

VIRGINIA GUN COLLECTORS ASSOCIATION

GLOSSARY OF FIREARMS COLLECTING TERMS

Marc Gorelick
VGCA

A

ACCOUTREMENT - Equipment carried by soldiers on the outside of their uniform, such as belts, ammunition pouches, bayonet scabbards, or canteens, but not weapons.

ACCURIZE or **ACCURIZING** - The process of altering a firearm to improve its accuracy.

ACTION - The mechanism and method that manipulates, loads, locks, extracts and ejects cartridges and/or seals the breech. Actions are broadly classified as either manual or self-loading and are generally categorized by the type of mechanism used. Manual actions are single shot or repeater. Single shot actions include dropping block (tilting or falling) rolling block, break, hinged (such as a trapdoor), and bolt. Repeater actions include revolver, bolt (turn-bolt or strait-pull), lever, pump and slide. Self-loading actions are semiautomatic or automatic.

ADJUSTABLE SIGHT - A firearm sight that can be adjusted for windage and/or elevation so that the shooter's point of aim and the projectile's point of impact coincide at the target. Only the rear sight is adjustable on a majority of firearms, but front sights may also be adjustable.

AIR CHAMBER (See **LIGHTENING GROOVE**) – A 19th century U.S. Ordnance Department the term for a groove cut out of the inside of a rifle's wooden forend or a carbine's forearm in order to make the firearm lighter.

AIR GUN – A long arm or handgun that uses compressed air to fire a projectile. The earliest known air guns date to the 16th century. The compressed air was kept in a chamber in the buttstock or in a round metal ball attached to the underside of the barrel near the breech. Although most were used for target shooting, training or hunting small game, at least one type, in .45 caliber with an air chamber in the buttstock was adopted by the Austrian Army around 1787-1788. It was capable of firing 30 shots a minute and Napoleon Bonaparte declared them illegal after he defeated the Austrians. The Lewis and Clark

Expedition of 1804-1806 had an air gun. Air Guns are an interesting area of gun collecting.

AK STYLE ACTION - A gas operated rifle action with a long-stroke gas piston, a tilting breechblock locking design, and a milled sheet metal receiver. No gas regulator is used; the robust design, machining, tolerances, ease of maintenance, and component durability assure reliable function in all circumstances. The AK style action is used in numerous firearms, including the Russian AKM and AK-74, the Finnish Valmet M-60 to 90 series, and the Israeli Galil.

ALARM GUN – A firearms curiosa, it is a device, often based on a small pistol action that fired a charge to sound an alert in case unwanted intruders tried to enter a building or open a piece of furniture, such as a trunk or desk. They became popular in America when the percussion cap became widely used and the crime rate started to rise. Some fire metallic cartridges and some are combination animal trap and alarm guns. There are many ingenious designs with about 300 U.S. patents being issued. One alarm gun was designed to be put into a coffin and buried with the body in order to discourage grave-robbers!

AMERICAN LONG RIFLE (Also see **PENNSYLVANIA RIFLE**) – The generic non-regional name for a type of long rifle that was developed by German gunsmiths in Pennsylvania from the German Jaeger rifle. Production continued to center around Pennsylvania, although gunsmiths in other states (including Virginia, Maryland, Tennessee, New York and the Carolinas) produced similar rifles. In its purest form it was a flintlock (later ones were often percussion) muzzle loader that had had a long barrel, usually fully octagon but sometimes half round and half octagon, of about .45 caliber. It often had a maple stock and was decorated with brass furniture. Ornate brass patchboxes are a salient feature, especially after 1800, although early examples had patchboxes with sliding wooden covers. Many were heavily decorated, with brass or silver inlays.

AMMUNITION – Originally referred to the separate propellant (gunpowder) and projectile. Since the design of the self-contained metallic cartridge, the meaning has been changed to refer to the complete assembly of a projectile and its propellant in a single package.

ANTIQUÉ FIREARM – According to the Gun Control Act of 1968 27CFR Part 478.11, an antique firearm is: “(a) Any firearm (including any firearm with a matchlock, flintlock, percussion cap or similar type of ignition system) manufactured in or before 1898; and (b) any replica of any firearm described in paragraph (a) of this definition if such replica (1) is not designed or redesigned for using rimfire or conventional centerfire fixed ammunition, or (2) uses rimfire or conventional centerfire fixed ammunition which is no longer manufactured in the United States and which is not readily available in the ordinary channels of commercial trade.”

APACHE PISTOL (See **COMBINATION WEAPON**) – An ingenious pocket-sized combination weapon manufactured up to the end of the 19th century that combined three weapons: a small six-shot pepperbox-like revolver; a small dagger blade that could be swung forward and locked into place, and a knuckleduster that could serve at the butt of the revolver or as a striking weapon. Supposedly, it was a weapon of choice for Parisian criminals.

APERTURE – A hole in a rear iron sight through which the shooter looks to align the front sight and target.

APERTURE SIGHT - An iron rear sight which has a hole or aperture in a disc or semi-circular blade instead of the rectangular or “V” notch of an open sight. May also be a front sight, or adjustable for windage and/or elevation, or have adjustable/interchangeable apertures.

APPENDAGE – A U.S. Ordnance Department term relating to those items issued or shipped with service firearms to maintain them in good order. Appendages could be either individual or organizational equipment and could include various gun tools, shell extractors, cleaning rods, oilers, muzzle and front sight covers, and wipers. The term encompassed different items at different times. For instance, the U.S. Ordnance Department considered the Trapdoor cleaning rod to be an appendage, yet the cleaning rod for the Krag-Jorgensen was considered a basic component of the rifle, rather than an appendage.

AR-15 STYLE ACTION - A gas operated rifle action with a direct gas impingement system (i.e. no gas piston, no regulator, no moving parts), a bolt carrier enclosing a multi-lugged rotating bolt locking design, and a two part light-weight receiver. Propellant gas flows through a gas tube, acting directly on the bolt carrier to cycle the action, and venting into the receiver. Although AR-15 style actions have fewer parts, are more adaptable, and are lighter than other gas operated actions, more maintenance, cleaning, and lubrication are required for reliability. This action is used in the U.S. M-16 rifle and M-4 carbine, the rifles of numerous militaries, and in many civilian firearms.

ARMY REVOLVER (Also see **NAVY REVOLVER**) – The terms **ARMY** and **NAVY** when associated with percussion revolvers manufactured in the United States from about 1851 to the mid-1870's refers to the caliber of the pistol and not to its use by either the Army or Navy. **ARMY** caliber revolvers are .44 caliber and **NAVY** caliber revolvers were .36 caliber. During the Civil War, both the Union and Confederate armies and navies used both caliber revolvers. Navy models usually had slightly smaller dimensions as they fired a smaller ball and took a smaller charge than Army model revolvers. The major gun manufacturers, such as Colt and Remington made both Army (.44 caliber) and Navy (.36 caliber) models of the same firearm. An example is the Remington .44 caliber New Model Army and the Remington .36 caliber New Model Navy.

ARQUEBUS (See **HARQUEBUS**) – An early type of one-man portable firearm, fired from a forked rest or other support. German origin meaning “a gun with a hook.”

ASH BLUE (See **HEAT BLUE**) – A process in which metal parts that are to be “heat blued” are packed in ashes to prevent oxidation before being heated in a furnace.

ASSAULT RIFLE – A combat rifle designed to facilitate or repel assaults and having the following characteristics: firing an intermediate size rifle cartridge, selective fire, having a separate pistol grip, straight-line stock, and a detachable magazine.

AUTOLOADING – Modern firearms in which the force of the explosion of each shot automatically unlocks the mechanism, extracts and ejects the empty shell and reloads by feeding a new cartridge from the magazine into the chamber. The trigger must be pulled for each shot.

AUTOMATIC – Modern firearms in which when the trigger is pulled and held back, the gun continues to fire multiple shots (unlocks the mechanism, extracts and ejects the empty shell, reloads by feeding a new cartridge from the magazine into the chamber and fires again).

AUTO SEAR – In modern firearms, the part tripping the sear each time the bolt group (except in a blowback firearm) goes into battery when a weapon is fired full automatic.

B

BACK ACTION SIDE LOCK (Also see **BAR ACTION SIDE LOCK**) - A sidelock action on a break-open rifle or shotgun where the mainspring is mounted rearwards behind the tumbler towards the butt of the firearm. The lockplate is shorter than a Back Action Side Lock’s lockplate and sits flush to the frame. It is often used in double rifles where the need for strength requires as little steel as possible be removed from the bar of the action.

BACK ACTION LOCK (Also see **BAR ACTION LOCK** and **FOWLING PIECE**) – A percussion lock typically found on muzzle loading fowling pieces and shotguns in which the hammer is located on the very front end of the lockplate while the mainspring is located behind the hammer on the inside of the lock. The mainspring exerts pressure upward against the tumbler. Typically inletted into the wrist of the stock. It was introduced in the 1830's.

BACKBORE, BACKBORED BARREL - A shotgun barrel whose internal diameter is greater than nominal for the stated gauge. Back boring is done to try to reduce felt recoil, improve patterning, or change the balance of the shotgun.

BACK STRAP – A strip of metal along the back of a pistol or revolver grip. Usually part of the frame.

BALLISTICS – The science dealing with the motion of projectiles and projectile (bullet) performance, particularly in regards to trajectory, energy, velocity, range, drift, drop, penetration, etc.

BALLISTIC COEFFICIENT – The measure of velocity that a bullet loses or retains as it travels through the air.

BANDOLIER or **BANDOLEER** - A belt with pockets or loops for holding ammunition and cartridges, usually slung over a shoulder and the chest. Bandoliers are now rarely used for most modern military arms because magazines are not well-suited to being stored in such a manner. They are still used with shotguns, as individual shells can easily be stored in traditionally designed bandoliers.

BAND SPRING – An “L” shaped piece of tempered steel inletted into a groove cut into the forend of a firearm and anchored with a pin to hold the barrel band in position.

BAR - The part of a break-open gun's action extending forward from the bottom of the standing breech, supporting the hinge pin.

BAR ACTION SIDE LOCK (Also see **BACK ACTION SIDE LOCK**) – On a break-open “modern” shotgun, a sidelock action where the mainspring is mounted forward into the bar of the action. A Bar action and theoretically allows faster lock times than a back action and is often more graceful in appearance.

BAR ACTION LOCK (Also see **BACK ACTION LOCK** and **FOWLING PIECE**) – A percussion lock on muzzle loading guns in which the hammer is mounted towards the rear of the lockplate and the lockplate extends forward alongside the bolster and under the barrel breech. The mainspring is mounted on the inside of the lock in front of the hammer and the exerts pressure downward against the tumbler. The lockplate is fully removable. Also known as a **FRONT LOCK** or **SIDE LOCK**.

BAR ACTION SIDE LOCK (Also see **BACK ACTION SIDE LOCK**) – On a break-open “modern” shotgun, a sidelock action where the mainspring is mounted forward into the bar of the action. Bar Action Side Locks are widely used and they theoretically allow faster lock times than a Back Action Side Lock.

They are also said to be more graceful in appearance. Typically seen on L.C. Smith shotguns.

BARREL - A tube, usually metal, through which a controlled explosion or rapid expansion of gases are released in order to propel a projectile out of the end at a high velocity.

BARREL BANDS or **BANDS** – Metal strips that encircle the barrel and the stock, fastening them together.

BARREL BAND FRONT SIGHT - A front sight base completely encircling a rifle barrel at the muzzle. It is supposed to provide a more positive and reliable joint than a simple dovetailed, soldered or screwed in sight base.

BARREL BAND SWIVEL BASE – A metal loop completely encircling the barrel of a rifle that has a sling swivel attached to it. It is supposed to provide a more positive and reliable connection than a simple soldered or screwed in attachment. Often seen on large caliber express rifles that are fired at short to medium range. However, slings attached to the barrel with a Barrel Band Swivel Base are not normally used on long-range rifles because the stress of using the sling to carry the rifle can impose stress on the barrel adversely affecting accuracy.

BARREL LENGTH - The length of a barrel measured from the muzzle to the standing breech in a break-open shotgun or rifle, or to the bolt face in a bolt-action rifle, including the chamber. A revolver barrel's length is only the barrel itself, and does not include the cylinder.

BATTERY (1) - A group or set of different firearms, which taken together should be able to accomplish a broad variety of hunting or shooting situations. For instance, three-gun battery for an African safari might consist of a .308 caliber bolt action rifle, a .375 H&H bolt action rifle and a .470 Nitro Express double-barreled rifle.

BATTERY (2) – The tactical organization for a group of artillery pieces (cannon or howitzers). Usually consists of the cannon, their transport, an internal supply and support element and a command element.

BATTERY (3) – See **FRIZZEN**.

BATTERY (4) – When a firearm is cocked with the bolt closed and locked, and ready to fire.

BAYONET – A blade or spike attached to a military shoulder arm used for stabbing an opponent. In early weapons long bladed **SWORD BAYONETS** were also used as short swords. Many modern blade bayonets can be used as

knives. **PLUG BAYONETS**, which were inserted into the muzzle of a gun, were the first type of bayonets used in early firearms. **SOCKET BAYONETS**, common in the 17th to 19th centuries, fit over the muzzle of the fire arm and often used the front sight as an attachment point. **RAMROD BAYONETS**, in the form of a spike, were an integral part of the shoulder arm and not normally detachable.

BAYONET LUG - An attachment point for a bayonet on the muzzle end of the barrel.

BEAVERTAIL FOREND - A wider than normal forend on a long arm.

BENCH REST RIFLE – A rifle designed and optimized for competition or match target shooting from a table or bench. It is usually accurized with a heavy barrel and stock.

BENCH REST STOCK - A rifle stock specifically designed for a “bench rest” competition or match rifle which is fired from a table or bench. It is optimized for stability and accuracy, usually being heavier than normal sporting stocks, and usually has a very wide flat-bottomed forend.

BELT – An ammunition belt is a device used to retain and feed cartridges into an automatic firearm, usually a machine gun. Early belts were sometimes made of cloth. Today they are often made of metal links and commonly carried in an ammunition box that can be attached to the side of the machine gun.

BELTED MAGNUM - Any caliber cartridge, generally for rifles, using a shell casing with a pronounced "belt" around its base that continues 2-4mm past the extractor groove. The addition of the belt to the cartridge can prevent over-insertion of non-shouldered (non-"bottlenecked") magnum rifle cartridges into too far into the chamber, which could cause catastrophic failure of the gun when fired with excessive headspace.

BERDAN PRIMER – A centerfire cartridge primer invented by Hiram Berdan. The cartridge case has a primer pocket with an integral anvil built into the center and two, off-center touchholes. Common in Europe, it theoretically provides more reliable ignition than Boxer primers by better distribution of the flash.

BIPOD - A support device with two legs commonly attached to rifles to provide a forward rest and reduce motion when aiming and shooting in order to increase accuracy.

BIRD'S HEAD GRIP – A curved grip configuration on revolvers that resembles the outline of a bird's head. It was popular in the American west during the last quarter of the 19th century. Used mainly on revolvers with short to medium length barrels, the Colt Model 1877 Thunderer was one of the first revolvers to use it

BLACK POWDER also called **GUNPOWDER** – A mixture of sulfur, charcoal, and potassium nitrate (saltpeter) that burns rapidly, producing a volume of hot gas. Because of its burning properties and the amount of heat and gas volume that it generates, gunpowder has been widely used as a propellant in firearms and as a pyrotechnic composition in fireworks. Modern firearms do not use the traditional black powder described here, but instead use smokeless powder.

BLADE – Refers to an upright, elongated front sight.

BLANK - A type of metallic cartridge for a firearm that contains gunpowder but no bullet or shot. When fired, the blank makes a flash and an explosive sound (report). Blanks are often used for simulation, training, and for signaling. Blank cartridges differ from dummy cartridges, which are used for training or function testing firearms; these are inert, containing no primer or gunpowder.

BLIND MAGAZINE - An internal, non-detachable rifle magazine without a floor plate. It must be loaded and unloaded from the top only. While it is less convenient to unload, it gives a rifle slightly cleaner lines and slightly lighter weight than a rifle with a floor plate or detachable magazine.

BLOWBACK ACTION - A gas operated semi-automatic or automatic firearm operating design that uses expanding propellant gasses to push a heavy unlocked breech bolt open. It relies on the inertia of its moving parts to keep the action closed until the bullet has exited the muzzle and pressure has decreased to a safe level.

BLUING or **BLUEING** - A process of artificially oxidizing or rusting used to color metallic parts of a firearm in shades of blue or black (depending on polish). It is named after the blue-black appearance of the resulting protective finish.

BLUNDERBUSS – An early form of smoothbore muzzle loading firearm, popular during the 18th and 19th centuries that fired multiple balls. It normally had a short barrel and a wide bell-shaped muzzle that was designed to scatter the shot.

BOLT – The breech closure part of the firearm used to open and close the chamber. The word BOLT is also used to identify the part of the action mechanism that locks the mechanism when the gun is fired.

BOLT ACTION - A firearm action in which the bolt is manually operated by the opening and closing of the breech with a small handle. As the handle is operated, the bolt is unlocked, the breech is opened, the spent shell casing is extracted and ejected, the firing pin is cocked, and a new cartridge is moved from the magazine (if present) and inserted into the chamber and the bolt closed and locked.

BOLT CARRIER – A part in some semi-automatic and automatic firearms that directly houses and travels with the bolt.

BOLT GROUP – In automatic and semi-automatic firearms, a group of parts that includes the bolt, bolt carrier, extractor, ejector, firing pin, and other assorted pins and springs.

BOLT LUG – The part of a bolt that locks the bolt in the action when the bolt is closed.

BOLT RELEASE – A part in automatic and semi-automatic firearms often serves as a hold-open device that releases the bolt from being locked to the rear.

BOLT STOP - A moveable device, usually towards the rear of a bolt action firearm, which in normal position prevents the bolt from falling completely out of the rifle when cycling the action. It is easily moved aside by the bolt stop release to let the bolt be removed cleaning or disassembly.

BORE – The interior of a firearm barrel.

BORE (See **GAUGE**) - In early firearms the diameter of the bore was designated by the gauge, or the number of spherical balls of the same size that would fit in the barrel and would weigh a pound.

BOXER PRIMED - A centerfire cartridge with a primer pocket with one central touchhole in the center. A tiny anvil is built into the primer to provide a surface against which the detonating compound may be punched by the strike of the firing pin. It is commonly used in the United States and lends itself to reloading because it is easy to remove the spent Boxer primer with a decapping punch.

BOXLOCK (See **SIDELOCK**) - A type of action (receiver) for a break-open firearm (rifle or shotgun) where the lockwork is contained within a box-shaped housing. A boxlock is considered to be superior to a sidelock because although more metal needs to be removed from the action body, less wood needs be removed from the head of the stock and wood is more vulnerable than metal. Many consider the Anson & Deeley boxlock, (patented in 1875) to be the simplest, most reliable and most successful boxlock action design. The sears and hammers rotate on two pins that span the width of the action, one at the bottom rear and one slightly forward and higher.

BOXLOCK PISTOL – A type of flintlock pocket pistol, initially developed in England around 1700 and refined around 1750. In its earliest form the metal of the breech piece was combined with the lock plate and the trigger plate. Around 1750 the pan, steel, steel spring and cock were relocated from the side to the top of the breech section. Typically seen on Queen Anne (screw barrel) style pistols and often seen on multi-barrel pistols. In its final form, the true boxlock pistol's

breech section is normally rectangular or square in cross-section and the corners are not rounded.

BRASS - The empty cartridge case. It is a generic term since most modern cartridge cases are made of brass. Early cartridges were made of copper, which was softer and not as strong as brass.

BRAZE – A method for joining metals by allowing a mixture of molten brass and silver to go between the joints.

