



**Arizona Olympic Trap Grand Prix – Shotgun Reference
Terminology & Glossary
Courtesy of Mike McGuire,
Shotgun + Clay Targets Trivia Q&A
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Action: - The receiver of a shotgun containing the breech-locking and firing mechanism. Major types are: Boxlock, Sidelock, Blitz, Falling Block and Bolt.

Action Face: - The vertical face of the action that mates with the breech face of the barrels; sometimes called the “standing breech” or “breech face.”

Action Flats: - The slotted flats of the action bar through which the barrel lumps pass; sometimes called the “table” or “water table.”

Action Slots: - The slots in the action flats into which the barrel lumps fit.

All-Around (HAA): - Championship at the Grand American, Satellite Grand's, Zone, State and other major shoots based on the combined scores of the 400 championship targets – 200 singles, 100 doubles and 100 handicap.

Amateur: - Any shooter not classified as an industry representative. May and usually does shoot for money and other awards or prizes.

Amateur Trapshooting Association (ATA): - Governing body of registered trapshooting in the United States and Canada. To compete in an ATA regulated event, the trap shooter must be a member of the ATA. There are two classifications of membership – Life and Annual. Memberships are available only to individuals, not to clubs.

Ammunition: - A loaded shot shell (cartridge) consisting of a hull, primer, propellant (gun powder), wad and the shot pellets.

ANIB: - As new in original box. Perhaps fired, but in virtually new condition. If you collect shotguns always keep the original box as it adds value to your collection over the years!

Anson & Deeley Action: - A type of boxlock action design developed in 1875---the essence of simplicity utilizing only two springs and three moving parts (per barrel). One of the most successful action designs ever developed, and still produced to this day by innumerable makers in many countries.

Anson Forend Release: - A latch for securing the forend to the barrels of a break-open gun, operated, via a longitudinal rod, by a pushbutton exposed at the very tip of the forend.

APUN: - Action Patent Use Number. Under patent law during the period of greatest creativity in the British firearms trade (circa 1860 - 1910). Gun makers typically numbered each patented component with its own number of use of the patent (not the number of the patent itself as registered with the patent office as in the USA)---irrespective of the serial number of the firearm.

Arcaded Fences: - Fences on a side-by-side gun decorated with a series of engraved crescents. A particular signature of James Woodward guns.

Arrowheads: - A signature stock-carving detail of Robert G Owen, a renown English-born American stock maker, active 1920s - 1950s.

Articulated Front Trigger: - A hinged front trigger, built to cushion its impact on one's trigger finger as the gun recoils when the rear trigger is pulled.

Antique: - By U.S. Government definition, a firearm manufactured prior to 1899 or a firearm for which ammunition is not generally available or a firearm incapable of firing fixed ammunition.

Automatic or Autoloader: - A variety of repeating or magazine shotguns in which part of the energy of the first shot is used to re-cock the shotgun for the next shot. A shotgun activated as above, but which shoots only one shot shell with each separate pull of the trigger. While often erroneously referred to as "automatic" is more properly termed Semi-Automatic.

Automatic Ejectors: - Fittings inset into the breech end of the barrels of a break-open shotgun that kick out fired shot shells, while only raising unfired shells enough to be removed by hand.

Automatic Safety: - A safety catch on a break-open shotgun that resets to the "safe" position each time the gun is opened, usually via a limb attached to the top lever spindle.

Average: The percentage of targets the shooter has hit out of a total shot at. Used for handicapping and classifying purposes.

Average Book: The yearly book compiled and published by the Amateur Trapshooting Association (ATA) listing all singles, handicap and doubles averages of each member who shot during the preceding year. The book also lists current state and zone champions and high average leaders in each category for the previous year; often called "The Bible" among ATA veteran trap shooters.

Blue: - Bluing is a thin surface coloring, induced either by heat or by polishing and the repeated application of an acid solution to form a type of blue-black rust. Bluing reduces the reflectivity of polished steel parts and helps inhibit further rust. The percentage of original blue finish remaining is a quick indicator of the condition of a gun. In our condition descriptions, 98% blue means raw steel is showing through 2% of the overall blued surface. We try to describe the percentage of finish neither optimistically nor conservatively but exactly as it is.

Back Action: - A sidelock action where the mainspring is mounted rearward of the lockwork (behind the tumbler) and inlet into the stock towards the butt. The back action 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.

Backboring: - Enlarging the internal diameter of a shotgun barrel beyond its proper standard (.729" in 12 gauge) by reaming, in an effort to reduce the recoil or to improve the shot pattern. Backboring removes steel and therefore strength from the barrels---possibly making them unsafe. While there is no proof law in the USA, in England, to ream out the bore of a shotgun by more than 8 thousandths of an inch would render it out of proof and illegal to sell.

Back Yardage: - Positions in handicap shooting from 24 to 27 yards behind the trap house.

Baker Ejectors: - A type of mechanism, built into the forend of a break-open shotgun, utilizing a direct-acting coil spring to kick out a spent shell while only raising an unfired shell far enough to remove manually.

Ballistics: - The study of the action of propellant powders upon projectiles, their speeds, energies and trajectories. Ballistics can be categorized into three phases: Interior (the

projectile's behavior inside the bore), Exterior (the projectile's behavior in flight), and Terminal (the projectile's behavior upon contact with the target).

Bar: - The portion of a break-open shotgun's action body extending forward from the bottom of the standing breech, supporting the hinge pin. In modern side-by-side shotguns, it is usually machined to accept the cocking limbs and the main locking bolts as well.

Bar Action: - A sidelock action where the mainspring is mounted forward into the bar of the action. This feature is often more graceful in appearance than the back action and theoretically allowing faster lock times; the classic sidelock shotgun.

Barrel: - The steel tube from which a shot shell's pellets are propelled down the bore towards the muzzle end because of the action of burning powder. Barrels are manufactured in various internal diameters (bore) commonly known as gauges. Shotgun barrels have no grooves (rifling) and are known as smooth-bores.

Barrel Face: - The flat area at the back of the breech that mates with the breech face. Sometimes called the "breech end."

Barrel Flats: - The flat area under the breech portion of the barrels of a side-by-side onto which proof marks are applied.

Barrel Length: - The length of a barrel as measured from the muzzle to the standing breech in a break-open shotgun.

Barrel Selector: – Determines which barrel of a double barrel gun will fire first.

Barrel Wall Thickness: - The thickness of the walls of a shotgun barrel tube.

It is reasonable to assume that guns built by responsible manufacturers are safe to shoot, when new, with the loads for which they were intended. As the decades go by, however, as barrels are drawfiled or buffed for rebluing and as occasional pits are honed out of the bores, steel is gradually removed from the barrels. The barrel walls, already built thin for lightness, become thinner still. At some point they become too thin for safety. It is important to know the minimum barrel wall thickness of an old, well-used shotgun before shooting it. While no substitute for an actual proof test, a useful rule of thumb states that the minimum barrel wall thickness should be .020" in a 12 gauge shotgun.

Base Wad: - The paper filler at the rear of the powder charge of the shot shell.

Battue: - 4 ¼" inches, (108mm) standard diameter, 1/8" thick, 3/8" high special clay target used in Sporting Clays. Known as a "flying razor blade," difficult to pick up edge-on; does rolls and wingovers.

Bead: - Normally a small white, round object, which is situated on the very end of the barrel on the top of the rib. It is used as almost a subconscious 'sight' for the shooter. Sometimes there is another bead in the middle of the rib as an additional sight for adjustment and alignment. Lately beads are being offered in different fluorescent colors and combinations of length.

Beaded Cheekpiece: - A raised-carved cheek rest on the side of a butt stock, specifically with the extra detail of a shadow line around its perimeter where it blends into the butt stock proper.

Beaded Fence: - A fence with decorative raised or carved fillets at its back. The latter is sometimes call the “bead.”

Beavertail Forend: - A broad forend, wrapping partially around the barrel(s) to give a more positive grip and to better protect the hand from hot barrels than does a splinter forend.

Bedding: - That part of the stock into which the receiver, action and barrel fits.

Bend: - British term for Drop.

Bent: - A notch in a hammer or firing-pin housing. The sear rests in this notch when the firearm is cocked. When the trigger is pulled, the sear moves out of the bent, allowing the firing-pin to fall under the tension of the mainspring and fire the gun.

Best Gun: - A pompous English term for a shotgun that must have several specific details. To qualify for the title, it must have a Sidelock action with Intercepting Sears, have Chopper Lump Barrels, be Stocked to the Fences and have its lumps concealed by its floorplate. While almost any respectable gunmaker can accomplish these requirements, the implication, of course, is that it is also built to the highest standard of quality.

Bifurcated Lumps: - A locking system for over & under shotguns whereby the barrels are mounted to the receiver via trunnions on either side of the lower barrel and where a pair of bolts move forward into recesses on either side of the barrel-set when the shotgun is closed. This system makes it possible to build an over & under shotgun with a sleeker, lower profile than possible when mounting the lumps, hook, and locking bites to the underside of the bottom barrel.

Bird: - Term used in sporting clays for any type of clay target that flies. Includes Standard, Midi, Mini, Rocket and Battue.

Bird Shot: - Small lead or steel pellets used in shotshells ranging in size from #12 (less than the size of a pencil point) to #4 (about .10” in diameter) used for short range bird and small game hunting. Not seen in clay target shooting sports.

Bite: - In a side-by-side with Purdy bolts, the notch (or notches) – usually rectangular – machined in the back of the lump where the bolt engages to lock the barrels to the action.

Black Powder: - The first successful propellant harnessed for use in firearms. Composed, generally of 3 parts potassium nitrate, 2 parts powdered charcoal and 1 part sulphur. Black powder explodes—expending its energy in an instant of time, produces volumes of vision-impairing smoke, its residue promotes rust in gun bores and it is unpredictably dangerous to handle. Black powder was replaced in the marketplace by nitro-glycerin-based powders around the turn of the last century because they burned more slowly (maintaining pressure on the projectile longer during its travel through the bore, allowing higher velocities), did not blind shooters with the smoke, did not promote rust in bores and was much safer to store and to

handle. For these reasons, it is dangerous to shoot modern nitro powders in vintage guns (such as those with barrels of damascus steel) originally designed for Black Powder.

Blown Pattern: - A shotgun shell pattern with erratic shot distribution, generally caused by gas escaping past the wad and getting into the shot.

Blue (Bluing): - A chemical rust process that produces a very dark, almost black, blue finish to the steel parts of a firearm which enhances the appearance and provides some protection from unwanted rust. Sometimes it can have a slight brownish undertone. The percentage of blue finish remaining on a gun can be a proxy for describing its condition.

Blue Rock or Rock: - The clay target; a carryover term of nomenclature from live-bird shooting, which often used the European blue rock variety of pigeons. Name commonly used in the Midwest part of the United States.

Bockbüchsfinte: - German term for an over & under combination gun with one shotgun barrel over one rifle barrel.

Bolstered Frame: - A firearms action, most commonly on a heavily recoiling break-open weapon, in which the action forging has been enlarged with extra steel at its weakest point---the line extending downwards from the standing breech, at the beginning of the watertable; also called a reinforced frame.

Bore: – The interior diameter of a shotgun barrel, which will vary according to the shotgun's size and intended use. .729" or AKA 12 gauge is the most popular bore for most clay target sports. The chamber is not considered a portion of the bore and is excluded.

Bottom Plate: - A plate in the base of a boxlock that covers the locks and associated components. In some designs (Westley Richards) it is hand-detachable to allow access or removal of locks.

Boxer: - A shot shell (cartridge) case having a primer pocket with one central touchhole at the center bottom. A tiny anvil is built into the primer to provide a surface against which the detonating compound may be sharply pinched by the action of the firing pin. Most commonly used in the USA today. It is simple to remove the spent Boxer primer for re-loading the shot shell casing with a single, central, pin-shaped decapping punch.

