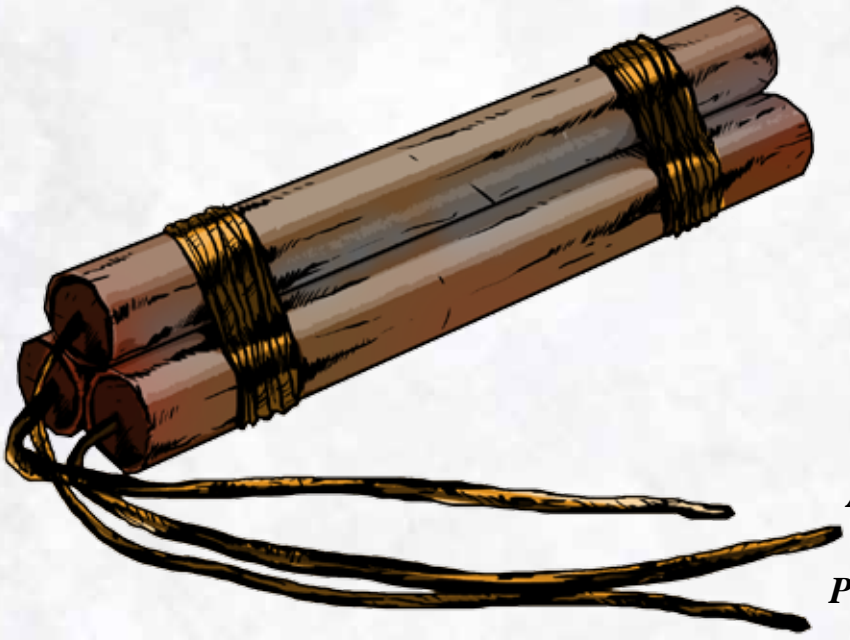
Call to Arms

Fireworks & Primitive Firearms



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Call to Arms is a book line for players and gamemasters alike. Each book focuses on a different type of item, expanding rules for those items and adding everything from new mundane and magical examples of the item to new character options related to the item. **Call to Arms:** ***Fireworks and Primitive Firearms*** focuses on the earliest uses of gunpowder and the many different weapons of war made to use it. Starting with a general discussion of how the powder was made and improved, to how to integrate these facts into your own setting, the book moves on to introducing advanced rules for the creation of explosives and fireworks that either function as single-use firearms or simple, controlled explosions of fire and light. The capstone primitive firearm from the time period this book focuses on is the introduction of various handgonnes which were the first weapons a modern gun-owner would recognize as a true firearm. Finally, in addition to new rules for firearms in general an entire collection of magical explosives and fireworks is detailed, along with new magical wondrous items, cursed explosive powder, a mythic boomstick, an artifact of impressive destructive power and much more.

Pathfinder® Roleplaying Game Compatible

The cadence of the horse's gallop felt like a drummer beating a tattoo into the steel of Reginald's plate mail. He internalized the motion, steadying the metal pole against his chest and aiming it squarely at his target. One – two – three - four, one – two – three - four, the tempo of the hooves hitting the ground were a familiar rhythm that helped him focus.

As the opposing knight charged, Reginald breathed in one calming lung full of air and regretted not having a shield in case he missed. Closer now, the opposing knight was mere seconds away, his lance point dipping toward Reginald's throat and chest perfectly on target. But it would never meet its mark.

Just as the knight closed within the final few feet of his target, Reginald's right hand reached a burning slow match to the touchhole of the petronel against his chest and fire was born into the world, propelling a one inch ball of metal straight into his target, through his shield, his armor and his flesh. The opposing knight wasn't even jarred from his steed, instead his lance simply fell limp and his body crumpled to the side being held in position by his charger's saddle.

As Reginald reigned in his horse and surveyed his fellow knights-errant that had watched the impromptu "joust," he doubted any would dare to question his new "hobby" in exploding powders ever again..

The introduction of firearms into a traditional fantasy campaign setting can open many doors that gamemasters can be reluctant to consider allowing. With guns comes gunpowder, a mundane source of power that anyone can access and use. The **Pathfinder Roleplaying Game**, even as it introduces rules and mechanics that allow wizards to summon fire at will or clerics to heal wounds instantaneously, inherently restricts who has access to certain types of power and seeks to balance classes against one another so that no single class or player is inherently more powerful than others. Firearms level the playing field of combat, as a simple farmhand can be given a keg full of powder and blow up a sorcerer's ancient stronghold. While this may be true, many gamers want to over simplify their approach to firearms and explosives in general. They ignore a long and rich history of how and why explosive powders came into existence and the baby steps that took often centuries before culminating in something as singularly powerful as the musket, let alone more advanced firearms like rifles and revolvers.

This book is designed with the expectation that you have access to the firearms rules published in **Pathfinder Roleplaying Game: Ultimate Combat** or **Pathfinder Roleplaying Game: Ultimate Equipment**. Many of the core rules for firearms have not been reproduced here and references are written assuming you can access these rules. Versions of the rules are available online through either Paizo Publishing's main website or websites like d20pfsrd.com..

Editorializing on the "Invention of Gunpowder"

The earliest uses of what we popularly call gunpowder (or black powder, though there was no need to refer to its color until significantly later when various types of powder that were something other than blackish-brown were introduced) are often ascribed to the Chinese of the mid-9th century. As is generally the case with anything from a time period so far flung, debate rages over what was made, the veracity of written accounts, how to understand odd illustrations of "possible" fireworks or firearms being used in myths and legend, etc. There are some that debate that the earliest weapons we could see as "firearms" would likely have been as effective in combat against armored combatants as shouting "BOOM!" and throwing a handful of pellets – but in a game that allows for archers to launch a half-dozen arrows in six seconds at raging hell-spawn and frost-breathing dragons or allows you to wield two oversized blades of impractical weight into battle without being your automatic death – in this text we're going assume that "Yes" these weapons would work.

Significantly more important than historical accuracy, I feel, is the progression of the weapons as they will often need to be introduced into an entirely fictional world. Whether it was dwarves who first invented an "explosive powder" to aid them in mining or Oriental-inspired elves that discovered the first "earth-that-burns" on the quest for the philosopher's stone is a matter left to

your gamemaster, who shouldn't worry whether it was a 9th century Chinese invention or a 12th century European revolution. What is more often the trouble is that the introduction of the simplest forms of gunpowder generally lead to characters wielding six-shooters and automatic rifles that are a few hundred years of development away.

Returning to real-world history for a moment, and assuming that it was around the 950's AD that the first "explosive powder" was being introduced, it was over 500 years later that the first true "muskets" were being introduced in Europe of the 1450's or so (for a detailed look into that time and beyond see **Call to Arms: Pistols and Muskets**). That 500 year span could be considerably more condensed in your own fantasy world, but there are some inventions to come out of the era that are the practical considerations of this book.

A Brief History of Fireworks and Primitive Firearms

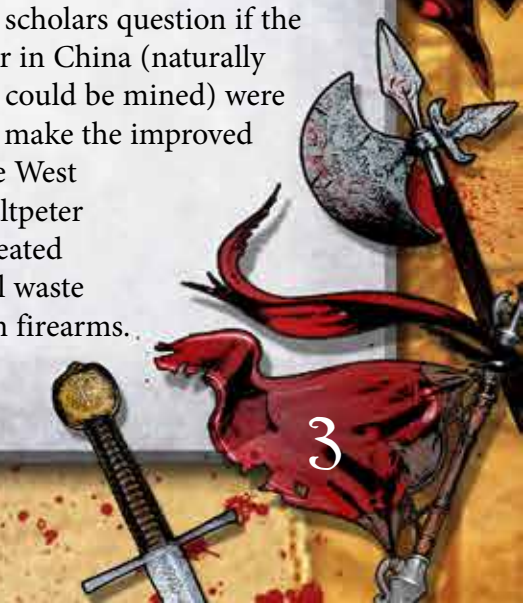
Fire in some form has been used in combat since time immemorial, but most scholars believe the first people to discover that the combination of charcoal, brimstone (sulfur) and saltpeter (niter) could create explosions were likely alchemists trying to create the philosopher's stone to prolong their lives. A reason often given for why the Chinese did not develop firearms the way the West did relates to the fact that if the original inspiration was to extend life, not end it, then those early Chinese alchemists were more likely to be designing medicine and flashy tricks than weapons. Others like to point out how rockets were reportedly used to fend off invading Mongols before there was a Great Wall of China. Regardless, before you can have guns, you need an exploding powder, like gunpowder.