BREAK ACTION - A breech-loading firearm whose chamber(s) and barrel(s) are hinged and rotate about a hinge pin perpendicular to the bore axis to expose the breech and allow loading and unloading. Boxlocks and Sidelocks are Break Action.

BREAK OPEN (Also see **TOP BREAK**) – A revolver that is hinged in the bottom front of the frame so that it breaks open at the top rear for loading and unloading.

BREECH – The rear of the barrel and the related mechanism into which ammunition is loaded.

BREECH LOCK – The part of the firearm action or mechanism that closes the rear of the chamber and bore against the force of the explosion of the gun powder or cartridge.

BREECH LOADER – A firearm that is loaded with ammunition at the breech.

BREECH PLUG – a cylindrical plug screwed into the breech of muzzle loading firearms to close the back of the barrel.

BREECH PRESSURE or **BOLT THRUST** (Also see **CHAMBER PRESSURE**) - The amount of rearward or sideways force or pressure exerted on the walls of the chamber, the bolt or breech plug of a firearm action or breech by gases when a cartridge is fired. Usually measured in thousands of pounds.

BRIGHT FINISH (See **IN THE WHITE**, **NATIONAL ARMORY BRIGHT**, and **WHITE**) – Metallic parts of a firearm that were polished to a dull natural metallic sheen. Usually done before 1873. When done at the Springfield Armory the finish was called “National Armory Bright.”

BROWN BESS – The commonly used name to describe the flintlock musket that was the chief shoulder weapon of the British Army from the 1720's to the 1830's. The original designation for the First Model with a 46-inch long barrel was Long Land Musket, while the Second Model with a 42-inch long barrel was the Short Land Musket. There was also a light infantry model, and a marine or militia model, which also had a 42 inch barrel.

BROWNING (See **BLUING**) – 1. A term used in the 19th century for the bluing process by which an iron or steel part is given an even coat of red rust to prevent reflections. 2. Springfield Armory used the term “browning” for “bluing” in which the red rust was converted to a dark blue-black color by boiling in water.

BUCKHORN SIGHT – An open iron rear sight in which the sides curl upward and inward.

BUFFER – In automatic and semi-automatic firearms, a device that softens the abrupt stopping of the bolt group or operating rod at its most rearward travel when the firearm is fired.

BULL BARREL - A heavy, thicker than normal barrel with little or no taper. Often seen on target firearms.

BULLET – A projectile that is shot from a firearm.

BULLET MOLD – A tool or device, usually metal, that is used to make bullets and balls. Molten lead would be poured into the cavities in the tool and allowed to cool and harden.

BULLPUP STOCK – In modern firearms, a stock in which the action and magazine are moved to the rear, into the buttstock, in order to reduce the firearm’s overall length.

BURST – To fire several (usually 2-3) cartridges with one pull of the trigger.

BUTT – The rearward portion of the stock of a firearm. In long arms or shoulder arms the butt is placed against the shoulder. In hand guns it refers to the bottom or thicker part of the grip or handle.

BUTT CAP – A metal cap used to protect the butt of a pistol.

BUTT PAD - A part attached to the end of a buttstock end that is made of rubber or synthetic material and is intended to absorb recoil energy, prevent damage to the buttstock, and vary length of pull. It may be fixed, solid, ventilated, or adjustable.

BUTT PLATE – A metal plate used to reinforce, cover and protect the end of the butt of shoulder arms.

BUTTSTOCK – The part of the stock that fits against the shoulder.

C

CALIBER/CALIBRE - 1. In small arms, the internal diameter of a firearm's barrel (bore) or the external diameter of a cartridge's bullet, usually expressed in hundredths of an inch or millimeters. Rifled barrels may be measured across the grooves or lands. 2. In artillery, the length of the barrel expressed in terms of a multiplier of the internal diameter. For instance, a 3 inch, 30 caliber gun would have a barrel 3 inches in internal diameter and 90 (30 times 3) inches in length. A 5 inch 45 caliber gun would have a barrel 5 inches in internal diameter and 225 (45 times 5) inches in length.

CALIVER – The classification name of an early smoothbore firearm during the 16th and early 17th centuries. Under the English system, the caliver was between a musket and arquebus in size, being about 4 feet 6 inches long with a 17-gauge barrel 3 feet 3 inches long. Calivers could have matchlock, wheellock or flintlock actions.

CANNELURE – 1. Sunken rings in a bullet used to hold lubricant or receive the crimp of the cartridge case. 2. Also channels or grooves in the brass shell of a cartridge. 3. Rings around the end of the ramrod to assist in holding it.

CANNON BARREL PISTOL – See **QUEEN ANNE PISTOL** and **SCREW BARREL PISTOL**.

CANT – The act of tilting a firearm to the side greatly complicates sighting. Canting a rifle can cause significant loss of accuracy, particularly at long ranges. Some long-range target rifles are equipped with Spirit Level sights to help control canting.

CAP (Also see **PERCUSSION CAP**) – A small metal or paper device used with percussion firearms holding a fulminate or ignition compound designed to ignite the main charge of a firearm. Usually a small copper or brass cup shaped device containing ignition compound (often fulminate of mercury) that was placed on the cone or nipple of a percussion firearm. Pulling the trigger releases a hammer which strikes the percussion cap and ignites the explosive compound, sending a flame through the hollow cone to the main gunpowder charge in the chamber, which explodes, propelling the bullet or ball out the barrel. Variations of the cap included narrow double strips of varnished paper that contained explosive caps. The strips were automatically fed to the cone or nipple by a mechanical device. The percussion cap was the crucial invention that enabled firearms using loose gunpowder or paper cartridges to fire reliably in any weather.

CAPE GUN - A combination gun that is two-barreled, side-by-side, shoulder-fired and has one smoothbore shotgun barrel and one rifled barrel.

CAPTIVE RAMROD (See **SWIVEL RAMROD**) - A ramrod on a muzzle-loading firearm that is permanently attached to the gun by some sort of swivel mechanism or chain, so as to be easily utilized, but never lost. It was often seen on pistols and carbines.

CARBINE - A shortened version of an infantry rifle or musket, often used by cavalry, engineers, artillerymen or other specialized troops. Carbine cartridges may be different less powerful than regular infantry shoulder arms cartridges.

CARTOUCHE (Also see **INSPECTOR'S MARKS**) – A stamp impressed into wood or metal, usually by an official inspector to signify that the arm was approved and/or accepted.

CARTRIDGE - The metal or paper container holding the primer, a charge of explosive gunpowder and a bullet. Early cartridges for muzzle loaders were generally of paper, were broken to load and the contents poured down the barrel from the muzzle into the chamber of the gun. Modern cartridges are metal, the assembly consisting of a bullet, gunpowder, shell casing, and primer. When counting, each individual cartridge is referred to as a round.

CASE HARDENING (Also see **COLOR CASE HARDENING**) – A process in which iron or steel is heated with carbon, then rapidly cooled to form a thin layer of high carbon content metal on the surface of a softer, less brittle core. The harder surface resists wear. Cooling the metal in water produces mottled blue, red and yellow colors. Cooling the metal in oil produces a mottled black color.

CASELESS CARTRIDGE (Also **CASELESS AMMUNITION**) – A cartridge that does not have a separate metallic case, but instead has a hardened propellant with a fixed primer and projectile.

CATCH – A mechanism used to secure any part of a firearm in a desired position.

CENTERFIRE - A cartridge in which the primer is located in the center of the cartridge case head. The primer is a separate and replaceable component.

CHAMBER - The part of the firearm barrel (bore), firing mechanism or cylinder (in revolvers) which contains the charge or in which the cartridge is inserted prior to being fired. Rifles, muskets, pistols and shotguns usually have a single chamber in each barrel, while revolvers have multiple chambers in their cylinders and no chamber in their barrel.

CHAMBERING – The act of inserting a cartridge into the chamber, either manually or through the firearm's action.

CHAMBER PRESSURE (Also see **BREECH PRESSURE** or **BOLT THRUST**) – Pressure against the walls of the chamber produced by the expansion of gases produced by the explosion of the charge. Usually measured in thousands of pounds.

CHAMFER – To smooth or remove a sharp metal edge by beveling.

CHARGER - A device (often called a **CLIP**) that holds several cartridges together in a single unit for easier and faster loading of a firearm's magazine. A stripper clip is used only for loading the magazine and is not necessary for the firearm to function.

CHARGER GUIDE – A device that holds a charger in line with the magazine in order to facilitate loading. It may be part of the weapon or attached to the charger.

CHARGING HANDLE - A component on a semi-auto firearm that is manipulated to cycle the action, but which does not fire the cartridge. It is also called a cocking handle, cocking knob, or operating handle.

CHARLEVILLE – A generic name often used to designate 18th century French military flintlock muskets and pistols. In fact, the Model 1766 Charleville was just one of many model muskets that the French military used. Others were the Models 1717, 1728, 1746, 1754, 1763 and 1777. The use of the term Charleville also erroneously implies that all French military muskets were made at the Royal Manufactorie at Charleville. However, many were also made at other French arsenals, such as St. Etienne and Maubeuge. The French .75 caliber Model 1766 Charleville served as the pattern for the U.S. Model 1795, the first official U.S. Government musket made after the Revolutionary War.

CHASING (See **REPOUSSE**) – A hand process in decorating a firearm. Touch up work on **REPOUSSE** or cast metal pieces using cutters, files and punches that cleans up the piece and puts on the final touches.

CHECKERING – Roughing the stock of a firearms in a pattern of lines in order to provide a better grip or for ornamentation.

CHISELLING (See **REPOUSSE**) - A hand process in decorating a firearm. Sculpting iron, gold, silver, copper or bronze parts in low or high relief. This form of arms decoration requires great skill and patience in order to be done well and is often part of the touch up or finishing work on **REPOUSSE** pieces.

CHOKE - A tapered constriction of a shotgun barrel's bore at the muzzle to improve performance and control the pattern of shot. Chokes can be a permanent part of the barrel or removable **CHOKE TUBES** that are

interchangeable with other **CHOKE TUBES** in order to control the pattern or scatter of shot.

CHOKE TUBES - Short, interchangeable cylinders that screw into the threaded internal section of a shotgun's muzzle. They are of slightly different internal tapers so that the shot pattern thrown by the gun can be altered. The different tapers or configurations are cylinder, improved cylinder, improved modified, modified, and full. Most choke tubes fit flush with the end of the barrel; however some choke tubes protrude from the end of the barrel. Choke tubes should be tightened until snug and guns fitted for choke tubes should never be fired without them inserted. Shotguns made and sold today often come with three to five **CHOKE TUBES** as part of the package.

CLAW EXTRACTOR - A large, long extractor on some bolt action rifles and carbines. It is mounted to and revolves around the bolt shaft, remaining stationary in the receiver raceway when the bolt revolves. The claw takes positive hold of the cartridge coming from the magazine and places it in the chamber when the bolt is closed. When the bolt is opened, the claw, which relinquished its grip on the rim of the cartridge, withdraws the cartridge from the chamber with absolute reliability. It is an essential design element of the Mauser 98 bolt action and its derivatives. Many experienced hunters of dangerous game prefer an action with a Mauser-type claw extractor for its reliability.

CLAW MOUNTS - A scope mounting system for quickly attaching and detaching a scope on a rifle. The front and rear of the scope are fitted with sets of hook-shaped tentacles that are inserted into a slot in fixed scope bases. When these are pressed sharply downwards into their opposing receptacles the sets of hook shaped tentacles snap into place and are held by spring-loaded clasps that lock the scope into position. Claw Mounts are popular in Austria and Germany where they often considered the best quick-detachable system for scope mounting, being clean looking, the easy to operate and the most accurate in returning to zero. However, claw mounts should be custom-fitted by a skilled gunsmith.

CLIP - A device (sometimes called a **CHARGER**) that holds several cartridges together in a single unit for easier and faster loading of a firearm's magazine. A stripper clip is used only for loading the magazine and is not necessary for the firearm to function.

CLOSED-BOLT – In automatic or semi-automatic firearms, the position of a bolt from which the weapon is fired.

COACH GUN – Historically, a side-by-side double barreled shotgun with two short barrels of the gauge or bore. They were often used by guards on coaches or carriages because their short length made them handy.

COCK (Also see **HAMMER**) – 1. To cock is to place the hammer or firing pin of a firearm in position to fire the gun. 2. In flintlock systems the word “COCK” was another name for the hammer. The **COCK** or hammer is equipped with jaws to hold the flint, which is struck against the frizzen to produce sparks to ignite the charge.

COCKING HANDLE – In automatic and semi-automatic firearms, the part that is pulled to the rear (and often released to travel forward) in order to load and cock (charge) the firearm.

COIN FINISH – 1. A high-polish bright steel finish that is usually on the receiver of a break-open gun. Coin finish shows off delicate engraving better than other finishes. 2. The term is sometimes used by people dealing in old firearms to describe the finish on a gun’s receiver when all the original case-hardening colors have worn or been polished off.

COLOR CASE HARDENING (Also see **CASE HARDENING**) - A process for hardening the surface of iron and steel parts while imparting colorful swirls. In traditional color case hardening, the metal parts are put in a crucible packed with a mixture of charcoal and finely ground animal bone and heated to temperatures from 800 to 900 degrees, after which they are slowly cooled. The parts are then submerged into cold water, leaving a thin, colorful protective finish. Color case hardening can also be achieved by treating the necessary metal parts with a cyanide liquid, which helps harden the metal surface, which imparts a more layered color appearance than charcoal hardening.

COLT – A major American firearms manufacturer, best known for its revolvers and semi-automatic pistols. Some of its more popular products include the Single Action Army revolver, the Model 1911 pistol, and the Python revolver.

COMB – The ridge at the upper part of a shoulder arm butt between the butt stock and wrist against which a shooter’s cheek is placed when aiming and firing.

COMBINATION GUN - A shoulder-held firearm that has two single-shot barrels; one rifle barrel and one shotgun barrel. Most combination guns are of an over/under design (O/U), in which the two barrels are one on top of the other, but some combination guns are of a side-by-side design (SxS), in which the two barrels sit beside each other.

COMBINATION WEAPON (Also see **SWORD PISTOL** and **KNIFE- PISTOL**) – A versatile weapon in which a firearm is combined with a non-firearm type of weapon for attack or defense. Examples include the pistol-sword or sword-pistol, the knife-pistol, and the bayonet-pistol, all popular during the 18th and early 19th centuries. And during the first half of the 1500’s King Henry VIII’s body guard was for a time equipped with a small round steel shield that was fitted with a breechloading matchlock pistol.

COMMEMORATIVE - A firearm that was manufactured in "limited" numbers and engraved, marked, stamped or fitted with extra features in order to celebrate, commemorate or evoke remembrance for some famous person, place or historical event. Commemorative firearms are not manufactured for use, but rather they are made to be collected. Commemoratives are often hard to resell.

CONCEALED GUN – To the collector a CONCEALED GUN is one which is hidden in, or made to look like, a normally unrelated object in order to disguise its true nature. They are predominately single shot. Walking sticks and canes have long been popular for hiding pistols, and wheellock, flintlock and percussion versions are known in which the cane or walking stick forms the barrel and the muzzle is protected by a wooden or cork ferrule. Horse riders could have a pistol that was concealed in the handle of a whip, and pipe smokers could have small caliber pistols disguised as pipes. Among the smallest are pistols hidden in, or disguised as, large old-style keys.

CONE (Also see **NIPPLE**) - On percussion firearms it is a small tube on which is set the percussion cap containing fulminate or other priming compound. The cap explodes when struck by the hammer, sending flame through the nipple to ignite the charge in the chamber.

CONE SIGHT – A front sight of conical shape. Often found on firearms from the 19th century or earlier.

CONVERSION – A firearm that has been significantly changed from its original form into a new form. Examples include: converting a gun from flintlock to percussion ignition system; converting a firearm from a muzzle loader to a breechloader; converting a percussion firearm to one that uses metallic cartridges; and converting a military rifle into one designed for sport or hunting (sporterizing).

CORDITE - A family of smokeless propellants developed and produced in the United Kingdom from 1889 to replace gunpowder (black powder) as a propellant in military cartridges.

CRIMP – The constriction at the mouth of a cartridge case to retain the charge or propellant and hold the bullet in place.

CROSSBOLT (1) - A transverse locking rod/bar used in many side by side double barrel shotguns with **BOXLOCK ACTIONS** and a few rifles, which locks the standing breech and barrels to each other. It is sometimes called a Greener crossbolt since W.W. Greener, a British gunsmith, originally designed it.

CROSSBOLT (2) (See **REINFORCING CROSSBOLT**) - A steel bolt, mounted transversely through a rifle stock just under and behind the front and sometimes

the rear receiver ring against which the action is carefully bedded. When properly fitted, it helps distribute the recoil and reinforces the stock at the point where wood has been removed to accept the action in order to prevent damage to the stock from recoil or abusive handling. Crossbolts can be recognized by the flush-mounted circular steel fittings on the side of the stock; however they can also be finished with contrasting wooden plugs and sometimes are completely hidden.

CROWN – The process in which the muzzle at the end of a barrel is machined to produce a rounded end with a recess in the middle to protect the ends of the lands and grooves in the bore.

CURIO AND RELIC (C & R) – According to the Gun Control Act of 1968 27CFR Part 478.11, Curios and Relics are “Firearms which are of special interest to collectors by reason of some quality other than that which is normally associated with firearms intended for sporting use or as offensive or defensive weapons. To be recognized as Curios and Relics, firearms must fall within one of the following categories;

“(a) Firearms which were manufactured at least 50 years prior to the current date, but not including replicas thereof;

“(b) Firearms which are certified by the curator of a municipal, State or Federal museum which exhibits firearms to be curios or relics of museum interest; and

“(c) Any other firearms which derive a substantial part of their monetary value from the fact that they are novel, rare, bizarre, or because of their association with some historical figure, period, or event. Proof of qualification of a particular firearm under this category may be established by evidence of present value and evidence that like firearms are not available except as collector’s items, or that the value of like firearms available in ordinary commercial channels is substantially less.”

CUT-AWAY GUN - A firearm that has had numerous careful machining cuts taken in its exterior in order to expose and demonstrate the internal placement and functioning of its mechanism. Used as a training aid.

CYCLIC RATE OF FIRE – The measurement of the number of rounds that an automatic weapon will fire in one minute.

CYLINDER – The part of a multi-firing firearm holding a number of chambers and presenting the loads or cartridges successively for firing by revolving around an axis. An integral mechanism in a revolver.

CYLINDRO-CONOIDAL BULLET - A hollow base bullet, shaped so that, when fired, the bullet will expand and seal the bore. It was invented by Captain John Norton of the British Army in 1832, after he examined blow pipe arrows used in India and found that their base was formed of elastic locus pith, which by its

expansion against the inner surface of the blow pipe prevented the escape of air past it and imparted more velocity and accuracy to the dart.

D

DAMASCENING – A process in decorating a firearm. Properly the word identifies the production of watered patterns in gun barrels (such as DAMASCUS BARRELS), particularly on fine shotguns. However, the term is often used to describe gold or silver inlay or overlay such as the early form of overlay where a rough ground was cut in an iron part of the firearm and the gold or silver wire was lightly hammered on.

DAMASCUS BARREL – A method of manufacturing a firearm barrel made by twisting strips of iron and steel around a mandrel (rod) and forging them together in varying combinations depending on the skill of the maker. After the mandrel was withdrawn, the interior was reamed and the exterior filed until the finished barrel was achieved. Damascus barrels may be recognized by any of a variety of twist or spiral patterns visible in the surface of the metal. Barrels were often produced in this manner before the 19th century because gunmakers did not have the technology to drill a straight deep hole the full length of a bar of steel without coming out the side. Damascus barrels were intended for use with black powder and not for today's modern smokeless powder. It is not advisable to shoot modern smokeless powder in a Damascus Barrel because they are weaker than modern barrels due to their age and method of construction. The contour of the barrel wall, intended for the fast explosion of black powder, was quite thick at the breech and became significantly thinner towards the muzzle. Smokeless powder burns more slowly, lowering the pressure at the breech end, but considerably raising it further down the barrel to a level that Damascus Barrels were rarely designed to handle. Firing modern ammunition through a Damascus Barrel could result in a burst barrel and probable injury.