Boxlock: - A type of action (receiver) for a break-open gun where the lockwork is contained within a box-shaped housing, per the Anson & Deeley patent of 1875. (also see: Sidelock). A boxlock is 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 generally more vulnerable than metal. The boxlock, is the simplest, most reliable and most successful action design, is identified by two pins spanning the width of the action, one at the bottom rear and one slightly forward and higher, upon which the sears and hammers, respectively, rotate.

Break Open: - In a hinge type shotgun, where the barrels are dropped open with a clear view of the action and exposing the chambers to view. A good safety tip here in the way to handle your shotgun when not in a stand ready to shoot.

Break Open Lever: - Opens the hinge type shotgun, i.e. Over & Under for reloading and/or unloading.

Break Point: - The pre-determined general area or “zone” where a shooter plans to break a target.

Breech: - The end of a barrel into which a shot shell is inserted.

Breech Pin: - In a traditional gun, the large screw that passes vertically through the top strap just behind the breech to secure the action to the stock. Typically, it screws into a box on the triggerplate.

Bridge: - The bridge on conventional guns that separates the front slot from the rear slot.

Bridle: - A small flat secondary plate, mounted behind and parallel to a sidelock gun's lockplate which supports the inside ends of the pins about which the moving parts rotate and provides support for the tumbler.

Broken: - The state of the gun when not in use; i.e. the chambers are visibly empty and the barrels are not closed up to the stock. Guns should always be in this condition unless one is on the shooting stand and ready to shoot.

Broken Target: - a) a clay target which comes out of the traphouse in pieces. It is declared “no target” whether the shooter shoots at it or not, and another bird is thrown. It does not count, even if the shooter hits it. b) a whole clay target which the shooter shoots, hits it and is scored as dead.

Browning: - An oxidation process applied to the surface of raw steel, undertaken with acids, to produce a finish that resists further rusting. See also Bluing.

Browning, John Moses: - The world's greatest firearms inventor. He was born in Ogden, Utah. While he made some guns himself, normally, he licensed his designs to prominent manufacturers such as Colt, Fabrique National and Winchester. While Samuel Colt and Paul Mauser achieved fame basically as a result of one idea, John M. Browning produced dozens of the most successful firearms designs, including the Winchester 1885, 1886, 1892, 1894 and 1895 rifles; The Colt 1903, 1908, 1911 and Woodsman pistols; the Browning Auto-5 and Superposed shotguns; as well as the BAR, 1917 and M2 .50 calibre machine guns.

Buckshot: - Large lead pellets ranging in size from .20” to .36” diameter normally loaded in shotshells used for deer hunting.

Bulino Engraving: - Shallow, pictorial engraving designs, often of graphic quality, executed directly by hand onto the steel with a fine-pointed scribe called a burin, without the use of a chasing hammer. Also called banknote engraving and often seen on high-grade, contemporary Italian shotguns.

Butt: - The end of a shotgun stock; the part that rests on the shoulder when the shotgun is mounted.

Buttplate: - A plate made of some material harder than the wood of the buttstock, fitted to the end of same to protect it. It may be made of hard rubber, horn, plastic or steel. It may be shaped relatively flat, like a crescent, or with all manner of protruding appendages in the interest of achieving consistency of mounting position as in a Swiss or Scheutzen buttplate. It may be finished smooth, checkered, striated or engraved.

Call: - A signal given by the shooter for release of target(s). Usually the word "Pull," but any sound will normally do and may be used.

Cant: - To tilt a gun to one side or the other, complicating sighting considerably.

Cape Gun: - A two-barreled, side-by-side, shoulder-fired gun having one smoothbore shotgun barrel and one rifled barrel.

Carryover: - Method of deciding ties where shooters' scores on the next event determine winner after tie in previous event.

Cashier: - The person who takes the entries of the participants, calculates winners, purse winnings, etc.

Cartridge - In its definition valid from circa 1870 to the present: a small usually cylindrical packet, containing a detonating primer, a powder charge, a load---either a single projectile for a rifle or a quantity of small pellets for a shotgun---and possibly some attendant wadding. The cartridge is placed into the breech of a firearm, comprising all required consumables for the firing of the weapon

Cartridge Trap - A compartment built into the buttstock of a long gun, usually with a hinged cover, in which are drilled holes deep enough to hold several spare cartridges of the type suitable for use in the specific gun.

Cast Off - An offset of a gun stock to the right, so that the line of sight aligns comfortably with the right eye while the butt of the stock rests comfortably on the right shoulder. Almost all right-handed shooters benefit from a little castoff and most custom built guns are made this way. The only question is how much. The castoff of a gun is about right when, with the gun comfortably mounted, the front bead lines up with the center of the standing breech. A stock offset to the left, for shooting from the left shoulder is said to be Cast On. See Eye Dominance.

Casehardening Colors - mottled blue/green/brown colors on a shotgun or double rifle receiver, vintage Winchester receiver or Colt Single Action frame. The colors are the by-product of a heat-treating process that incorporates carbon into the surface molecular structure of the steel, providing a hard-wearing surface without making the entire receiver brittle. The parts to be casehardened are packed in a crucible with carbon-rich media such as bone meal and charcoal, heated to bright orange, about 1800°F, then quenched in bubbling oil. Also called Carbonizing. The colors themselves are fairly perishable both from wear and from sunlight. The percentage of original case colors remaining is therefore a quick proxy for the cosmetic condition of the gun.

Guns should never be rehardened in the vain interest of restoring the cosmetic effect of the colors. Casehardening is a heat process which alters the surface molecular structure of the steel. Rehardening an action can warp it. Subsequent efforts to straighten the

metalwork, either by bending or filing can only harm the fine original metal-to-metal fit and adversely alter the workings of carefully aligned internal parts.

Chamber - An area at the breech end of a barrel, of about the diameter of the cartridge for which the gun was intended, and into which the cartridge is inserted. The nominal length of a shotgun chamber will accommodate the loaded cartridge for which it was intended and allow for its crimp to open fully when the cartridge is fired. Although one can easily insert a longer-than-nominal-length loaded cartridge in a shotgun chamber, it is not advisable to do so because when it is fired the crimp will open into the forcing cone. Because of the taper of the forcing cone, the crimp will not be able to open fully and the gun will develop far greater pressure than it was designed to handle.

While most 12 gauge shotguns built today have nominal 2 3/4" chambers, this was not always the case. Prewar American guns and many modern English guns often have shorter chambers. It is important to know the length of a gun's chambers and to use the ammunition for which it was intended.

Checkering - A regular pattern of fine grooves cut into the surface of a stock to aid in gripping a gun. Originally done for utility only, checkering has become an art form in itself; craftsmen adorning the borders with ribbons, fleur-de-lys, floral carving, etc. The amount of coverage, the precise regularity, and the number of lines per inch indicate the quality of the work. Too-fine checkering, however, defeats the purpose of the work altogether.

Cheekpiece - A broad, flat, raised area on the side of a buttstock. While considered a sign of a well-appointed gun, it actually may interfere with natural mounting and pointing---somewhat negating the positive effect of cast-off. The cheekpiece is carved on the left side of a stock for a right-handed shooter; it is on the right side for a left-handed shooter.

Chip: - a) verb - to break only a small piece from a target. B) noun – a small piece of the target.

Choke - A carefully measured constriction of the bore of a shotgun at the muzzle, designed to control the spread of the shot as it leaves the barrel.

Descriptions of choke borings are determined by measuring with a bore micrometer, irrespective of any markings on the barrels. The internal diameter is measured four inches from the muzzle and again just at the muzzle. Subtracting gives the amount of constriction in thousandths of an inch.

Measurements of muzzle constriction by micrometer are useful to predict the pattern thrown by a shotgun barrel, but they remain merely a prediction. Patterns can vary depending on atmospheric pressure, humidity, length of cartridge, type of wad, size of shot, and numerous other factors. Terms such as "Improved Cylinder" and "Full" are only words, based on relative rules of thumb. The only way to determine the actual pattern thrown by a shotgun barrel is to shoot it, by convention at 40 yards, count the percentage of pellets falling within a 30" circle placed around the visual center of the pattern, then do it a few more times and take an average. Chart

Choke tubes - Short, interchangeable cylinders, of subtly different internal tapers, that screw into a threaded recess at the muzzle of a shotgun. By inserting different choke tubes, one can alter the shot pattern thrown by the gun. Choke tubes should be tightened until snug. Guns fitted for choke tubes should never be fired without tubes inserted.

Chopper-lump barrels (also called Demi-bloc barrels) - A method of joining the two separate tubes of a set of barrels where the right-hand half of the pair of lumps under the barrels are forged integrally with the right barrel and the left-hand half of the pair of lumps under the barrels are forged integrally with the left barrel. Chopper-lump barrels can be recognized by the fine joint-line running longitudinally down the center of each lump. This method of jointing barrels is the best because: 1. It is the strongest in relation to its weight, and 2. Because it allows the two barrels to be mounted closest to each other at the breech end, reducing problems regulating the points of aim of the two separate barrels.

Claw Extractor - An essential design element of the Mauser 98 bolt action and its derivatives: the Springfield '03 and the Winchester pre-'64 Model 70. A large, long extractor is mounted to and revolves around the bolt shaft---or more properly, remains stationary in the receiver raceway when the bolt revolves. This claw takes positive hold of the cartridge coming from the magazine and places it in the chamber when the bolt is closed. Then, when the bolt is opened, the claw, never having relinquished its grip on the rim of the cartridge, withdraws it from the chamber with absolute reliability.

Lesser bolt actions have a small clip built into the bolt face which snaps over the chambered cartridge rim when the bolt is closed. While cheaper to manufacture, this system allows the possibility of the clip slipping back off the rim of the expanded spent case during extraction. Most experienced hunters prefer an action with a Mauser-type claw extractor for its reliability, especially when facing dangerous game.

Claw Mounts - A quick-detachable scope mounting system, popular in Germany and Austria. The front of the scope is fitted with a hook-shaped tentacle which is inserted into a slot in a fixed front scope base. The rear of the scope is fitted with another set of hook-shaped tentacles. When these are pressed sharply downwards into their opposing receptacles they snap into place, held by a spring-loaded clasp, locking the scope into position. When properly installed, claw mounts are generally considered the best quick-detachable system for scope mounting: the cleanest looking, the easiest to operate and the most accurate in returning to zero. But, it is not an off-the-shelf, bolt-on system; claw mounts must be custom-fitted by a skilled gunsmith.

Clip - A simple, disposable narrow spring-lined channel-rail in which cartridges are supplied for military weapons. The shooter positions the clip vertically above the firearm's magazine, then pressing down with the thumb, slides the cartridges from the clip and down into the magazine. Also: Stripper Clip or Charger. See Magazine.

Cocker/De-Cocker - A type of action on a break-open gun or rifle where, in place of a traditional top tang safety, a somewhat more robust tab is fitted. Normally such a gun is carried in the field loaded, but with the action not cocked---an exceedingly safe condition. Then, when ready to fire, the shooter, instead of pushing a safety tab forward, pushes this larger tab forward, cocking the mainspring, making the gun ready to fire. Then, if the shot is not taken, he

may simply slide this tab rearwards again, de-cocking the gun and returning it to the still-loaded, but very safe position. Or, in German: Handspanner.

Cocking Indicators - Small devices attached to the internal hammers of a break-open gun and visible from the exterior of the gun to show when each barrel is cocked and when it has been fired. These are usually in the form of protruding pins on a boxlock gun or in the form of engraved or gold inlaid lines on the tumbler pins of a sidelock gun.

Coin-finish generally refers to a high-polish finish, bright steel on the receiver of a break-open gun. Other action-body finishes could be case-hardened, blued or French-gray (a chemical-finish, dull gray steel color). Coin-finish, when appearing typically on a modern, high grade Italian shotgun shows off the exquisite and delicate engraving better than other finishes. The term is sometimes used (incorrectly) by people dealing in old guns to describe the finish on a well-worn gun's receiver when all the original case-hardening colors have worn or have been polished off.

