Symbol	Typ	Titel
F	**Sektion**	**SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING**
F41	**Untersektion**	**WEAPONS; BLASTING**
F41	**Klasse**	**WEAPONS**
F41A	**Unterklasse**	**FUNCTIONAL FEATURES OR DETAILS COMMON TO BOTH SMALLARMS AND ORDNANCE, e.g. CANNONS; MOUNTINGS FOR SMALLARMS OR ORDNANCE [5]**
F41A 1/00	**Hauptgruppe**	**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]**
F41A 1/02	1-Punkt Untergruppe	. 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]
F41A 1/04	1-Punkt Untergruppe	. Missile propulsion using the combustion of a liquid or gaseous fuel, e.g. hypergolic fuel [5]
F41A 1/06	1-Punkt Untergruppe	. 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]
F41A 1/08	1-Punkt Untergruppe	. Recoilless guns, i.e. guns having propulsion means producing no recoil [5]
F41A 1/10	2-Punkt Untergruppe	. . a counter projectile being used to balance recoil [5]
F41A 3/00	**Hauptgruppe**	**Breech mechanism, e.g. locks [5]**
F41A 3/02	1-Punkt Untergruppe	. Block action, i.e. the main breech opening movement being transverse to the barrel axis [5]
F41A 3/04	2-Punkt Untergruppe	. . with pivoting breech-block [5]
F41A 3/06	3-Punkt Untergruppe	. . . about a horizontal axis transverse to the barrel axis at the rear of the block (F41A 3/08 takes precedence) [5]
F41A 3/08	3-Punkt Untergruppe	. . . carrying a rotably mounted obturating plug of the screw-thread or the interrupted-thread type (F41A 3/30 takes precedence) [5]
F41A 3/10	2-Punkt Untergruppe	. . with sliding breech-block, e.g. vertically [5]
F41A 3/12	1-Punkt Untergruppe	. Bolt action, i.e. the main breech opening movement being parallel to the barrel axis [5]
F41A 3/14	2-Punkt Untergruppe	. . 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]
F41A 3/16	3-Punkt Untergruppe	. . . the locking elements effecting a rotary movement about the barrel axis, e.g. rotating cylinder bolt locks [5]
F41A 3/18	4-Punkt Untergruppe	. . . . hand-operated [5]
F41A 3/20	5-Punkt Untergruppe	. . . . . Straight-pull operated bolt locks, i.e. the operating hand effecting only a straight movement parallel to the barrel axis [5]
F41A 3/22	5-Punkt Untergruppe	. . . . . the locking being effected by rotating the operating handle or lever transversely to the barrel axis [5]
F41A 3/24	6-Punkt Untergruppe	. . . . . the locking elements forming part of the operating handle or lever [5]
F41A 3/26	4-Punkt Untergruppe	. . . . semi-automatically or automatically operated, e.g. having a slidable bolt-carrier and a rotatable bolt [5]
F41A 3/28	5-Punkt Untergruppe	. . . . . 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]
F41A 3/30	4-Punkt Untergruppe	. . . . Interlocking means, e.g. locking lugs, screw threads [5]

Symbol	Typ	Titel
F41A 3/32	3-Punkt Untergruppe	. . . the bolt being rocked about a notional axis transverse to the barrel axis [5]
F41A 3/34	3-Punkt Untergruppe	. . . the bolt additionally effecting a sliding movement transverse to the barrel axis [5]
F41A 3/36	2-Punkt Untergruppe	. . Semi-rigid bolt locks, i.e. having locking elements movably mounted on the bolt or on the barrrel or breech housing [5]
F41A 3/38	3-Punkt Untergruppe	. . . having rocking locking elements, e.g. pivoting levers or vanes [5]
F41A 3/40	4-Punkt Untergruppe	. . . . mounted on the bolt (F41A 3/42 takes precedence) [5]
F41A 3/42	4-Punkt Untergruppe	. . . . hand-operated [5]
F41A 3/44	3-Punkt Untergruppe	. . . having sliding locking elements, e.g. balls, rollers [5]
F41A 3/46	4-Punkt Untergruppe	. . . . mounted on the bolt (F41A 3/48 takes precedence) [5]
F41A 3/48	4-Punkt Untergruppe	. . . . hand-operated [5]
F41A 3/50	3-Punkt Untergruppe	. . . Toggle-joint locks, e.g. crank-operated [5]
F41A 3/52	4-Punkt Untergruppe	. . . . hand-operated [5]
F41A 3/54	2-Punkt Untergruppe	. . Bolt locks of the unlocked type, i.e. being inertia operated [5]
F41A 3/56	3-Punkt Untergruppe	. . . the bolt being provided with an additional slidable mass [5]
F41A 3/58	1-Punkt Untergruppe	. Breakdown breech mechanisms, e.g. for shotguns [5]
F41A 3/60	1-Punkt Untergruppe	. Breech mechanisms for guns having two or more barrels (F41A 3/58 takes precedence; for revolving-cannon guns F41F 1/10) [5]
F41A 3/62	1-Punkt Untergruppe	. using combustion gas pressure for adding to the mechanical locking action, or for delaying breech opening movement [5]
F41A 3/64	1-Punkt Untergruppe	. Mounting of breech-blocks; Accessories for breech-blocks or breech-block mountings [5]
F41A 3/66	2-Punkt Untergruppe	. . Breech housings or frames; Receivers [5]
F41A 3/68	2-Punkt Untergruppe	. . Bolt stops, i.e. means for limiting bolt opening movement [5]
F41A 3/70	2-Punkt Untergruppe	. . Anti-rebound arrangements, i.e. preventing rebound of the bolt out of the firing position [5]