DELAYED IMPINGEMENT GAS SYSTEM - A trademarked gas operating system for AR-15 style carbines. While it is similar to a gas piston action in concept, it has instead an operating rod and a recoil spring that replaces the buffer and spring in the AR-15 buttstock. The operating rod and recoil spring run through the receiver, over the barrel, and sleeve the gas tube at the gas block. The gas tube does not enter the receiver.

DERRINGER - A small, concealable pistol, usually with one or two short barrels. A number of different arms manufacturers, including Remington, manufactured derringer pistols.

DIRECT IMPINGEMENT GAS SYSTEM (Also see **GAS IMPINGEMENT OPERATING SYSTEM**) - A gas operating system that cycles the action of an

automatic or semi-automatic firearm by routing propellant gas from a fired cartridge into the firearm receiver to make direct contact with and move components such as the bolt carrier or slide assembly. There are no moving parts, such as a piston or operating rod, in a direct impingement gas system. Also called a **DIRECT IMPINGEMENT SYSTEM**.

DISCONNECTOR – In modern firearms, the device that prevents a semi-automatic gun from firing more than one shot each time the trigger is pulled. In a selective fire weapon, it is the device that prevents the firearm from firing more than a set number of shots when it is set on burst mode.

DOGLOCK (Also see **FLINTLOCK**) – An early form of flintlock that preceded the true flintlock in muskets, carbines and pistols during the 1600's. It was used throughout Europe during the 17th century and was favored by the English, Dutch and Swedish military. The English doglock was characterized by a hook (dog) screwed into the lockplate to the rear of the cock, which engaged the cock when it was pulled half-way back (half cock). The gun could not fire until the cock was pulled all the way back to full-cock, which action disengaged the dog.

DOUBLE ACTION (Also see **SINGLE ACTION**) - A revolver or auto-loading pistol action in which a single pull on the trigger cocks and drops the hammer onto the firing pin. Most of these actions in revolvers also allow single action fire (unless it is a hammerless or concealed hammer gun). In auto-loading pistols, double action normally applies only to the first shot of any series, the hammer subsequently being cocked by the slide.

DOUBLE ACTION ONLY (Also called **DAO**) - A firearm action in a revolver or auto-loading pistol which cannot be operated in single action mode.

DOUBLE BARRELED SHOTGUN - A shotgun with two barrels, usually of the same gauge or bore. The two types of double-barreled shotguns are over/under (O/U), in which the two barrels are one on top of the other, and side-by-side (SxS), in which the two barrels are beside each other. Coach guns were typically side-by-side double barreled shotguns with short barrels and were often used by guards on coaches or carriages.

DOUBLE RIFLE - A break-open rifle with two barrels, usually of the same caliber. The two types of double rifles are over/under (O/U), in which the two barrels are one on top of the other, and side-by-side (SxS), in which the two barrels are beside each other. High priced, large caliber African big-game rifles were often side-by-side **DOUBLE RIFLES**. A double-barreled gun that has one shotgun barrel and one rifle barrel is called a **COMBINATION GUN**.

DOUBLE-SET TRIGGER - A device that consists of two triggers – the first (set) trigger cocks the mechanism converts the front (main) trigger to a light, hair spring assisted trigger that actually discharges the firearm, substantially

lightening the second trigger's pull weight and supposedly improving long-distance accuracy.

DOUBLE TRIGGERS – Two triggers on a double barrel shotgun or rifle positioned one behind the other. Each trigger fires one barrel.

DOVETAIL - A flaring slot that is machined or hand-cut into the upper surface of barrels and sometimes actions and slightly tapered at one end to accept and hold a corresponding part. Often used to mount a sight.

DRIFT – Flight of the bullet to the left or right of the line of sight to the target caused by the spin of the bullet imparted by the rifling in the barrel.

DRILLED & TAPPED – The holes that are drilled into the top of a receiver or frame and then threaded in order for scope bases, rails, blocks, rings, or other sighting devices to be attached to the firearm.

DRILLING - A sporting or hunting firearm with three barrels (from the German word *drei* for three). Typically it has two shotgun barrels side by side on the top, with a third, rifle barrel, underneath. This provides a versatile hunting firearm capable of taking birds as well as ground animals. Drillings are more popular in Europe than in the United States.

DRUM MAGAZINE - A type of firearm magazine that is cylindrical in shape, similar to a drum.

DRY FIRE - To pull the trigger and release the hammer of a firearm without having a cartridge in the chamber. Dry firing can damage the internal parts of gun, which is designed to have the shock of the hammer's blow absorbed somewhat by the soft brass of the primer. It is recommended that snap caps be used when testing the trigger and action of a gun. Snap caps replicate the buffering effect of an actual cartridge.

DUELING PISTOLS - Single shot muzzle loading pistols used to settle disputes and affairs of honor, of a design originating in England. They were popular during the late 18th century and first half of the 19th century. They were made in pairs, either with flintlock or percussion ignition. Dueling pistols were usually finely made and cased together with loading accessories. They were often lighter and sleeker than other pistols and tended to have smoothbore (or lightly rifled octagon (or octagon-to-round) barrels around nine or ten inches long. They typically had rudimentary front and rear sights, single-set triggers, and curved grips with full or half-stocks. They were usually of high quality construction, normally of relatively plain decoration but sometimes with silver furniture.

DUM-DUM - A bullet altered to expand on impact, increasing in diameter to limit penetration and/or produce a larger diameter wound. Soldiers in the field could make Dum-dum rounds by cutting an X into the point of the bullet.

DUMMY ROUND - A cartridge that is completely inert, i.e., contains no primer, propellant, or explosive charge. It is used to check weapon function and for training.

DUST COVER – A device (usually spring loaded) that covers the ejection port on a modern automatic or semi-automatic firearm that prevents dirt and debris from entering the firearm's action.

E

EJECTOR – The part of a firearm mechanism that throws or ejects fired cartridges from the firearm. In revolvers with swing-out cylinders or breaktop actions the extractor and ejector are the same mechanism.

ENGLISH LOCK (Also see **FLINTLOCK**) – A type of flintlock mechanism that was developed in England around 1610 to 1620, it superseded the **SNAPHAUNCE**. It introduced a significant innovation in that it combined the Snaphaunce's separate frizzen and flashpan cover into a single device that pivots on the outside of the lockplate and is held over the pan by a spring. It also featured a half-cock or safety position by using a notch on the internal tumbler that was engaged by the sear. The English Lock was eventually supplanted by the **FRENCH LOCK**.

ENGLISH STOCK or **ENGLISH GRIP** - A style of shotgun or rifle stock that is straight with a slender grip. Often seen on English shotguns, it is built for graceful aesthetics, light weight and fast handling.

ENGRAVING - The art of cutting decorative designs metal or other hard material in decorative patterns or scenes. The most common type of hand engraving is scroll engraving. Hand engraving is done by skilled craftsmen using a chisel or hammer and chisel, and requires artistry and knowledge of metals and related materials. Much of today's factory engraving is mechanically rolled on, or done by machine.

ESCUTCHEON (Also see **OVAL**) – A brass or precious metal plate with a complex outline that is inset into a gun stock or gun case of a fine firearm, upon which is engraved the owner's initials, monogram or coat of arms.

ETCHING – A process in decorating a firearm. It is cutting a design on metal or other hard material by the action of an acid. It is generally done by coating the

metal's surface with a varnish or wax in a design, then removing the resistant surface substance with a pointed instrument and applying acid, which eats the metal and leaves the design.

EXHAUST PORT – In modern gas-operated firearms, a hole or holes, usually in a gas cylinder, that allows gas to escape after it is used to cycle or operate the action or mechanism of a firearm.

EXPANDING BULLET - A bullet designed to expand on impact, increasing in diameter to limit penetration and/or produce a larger diameter wound. Two common designs are the hollow point bullet and the soft point bullet. A dum-dum is also designed to expand on contact in order to produce a larger wound.

EXPRESS – A marketing term introduced by the English gun manufacturer Purdey about 1855 to identify a high velocity rifle.

EXPRESS SIGHT – A rear “iron” sight with an open “V” shaped leaf. It is mounted to a rifle barrel on a block or on a quarter-rib, sometimes solid standing, sometimes folding, and often mounted in a row of similar leaves, each of a slightly different height, marked with the range for which each is registered.

EXTRACTOR - The part of a firearm mechanism that removes fired cartridges from the chamber after the cartridge has been fired. When the gun's action cycles, the extractor lifts or removes the spent brass casing from the firing chamber to where it can be ejected from the firearm.

F

FALLING BLOCK ACTION - A single-shot firearm action in which a solid metal breechblock slides vertically in grooves cut into the breech or frame of the firearm. It is moved by a lever. When the breechblock is lowered the back of the chamber is open to be loaded with a cartridge. When the breechblock is raised it is locked and resists the force of recoil while sealing the chamber. Among the numerous rifles that used falling block actions are: the Sharps, the Browning Hi-and Low-Walls, and the Ruger No. 1.

FEED RAMP - An inclined, polished area on a repeating firearm, just behind the chamber, that helps guide a cartridge into the chamber when it is pushed forward by the closing bolt.

FERGUSON RIFLE – A breechloading flintlock rifle invented by Major Patrick Ferguson of the British Army during the Revolutionary War. The action had a threaded plug, attached to the trigger guard that engaged a vertical threaded section in the breech end of the barrel. The idea was not new but Ferguson

improved on it by using fast threads so that the plug could be dropped with only clockwise one rotation of the trigger guard and one counterclockwise rotation returned it to firing position. In loading the plug was lowered, the barrel tipped slightly downward and a ball dropped into the breech cavity where it rolled against the rifling. Powder was then put into the breech and the plug closed. The 4 foot 1 inch long rifle's flintlock was then primed and the rifle was ready for firing. Ferguson was promoted to Colonel but was killed by American troops on October 7, 1780 at the Battle of King's Mountain. Without him to promote it, the rifle failed to find acceptance with the British War Office and disappeared from British use.

FERRITIC NITROCARBURIZING - A case hardening process (also called nitriding).that diffuses nitrogen and carbon into metals at to improve scuffing resistance, fatigue properties and corrosion resistance of metal surfaces.

FIELD GRADE – A plain unembellished firearm used to hunt in rough terrain where there may be risk of damage.

FIELD GUN - A shotgun of relatively light weight because it is often carried a great distance when hunting. Recoil is a secondary factor.

FIELD STRIP – The partial disassembly of a firearm in order to clean and lubricate it, or perform minor repairs under field conditions.

FIRE BLUE - A brilliant, slightly iridescent, blue finish on highly-polished steel achieved by heating to a temperature of about 500°F.

FIRING PIN – The rod-like part of the firearm mechanism that transmits the blow of the hammer to the cap in a cartridge. The term is sometimes used to describe the nose of a hammer that directly strikes the cap.

FIRING PIN HEAD – The rear of the firing pin that is struck by the hammer.

FIRING PIN NOSE – The forward end of the firing pin that strikes the cartridge's primer.

FIT AND FINISH - An expression used in describing the quality of over-all firearm appearance, condition and workmanship.

FIXED STOCK – In modern rifles, carbines and shotguns, it is a buttstock that does not move, fold or collapse. (See **FOLDING STOCK**.)

FLAKING - The tendency for blue finish to deteriorate into rust, seemingly without wear or bad treatment. Some firearms are more vulnerable to this defect than others. Conversely, the condition indicates that the remaining finish may be original.

FLARE GUN – See **SIGNAL PISTOL**.

FLASH SUPPRESSOR or FLASH HIDER - A muzzle attachment that mechanically disrupts and reduces muzzle flash. It does not reduce muzzle blast or recoil.

FLAT-POINT CHECKERING - A traditional English style of checkering gunstocks in which the diamonds are not brought to sharp points but are rather flat on top. It is more durable than sharp-point pattern checkering and allows the grain structure of the wood to show through better. However, it does not provide as firm a grip as standard sharp point-pattern checkering.

FLINT – A hard stone of the quartz family that fractures to a sharp edge and produces sparks when struck against steel. An essential component in the FLINTLOCK mechanism.

FLINTLOCK (Also see **DOG LOCK, ENGLISH LOCK, MIQUELET, FRENCH LOCK,** and **SCANDINAVIAN LOCK**) – An action or external mechanism used in early firearms to ignite the charge of powder in the chamber. When the trigger is pulled, the flint held in the hammer jaws strikes the steel frizzen causing a shower of sparks to be thrown into the flash pan, which contains priming powder. Flame from the exploding primer charge travels down the vent into the chamber, igniting that charge to fire the gun. There were various styles of flintlock mechanisms, mostly named after, and centered on, their country of origin. They included the English Lock, the Dog Lock, the Scandinavian or “Snap” Lock, the popular Miquelet Lock from Spain, and the widely used French Lock.

FLOATED BARREL - A rifle barrel mounted firmly to the receiver and does not touch the forend of the stock. Barrels are floated so that the stock will not adversely affect accuracy by impinging upon the natural vibration of the barrel when the rifle is fired or by applying pressure to the barrel due to climatic conditions. Floated barrels are often seen in rifles that have been accurized.

FLOOR PLATE – The removable or hinged metal plate at the bottom of an internal non-detachable rifle magazine which, when opened, allows fast unloading. It is typically held closed by a catch or latch in front of the trigger guard.

FLUID STEEL BARREL – A barrel made of homogeneous steel as opposed to a damascus barrel, which is made of separate steel strips. Fluid Steel Barrels have been standard practice for well over a century.

FLUTED BARREL - A rifle or pistol barrel that has had longitudinal grooves milled into it. While fluted barrels are more expensive to make than round

barrels, they dissipate heat faster and they provide a better stiffness-to-weight ratio.

FLUTED CYLINDER (See **UNFLUTED CYLINDER**) – A revolver cylinder that has exterior metal removed from between the chambers.

FN FAL STYLE ACTION – A gas operated rifle action with a short-stroke spring-loaded gas piston, a tilting breechblock locking design, and a heavy receiver. A regulator valve permits the user to adjust the amount of gas that enters the system in order to ensure reliable operation in adverse conditions. However, propellant gas does not vent into the receiver and fire control components, unlike direct gas impingement or delayed blowback operating systems. Developed by Fabrique Nationale (FN) of Belgium, the FAL action was used in the FAL rifle, which was adopted in one form or another by the militaries of 90 countries.

FORCING CONE - The tapered section at the rear of the barrel of a revolver that eases the entry of the bullet into the barrel when the cartridge or charge is fired.

FOLDING STOCK – A buttstock that folds to the side of or under a long arm, in order to shorten the firearm's overall length.

FOREARM or **FORE ARM** – 1. The part of the stock in front of the trigger guard under the barrel extending towards the muzzle. 2. The forward part of a carbine stock.

FOREND or **FORE STOCK** – 1. The part of the stock in front of the trigger guard under the barrel on muskets and rifles extending towards the muzzle almost the length of the barrel. 2. The forward part of a rifle stock. 3. One of the three major dismountable components of a break-open shotgun or rifle (the others being the barrel(s) and the action/buttstock), that secures the barrels to the receiver and often houses the ejector mechanism.

FOREND RELEASE or **FOREND LATCH** - A latch for securing the forend to the barrels of a break-open shotgun or rifle. It is usually on the bottom of the forend.

FORGE – To shape metal by hammering it after it has been heated to a plastic state.

FOREGRIP – A vertical pistol grip attached to the bottom of the fore end or fore stock of a rifle, carbine or shotgun.

FORWARD ASSIST – In some modern automatic and semi-automatic firearms, a device used to force the bolt forward when a failure to feed or fully chamber a cartridge happens.

FOULING - The accumulation of unwanted material on the bore of a firearm. Fouling material can consist of either powder, lubrication residue, or bullet material such as lead or copper.

FOWLING PIECE – A flintlock or percussion single barrel (sometime double barrel) muzzle-loading smooth bore longarm (shotgun) specifically designed to fire a quantity of pellets or shot. They were used for hunting small game and birds (hence the name FOWLING PIECE). Early muzzle-loading Fowling Pieces were heavy and had long barrels. With the introduction of breechloading they evolved into today's lighter and shorter shotgun. Most muzzle-loading Fowling Pieces had either **BACK ACTION LOCKS** or **BAR (or FRONT) ACTION LOCKS**, although other types of lock were also used.

FRAME - The part of a firearm, usually a pistol or revolver, to which the action barrel, and grip (or stock) are connected.

FRANGIBLE BULLET - A bullet designed to disintegrate into small pieces upon impact to minimize penetration for reasons of safety, environmental impact, or to limit the danger behind the intended target.

FREE PISTOL – A small caliber (usually .22), single shot, and highly accurate pistol designed and built to certain specifications that are used in target shooting competitions, including Olympic competitions.

FRENCH GRAY - An acid etched or phosphate finish, usually applied to shotgun actions that forms a gray-colored, non-reflective matte finish which also provides some protection from rust.

FRENCH LOCK (Also see **FLINTLOCK**) – Often called the “true” flintlock, the French Lock is the ultimate development of the **FLINTLOCK** mechanism. Developed in France around 1610, it quickly spread throughout Europe, eventually supplanting most other Flintlock designs, with the exception of the Spanish **MIQUELET**. It is a simplified mechanism with two major features: 1) The internal sear moved vertically to engage the tumbler notches, and 2) there were two notches in the tumbler, half-cock and full-cock.

FRIZZEN (Also see **BATTERY**) - The upright, pivoted "L" shaped piece of steel (or steel-faced iron) hinged at the rear used in flintlock firearms. When the trigger is pulled, the flint in the hammer (jaws) strikes the steel frizzen causing a shower of sparks to be thrown into the vent or flash pan, which contains priming powder. Also called the **BATTERY** or **STEEL**.

FRIZZEN SPRING – A “U” shaped spring on a flintlock mechanism that keeps the frizzen upright over the pan or tilted forward uncovering the pan.

FRONT SIGHT – A device near the muzzle used to facilitate aiming the firearm. Used in conjunction with a rear sight.

FRONT STRAP - Front, metal, part of a handgun's grip---which together with the backstrap, provides a mounting frame for the grip panels.

FULL STOCK (Also see **MANNLICHER STOCK**) - A rifle or carbine with a one-piece stock extending to the muzzle. It is traditional in Europe for close-range woodland hunting, but not noted for extreme, long-range accuracy. A full stock is sometimes called a Mannlicher stock, although such a term is confusing because Mannlicher Schoenauer rifles are made with both full and half stocks.

FULMINATE – An explosive compound that will ignite if heated, struck or shaken. Used in percussion caps or caps in cartridges.

FURNITURE – The components on the exterior of a firearm with the exception of the receiver, barrel, lock and trigger assembly, and bayonet. Examples of furniture include: barrel bands, sling swivels, butt plates and ramrods.

FUSIL – A smoothbore, flintlock shoulder arm often carried by officers in European-style armies mostly during the 18th century. Fusils were of lighter construction, finer quality and more ornate than the muskets of enlisted men.

G

GAIN TWIST – A form of rifling in which the twist is slight at the breech and increases gradually as it goes down the bore towards the muzzle to give the bullet maximum rotary motion.

GAS BLOCK – In modern gas operated firearms, the device or part fixed to the barrel from which gas is bled to operate the action. It also housed the front sight in some modern firearms.