Comb: - The top of a gun's stock, where a shooter rests his cheek when mounting the shotgun. As it is the top of the stock that determines the position of one's eye, and one's eye is the rear sight on a shotgun, the position of the comb is very important in determining the proper fit of a shotgun.

Combination Gun - A firearm with various different configurations of rifle and shotgun barrels. See various specific types: Bockbüchesflinte, Cape Gun, Paradox, Drilling, Doppelbüches-Drilling, Vierling, German Combination Gun names, Compared

Commemorative - In firearms parlance, a gun that was manufactured in "limited" numbers (often into the thousands), marked, stamped or fitted with extra bells and whistles in such a way as to evoke reverence to some famous person, place or historical event. Rather than to be manufactured for honest use, a commemorative is manufactured specifically to be collected. Actually to shoot one will normally delete any supposed extra value such a questionable concept ever had in the first place.

Concealed Third Fastener - An extension protruding rearward from the breech end of a set of side-by-side barrels and entering a complementary recess in the breech face. The top of the extension is locked down by a cam attached to the toplever spindle. When the gun is closed this extra fastener is not visible from the exterior of the gun. Also called a Secret Bite.

Crossover Stock - A gunstock with extreme cast (Cast-off or Cast-on), usually custom made, for use by persons with disability so as to be able to shoot from the right shoulder using the left eye or from the left shoulder using the right eye.

Cross Pin Fastener - A horizontal wedge, press-fit through the forend of a vintage gun, through a lump attached to the underside of the barrel and out the other side of the forend. To secure the forend in position. Also called a key fastener.

Crown - The finish contour of the muzzle or a rifle. May be flat or rounded. Often shows effective chamfering to protect the critical rifling at the absolute end of the muzzle.

Curios or Relics - is defined in 27 CFR 178.11 as follows:

"Firearms which are of special interest to collectors by reason of some quality other than is associated with firearms intended for sporting use or as offensive or defensive weapons. To be recognized as curios or relics, firearms must fall within one of the following categories:

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

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

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 channels is substantially less."

A list of acknowledged "Curios or Relics" is available from the Bureau of Alcohol, Tobacco and Firearms, Firearms Technology Branch, Room 6450, 650 Massachusetts Avenue NW, Washington, DC 20226.

A special Curios or Relics license is available from the BATF, which allows collectors to buy eligible firearms in interstate commerce. A licensed collector is not authorized to engage in business as a dealer in any firearms, including curios or relics.

Cylinder - That part of a modern revolver that holds cartridges in separate chambers radially around a central hinge pin. The cylinder revolves as the handgun is cocked, bringing each successive cartridge into position, and locked into alignment with the barrel for firing.

DA or Double Action - An action type, typical on revolvers, where pulling the trigger through a long stroke revolves the cylinder, cocks the hammer and fires the gun---and alternatively, where manually cocking the hammer and then pulling the resulting single-stage trigger fires it also.

Damascus Barrels - Barrel tubes built up by twisting alternate strips of iron and steel around a fixed rod (mandrel) and forge-welding them together in varying combinations according to the intended quality and the skill of the maker. The rod was withdrawn, the interior reamed and the exterior filed until the finished tube was achieved. Damascus barrels may be recognized by any of a variety of twist or spiral patterns visible in the surface of the steel. Before the 20th century, barrels were typically built in this manner because gunmakers did not have the technology to drill a deep hole the full length of a bar of steel without coming out the side.

Damascus barrels were usually intended for use with black powder---the standard of the day. The contour of the barrel wall thickness, intended for the fast explosion of black powder, was quite thick at the breech and tapered thinner towards the muzzle. It is not advisable to shoot modern smokeless powder in a damascus barrel. Apart from giving due deference to the age of such barrels and to the method of their construction, smokeless powder burns more slowly, lowering the pressure at the breech end, but considerably raising it further down the barrel to a level such barrels were rarely designed to handle.

Deeley Forend Release - A latch for securing the forend to the barrels of a break-open gun, operated by a short pull-down lever mounted to the center of the forend. Typically seen on Parker and Prussian Charles Daly guns.

Demi-bloc Barrels - (called Chopper-lump barrels in British) - A method of joining the two separate tubes of a set of barrels where the right-hand half of the pair of lumps under the barrels are forged integrally with the right barrel and the left-hand half of the pair of lumps under the barrels are forged integrally with the left barrel. Chopper-lump barrels can be recognized by the fine joint-line running longitudinally down the center of each lump. This method of jointing barrels is the best because: 1. It is the strongest in relation to its weight, and 2. Because it allows the two barrels to be mounted closest to each other at the breech end, reducing problems regulating the points of aim of the two separate barrels.

Disc-Set Strikers - Circular steel fittings, about 1/2 inch in diameter, screwed into the breech face of a gun and through which the firing pins pass. Firing pin bushings allow the convenient replacement of broken firing pins. They also allow the renewal of an older gun where, over the decades, leakage of high-pressure gas from corrosive primers has eroded the breech face around the firing pins; and replacing these bushings with new ones, slightly oversized can compensate for a situation where proper headspace has been compromised. In American: Bushed Firing Pins.

Doll's Head - A rib extension on a break-open gun, ending in a circular or semi-circular shape in plan (resembling the head of a doll), mating into a similarly-shaped recess in the top of the receiver, designed to resist the tendency of the barrels to pull away from the standing breech when firing. Because an action's centerpoint of flexing when firing is at the base of the standing breech, not at the hinge pin, a passive doll's head extension makes an effective extra fastener, even without additional mechanical locks operated by the opening lever.

Doppelbuches-Drilling: - German term for a three-barrel firearm comprising two side-by-side rifle barrels over one shotgun barrel.

Dovetailed barrels - The usual way of building a set of side-by-side barrels. Two raw tubes are filed to approximate their final contour. A solid block of steel is then filed to shape, fitted between the two tubes at the breech end with about 3/4" exposed on the underside and soldered or brazed into place to form the lump(s). Alternatively, see Chopper-Lump Barrels

Drilling - A three-barrel shoulder-fired gun, typically with two identical side-by-side shotgun barrels mounted above one rifle barrel. Built primarily in Germany and Austria. If with two rifled barrels above a single rifled barrel, it is called a Bock Drilling.

Drop - The distance from an imaginary straight line of sight extended along the rib of a shotgun rearward towards the butt--to the top of the stock at the comb or the heel. (In British: Bend). All drop measurements listings are taken at the heel; that is, the distance between the imaginary straight line of sight and the stock at its very end. We will be happy to provide the drop measurement at the comb upon request.

Browning, in its infinite wisdom, considers that 2 3/8" drop at the heel will best fit the broadest range of shooters for field use. This measurement can therefore be considered

"normal." A gun with less drop will shoot higher, while a gun with more drop will shoot lower for a given individual. When the gun is comfortably mounted with the cheek snugly on the comb, the drop is about right when you can see the front bead and just a little rib over the standing breech.

Trap guns usually have less drop because they are supposed to shoot a little high in order to hit an almost universally rising target. Standard wisdom indicates that the drop is about right for a mounted trap gun when the front bead seems to rest just on top of the middle bead like two parts of a snowman, or forming a figure-eight.

Drop-Box Magazine - An extra-deep magazine typical of large calibre rifles for dangerous game. The line of the underside of the wrist does not carry straight forward as with ordinary rifles. Rather the rear of the magazine aligns more towards the center of the forward edge of the triggerguard, typically allowing at least one extra cartridge to be carried.

Droplock - A variation on the Anson & Deeley boxlock design, introduced by Westley Richards at the end of the 19th Century, whereby the locks themselves are removable, without tools, from the action body for cleaning or repair through a hinged or a detachable floorplate. A droplock action may be distinguished from an ordinary Anson & Deeley action at sight because it has no action pins visible on the side of the receiver.

Dropper Points - Small, raised-carved details on either side of a double gun, behind the lockplates of a sidelock or behind the flat sidepanels of a boxlock, in the shape of teardrops. Also called teardrops.

DRP - Deutsches Reichspatent. Marked on patented inventions (including guns), adopted by recently-united Germany in 1877.

DRGM - Deutsches Reichs Gebrauchs Muster. In Germany, a pre-patent registration of a (hopefully) patentable idea. A simpler, patent-like document of shorter duration. "Patent angemeldet" means, patent applied for.

DST or Double-Set Trigger - On a rifle, optionally pulling the rear (set) trigger converts the front (main) trigger to a light, hair trigger---too light and sensitive to be carried safely in the field. While the front trigger is always at the ready, if one has the time, using the set trigger feature may allow for a more accurate long-distance shot. Operates using its own miniature firing mechanism (sear, spring and hammer) when cocked, to multiply the force of a pull on the main trigger.

DT or Double Triggers - one for each barrel. Double triggers are better than single triggers on a double gun because: 1. They are simpler in design, therefore making the gun lighter and more reliable. 2. They are less prone to double-firing. 3. In the hands of an experienced shooter they are faster. 4. They allow immediate selection of which barrel to fire - the immediate selection of the pattern to throw - even while the grouse is flushing.

Duelling Pistols - Single shot pistols, of a design originating in England, in vogue circa 1770 - 1850, built necessarily in pairs, either of flintlock or percussion ignition, usually finely made and cased together with loading accessories. Dueling pistols tended to be lighter and sleeker than

their contemporary service pistols. They tended to have smoothbore (or sometimes secret, scratch-rifling), octagon (or octagon-to-round) barrels around nine or ten inches long of some form of damascus steel, bores just over a half-inch, ramrods, rudimentary sights front and rear, single-set triggers, roller-bearing frizzens and curved grips integral with full or half-stocks. They were usually of high quality construction, sometimes with silver furniture, but normally of relatively plain decoration.

Ejectors - Fittings inset into the breech end of a pair of barrels of a break-open gun that kick out fired shells, while only raising unfired shells enough to be removed by hand. Recognizable at a glance on the breech end of a double gun because the fitting is split in two---one ejector for each barrel.

Elevation - Adjustment of the point of impact of a firearm in the vertical plane; the knob used on an iron sight or telescopic sight to raise or lower the point of impact.

Energy - Capability to perform work. As measured in foot-pounds, the amount of force it takes to lift and object weighing one pound, one foot. To calculate the energy, in foot-pounds, of a bullet in flight at any point on its trajectory:

$$W = \text{Weight of the bullet in grains.} \quad V = \text{Velocity in feet per second}$$

English Casing - A style of gun case whereby all the cased components are secured into more open box-like compartments---the barrels and action secured well enough, but the accessories liable to moving about a bit. An alternative to French casing, where all the cased components---barrels, action and accessories are fitted into shaped compartments with no space around them.

English Grip - A straight-wrist grip, typical on English shotguns, built for graceful aesthetics, light weight and fast handling. May be ovoid or somewhat diamond-shaped in cross-section.

Escutcheon - A plate, typically of more complex outline than a simple oval, typically of brass or precious metal, inlaid into a gunstock or a gun case, upon which is engraved the initials, monogram or coat-of-arms of the owner.

Express Sights - "V" shaped rear leaf sights 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 regulated.

Extended Top Tang - A display of gunmaking skill with a possible benefit of strengthening the wrist of a heavily-recoiling rifle, whereby the top tang of the action is made extra long, shaped and inletted into the top of the buttstock, extending along the top of the wrist and up over the comb. Popularized by Holland & Holland and adopted by several of the finest contemporary riflemakers in the USA.

Extractors - A fitting inset into the breech end of a pair of barrels of a break-open gun. When the gun is opened the extractor lifts the cartridges so they may be removed by hand. Recognizable at a glance on the breech end of a double gun because the fitting is solid---one extractor taking care of both barrels together.

Eye Dominance - Although we have two eyes for depth perception and for spare parts, there is a natural tendency for one eye to take precedence over the other, regardless of the relative visual acuity of each eye. It is a fortunate condition when the eye on the side of the shoulder where one is comfortable mounting a gun is also the dominant eye.

