65 takes precedence) [5]
- 19/69 . . . Electric contacts or switches peculiar thereto (F41A 19/65 takes precedence) [5]
- 19/70 Electric firing pins; Mountings therefor [5]
- 21/00 Barrels; Gun tubes; Muzzle attachments; Barrel mounting means** (F41A 25/00 takes precedence; barrel attachments for firing grenades or riot-control ammunition from smallarms F41C 27/06; sighting devices F41G 1/00) [5]
- 21/02 . . Composite barrels, i.e. barrels having multiple layers, e.g. of different materials [5]
- 21/04 . . Barrel liners [5]
- 21/06 . . Plural barrels [5]
- 21/08 . . Barrel junctions [5]
- 21/10 . . Insert barrels, i.e. barrels for firing reduced calibre ammunition and being mounted within the normal barrels [5]

F41A

- 21/12 . Cartridge chambers; Chamber liners (F41A 3/74, F41A 9/46, F41A 21/04 take precedence) [5]
- 21/14 . . Arrangement of cartridge chambers lateral to the barrel axis [5]
- 21/16 . Barrels or gun tubes characterised by the shape of the bore [5]
- 21/18 . . Grooves; Rifling [5]
- 21/20 . Barrels or gun tubes characterised by the material (F41A 21/02 takes precedence) [5]
- 21/22 . Barrels which have undergone surface treatment, e.g. phosphating [5]
- 21/24 . Barrels or gun tubes with fins or ribs, e.g. for cooling [5]
- 21/26 . specially adapted for recoil reinforcement, e.g. for training purposes [5]
- 21/28 . Gas-expansion chambers; Barrels provided with gas-relieving ports (F41A 1/06, F41A 13/08 take precedence) [5]
- 21/30 . Silencers [5]
- 21/32 . Muzzle attachments or glands (F41A 21/26, F41A 21/30, F41A 21/46 take precedence) [5]
- 21/34 . . Flash dampers [5]
- 21/36 . . for recoil reduction (recoil reduction arrangements in general F41A 25/00) [5]
- 21/38 . . . adjustable [5]
- 21/40 . . Chokes for shotguns [5]
- 21/42 . . . adjustable [5]
- 21/44 . Insulation jackets; Protective jackets [5]
- 21/46 . Barrels having means for separating sabots from projectiles [5]
- 21/48 . Barrel mounting means, e.g. releasable mountings for replaceable barrels [5]
- 23/00 Gun mountings, e.g. on vehicles; Disposition of guns on vehicles** (F41A 25/00, F41A 27/00 take precedence) [5]
- 23/02 . Mountings without wheels [5]
- 23/04 . . Unipods [5]
- 23/06 . . . adjustable [5]
- 23/08 . . Bipods [5]
- 23/10 . . . adjustable [5]
- 23/12 . . Tripods [5]
- 23/14 . . . adjustable [5]
- 23/16 . . Testing mounts [5]
- 23/18 . . Rests for supporting smallarms in non-shooting position (racks for storage A47B 81/00; racks in vehicles B60R 11/00) [5]
- 23/20 . for disappearing guns [5]
- 23/22 . . on board of submarines [5]
- 23/24 . Turret gun mountings (feeding, loading or guiding ammunition F41A 9/00; mechanical elevating or traversing systems for turret guns F41A 27/18) [5]
- 23/26 . Mountings for transport only; Loading or unloading arrangements for guns for use with carrier vehicles (F41A 23/50 takes precedence) [5]
- 23/28 . Wheeled-gun mountings; Endless-track gun mountings [5]
- 23/30 . . the wheels being liftable from the ground for firing [5]
- 23/32 . . with split trails (F41A 23/30, F41A 23/46 take precedence) [5]
- 23/34 . on wheeled or endless-track vehicles [5]
- 23/36 . . on trailers (F41A 23/42 takes precedence) [5]
- 23/38 . . on motorcycles [5]
- 23/40 . . on rail vehicles [5]
- 23/42 . . for rocket throwers [5]
- 23/44 . on sledges [5]
- 23/46 . Trail spades [5]
- 23/48 . . elastic [5]