GAS CYLINDER - In modern gas operated firearms, the device or part that housed a gas piston.

GAS IMPINGEMENT OPERATING SYSTEM (Also see **DIRECT IMPINGEMENT GAS OPERATING SYSTEM**) -

An action in which high pressure propellant gas from a fired cartridge is routed from the barrel to supply the energy required cycle the firearm's action (i.e., to unlock the breech, extract/eject the fired case, load a cartridge, and lock the breech). This type of system generates a large amount of heat and fouling in the action.

GAS PISTON - In modern gas operated firearms, the device or part at the forward part of the operating rod or slide that causes initial movement.

GAS PISTON OPERATING SYSTEM - A gas operation design in which a piston is used to transfer propellant gas energy from a fired cartridge to the action components. No gas enters the receiver or makes contact with other action components resulting in less heat and less fouling in the receiver.

GAS OPERATED FIREARM – An automatic or semi-automatic firearm that used the gas from a fired cartridge to provide the energy to cycle the action and load another cartridge into the chamber.

GAS PORT - 1. A small opening in the barrel of a gas operated firearm that allows high pressure gas generated by a fired cartridge to flow into the gas system's operating parts. 2. An escape vent safety feature in a firearm's receiver that allows excess gas to escape.

GAS TRAP – In modern gas operated firearms, a gas system where no gas port is used, but where gas is trapped after a fired bullet leaves the barrel to operate a long-stroke piston.

GAS TUBE - In modern direct-gas operated firearms, a part that feeds gas from the gas block to the bolt group.

GAUGE - A unit of measurement used to measure the diameter of the bore of a firearm expressed in the number of spherical balls of corresponding size to the pound. For instance, 16 gauge indicates a diameter which will take a round ball of the weight of 16 such balls to the pound. Twelve gauge indicates a diameter which will take a round ball of the weight of 12 such balls to the pound, therefore 12 gauge is a larger diameter than 16 gauge. Today it is commonly used only to denote the diameter of shotgun barrels and shells; however the term "gauge" was once commonly used to express the diameter of bores in early muzzle loading firearms. For example, an early .69 caliber musket (which fired one ounce lead balls) could also be called 16 gauge because it took 16 .69 caliber balls to equal a pound. Collectors of antique guns in Europe still often refer to the bore size of antique firearms in terms of a gauge instead of using a modern decimal system.

GILDING – A process in decorating a firearm no longer in common use. It is accomplished by overlaying or covering the surface of the metal or other hard material gold by using an amalgam of gold and mercury. The electrical process known as plating replaced gilding in the 19th century.

GLOBE SIGHT - A front sight assembly that is used primarily on target rifles. It consists of a tube that houses interchangeable beads and blades. The tube guards against sight pictures that are influenced by reflections.

GRAIN - A unit of measurement used in firearms to denote the amount of powder in a cartridge or the weight of a bullet. Traditionally it was based on the weight of a grain of wheat or barley, but since 1958, the **grain (gr)** measure has been redefined using the International System of Units as precisely 64.79891 mg or 1/7000 of a pound.

GRIP – The handle-part of the pistol or revolver that is grasped in the hand when using the firearm. Grips are also used in some modern rifles and assault guns to give better control when firing.

GRIP SAFETY - A safety mechanism, usually a lever on the rear of some semi-automatic pistol grips, that unlocks the trigger mechanism of a firearm as the shooter's hand applies pressure to the grip. Also used in some sub-machine guns.

GROOVES – In rifling, the spiraling parallel length-wise hollows cut in the bore of a firearm to impart a rotary motion to the bullet as it travels down the barrel.

GUIDE ROD – In modern automatic and semi-automatic firearms, a rod that remains stationary as a recoil spring moves back and forth along it.

GUN – 1. A firearm. 2. In the U.S. Army the term gun refers to an artillery piece.

GUNPOWDER also called **BLACK POWDER** – A mixture of sulfur, charcoal, and potassium nitrate (saltpeter) that burns rapidly, producing a volume of hot gas. Because of its burning properties and the amount of heat and gas volume that it generates, gunpowder has been widely used as a propellant in firearms and as a pyrotechnic composition in fireworks. Modern firearms do not use the traditional black powder described here, but instead use smokeless powder. The standard formula for gunpowder is 75 parts saltpeter, 15 parts charcoal, and 10 parts sulphur by weight.

GUN TOOLS – Appendages that were issued to soldiers (or came with civilian firearms) do that the weapons could be maintained, cleaned, and have minor field repairs done. Usually, every gun had special tools that were designed just for it. The differences in size and shape of the weapon's screws and (in the case of percussion arms) nipples made this necessary. Even today's modern firearms have their own specialized tools. Gun collectors often collect the tools that came with the guns they collect, and tools constitute a significant collecting area in their own right. Below are just a few of the types of tools issued and used from Revolutionary to modern times.

BALL-SCREW – Often called a “worm” or ball-puller” this tool was threaded on the end of a ramrod and used to extract balls or bullets from a muzzle loading firearm when it failed to fire or needed to be unloaded. A

screw-like projection was driven into the lead ball and turned. After it “caught” the ball was pulled out of the barrel.

BAND-SPRING AND TUMBLER PUNCH – A combination tool that was used to drive the pins of the barrel band springs out of the forestock and the tumbler in a percussion lock from its tight-fitting pivot.

BRUSH AND PICK SET – Combination tools for cleaning or sweeping out the pans and cleaning the touch holes or vents of flintlock firearms. The two separate implements were typically held together with a chain.

CARBINE BRUSH – A cleaning tool for breechloading rifles and carbines when there was no ramrod/cleaning rod. A leather thong or string was used to pull a brass bristle brush through the bore in order to clean it.

COMBINATION TOOL – A gun tool with two or more different functions. An early example is the Hall Model 1840 Carbine Combination Tool, which combined a screwdriver, cone pick and a spanner-type cone wrench. A modern example is the Second Model U.S. M-1 Garand Rifle Combination Tool, designed to be carried in the rifle’s buttstock and which combined a chamber cleaning brush, screwdriver and dismantling tool for the extractor and ejector.

COMBINATION SCREW DRIVER/NIPPLE WRENCH – A tool that had a nipple wrench on one end and one or more blades with different size screw driver blades or slots.

CONE or NIPPLE PICK – A thin wire tool that was used to remove fouling, dirt or cap debris from the cone or nipple of a percussion firearm.

CONE or NIPPLE PROTECTOR – A cup like device that fit over the cone or nipple of a percussion firearm to protect it from damage when the firearm was not being shot.

EXTRACTOR (Also called a ***HEADLESS SHELL EXTRACTOR***) – A small tool that was threaded on the end of a ramrod and used to extract a ruptured metallic cartridge case that was stuck or jammed in the breech of the firearm.

JAG – A small serrated tool that is threaded on the end of a cleaning rod or ramrod and used for cleaning the bore of a firearm. The serrations hold a wad or cleaning patch as the rod and patch are run through the bore.

MAIN SPRING VICE or SPRING VICE – A tool with a thumb-screw that was used to depress the springs in a flintlock or percussion lock in order to remove them from the lock.

NIPPLE WRENCH – A small wrench used to remove the nipple or from the breech area of a percussion firearm and or insert and seat a new nipple.

OILER – A small container that held gun oil. Often comes with a threaded cap and sometimes an integral oil dropper.

RAMMER – A short ramrod used for loading a muzzle loading firearm that was separate from, and not integral to, the firearm. An example is the rammer that came with a boxed set of dueling pistols.

SCREW DRIVER – Used to manipulate screws, it often had a number of different-size slots. Screwdrivers could be simple or single bit, L-shaped, or combination.

SEGMENTED CLEANING ROD (Also called a **TWO** or **THREE-PIECE CLEANING ROD**) – Often issued with military carbines such as the Springfield Trapdoor or Krag-Jorgensen. They came in two or three pieces that screwed together for cleaning the firearm. Often stored in a special cavity in the buttstock when separated into its component parts.

SIGHT COVER AND MUZZLE PROTECTOR – A metal device that slipped over a sight (usually the front sight) to protect it from damage. Often slipped around the barrel near the sight. They were often combined with muzzle protectors which covered and protected the muzzle of the firearm and prevented dirt or moisture from entering the barrel.

TOMPION - A plug that was inserted into the muzzle of a firearm to keep dirt and water from entering the bore.

WIPER – This tool was threaded to the end of the ramrod or cleaning rod and used to clean the bore of the gun. Two sharp metal prongs held a piece of cloth that was used to “wipe” the bore. It could also be used as a “ball-screw” in an emergency to remove a ball and unload a muzzle loading firearm.

WRENCH – Made in a wide variety of different shapes and used for removing specific parts or components of a firearm. They are often a part of a combination tool and include open or box wrenches, T-handle wrenches, and spanner wrenches with studs and points. An example of a modern wrench is the Belgium FN ABLM M49 Gas Cylinder Wrench.

H

HALF-COCK – The position of the hammer where the hammer is partially but not completely cocked. In older firearms the purpose of the half-cock position has been used both for loading a firearm, and as a safety-mechanism. Many firearms, particularly older firearms, had a notch cut into the hammer allowing half-cock, as this position would not allow the gun to fire while the action was being manipulated to load the firearm or extract fired cartridges. It would act as a safety mechanism in percussion firearms since it would not permit the hammer to rest on a live percussion cap mounted firing pin and in cartridge firearms since it would not allow the hammer to rest on the firing pin or the hammer-mounted firing pin to rest on the cartridge primer cap.

HAMMER – The movable part of the firing mechanism used to ignite the priming charge or primer in the cartridge. In modern firearms the hammer usually strikes the firing pin. Hammers can be external or internal in modern firearms. In the flintlock ignition system the hammer or “cock” is equipped with jaws to hold the flint, which is struck against the frizzen to produce sparks for igniting the primer charge.

HAMMERLESS - A firearm that does not have a hammer but may have a firing mechanism based on a spring-powered striker. Some “hammerless” revolvers do in fact have hammers, which are hidden in the frame. Other, so called, “hammerless” firearms have hammers which are located in the action housing.

HAND GUARD – A wood or metal guard on top of the barrel designed to protect the shooter’s hand from the heat of the barrel due to rapid firing. Typically found in military type long guns.

HANG FIRE – An unexpected delay between the triggering of a firearm and the ignition of the propellant. This failure was common in firearm actions that relied on open primer pans, due to the poor or inconsistent quality of the powder. It may be caused in modern weapons if the ammunition has been stored in an environment outside of design specifications.

HARMONICA GUN – A repeating firearm, usually a rifle but sometimes a hand gun, that used a horizontal sliding rectangular bar containing several chambers. The rectangular bar’s resemblance to a harmonica gives this type of gun its name. Made during the percussion and early metallic cartridge eras, they were awkward and never gained popularity. Never made in large numbers, they are quite rare today.

HAWKEN RIFLE (Also see **PLAINS RIFLE**) – A muzzle loading rifle, either flintlock or percussion, made for use on the western plains and mountains, primarily during the first half of the 19th century. Jacob Hawken and his brother

Samuel, gunsmiths in St. Louis, Missouri, were the famous originators of the type of rifle and the name Hawken became a commonly accepted name for this style of PLAINS RIFLE. Besides the Hawken brothers, a number of other gunmakers, mostly located in and in and around St. Louis, Missouri, also made this style of rifle. The rifles were essentially heavily modified versions of the Pennsylvania/Kentucky rifle style that were designed for use in the west. Design elements included shorter (36" to 38") large caliber barrels, usually .50 caliber or better, often half-stocked, ruggedly built for hard rough usage, furniture was simple with no projecting elements so as to not catch on clothing or saddle, and even patchboxes (when present) were kept simple. Furniture was often iron. They were strongly made and proportionately larger and heavier than regular sporting rifles with weights ranging from 9 to 14 pounds. In their time they were also called "Mountain Rifles" probably because they were the rifle of choice of Mountain Men. The style of rifle is also called a **PLAINS RIFLE**.

HARQUEBUS (See **ARQUEBUS**) – An early type of one-man portable firearm, fired from a forked rest or other support. German origin meaning "a gun with a hook."

HEADLESS SHELL – A cartridge case with the rim and rear part broken off, leaving the tube portion of the cartridge stuck in the chamber.

HEADSPACE - The distance measured from the part of the chamber that stops forward motion of the cartridge to the face of the bolt.

HEADSTAMP – The markings on the bottom of a cartridge case. The markings usually identify the manufacturer, the caliber of the cartridge, and sometimes the year of manufacture (if it is a military cartridge).

HEAT BLUE (See **ASH BLUE**) – A bluing process in which an iron or steel part is heated slowly to about 600 to 650 degrees Fahrenheit and then plunged into oil to cool. The metal then takes on a shiny blue color.

HEAT SHIELD - Often in modern automatic and semi-automatic firearms, a thin metal plate inside a hand guard that blocks and reflects heat away from the hand guard.

HEEL – The top rear part of the butt of a shoulder arm.

HEEREN - A German falling block single shot action developed about 1880 that both opens and cocks when the front of the trigger guard is pulled downwards. The compact action incorporates an integral cocking/de-cocking mechanism.

HENRY RIFLE – A lever action, magazine fed rifle that was the most technically advanced firearm during the Civil War. The tubular magazine under the barrel held 15 rounds and when the combined under lever-trigger guard was actuated

the rifle's action extracted and ejected a fired cartridge case, fed a fresh .44 caliber rimfire round into the chamber, and cocked the firearm. The Henry was the direct forerunner of the Winchester lever action firearm.

HIGH BRASS - A shotgun shell for more powerful loads with the brass extended further up along the sides of the shell. Lighter shotgun shell loads will use "low brass" shells. The length of the brass does not actually provide a significant amount of strength, but the difference in appearance provides shooters with a way to quickly differentiate between high and low powered ammunition.

HINGE PIN - A short cylindrical rod of hardened steel set laterally near the front of a break-open firearm's action around which the barrel hook revolves when the gun is opened for loading and unloading.

HK91/G3 STYLE ACTION - A roller locked delayed blowback rifle action developed by Heckler & Koch of Germany from the Spanish CETME action. It does not have a traditional gas operating system. Instead, gas pressure in the cartridge case pushes the case against the bolt and bolt carrier and spring-loaded rollers in the bolt resist unlocking and carrier/bolt movement until the chamber pressure has dropped to a safe level. Components are heavier, recoil is greater, and cocking effort is much greater than with direct gas or gas piston firearms. The chamber must be fluted to insure extraction of the cartridge case. Used in many variations by Germany and numerous other countries' militaries.

HOLD OPEN DEVICE – In modern automatic and semi-automatic firearms, a device or part that hold the bolt, bolt group or slide (in a pistol) open and to the rear, often after the last shot in the magazine is fired. It can also be manually operated and can act as a **BOLT RELEASE**.

HOOK - A concave, semi-cylindrical surface cut into the back of a barrel assembly of a break-open firearm that revolves about the hinge-pin when the gun is opened for loading and unloading.

HOWDAH PISTOL – Developed in India, it is typically a break-open, double-barrel, side-by-side pistol of large caliber, used when hunting tiger while sitting in a howdah (basket compartment) on the back of an elephant. The howdah pistol is the weapon of last resort in case a tiger tries to attack the hunters on top of the elephant.

I

IMPINGE – To transmit energy from one part to another.

IMPROVED CARTRIDGE - A wildcat cartridge that is made by straightening the sides of an existing case and making a sharper shoulder to maximize space for propellant. The neck length and shoulder position are often altered as well. The caliber is not changed in the process.

IN BATTERY – The condition of a firearm where it is loaded with the action closed cocked and ready to fire (with the possible exception of the safety being on).

INDIAN OWNED or USED FIREARM – A firearm, often dating from the 1850's to the 1880's, that shows signs of having been used or owned by American Indians. Often characterized by Indian decorations, such as brass tacks hammered into the stock in geometric or other design patterns, or carved Indian symbols. Some will display repairs to the stock wrist or forearm with wide pieces of rawhide that were wrapped around the gun and shrunk when wetted. Collectors should be cautious as unscrupulous persons have been known to turn a cheap beat up gun that looks like it was used as a boat anchor into a high-priced "historical" piece by hammering brass tacks into the stock.

INDIAN TRADE GUN – A firearm, either musket or (later) rifle, made either in Europe or the United States for the North American Indian trade, mostly for trading with Indian tribes for beaver and other fur. By the 1770s they were generally standardized as a gun that was inexpensive, dependable, and large enough to take big game. Flintlocks remained popular well into the 19th century as they were easy to use and maintain, and were not dependent on a uncertain supply of percussion caps or metallic cartridges. They are characterized by being full-stocked with full or part octagon barrels and ornate, but inexpensive decorations, such as large brass side plates cast in the form of a serpent or "dragon." Although thousands were produced by many different known gunmakers, the survival rate is low and many of those show hard usage or alteration/modification.

INLAYING – A process in decorating a firearm. A craftsman sets sheet or wire gold, silver or copper into undercut grooves in an iron or steel part of the firearm. After it is set (inlaid) the craftsman engraves and/or relief chisels the soft metal to produce a decorative design or image. If the inlaying is done correctly the inlaid metal will not fall out or fragment. Traditionally, soldering is not used to fix the soft metal in the iron or steel.

INLETTING - The process of precision carving out of recesses in wooden stocks to accept the metal components of a firearm.

INSPECTOR'S MARKS or STAMPS (Also called **INSPECTION MARKS or STAMPS**) – The mark that an official puts on a gun part or completed gun to show that it was inspected, met all specifications and passed inspection and (in the case of military inspectors) was accepted for service. Inspector marks are

often the inspector's initials stamped into a metal part or a **CARTOUCHE** stamped into the wooden stock of the firearm.

INTERNAL BALLISTICS - A subfield of ballistics. The study of a projectile's behavior from the time its propellant's ignition is initiated until it exits the gun barrel. Internal ballistics is important to designers and users of firearms of all types.

IN THE WHITE (See **BRIGHT FINISH, NATIONAL ARMORY BRIGHT, WHITE**) – A white natural finish to iron and steel parts of a firearm applied at Springfield Armory, usually before 1873, by the use of successive grinding and polishing to achieve a dull natural metallic sheen.

IRON SIGHTS - A system of aligned markers used to assist in the aiming of a firearm that excludes the use of optics such as a scope. Iron sights are typically composed of two components: a rear sight mounted close to the shooter and usually consisting of some form of notch (open sight) or aperture/ring (closed sight); and a front sight mounted close to the muzzle that is a blade, post, bead, or ring.

ISLAND LOCK - A type of **SIDELOCK**, inletted into the wood at the side of a firearm in its own recess and independent of the receiver.

J

JACKET - A metal shell wrapped around a lead core to form a bullet.

JAEGER RIFLE – A .50 caliber or greater, short barreled, muzzle loading German hunting rifle, typically with a flintlock or percussion action and a patchbox in the stock.

JAM – A stoppage or malfunction in a firearm.

JAWS – The vise-like part of a flintlock's hammer used to hold the flint.

JEWELING - A cosmetic process to enhance the appearance of certain firearm parts, such as the bolt. The look is created with an abrasive brush and compound that roughs the surface of the metal in a circular pattern.

JONES UNDERLEVER - A mechanism of a break-open firearm in which a lever is mounted to the underside of the receiver and extends half way around the trigger guard and ends in a knob the shooter can grasp. When the lever is turned 90 degrees to the right, a pair of tapered, opposing lugs move out of mating bites in the barrel lumps, allowing the barrels to drop open and revolve

around the hinge pin. While not the fastest- design for opening and closing a break-open firearm, it is amongst the strongest and most durable.

K

KEY – A wedge shaped piece of metal used to fasten the barrel to a stock when it is inserted through aligned holes in a lug(s) beneath the barrel and through the stock.