F41A 3/72	2-Punkt Untergruppe	. . Operating handles or levers; Mounting thereof in breech-blocks or bolts [5]
F41A 3/74	2-Punkt Untergruppe	. . Obturating or packing devices for gas leak prevention in breech mechanisms [5]
F41A 3/76	3-Punkt Untergruppe	. . . 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]
F41A 3/78	2-Punkt Untergruppe	. . Bolt buffer or recuperator means [5]
F41A 3/80	3-Punkt Untergruppe	. . . Adjustable spring buffers [5]
F41A 3/82	3-Punkt Untergruppe	. . . Coil spring buffers (F41A 3/80 takes precedence) [5]
F41A 3/84	4-Punkt Untergruppe	. . . . mounted within the gun stock [5]
F41A 3/86	4-Punkt Untergruppe	. . . . mounted under the barrel [5]
F41A 3/88	4-Punkt Untergruppe	. . . . mounted around the barrel [5]
F41A 3/90	3-Punkt Untergruppe	. . . Fluid buffers [5]

Symbol	Typ	Titel
F41A 3/92	4-Punkt Untergruppe	. . . . adjustable [5]
F41A 3/94	4-Punkt Untergruppe	. . . . in combination with spring buffers [5]
F41A 5/00	**Hauptgruppe**	**Mechanisms or systems operated by propellant charge energy for automatically opening the lock [5]**
F41A 5/02	1-Punkt Untergruppe	. recoil-operated [5]
F41A 5/04	2-Punkt Untergruppe	. . the barrel being tilted during recoil [5]
F41A 5/06	2-Punkt Untergruppe	. . the barrel being rotated about its longitudinal axis during recoil [5]
F41A 5/08	2-Punkt Untergruppe	. . having an accelerator lever acting on the breech-block or bolt during the opening movement [5]
F41A 5/10	2-Punkt Untergruppe	. . having a movable inertia weight [5]
F41A 5/12	3-Punkt Untergruppe	. . . mounted in a gun having a fixed barrel [5]
F41A 5/14	2-Punkt Untergruppe	. . Barrel stops, i.e. devices for holding the recoiling barrel in a predetermined position, e.g. the recoil position [5]
F41A 5/16	2-Punkt Untergruppe	. . having a barrel moving forwardly after the firing of a shot [5]
F41A 5/18	1-Punkt Untergruppe	. gas-operated [5]
F41A 5/20	2-Punkt Untergruppe	. . using a gas piston arranged concentrically around the barrel [5]
F41A 5/22	2-Punkt Untergruppe	. . having two or more gas pistons [5]
F41A 5/24	2-Punkt Untergruppe	. . by direct action of gas pressure on bolt or locking elements [5]
F41A 5/26	2-Punkt Untergruppe	. . Arrangements or systems for bleeding the gas from the barrel (F41A 5/20-F41A 5/24 take precedence) [5]
F41A 5/28	3-Punkt Untergruppe	. . . Adjustable systems [5]
F41A 5/30	1-Punkt Untergruppe	. Gas- or recoil-operation, e.g. selection of gas- or recoil-operated systems [5]
F41A 5/32	1-Punkt Untergruppe	. Energy accumulator systems, i.e. systems for opening the breech-block by energy accumulated during barrel or gas piston recoil [5]
F41A 5/34	2-Punkt Untergruppe	. . with spring accumulators [5]
F41A 5/36	2-Punkt Untergruppe	. . with fluid accumulators [5]
F41A 7/00	**Hauptgruppe**	**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]**
F41A 7/02	1-Punkt Untergruppe	. Machine-gun rechargers, e.g. manually operated [5]
F41A 7/04	2-Punkt Untergruppe	. . fluid operated [5]
F41A 7/06	2-Punkt Untergruppe	. . electrically operated [5]
F41A 7/08	1-Punkt Untergruppe	. Drives for externally-powered guns, i.e. drives for moving the breech-block or bolt by an external force during automatic firing [5]
F41A 7/10	2-Punkt Untergruppe	. . using a rotating cylindrical drum having a camming groove [5]
F41A 9/00	**Hauptgruppe**	**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]**
F41A 9/01	1-Punkt Untergruppe	. Feeding of unbelted ammunition [5]

Symbol	Typ	Titel
F41A 9/02	2-Punkt Untergruppe	. . using wheel conveyers, e.g. star-wheel-shaped conveyers [5]
F41A 9/03	2-Punkt Untergruppe	. . using screw or rotary-spiral conveyers [5]
F41A 9/04	2-Punkt Untergruppe	. . using endless-chain belts carrying a plurality of ammunition [5]
F41A 9/05	3-Punkt Untergruppe	. . . in tandem sequence [5]
F41A 9/06	2-Punkt Untergruppe	. . 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]
F41A 9/07	3-Punkt Untergruppe	. . . Reciprocating conveyers, i.e. conveyers pushing a plurality of ammunition during the feeding stroke [5]
F41A 9/09	3-Punkt Untergruppe	. . . Movable ammunition carriers or loading trays, e.g. for feeding from magazines [5]
F41A 9/10	4-Punkt Untergruppe	. . . . pivoting or swinging [5]
F41A 9/11	5-Punkt Untergruppe	. . . . . in a horizontal plane [5]
F41A 9/12	6-Punkt Untergruppe	. . . . . mounted within a smallarm [5]
F41A 9/13	5-Punkt Untergruppe	. . . . . in a vertical plane [5]
F41A 9/14	6-Punkt Untergruppe	. . . . . transverse to the barrel axis [5]
F41A 9/15	7-Punkt Untergruppe	. . . . . mounted within a smallarm [5]
F41A 9/16	6-Punkt Untergruppe	. . . . . parallel to the barrel axis [5]
F41A 9/17	7-Punkt Untergruppe	. . . . . mounted within a smallarm [5]