To test for eye dominance, pick out a small object several feet away. With both eyes open, center your right index finger vertically over the object. Close your right eye. If your finger appears to jump to the right, you are right eye dominant. Then open your right eye and close your left eye. If your finger remains in position in front of the object, you have confirmed your right eye dominance. Alternatively, if in the above test, upon closing your right eye your finger remains in position covering the object, you are left eye dominant. If you close your left eye instead and your finger appears to jump to the left you have confirmed your left eye dominance.

Eye dominance problems can be treated with 1. A severely-cast, cross-eye stock to bring the dominant eye in line with the gun's line of sight, 2. A patch over the dominant eye, or just a small piece of frosty Scotch tape on shooting glasses intercepting the dominant eye's line of sight, 3. Fully or partially closing the dominant eye, or 4. Learning to shoot from the dominant-eye shoulder. While less convenient, methods that retain the use of both eyes better preserve the ability to perceive depth in three-dimensional space---a great benefit in wingshooting.

Falling Block - A type of action used primarily for single shot rifles whereby some kind of lever actuates a breechblock, moving it downwards in a vertical recess to expose the chamber. May have visible or enclosed hammer. For any given barrel length, it allows a shorter overall rifle length compared to a bolt action because no space is taken up by the forward-and-back cycling of the bolt. Most of the better British makers produced them in limited numbers around the turn of the last century. Perhaps the best-known falling block action is 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 pushed forward by the closing bolt.

Fences - Hemispherical outgrowths of the receiver of a double gun that mate with the breech ends of the barrels. The term derives from the flanges (or fences) in this position on a muzzle loading gun that were designed to protect the eyes of the shooter from sparks and escaping gasses.

FFL - Federal Firearms [Dealer's] License. To ship a firearm, a selling dealer must have in his possession a copy of the receiving dealer's license.

Field Forend - A relatively slender forend on an over & under gun (as opposed to a beavertail forend). Over & Under counterpart of a Splinter Forend.

Field Grade - An unembellished firearm used to hunt in rough terrain where one might prefer not to put a more expensive, deluxe grade gun at risk of damage.

Field Gun - A shotgun, generally stocked to shoot where it is pointed and of relatively light weight because one often carries it a great distance---the consequent recoil not being an important factor because one actually shoots it very little.

Figured Walnut - Every piece of walnut is different in terms of its figure or fancy, streaked, fiddleback, burlled, grain pattern. It is difficult to describe a beautiful gunstock in a couple of words, but we use the following terms:

Plain wood, perhaps with visible grain but without swirls. Straight and strong.

Lightly figured walnut Some figure to elevate it from the ordinary.

Figured walnut Very pleasing figure, covering about half the buttstock

Highly figured walnut Beautiful figure, covering virtually all the buttstock

Exhibition walnut Stunning figure, dramatically covering the entire stock. We rarely use this term.

Firing Pin - The narrowly rounded, pointed component of a cartridge firearm that impacts and causes detonation of the primer. This may be mounted coaxially with a coil mainspring in a bolt rifle, may be a small replaceable tip mounted into the breech face of a sidelock break-open gun or an integral part of the [enclosed] hammer of a boxlock gun.

Five-Screw - Four Screw - Three Screw - Terms relating to Smith & Wesson double-action revolvers. The five screws were four retaining the sideplate and one at the front of the triggerguard. From the introduction of the Hand Ejector in 1905, there were five screws. Then, around 1955 S&W deleted the top sideplate screw. Around 1961, they deleted the triggerguard screw. Collectors find cheapening of fine products irritating. Consequently, all other things being equal, with Smith & Wesson revolvers, the more screws, the better. When counting the screws, be aware that on many revolvers, the larger-sized grips can cover the rearmost sideplate screw--only four screws being visible on a true five-screw revolver.

Flintlock - A system of firearms ignition, in general use circa 1660 - 1825, whereby the pull of a trigger releases a sear from a notch in a spring-loaded hammer, which holding a properly knapped piece of flint, strikes a vertical slab of steel (called a frizzen) scraping off tiny molten particles of the steel, and pushing it forward causes an integral flashpan cover to open forward, exposing a bit of fine gunpowder below, which when contacted by the falling sparks, ignites and sends a flash of fire through the touchhole, into the loaded breech setting off the main charge and firing the gun. The Flintlock system was supplanted by the Percussion system around 1820.

Floated barrel - A rifle barrel mounted firmly to the receiver, but not touching the forend. Done so that the stock will not adversely effect accuracy by impinging upon the natural vibration of the barrel when the rifle is fired.

Fluid Steel bbls - Barrels made of homogeneous steel (not damascus steel) --- standard practice for over a century.

Fluted Barrel - A rifle or pistol barrel, often of octagonal cross-section, into which longitudinal grooves have been milled. Fluted barrels, while more expensive to make than round barrels, dissipate heat more rapidly and they provide a better stiffness-to-weight ratio.

Forcing Cone - In a shotgun barrel, A tapered area a few inches from the breech end, providing a transition between the chamber (approximately the diameter of the outside of a shotgun shell) to the bore proper (approximately the diameter of the inside of a shotgun shell). The forcing cone provides the transition between the exterior and the interior diameters of the cartridge. Older shotguns usually have more abrupt forcing cones suitable for then-current thick-walled paper shells with fibre wads. Newer shotguns usually have more gradual, longer forcing cones suitable for thinner modern plastic shells with obturating plastic shot-cup wads.

French Casing - A style of gun case, where all the cased components---barrels, action and accessories are fitted into shaped compartments with no space around them. An alternative to English Casing whereby all the cased components are secured into more open box-like compartments---the barrels and action secured well enough, but the accessories liable to moving around a bit.

French Gray - An acid etched or phosphate finish, applied typically to shotgun actions, forming a gray-colored, non-reflective matte finish which also provides some protection from rust. Also called, gray-etched.

Frizzen - That part of a flintlock action that receives the blow of the flint-tipped hammer, which then yields tiny molten fragments of steel---sparks---which fall into the flashpan, igniting the priming charge and thence, through the touchhole, the main charge.

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

Fugger, Josef: - Austrian-born engraver, spent most of his professional life at Griffin & Howe in New York.

Full Stock - A rifle or carbine with a one-piece stock extending to the muzzle. Sometimes called a Mannlicher stock, although such a term is confusing because Mannlicher Schoenauer rifles are built with both full and half stocks. Traditional in Europe for close-range woodland hunting, but not noted for extreme, long-range accuracy.

Funeral Grade: - A colloquial term to describe a break-open gun, of any quality but often of the very highest, bearing the least possible decoration; having an all-blued receiver with either no engraving at all or only a simple borderline.

Gape - The degree to which the barrel(s) of a break-open gun drop down; the size of the opening space---which should be sufficient to allow for ease of loading, unloading and properly-functioning ejection. A good gape is easier to achieve on a side-by-side than an over & under where the bottom barrel is well-enclosed by the action body.

Gauge - System of measurement for the internal bore diameter of a smooth-bore firearm based on the diameter of each of that number of spherical lead balls whose total weight equals one pound. The internal diameter of a 12 gauge shotgun barrel is therefore equal to the diameter of

a lead ball weighing 1/12 pound, which happens to be .729" (Or in British: Bore.) The Gauge/Bore system is also used, by convention, to describe the internal barrel diameter of large-bore, 19th century, English, single-shot and double-barrel rifles.

Glassbedding - Swabbing wet epoxy over the inletted portion of a stock, covering the metalwork with a release agent and pressing the barreled action into the wood. A process undertaken to compensate for imperfect wood-to-metal fit.

Gloaming Sight - A second, folding or pop-up front sight bead of larger than usual size, perhaps not as accurate as a normal fine bead, but easier to see in the gloaming (twilight) or dawn.

Globe Sight - A front sight assembly, primarily for target rifles, consisting of a tube, housing interchangeable beads and blades. The tube guards against imperfect aiming due to sight pictures influenced by reflections.

Graticule - British for Reticle.

Greener Crossbolt - A tapered round bar, operated by the toplever of a shotgun, passing transversely behind the standing breech of a side-by-side gun and through a matching hole in a rib extension; to strengthen the lock-up. Scott's crossbolt operates similarly, but is square in cross-section.

Greener Safety - A safety catch mounted to the left side of a gun, just behind the receiver, which swivels fore and aft on a transverse rod. Often seen on drillings as well as on Greener's own shotguns.

Griffin & Howe Sidemount - A quick-detachable scope mount system built by the company of that name. The base fits to the side rail of a bolt action. The slide locks in place on the rail with two levers. (Pre-war mounts had a single lever.) Rings of various heights and diameters attach the scope of your choice to the slide. Mounting a scope high enough allows use of iron sights.

Hagn Action - A modern, strong, simple, solid, well-engineered, falling-block, single-shot action designed by Martin Hagn of British Columbia and made both by him and by Hartmann & Weiss of Hamburg.

Half grip - Round knob, semi pistol grip (Prince of Wales grip)

Hammer - The part of a gun lock, which driven by a spring and released by a pull of the trigger, falls and (usually via an intervening firing pin) strikes the detonating primer of the load and discharges the gun. Hammers may be external or internal.

Hammer Forging – Using heavy specialist machinery, a slightly oversized barrel blank is hammered-swaged externally over a pre-contoured mandrel having the desired spiral lands and grooves, and sometimes even the chamber, already machined in place.

Hammerless - A firearm with its hammer enclosed inside the action body; i.e.. no visible hammer.

Hand - A small lever that engages a notch in the cylinder of a revolver and turns it to move the next chamber into battery as the hammer is cocked.

Hand-Detachable Locks - The firing mechanism of a break-open gun which may be removed for inspection or cleaning without the use of tools. The release latch may be plainly visible or concealed. A feature typically seen on sidelock guns but also on the Westley Richards "droplock" boxlock action.

Handspanner - German for Hand-Cocking or Cocker/De-Cocker. A type of action on a break-open gun or rifle where, in place of a traditional top tang safety, a somewhat more robust tab is fitted. Normally such a gun is carried in the field loaded, but with the action not cocked---an exceedingly safe condition. Then, when ready to fire, the shooter, instead of pushing a safety tab forward, pushes this larger tab forward, cocking the mainspring, making the gun ready to fire. Then, if the shot is not taken, he may simply slide this tab rearwards again, de-cocking the gun and returning it to the still-loaded, but very safe position.

Hang Fire - A dangerous situation resulting occasionally from the use of outdated old ammunition where the primer does not fire upon being struck by the firing pin. The cartridge may fire in a virtual instant or some seconds later. In the event that a cartridge fails to fire immediately upon the pull of the trigger, always count out ten seconds before opening the breech.

Headspace - The distance, or clearance, between the base of a chambered cartridge and the breech face (or bolt face) of a firearm. This is a critical dimension, particularly in high powered rifles. If there is too little headspace, the bolt will not close. If there is too much headspace the cartridge will not be properly supported in the chamber and the cartridge will expand upon firing and may rupture, blasting high-pressure gas into the action and possibly into the body of the shooter. Headspace should be .003" - .006" in a centerfire rifle. It can be checked with a set of "Go and No-Go" gauges specific to the calibre in question. With a standard cartridge, the headspace is registered by the shoulder, with a belted cartridge, the headspace is registered by the forward edge of the belt.

Heel - The top of the butt-end of a gun stock.

Heel & Toe Plates - Protective plates, usually of steel or horn, covering the top and bottom of a gunstock's butt only (the heel and the toe); leaving wood exposed in the center.

Hinge Pin - A short cylindrical rod of hardened steel running laterally near the front of the bar of a break-open gun's action around which the barrel hook revolves when the gun is opened. Over the decades, this pin and its complimentary hook can wear and a gun can sometimes "shoot loose" or "come off the face." The proper cure for this condition is to replace the hinge pin with a new one, slightly oversized, to compensate for wear on both itself and on the barrel hook.

To test for a worn hinge pin, remove the forend (which helps hold the barrels tightly onto the receiver). Hold the receiver in one hand and the end of the butt in the other. Give the gun a good shake, side to side. If you can detect movement of the barrels against the receiver, the gun has probably seen a good deal of use. It probably ought to have a new hinge pin fitted by a competent gunsmith.