KENTUCKY RIFLE (Also see **AMERICAN LONG RIFLE** and **PENNSYLVANIA RIFLE**) – A misnomer for the **PENNSYLVANIA RIFLE** or **AMERICAN LONG RIFLE** of the 18th and early 19th centuries that was coined and made popular by songwriters and authors of fiction. Very few of these quintessential American muzzle loading rifles were actually made in Kentucky. Production actually centered in Pennsylvania, where German gunsmiths developed it from the German Jaeger rifle.

KEYHOLE or **KEYHOLING** - The shape of the hole left in a paper target by a bullet fired through a gun barrel that has a diameter larger than the bullet or which fails to properly stabilize the bullet. A bullet fired in this manner tends to wobble or tumble as it moves through the air and leaves a "keyhole" shaped hole in a paper target instead of a round one.

KHYBER PASS COPY - A firearm manufactured in the Khyber Pass region between Pakistan and Afghanistan by local cottage gunsmiths. The city of Peshawar is a traditional center of this arms trade.

KICK – A common term used to describe a firearm's recoil.

KNIFE-PISTOL – A combination weapon in which a knife blade is attached to a pistol. Popular during the 17th to early 19th centuries, they came in all sizes and in a number of ingenious designs. The largest often had a pivoting, spring loaded bayonet where the pivot was attached at the muzzle and was released by a catch. One of the smallest is a pocket knife-pistol which had two folding blades and a short barrel that was attached to top of the handle. It fired a small caliber pin-fire cartridge. When the hammer was cocked a hidden trigger dropped down into position. Most **KNIFE-PISTOLS** were made for the civilian market, although the U.S. Navy purchased 150 **KNIFE-PISTOLS** from George Elgin who in 1837 patented his design for a combination single shot percussion pistol and Bowie knife.

L

LANDS – The uncut portion of the original inner surface of the bore left between the grooves as a result of the rifling process.

LANYARD LOOP or **LANYARD RING** - A ring, often swivel-mounted, and usually at the butt of a handgun to enable securing the firearm to a holster or a belt with some kind of cord, or lanyard. Typically found on military revolvers.

LAP – The process of polishing a metal surface with a fine abrasive paste in order to remove machining marks and make the metal smoother. Bores may be lapped to improve velocities and minimize fouling. Bolt actions may be lapped to improve the smoothness of operation.

LENGTH OF PULL - The distance between the trigger and the butt end of the stock of a rifle or shotgun.

LEVER ACTION - A firearm action that uses a lever located behind the trigger guard area, (and often includes the trigger guard) to eject spent cartridges, load new cartridges into the chamber and cock the firearm when the lever is worked.

LIGHTENING GROOVE – A groove cut out of the inside of a rifle's wooden forend or a carbine's forearm in order to make the firearm lighter. During the 19th century the U.S. Ordnance Department used the term **AIR CHAMBER**.

LINE-THROWING GUN – A maritime firearm designed to throw a line from one ship to another using special ammunition and a projectile to which the line is attached. They could be either purpose-built or converted. For instance, some surplus **TRAPDOOR** rifles were converted into LINE-THROWING GUNS for the U.S. Navy. Vintage LINE-THROWING GUNS that still have their case or box containing all the accessories (projectiles, ammunition, parts, tools, line, manual, etc.) are relatively rare and highly collectable.

LOCK – The mechanism of the firearm whose function is to ignite the explosive. Mostly used in reference to external ignition mechanisms, such as matchlocks, wheellocks and flintlocks.

LOCK-PLATE or **LOCK PLATE** – The external metal plate on which the external lock mechanism (i.e., flintlock, percussion, wheellock) is mounted.

LOCK, STOCK AND BARREL – An English expression that originated in the flintlock era or earlier to describe a whole and complete firearm. The lock, stock and barrel were the three main components of a firearm. During the beginning of the 19th century and earlier, gunmakers typically employed or contracted with a number of different craftsmen and tradesmen. The different tradesmen involved

in the fabrication of a firearm included blacksmiths, barrelforgers, locksmiths, wood carvers, engravers, metal smiths, and sometimes even jewelers.

LOCKING LUG – The part of the bolt that prevents rearward movement when the firearm is fired.

LOCKING SHOULDER – The part of a receiver against which locking lugs engage in order to prevent rearward movement of the bolt when the firearm is fired.

LONG ARM (Also see **SHOULDER ARM**) – A classification designation for the longer types of firearms, such as muskets, rifles, carbines and shotguns that are usually held against the shoulder when aimed and fired.

LOWER RECEIVER – In some modern automatic and semi-automatic rifles, carbines and assault rifles, that part of the receiver housing the pistol grip, firing mechanism, trigger and trigger group and magazine well. An example is the AR-15 type of firearm.

LUG - A piece that projects from a firearm for the purpose of attaching something to it. Four examples are: 1. A bayonet lug is the metal protrusion near the muzzle that is used to attach a bayonet to a long arm. 2. Locking lugs on a break-action firearm, such as a shotgun, that extend from the bottom of the barrels under the chamber(s) and connect into the receiver bottom. 3. The locking lugs on a bolt that secure the bolt in the receiver and prevent it from moving rearward when the firearm is fired. 4. The metal shroud underneath the barrel of a revolver that surrounds and protects the ejector rod that ejects cartridges from the cylinder. There are two types of underlugs: the **full-lug**, where the shroud runs the full length of the barrel; and the **half-lug**, where the shroud is only as long as the ejector rod. The lugs also add weight to the barrel to stabilize the gun, mitigate recoil, and reduce muzzle flip during firing.

LUGER STRAW Coloration: The percentage of strawing remaining refers to several small parts that were heat treated to a gold (or straw) color. Most notably these were the trigger, takedown lever, magazine release, thumb safety and the ejector. The strawing fades over time and with use, so the percentage of straw remaining is a key factor. Mauser stopped the strawing processing in late 1937, coincidental with the change in bluing practices, and all Lugers produced after that year were not strawed.

LUMP (Also see **UNDERLUG**) – A British term for the mass of metal out of which the locking lugs on a break-open action firearm are machined. They extend from the bottom of the barrels under the chamber(s) and connect into the receiver bottom. The hook that swivels around the hinge pin and the bites that accept the locking bolts is machined into the lump. In the U.S. the **LUMP** is often called the **UNDERLUG**.

M

MACHINE PISTOL - A handgun style, magazine-fed, firearm that fires in fully automatic or burst-mode.

MAGAZINE - An ammunition storage and feeding device integral with (internal, fixed) or removable (detachable) from a repeating firearm. The magazine functions by moving cartridges within it to a position where they are loaded into the chamber by the firearm's action.

MAGAZINE RELEASE – A button, device or lever that is manipulated to remove a magazine from a firearm.

MAGAZINE WELL – The part of a firearm into which the magazine is inserted.

MAGNUM - A cartridge of greater than normal power or velocity and of the firearm designed to handle it safely.

MAINSRING - The spring in a firearm's action that delivers energy to the hammer or striker and causes it to fire the gun.

MANNLICHER STOCK (Also see **FULL STOCK**) - A full-length stock with a slender forend that extends to the muzzle in order to give better protection to the barrel. A full stock is sometimes called a Mannlicher stock, although such a term is confusing because Mannlicher Schoenauer rifles are made with both full and half stocks.

MARKING – The indication of the manufacturer of the firearm or its component parts. Firearms are usually marked in the form of stamps in the metal.

MARTINI ACTION - A strong, hammerless, single shot, breech loading action. The breech block is hinged at the upper rear and the front tilts downward to expose the chamber when an underlever is pulled down and forward. The front of the breech block rises to seal the chamber when the underlever is pulled back and up. Used by the British and other militaries during the last part of the 19th century.

MATCH GRADE – A firearm's components and ammunition that are suitable for competition shooting. Refers to parts that are designed and manufactured to relatively tight-tolerances to impart a high level of accuracy to the firearm. Also refers to the level of quality in complete firearm that is assembled for competitive shooting matches.

MATCHLOCK – A firearm system of ignition where a slow burning “match” or cord is lowered into contact with the external priming charge. In early matchlocks, the match was hand-held. In later matchlocks a mechanical cock or “serpentine” held the match and moved the match into contact with the priming charge when a trigger or lever was activated.

MICROMETER SIGHT – An adjustable iron sight with very precise and small increments of adjustment for windage and elevation.

MINIATURE FIREARM – A small scale functioning reproduction of a real firearm. Often hand-made by skilled craftsmen, many of the finest and most intricate were made in the early 1800s or earlier. For instance, one miniature wheellock was documented with over 50 scale moving parts. They range from single pistols to cased sets of pistols in presentation boxes with all accessories to working miniature Gatling guns and artillery pieces. A narrow but interesting and growing area of gun collecting with rising values.

MILL or **MILLED** – A piece of metal that has been shaped or cut using a rotary (or other) cutter.

MINIE BULLET or **MINIE “BALL”** – An elongated bullet with a cup shaped hollow in the base that expanded to fill the rifled grooves in a rifled barrel when the firearm was discharged. C.E. Minie, a French infantry captain invented it to give greater range and accuracy to rifles long arms. The Minie bullet had largely replaced round balls in muzzle loading military long arms by the time of the Civil War.

MINUTE OF ANGLE or **MOA** - The unit of measure used in adjusting rifle sights. It is 1/60th part of a degree and translates almost exactly to one inch at 100 yards, two inches at 200 yards and three inches at 300 yards.

MIQUELET LOCK – (Also see **FLINTLOCK**) – A style of flintlock mechanism that was developed in Spain in the 16th century and was in widespread use in the Mediterranean (including Italy), North Africa and Spain’s colonies in the New World. The mainspring is mounted externally on the lock with the tension of the spring acting directly on the hammer instead of a tumbler on the inside of the lock.

MODEL (See **PATTERN**) – A designation applied to weapons of a particular design. Prior to the 1930’s the U.S. Ordnance Department designated weapons by the year they were adopted. Examples include: Model 1861 Rifle-Musket; Model 1873 Rifle, Model 1903 Rifle.

MONOBLOCK BARRELS - A method of building a pair of barrels for a double barreled rifle or shotgun where the entire breech end of both barrels and the underlugs (lumps) are machined as one unit from a solid piece of steel. The

barrel tubes are fitted separately into the monoblock and ribs are attached. A distinctive ring around the barrels about three inches in front of the breech is a way of identifying monoblock barrels. The Beretta Company favors this method for joining the barrels to the breech.

MORTISE – A hole or recess cut into wood to take a corresponding projection (tenon) in another piece of wood to hold the two pieces together.

MOSSBERG - A major American firearms manufacturer, known for its shotguns and .22 caliber rifles.

MULE EAR (Also see SIDE HAMMER RIFLE) – A popular name for a **SIDE HAMMER RIFLE**. It is a distinctive percussion rifle, either muzzle loading or breech loading, in which the hammer and nipple are on the side of the gun and work horizontally instead of vertically, as was the common arrangement for most percussion firearms. It was called a “MULE EAR” because of the shape of the cocking lever on the hammer, which supposedly resembles a mule’s ear. Arguably, the most famous SIDE HAMMER gun is the Jenk’s “Mule Ear” carbine that was used by the U.S. Navy from the 1840’s until after the Civil War.

MUSKET – A shoulder-fired firearm with a full stock and smoothbore barrel. Commonly associated with flintlock or percussion arms.

MUSKETOON – A short musket used by cavalry, artillery or by special troops, such as engineers (i.e., sappers or pioneers).

MUZZLE - The end of the barrel from which the bullet exits the firearm.

MUZZLE BRAKE / RECOIL COMPENSATOR – A device that is fitted to the muzzle of a firearm to redirect propellant gases in order to reduce recoil and rising of the barrel (“muzzle rise”) when the firearm is fired.

MUZZLE ENERGY - The kinetic energy of a bullet as it is expelled from the muzzle of a firearm. Often used as a rough indication of the destructive potential of a given firearm or cartridge.

MUZZLE LOADER – A firearm that has the propellant (powder) and projectile (ball or bullet) loaded from the muzzle.

MUZZLE VELOCITY - The speed at which a bullet leaves the muzzle of a firearm. Muzzle velocity is often determined by the quantity and quality (burn speed, expansion) of the propellant, the mass and shape of the bullet, and the length of the barrel.

N

NATIONAL ARMORY BRIGHT (Also see **BRIGHT FINISH, IN THE WHITE** and **WHITE**) - A white natural finish to iron and steel parts of a firearm applied at Springfield Armory, usually before 1873, by the use of successive grinding and polishing to achieve a dull natural metallic sheen.

NATO STANAG or **STANAG** – North Atlantic Treaty Organization Standardization Agreement – An agreement by NATO members to standardize major elements of combat equipment in order to improve logistics and interoperability.

NAVY REVOLVER (Also see **ARMY REVOLVER**) – The terms **ARMY** and **NAVY** when associated with percussion revolvers manufactured in the United States from about 1851 to the mid-1870's refers to the caliber of the pistol and not to its use by either the Army or Navy. **ARMY** caliber revolvers are .44 caliber and **NAVY** caliber revolvers were .36 caliber. During the Civil War, both the Union and Confederate armies and navies used both caliber revolvers. Navy models usually had slightly smaller dimensions as they fired a smaller ball and took a smaller charge than Army model revolvers. The major gun manufacturers, such as Colt and Remington made both Army (.44 caliber) and Navy (.36 caliber) models of the same firearm. An example is the Remington .44 caliber New Model Army and the Remington .36 caliber New Model Navy.

NECKING DOWN or **NECKING UP** – The act of shrinking or expanding the neck of an existing case to make it use a bullet of a different caliber. This process is often used in the creation of wildcat cartridges.

NEEDLE GUN – The first production bolt action firearm with an ignition system invented by Johan Nikolas von Dreyse in 1829 that used a paper cartridge containing igniter, propellant (gunpowder) and bullet. The Dreyse Needle Gun was used effectively by the Prussian Army during the mid-1800's but it became obsolete after metallic cartridges were invented.

NIPPLE (also see **CONE**)– On percussion firearms it is a small tube on which is set the percussion cap containing fulminate or other priming compound. The cap explodes when struck by the hammer, sending flame through the nipple to ignite the charge in the chamber.

NITER BLUE – A bluing process in which iron and steel parts are heated in molten potassium nitrate and cooled in oil to impart a bright blue shine. Springfield Armory developed a variation of this process in 1885.

NITRO - The chemical composition of a smokeless propellant adopted in the very late 19th century. It is based on nitroglycerine in a solid form and quickly

replaced traditional black powder. Compared to black powder it did not generate much smoke, it was safer to handle, it did not promote rust or fouling in bores and it burned slower, allowing the projectile to accelerate longer as it moved down the barrel and attain a higher muzzle velocity. Because it produces higher pressures than black powder it is dangerous to shoot nitro-based ammunition in firearms designed for black powder.

NITRO EXPRESS - A marketing term from the early days of nitro powders, identifying nitro-based ammunition as more powerful than black powder cartridges.

NITRO PROOF - A proof marking on a firearm identifying that gun as safe to use with nitro-based ammunition. It shows that the firearm was successfully tested at an official proof house with a special extra-heavy charge. The specifics of the test depend upon which proof house undertook the test and what pressure they tested the gun to.

NON-RECIPROCATING CHARGING HANDLE – In modern automatic and semi-automatic firearms, a charging handle that remains forward and does not move when the weapon is fired.

NOSE CAP – A metal tip or cap that covers the forward end of a rifle or musket stock to protect it from damage.

NRA or **NATIONAL RIFLE ASSOCIATION OF AMERICA** - An American organization which lists as its goals the protection of the Second Amendment of the United States Bill of Rights and the promotion of firearm ownership rights as well as gun collecting, marksmanship, firearm safety, and the protection of hunting and self-defense in the United States. The **VGCA** is a NRA affiliated organization. The NRA is also the sanctioning body for most marksmanship competition in the U.S.A., from the local to the Olympic level.

O

OBTURATING BREECH - A breech loading action design whereby the breech slides forward and overlaps the barrel in order to form a better seal. It can also be where the barrels slide back and overlap the breech. Modern firearms do not require special obturating breeches because brass cartridges swell when fired, sealing the rapidly expanding propellant gas within the breech.

OBTURATION or **OBTURATING BULLET** - The process of a bullet expanding under pressure to fit the bore of the firearm, or a cartridge case expanding under pressure to seal the chamber. Also see **SWAGE**.

OPEN-BOLT – In modern automatic and semi-automatic firearms, the position of the bolt from which the firearm is fired.

OPERATING ROD – In modern automatic and semi-automatic long arms, usually a round rod-like extension, often found between the piston and the bolt or bolt carrier. Often found in short and long stroke gas piston operating weapons. They sometime connect directly to the bolt.

OPERATING SLIDE – In modern automatic and semi-automatic long arms, a part similar to an operating rod, but that slides in grooves. Examples are the M-2 Carbine and the Mini-14. In some firearms, such as the M-14, the operating slide is the rear portion of the operating rod.

OPTICAL SIGHT - A sight that uses one or more optical lenses to aim the firearm. Optical sights usually magnify the target image, but there are many non-magnifying optical sights.

OUT-OF-BATTERY - The status of a firearm before the action has returned to the normal firing position. In firearms with an automatic loading mechanism, it refers to a condition in which a live round is partially in the chamber and capable of being fired, but is not properly secured by the usual locking mechanism of that particular firearm's action.

OVAL (Also see **ESCUTCHEON**) - A small oval plate of brass or precious metal, usually inletted flush into the buttstock of a fine gun on which the owner's initials, monogram or coat of arms may be engraved.

OVAL-BORE – A type of smooth boring of the barrel, slightly oval in cross section that revolves around the long axis of the barrel and imparts spin to the fired bullet by causing it to revolve around its axis.

P

PALM REST - A handle, mounted to the underside of the forend of a rifle built for off-hand target shooting. It is usually adjustable, being attached to the rifle by being inserted into a rail or groove that runs the length of the forend.

PALM SWELL - A bulge in the side of the pistol grip of a stock designed fill the palm of the hand and provide a more comfortable and secure hold on the firearm.

PAN (See **PRIMING PAN**) – The receptacle for holding a priming charge of loose gunpowder in flintlock, matchlock and wheellock firearms.

PAPER PATCHED BULLET (Also see **PATCH**) - In the early metallic cartridge era, lubricated paper patches were wrapped around a lead bullet in order to minimize contact between the lead and the bore. This helped eliminate lead fouling, caused the bullet to “take” better to the rifling, and imparted greater accuracy and a flatter trajectory.

PARADOX BARREL - A shotgun barrel boring system invented by G.V. Fosbery, British gunsmith, that allowed a shotgun barrel to be used to fire shot and also to be used to fire a single bullet or slug with reasonable accuracy. The barrel is smoothbore for most of its length until about three inches from the muzzle where a normal shotgun choke begins to constrict the bore. A deep series of spiral rifling lands and grooves are cut into the constricted bore about an inch and a half from the muzzle. While the rifling does not unduly affect shot, a conical bullet or a slug is given a real spin, thereby achieving accuracy superior to that of a modern “rifled” slug fired through a normal smoothbore shotgun barrel.

PARKERIZING - A method of protecting a steel surface from corrosion and increasing its resistance to wear by applying an electrochemical phosphate conversion coating. Also called phosphating. The dull matte finish it imparts to the steel is called a “parkerized finish” and is often gray or black in color.

PATCH (Also see **WAD** and **PAPER PATCHED BULLET**) – In muzzle loading arms, a cloth, leather or paper wrapper, usually greased, used around the bullet or ball to facilitate loading and hold the loose powder, bullet or ball in place. The patch is usually placed between the powder and the projectile. When paper cartridges holding both powder and projectile were used, the paper acted as the patch. In metallic cartridges, used as a jacket around a lead bullet in order to minimize contact between the lead and the bore. This helps eliminate lead fouling, causes the bullet to “take” better to the rifling, imparting greater accuracy and a flatter trajectory.