F41A 9/18	8-Punkt Untergruppe	. . . . . feeding from a magazine under the barrel [5]
F41A 9/19	8-Punkt Untergruppe	. . . . . feeding from a magazine mounted in the stock [5]
F41A 9/20	4-Punkt Untergruppe	. . . . sliding, e.g. reciprocating [5]
F41A 9/21	5-Punkt Untergruppe	. . . . . in a vertical direction (F41A 9/23 takes precedence) [5]
F41A 9/22	5-Punkt Untergruppe	. . . . . in a horizontal direction (F41A 9/23 takes precedence) [5]
F41A 9/23	5-Punkt Untergruppe	. . . . . mounted within a smallarm [5]
F41A 9/24	2-Punkt Untergruppe	. . using a movable magazine or clip as feeding element [5]
F41A 9/25	3-Punkt Untergruppe	. . . using a sliding clip [5]
F41A 9/26	3-Punkt Untergruppe	. . . using a revolving drum magazine [5]
F41A 9/27	4-Punkt Untergruppe	. . . . in revolver-type guns [5]
F41A 9/28	5-Punkt Untergruppe	. . . . . of smallarm type (in revolvers F41C 3/14) [5]
F41A 9/29	1-Punkt Untergruppe	. Feeding of belted ammunition [5]
F41A 9/30	2-Punkt Untergruppe	. . Sprocket-type belt transporters [5]
F41A 9/31	3-Punkt Untergruppe	. . . with cartridge stripping means [5]
F41A 9/32	2-Punkt Untergruppe	. . Reciprocating-slide-type belt transporters [5]
F41A 9/33	3-Punkt Untergruppe	. . . with cartridge stripping means [5]

Symbol	Typ	Titel
F41A 9/34	2-Punkt Untergruppe	. . from magazines (magazines for belted ammunition per seF41A 9/79) [5]
F41A 9/35	1-Punkt Untergruppe	. Feeding multibarrel guns [5]
F41A 9/36	2-Punkt Untergruppe	. . Feed mechanisms for revolving-cannon guns [5]
F41A 9/37	1-Punkt Untergruppe	. Feeding two or more kinds of ammunition to the same gun; Feeding from two sides [5]
F41A 9/38	1-Punkt Untergruppe	. Loading arrangements, i.e. for bringing the ammunition into the firing position [5]
F41A 9/39	2-Punkt Untergruppe	. . Ramming arrangements [5]
F41A 9/40	3-Punkt Untergruppe	. . . the breech-block itself being the rammer [5]
F41A 9/41	4-Punkt Untergruppe	. . . . pushing unbelted ammunition from a box magazine on the gun frame into the cartridge chamber [5]
F41A 9/42	3-Punkt Untergruppe	. . . Rammers separate from breech-block [5]
F41A 9/43	4-Punkt Untergruppe	. . . . Chain rammers [5]
F41A 9/44	4-Punkt Untergruppe	. . . . Fluid-operated piston rammers [5]
F41A 9/45	2-Punkt Untergruppe	. . the cartridge chamber or the barrel as a whole being tiltable between a loading and a firing position [5]
F41A 9/46	2-Punkt Untergruppe	. . the cartridge chamber being formed by two complementary elements, movable one relative to the other for loading [5]
F41A 9/47	2-Punkt Untergruppe	. . using forwardly-sliding barrels or barrel parts for loading [5]
F41A 9/48	2-Punkt Untergruppe	. . by gravitational force [5]
F41A 9/49	1-Punkt Untergruppe	. Internally-powered drives, i.e. operated by propellant charge energy, e.g. couplings, clutches, energy accumulators [5]
F41A 9/50	1-Punkt Untergruppe	. External power or control systems [5]
F41A 9/51	2-Punkt Untergruppe	. . Boosters, i.e. externally-powered motors [5]
F41A 9/52	1-Punkt Untergruppe	. Arrangements for changing from automatic or magazine-loading to hand-loading [5]
F41A 9/53	1-Punkt Untergruppe	. Charged-condition indicators, i.e. indicating the presence of a cartridge in the cartridge chamber [5]
F41A 9/54	1-Punkt Untergruppe	. Cartridge guides, stops or positioners, e.g. for cartridge extraction [5]
F41A 9/55	2-Punkt Untergruppe	. . Fixed guiding means, mounted on, or near, the cartridge chamber [5]
F41A 9/56	2-Punkt Untergruppe	. . Movable guiding means [5]
F41A 9/57	3-Punkt Untergruppe	. . . Flexible chutes, e.g. for guiding belted ammunition from the magazine to the gun [5]
F41A 9/58	2-Punkt Untergruppe	. . Cartridge stops; Cartridge positioners [5]
F41A 9/59	1-Punkt Untergruppe	. Ejectors for clips or magazines, e.g. when empty [5]
F41A 9/60	1-Punkt Untergruppe	. Empty-cartridge-case or belt-link collectors or catchers (F41A 9/81 takes precedence) [5]
F41A 9/61	1-Punkt Untergruppe	. Magazines [5]
F41A 9/62	2-Punkt Untergruppe	. . having means for indicating the number of cartridges left in the magazine, e.g. last-round indicators (last-round safeties F41A 17/40) [5]
F41A 9/63	2-Punkt Untergruppe	. . specially adapted for releasable connection with other magazines [5]

Symbol	Typ	Titel
F41A 9/64	2-Punkt Untergruppe	. . for unbelted ammunition [5]
F41A 9/65	3-Punkt Untergruppe	. . . Box magazines having a cartridge follower [5]
F41A 9/66	4-Punkt Untergruppe	. . . . Arrangements thereon for charging, i.e. reloading (apparatus or tools for reloading magazines F41A 9/83) [5]
F41A 9/67	5-Punkt Untergruppe	. . . . . having means for depressing the cartridge follower, or for locking it in a depressed position [5]