Gunpowder

The three key ingredients of real world gunpowder are charcoal, saltpeter and sulfur. Various other chemicals can be used to make an explosive powder of varying effectiveness, but these three chemicals are considered the go-to choice to make what is used in firearms. Historically in the West, the creation and study of gunpowder was viewed as investigating "dark arts" which isn't helped by specifically needing to add brimstone (sulfur). Exact recipes were often jealously guarded or only recorded in coded forms. In the East on the other hand, the methods and exact recipe for gunpowder was considered a state secret by most governments and death was the only way to punish those that would share such powerful knowledge.

At the same time, perfectly made charcoal has been known to be a much better fuel source for hot fires used in places like blacksmith foundries for as long as we have done metal working and anyone that has experimented with burning things (read "alchemists") would know that adding even naturally occurring and unrefined saltpeter to any organic fuel source (like wood or charcoal) makes it burn hotter. The effects of sulfur in a fire are numerous but mostly noxious smoke useful for fumigation.

This is all to say that how to make gunpowder, especially in the early days, was a secret that few knew. In part this secrecy also lead to the problem that many different "recipes" for gunpowder existed, each with varying effectiveness. Even in modern times however there is no single "perfect" recipe especially as the amounts of each of the main ingredients should be adjusted depending upon what other processes are used as well as the purpose of the powder. The quality of the ingredients can also vary wildly. For instance, some scholars question if the primary source of saltpeter in China (naturally occurring formations that could be mined) were of too poor a quality as to make the improved explosive powders that the West (which lacking minable saltpeter invented processes that created it from human and animal waste products) needed to use in firearms.



Regardless of when and where it was first produced, it was in Europe that some important discoveries about how best to process gunpowder were discovered, often on accident. Corning black powder for instance is considered to have accidently been discovered while the producers of the powder were trying to find safer and more practical methods of storing and shipping large amounts of an explosive substance. By adding water and packing the powder into tight disks after the three key ingredients were pulverized to dust and mixed adequately allowed small nuggets or grains of the combined powder to form. These had a better surface area for ignition of the powder and also kept the various ingredients of the powder from separating, which would also reduce their effectiveness.

Processes like corning are represented below in the form of having three "qualities" of explosive powder (an alternative name used in this text to account for all dry powders that could act as gunpowder in a campaign setting, both realistic and fantastic). Simple explosive powder represents the earliest forms of gunpowder or what you would produce if you tried to make black powder yourself at home with simple tools. Common explosive powder is an alternate name for what is termed either gunpowder or black powder in the ***Pathfinder Roleplaying Game: Ultimate Combat*** book. It would be effective gunpowder or as an explosive. Superior explosive powder is a catch-all term for a number of both real world and fantasy methods of processing a powder like gunpowder to be even more effective and efficient, for instance reducing the amount of smoke produced when used or the speed at which it burns.

Fireworks

The first fireworks are again attributed to the Chinese. Depending upon if you are talking about simple firecrackers or complicated spinning flare wheels to even potentially military rockets, an explosive powder like gunpowder is often the beginning. While alternate materials are commonly used for effect in fireworks, like flash powder which actually has a completely different composition from explosive gunpowder, those same alchemists whom first discovered the explosive combination of charcoal, saltpeter and brimstone are likely to be the ones to realize the many ways to use them.

The actual purpose and use of fireworks is many fold. In Chinese history for instance, fireworks were as likely to be used by commoners as nobility to celebrate festivals in even the most far-flung corners of their empire. While commonly used for celebration, both in the past and today, it also wasn't unexpected to find various versions of rocket-powered projectiles on the battlefield in the form of mass rocket-powered arrow launchers like the hwacha or to have large rockets carrying siege ballista-sized arrows as fire arrows.

While of course numerous types and styles of fireworks have existed throughout time, this book focuses on rules for making fireworks to be used specifically in combat situations. If your adventures are in a more festive mood, the firework rules as presented can be a starting point for them to create many large and beautiful displays of Catherine wheels, star-bursts, Chinese flowers and salutes. While it isn't specifically covered in these rules, the additions of many elements like lithium, calcium, sodium, copper, cesium, potassium, iron or magnesium can lead to every color of the rainbow being displayed in a firework.

Primitive Firearms

Exact historical dates are almost impossible to settle on when it comes to the most primitive of firearms. In fact, debate rages on what should even be classified as a "firearm" instead of some other type of explosion-powered weapon, like a Roman candle style firework. While the fire lance is included in the *Pathfinder Roleplaying Game: Ultimate Combat* as a firearm, it realistically falls into a small and overlooked category of projectile-firing fireworks. These were things

like the fire arrow or fire lance which used a small charge of gunpowder to project an arrow or javelin out of a wood or metal tube. While some designs could be reloaded, the process even used to pack these projectiles was more similar to creating a firework than loading a musket.

As a weapon historically, fire arrows and fire lances were of questionable value, at least as personal weapons. The most famous accounts of early fireworks as weapons talk about things like massive anti-fortified wall rockets or mass-firing hwachas that could simultaneously release hundreds of explosive fire arrows in a single attack. These early weapons were often hard to aim and required knowledge to load and fire that might be considered too secret to let many know their construction. Another reason to consider fire lances and other firework-firearms as inherently different from most firearms is that they do not count as a ranged touch attack for any range increment like other firearms, even within the first. A slightly later development can be considered the first true firearm.

Although often overlooked by most historians of firearms, a type of weapon popularly referred to as a "handgonne" filled a crucial developmental step from simple metal tubes filled with gunpowder and a projectile to the refined matchlock musket of the mid-15th century. Much larger bombards and cannons primarily used for castle siege warfare are considered by most to be the first purpose-built all-metal firearm, but it rarely took long for someone to miniaturize these huge metal cannons to a man-portable size like the culverin presented in Pathfinder's firearm rules. While the earliest of the handgonnes were likely only used by defensive troops fending off sieges, it didn't take long for methods of crafting to improve on the design to the point that even armored knights were trotting on horseback with and firing handgonnes at one another. As opposed to those earliest firework-firearms, handgonnes started off large enough to penetrate armor at close range and were always made to keep this quality.

The Cost of Explosives, Fireworks and Firearms

Explosives

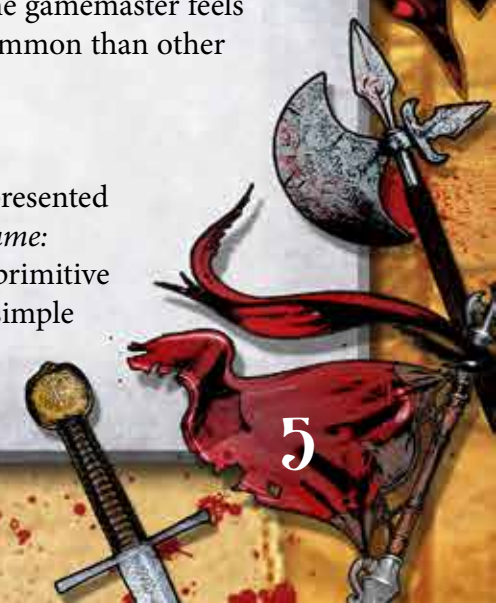
In our own world's history, the creation of explosive powders was often considered a secret of either the individual alchemist or possibly even the government. Additionally, control of the amount and who had access to explosive powder has almost always been tightly controlled regardless of era. Whether or not you want that to be the case in your own game-world is up to you, but prices listed for all explosives assume that at least the price of even base materials of gunpowder are kept artificially high to reduce who can afford access to them. If you are playing in a world where firearms, explosives and similar items are more readily available, you should reduce to price to as little as 25% or even 10% the price listed. Lower quality substances, like simple explosive powder compared to superior explosive powder could be more drastically represented by having one cost the price as listed but the other be reduced to just one-tenth its original price.

Fireworks

Unlike directly purchasing explosive powders or firearms in general, fireworks and firework-firearm prices are more accurately represented compared to their material costs. While these prices are still slightly inflated compared to what actual materials should be considered included in them, they are priced to match similar alchemical weapons like acid and alchemist's fire. As such, the price to both purchase and craft these objects should only be adjusted if the gamemaster feels that they should be more common than other alchemical tools.