Holdopen Toplever - A catch built into the receiver of a break-open gun to keep the toplever in its extreme right position when the barrels are removed. This device makes it slightly easier to remount the barrels. When the barrels are mounted and the breech closed, the barrels contact some kind of release pin and the toplever automatically returns to the center locked position. As, however, it requires a separate act to re-center the toplever on a broken-down gun, this feature may be irritating when trying to put a gun away in its case.

Hook - A concave, semi-cylindrical surface cut into the forward lump of a barrel set of a break-open firearm which revolves about the hinge-pin when the gun is opened.

Howdah Pistol - Normally, a break-open, double-barrel, side-by-side pistol of large calibre, used by a maharaja when hunting tiger on the back of his elephant (in the howdah---the basket compartment in which he sits). The howdah pistol is the weapon of last resort in case the tiger tries to join him in the howdah.

Imports - Click for information for foreign sellers and for Americans purchasing firearms abroad.

Inletted Swivel Studs - A type of base for detachable sling swivels whereby the steel base is inletted into the stock for a cleaner look, rather than simply being screwed onto the surface. A sign of a better custom-made rifle.

Inletting - The process of carving out recesses in wooden stocks with precision, using gouges, chisels and scrapers to accept the steel components of a firearm.

Intercepting Sear - A second sear, poised just behind a second notch in the hammer.

It is possible that when a cocked firearm is dropped or sharply jarred, a single sear could jump out of its notch and the hammer could fall, firing the gun accidentally. In this event, an intercepting sear would engage before the hammer could fall completely, preventing an accidental discharge. On a gun with intercepting sears, only by pulling the trigger are both sears moved out of the way simultaneously, allowing the gun to fire.

Intercepting sears are usually found on better sidelock actions. They are sometimes found on best boxlocks, and can be recognized by an extra screw behind the action fences, in addition to the usual two screws (or pins) along the lower rear of the receiver.

Island Lock - A sidelock, inletted into the wood at the side of a (vintage) gun, in its own recess, independent of the steel receiver.

Island Rear Sight - A rear barrel sight base, more articulated than having the sight simply dovetailed into the barrel, but not requiring as much gunsmithing as having it mounted onto a proper quarter-rib.

J-Bore - In reference to variations of the German military cartridge, 8x57. This cartridge was originally manufactured using a bullet with a diameter of .318 inches. It is known in Germany as the 8x57I or in the USA as 8x57J. (I and J are interchangeable.) In 1905, the German military adopted a slightly larger bullet diameter, .323 inches, also with a slightly larger neck diameter, and named it 8x57S. Commercial sporting arms makers adopted the new cartridge at a glacial pace. Rimmed versions of both these cartridges are available for use in break-open and single

shot rifles, denominated respectively 8x57JR and 8x57JRS. Often, it is difficult to ascertain which bore size a vintage rifle might have. Markings can be confusing and rifles may have been altered. The only safe way to determine the exact bore size is to take a cast of the chamber extending a bit into the bore proper and measure it with a micrometer. It may be safe to shoot a .318 inch bullet in a .323 inch bore, but accuracy will be unpredictable. To shoot a .323 inch bullet in a .318 inch bore is dangerous.

Jeweled - An engine-turned treatment on a steel part done both for a finished look and to hold oil on the surface. An abrasive-impregnated rubber bit is used to describe a circular pattern on the surface of the steel, then moved just a little less than distance of the diameter of the bit, touched to the surface again, and the process repeated until the steel surface is covered with small regular rows of circular swirls.

Jones Underlever - A lever, mounted to the underside of the receiver of a break-open gun, extending half way around the trigger guard and ending 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 on the hinge pin. While not the fastest-opening design for the lockup of a break-open gun, it is amongst the strongest and most durable.

Kersten lock - A crossbolt running laterally, just behind the breech face, through the top of the standing breech of a break-open gun which passes through a complimentary hole in a flange extending rearward from the top side of a barrel. Double Kersten locks: two such locks; one on either side of the barrel set. A system of lockup usually found on German over & under shotguns such as Merkel and Simson.

Key Fastener - A horizontal wedge, press-fit through the forend of a vintage gun, through a lump attached to the underside of the barrel and out the other side of the forend. To secure the forend in position. Also called a crosspin or a wedge fastener.

Knuckle - The curved, forward end of the bar of a break-open firearm's action, about which the mounted forend iron revolves downward. This area should be kept lightly greased to avoid galling the bearing surfaces.

Lap - (verb). To polish with a fine abrasive paste, as to remove machining marks. Bores may be lapped to improve velocities and minimize fouling. Bolt actions may be lapped to improve the smoothness of operation.

Lefauchaux, M.: - Patented one of the first practical breech-loading shotgun actions, using his proprietary Pinfire cartridge. The action operated by a forward-facing lever on the underside of the forearm, which when moved 90 degrees to the right, caused the barrels to slide forward and then to drop down exposing the chamber.

Lever Forend Release - A latch for securing the forend to the barrels of a break-open gun, operated by swiveling a lever to the side. It provides a very positive lock; primarily used on double rifles.

Lifters: - Another name for Extractors.

LTRK: - Long tang, round knob, semi-pistol grip (A term used by Browning shotgun collectors)

Lock - Part of the action of a gun; the mechanism by which a pull of the trigger causes a blow to be struck to the detonating primer, firing the gun. It can have an internal or external hammer, be a flintlock, percussion lock, Boxlock, Sidelock, blitz lock or of any number of different designs.

Lumps - The projections extending downward from the breech end of a side-by-side gun. Into the lumps are machined the hook (to swivel around the hinge pin) and the bites (to accept the locking bolts). Also called underlugs. See also Bifurcated Lumps and Chopper Lumps

Magazine: - A spring-operated reservoir for shot shells for a repeating shotgun.

Magazine Follower - A plate, mounted to the top of a spring, inside a magazine, over which cartridges may slide smoothly as they are guided into the chamber of a repeating firearm.

Matchlock - An early system of ignition for muzzle-loading firearms where a priming charge is loaded into a flashpan with a separate, manually-operated cover. To fire, the cover is opened and then a slowly smoldering wick, held in the nose of the curved arm, is lowered by means of a lever (precursor to a trigger) to ignite a priming charge which then ignites the main propellant charge inside the barrel.

Minute of Angle; MOA - A 1/60th part of a degree, the unit of measure used in adjusting rifle sights. As it turns out, a minute of angle translates almost exactly to one inch at 100 yards, to two inches at 200 yards and three inches at 300 yards.

Monoblock barrels - A method of building a pair of barrels where the entire breech end of both barrels and the lumps together are machined from one solid piece of steel. The barrel tubes are then fitted separately into this monoblock and the ribs attached. Often identifiable by a distinctive ring around the barrels about three inches in front of the breech end. The favored jointing method of the Beretta company. An incorrect euphemism for sleeved barrels.

Monogram: - A personalized marking consisting of initials, often artistically engraved or inlaid in which the letter for the surname is central and prominent. Often seen on the pistol grip of a shotgun for show or identification.

Monte Carlo Comb - An elevated gunstock comb which drops to a normal height at the heel.. Useful on rifle stocks to align the eye with a telescopic sight better, and on trap guns to raise the point of impact.

Monte Carlo Cheekpiece - A cheek rest, built onto the side of a gunstock, which also extends upward to raise the comb of a stock, then falls sharply to a normal height so as not to affect the drop at the heel. As above, useful on rifle stocks to align the eye with a telescopic sight better, and on trap guns to raise the point of impact.

Mullered Borders - A borderline at the edge of a checkered area on a gun stock. It is made by using a convex cutting tool which is slightly larger than the normal pointed checkering tool used for the body of the pattern. Typical of better English guns and of fine American guns built to evoke an English style.

Muzzle: - The end of a barrel, pointing towards the target, out of which, the load from the shot shell is discharged.

Muzzle Brake - A fitting attached to the muzzle of a firearm, with a series of perforations designed to deflect some of the forward-rushing gasses and pull the firearm forward off the shoulder, reducing recoil. While muzzle brakes can be effective in reducing recoil, their resultant blast is at least mildly offensive to anyone else standing nearby.

NIB - New, unfired, in original box, although possibly previously owned.

NID - New Improved Design. An improved version of the Ithaca shotgun: the "Knick" model---stronger and more reliable than its predecessor, the "Flues" model.

Nipple - A small, tubular protuberance, screwed into the breech end of a percussion-system firearm's barrel, upon which is fitted the percussion cap and through which, at the moment of the hammer's impact the detonating flash passes to the main propellant charge.

Nitro - Refers to the chemical composition of the smokeless powder used to propel shot (or a bullet) from a firearm. It is a solid form, based on nitroglycerine. Generally adopted in the very late 19th century, it very quickly replaced traditional gunpowder (Carbon, Sulphur and Saltpeter) because it did not generate nearly as much smoke, because it was safer to handle, because it did not promote rust in bores and because it burned slower---allowing the projectile to accelerate longer as it moved down the barrel and consequently reach a higher muzzle velocity. It is dangerous to shoot nitro-based ammunition in vintage firearms originally designed for black powder.

Nitro Express - A marketing term dating from the early days of nitro powders, non-specifically denoting a more powerful cartridge than the black powder cartridge it might be compared to. "As powerful as an express train."

Nitro Proof - A marking on a gun meaning that it is safe for use with nitro-based powders and has been 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, what pressure they tested the gun to and upon what extra data is included amongst the proofmarks. The safety of shooting any gun depends not only upon its original construction but also upon its current condition.

Obturing Breech - A design of breechloading action whereby the breech slides forward to the barrels (or vice versa) and the one overlaps the other to form a better seal. Ordinarily, modern firearms do not require special obturating breeches because ductile brass cartridges swell slightly when fired, effectively sealing the rapidly expanding gas within the breech.

Offhand - The standing position for shooting a rifle from the shoulder. A stance generally not resulting in as fine accuracy as the other positions, kneeling, sitting and prone; but usually faster.

O/U or Over and Under [barrels] - Over and under barrels are better than side-by-side barrels because they have a narrower sighting plane. They allow more precise aiming and allow slightly better peripheral vision. Over & under guns are more suitable for shooting clays, where one

generally knows where and when the target will be presented. Consider the analogy that fine crosshairs in a rifle scope may be harder to see, but when one has time, allow for a more accurate shot than the broad crosshairs of a hunting scope.

Oval - A small oval plate of nickel, silver or gold, usually inletted flush into the underside of the buttstock of a fine gun on which the owner's initials, monogram or coat of arms may be engraved. See also: Escutcheon.

Pair (of Shotguns) - Two shotguns of a matched Pair are identical in every way---same barrel lengths, same chokes, stocks of the same dimensions cut from the same piece of wood, identical weights, balance, etc. They should be consecutively numbered and all the readily-detachable components should be numbered 1 and 2 respectively. Usually, they are cased together. Ideally, in the heat of a driven shoot when the birds are coming hard and fast, working with a loader, the shooter shouldn't be conscious at all of which gun of the pair he has in hand at any given moment. A "pair" of guns ordered with different chokes or other differences, in the interest of increasing their range of utility, defeats the entire concept of a matched Pair. Most makers will charge an extra 10% over the cost of two single guns for their trouble insuring the precise matching of the two guns. A Composed Pair of guns is one where two separate guns, made individually, are subsequently stocked or altered to match as closely as possible.

PG - Full Pistol Grip, with flat knob, with or without pistol grip cap. Although less sleek in appearance than a straight English grip, a more naturally fitting handle allowing the human hand to hold the gun in a more relaxed position. Considered by many to be more suitable for target guns, where one shoots somewhat deliberately.

Palm Rest - A handle, mounted to the underside of the forend of a rifle built for off-hand target shooting. In use, a right-handed person would place the butt to the shoulder, grasp the wrist with the right hand, cock the left elbow to the left hip and by triangulation of his forearm support the palmrest with the palm of his left hand.