F41A 9/68	4-Punkt Untergruppe	. . . . Plural magazines, e.g. tandem magazines [5]
F41A 9/69	4-Punkt Untergruppe	. . . . characterised by multiple-row or zigzag arrangement of cartridges [5]
F41A 9/70	4-Punkt Untergruppe	. . . . Arrangements thereon for discharging, e.g. cartridge followers or discharge throats [5]
F41A 9/71	4-Punkt Untergruppe	. . . . Arrangements thereon for varying capacity; Adapters or inserts for changing cartridge size or type [5]
F41A 9/72	3-Punkt Untergruppe	. . . Tubular magazines, i.e. magazines containing the ammunition in lengthwise tandem sequence [5]
F41A 9/73	3-Punkt Untergruppe	. . . Drum magazines [5]
F41A 9/74	4-Punkt Untergruppe	. . . . with radially disposed cartridges [5]
F41A 9/75	4-Punkt Untergruppe	. . . . having a spiral cartridge channel [5]
F41A 9/76	3-Punkt Untergruppe	. . . Magazines having an endless-chain conveyer [5]
F41A 9/77	3-Punkt Untergruppe	. . . Magazines having a screw conveyer [5]
F41A 9/78	3-Punkt Untergruppe	. . . Magazines having a reciprocating conveyer [5]
F41A 9/79	2-Punkt Untergruppe	. . for belted ammunition [5]
F41A 9/80	3-Punkt Untergruppe	. . . having provision for quick-coupling of the belts of adjacent magazines [5]
F41A 9/81	3-Punkt Untergruppe	. . . having provision for collecting belt links or empty cartridge cases [5]
F41A 9/82	1-Punkt Untergruppe	. Reloading of magazines [5]
F41A 9/83	2-Punkt Untergruppe	. . Apparatus or tools for reloading magazines with unbelted ammunition, e.g. cartridge clips [5]
F41A 9/84	3-Punkt Untergruppe	. . . Clips [5]
F41A 9/85	4-Punkt Untergruppe	. . . . for reloading revolver-type magazines [5]
F41A 9/86	2-Punkt Untergruppe	. . Feeding belted ammunition into magazines [5]
F41A 9/87	1-Punkt Untergruppe	. Ammunition handling dollies or transfer carts (F41A 9/86 takes precedence) [5]
F41A 11/00	**Hauptgruppe**	**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]**
F41A 11/02	1-Punkt Untergruppe	. Modular concepts, e.g. weapon-family concepts [5]
F41A 11/04	1-Punkt Untergruppe	. 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]
F41A 11/06	2-Punkt Untergruppe	. . Telescopic guns [5]
F41A 13/00	**Hauptgruppe**	**Cooling or heating systems (barrels or gun tubes with fins or ribs F41A 21/00); Blowing-through of gun barrels; Ventilating systems [5]**
F41A 13/02	1-Punkt Untergruppe	. Heating systems [5]
F41A 13/04	1-Punkt Untergruppe	. Injecting fluids into barrels or cartridge chambers (F41A 13/08 takes precedence) [5]

Symbol	Typ	Titel
F41A 13/06	1-Punkt Untergruppe	. Evacuating combustion gas from barrels (F41A 13/10 takes precedence) [5]
F41A 13/08	2-Punkt Untergruppe	. . 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]
F41A 13/10	1-Punkt Untergruppe	. Blowers or turbines for evacuating or cooling guns, e.g. driven by combustion gas pressure or recoil [5]
F41A 13/12	1-Punkt Untergruppe	. Systems for cooling the outer surface of the barrel (F41A 13/10 takes precedence) [5]
F41A 15/00	**Hauptgruppe**	**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]**
F41A 15/02	1-Punkt Untergruppe	. for revolver-type guns, e.g. revolvers [5]
F41A 15/04	1-Punkt Untergruppe	. specially adapted for cartridge cases being deformed when fired, e.g. of plastics [5]
F41A 15/06	1-Punkt Untergruppe	. for breakdown guns [5]
F41A 15/08	1-Punkt Untergruppe	. for block-action guns [5]
F41A 15/10	2-Punkt Untergruppe	. . of sliding-block type [5]
F41A 15/12	1-Punkt Untergruppe	. for bolt-action guns [5]
F41A 15/14	2-Punkt Untergruppe	. . the ejector being mounted on, or within, the bolt [5]
F41A 15/16	2-Punkt Untergruppe	. . the ejector being mounted on the breech housing or frame [5]
F41A 15/18	1-Punkt Untergruppe	. for guns with forwardly slidable barrels [5]
F41A 15/20	1-Punkt Untergruppe	. specially adapted for caseless-ammunition duds [5]
F41A 15/22	1-Punkt Untergruppe	. Tools for extracting cartridges [5]
F41A 17/00	**Hauptgruppe**	**Safety arrangements, e.g. safeties [5]**
F41A 17/02	1-Punkt Untergruppe	. Key-operated safeties [5]
F41A 17/04	1-Punkt Untergruppe	. Safeties of the combination-lock type (F41A 17/02 takes precedence) [5]
F41A 17/06	1-Punkt Untergruppe	. Electric or electromechanical safeties (F41A 17/04, F41A 17/08 take precedence) [5]
F41A 17/08	1-Punkt Untergruppe	. for inhibiting firing in a specified direction, e.g. at a friendly person or at a protected area (F41A 27/02 takes precedence) [5]
F41A 17/10	2-Punkt Untergruppe	. . Firing mechanisms with elevation stop [5]
F41A 17/12	2-Punkt Untergruppe	. . Firing mechanisms with anti-canting safety [5]
F41A 17/14	1-Punkt Untergruppe	. Double-loading prevention [5]
F41A 17/16	1-Punkt Untergruppe	. Cook-off prevention, i.e. prevention of spontaneous firing of a cartridge by chamber wall heat [5]