Firearms

Unlike most firearms as presented in *Pathfinder Roleplaying Game: Ultimate Combat*, the most primitive of firework-firearms are so simple



as to allow for their price to not be artificially inflated to account for their increases rarity (as with all fireworks, see above). Handgonnes on the other hand, including the culverin as presented originally in the *Pathfinder Roleplaying Game: Ultimate Combat* section on firearms, do have increased costs to account for a level of their rarity. These increases are generally modest because the actual materials used and skill needed for most handgonne designs is comparable to more complicated melee weapons of their time. When exceptions seem to exist, like the hand bombard (the original culverin in *Ultimate Combat*), it is often a combination of rare casting technique (the first cannons were made by bell makers, the only metalworkers used to working in such volumes of molten metal) and raw material needed (hand bombards were heavy for a reason).

If you are playing in a world where firearms are more common, or that includes significantly more advanced firearms, the prices for these primitive firearms should be drastically reduced. The skills and processes needed to create a proper musket or rifle barrel are similar enough to all handgonnes, if not more advanced, that any gunsmith of either of those could likely quickly and easily craft a handgonne. Reductions in price to 25% the listed price or even just 10% of the listed price should not be unheard of if other firearms are more common than these.

Likewise, when using the option crafting rules presented in the Rules Appendix to create firearms, reduce the costs of all firearms except firework-firearms. The exact amount to reduce a firearm by is left to gamemaster discretion though it is recommended that at maximum you use only 25% of the cost of the weapon as listed. To actually account for the cost of materials, not the skill needed to craft them, 10% of the listed price is likely a more accurate materials cost.

New Explosive Weapons

Numerous chemical compositions can be combined to produce an explosive result, and that's just when you are talking about real-world chemistry. Add in the potential qualities found in red dragon blood or the ashes of a phoenix and only your gamemaster can decide what is going to happen. With that in mind, rather than trying to provide an incredibly long list of both real and fantasy explosives, this book introduces types of explosives with generic rules to be applied by you to innumerable devices, substances and objects that produce explosions. While at time very specific devices are named, reading the individual entry will often illuminate alternative examples that would produce similar effects.

This book focuses on explosives made from an exploding powder, like gunpowder. Explosives are often categorized in a number of different schemas: low versus high explosives, primary, secondary or tertiary explosives, etc. While each method has its merits, it often would prove unimportant for the sake of game mechanics between these specific types. Rules, for instance, for "high explosives" are not actually included at all in this text as the first true high explosive, nitroglycerin, wasn't even first invented until the mid-1800's, which would typically be "outside" the normal gameplay concerns of most Pathfinder Roleplaying Game campaigns. The real-world difference between a low explosive and a high explosive is that low explosives like gunpowder "deflagrate" or burn up at a subsonic speed, while true high explosives "detonate" at a supersonic speed creating as shockwave and a fiery burst. To simulate effects of high explosives in your game, assuming some modern C-4 magically is teleported across time and space for instance to your game setting, it is recommended you increase the damage and area of effect of a listed explosive by two to three times or more depending upon circumstance.

Explosives are designed to produce light, heat, sound and pressure for various effects. As gunpowder, shoved down a barrel, the "explosive" is being used to mostly make pressure to act as a propellant. In a flare, a bright flash of light is

purposely made. While only a few base explosives are introduced, optional rules and add-ons, both realistic and fantastic, are included to modify your explosive to their specific use and need as special weapon qualities.

Fuses and Timing Detonation

For most explosive devices as presented in the Pathfinder Roleplaying Game, the amount of time a fuse burns for before an explosive or firework is ignited is almost always randomly determined with a die roll. This assumes an average user that is only somewhat familiar with explosive devices and likely didn't even create the weapon being used. When you are a trained professional and highly experienced with explosives, fireworks and firearms, you can often learn to time fuses, especially those you made yourself, down to the millisecond. Use the following guidelines when trying to calculate how long until a fuse ignites a weapon.

For a normal user: Your average adventurer is likely only familiar with explosives in passing. As such, they are unable to guesstimate the accurate fuse length for any explosive or firework they did not personally make. In such cases, always roll randomly to determine how long a fuse will burn before igniting a device. Unless otherwise specified, roll a 1d4 and reduce the roll by 1, with the result of a 0 meaning the device explodes at the end of the round it was lit and a 1-3 meaning the device explodes on your turn in the next round, the round after that or the third round after being lit respectively.

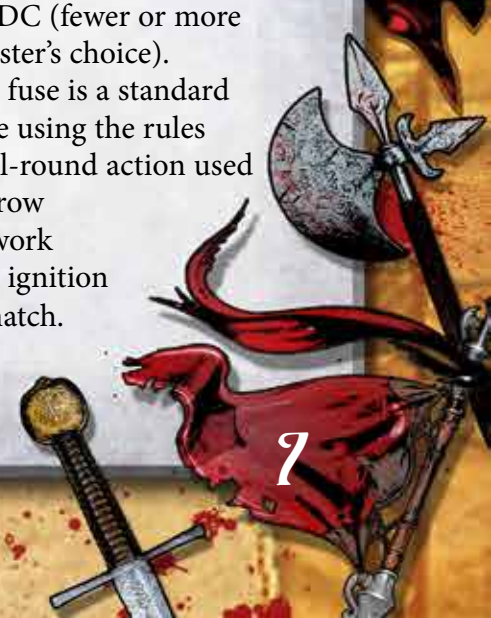
For the crafter of the explosives: If you are familiar enough with explosives and alchemy to have crafted your own explosive or firework, then you are assumed to be familiar enough with those fireworks you created to accurately time them. At the time of the explosives creation, you can set how long you want the fuse to be, with 0 rounds meaning the object explodes at the end of the round it is lit and on to almost any length measured in rounds. Adjusting the fuse of a device, even one you crafted personally, after it has been created is treated as the rules below (see "For experts in explosives" below).

For experts in explosives: People that work with explosives all the time are much better at timing them. Hard rock miners, farmers with stubborn tree stumps, alchemists and gunslingers are all familiar enough with explosive powder and fuses to be able to attempt to either guess the length of time of a fuse or to adjust it themselves. To estimate how long a fuse would burn, you must inspect the explosive device visually for one round. At the end of the round, you can make a Craft (alchemy) check DC 20 to estimate the length of time of a fuse. For every 5 points you are short of the DC, add one round up or down (gamemaster's choice).

To shorten the length of time of any fuse, you can make a Craft (alchemy) check against a DC 20 as a standard action. Success means you can choose how many rounds less you want to make a fuse burn. Missing the DC by 5 points or more means you over or underestimated and the length of time of the fuse is off by one round per 5 points you missed the DC (fewer or more rounds is left to the gamemaster's choice).

There is no mundane method to increase the length of a fuse, but you can replace a fuse on any device with a new longer fuse. This is a Craft (alchemy) check against the normal DC of crafting the explosive that takes a full-round action to complete. Missing the DC by 5 points or more means you over or underestimated and the length of time of the fuse is off by one round per 5 points you missed the DC (fewer or more rounds is left to the gamemaster's choice).

Shortening the length of a fuse is a standard action, though it can be done using the rules above as part of the same full-round action used to ignite a fuse and either throw or place an explosive or firework assuming you have a reliable ignition source like a burning slow match.



Qualities of Explosive Powder

Simple: The earliest explosive powders, as well as those made the most primitive of ways (dry-compounded, with little to no post-creation refinement like corning), are represented in-game as being *simple explosive powder*. The most common form of simple explosive powder is referred to as "serpentine powder" and was popular during the early 1400's in Europe. It was known for needing to be remixed in the field just before use as the various components would separate in transit.

The specific difference between simple and common powders is the speed at which the powder burns. If a small trail of each powder were laid out next to one another over a few feet on the floor, simple powder could take up to ten times as long to burn from one end to the other as opposed to common powder taking a second or two. Simple powder then is the powder being used to ignite the barrels of gunpowder in all those pirate movies, where the fire moves slow enough for the camera to watch. Common powder would have made the transit in less than one round even it were over 100 feet long. This difference in speed of ignition also translates into the amount of force released when used as an explosive or in firearms.