Palm Swell - A bulge in the side of the pistol grip of a stock designed fill the palm of the hand and offer the shooter a more comfortable, repeatable hold on his gun. Wundhammer Swell.

Pancake Cheekpiece - A cheekpiece confined completely to the side of a buttstock---as opposed to one in which the forward borderline flows into the wrist or one that flows up and over the comb.

Paradox - A barrel boring system invented by G V Fosbery to allow use as an ordinary shotgun and also to be able to fire a single projectile with reasonable accuracy approaching that of a rifle. The barrel is smoothbore for most of its length. Then, about three inches from the muzzle, a normal shotgun choke begins its smooth constriction. Finally, about an inch and a half from the muzzle, a deep, robust series of spiral rifling lands and grooves are cut. Shot is not unduly effected by the rifling. A conical bullet or a slug is given a real spin by the rifling---achieving far superior accuracy to that of a modern "rifled" slug shot through a normal shotgun bore. Sometimes referred to as a "Ball & Shot Gun".

Parallax - A condition, when looking through a telescopic sight, when a movement of the eye, up, down or sideways, changes the position of the reticle with respect to the target. This

condition is caused by the reticle not being in proper focus with the objective lens. It is difficult to achieve reliable accuracy while there is a parallax problem. And, the higher the magnification, the more likely parallax will be an issue. The cure is to focus the scope for the range it is to be used. Most scopes may be focused by rotating the ocular bell. Many high-powered scopes have a parallax adjustment---the ability to focus via the objective bell.

Parkerizing - A chemical phosphate process developed during the second world war to provide an economical, durable and non-reflective surface finish to military firearms.

Patridge Sights - A relatively thick, flat-topped front blade sight and a square-notched rear sight, used normally on handguns. Designed by E. E. Patridge in the 1890s.

Pattern - The shape of the shot cloud as it deploys from the muzzle of a shotgun. While choke determines the degree of concentration of the shot, it is primarily skilled boring of the barrel that determines the highly-desirable evenness of the pattern. Cartridge design can also effect evenness and concentration of pattern. Adjudged, traditionally against a 30 inch circle, fired at a range of 40 yards.

Pedestalled - A stockmaking detail where a small metal component such as a sling swivel stud is mounted to a raised flat area.

Peep Sight - A type of gunsight, mounted towards the rear of a rifle through which one simply looks, placing the front sight on the target. Also called an aperture sight. With a small aperture, it can be very accurate. With a larger aperture, it allows faster target acquisition. Typically adjustable for windage and elevation. It is superior to the open rear buckhorn or express sight because it requires the shooter to focus on two planes only (the front sight and the target) instead of three (the open rear sight, the front sight and the target). The attribute is especially beneficial for older people who have trouble focusing at near distances. And, the small aperture, by bending light rays at the edge of its metal-to-air interface, effectively acts as a lens.

Percussion Lock - Based on a discovery by the Rev. Alexander Forsyth, patented in 1807, that a blow to fulminate of mercury will detonate it, through several designs to utilize the concept with limited success, culminating in the adoption of the copper priming cap. This small, cup-shaped cap, containing a bit of fulminate, after the hammer is cocked, is placed upside-down on the tubular-conical nipple. To fire the gun, one pulls the trigger, releasing the spring-loaded hammer which falls on the head of the percussion cap, detonating the fulminate, sending fire through the hole in the nipple to the main charge inside the breech (having been loaded from the muzzle) touching it off and discharging the weapon. The percussion system superseded the flintlock system generally around 1820 because it was more reliable in the wind and the rain, quicker to load, of faster lock time and because it was cheaper to manufacture.

Pigeon Gun - A double-barrel shotgun, with relatively tight choke boring and a relatively high-combed stock used for shooting live pigeons (euphemistically known as flyers) which normally rise when released. To better absorb recoil, a pigeon gun is normally heavier than a field gun as one shoots heavy loads and walks only a little. Because of the inevitable expense of this shooting discipline, pigeon guns are often built to a high standard of quality and reliability in deluxe grades with highly figured walnut stocks and fine engraving.

Pin: - British for Screw.

Pinned - In Smith & Wesson parlance, a pin (in its American definition---a small-diameter cylinder of steel) fitted through the top front of a revolver frame and through the breech end of the barrel, to lock it into position after it has been screwed in place. The extra expense of fitting this pin was generally deleted during the early 1980s. All other things being equal, most people would rather have this feature than to see their revolver cheapened in such a petty way.

Pinfire - An early form of complete, self-contained cartridge. It included bullet, powder and ignition primer, all in one package. The primer was located towards the base of the cartridge, but completely internally. The pin, shaped like a little finishing nail, pointed on the inside end and resting on the internal primer, projected radially about a quarter-inch to the outside of the base of the cartridge.

When loaded, a pinfire gun showed the tips of the pins exposed through small slots in the tops of the breech faces of the barrels. To fire, hammers fell on the pins, driving them (through the wall of the cartridge) into the internal primer. The exposed pins made the cartridges vulnerable to surprise ignition when dropped or knocked about in one's pocket. As a system, it was rather short-lived.

Pitch - The angle of the butt of a gun in relation to the line of sight. In America, pitch is measured by resting the gun with its butt flat on a floor, the top of the receiver against a wall and its muzzle pointing up. The distance of the muzzle from the wall is the gun's pitch down. In England, pitch is determined by measuring the length of pull, separately, to each of the heel, the middle of butt and the toe.

Ported barrels - Barrels with a series of holes or slots drilled near the muzzle. When a ported barrel is discharged, gasses moving violently down the barrel hit the forward edge of the holes and pull the gun forward off the shoulder, reducing felt recoil. Porting holes, when cut along the top of the barrel also work to depress the barrel under discharge, counteracting muzzle jump. Ported barrels may provide some benefit to the shooter, but the sideways blast of gas is somewhat obnoxious for others nearby.

Postal Proof - A Winchester mark, stamped at the factory on barrels supplied mail-order to independent gunsmiths, who then fitted them to customer's rifles. An indication of a re-barreled rifle.

Pre-'64 - A collectors' term, specific to Winchester firearms. In 1964 the Winchester board took a decision to cheapen their entire product line in a vain attempt to compete with their imitators on price. On their Model 70, the Mauser-based controlled-feed claw extractor was deleted. On their lever action guns, the forend was no longer dovetailed into the front of the receiver. Collectors resent the accountant's power over the engineers and craftsmen and the watershed erosion of quality that occurred in that year. Consequently, all other things being equal, Pre-'64 Winchesters are worth more than Post-'64 Winchesters.

Prewar - Before World War II (with all due respect to those who served in other conflicts).

Primer - A small capsule of soft metal containing a detonating compound, press-fitted into the head of a cartridge. When the primer is struck by the firing pin, the small charge explodes, touching off the main powder charge inside the cartridge, launching the bullet or shot charge.

Proof - The test-firing of a gun with an extra-heavy load, at an official establishment, to verify the safety of a gun, which is then marked with formal stamps showing, among other things, the loads for which it is intended. Proof date code table.

Most civilized countries have proof houses, run either by the government or by the trade association under the auspices of the government. In these countries, every new gun must pass proof before it is sold. The United States, the most litigious country in the world, has no proof house. Perhaps for these reasons, American shotguns are often stronger and heavier than their European counterparts. , typical Proofmarks

Pull - The length of a stock, as measured from the center of the trigger to the center of the butt, including any recoil pad, buttplate or simply to the end of the wood if finished with a checkered butt. Pull measurements are not exactly comparable between double-trigger and a single-trigger guns. Pull is measured from the front trigger of a double-trigger gun and from the only trigger of a single-trigger gun. 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. Any less, and you might hit your face with your hand when the gun recoils. Any more, and you might catch the butt on your clothing when you hastily mount the gun.

Pump Action Shotgun: - The shotgun features a movable forearm that is manually actuated to chamber a shot shell, ejecting the casing and putting another shot shell in the position to fire.

Purdey Underbolts - A sliding bar, running longitudinally through the watertable of a break-open side-by-side gun's action, with openings through which the lumps of the barrels pass when the gun is closed. Under spring tension, this bar moves forward when the opening control is released and its two locking surfaces engage complementary slots (bites) in the rear of the two barrel lumps. Originally operated by a hinged tab in front of the trigger guard. Now invariably operated by a cam from Scott's [toplever] spindle. Most modern side-by-side guns lock closed in this manner.

Quarter Rib - A raised section of rib, running from the breech end, partly towards the muzzle, found predominately on side-by-side double rifles, but also sometimes on better custom bolt rifles, to act as a base for express sights and in itself as a aid in quick pointing.

QD - Quick-detachable, as in scope mounts or sling swivels.

Rail Mount - A telescopic sight with an integral rail on the underside. The rail provides rigidity to the scope and it provides a convenient point of attachment for a typically European quick-detachable mounting system. Longitudinal positioning is more flexible because the rail is less obstructed by objective or ocular bells and windage/elevation turrets.

Recessed - In Smith & Wesson parlance, a revolver cylinder whose chambers have been counterbored to accept the cartridge's rims---the base of the cartridges then resting flush with the rear of the cylinder. In later guns, the expense of counterboring the chambers has largely

been deleted. All other things being equal, most people would rather have a revolver with recessed chambers.

Rebounding Lock - An action design developed during the hammer cartridge era wherein the released hammer comes to rest slightly rearward and out of contact with the firing pin. Previously, with non-rebounding hammers, unless the hammer was kept on half-cock or cocked and on safe, the hammer would rest on the firing pin---which in turn would rest on the primer; a decidedly perilous condition.

Receiver - The frame or action body of a firearm. The housing that contains the mechanism that fires the gun. The serially-numbered part which legally constitutes the firearm.

Regulation of Double Rifles - If the two barrels of a double-barrel shotgun shot 3" apart at 25 yards, not many people would notice because the pattern from each barrel, spreading two feet across at that range, would largely overlap. If, on the other hand, the two barrels of a double rifle shot 3" apart at 25 yards, it would probably shoot 6" apart at 50 yards and 12" apart at 100 yards, limiting its utility.

One cannot build a double rifle, using sophisticated mass-production machinery with barrels perfectly parallel and expect both barrels to shoot to a common point of impact. While the bullet is traveling down the right barrel (of a side-by-side double rifle) the rifle will be pushed up and to the right, throwing the bullet up and to the right when it exits the muzzle. While the bullet is traveling down the left barrel, the rifle will be pushed up and to the left, throwing the bullet up and to the left when it exits the muzzle. To compensate for the movement of a double rifle while bullets are traveling down the barrels, it must be built with the barrels converging towards the muzzle (by a mysterious amount). Because different powder charges, bullet weights, rifle weights, shooter body weights, ambient temperatures, etc., all effect the way a rifle moves under recoil, the only way to balance these factors is by trial and error. This process is called regulation.

The goal of regulation is to make the rifle shoot both barrels to a common point of impact at a range appropriate for the calibre.

One can proceed generally in either of two ways: adjusting the relative position of the barrels or adjusting the load. If one has a fixed load in mind, the former method must be used. It involves repetitive unsoldering and resoldering the barrels until the required convergence is achieved, then relaying the ribs and finally refinishing the barrels.

A simpler method is to vary the load. The longer the bullet spends traveling down the barrel, the greater the force is exerted on the rifle to cause it to move while under recoil. If bullets from the left and right barrels strike the target too far apart at the desired range, and have crossed before they reach the target, the velocity is too great. The bullet weight must therefore be increased or the powder charge decreased. If bullets from the left and right barrels strike the target at the desired range too far apart, but have not crossed before they reach the target, the velocity is too slow. The bullet weight must therefore be decreased or the powder charge increased.

The construction of an effective double rifle is the apogee of the gunmaker's art. If, however, one comes into possession of a double rifle for which the original load is unknown, one can often make it shoot well by adjusting the load to the rifle. Double Rifles for Sale

Reinforced Frame - A firearms action, most commonly on a heavily recoiling break-open weapon, in which the action forging has been enlarged with extra steel at its weakest point---the line extending downwards from the standing breech, at the beginning of the watertable. Also called a bolstered frame.