F41A 17/18	1-Punkt Untergruppe	. Hang-fire prevention [5]
F41A 17/20	1-Punkt Untergruppe	. 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]
F41A 17/22	2-Punkt Untergruppe	. . acting on the trigger [5]
F41A 17/24	2-Punkt Untergruppe	. . acting on the firing pin [5]
F41A 17/26	2-Punkt Untergruppe	. . acting on the hammer [5]

Symbol	Typ	Titel
F41A 17/28	2-Punkt Untergruppe	. . acting on the sear [5]
F41A 17/30	1-Punkt Untergruppe	. 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]
F41A 17/32	2-Punkt Untergruppe	. . the other element being the breech-block or bolt [5]
F41A 17/34	1-Punkt Untergruppe	. Magazine safeties [5]
F41A 17/36	2-Punkt Untergruppe	. . locking the gun in a safety condition when the magazine is empty or removed [5]
F41A 17/38	2-Punkt Untergruppe	. . locking the magazine in the gun [5]
F41A 17/40	1-Punkt Untergruppe	. Last-round safeties (F41A 17/34 takes precedence) [5]
F41A 17/42	1-Punkt Untergruppe	. Safeties for locking the breech-block or bolt in a safety position (F41A 17/32, F41A 17/36, F41A 17/40 take precedence) [5]
F41A 17/44	1-Punkt Untergruppe	. Safety plugs, e.g. for plugging-up cartridge chambers [5]
F41A 17/46	1-Punkt Untergruppe	. Trigger safeties, i.e. means for preventing trigger movement (F41A 17/02-F41A 17/40 take precedence) [5]
F41A 17/48	2-Punkt Untergruppe	. . Automatically operated trigger safeties, i.e. operated by breech opening or closing movement [5]
F41A 17/50	3-Punkt Untergruppe	. . . by breakdown action [5]
F41A 17/52	2-Punkt Untergruppe	. . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
F41A 17/54	2-Punkt Untergruppe	. . Protecting-caps for trigger guards; Trigger locking pieces mounted on, or within, the trigger guard [5]
F41A 17/56	1-Punkt Untergruppe	. 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]
F41A 17/58	2-Punkt Untergruppe	. . automatically operated, i.e. operated by breech opening or closing movement [5]
F41A 17/60	3-Punkt Untergruppe	. . . by breakdown action [5]
F41A 17/62	2-Punkt Untergruppe	. . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
F41A 17/64	1-Punkt Untergruppe	. Firing-pin safeties, i.e. means for preventing movement of slidably-mounted strikers (F41A 17/02-F41A 17/40 take precedence) [5]
F41A 17/66	2-Punkt Untergruppe	. . automatically operated, i.e. operated by breech opening or closing movement [5]
F41A 17/68	3-Punkt Untergruppe	. . . by breakdown action [5]
F41A 17/70	2-Punkt Untergruppe	. . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
F41A 17/72	2-Punkt Untergruppe	. . trigger-operated, i.e. the movement of the trigger bringing a firing-pin safety into inoperative position during the firing [5]
F41A 17/74	1-Punkt Untergruppe	. 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]
F41A 17/76	2-Punkt Untergruppe	. . automatically operated, i.e. operated by breech opening or closing movement [5]
F41A 17/78	3-Punkt Untergruppe	. . . by breakdown action [5]
F41A 17/80	2-Punkt Untergruppe	. . Thumb-operated sliding safeties mounted on the upside of the stock, e.g. for shotguns [5]
F41A 17/82	2-Punkt Untergruppe	. . trigger-operated, i.e. the movement of the trigger bringing a hammer safety into inoperative position during firing [5]
F41A 19/00	**Hauptgruppe**	**Firing or trigger mechanisms; Cocking mechanisms [5]**

Symbol	Typ	Titel
F41A 19/01	1-Punkt Untergruppe	. Counting means indicating the number of shots fired [5]
F41A 19/02	2-Punkt Untergruppe	. . Burst limiters (F41A 19/67 takes precedence) [5]
F41A 19/03	1-Punkt Untergruppe	. Shot-velocity control (F41A 3/78, F41A 5/28, F41A 19/05, F41A 19/66 take precedence) [5]
F41A 19/04	2-Punkt Untergruppe	. . by regulating the time of release of the firing pin or hammer [5]
F41A 19/05	1-Punkt Untergruppe	. Synchronising for firing through the propeller of an aircraft [5]
F41A 19/06	1-Punkt Untergruppe	. Mechanical firing mechanisms (F41A 19/01-F41A 19/05, F41A 19/59 take precedence) [5]
F41A 19/07	2-Punkt Untergruppe	. . press-button actuated, e.g. with thumb rest [5]
F41A 19/08	2-Punkt Untergruppe	. . remote actuated; lanyard actuated [5]
F41A 19/09	2-Punkt Untergruppe	. . Auxiliary trigger devices (F41A 19/08 takes precedence) [5]
F41A 19/10	2-Punkt Untergruppe	. . Triggers; Trigger mountings [5]
F41A 19/11	2-Punkt Untergruppe	. . Trigger guards; Trigger-guard mountings (F41A 19/15 takes precedence) [5]
F41A 19/12	2-Punkt Untergruppe	. . Sears; Sear mountings [5]
F41A 19/13	2-Punkt Untergruppe	. . Percussion or firing pins, i.e. fixed or slidably- mounted striker elements; Mountings therefor [5]
F41A 19/14	2-Punkt Untergruppe	. . Hammers, i.e. pivotably-mounted striker elements; Hammer mountings [5]