PATCH BOX – A cavity in the butt stock of a blackpowder shoulder arm that held small items, such as tools, extra flints, bullets, patches, etc. Patch boxes typically have a hinged metal door or a sliding wooden cover.

PATINA – A natural aging or darkening of wood, metal or finish brought on by exposure to the air over a long period of time. Patina of unfinished or bright steel is often gray while patina of old brass is often dark brown or orange color.

PATTERN (See **MODEL**) – 1. In the U.S it is an Ordnance Department designation used before 1902 for items of equipment. The equipment was usually named for the year of adoption, such as the Pattern 1876 Cartridge Belt or the Pattern 1896 Carbine Scabbard. 2. A British designation applied to weapons of a particular design. Prior to 1926 British War Office nomenclature

often identified service arms by the word Pattern and usually the year it was adopted. Examples include: Pattern 1913 and Pattern 1914 rifles.

PATTERN - The shape and concentration of the shot cloud fired from a shotgun as the shot it leaves the muzzle of a shotgun and hits a target at a given distance. An even shot cloud is highly desired. The shot pattern is traditionally measured against a 30 inch circle, fired at a range of 40 yards.

PEDESTAL - A stock making detail where a small metal component, such as a sling swivel stud, is mounted on a flat raised area on the stock.

PEEP SIGHT - A rear sight that consists of a disc or blade with a hole or aperture through which the front sight and target are aligned.

PENNSYLVANIA RIFLE (Also see **AMERICAN LONG RIFLE** and **KENTUCKY RIFLE**) – The quintessential American long gun of the 18th and early 19th centuries. The German gunsmiths who settled in Pennsylvania around 1710 initially developed it from the German Jaeger rifle to meet local conditions and requirements. Production continued to center around Pennsylvania, although gunsmiths in other states produced similar rifles. In its purest form it was a flintlock (later ones were often percussion) muzzle loader that had had a long barrel, usually fully octagon but sometimes half round and half octagon, of about .45 caliber. It often had a maple stock and was decorated with brass furniture in contrast to the bone, wood and brass used on its German ancestor. Ornate brass patchboxes are a salient feature, especially after 1800, although early examples had patchboxes with sliding wooden covers. Many were heavily decorated, with brass or silver inlays. They were highly accurate; British officers who faced them during the Revolutionary War attested that an expert rifleman could easily hit a British soldier at a range of 300 yards. There were various schools of gunsmiths making them and that is often reflected in the different styles and designs.

PEPPERBOX – A firearm (usually a pistol) with several barrels that revolve around a common axis and are presented successively for firing. Pepperboxes were popular during the early to mid 1800s.

PERCUSSION CAP (Also see **CAP**) - A small metal or paper device used with percussion firearms holding a fulminate or ignition compound designed to ignite the main charge of a firearm. Usually a small copper or brass cup shaped device containing ignition compound (often fulminate of mercury) that was placed on the cone or nipple of a percussion firearm. Pulling the trigger releases a hammer which strikes the percussion cap and ignites the explosive compound, sending a flame through the hollow cone to the main gunpowder charge in the chamber, which explodes, propelling the bullet or ball out the barrel. Variations of the cap included narrow double strips of varnished paper that contained explosive caps. The strips were automatically fed to the cone or nipple by a mechanical device.

The percussion cap was the crucial invention that enabled firearms using loose gunpowder or paper cartridges to fire reliably in any weather.

PERCUSSION CAP TESTER – A firearm curiosa, they looked like percussion pistols without barrels and were used to find out the optimum force required to detonate a percussion cap. The tension on the mainspring could be adjusted and a wire was attached to the ring at the top of the hammer and a gauge that measured the force required for detonation.

PERCUSSION LOCK – A mechanical ignition system in which the blow of the hammer explodes the percussion cap so that flame travels down the vent to ignite the main propellant charge in the chamber.

PETRONEL – The classification name for a light smoothbore carbine designed for mounted use during the 16th and early 17th centuries. Petronels were usually matchlocks or wheellocks and, according to an English standard from 1630, were about 3 feet long with a 24-gauge barrel that was 2 feet 6 inches long.

PICATINNY RAIL - A permanent or temporary (removable) bracket used on some modern firearms in order to provide a standardized mounting platform for sights or accessories.

PIGEON GUN - A double-barrel shotgun, with relatively tight choke boring and a relatively high-combed stock used for shooting live pigeons as they take off when released. A pigeon gun is normally heavier than a FIELD GUN to better absorb the recoil of heavy loads. Because this sport is expensive, pigeon guns are often built to a high standard of quality and reliability in deluxe grades with highly figured walnut stocks and fine engraving.

PILLAR BEDDING – A method of fitting a rifle action to a stock in order to improve the rifle's accuracy at long distances. Typically used with bolt action rifles. Carefully-sized metal cylinders sleeve around the action screws and act as spacers, precisely controlling the dimensional relationship between the action and the bottom metal. This reduces the rifle's dependence on a wood stock, which can expand or contract with changes in temperature and humidity and thereby adversely affect the rifle's accuracy.

PIN – A small cylindrical piece of metal that passes through corresponding holes in the stock and barrel studs, barrel and frame, or other pieces, in order to hold components together.

PINFIRE - An early type of self-contained metallic cartridge in which the priming charge is ignited by the hammer striking a small pin which protrudes radially from just above the base of the cartridge. When used in revolvers the cartridge was inserted into the cylinder and the pin was held upright in slots cut into the cylinder

wall. The French arms maker Lefauchaux was a major manufacturer of pinfire revolvers, which were used before, during, and after the American Civil War.

PIPE - A cylindrical device for holding a ramrod that was attached to the underside of the barrel of some muzzle loading firearms. A **TAIL PIPE** is a pipe that is used at the point where the stock thickened and the ramrod entered the stock.

PISTOL – A firearm designed to be fired when held in one hand.

PISTOL GRIP – A mostly vertical, pistol-like grip that is on some rifles, carbines and shotguns.

PISTON – The part of a modern automatic or semi-automatic firearm's gas operating system that rides inside a gas cylinder.

PITCH (See **TWIST**) – The degree of twist in the rifling a barrel. Usually measured in terms of inches per revolution.

PLAIN RIFLE – A Pennsylvania or Kentucky type muzzle loading rifle, either flintlock or percussion, that was simple and without ornamentation. Although they followed the general configuration of the long Pennsylvania/Kentucky rifle, their lack of embellishments extended even to many not having a patchbox.

PLAINS RIFLE (Also see **HAWKEN RIFLE**) – A muzzle loading rifle, either flintlock or percussion, made for use on the western plains and mountains, primarily during the first half of the 19th century. Mostly made in and around St. Louis, Missouri, they were essentially a heavily modified version of the Pennsylvania/Kentucky rifle, designed to better suit them for use in the west. Design elements included shorter (36" to 38") large caliber barrels, usually .50 caliber or better, often half-stocked, ruggedly built for hard rough usage, furniture was simple with no projecting elements so as to not catch on clothing or saddle, and even patchboxes (when present) were kept simple. Furniture was often iron. They were strongly made and proportionately larger and heavier than regular sporting rifles with weights ranging from 9 to 14 pounds. In their time they were also called "Mountain Rifles" probably because they were the rifle of choice of Mountain Men. The style of rifle is also called a **HAWKEN RIFLE**, after the most famous manufacturers and the originators of this type of firearm.

POCKET PISTOL – A small pistol, first developed in Europe during the third quarter of the 16th century, as a scaled down version of a belt or holster pistol, that could be carried in the large coat or waistcoat pockets that were then prevalent. The pocket pistol gained in popularity in the 17th century and many in England were of the **QUEEN ANNE** or **SCREW BARREL, BOX LOCK** design. They were both single and multi-barrel, and from the middle of the 18th century pocket pistols with spring loaded bayonets and knives (Knife-Gun) became more

common. Henry Deringer of Philadelphia was a large-scale American manufacturer of pocket pistols from the 1830's. His name became the generic name (see **DERRINGER**) for a whole class of pocket pistols that are still manufactured today.

POLYGONAL RIFLING (Also see **RIFLING**) - Rifling without sharp edged lands and grooves. Polygonal rifling has several advantages over traditional sharp edged rifling with lands and grooves, including a slight increase in muzzle velocity, less bullet deformation, and reduced lead fouling.

PORTED BARRELS - Barrels with a series of holes or slots drilled near the muzzle in order to reduce felt recoil and minimize muzzle jump when the firearm is fired. When a gun with a ported barrel is discharged, gasses moving down the barrel hit the forward edge of the holes and pull the gun forward reducing recoil. Holes or slots cut along the top of the barrel work to depress the barrel when the gun is fired, counteracting muzzle jump or muzzle rise. Ported barrels may be less than useful when shooting in the dark as the upward and sideways flare can adversely affect a shooter's vision.

POWDER FLASK – A container usually made of metal, often copper, that holds blackpowder for use in a firearm. They became popular around 1830 and were largely used when powder and ball were carried separately. They often had a device in the spout that measured the correct amount of powder to put in the chamber. They were mostly superseded by cartridges. Powder Flasks have been called appendages, accessories and accoutrements, depending on the writer, and are collectable in their own right.

POWDER HORN – A container usually made from a cow or ox horn that holds blackpowder for use in a muzzle loading firearm. They have been used whenever powder and balls were carried separately and are still used today by reenactors and black powder shooting enthusiasts. Powder horns have been called appendages, accessories and accoutrements, depending on the writer, and are collectable in their own right, especially engraved powder horns from 1750-1780. There were two basic types: a large powder horn for holding coarse powder (propellant) and a small powder horn that usually held fine powder for the primer. The traditional steps in making a powder horn typically are:

1. Saw off each end;
2. Boil the horn in potash water;
3. Bore through the tapered end to make a spout;
4. Fit the spout with a stopper;
5. Fit the open base with a wooden plug;
6. Scape and treat the outside of the horn with oil and pumice; and
7. Leave the horn plain or decorate it with engravings.

PRE-'64 WINCHESTER- A collectors' term, specific to Winchester firearms. In 1964 the Winchester Repeating Arms Company decided to economize by

reducing manufacturing costs (and quality) on its entire product line in a vain attempt to compete with their competitors on price. For instance, the Mauser-based controlled-feed claw extractor was deleted on the Model 70 and the forend was no longer dovetailed into the front of the receiver on lever action rifles. Collectors and shooters resent the watershed erosion of quality that occurred in that year. Consequently, to a collector, Pre-'64 Winchesters are worth more than Post-'64 Winchesters.

PRIMER – A percussion cap-type device at the base of center fire cartridges. When the primer is struck by the firing pin it ignites the main charge in the cartridge.

PRIMING – A small charge of loose gunpowder or fulminate in the pan of a flintlock, matchlock or wheellock, which, when ignited, sends a flame through the vent to ignite the main charge in the chamber.

PRIMING PAN (See PAN) – The receptacle for holding a priming charge of loose gunpowder in flintlock, matchlock and wheellock firearms.

PROOF MARK – A symbol, letters and/or numbers stamped into the metal or wood of a firearm to show that the firearm has been inspected, tested, and meets established standards and specifications.

PROOFING – A procedure in which the barrel and breech mechanism of a firearm are tested by subjecting them to dynamic pressure higher than is to be expected by normal cartridges. This is usually accomplished by discharging a cartridge through the forearm that is overloaded by 20% or more. If the firearm passes the test, a **PROOF MARK** is stamped in the metal or wood.

PROPELLANT – The charge whose explosion provides the rapidly expanding gases that force the bullet or projectile down the barrel and out the firearm.

PROVENANCE – An object's history, particularly showing its ownership (e.g., who, what, where, when). Written, dated material can add value to a firearm, especially if it can be linked to a known historical person.

PULL - The length of a stock, as measured from the center of the trigger to the center of the butt, including any recoil pad or butt plate. Pull measurements are not exactly comparable between double-trigger and single-trigger guns. Usually, the length of pull is about right for a shotgun when, with the gun comfortably mounted, there are about two finger-widths between the meat of your thumb and your cheekbone. If it is less than that a shooter's hand might hit his or her face when the gun recoils. If more than that the butt might catch on the shooters clothing when he or she hastily mounts the gun.

PUMP ACTION (Also see **SLIDE ACTION**) - A rifle or shotgun in which the forearm handgrip is manually pumped back and forth to cycle the action (eject a fired cartridge case and chamber a new one. It is often faster than other types of manual actions, such as bolt actions and lever actions, since the trigger hand is not moved from the trigger while the action is cycled.

PUNT GUN – A very large heavy single or double barrel shotgun of 8 gauge, 6 gauge, or larger that was used by commercial market hunters of water fowl, mostly during the 18th and 19th centuries. The gun was usually fixed on the bow of a punt (thus the name “Punt Gun”) that hunters would row or pole through a marsh or similar area to a blind. The gun was fired at flocks sitting in the water and whole species were decimated. Federal legislation made market hunting illegal in 1918. Punt and the huge percussion Market Guns have a strong collector demand. Typically, the bigger and heavier the gun, the higher the price.

PYRITES – A mineral possessing the property of producing sparks when struck against steel. Used to ignite priming in flintlock and wheellock firearms.

Q

QUEEN ANNE PISTOL (Also see **SCREW BARREL PISTOL**) – A pistols first developed in England around 1650 and popular as a flintlock in the 18th century. The lock mechanism was forged as an integral part of the breech chamber. The cannon shaped barrel was unscrewed from the breech chamber to load powder and shot directly into the breech. The barrel was then screwed into the breech. They often had the lock mechanism on top of the breech, rather than beside it, and in these cases were sometimes called **BOX LOCKS** (not to be confused with the **BOXLOCK ACTION** of a break-open shotgun). It usually did not have a wood forestock.

QUARTER RIB - A raised section of rib, running on the top of the barrel(s) from the breech part way towards the muzzle to act as a base for express sights and act as an aid in quick pointing. It is found predominately on fine side-by-side double rifles, and sometimes on higher quality custom bolt rifles.

R

RAIL MOUNT – An integral rail on the underside of a telescopic sight that provides rigidity to the scope and an attachment point for a European-type quick-detachable mounting system.

RAMPART GUN (Also See **WALL GUN** and **SWIVEL GUN**) – A large heavy gun that was essentially a small cannon that fired a heavy load (either a round ball or grape shot) at short distances. Essentially defensive weapons, they were usually swivel mounted on the walls of fortifications, on the bulwarks of sailing ships or used as boat guns. Made with touch hole (matchlock), flintlock and percussion locks.

RAMROD – A wooden or metal used for loading muzzle loading firearms by pushing or “ramming” the charge (mainly gunpowder) and projectile down the barrel into the chamber. Also used for cleaning the bore of firearms. The designation “ramrod” was also used by the U.S. Ordnance Department for a one-piece cleaning rod.

RATE OF FIRE - The frequency that a firearm can fire or can be fired. Usually measured in terms of rounds per minute.

RATE REDUCER – A device in an automatic firearm that slows the rate of fire.

REAR SIGHT – A sighting device close to the shooter between the front sight and the eye used to aim the firearm. Rear sights be either optical, with lenses that magnify the target, or iron. Iron rear sights usually consist of some form of notch (open sight) or aperture/ring (closed sight);

REBOUNDING LOCK - An action in which the released hammer comes to rest slightly rearward and out of contact with the firing pin. Before its development, unless the hammer was kept on half-cock or cocked and on safe, non-rebounding hammers would rest on the firing pin, which would rest on the primer in the cartridge; a decidedly dangerous condition that could lead to accidental discharge.

RECEIVER – The part of the firearm to which the barrel is attached. The receiver often holds the action or part of the action.

RECIPROCATING CHARGING HANDLE – In modern automatic and semi-automatic firearms, a charging handle that moves forward and backward with the bolt as the gun is fired.

RECOIL - The rearward movement of a firearm when it is fired. According to Newton’s third law, the recoil exactly balances the forward movement of the projectile.

RECOIL ACTION or **RECOIL OPERATION** - An operating mechanism used in automatic or semi-automatic (autoloading) firearms. The force of recoil provides energy to cycle the action (i.e., unlock, extract, eject, cock the firing mechanism, and reload the chamber.

RECOIL SPRING – In modern automatic and semi-automatic firearms, the spring that acts upon the bolt or bolt group in its rearward position and causes it to return forward.

RECONVERSION – The act of restoring to its original configuration a (usually antique) firearm that has been converted from one type of action or ignition system to a newer action or ignition system. For instance, many flintlock guns were converted (modernized) to percussion during the 1840's and 1850's. Some unethical persons may try to restore such a converted firearm to its original flintlock system in order to increase its apparent value.

REFINISH – The process of putting a new finish on the metal or wood of firearm whose original finish has been worn. Can be legitimately done, such as being part of an arsenal refurbishment. Unscrupulous persons can also refinish an old gun in order to increase its apparent value.

REFURBISH – The rebuilding or restoring of a military firearm to full service condition, usually by a government arsenal or contractor.

REINFORCED FRAME - A firearm frame, most commonly on a heavily recoiling break-open firearm, in which the action forging has been enlarged with extra steel at its weakest point.

REINFORCING CROSSBOLT (See **CROSSBOLT**) - A steel bolt, mounted transversely through a rifle stock just under and behind the front and sometimes the rear receiver ring against which the action is carefully bedded. When properly fitted, it helps distribute the recoil and reinforces the stock at the point where wood has been removed to accept the action. Reinforcing crossbolts can be recognized by the flush-mounted circular steel fittings on the side of the stock, however they can also be finished with contrasting wooden plugs and sometimes are completely hidden.

RELEASE TRIGGER - A trigger in shotguns designed for trap shooting, which fires the gun when the trigger is released.

REMINGTON – A major American firearms manufacturer. America's oldest continuous gunmaker. Some of its more popular products include the Rolling Block rifle, the Model 700 rifle and Model 870 shotgun.

REPEATING FIREARM – A firearm capable of firing a number of shots in quick succession.

REPRODUCTION – A modern manufactured working replica of a (usually) antique firearm.

REPOUSSE (See **CHASING** and **CHISELLING**) – A hand process in decorating a firearm. Relief decoration is made by hammering or beating of plate metal from the underside using fine hammers and punches. REPOUSSING is usually accompanied by CHASING and CHISELLING to bring out the deeper and fine detail in the design. REPOUSSING is usually limited to parts such as the sideplates of finer guns. The term is often used today for all relief work, even that done on the upper surface of the metal.

RESTORATION – The process of returning a firearm to its original or near-original configuration and/or condition. In collecting there is a fuzzy line between ethical or legitimate restorations (or repairs) and unethical restorations.

RETRACTABLE STOCK – A buttstock that slides back and forth, usually on a modern long arm, in order to provide different lengths of pull or reduce the overall length of the firearm.

REVOLVER - A handgun equipped with a revolving cylinder containing multiple chambers holding ammunition to be presented to the rear of a barrel for successive firing.

REVOLVING RIFLE and **REVOLVING SHOTGUN** (Also see **TURRET GUN**) – A repeating rifle or shotgun usually made during percussion era (and early metallic cartridge era) that used a revolving cylinder containing multiple chambers that were presented to the rear of the barrel for successive firing. Besides firearms with conventional cylinders, this category includes TURRET GUNS and other curiosities such as the Bennett & Haviland design which had a number of separate chambers horizontally mounted on a linked belt. Several gunmakers today have reintroduced revolving rifles, either as new designs or as reproductions of historical arms.

RICOCHE - A projectile (bullet) that rebounds, bounces or skips off a surface.

RIFLE BEDDING (Also **BEDDING**) - A process of filling gaps between the action and the stock of a rifle with an epoxy based material. Makes the action more rigid in the stock and improves accuracy.

RIFLE – A shoulder arm with a rifled barrel.