Reinforcing Crossbolt - A steel bolt, mounted transversely through a rifle stock just under and behind the front (and sometimes rear) receiver ring, sometimes concealed in the wood and usually against which the action is carefully bedded. When properly fitted, it helps distribute the recoil and reinforces 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, but are sometimes finished with contrasting wooden plugs and sometimes concealed completely. Also called Recoil Crossbolt.

Release Trigger - A trigger mechanism which sets when pulled, and then fires when released. Sometimes fitted to competition shotguns for shooters who are bothered by flinching, but perilous in the hands of someone not expecting such an arrangement.

Reticle - A matrix of dots, posts or lines, visible inside a rifle's telescopic sight, normally adjustable via exterior knobs for windage and elevation. After careful adjustment at a known range, the shooter aims the rifle by superimposing this matrix onto the target. With good estimation or range, cooperation from the wind, a clear eye and a steady hand, he may have a reasonable expectation of hitting his target. Also, less correctly: Reticule. Or, in British: Graticule.

Rising Bite - A lockup design for break-open guns, usually serving as a third fastener to strengthen the lockup of a gun with double Purdey underbolts. Designed by J Rigby and T Bissell, patent number 1141 of 1879. A loop-shaped rearward extension of the rib, drops into a mating female recess in the top of the standing breech, surrounds a fixed central buttress and is secured by a rising post at the rear. Often seen on Rigby double rifles of the period circa 1880 - 1920; after which even Rigby discontinued it in favor of the Doll's Head, because it was exceedingly expensive to built. A marvelous feat of gunmaking.

Rolled Triggerguard - A thickened, beaded edge on the side of a triggerguard bow. This extra detail allows the triggerguard to be made light, thin and graceful while at the same time thick enough to avoid finger injury when the gun recoils---theoretically possible with a sharp-edged triggerguard.

Rook Rifle - English term for a light, usually single-shot, usually break-open design rifle, firing a centerfire cartridge of power similar to a pistol cartridge, and used to shoot rooks, crows and other vermin.

Rose & Scroll Engraving - A traditional English engraving pattern where areas of tight scroll are interspersed with bouquets of roses. This pattern developed as much to impart a texture to

the raw polished steel which would remain after the color hardening had worn off, as it was an art in its own right.

Round Action - Name commonly used to describe the MacNaughton / Dickson / McKay Brown Triggerplate Action

Rounded Action - Not truly a Round Action; one of ordinary (boxlock or sidelock) design, whose sharp edges have been comfortably radiused and, perhaps, the exterior of whose lockplates have been subtly curved.

Safety - A device, incorporated into the design of most firearms actions that, when engaged, should prevent the discharge of the firearm. Some safeties are more positive than others. A safety device is not a perfect substitute for the general principles of responsible gun handling. Never point a gun in a direction you do not intend to shoot.

Safety Lug - An extra flange behind the bolt handle, at the rear of a bolt action receiver (notably the Mauser Model 1898), which uses the bolt handle as an extra locking surface in the extremely unlikely event of forward bolt lug failure.

Scalloped receiver - Extra detail on a boxlock gun where 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. Also called Fancy-back.

Schnabel: - Stock detail, typical of German and Austrian guns, where the forend tip flares out to an enlarged knob.

Scope Blocks - A pair of small dovetailed steel bases, screwed usually one to the barrel and one to the front receiver ring of a rifle, to 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. Also, Target Blocks.

Scott's Spindle - A type of fastening actuator for a break-open gun consisting of a vertical shaft, rotated by a lever on the top of an action body, operating a cam fixed to its bottom, which when rotated, withdraws (typically) a Purdey bolt which unlocks the barrels allowing the gun to open. Patented by William M Scott in 1865.

Sear - A sharp bar, resting in a notch (or in British: "bent") in a hammer (or in British: "tumbler"), holding the hammer back under the tension of the mainspring. When the trigger is pulled, the sear moves out of its notch, releasing the hammer and firing the gun.

Self-Opening (Assisted Opening) - Attribute of a break-open gun whereby the barrels drop down simply by pressing the toplever without muscling them open manually. The Holland & Holland system utilizes a coil spring within a cylindrical housing mounted just ahead of the forward lump to urge the barrels open. The Purdey system utilizes residual energy remaining in the mainspring after the gun has been fired. Both systems enable a shooter to load more quickly when birds are coming fast.

Selous Plates - Form-fitting panels of thin sheet steel inletted and screwed onto both sides of the wrist of a shoulder-fired weapon, either as a reinforcement or repair. Named for the famed African hunter Frederic Courtney Selous.

Semi-Automatic [Action] - A type of firearm which, utilizing some of the recoil or some of the expanding-gas energy from the firing cartridge, cycles the action to eject the spent shell, to chamber a fresh one from a magazine and to cock the mainspring, placing the gun in position for another shot with nothing more needing to be done than to provide another pull on the trigger. Autoloader. Often erroneously referred to as automatic---but automatic actually refers to a machine gun. The Colt Model 1911 pistol and the Browning Auto-5 are semi-automatic designs.

Shot Sizes - See Table

Lead shot sizes:	12	9	8½	8	7½	6	5	4	2	BB
Pellet diameter (inches)	.05	.080	.085	.090	.095	.110	.120	.130	.150	.180
(mm)	1.27	2.30	2.16	2.29	2.41	2.79	3.05	3.30	3.81	4.57

Buck shot sizes:	No. 4	No. 3	No. 2	No. 1	No. 0	No. 00	No. 000
Pellet diameter (inches)	.24	.25	.27	.30	.32	.33	.36
(mm)	6.10	6.35	6.86	7.62	8.13	8.38	9.14

Steel shot sizes:	6	5	4	3	2	1	Air Rifle	BB	BBB	T	F
Pellet diameter (inches)	.11	.12	.13	.14	.15	.16	.177	.18	.19	.20	.22
(mm)	2.79	3.05	3.30	3.56	3.81	4.06	4.49	4.57	4.83	5.08	5.59

Note: the size of shot, whether lead or steel, is based on American Standard shot sizes. Thus, a steel No. 4 pellet and a lead No. 4 pellet are both .13 inches (3.3mm) in diameter.

Sideclips - A pair of small beveled flanges extending forward from the sides of the standing breech of a shotgun, mating with similarly beveled edges of the breech end of the barrels; reinforcing the barrels against lateral movement while firing.

Sidelock - A type of action on a break-open gun where the lockwork (hammer, sear, mainspring etc.) is mounted to the back side (inside) of a plate (or pair of plates for a double gun). A sidelock is superior to a boxlock because: 1. Less steel needs be removed from the bar of the

action; the action is therefore stronger. 2. The lock plates provide a larger canvas for the engraver's art. 3. Sidelocks have generally been considered a more aesthetically pleasing form. 4. They are often made with secondary, or intercepting, safety sears. 5. Trigger pulls theoretically may be adjusted more precisely. 6. Because of all the above, most makers building a range of guns have usually reserved the sidelock action for their better grades of guns; this last being the most relevant reason why sidelocks are generally considered superior to boxlocks. See also: Boxlock

Sidepanels - Flat protrusions along the side of a rifle stock, to reinforce the stock in the area weakened by wood having been removed to receive the action. Or, A flat area on the side of the head of a stock of a break-open gun. This sidepanel allows more wood in the area in contact with the receiver, allowing a stouter wood-to-metal connection, without resulting in an ungainly bulky line to the wrist.

Sideplates - Decorative steel plates mounted to the sides of a boxlock break-open gun, inletted into the receiver and into the wood just behind it, to make the gun resemble a sidelock in appearance and to provide a greater area for engraving. Sideplated guns, usually, can be recognized by the lack of action pins visible in the sideplates (although some sideplated guns are built with fake pins).

Silver's Pad - A very traditional English recoil pad made of solid orange/red rubber with smooth sides and face, bonded to a black base. Two conspicuous matching flush-fitting rubber plugs cover the mounting screws. Originally made by S. W. Silver & Co., the name is often used to describe both the original and several veritable facsimiles.

Single Action - An action type, typical on handguns, where the hammer must be cocked manually prior to each shot (if it be a revolver) or prior to the first shot with an already loaded chamber and de-cocked hammer (if it be a semi-automatic).

Single Set Trigger - A single trigger, operating at a normal 4 - 6lb pull, which when pushed forward converts to a hair trigger. This trigger is usually fitted with a small set screw to adjust the weight of the hair trigger.

Skeet Gun - A double-barrel shotgun with relatively short barrels and relatively open chokes, used for the game of Skeet, which requires crossing shots at clay pigeons at relatively close range that can travel with high angular velocity. A skeet gun is normally heavier than a field gun because one shoots a lot but walks only a little. Two barrels are required because the game calls for shooting doubles---but, theoretically an infernal contraption repeater could be used.

Skeet Set - A shotgun built for the sole purpose of competition in the specific game of skeet where one must shoot the course separately with four different gauges: 12, 20, 28 and .410. By 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 weighted identically.

Skeet tubes - Interchangeable sub-calibre, full-length liner tubes that fit into the barrels of a shotgun to reduce the gauge without using a different gun or a different barrel set. Skeet tubes allow one to shoot the required different gauges in competition skeet without having to invest in a set of guns, invest in a Skeet Set of barrels or adjust to using different guns. While not as

good as a Skeet Set because the barrels with tubes fitted will have different weights than the primary 12 gauge barrel set alone, such an arrangement is less expensive.

Skeleton Buttplate; Skeleton Grip Cap - A steel rim, surrounding and protecting the edge of the butt (or of the pistol grip) of a long gun allowing the wood to show through---which is normally checkered. Popularized by Parker Brothers.

Sleeved barrels - An economical method of bringing new life to a damaged pair of barrels, regardless of their original method of jointing. The ribs are removed. The barrels are cut off 3" - 4" from the breech end and discarded. The bores of the remaining breech-end are reamed out oversize. New tubes are fitted down into the original breech section and filed down to fit flush. The original ribs are then replaced.

Sleeving is considerably less expensive than building a completely new set of barrels. Much of the time required to build a set of barrels is concentrated in the fitting of the breech end to the receiver; this work is salvaged through sleeving. Sleeving can be recognized by a pair of circumferential lines around the barrels a few inches from the breech; the more invisible, the finer the job. A sleeved gun should always be identified as such amongst the proof marks, and if done in England must be properly reproofed.

Sleeving is not the same thing as Monoblocking. Monoblock barrels are built that way from new, using a solid homogeneous machined lump of steel for the entire breech end of the barrel set. Sleeved barrels involve fitting new tubes into what may look at a glance to be a monoblock but which most likely had been assembled from two separate tubes and lumps by a variety of different methods.

Snap Action - An early break-open action design whereby one pushes forward on a spring-loaded underlever to drop the barrels. One then closes the gun simply by raising the barrels and the action snaps closed. Easier to operate than a Jones Underlever which normally must be locked manually.

Snap Caps - Dummy cartridges with spring-loaded "primers" used to test the mechanical functioning of a firearm, particularly the trigger pulls, hammer-fall and ejector-timing of a break-open gun. It is not advisable to dry-fire a break-open gun on an empty chamber. Hardened steel parts can shatter without the soft brass primer to act as a shock absorber. Snap caps cushion the blow of the hammer and firing-pin when the use of a live cartridge would be impractical.

Snaphance - An early type of ignition system for muzzle-loading firearms; a spring-loaded lock whereby upon pulling a trigger, 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 pan-cover would allow the gun to be carried loaded, but for safety, not cocked.

Southgate Ejectors - A type of mechanism, built into the forend of a break-open firearm, utilizing a spring and an over-center cam to kick out a spent shell while only raising an unfired shell far enough to remove manually.

Spirit Level Front Sight - A front sight with a bubble-level to allow careful orientation of a rifle in a level position, avoiding canting. Seen in better quality long range target rifles and "buffalo" guns.