F41A 19/15	2-Punkt Untergruppe	. . Modular firing mechanism units [5]
F41A 19/16	2-Punkt Untergruppe	. . Adjustable firing mechanisms; Trigger mechanisms with adjustable trigger pull (F41A 19/17 takes precedence) [5]
F41A 19/17	2-Punkt Untergruppe	. . Hair-trigger mechanisms [5]
F41A 19/18	2-Punkt Untergruppe	. . for multibarrel guns (F41A 19/68 takes precedence) [5]
F41A 19/19	3-Punkt Untergruppe	. . . with single-trigger firing possibility [5]
F41A 19/20	4-Punkt Untergruppe	. . . . Double-trigger arrangements having the possibility of single-trigger actuation [5]
F41A 19/21	4-Punkt Untergruppe	. . . . having only one trigger [5]
F41A 19/22	5-Punkt Untergruppe	. . . . . and only one striker element [5]
F41A 19/23	6-Punkt Untergruppe	. . . . . rotatable about an axis parallel to the barrel axis for firing subsequent barrels [5]
F41A 19/24	2-Punkt Untergruppe	. . Release-trigger mechanisms, i.e. the striker element being released during the return movement of the trigger subsequent to trigger pull [5]
F41A 19/25	2-Punkt Untergruppe	. . having only slidably-mounted striker elements, i.e. percussion or firing pins [5]
F41A 19/26	3-Punkt Untergruppe	. . . the percussion or firing pin and the breech-block or bolt forming one piece [5]
F41A 19/27	3-Punkt Untergruppe	. . . the percussion or firing pin being movable relative to the breech-block [5]
F41A 19/28	4-Punkt Untergruppe	. . . . propelled by a cam or lever when the breech-block or bolt arrives at a closing position [5]
F41A 19/29	4-Punkt Untergruppe	. . . . propelled by a spring under tension [5]
F41A 19/30	5-Punkt Untergruppe	. . . . . in bolt-action guns [5]
F41A 19/31	6-Punkt Untergruppe	. . . . . Sear arrangements therefor (F41A 19/33 takes precedence) [5]

Symbol	Typ	Titel
F41A 19/32	7-Punkt Untergruppe	. . . . . for catching the percussion or firing pin after each shot, i.e. in single-shot or semi-automatic firing mode [5]
F41A 19/33	6-Punkt Untergruppe	. . . . . Arrangements for the selection of automatic or semi-automatic fire [5]
F41A 19/34	6-Punkt Untergruppe	. . . . . Cocking mechanisms [5]
F41A 19/35	7-Punkt Untergruppe	. . . . . Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
F41A 19/36	5-Punkt Untergruppe	. . . . . in block-action guns [5]
F41A 19/37	6-Punkt Untergruppe	. . . . . Cocking mechanisms [5]
F41A 19/38	7-Punkt Untergruppe	. . . . . Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
F41A 19/39	5-Punkt Untergruppe	. . . . . Cocking mechanisms for other types of guns, e.g. fixed breech-block types, forwardly-slidable barrel types [5]
F41A 19/40	6-Punkt Untergruppe	. . . . . Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
F41A 19/41	6-Punkt Untergruppe	. . . . . for breakdown guns [5]
F41A 19/42	2-Punkt Untergruppe	. . having at least one hammer [5]
F41A 19/43	3-Punkt Untergruppe	. . . in bolt-action guns [5]
F41A 19/44	4-Punkt Untergruppe	. . . . Sear arrangements therefor (F41A 19/46 takes precedence) [5]
F41A 19/45	5-Punkt Untergruppe	. . . . . for catching the hammer after each shot, i.e. in single-shot or semi- automatic firing mode [5]
F41A 19/46	4-Punkt Untergruppe	. . . . Arrangements for the selection of automatic or semi-automatic fire [5]
F41A 19/47	4-Punkt Untergruppe	. . . . Cocking mechanisms [5]
F41A 19/48	5-Punkt Untergruppe	. . . . . Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
F41A 19/49	3-Punkt Untergruppe	. . . in block-action guns [5]
F41A 19/50	4-Punkt Untergruppe	. . . . Cocking mechanisms [5]
F41A 19/51	5-Punkt Untergruppe	. . . . . Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
F41A 19/52	3-Punkt Untergruppe	. . . Cocking mechanisms for other types of guns, e.g. fixed breech-block types, revolvers [5]
F41A 19/53	4-Punkt Untergruppe	. . . . Double-action mechanisms, i.e. the cocking being effected during the first part of the trigger pull movement [5]
F41A 19/54	4-Punkt Untergruppe	. . . . for breakdown guns [5]
F41A 19/55	1-Punkt Untergruppe	. Fluid-operated firing mechanisms [5]
F41A 19/56	2-Punkt Untergruppe	. . Ignition of the propellant charge by contact with air heated by adiabatic compression [5]
F41A 19/57	1-Punkt Untergruppe	. Firing mechanisms operating with primer cartridge [5]
F41A 19/58	1-Punkt Untergruppe	. Electric firing mechanisms (F41A 17/10, F41A 17/12 take precedence) [5]
F41A 19/59	2-Punkt Untergruppe	. . Electromechanical firing mechanisms, i.e. the mechanical striker element being propelled or released by electric means [5]

Symbol	Typ	Titel
F41A 19/60	2-Punkt Untergruppe	. . characterised by the means for generating electric energy [5]
F41A 19/61	3-Punkt Untergruppe	. . . Inductive generators [5]
F41A 19/62	3-Punkt Untergruppe	. . . Piezo-electric generators [5]