RIFLE-MUSKET – A term used by the U.S. Army Ordnance Department in the mid-1800s to designate the new-built muzzle loading shoulder arms of musket size but with slender rifled barrels more than 28 inches long. The .58 caliber **RIFLE-MUSKET** was the standard infantry arm during the American Civil War. In U.S. military service, they were manufactured between 1855 and 1865.

RIFLED MUSKET – A early to mid-19th century military (usually muzzle loading) shoulder arm that was originally manufactured as a musket but was converted to a rifle by either having grooves cut in the barrel or having a new rifled barrel.

RIFLING – Evenly spaced spiral grooves cut in the bore of a firearm that twist around the long axis of the barrel to impart a spin to a projectile. This spin serves to stabilize the projectile in flight, improving its stability and accuracy. The raised portions of the bore between the grooves are called “lands.” There are a number of different methods of rifling:

- **BROACH RIFLING** – (Procession displacement) A carbide tool that has a series of studs on the surface is pulled through the bore, displacing metal to form the rifling grooves. Each stud is slightly taller than the one in front of it, displacing a little more metal.
- **BUTTON RIFLING** – (Displacement forming) As a tapered carbide button, similar in shape to a bullet, is pushed or pulled down a bore, angled ridges in the side of the button push metal aside and rotate the button to form rifling grooves.
- **CATION RIFLING** – (Chemical erosion) A caustic acid is precisely deposited on the surface of the bore eroding the metal into the desired rifling grooves. The acid is neutralized when the final rifling pattern is attained.
- **CUT RIFLING** – (Metal removal) The old traditional method of rifling. A small hook cutter is pulled through the bore, removing metal from the bore’s surface to cut rifling grooves.
- **HAMMER FORGING** – (Compression forming) A mandrill of the desired dimensions and shape is inserted into a barrel blank. Hydraulic hammers then compress the barrel blank around the mandrill and the mandrill is withdrawn, leaving a finished rifled bore.

RIM - A flange at the base of a cartridge case that provides purchase for the firearm's extractor to grasp and remove or eject the cartridge from the chamber. It also prevents the cartridge from sliding too far forward in the chamber.

RIMFIRE - A cartridge that is discharged when a firing pin strikes the rim of the cartridge’s base instead of striking a primer cap at the center of the base of the cartridge. The rim of the rimfire cartridge is essentially an extended and widened percussion cap which contains the priming compound, while the cartridge case itself contains the propellant and bullet. A rimfire cartridge does not have a primer cap in the center of the base. Large caliber rimfire cartridges were common in the 1860’s and early 1870s but today are primarily used in small caliber cartridges, such as .22 caliber ammunition.

ROLLED TRIGGERGUARD - A thickened, beaded edge on the sides of a triggerguard bow. This detail strengthens the triggerguard while at the same time permits it to be made light, thin and graceful. The rounded edges also theoretically help to avoid finger injury when the firearm recoils, which is

something that may be possible with a sharp-edged triggerguard in a heavy recoiling firearm.

ROLLING BLOCK - A firearm action where the breech sealed by a circular shaped breechblock that rotates on a pin. The breechblock is locked into place by the hammer, preventing the cartridge from moving backwards at the moment of firing. Cocking the hammer allows the breechblock to be rotated freely to open the chamber and reload the weapon.

ROTATING BOLT – A bolt that rotates in order to engage its locking lugs.

ROUND - A single cartridge.

RUGER (Also **STURM, RUGER & CO.**) – A major American firearms manufacturer. Some of its more popular products are: the Mini-14 rifle, the GP-100 and SP-101 revolvers, the Mark II, .22 caliber pistol, and the Model 10/22 rifle.

S

SABOT - A type of ammunition used in a firearm to fire a projectile that is smaller than the bore diameter. In effect it is an oversized housing that allows a sub-caliber projectile to be fired in a larger-diameter bore. The sabot falls away from the actual projectile upon exiting the muzzle. From the French, for Shoe

SADDLE RING CARBINE - A military carbine with a ring typically fitted to the left side of the receiver. Such a firearm may be attached by a swiveling snaphook to a broad leather belt (sling) worn over the cavalryman's shoulder and across the body in order to prevent the carbine from being accidentally dropped. The Krag-Jorgensen Model Carbine of 1898 was the last Saddle Ring Carbine in U.S. service.

SAFETY – The mechanism of a firearm designed to prevent accidental discharge, helping to ensure safer handling.

SALTPETER or **SALTPETRE** – Potassium Nitrate, one of the three principal ingredients of blackpowder. It is a chemical salt with strong oxidizing qualities.

SAVAGE ARMS – A major American firearms manufacturer, known for its rifles.

SCALLOPED RECEIVER – A decorative detail on a boxlock firearm. The rear edge of the receiver is carved into any of a variety of curved shapes where it joins the buttstock instead of being left in a simple straight vertical line.

SCANDINAVIAN LOCK (Also see **FLINTLOCK**) – A **FLINTLOCK** design developed and used in Sweden and other Scandinavian countries. It is similar to the **MIQUELET** in that the mainspring is on the outside of the lock and acts directly on a notch in the hammer. In addition the mainspring also supplied tension to the frizzen. However, the flashpan had its own separate cover, much like the **SNAPHAUNCE**.

SCHEUTZEN BUTTPLATE (Also see **SWISS BUTTPLATE**) - A prominent buttplate often seen on Scheutzen target rifles. It is usually cast of brass and then plated, with prongs at heel and toe to help stabilize the butt of a rifle on the shooter's shoulder.

SCHEUTZEN RIFLE - A single-shot rifle of German conception and design used for off-hand target shooting. They are typically heavy, with long, often octagon, barrels, high comb stocks with prominent sculptured cheekpieces, palm rests and fancy extended-curve buttplates with prongs at the heel and toe (See **SCHEUTZEN BUTTPLATE** (and **SWISS BUTTPLATE**)).

SCHNABEL FOREND or FOREARM - The curved/carved flared end of the forend/forearm that resembles a bird's beak (Schnabel in German). A **SCHNABEL** forend is common on Austrian and German guns and is often seen on custom stocks and rifles.

SCOPE BLOCKS (Also see **TARGET BLOCKS**) - A pair of small dovetailed steel bases that accept mounts for target scopes such as the Unertl where the scope is allowed to move forward in the rings under the recoil of the rifle and which typically carry the windage and elevation adjustments in the mount. Usually one base is mounted on the barrel and one to the front receiver ring of the rifle.

SCOPE RINGS (BLOCKS/BASES) - Metal devices used to attach (mount) a scope to the top of a firearm's receiver or frame.

SCREW BARREL PISTOL (Also see **QUEEN ANNE PISTOL** and **POCKET PISTOL**) – Flintlock pistols developed in England around 1650. The lock mechanism was forged as an integral part of the breech chamber. The cannon shaped barrel was unscrewed from the breech chamber to load powder and shot directly into the breech. The barrel was then screwed into the breech. It did not have a wood forestock.

SEAR – The pivoting part of a firearm mechanism operating between the trigger and the hammer, cocking piece, striker, or the firing pin.

SELECTIVE FIRE - A modern firearm that fires both in semi-automatic and automatic mode by means of a selector device. Some selective fire weapons

utilize burst mode mechanisms fire a limited number of shots when the trigger is pulled and held back.

SELECTOR – A device on a modern selective fire firearm that allows the mode of fire to be selected and manually controlled.

SEMI-AUTOMATIC – A self-loading firearm that fires only one cartridge with each pull of the trigger.

SEMI-WADCUTTER - A type of bullet commonly used in revolvers which combines features of the wad-cutter target bullet and traditional round nosed bullet. The basic design consists of a roughly conical nose, truncated with a flat point, sitting on a cylinder. The semi-wadcutter design offers better external ballistics than the wadcutter.

SERPENTINE – An “S” shaped metal cock holding the lighted match or cord in matchlock firearms.

SHELL (Also see **CARTRIDGE**) – A metal or cardboard part of the cartridge holding the charge or propellant.

SHELL DEFLECTOR - A device or protrusion near the ejection port of modern automatic and semi-automatic firearms that is positioned and shaped to deflect an ejected case away from the shooter’s body.

SHARPS – An American breechloading single shot rifle or carbine. It used a falling block action that was actuated by an integral lever/trigger guard. Before and during the Civil War it used a percussion cap to fire combustible linen or paper cartridges. After the Civil War the design was modified to fire self contained metallic cartridges.

SHARPSHOOTER – Originally a Civil War era sniper, the meaning of the term has expanded to refer to someone who is an accurate shot.

SHORT ARMS – A classification designation for hand weapons, such as pistols and revolvers.

SHOULDER ARM (See **LONG ARM**) - A classification designation for the longer types of firearms, such as muskets, rifles, carbines and shotguns that are usually held against the shoulder when aimed and fired.

SHOOTING STICK – A portable weapon mount, usually in the shape of a stick with a fork or “V” in the upper end, that holds a firearm steady while it is aimed and fired.

SIDE HAMMER RIFLE or **MUSKET** (Also see **MULE EAR**) – A distinctive percussion rifle, either muzzle loading or breech loading in which the hammer and nipple are on the side of the gun and work horizontally instead of vertically, as was the common arrangement for percussion firearms. Often called a “**MULE EAR**” because of the shape of the cocking lever on the hammer, which supposedly resembles a mule’s ear. Arguably, the most famous **SIDE HAMMER** gun is the Jenk’s “Mule Ear” carbine that was used by the U.S. Navy from the 1840’s until after the Civil War.

SIDE LEVER – A lever mounted on the side of an early (1860’s and 1870’s) break-open firearm (typically a shotgun) for opening and locking the firearm. Manufactured concurrently with the **UNDER LEVER** and superseded by the **TOP LEVER** which is in common use today.

SIDELOCK (Also see **BOXLOCK**) - A type of action on a break-open gun where the lockwork (i.e., hammer, sear, mainspring) is mounted to the inside or back side of a side plate (or pair of plates for a double gun). Some consider a sidelock to be superior to a boxlock because:

- Less steel needs be removed from the bar of the action supposedly making the action stronger;
 - The lock plates provide a larger space for engraving;
 - Sidelocks have often been considered more aesthetically pleasing than boxlocks;
 - They are often made with secondary, or intercepting, safety sears;
 - Trigger pulls theoretically may be adjusted more precisely; and
- Because of all the above, many gun manufacturers often reserve the sidelock action for their better grades of guns.

SIDEPANEL – 1. A flat protrusion along the side of a rifle stock that reinforces the stock in the area weakened by wood having been removed to receive the action. 2. A flat area on the side of the head of a stock of a break-open gun. Typically found in fine firearms, the sidepanel permits more wood in the area to be in contact with the receiver, giving a stronger wood-to-metal connection, without resulting in an ungainly bulky line to the wrist of the stock.

SIDEPLATE or **SIDE PLATE** – 1. Decorative steel plates mounted on the sides of a boxlock break-open firearm, inletted into the receiver and into the wood just behind it. Sideplates make the gun resemble a sidelock in appearance and provide a greater area for engraving. Sideplated guns can often be recognized by the lack of action pins visible in the sideplates, although some sideplated guns are built with fake pins. 2. Decorative metal designs usually found on the left side of the stock (the side opposite the lock) on many flintlock and percussion firearms. They could be quite ornate on finer, highly decorated custom pistols and long arms. They also helped reinforce the wooden stock in an area where it was thin and relatively weak.

SIGNAL PISTOL – A firearm designed to fire a pyrotechnic signal or flare. Also called a **FLARE GUN** or **VERY PISTOL** (after Edward W. Very, the American inventor of the basic design that most modern SIGNAL PISTOLS follow). Early SIGNAL PISTOLS were had flintlock or percussion actions and were breech or muzzle loading. Later SIGNAL PISTOLS are typically break-open breechloading pistols with one (and sometimes two) barrels that fire a cartridge which contains a flare or pyrotechnic signal. This is a distinct and interesting area of gun collecting.

SINGLE ACTION (Also see **DOUBLE ACTION**) - A revolver action that requires the hammer to be manually cocked for each shot. Some single action revolvers can also be fired in double action. It is also an auto-loading pistol action that requires manual cocking of its mechanism, such as directly cocking the hammer or manipulating the slide, for the first shot only.

SINGLE SHOT ACTION - A manually operated action that limits storing or loading to only a single cartridge.

SINGLE SET TRIGGER - A single trigger that normally operates at 4 – 6 pound pull, which when pushed forward converts to a hair trigger. This trigger is usually fitted with a small set screw to adjust the pull (weight) of the hair trigger.

SINGLE SHOT - A firearm that holds only a single round of ammunition, and must be reloaded after each shot.

SINGLE TRIGGER - One trigger on a double barrel shotgun or rifle. It fires each barrel individually by successive pulls, or may be selective in which the barrel to be fired first can be chosen via a control button or lever.

SKEET - A competitive game of shooting clay pigeons on a formally designed layout. Two launching machines are located at the corners of a semicircle, firing clay targets across and slightly forward of the front line; one machine firing targets higher; one firing targets lower in crossing shots at relatively close range that can travel with high angular velocity. Competitors shoot at 25 targets from stations at various positions along the circumference of the semicircle, and finally from the center point of the front line. Skeet emphasizes a broad variety of shots, outgoing, incoming and crossing.

SKEET GUN - A double-barrel shotgun with short barrels and relatively open chokes, used for the game of Skeet. A skeet gun is normally heavier than a field gun. Two barrels are required because the game calls for shooting doubles, however theoretically a repeater such as a pump action or semi-automatic shotgun could be used.

SKEET SET - A shotgun built for the sole purpose of competition in Skeet in which one must shoot the course separately with four different gauges: 12, 20,

28 and .410. When using four different interchangeable barrel sets on the same receiver/stock, the dimensions of the stock remain constant and all the barrel sets can be the same weight.

SKEET TUBES - Interchangeable sub-caliber, full-length liner tubes of 20, 28 and .410 gauge that fit into the barrels of a 12 gauge shotgun to reduce the gauge without using a different gun or a different barrel Skeet Set. Skeet Tubes allow one to shoot the required different gauges in Skeet without having to invest in a set of guns, invest in a Skeet Set of barrels or adjust to using different guns. Skeet Tubes are less expensive than a Skeet Set but not as good because the barrels with different tubes will have different weights.

SLAM-FIRE – The firing of a blow-back firearm from an open bolt position in which the forward movement of the bolt feeds chambers and fires the cartridge in a single movement.

SLEEVEING (Also called **RELINING**) - A method of inserting new bore tubes to replace a worn-out gun barrel or for converting a barrel to a new smaller caliber. The original barrel is reamed or bored out and a new liner is inserted, brazed to the original barrel, and rifled to the desired caliber (if it was not already pre-rifled).

SLIDE ACTION (Also see **PUMP ACTION**) - A manually operating repeating long arm action with a reciprocating forearm. Sliding the forearm towards the receiver opens the action and extracts/ejects the fired cartridge case; forward motion chambers a new cartridge and locks the action.

SLING - A strap or harness designed to allow a person to carry a firearm (usually a long gun) on his /her person (usually over the shoulder). A sling can also assist in aiming by allowing the shooter to hold the firearm steady.

SLING EYE - A small round metal loop mounted to the underside of a firearm's butt and to either the underside of the barrel or to the forend, designed to accept a metal hook attached to a sling. It can also be used to tie a piece of rope or thong of rawhide that is used as a carry sling.

SLING SWIVEL - A slender steel device attached to the stock (and sometimes barrel) of a long gun about which a sling is folded. It may be permanently affixed or quick-detachable.

SMALL ARMS – A military term for arms carried on the person, and in the case of firearms, fired without support.

SMITH & WESSON – A major American firearms manufacturer best known for its revolvers. It was the first American maker of repeating handguns (revolvers) that fired self-contained metallic cartridges.

SMLE (SHORT MAGAZINE LEE ENFIELD) - The standard British Army rifle from around 1895 to 1957.

SMOKELESS POWDER – A firearm propellant whose ignition and explosion is characterized by a lack of smoke.

SMOOTHBORE – A firearm whose bore is not rifled, such as a musket.

SNAP ACTION - An early break-open action design in which the shooter pushes forward on a spring-loaded underlever to drop the barrels and expose the chambers for loading and unloading. The shooter then closes the gun simply by raising the barrels and the action snaps closed.

SNAP CAP – A dummy cartridge with a spring-loaded "primer" that is used to test the mechanical functioning of a firearm. It is not advisable to dry fire most firearms on an empty chamber. Hardened steel parts can shatter without the soft brass primer to act as a shock absorber. Snap caps help avoid damaging the firearm by cushioning the blow of the hammer and firing pin when the use of a live cartridge would be impractical.

SNAPHANCE or **SNAPHAUNCE** – An early and simple form of flintlock chiefly characterized by a manually operated pan cover or the absence of a pan cover. When the trigger is pulled a hammer holding a flint falls, striking a steel frizzen and while pushing it forward scrapes particles from its surface, which as sparks, fall into a flashpan containing a priming charge of fine gunpowder, igniting first it and then, through a touchhole, the main propellant charge. A separate, manually operated pan-cover would allow the gun to be carried loaded, but for safety, not cocked.

SNIDER ACTION - An early type of breech-loading single-shot action in which a breech block, hinged at the side, is manually rotated to expose the breech. Although designed by an American, Jacob Snider, it was first mass-produced to convert muzzleloaders to breechloaders for the British army in 1866.

SNUBNOSED REVOLVER - A revolver with a short barrel.

SOPER ACTION - An early type of breech loading single-shot action in which a breech block, hinged at the side, is rotated by a side lever to expose the breech. Although considerably fast to operate, it lost out in British Army trials because of its complexity and cost of production/

SPEEDLOADER - A device used for quickly loading a firearm or magazine with loose ammunition.

SPENCER – An American made repeating rifle or carbine that was one of the most technically advanced and effective firearms of the Civil War. It featured a

tubular feed magazine in the buttstock that held seven cartridges. By means of a lever action, the mechanism extracted and ejected a fired cartridge case and fed a new cartridge into the chamber. The external hammer was then cocked to fire the gun.

SPIRIT LEVEL FRONT SIGHT - A front sight with a bubble-level. It was designed to avoid canting and allow careful orientation of a rifle in a level position. It is most often seen on better quality long range target rifles and large caliber professional hunting rifles, like "buffalo" guns.

SPITZER BULLET - An bullet design that maximizes aerodynamics.

SPLINTER FOREND - A slender English-style forend on a break-open shotgun, designed to retain the barrels on the receiver when the gun is opened and to house the ejectors, but not necessarily to provide a hand-hold. Splinter forend guns are supposed to be grasped by the barrels, just ahead of the forend.

SPORTERIZING / SPORTERIZATION / SPORTERIZED - The modification of military-type firearms to make them suitable for civilian sporting use or make them legal under the law. True collectors of historical and collectable military arms consider sporterizing those weapons to be almost desecration. It also considerably reduces their value as collectable arms. That being said, there is a growing sub-genre of collecting that includes historical U.S. military arms that were sporterized by some of the large surplus arms dealers, such as Bannerman or Schuyler, Hartley and Graham.

SPORTING CLAYS - A game of clay target shooting with a shotgun in which the competitor walks along a course of different stations. At each station a different type of target is presented, designed to replicate a variety of live hunting situations.

SPRING GUN (See **AIR GUN**) – A type of **AIR GUN** that uses a compressed spring to propel a bullet or pellet out of the barrel. When the spring is released it pushes air that pushes the projectile.

SPUR TRIGGER - An obsolete firearm design popular during the 1800's that housed the trigger in an extension of the frame. The trigger projected only slightly from the front of the extension or spur. There was no trigger guard to help prevent accidental discharges.

SQUIB LOAD - A malfunction in which a fired projectile does not have enough energy behind it to exit the barrel, and thus becomes stuck.