- 23/50 . Travelling locks; Brakes for holding the gun platform in a fixed position during transport [5]
- 23/52 . Base plates for gun mountings [5]
- 23/54 . . for mortars [5]
- 23/56 . Arrangements for adjusting the gun platform in the vertical or horizontal position (F41A 17/10, F41A 17/12 take precedence) [5]
- 23/58 . . Hydraulic jacks [5]
- 23/60 . . Screw-operated jacks [5]
- 25/00 Gun mountings permitting recoil or return to battery, e.g. gun cradles; Barrel buffers or brakes** (recoilless guns F41A 1/08) [5]
- 25/02 . Fluid-operated systems [5]
- 25/04 . . adjustable [5]
- 25/06 . Friction-operated systems [5]
- 25/08 . . adjustable [5]
- 25/10 . Spring-operated systems [5]
- 25/12 . . using coil springs [5]
- 25/14 . . . adjustable [5]
- 25/16 . Hybrid systems [5]
- 25/18 . . Hydroelastic systems [5]
- 25/20 . . Hydropneumatic systems [5]
- 25/22 . Bearing arrangements for the reciprocating gun-mount or barrel movement [5]
- 25/24 . . using ball or roller bearings [5]
- 25/26 . Assembling or dismounting recoil elements or systems [5]
- 27/00 Gun mountings permitting traversing or elevating movement, e.g. gun carriages** [5]
- 27/02 . Control systems for preventing interference between the moving gun and the adjacent structure [5]
- 27/04 . Scatter-fire arrangements, i.e. means for oscillating guns automatically during firing [5]
- 27/06 . Mechanical systems (F41A 27/02, F41A 27/04, F41A 27/30 take precedence) [5]
- 27/08 . . Bearings, e.g. trunnions; Brakes or blocking arrangements [5]
- 27/10 . . . Bearings for supporting a pivoting gun in a wall, e.g. a turret wall [5]
- 27/12 . . . Brakes or locks for blocking traversing or elevating gear in a fixed position [5]
- 27/14 . . . Central-pivot bearings [5]
- 27/16 . . . using raceway bearings, e.g. for supporting the turret [5]
- 27/18 . . for gun turrets (F41A 27/08 takes precedence) [5]
- 27/20 . . . Drives for turret movements [5]
- 27/22 . . Traversing gear (F41A 27/18 takes precedence) [5]
- 27/24 . . Elevating gear (F41A 27/18 takes precedence) [5]
- 27/26 . Fluid-operated systems (F41A 27/02, F41A 27/04, F41A 27/30 take precedence) [5]
- 27/28 . Electrically-operated systems (F41A 27/02, F41A 27/04, F41A 27/30 take precedence) [5]
- 27/30 . Stabilisation or compensation systems, e.g. compensating for barrel weight or wind force [5]
- 29/00 Cleaning or lubricating arrangements** (injecting fluids into barrels or cartridge chambers F41A 13/04) [5]
- 29/02 . Scrapers or cleaning rods [5]
- 29/04 . Lubricating, oiling or greasing means, e.g. operating during use [5]

- 31/00 Testing arrangements** (testing mounts F41A 23/16) [5]
 31/02 . for checking gun barrels [5]
- 33/00 Adaptations for training** (adaptations of barrels for recoil reinforcement F41A 21/26); **Gun simulators** (teaching or practice apparatus for gun-aiming or gun-laying F41G 3/26) [5]
 33/02 . Light- or radiation-emitting guns [5]
 33/04 . Acoustical simulation of gun fire, e.g. by pyrotechnic means [5]
 33/06 . Recoil simulators [5]

- 35/00 Accessories or details not otherwise provided for** [5]
 35/02 . Dust- or weather-protection caps or covers (protecting-caps for trigger guards F41A 17/54) [5]
 35/04 . . Muzzle covers [5]
 35/06 . Adaptation of guns to both right and left hand use [5]
- 99/00 Subject matter not provided for in other groups of this subclass** [8]