F41A 19/63	2-Punkt Untergruppe	. . having means for contactless transmission of electric energy, e.g. by induction, by sparking gap [5]
F41A 19/64	2-Punkt Untergruppe	. . for automatic or burst-firing mode [5]
F41A 19/65	3-Punkt Untergruppe	. . . for giving ripple fire, i.e. using electric sequencer switches for timed multiple-charge launching, e.g. for rocket launchers [5]
F41A 19/66	3-Punkt Untergruppe	. . . Electronic shot-velocity control (F41A 19/65 takes precedence) [5]
F41A 19/67	3-Punkt Untergruppe	. . . Burst limiters [5]
F41A 19/68	2-Punkt Untergruppe	. . for multibarrel guns (F41A 19/65 takes precedence) [5]
F41A 19/69	2-Punkt Untergruppe	. . Electric contacts or switches peculiar thereto (F41A 19/65 takes precedence) [5]
F41A 19/70	3-Punkt Untergruppe	. . . Electric firing pins; Mountings therefor [5]
F41A 21/00	**Hauptgruppe**	**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]**
F41A 21/02	1-Punkt Untergruppe	. Composite barrels, i.e. barrels having multiple layers, e.g. of different materials [5]
F41A 21/04	2-Punkt Untergruppe	. . Barrel liners [5]
F41A 21/06	1-Punkt Untergruppe	. Plural barrels [5]
F41A 21/08	2-Punkt Untergruppe	. . Barrel junctions [5]
F41A 21/10	1-Punkt Untergruppe	. Insert barrels, i.e. barrels for firing reduced calibre ammunition and being mounted within the normal barrels [5]
F41A 21/12	1-Punkt Untergruppe	. Cartridge chambers; Chamber liners (F41A 3/74, F41A 9/46, F41A 21/04 take precedence) [5]
F41A 21/14	2-Punkt Untergruppe	. . Arrangement of cartridge chambers lateral to the barrel axis [5]
F41A 21/16	1-Punkt Untergruppe	. Barrels or gun tubes characterised by the shape of the bore [5]
F41A 21/18	2-Punkt Untergruppe	. . Grooves; Rifling [5]
F41A 21/20	1-Punkt Untergruppe	. Barrels or gun tubes characterised by the material (F41A 21/02 takes precedence) [5]
F41A 21/22	1-Punkt Untergruppe	. Barrels which have undergone surface treatment, e.g. phosphating [5]
F41A 21/24	1-Punkt Untergruppe	. Barrels or gun tubes with fins or ribs, e.g. for cooling [5]
F41A 21/26	1-Punkt Untergruppe	. specially adapted for recoil reinforcement, e.g. for training purposes [5]
F41A 21/28	1-Punkt Untergruppe	. Gas-expansion chambers; Barrels provided with gas-relieving ports (F41A 1/06, F41A 13/08 take precedence) [5]
F41A 21/30	1-Punkt Untergruppe	. Silencers [5]
F41A 21/32	1-Punkt Untergruppe	. Muzzle attachments or glands (F41A 21/26, F41A 21/30, F41A 21/46 take precedence) [5]
F41A 21/34	2-Punkt Untergruppe	. . Flash dampers [5]
F41A 21/36	2-Punkt Untergruppe	. . for recoil reduction (recoil reduction arrangements in general F41A 25/00) [5]

Symbol	Typ	Titel
F41A 21/38	3-Punkt Untergruppe	. . . adjustable [5]
F41A 21/40	2-Punkt Untergruppe	. . Chokes for shotguns [5]
F41A 21/42	3-Punkt Untergruppe	. . . adjustable [5]
F41A 21/44	1-Punkt Untergruppe	. Insulation jackets; Protective jackets [5]
F41A 21/46	1-Punkt Untergruppe	. Barrels having means for separating sabots from projectiles [5]
F41A 21/48	1-Punkt Untergruppe	. Barrel mounting means, e.g. releasable mountings for replaceable barrels [5]
F41A 23/00	**Hauptgruppe**	**Gun mountings, e.g. on vehicles; Disposition of guns on vehicles (F41A 25/00, F41A 27/00 take precedence) [5]**
F41A 23/02	1-Punkt Untergruppe	. Mountings without wheels [5]
F41A 23/04	2-Punkt Untergruppe	. . Unipods [5]
F41A 23/06	3-Punkt Untergruppe	. . . adjustable [5]
F41A 23/08	2-Punkt Untergruppe	. . Bipods [5]
F41A 23/10	3-Punkt Untergruppe	. . . adjustable [5]
F41A 23/12	2-Punkt Untergruppe	. . Tripods [5]
F41A 23/14	3-Punkt Untergruppe	. . . adjustable [5]
F41A 23/16	2-Punkt Untergruppe	. . Testing mounts [5]
F41A 23/18	2-Punkt Untergruppe	. . Rests for supporting smallarms in non-shooting position (racks for storage A47B 81/00; racks in vehicles B60R 11/00) [5]
F41A 23/20	1-Punkt Untergruppe	. for disappearing guns [5]
F41A 23/22	2-Punkt Untergruppe	. . on board of submarines [5]
F41A 23/24	1-Punkt Untergruppe	. Turret gun mountings (feeding, loading or guiding ammunition F41A 9/00; mechanical elevating or traversing systems for turret guns F41A 27/18) [5]
F41A 23/26	1-Punkt Untergruppe	. Mountings for transport only; Loading or unloading arrangements for guns for use with carrier vehicles (F41A 23/50 takes precedence) [5]
F41A 23/28	1-Punkt Untergruppe	. Wheeled-gun mountings; Endless-track gun mountings [5]
F41A 23/30	2-Punkt Untergruppe	. . the wheels being liftable from the ground for firing [5]
F41A 23/32	2-Punkt Untergruppe	. . with split trails (F41A 23/30, F41A 23/46 take precedence) [5]
F41A 23/34	1-Punkt Untergruppe	. on wheeled or endless-track vehicles [5]
F41A 23/36	2-Punkt Untergruppe	. . on trailers (F41A 23/42 takes precedence) [5]
F41A 23/38	2-Punkt Untergruppe	. . on motorcycles [5]