STAMP – 1. Marks made in metal or wood of a firearm to denote manufacturing information, inspection, approval, or other information. 2. The process of forming metal with a power driven hammer against a die.

STAR GAUGED BARREL – A barrel made for U.S. Springfield Model 1903 rifles by Springfield Armory and Rock Island Arsenal, that was measured internally for precision of boring and rifling throughout its full length with a special gauge. If it was found acceptable the barrel was marked at the bottom of the muzzle with a circular six-pointed star. First used on National Match rifles, this star is reputed to be the sign of a particularly accurate barrel.

STEEL (See **FRIZZEN** and **BATTERY**) – An old name for a **FRIZZEN** on a **FLINTLOCK** firearm that is no longer in common usage. Used during the 17th and 18th centuries.

STOCK - The part of a long arm that is held against the shooter's shoulder when firing the firearm. The stock provides a means for the shooter to firmly support and aim the firearm. The barrel and firing mechanism are attached to the stock.

STOPPAGE – The failure of a firearm to function that can be easily corrected without tools.

STOPPING POWER – A component of terminal ballistics, it is the ability of a firearm and/or ammunition to cause a wound sufficient to incapacitate the living target.

STOVEPIPE – When a cartridge fails to chamber properly, especially in a semi-automatic pistol, because it approaches the loading ramp at the wrong angle and is trapped by the rear edge of the ejection port, causing a jam. Also, when a fired case fails to clear the ejection port and becomes caught between the rear of the port and the breech end of the barrel.

STRAIGHT-LINE – A stock design in which the top of the stock is in alignment with the centerline of the bore. Often found in modern assault rifles.

STRIKER – A firing pin released directly by the sear in order to go forward with energy from its own mainspring to strike the primer. No hammer is used.

STRIPPER CLIP - A device that holds several cartridges together in a single unit for easier and faster loading of a firearm's magazine.

STRIPPING – The failure of a bullet or projectile to “take” the rifling, resulting in failure to attain rotary motion, and losing portions of the projectile in its passage through the barrel.

STUD – A projection on a firearm designed to hold another part in position by contact with it. In early rifles that used socket bayonets it was the front sight base that also served to secure the bayonet in place.

STUTZEN – A German term for a short rifle or carbine.

SUPERPOSED - A double Over/Under (O/U) barrel configuration, usually in shotguns (e.g., “superposed shotgun”) but sometimes may be found in custom rifles.

SUPPRESSOR / SILENCER - A device attached to or part of the barrel at the muzzle of a firearm to reduce the amount of sound and flash generated by firing the firearm.

SURVEY – An Ordnance Department term for removing an item of equipment from U.S. Army service due to damage or obsolescence.

SWAGE - To reduce an object item in size by forcing through a die. In internal ballistics, swaging is the process where bullets are swaged into the rifling of the barrel by the force of the expanding propellant gases.

SWAGED BULLET - A bullet that is formed by forcing it into a die to assume its final form.

SWAGED CHOKE - A choke that is an integral part of a shotgun barrel and is formed by a swaging process that compresses the outside of the barrel and constricts the bore near the muzzle.

SWAGED RIFLING - Rifling in a firearm barrel formed by a swaging process, such as button rifling.

SWISS BUTTPLATE (Also see **SCHEUTZEN BUTTPLATE**) - A prominent buttplate often seen on Scheutzen target rifles. It is usually cast of brass and then plated, with prongs at heel and toe to help stabilize the butt of a rifle on the shooter’s shoulder.

SWIVEL (1) – A device permitting motion on a part of a firearm while remaining a part of the piece. An example is the “swivel ramrod,” which is attached to the firearm, yet capable of movement to allow loading. Another example is the “sling swivel” which is attached to the firearm (usually the stock) yet allows movement in the sling.

SWIVEL (2) – A connecting shackle that is fitted between the lower hook of the mainspring and the forward arm of the tumbler in a **SIDELOCK** action. This arrangement gives a faster lock time than with a **BOXLOCK** action because the swivel causes the angle of the force applied to the hammer to change as the hammer falls, maintaining and even increasing pressure as the mainspring’s energy is released.

SWIVEL GUN (Also See **WALL GUN** and **RAMPART GUN**) – A large heavy gun that was essentially a small cannon that fired a heavy load (either a round ball or grape shot) at short distances. Essentially defensive weapons, they were usually swivel mounted on the walls of fortifications, on the bulwarks of sailing ships or used as boat guns. Made with touch hole (matchlock), flintlock and percussion locks.

SWIVEL RAMROD (See **CAPTIVE RAMROD**) – A ramrod that is permanently attached to a muzzle loading firearm near the muzzle by a device that allows movement for loading.

SWORD-PISTOL (Also known as a **SWORD-GUN** and **PISTOL-SWORD**) – A combination weapon popular during the 17th to early 19th centuries. Typically, one small barrel and lock were mounted on the top of the blade just below the guard with the trigger inside the knuckle bow. Some **SWORD-PISTOLS** had two barrels and locks mounted on either side of the sword blade.

T

TACTICAL - An imprecise term referring to certain features on firearms that are designed to improve a firearm's performance/handling in combat situations. Before 2000, a tactical firearm usually referred to a rifle or carbine designed for military or law enforcement, however, in today's marketplace, the term tactical is overused as a marketing ploy for selling military or paramilitary style weapons, accessories, accoutrements, clothing and gear.

TAIL PIPE (See **PIPE**) - A cylindrical device for holding a ramrod that was attached to the underside of the barrel of some muzzle loading firearms that was used at the point where the stock thickened and the ramrod entered the stock. It helped guide the ramrod into its hole.

TAKE DOWN - A firearm that can be easily disassembled into two or more sections for carrying or shipping.

TANG – A metal strip (upper and/or lower) attached to the rear of the receiver, frame, action, or barrel and projecting toward the butt. Tangs help to secure the stock to the action, frame, receiver, or barrel. It is usually forged as one piece with the breechplug in muzzle loading firearms.

TANGENT SIGHT - A type of rear iron sight, typically used on rifles for long range shooting, in which a ladder may be raised from a horizontal to a vertical position, and which incorporates a sliding crossbar that can be moved vertically in order to aim the firearm. The ladder will be marked with various ranges and the crossbar would have a notch or aperture help in aiming the gun.

TAPPET – In modern gas operated firearms, a gas piston with a very short stroke that delivers energy to an operating rod or slide.

TARGET BLOCKS (Also see **SCOPE BLOCKS**) - A pair of small dovetailed steel bases that accept mounts for target scopes such as the Unertl where the scope is allowed to move forward in the rings under the recoil of the rifle and which typically carry the windage and elevation adjustments in the mount. Usually one base is mounted on the barrel and one to the front receiver ring of the rifle.

TARGET STOCK - A stock designed for firearms (pistol and rifle) used primarily in formal known-distance shooting competitions. They are optimized for accuracy, consistency, ergonomics, and reliability and may have many adjustment options, such as: length of pull, cast, comb/cheek piece, palm rest, hand stop, accessory attachment, thumb or palm rests, spacers, and inserts.

TELESCOPING STOCK or **COLLAPSING STOCK** - A buttstock on a firearm that telescopes or folds in on itself in order to become more compact.

TEMPER – Heating a metal to change its physical properties (usually its hardness and strength).

TENON – 1. The end of the barrel that screws into the receiver. 2. A projection cut in a piece of wood that fits into a hole or recess cut into another piece of wood (mortise) to hold the two pieces together.

TERMINAL BALLISTICS - A sub-field of ballistics. It is the study of the behavior of a projectile or bullet when it hits its target.

THROAT - The beginning of the bore of a rifled firearm that is the transition area between the chamber and the rifling. It is the area most vulnerable to erosion from high velocity cartridges.

THROAT EROSION - The wearing of that part of the barrel, between the chamber and the rifling, where pressure and heat is highest as the bullet leaves the chamber. The greater the chamber pressure the more rapid throat erosion occurs.

THUMB CUT – A semi-circular cut or groove on the left receiver rail of a (usually) bolt action rifle that facilitates rapid loading of the magazine from a stripper-clip.

THUMBHOLE STOCK - A rifle stock, with a smooth sculptured hole at the wrist of the stock behind the gripping area for the thumb to go through. It is supposed to give a better, more natural grip than a traditional stock. Often seen on aftermarket stocks.

THUMBPIECE or **THUMB-PIECE** – A lever used to unlatch and open the breechblock, particularly in Trapdoor actions.

TIP UP – An obsolete revolver that has a hinge at the top rear of the barrel allowing the barrel to be lifted or tipped up in front of the cylinder so that it could be removed for loading and unloading.

TILTING BOLT – In modern automatic and semi-automatic firearms, a bolt that tilts to engage with the locking shoulder, usually at the rear. Also called a Propped Bolt.

TOE – The bottom rear part of the buttstock.

TOP BREAK (Also see **BREAK OPEN**) – A revolver that is hinged in the bottom front of the frame so that it breaks open at the top rear for loading and unloading.

TOP LEVER – A vertically pivoted lever located on the upper rear of the receiver of a break-open rifle or shotgun that opens the gun and locks it. The lever actuates various parts that unlock the action for loading, or lock the barrels to the action. First introduced in the 1880's, the Top Lever superseded the **UNDER LEVER** and **SIDE LEVER** and is in common use on break-open shotguns today.

TOP STRAP - The upper part of a revolver frame above the cylinder. It is often either slightly grooved - the groove serving as rear sight – or, in many modern revolvers, has an attached sight at its rearward end, which may or may not be adjustable.

TOUCH HOLE (Also see **VENT**) - A small hole, tube or channel used in firearms with exterior locks so that the flash of the ignited priming is conveyed from the exterior of the breech to the main charge in the chamber.

TOUCHMARK – The signature stamp of a master craftsman, such as an engraver, discretely placed to identify his work.

TRADEMARK - A company's signature stamp, which identifies its work, even if the name of another maker or retailer appears more prominently.

TRAJECTORY – The path of a bullet or projectile in flight.

TRAP - A competitive game of shooting clay pigeons on a formally designed layout. A clay pigeon launching machine is located 16 yards in front of a straight line, launching targets upward and perpendicular to and away from the shooters' line. Five competitors shoot five individual targets at each of five stations along that line. Although each target is launched at slightly different, random vectors,

trap generally emphasizes a single type of shot - outgoing and rising - and targets are broken at generally longer ranges than Skeet.

TRAP GUN - A shotgun, often with only a single relatively long barrel, with a tight choke boring and a relatively high-combed stock used for shooting clay pigeons in the game of Trap. Trap guns are normally heavier than a field guns because one shoots a lot but walks only a little, and the heavier guns better absorb recoil.

TRAPDOOR (1) – A modern collector term used to describe the single-shot action used in the system of firearms developed by Erskine Allin at the Springfield Armory after the Civil War. In a Trapdoor firearm, the breechblock, which is hinged at its forward end to the top of the chamber is manually lifted up and forward to a fired cartridge and load a new cartridge. Trapdoor-type actions were also developed and used in Europe.

TRAPDOOR (2) – An item of furniture such as a buttplate or pistol grip cap that has a hinged plate or door covering a small compartment in which items such as extra cartridges, sight components, extra springs or pins, or cleaning rod and oilers may be stored.

TRIGGER - A part of the firing mechanism of a firearm that actuates the firing mechanism. In conventional firearms triggers are mostly in the form of levers pulled by the index finger. Normally, in modern firearms, the trigger is connected to the sear. Pulling the trigger moves the sear out of its notch, releasing the spring-loaded hammer to strike the firing pin, which strikes the primer. If it is a true hammerless firearm moving the sear out of its notch directly releases the coil spring-loaded firing pin.

TRIGGER GUARD – A frame placed around the trigger to prevent accidental discharge by unintentional pressure on the trigger.

TRIGGER PLATE – A metal part of a firearm through which the trigger projects.

TRIGGER SAFETY - A safety device that is part of the trigger assembly that must be depressed or otherwise moved before the trigger can be pulled completely to fire the weapon. Most often a pivoting blade housed in the center of a trigger and which protrudes from the face of the trigger and automatically resets itself after the trigger is pulled.

TUNNEL CLAW MOUNT - A claw mount for a scope with openings through which a shooter can use a rifle's iron sights without removing the scope.

TRUNNION - A cylindrical protrusion used as a mounting and/or pivoting point. Firearm barrels are sometimes mounted in a trunnion, which in turn is mounted to the receiver. Cannon trunnions protrude from the barrel and rest on the carriage, allowing the barrel to be elevated and depressed.

TURRET GUN (Also see **REVOLVING RIFLE**) – An early attempt to make a repeating firearm during the percussion era. A round turret containing several chambers revolves around a central axis, presenting each chamber to the rear of the barrel in turn for successive firing. Made with both horizontal and vertical turrets, the guns, usually rifles, were made with both centrally located hammers on the top or with centrally located underhammers. They belong in the revolving rifle category and are quite rare today.

TWIST / TWIST RATE (See **PITCH**) – The angle of rifle grooving with the axis of the bore. The angle of the spiral grooving in the rifling a barrel. Usually measured in terms of inches per revolution and expressed as a ratio, such as 1:12 (one turn in 12 inches).

TWIST BARREL - An obsolete process for making firearms barrels in which bars or ribbons of iron (skelps) were wrapped around a mandrel (usually a steel rod) and welded in a charcoal fire to form one piece of metal. The mandrel was then driven out to be used again. The interior of the resulting tube then had to be laboriously bored out by hand to remove the roughness. Once the bore was polished, the outside of the barrel was smoothed on big (usually waterpower) grinding wheels.

U

UNDER HAMMER – A firearm, typically percussion, that has the hammer and nipple on the bottom of the piece, below the chamber and in front of the trigger guard. Virtues claimed for this system included ease in sighting and greater safety because shooter's eyes are not close to the flash or broken pieces from the exploding cap. One disadvantage was if the percussion cap was not securely placed on the nipple it could fall off, making the weapon useless as a firearm. Both rifles and pistols were made in this configuration.

UNDER LEVER – A lever mounted on the bottom of an early (1860's and 1870's) break-open firearm (typically a shotgun) for opening and locking the firearm. Manufactured concurrently with the **SIDE LEVER** and superseded by the **TOP LEVER** which is in common use today.

UNDERLUG (Also see **LUMP**) - 1. The locking lugs on a break-open action firearm that extend from the bottom of the barrels under the chamber(s) and connect into the receiver bottom. The hook that swivels around the hinge pin and the bites that accept the locking bolts are machined into the underlug. The **UNDERLUG** is sometimes called the **LUMP**.

2. The metal shroud underneath the barrel of a revolver that surrounds and protects the ejector rod that ejects cartridges from the cylinder. There are two

types of underlugs: the **full-lug**, where the shroud runs the full length of the barrel; and the **half-lug**, where the shroud is only as long as the ejector rod.

UNFLUTED CYLINDER (See **FLUTED CYLINDER**) – A revolver cylinder that is perfectly round and has no exterior metal removed from between the chambers. Also known as a **NON-FLUTED** or **ROUND CYLINDER**.

V

VARMINT RIFLE - An accurate small-caliber rifle or high-powered air gun primarily used for hunting varmints — small animals such as rats, squirrels, gophers, rabbits, prairie dogs, groundhogs, coyote, weasels, or feral animals, such as cats, dogs, goats, and pigs, that are considered to be a nuisance.

VENT (See **TOUCH HOLE**) - A small hole, tube or channel used in firearms with exterior locks so that the flash of the ignited priming is conveyed from the exterior of the breech to the main charge in the chamber.

VENTILATED RIB - A flat sighting plane attached along the length of a shotgun barrel with gaps or slots milled into it for cooling and lightweight handling.

VERNIER SIGHT - A rear aperture (peep) sight that became popular on 19th century long-range hunting, sporting and target rifles. They were usually mounted on the upper tang, and were finely adjustable for elevation by means of a very precise screw device.

VERY PISTOL – See **SIGNAL PISTOL**.

VIERLING - A German word for a four-barreled gun.

W

WAD (See **PATCH**) – The paper, cloth, leather, felt or other material used to retain the propellant charge in the barrel of a firearm or in a cartridge. In muzzle loading arms, a cloth, leather or paper wrapper, usually greased, used around the bullet or ball to facilitate loading and hold the loose powder, bullet or ball in place. The wad is usually placed between the powder and the projectile. When paper cartridges holding both powder and projectile were used, the paper acted as the wad or patch. In metallic cartridges, placed between the bullet and powder and as a jacket around a lead bullet in order to minimize contact between the lead and the bore.

WADCUTTER - A special-purpose bullet specially designed for shooting paper targets. A wadcutter has a flat or nearly flat front that cuts a very clean hole through the paper target.

WALL GUN (Also See **SWIVEL GUN** and **RAMPART GUN**) – A large heavy gun that was essentially a small cannon that fired a heavy load (either a round ball or grape shot) at short distances. Essentially defensive weapons, they were usually swivel mounted on the walls of fortifications, on the bulwarks of sailing ships or used as boat guns. Made with touch hole (matchlock), flintlock and percussion locks.

WHALING GUN, HARPOON GUN, and DARTING GUN – A firearm used in hunting whales, from large flintlock swivel guns used during the 1700's that fired harpoons, to smaller shoulder-fired whaling guns used during the 1800's and early 1900's that fired Bomb-Lances, to Darting Guns that were used from the 1860's through the early 20th century to shoot toggle-type harpoons and "darting irons." Whaling guns can be considered a distinct collecting area.

WHEELLOCK - An early type of firearm in which ignition of the priming charge is affected by a rapidly revolving, spring-driven, serrated steel wheel which throws off sparks when it is in contact with a flint or other piece of pyrite.

WINCHESTER – A major American firearms manufacturer that first came to prominence after the Civil War when it introduced the Winchester Model 1866 lever action magazine fed rifle and carbine.

WHITE (Also see **BRIGHT FINISH, IN THE WHITE, and NATIONAL ARMORY BRIGHT**) - A white natural finish to iron and steel parts of a firearm applied at Springfield Armory, usually before 1873, by the use of successive grinding and polishing to achieve a dull natural metallic sheen.

WHITWORTH RIFLE – A .45 caliber British percussion muzzle loading rifle with a unique hexagonal rifled bore that used only special combustible Whitworth hexagonal cartridges. Extremely accurate, it was a favored weapon of Confederate sharpshooters during the Civil War, and when equipped with a special telescopic sight could be counted on for killing accuracy at ranges beyond 1,000 yards.

WILDCAT CARTRIDGE - A custom cartridge often created in order to optimize certain performance characteristic (such as the terminal velocity, terminal energy, size or accuracy). Often developed from existing commercial cartridges. These cartridges are See **IMPROVED CARTRIDGE**.

WIPER or WIPING HEAD – A slotted attachment on the end of a ramrod used for wiping out, or cleaning, the bore of a firearm.

WINDAGE (1) – The side-to-side adjustment of a sight, used to change the lateral part of the aiming point. Also refers compensating for effect of lateral (sideways) wind velocity on the flight of the bullet

WINDAGE (2) - With smoothbore guns, such as muskets, it is the difference between the smaller diameter of the ball and the larger diameter of the bore. Windage usually resulted in decreased accuracy and lower velocity.

WRIST – The narrow portion of the buttstock behind the receiver of long arms.

WORM – An corkscrew shaped device attached on the end of a ramrod in order to withdraw an unfired bullet and charge in muzzle loading firearms

X

X-RING – A circle in the middle of a shooting target bullseye.

Y

YOKE (Also called **CRANE**) – The metal piece that connects the cylinder of a swing-out revolver to the frame.

Z

ZERO-IN or **ZEROING-IN** - The process sighting in or setting up a telescopic sight or other sighting system so that the point of impact of a bullet fired by the gun matches the sights at a specific distance.