Game mechanics: Reduce the damage die of any explosive made using simple powder by one step as if it were a smaller weapon (for instance, 1d6 becomes 1d4). Additionally, reduce the area of effect of any explosive using simple powder by half. If used in a firearm, reduce the range increment of the firearm in half and reduce the total number of range increments it can be fired by two. Also, reduce the damage dealt by a firearm loaded with simple powder by one step as if it were a smaller weapon. Additionally, an attack from a firearm loaded with simple powder never counts as a ranged touch attack.

A loose pile in a line of simple powder can be used as a fuse, and for ease of game mechanics assume one-foot of the powder burns in one second.

Cost: Simple explosive powder is significantly cheaper to make than common or superior powders. Unless you are playing in a game setting where it is the only powder in existence (in which case, keep the prices of weapons as listed), assume that making an explosive with simple powder or to load a firearm is only 25% of the normal cost of the item.

Common: Gunpowder as presented in the *Pathfinder Roleplaying Game: Ultimate Combat* book should be assumed to be a *common explosive powder*. While other common explosive powders can and do exist, the first explosive powders were actually quite a bit less effective and were not developed for hundreds of years after the earliest discoveries. Common explosive powder has undergone some basic processing to make it a more effective powder explosive. Whether this is purely a process (like corning) or a special ingredient (like adding powdered red dragon gizzard) is left to gamemaster discretion. Historically, the major process applied to improve explosive powders was known as corning, and it involved processing the ingredients together wet, compressing them into uniform cakes or discs and then breaking them up before use. These processing methods helped to create uniform grain sizes (called corns, hence corning) that would burn more rapidly and with greater force.

Game mechanics: Assume the rules-as-written apply to common explosive powder. A loose pile in a line of common powder can be used as a fuse, and for ease of game mechanics assume 25-feet of the powder burns in one second.

Cost: Assume all explosives, fireworks and firearms are created, loaded or otherwise using common explosive powder unless otherwise specified. Only adjust the price if a superior form of explosive is now commonplace, in which case, making any explosive or powder to load a firearm is reduced by at least 50% of the normal cost of the item.

Superior: In the real world, many methods exist to improve standard gunpowder. From using graphite to keep particles separate to changing which chemicals are included or even just their ratio, almost every aspect of gunpowder can be improved upon. In a fantasy setting, numerous additional qualities could be added to powder as well as numerous additional methods of improving its basic properties. Superior explosive powder is a catch-all term for any form of "improved" powder. Certain qualities can only be made possible if superior powder is used, either because it needs to be a more powerful explosive or because some magical quality needs to be imparted to the powder.

Game mechanics: Every superior explosive powder has unique properties, sometimes more than one. To see an example of these kinds of improvements see **New Ammunition** below. A loose pile in a line of superior powder can be used as a fuse, and for ease of game mechanics assume 50-feet of the powder burns in one second. Additionally, an attack from a firearm loaded with superior powder counts as a ranged touch attack for an additional range increment, even in weapons that normally are not ranged touch attacks (like fire lances).

Cost: Superior powders always cost significantly more. Depending on what additional qualities the gamemaster will set for their inclusion, always at least double the normal price of an explosive device using a superior explosive powder.

New Special Weapon Qualities for Explosives and Fireworks

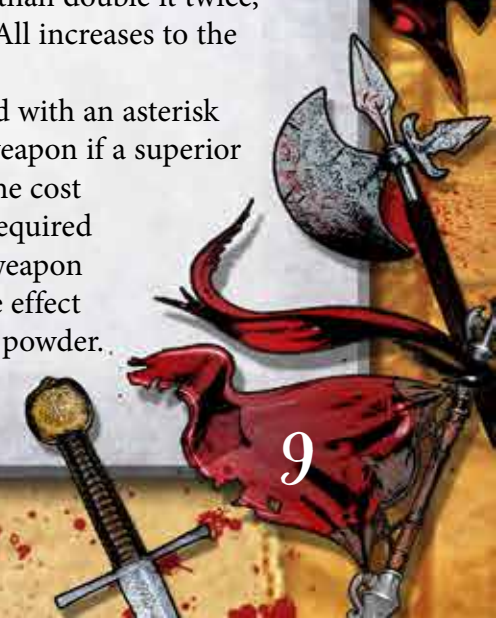
The following weapon qualities can be added to both explosives and fireworks used as weapons, but only at the time of their creation. Most could not be added as an "after-market" addition without gamemaster approval. The costs presented generally assume the price of purchasing the weapon, not crafting it. See the **Rule Appendix** for new rules about crafting explosives and fireworks. Saving throws to reduce the damage from the primary weapon also reduces any additional damage from special weapon qualities, and if a second saving throw is needed to negate an effect, it uses the same DC as the primary weapon.

Stacking Costs: When designing a weapon with more than one cost increase or decrease, apply each price change in the order that makes the most sense to you and your gamemaster. For example, the use of superior explosive powder affects the entire weapon, regardless of if it also produces fire or not, so those values should be applied last. If you would need to double the cost of the base item two or more times, instead add to the multiplier (i.e. rather than double it twice, multiply the cost by three). All increases to the DC to craft a weapon stack.

* Weapon qualities marked with an asterisk (*) can only be added to a weapon if a superior explosive powder is used. The cost listed does not include the required doubling of the cost of the weapon (so add that after adding the effect as well) for using a superior powder.

Dealing with the Many Varieties of Explosive Powder

In the real-world, there are innumerable variations at different times and places to gunpowder. After the introduction of the corning process, it was found that cannons fired most effectively with larger grains, while the faster burning small grains were ideal for small arms like the pistol and musket. Armies began stockpiling different types and grades of gunpowder. The base assumption of the original firearm game mechanics ignore that there is "gunpowder for cannons" and "gunpowder for pistols." One quick method to represent the effects of using "the wrong type" of explosive powder in a weapon is to treat the weapon as if it were loaded with a simple powder instead of common powder.



The additional cost generally accounts for the addition of "rare ingredients" like white dragon gizzard or alchemical ice to add the freezing special weapon quality.

Caustic: This weapon also sprays a caustic material out over its primary area of effect, dealing 1d6 acid damage in addition to its normal damage.
Cost: Adding the caustic special weapon quality costs an additional 20 gp. Increase the Craft (alchemy) DC by +5.

Concussive*: This weapon explodes with such force, it releases a natural sonic affect in its primary area of effect, dealing 1d4 sonic damage in addition to its normal damage.
Cost: Adding the concussive special weapon quality costs an additional 70 gp. Increase the Craft (alchemy) DC by +10.

Dazing*: This weapon explodes with such force that any creature in its primary area of effect is also dazed for 1 round. This effect only applies if the creature took damage from the weapon.
Cost: Adding the dazing special weapon quality costs an additional 500 gp. Increase the Craft (alchemy) DC by +10.

Dazzling*: This weapon explodes with such brilliant light that any creature caught in its primary area of effect is also dazzled for 1d4 round. This effect only applies if the creature was able to see the explosion and if they took damage from the weapon.
Cost: Adding the dazzling special weapon quality costs an additional 10 gp. Increase the Craft (alchemy) DC by +5.

Deafening: This weapon explodes with such a cacophony of sound that it temporarily deafens for 1d3 rounds (Fortitude negates) any creature in its primary area of effect. This effect only applies if the creature took damage from the weapon.
Cost: Adding the deafening special weapon quality costs an additional 200 gp. Increase the Craft (alchemy) DC by +5.

Disguised: This special weapon quality affects only the appearance of the weapon before it is used, not any of its game mechanics. The weapon can be made to look like some other object of equal or greater size. Common, everyday items are typically made though specific objects can be precisely replicated with time and skill.
Cost: Add the base cost of crafting the item it is being disguised to look like to the cost of making the weapon. For instance, to make the explosive look like a common chair worth 1 gold piece, it would cost an additional 5 silver pieces. To make it look like a 10,000 gold piece throne, it would cost an additional 5,000 gold pieces. Certain costly affects, like the appearance of being made out of solid gold, can be faked for significantly less (like using gold foil over solid objects), but the gamemaster will need to mitigate the required costs and skill checks. The designer of the explosive needs to succeed at all associated Craft skill checks for creating the item the explosive needs to look like, though they can be aided by others.