F41A 23/40	2-Punkt Untergruppe	. . on rail vehicles [5]
F41A 23/42	2-Punkt Untergruppe	. . for rocket throwers [5]
F41A 23/44	1-Punkt Untergruppe	. on sledges [5]
F41A 23/46	1-Punkt Untergruppe	. Trail spades [5]

Symbol	Typ	Titel
F41A 23/48	2-Punkt Untergruppe	. . elastic [5]
F41A 23/50	1-Punkt Untergruppe	. Travelling locks; Brakes for holding the gun platform in a fixed position during transport [5]
F41A 23/52	1-Punkt Untergruppe	. Base plates for gun mountings [5]
F41A 23/54	2-Punkt Untergruppe	. . for mortars [5]
F41A 23/56	1-Punkt Untergruppe	. Arrangements for adjusting the gun platform in the vertical or horizontal position (F41A 17/10, F41A 17/12 take precedence) [5]
F41A 23/58	2-Punkt Untergruppe	. . Hydraulic jacks [5]
F41A 23/60	2-Punkt Untergruppe	. . Screw-operated jacks [5]
F41A 25/00	**Hauptgruppe**	**Gun mountings permitting recoil or return to battery, e.g. gun cradles; Barrel buffers or brakes (recoilless guns F41A 1/08) [5]**
F41A 25/02	1-Punkt Untergruppe	. Fluid-operated systems [5]
F41A 25/04	2-Punkt Untergruppe	. . adjustable [5]
F41A 25/06	1-Punkt Untergruppe	. Friction-operated systems [5]
F41A 25/08	2-Punkt Untergruppe	. . adjustable [5]
F41A 25/10	1-Punkt Untergruppe	. Spring-operated systems [5]
F41A 25/12	2-Punkt Untergruppe	. . using coil springs [5]
F41A 25/14	3-Punkt Untergruppe	. . . adjustable [5]
F41A 25/16	1-Punkt Untergruppe	. Hybrid systems [5]
F41A 25/18	2-Punkt Untergruppe	. . Hydroelastic systems [5]
F41A 25/20	2-Punkt Untergruppe	. . Hydropneumatic systems [5]
F41A 25/22	1-Punkt Untergruppe	. Bearing arrangements for the reciprocating gun-mount or barrel movement [5]
F41A 25/24	2-Punkt Untergruppe	. . using ball or roller bearings [5]
F41A 25/26	1-Punkt Untergruppe	. Assembling or dismounting recoil elements or systems [5]
F41A 27/00	**Hauptgruppe**	**Gun mountings permitting traversing or elevating movement, e.g. gun carriages [5]**
F41A 27/02	1-Punkt Untergruppe	. Control systems for preventing interference between the moving gun and the adjacent structure [5]
F41A 27/04	1-Punkt Untergruppe	. Scatter-fire arrangements, i.e. means for oscillating guns automatically during firing [5]
F41A 27/06	1-Punkt Untergruppe	. Mechanical systems (F41A 27/02, F41A 27/04, F41A 27/30 take precedence) [5]
F41A 27/08	2-Punkt Untergruppe	. . Bearings, e.g. trunnions; Brakes or blocking arrangements [5]
F41A 27/10	3-Punkt Untergruppe	. . . Bearings for supporting a pivoting gun in a wall, e.g. a turret wall [5]
F41A 27/12	3-Punkt Untergruppe	. . . Brakes or locks for blocking traversing or elevating gear in a fixed position [5]
F41A 27/14	3-Punkt Untergruppe	. . . Central-pivot bearings [5]
F41A 27/16	3-Punkt Untergruppe	. . . using raceway bearings, e.g. for supporting the turret [5]
F41A 27/18	2-Punkt Untergruppe	. . for gun turrets (F41A 27/08 takes precedence) [5]
F41A 27/20	3-Punkt Untergruppe	. . . Drives for turret movements [5]

Symbol	Typ	Titel
F41A 27/22	2-Punkt Untergruppe	. . Traversing gear (F41A 27/18 takes precedence) [5]
F41A 27/24	2-Punkt Untergruppe	. . Elevating gear (F41A 27/18 takes precedence) [5]
F41A 27/26	1-Punkt Untergruppe	. Fluid-operated systems (F41A 27/02, F41A 27/04, F41A 27/30 take precedence) [5]
F41A 27/28	1-Punkt Untergruppe	. Electrically-operated systems (F41A 27/02, F41A 27/04, F41A 27/30 take precedence) [5]
F41A 27/30	1-Punkt Untergruppe	. Stabilisation or compensation systems, e.g. compensating for barrel weight or wind force [5]
F41A 29/00	**Hauptgruppe**	**Cleaning or lubricating arrangements (injecting fluids into barrels or cartridge chambers F41A 13/04) [5]**
F41A 29/02	1-Punkt Untergruppe	. Scrapers or cleaning rods [5]
F41A 29/04	1-Punkt Untergruppe	. Lubricating, oiling or greasing means, e.g. operating during use [5]
F41A 31/00	**Hauptgruppe**	**Testing arrangements (testing mounts F41A 23/16) [5]**
F41A 31/02	1-Punkt Untergruppe	. for checking gun barrels [5]
F41A 33/00	**Hauptgruppe**	**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]**
F41A 33/02	1-Punkt Untergruppe	. Light- or radiation-emitting guns [5]
F41A 33/04	1-Punkt Untergruppe	. Acoustical simulation of gun fire, e.g. by pyrotechnic means [5]
F41A 33/06	1-Punkt Untergruppe	. Recoil simulators [5]
F41A 35/00	**Hauptgruppe**	**Accessories or details not otherwise provided for [5]**
F41A 35/02	1-Punkt Untergruppe	. Dust- or weather-protection caps or covers (protecting-caps for trigger guards F41A 17/54) [5]
F41A 35/04	2-Punkt Untergruppe	. . Muzzle covers [5]
F41A 35/06	1-Punkt Untergruppe	. Adaptation of guns to both right and left hand use [5]
F41A 99/00	***Hauptgruppe***	***Subject matter not provided for in other groups of this subclass [2006.01]***