SPL or Splinter Forend - A slender English-style forend on a break-open gun, designed to retain the barrels on the receiver when the gun is opened and to house the ejectors---not necessarily to provide a hand-hold. Splinter forend guns are more properly grasped by the barrels just ahead of the forend. The closer one's hand is to the line of the bore and to the line of sight, the better one's hand-to-eye coordination. Many people consider the splinter forend more graceful than a beavertail forend on a classic double gun.

Squarebridge - The shape of (most often) the rear receiver bridge of a bolt action. Popularized by Mauser on their Model 98 commercial sporting actions, providing an extra mass of steel onto which or into which a skilled gunsmith could integrate a (typically quick-release) scope mount. Mauser supplied integral scope mounts on their commercial rifles, to order. When the front receiver bridge is also enlarged square, it is a double-squarebridge. Such rifles are rare---beware of fakes. Often incorporated into the design of quality bolt actions made for the custom gun trade today.

SRC or Saddle Ring Carbine - A carbine with a ring fitted to the side of the receiver. Such a firearm may be attached to a saddle with a lanyard.

SST or Single Selective Trigger - A single trigger with some sort of switch to change the order of firing of a pair of barrels.

ST - Single [non-selective] Trigger - Single triggers are better than double triggers because with the trigger always in a constant position one does not even have to consider changing one's hand position and because there is one less thing to think about when concentrating on the target. A single trigger is usually easier for people used to pump, semi-automatic and bolt-action guns. A plain single trigger is simpler and usually more reliable than a selective single trigger.

Stalking Safety - A safety catch fitted to a hammer gun where a sliding bar moves into a slot in the inner wall of the hammer base, locking it in place in the cocked position. The safety can then be released silently by sliding the tab, avoiding the game-startling sound of the hammer cocking.

Standing Breech - The face of the action of a break-open firearm which houses the firing pins and receives the direct recoil of the fired round.

Star - A five-pointed Star - A mark used by Smith & Wesson to indicate a revolver that has been returned to the factory for repair or refinishing. On the face of a Colt cylinder, it indicates "Machine Gun" steel.

Star Gauged Barrels - Barrels made for US Springfield Model 1903 rifles by Springfield Armory and Rock Island Arsenal, measured internally for precision of boring and rifling, by hand, throughout their full length with a special feeler gauge and subsequently marked at the bottom of the muzzle with a circular six-pointed star. Used first on National Match rifles, this star is

reputed to be the sign of a particularly accurate barrel---although William Brophy and E C Crossman had their doubts.

Steel Shot - Shotgun shot pellets of steel, designed as a non-toxic substitute for traditional lead shot. Unlike lead, steel pellets do not deform as they pass through the choke of a shotgun barrel. Steel shot should not, therefore, be fired through a tight choke (anything more than .015" constriction in a 12 gauge) or greater pressure will be generated than the gun was designed to handle. The result will be a ring bulge near the barrel's muzzle. Thankfully, also because steel pellets do not deform, fewer pellets are lost from the bulk of the pattern so steel shot patterns more tightly than lead. Although steel shot has less specific gravity than lead and therefore does not carry as far, within its effective range less choke constriction is needed for steel shot to achieve the same pattern density as lead. Click for relative physical characteristics of lead and steel shot.

STFK - Short tang, flat knob pistol grip (Browning)

St.m.G. - Stahlmantle Geschoss. German proofmark indicating a rifle barrel suitable for use with steel-jacketed bullets.

Stocked to the Fences - A detail, typical of traditional London "Best" guns, whereby the head of the stock comes fully up to the fences. On lesser guns, a bit of receiver forging is visible just behind the fences.

Stovepipe - Especially in a semi-automatic pistol, the tendency of a cartridge to fail to chamber properly because it has approached the loading ramp at the wrong angle and to become pinioned by the rear edge of the ejection port, causing a jam. Or, the event of the fired case failing to clear the ejection port and becoming caught between the rear of the port and the breech end of the barrel. Also: Smokestack.

STRK - Short tang, round knob, semi-pistol grip (Browning)

STR or Straight English-style grip - Considered by many to be sleeker and more aesthetically pleasing than a pistol grip. It helps reduce the weight of a gun. Some consider it faster to use in field-shooting situations where the opportunity for a shot may come unexpectedly.

Straddle Floorplate - A hinged plate covering the bottom of a rifle magazine and extending rearward on either side of the triggerguard. This design allows it to be more securely fastened for one more imperceptible step towards total reliability.

Striker - British for Firing Pin.

Swivel - On a sidelock action, a connecting shackle fitted between the lower hook of the mainspring and the forward arm of the tumbler. This layout allows a faster lock time than with a Boxlock. The swivel causes the angle of the force applied to the hammer to change as the hammer falls, maintaining pressure and even increasing it as the mainspring's energy is released.

SxS or Side by Side (barrels) - Side-by-side barrels are better than over & under barrels because they have a broader and more quickly-acquired sighting plane. Although one should

always concentrate on the target and not the gun, in field shooting, having subliminal consciousness of the position of the barrels is a real aid to throwing the shot towards a suddenly-appearing moving target. Although not as precise, it is quicker to find the broad crosshairs of a hunting telescopic sight than the fine crosshairs of a target scope. Side-by-side guns are easier to load than over & under guns because the barrels do not need to be opened to as wide an angle (gape) for cartridges to clear the standing breech. Side-by-side guns traditionally have been considered more elegant of line than over & under guns.

Take-Apart - Most anything that has been assembled by man can be disassembled by man---often with the aid of tools. A "Take-Apart" firearm is one designed to anticipate relative ease of disassembly, but which may still require the use of a tool. Example: A bolt action rifle, the barreled action of which may be easily removed from the stock, with the barrel still affixed to the action.

Takedown - A firearm that can be separated into (at least) two subassemblies in order to make a shorter package than when put together---without tools. There is no specific requirement regarding how this disassembly must be accomplished; the mechanical design is up to the creativity of the maker. This arrangement allows for more convenient transportation of a firearm, but with rifles, where the action normally separates from the barrel, usually at a small sacrifice in accuracy.

Tangent Sight - A style of rear sight, typically used on rifles for either slow-moving bullets or for long ranges, whereby a ladder may be raised from flush with the barrel to a vertical position, and which incorporates a sliding crossbar which may be moved vertically in order to achieve significant elevation.

Target Blocks - A pair of small dovetailed steel bases, screwed usually one to the barrel and one to the front receiver ring of a rifle, to 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. Also, Scope Blocks.

Teardrops - Small, raised-carved details on either side of a double gun, behind the lockplates of a sidelock or behind the flat sidepanels of a boxlock, in the shape of teardrops. Also called dropper points.

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

Through Bolt - A simple method of attaching a buttstock to a break-open firearm's receiver. Rather than using the traditional English method of upper and lower tang screws, augmented by positioned triggerplates, action screws and triggerguard screws---one long bolt only, extends from a longitudinal hole in the end of the butt, through the wrist to the rear of the receiver. The steel bolt has the advantage of reinforcing the weak wrist area as well as snugging the stock tightly against the receiver, even in the case of less than totally perfect inletting. It has the disadvantage of making it more difficult for a gunsmith to bend a stock for better fit to the shooter. Common on Browning Superposed and Perazzi shotguns. Normally built with a short triggerguard tang for ease of disassembly.

Thumbhole Stock - A rifle stock, with a sculptured throughhole at the wrist for the thumb, said to be more ergonomic to hold than a traditional stock. Apart from being slower to mount, totally useless for a counter-dexterous person, it is so unmitigatedly graceless as to be beneath consideration.

Toe: - The bottom of the butt-end of a gun stock.

Toplever - A lever on a break-open gun mounted to the top of the receiver which, when pushed with the thumb (normally) to the right, operates (usually) a Scott Spindle, which in turn withdraws (usually) a Purdey Underbolt from the bites in the lumps of the barrels, allowing them to hinge downwards and the gun to open.

Trap Gun - A shotgun, often with only a single relatively-long barrel, with relatively tight choke boring and a relatively high-combed stock used for shooting clay pigeons in the game of Trap, where the birds are launched at least 16 yards ahead, usually rising and going away from the shooter at relatively low angular velocity. To better absorb recoil, a trap gun is normally heavier than a field gun because one shoots a lot but walks only a little.

Trigger - The small lever on a cartridge firearm, which one pulls to cause the spring-loaded firing pin to impact the primer, causing the gun to discharge. Normally, the trigger simply connects to the sear. Pulling the trigger moves the sear out of its notch, releasing the spring-loaded hammer to strike the firing pin which in turn strikes the primer; or the coil-spring-loaded firing pin directly. Other, often-Germanic systems have their own miniature lockwork which, when cocked, allows an exceedingly light trigger pull to discharge the firearm---a setting that would be perilous to carry in the field. See also: Single Set Trigger, Double Set Trigger and Release Trigger.

Triggerplate Action or Round Action - Originated by MacNaughton, furthered by Dickson and then by David McKay Brown. The lockwork is behind the receiver, mounted to the triggerplate. Little steel needs be machined from the bar of the action, allowing it to be smaller and more streamlined than Anson&Deeley or Sidelock actions---truly rounded on the underside---while maintaining required strength. And, less wood needs to be removed from the head of the stock, strengthening the wood-to-metal connection.

Try Gun: - Typically a shotgun, a firing model or not; typically English or pre-war American, built with multiple adjustments for length of pull, drop at comb and heel as well as cast-off. Not built for retail sale, but used by custom gunmakers to establish the proper stock dimensions for a client ordering a custom fitted (or bespoke) gun.

Tumbler: - British for Hammer; particularly inside a "hammerless" gun.

Tunnel Claw Mount - A claw [scope] mount with openings through which a shooter can use a rifle's iron sights without removing the scope.

Turnscrew - An expensive English screwdriver.

Twilight Sight - A rifle front sight with a extra-large, folding bead. Typically, in addition to the normal fine bead (which allows for accuracy) the larger bead, while at a cost of potential accuracy, is more readily acquired in marginal light. Also called a Gloaming sight.

VC Case: - A Very-Compact trunk case with a wood frame, covered in leather or cloth, typically for a taken-down double shotgun, wherein to save space, the toe of the stock slides under the muzzle end of the barrels; also often called a Toe-Under case.

Vierling - A four-barreled gun, typically with two identical shotgun barrels and with two rifle barrels of differing calibres. Built primarily in Germany and Austria. Rare.

VR or Ventilated Rib: - Designed to help cool and more particularly to direct the shimmering hot air that rises from hot barrels away from the line of sight in order to reduce disturbance in the view of the target. Ventilated ribs are useful on target guns, but less desirable on field guns where small twigs and other detritus can become lodged in the openings under the rib.

Walnut: - The type of wood most commonly used for gunstocks because of its combination of attributes: lightness and resilience to shock, its close grain, ease and predictability of working and its handsome appearance. Several different types of walnut are available from English/French/Circassian (*Juglans Regia*), American Black (*Juglans Nigra*), Bastogne and Claro.

Watertable - The top of the bar of the action, the flat projection on the front of the receiver of a side-by-side gun, perpendicular to the standing breech. The cocking arms, hinge pin and locking bolts are typically mounted inside the bar, below the watertable. The Table, or the Action Flat.

Wedding Band: - A ring-shaped transition between the octagon and round sections of a gun barrel.

Widow's Peak: - A pointed detail where one material joins another. As at the top of a buttplate or under a forend tip.

Wrist: - The thinnest section of the stock of a long shotgun between the receiver and the butt, gripped by the trigger-hand. This area is the most vulnerable part of a gunstock.

Wundhammer Swell: - A bulge in the side of the pistol grip of a stock designed fill the palm of the hand and offer the shooter a more comfortable, repeatable hold on his gun. Palmwell. Named for the American gunsmith who promoted it, Ludwig Wundhammer.

XXV: - A designation used by Robert Churchill when promoting his signature 25-inch shotgun barrels. He maintained that 25 inches was the ideal length for shotgun barrels because they utilized all of the energy of modern powders and they provided a gun of livelier handling characteristics than more traditional, longer barrels, particularly when fitted with his high, narrow, matted, tapered rib.