Electrifying*: This weapon also releases a static charge in its primary area of effect, dealing 1d6 electricity damage in addition to its normal damage.
Cost: Adding the electrifying special weapon quality costs an additional 80 gp. Increase the Craft (alchemy) DC by +10.

Entangling*: This weapon also projects an effect similar to a tanglefoot bag over its primary area of effect. Use the rules presented for the tanglefoot bag alchemical weapon to mitigate secondary effects. This effect only applies if the creature took damage from the weapon.
Cost: Adding the entangling special weapon quality costs an additional 150 gp. Increase the Craft (alchemy) DC by +10.

Fiery: This weapon also releases a wave of fire over its primary area of effect, dealing 1d6 fire damage in addition to its normal damage. If the weapon normally deals fire damage, double the amount of fire damage dealt (by rolling more dice or just doubling the damage rolled) instead of adding additional die.
Cost: Adding the fiery special weapon quality costs an additional 40 gp. Increase the Craft (alchemy) DC by +5.

Flashing: This weapon explodes with such intense light that any creature caught in its primary area of effect is also blinded for 1d3 rounds (Fortitude negates). This effect only applies if the creature was able to see the explosion and if they took damage from the weapon.
Cost: Adding the flashing special weapon quality costs an additional 200 gp. Increase the Craft (alchemy) DC by +5.

Forceful*: This weapon also releases a spray of shards made of force energy in its primary area of effect, dealing 1d4 force damage in addition to its normal damage.
Cost: Adding the forceful special weapon quality costs an additional 500 gp. Increase the Craft (alchemy) DC by +10.

Fragmentation: This weapon also sprays metal shards and fragments to deadly effect in its primary area of effect. Damage from this weapon counts as both bludgeoning and piercing.
Cost: There is no cost to adding the fragmentation special weapon quality to a weapon. The Craft (alchemy) DC to include this special weapon quality does not increase.

Freezing*: This weapon also releases a cloud of freezing gas in its primary area of effect, dealing 1d6 cold damage in addition to its normal damage.
Cost: Adding the freezing special weapon quality costs an additional 80 gp. Increase the Craft (alchemy) DC by +5.

Larger: This weapon is a larger, more powerful version of itself. Increase the size and weight of the device by double. Increase the area of effect of the weapon by 1.5 times. Increase the damage die of all damage dealt as if they were weapons one size larger than normal (i.e. 1d6 becomes 1d8).
Cost: Adding the larger special weapon quality doubles all associated costs of the weapon. You can add this special weapon quality any number of times, doubling the cost each time. Increase the Craft (alchemy) DC by +10.

Noxious: This weapon also releases a cloud of noxious gas in its primary area of effect. Any creature that takes damage from the weapon makes a Fortitude save or becomes nauseated for 1d3 rounds. A successfu save still sickens the creature for 1d3 rounds.
Cost: Adding the noxious special weapon quality costs an additional 250 gp. Increase the Craft (alchemy) DC by +5.

Smaller: This weapon is a smaller, weaker version of itself. Decrease the size to one-quarter in

Explosive Weapons

Weapons	Price	Dmg	Critical	Range	Weight	Type	Special
Bomb	1,500 gp	3d6/3d6	x3	30-ft. burst	6 lb.	B/fire	Area, see text
Dust explosion	-	1d6	-	5-ft. burst	--	Fire	Area, see text
Firecracker	10 gp	1/1	x2	10 ft.	--	B/fire	See text
Grenade	100 gp	2d6/1d6	x2	10 ft.	1 lb.	B/fire	Area, see text
Powder dose	10 gp	1	x2	--	--	Fire	Area, see text
Powder flask	103 gp	1d4/1d6	x2	10 ft.	1 lb.	P/fire	Area, see text
Powder keg	1,000 gp	5d6	x2	20 ft. burst	5 lbs.	Fire	Area, see text
Makeshift explosive	varies	varies	x3	varies	varies	B/fire	Area, see text
Mine	500 gp	2d6/2d6	x3	10 ft. burst	5 lbs.	B/fire	Area, see text

dimensions and its weight by half. Decrease the area of effect of the by half. Decrease the damage die of all damage dealt as if they were weapons two sizes smaller than normal (i.e. 1d8 becomes 1d4).
Cost: Adding the smaller special weapon quality doubles all associated costs of the weapon. You can add this special weapon quality any number of times, doubling the cost each time. Increase the Craft (alchemy) DC by +10.

Spreading: This weapon has a secondary area of effect beyond its primary. This secondary area typically extends the area by double, for instance, making a bomb with a 10-foot radius burst have a second radius of a 20-foot radius burst. Any creatures caught in this secondary area of effect (between 10 and 20 feet from the radius in the example), are subject to half the normal damage with a DC decreased by 5 to reduce or negate an effect.

Cost: Adding the spreading special weapon quality triples the cost of a weapon. Most other special weapon qualities only modify a primary area of effect, but a secondary area can be modified by doubling the cost of the modification before calculating the triple cost of the weapon for adding the spreading quality. Increase the Craft (alchemy) DC by +15.

Smoking: This weapon also releases a cloud of heavy smoke in its primary area of effect. A creature who breathes smoke for a full round must make a Fortitude save (DC 10, +1 per previous check) or spend the next round choking and coughing. A creature who chokes for 2 consecutive rounds takes 1d6 points of nonlethal damage. Smoke obscures all sight, including darkvision, beyond 5 feet. A creature within 5 feet has concealment (attacks have a 20% miss chance). Creatures farther away have total concealment (50% miss chance, and the attacker can't use sight to locate the target). The smoke

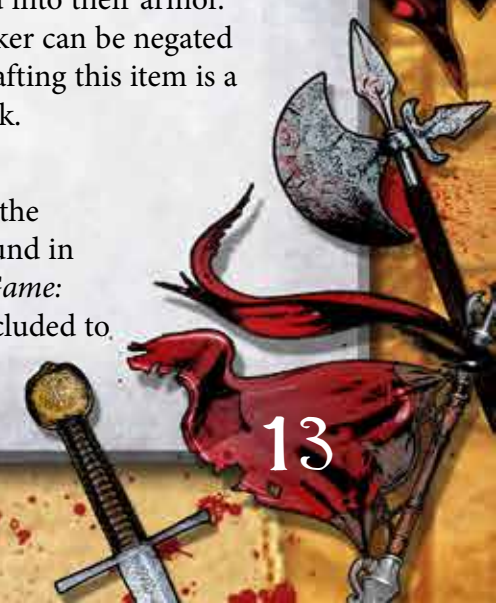
effect dissipates after five rounds in still air, three rounds in a light wind, one round in a moderate wind and instantly in a stronger wind. Reduce the time in half if used outdoors or in an open area with good ventilation. Double the time if used indoors or in a confined space like a narrow hallway or small room. For fireworks with a duration that possess this special weapon quality, the smoke effect exists while the firework is active and lasts the normal amount of time afterwards. *Cost:* Adding the smoking special weapon quality costs an additional 50 gp. Increase the Craft (alchemy) DC by +5.

Bomb: As opposed to just igniting a barrel full of explosive powder, a bomb uses that same 100 doses of black powder to create a purpose made weapon. Often bombs are made with a specific area of effect in mind, for instance, a metal box directing the blast toward a wall or structural support or a round bomb made to burst in all directions. This later bomb is represented by the statistics above, but that same 30-foot burst can be redirected into a 60-foot cone or even a concentrated to affect a single 5-foot by 5-foot square. As a cone weapon, a bomb still deals damage normally, but count a bomb made to affect a single square as dealing a critical hit on that space and anything contained within it. When a bomb explodes, it deals 3d6 points of bludgeoning damage and 3d6 points of fire damage in a 30-foot burst (Reflex DC 20 halves). A bomb is normally placed, not thrown (it counts as an improvised weapon when thrown). Crafting this item is a DC 30 Craft (alchemy) check.

Dust explosion: Any number of types of ultra-fine particles when tossed in the air, especially in an enclosed area, from coal dust and sawdust to the dust from grains, flour, sugar, pollen or even just plain dust can accidently be ignited to cause a fairly destructive blast. In farm country, grain silos regularly blow apart and the cramped confines of a coal mine make ideal conditions to explode. The larger an area affected by dust, the more damaging it is. Each 5-foot by 5-foot (by 5-foot area if all three dimensions matter) adds 1d6 fire damage to the resulting explosion. This damage is cumulative, so that a creature inside a 10-foot x 10-foot dust explosion would actually take 4d6 fire damage as the cloud of dust bursts into flame. Double this damage if the dust cloud perfectly fills a confined area like inside a room. A number of natural effects can create a dust cloud like this, but a character can use both hands to throw up a cloud of dust in one 5-foot by 5-foot area as a full-round action. The dust settles in one round enough to no longer be dangerous so a single person can rarely fill a larger space and ignite it in time. An explosive powder can also be used this way, in which case it takes at least 3 doses to affect one area. Dust explosions can only be modified with special weapon qualities at gamemaster's discretion.

Firecracker: A firecracker is a small, self-contained explosive with either a small amount of explosive powder or even flash powder in a disposable container made of bamboo, paper or even waxed cloth. The fuse of a firecracker is traditionally very short and the main purpose of a firecracker is to make a loud and startling noise. If used in rapid succession with many firecrackers going off one after another (use the rules for multiple explosives below), all sound based Perception checks suffer a -10 penalty due to noise. A firecracker is rarely used offensively as it only deals damage when contained, for instance in someone's hand or tucked into their armor. The damage from a firecracker can be negated with a Reflex save DC 5. Crafting this item is a DC 15 Craft (alchemy) check.

Grenade: This entry is the same as the fuse grenade found in the *Pathfinder Roleplaying Game: Ultimate Equipment*, and included to



act as a base that can be modified by the various special weapon qualities above. Any explosive weapon that uses explosive powder contained within a semi-hard shell (like clay or tin) counts as a grenade. When a grenade explodes, it deals 2d6 points of bludgeoning damage and 1d6 points of fire damage in a 10-foot-radius burst (Reflex DC 15 halves). You throw a grenade as if it were a splash weapon. Crafting this item is a DC 25 Craft (alchemy) check. A grenade is typically made using 30 doses of explosive powder.

Powder dose: This entry is the same as a single dose of black powder in *Pathfinder Roleplaying Game: Ultimate Combat*, which had no entry as a weapon in that book. Loose powder in a pile or a line will just burn rapidly as a flash, dealing little to no actual damage (hence 1 point of fire damage is listed). If contained within some object, a dose will deal a little more damage but not significantly in most cases. In rare situations however even a single dose of black powder contained in something like a paper tube or while contained in an object like the lock of a door, it can deal a small amount of damage to weak objects (like the delicate tumblers of a lock). Add 1 point of fire or bludgeoning damage per dose added up to the first five doses. At the point that you are dealing with five or more doses, use the makeshift explosive rules below. When explosive powder explodes, it deals 1 point of fire (if open) or bludgeoning (if contained) damage to whatever objects it currently touches. Throwing loose powder follows the rules of a dust explosion (see above). Use standard rules for creating exploding powder, just creating at least 1 dose, for crafting a powder dose (see **Rules Appendix**).

Powder flask: This entry is the same as the powder horn found in *Pathfinder Roleplaying Game: Ultimate Combat*, which under normal conditions will not spontaneously explode even if exposed directly to a heat source. Instead, this represents when, in desperation, a powder flask is rigged to be used an explosive either by sticking a fuse in past safety mechanisms or disabling those same mechanisms. While not nearly as effective as an actual grenade, a prepared powder flask can still deal a certain amount of damage as an explosive. When a powder flask explodes, it deals 1d4 points of bludgeoning damage and 1d6 points of fire damage in a 5-foot burst (Reflex DC 10 halves). You throw a powder flask as if it were a splash weapon. Use standard rules for creating exploding powder, just creating at least 10 doses worth, for crafting a flask of powder (see **Rules Appendix**).

Powder keg: This entry is the same as the black powder keg found in *Pathfinder Roleplaying Game: Ultimate Combat*, and is included to act as a base that can be modified by the various special weapon qualities above. Use this entry for any collection of around 100 (a standard full 5 lb. powder keg) doses of explosive powder loosely contained in some sort of container. When a powder keg explodes, it deals 5d6 points of fire damage in a 20-foot burst (DC 15 Reflex half). A powder keg is normally made to break apart on explosion and reduce the amount of fragmentation in the hopes that it won't destroy other containers of powder, etc. If an object that is unlikely to explode is used to contain the powder (say a heavy iron cauldron), change the area of effect from a 20-foot burst to a 30-foot cone originating at the object. Use standard rules for creating exploding powder, just creating at least 100 doses worth, for crafting a keg of powder (see **Rules Appendix**).

Makeshift explosive: Any number of doses of explosive powder brought together in a single container and ignited will produce an explosion. Various situations should be covered by the devices listed above, but in the event that

someone is hastily constructing an explosive from a pile of powder or breaking apart cartridges, use the rules presented here. Explosive powder works best when contained, either inside of a semi-hard object or inside of a structure being attacked (for instance, drilling holes into a rock wall and filling them with powder). If the exploding powder has some easy means of escaping the object containing it (like a powder keg) then it deals its damage as just fire. Contained the damage counts as bludgeoning, unless the fragmentation special weapon quality is being added (in the case of makeshift explosives this would be adding nails and bits of metal to the weapon). Damage from an explosive accumulates when ignited together up to the maximum size of explosive powder able to be ignited before its rate of ignition is beaten by the explosion happening (roughly 400 doses worth of explosive powder, or about 16 pounds worth). For every 20 doses worth of powder used in the weapon, add 1d6 damage (fire or bludgeoning). If between 5 and 10 doses are used, the weapon only deals 1d4 points of damage (for smaller amounts, see powder dose above). If 10 to 20 doses are used, count it as a powder flask. If a full 400 or more doses are being used, the maximum damage dealt from one makeshift explosive is 25d6. To deal more damage than this, multiple explosives need to be timed to work together (see side bar). The area of effect for a makeshift explosive begins as a 5-foot burst and increases by 5 feet for every 75 doses used to a maximum size of a 30-foot burst when 375 doses or more are used. Damage can be reduced by half from a makeshift explosive with a successful Reflex save (DC = 15 + 1 per 50 doses used). Assuming the amount of powder required is on-hand, crafting a makeshift explosive is a special DC 15 + 1 per 50 doses used Craft (alchemy) check that takes one minute to complete per 50 doses used (minimum 1 minute). Likewise, some special weapon qualities can still be added (gamemasters discretion), each extending the time needed by one minute assuming any required materials are on hand.

Mine: Popularly referred to as a "land mine," this device is not the very modern idea of a self-contained land mine activated by stepping on it. Instead, this is entry is supposed to represent a special-purpose bomb made to be hidden in the ground and lit by a long distance fuse. It would normally be smaller and flat, even occasionally being built on a board or in a metal bowl so that the force of the blast is directed up, getting more bang for less explosive powder (a typical mine uses 50 doses of black powder). Mines use a type of fuse that can safely be buried and still burn because of the addition of an oxidizer in the fuse itself. Use the rules presented above in **Fuses and Timing Detonation** to mitigate most uses of these types of mines as surprise attack weapon. Self-activating forms of mines can exist with gamemaster approval that relies on wheellock firing mechanisms connected to pressure plates or tripwires that ignite a fuse. These types of mines count as mechanical traps that can be setup in 1 minute with a successful Craft (traps) check against a DC 20 and have a Perception and Disable Device DC of 20. They typically trigger by touch, cannot be reset and count as an attack (+10 ranged attack, on the roll of a 1-3 they do not trigger). This type of self-activating mine costs at least twice as much as a typical mine as listed.

Multiple Explosives

The rules as presented represent basically one unit of an explosive. If the bomb could be thought as dynamite, each bomb would be a single stick. Adding more bombs, grenades, or makeshift explosives together does increase the damage of the unified weapon, but only when properly timed to go off together. If instead a single explosive were lit and thrown into a pile of other explosives, the fire of the device would likely ignite the other bombs but each bomb would release its potential as it goes off rather than simultaneously. As such, any object or creature standing too close to the pile would suffer multiple explosions rather than a single large explosion (even if they are all occurring with the same few seconds). Damage would be dealt, reduced, etc. for each explosive going off individually rather than as a single amount of damage all together.

Alternately, multiple explosives can be set to explode simultaneously, dealing all of their damage as a single attack. For this to work, a single fuse or ignition system must connect to all explosives. Creating and timing such a fuse mostly takes just time, requiring one move action per additional explosive being linked together. This additional time is after the standard action needed to prepare a fuse for an explosive, meaning that in one round two explosives can be linked together. After that first round, an additional round can be spent to add two more explosive devices, with two more being added per additional round. If an attack roll is needed, treat the roll of a 1 as the fuse being mistimed and thus not simultaneous.

New Firework Weapons

Though the term "firework" is used in this text, a more technically accurate term should be *pyrotechnic.* Pyrotechnics are any mixture of substances designed to produce one or more of the following effects: heat, light, sound, gas, or smoke. To these standard effects of pyrotechnics you could add any number of fantasy effects, which are represented by the new special weapon qualities found above and below. What differentiates a pyrotechnic from an explosive is largely academic, but relates to the fact that pyrotechnics (and thus fireworks) never "detonate" like a true explosive. Gunpowder is actually a good example of a pyrotechnic, in that the purpose of igniting the exploding powder is to create a large amount of gas to push a bullet down the barrel of a firearm at a target. Firearms however are handled elsewhere, just as explosives are detailed above.

Duration

In the *Pathfinder Roleplaying Game: Ultimate Equipment* book, fireworks have variable durations. Just like the base assumption for timing these devices (see **Fuses and Timing Detonation** above), the variable nature of fireworks is because of an expectation of a lack of experience with them. When a character is crafting a firework, they can automatically choose the duration that a firework will burn for when ignited within the range provided in the Duration entry on the table below. At gamemaster discretion, one way to handle failed Craft checks to create fireworks with a duration is to have the player assume the firework will function for a set amount of time when in fact the gamemaster will set or randomly determine how long the firework will activate for. Have the time vary by about 1 to 2 rounds shorter or longer, for each 5 points the crafter misses the DC by. An expert in fireworks can attempt to guess how long a firework will activate for that they did not craft themselves with a Craft (alchemy) check against

a pyrotechnics' Craft DC -10. Failing this check means the player assumes the firework will last for longer or short (gamemaster's choice) for each 5 points they miss the DC by. A duration on the table below of "Instantaneous" is never longer or shorter and cannot be modified by any special qualities that extend its duration. Assume all explosives have a duration of "Instantaneous" if it matters.

In addition to the special weapon qualities from explosive weapons above, firework pyrotechnics can also have the following special weapon qualities added.

Colorful: Though adding various mundane or semi-magical substances, almost any color of the rainbow can be added to a firework. Only in rare circumstances will this have any in-game effect. With the addition of certain special substances, light that is either like daylight or blacklight-like are even possible (gamemaster's discretion). The color of other aspects of a firework can be altered as well, for instance, the color of the smoke produced.
Cost: The substances used to add color are rarely more expensive than any other substance being added and only add 1 gold piece per color being added to the cost of a firework. If special color effects are allowed, they may cost significantly more expensive depending on what substances need to be added. Increase the Craft (alchemy) DC by +5.

Shaped: While straight explosives can be "shaped" to burst in a different fashion, purely mundane methods can be used on the flares and sparklers of a firework to create various simple shapes and designs. Depending on if you are talking about a skyrocket or a fountain on the ground, the shape can be one of simple geometric shapes or more complicated multi-bursts of color and light. This can take the form also of altering the area of effect of a firework, converting each

5-feet of a burst into 5-feet of cone (maximum 60 feet) or 10-feet line effect (maximum 100 feet).
Cost: Adding a simple shape to a firework doubles the cost of the firework as does changing the shape of a firework from one (a burst, cone or line) into a different one. Increase the Craft (alchemy) DC by +5.

Screaming: This firework is designed to create a high-pitched whistle or screaming noise during the duration of its time ignited. This sound effectively deafens any creatures that remain within the firework's area of effect and within 5 feet of the device as the even the loudest sounds they could make are drowned out by the piercing sound.
Cost: This special weapon quality can only be added to pyrotechnics that burn for a duration. Adding the screaming special weapon quality costs an additional 150 gp. Increase the Craft (alchemy) DC by +5.

Extended: A pyrotechnic with the extended special weapon quality is designed to be activated for longer than the duration listed. The crafter of the firework can have the device last up to twice as long as the typical duration listed, though this quality can be added to a firework multiple times. This special quality cannot be added to weapons with a duration of instantaneous.
Cost: This special weapon quality doubles the cost of the firework each time it is added. Increase the Craft (alchemy) DC by +5 each time it is added to a firework. Increase the weight of the firework by half each time it is added to a firework.

Carrier skyrocket: A carrier skyrocket is a self-propelled projectile designed to carry an object weighting up to one pound. Typically, additional alchemical or explosive weapons are used as the object being carried, though nothing prevents someone from using this as a rapid method of getting a healing potion or message across a battle field. When loaded and fired, a carrier rocket moves at a speed of 50 feet per round in a straight line, redirecting if they hit an object. At the end of their duration, the carrier skyrocket stops moving letting gravity and physics dictate what happens to the object being carried. For instance, if it were still in the air, it begins to fall out of the sky with momentum dictating direction. Alternately, if the object being carried is in a fragile container like glass, it might burst open upon impact with an object or at the end of its flight. Accurately directing a carrier skyrocket to land on a target after its flight is treated as a an indirect-fire ranged siege weapon attack (see full rules in the *Pathfinder Roleplaying Game: Ultimate Combat* book) with a targeting DC of 20.

Exploding arrow: This entry is actually a stand-in for any type of projectile with an attached explosive. The greatest difficulty in effectively using an exploding arrow is that they still require a fuse. Typically fuses are timed to last three rounds, so that they can be lit in one round, fired from a weapon in the second round, and explode in the third round after having hit their target (assuming the target left the arrow attached to whatever it struck). Some prefer only having fuses last for two rounds, where the arrow will explode at the end of the second round but to get this timing to work the archer needs to trust their ability to fire the arrow in the second round. An exploding arrow counts as normal projectile fired from the weapon of choice with a reduced range increment (half, round down). The explosion is a separate attack that effects a single 5-foot by 5-foot square and any creatures inside it. Crafting this item is a DC 20 Craft (alchemy) check. An exploding arrow is typically made using 2 doses of explosive powder.

Alchemical Weapons

Weapons	Price	Dmg (S)	Dmg(M)	Critical	Range	Weight	Type	Duration	Special
One-handed Melee Weapons									
Fusee	50 gp	1d2	1d3	x2	--	1/2 lb.	Fire	10 minutes	See text
Handheld fountain	100 gp	1d6	1d8	x2	--	1/2 lb.	Fire	1 minute	See text
Sparkler	5 gp	1	1d2	x2	--	--	Fire	5 rounds	See text
Ranged Weapons									
Carrier skyrocket	100 gp	--	--	--	50 ft.	3 lbs.	--	Varies	See text
Exploding arrow	11 gp	1d3/1d3	1d4/1d4	x3/x2	Varies	--	B/fire	Instantaneous	See text
Exploding skyrocket	15 gp	1d4/1d4	1d6/1d6	x3/x2	75 ft.	1 lb.	B/fire	Instantaneous	See text
Flaming arrow	5 gp	1d3	1d4	x2	Varies	--	Fire	1 minute	See text
Flare	25 gp	--	1d4	--	10 ft.	1/2 lb.	Fire	6 rounds	See text
Flash powder	50 gp	--	--	10 ft.	--	Light	Instantaneous	Area, see text	
Ground fountain	50 gp	--	1d6	Blindness	5 ft. cone	1 lb.	Fire	1 minute	Area, see text
Heat pellet	50 gp	-	See text	--	10 ft.	Fire	1 hour	See text	
Skyrocket arrow	20 gp	1d6/1d3	1d8/1d4	x3/x2	50 ft.	1 lb.	P/fire	1 minute	See text
Skyrocket	50 gp	--	2d6	--	90 ft.	1 lb.	Fire	6 rounds	Area, see text
Smoke bomb	20 gp	--	--	--	10 ft.	1/2 lb.	Smoke 1 minute	Area, see text	
Salute	25 gp	--	1	x2	10 ft.	1/2 lb.	Sonic	1 round	See text
Thermite	500 gp	--	3d6	--	1 lb.	Fire	1 minute	See text	
Whistler	75 gp	--	--	--	1 lb.	Sonic	1 minute	See text	

Exploding skyrocket: This entry is actually a stand-in for any type of self-propelled projectile with an attached explosive. The greatest difficulty in effectively using an exploding skyrocket is that they still require a fuse. Once ignited, the exploding skyrocket moves at a speed of 75 feet per round in a straight line, dealing its piercing damage to any creature or object struck. At the end of the duration of the skyrocket it explodes. The explosion is a separate attack that affects a single 5-foot by 5-foot square and any creatures inside it. Exploding skyrockets that strike a target are assumed to "stick to" their target unless removed, which if the skyrocket still has a duration it will continue to try to move. Crafting this item is a DC 20 Craft (alchemy) check. An exploding skyrocket is typically made using 3 doses of explosive powder.

Flaming arrow: This entry is actually a stand-in for any type of projectile covered in a special alchemical solution (typically including an exploding powder) and fired from a traditional ranged weapon (crossbow, longbow, etc.). The damaged listed is specifically the fire damage that occurs in addition to the normal damage of the arrow being fired. These specially coated arrows typically weigh more, reducing their range increment by 10 feet, but otherwise count as the respected projectile in almost every other way. They are designed to burn hot and long, and are ideal for setting fire to objects (they count as kindling when using the rules in the **Lighting Fires** sidebar below). Typically only the front few inches of a projectile are coated in the flaming material to prevent accidental

burning of the range weapon used to fire the flaming arrow. A flaming arrow must be ignited before it can be used in an attack. Crafting this item is a DC 20 Craft (alchemy) check. A flaming arrow is typically made using 1 dose of explosive powder.

Flare: This entry represents a firework designed for the sole purpose of creating a long lasting light source. The flare itself is relatively small, but once its fuse has burned down it produces a brilliant ball of light that burns for the fireworks duration. It sheds normal light in a 60-foot radius and increases the light level by one step for an additional 60 feet beyond that area (darkness becomes dim light and dim light becomes normal light). A flare does not increase the light level in normal light or bright light. A flare only produces this light effect while actively burning, fading once the duration of the firework is spent. While not designed to be used offensively, a flare does burn hot enough to injure creatures and it can be used to ignite fires (counts as kindling if the **Lighting Fire**s rules are being used, see sidebar below). Flares work best when launched into the air by a carrier skyrocket, especially if a small parachute is added to slow the flares decent (add 5 gp to the cost). Crafting this item is a DC 25 Craft (alchemy) check.

Flash powder: This entry is the same as the flash powder found in the *Pathfinder Roleplaying Game: Ultimate Equipment* book, and is included to act as a base that can be modified by the various special weapon qualities above. Flash powder can be composed of a wide range of alchemical substances, including lycopodium spore, a type of clubmoss. Flash powder epitomizes pyrotechnics that produce light. In the case of flash powder, exposure to any source of ignition, even significant friction or being thrown violently against a hard surface (as a standard action) creates a blast of light that blinds creatures within a 10-foot radius burst for 1 round (Fortitude DC 13 negates). Flash powder can be used as a simple explosive powder (see above for specific rules) in explosives and in firearms. Crafting this item is a DC 20 Craft (alchemy) check. Flash powder cannot have the flashing special weapon quality added to it.

Fusee: A fusee is a type of handheld flare, used either for signaling or as a high power light source. It sheds normal light in a 60-foot radius and increases the light level by one step for an additional 60 feet beyond that area (darkness becomes dim light and dim light becomes normal light). A fusee does not increase the light level in normal light or bright light. A fusee only produces this light effect while actively burning, fading once the duration of the firework is spent. While not designed to be used offensively, a fusee does burn hot enough to injure creatures and it can be used to ignite fires (counts as kindling if the **Lighting Fire**s rules are being used, see sidebar below). Crafting this item is a DC 20 Craft (alchemy) check.

Ground fountain: This entry represents a firework designed to stream a gout of fire and sparks in a cone-shape into the air, though if directed horizontally it can easily be used offensively. Once ignited, a ground fountain produces a 5-foot cone fired from the firework as its point of origin with sparks from the fountain falling to the ground within a 5-foot radius of the firework (see **Lighting Fires** below). The length of the cone and radius of the sparks effect can be doubled by doubling the cost of the firework, adding +5 to its Craft DC as well. Creatures standing in the area of the firework during its duration are effective blinded because of the bright fire effects. Crafting this item is a DC 25 Craft (alchemy) check.

Handheld fountain: This entry is the same as the flame fountain firework found in the *Pathfinder Roleplaying Game: Ultimate Equipment*

book, and is included to act as a base that can be modified by the various special weapon qualities above. While not a ranged weapon, handheld fountains count as firework-firearms when considering if they are reloadable (see sidebar). A handheld fountain sheds light as a torch. Using the **Lighting Fires** rules (see sidebar below), a handheld fountain counts as fuel and can ignite fuel as a move action or kindling and tinder as a swift action. Crafting this item is a DC 25 Craft (alchemy) check.

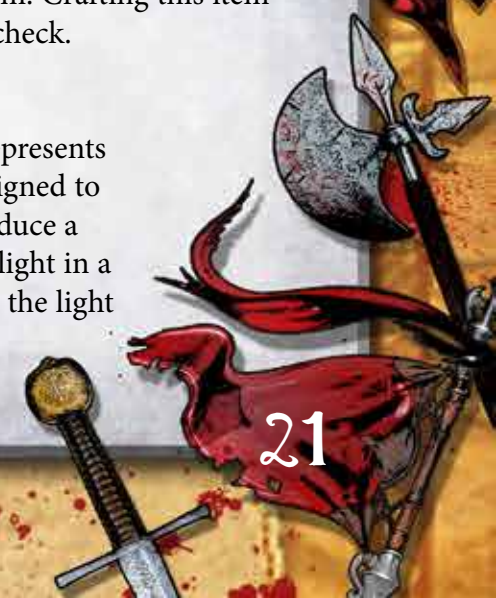
Heat pellet: This entry represents a firework designed for the sole purpose of creating a powerful heating source over an extended period of time. This pellet is roughly the size of a small stone but when ignited burns with the heat and intensity of a medium campfire for its duration. A burning heat pellet produces the same smoke, smell and light as embers of a dying campfire. It is hard to use a lit heat pellet offensively, though it does count as a burning log if thrown or otherwise used against a creature of object. A heat pellet can be lit and will burn in almost any weather except total down pour, requiring kindling to get it going fully and counting as coals if using the **Lighting Fires** rules in the sidebar below. Any method used to extinguish a normal fire can be used to extinguish a heat pellet. Crafting this item is a DC 20 Craft (alchemy) check.

Skyrocket: This entry is the same as the skyrocket firework found in the *Pathfinder Roleplaying Game: Ultimate Equipment* book, and is included to act as a base that can be modified by the various special weapon qualities above. Skyrockets are self-propelled projectiles that explode in a fiery ball at the end of their duration. Once ignited, a skyrocket moves at a speed of 90 feet per round in a straight line, redirecting if they hit an object. At the end of their last round, they explode in a burst of light and sound, dealing 2d6 fire damage in a 10-foot radius burst (Reflex DC 15 halves). Anyone who takes damage from the explosion is either blinded or deafened (50% chance of either) for 1 round. Crafting this item is a DC 25 Craft (alchemy) check.

Skyrocket arrow: The skyrocket arrow is a self-propelled projectile that uses an exploding powder as its propellant. Aiming a skyrocket arrow is difficult, with a -4 nonproficiency penalty on all attacks made with the firework. Once their fuse has burned up, a skyrocket moves at a speed of 75 feet per round in a straight line, generally "sticking in" and dealing damage if they hit an object. Crafting this item is a DC 25 Craft (alchemy) check.

Smoke bomb: The smoke bomb releases a cloud of heavy smoke in a 10-foot cube once ignited. A creature who breathes smoke for a full round must make a Fortitude save (DC 10, +1 per previous check) or spend the next round choking and coughing. A creature who chokes for 2 consecutive rounds takes 1d6 points of nonlethal damage. Smoke obscures all sight, including darkvision, beyond 5 feet. A creature within 5 feet has concealment (attacks have a 20% miss chance). Creatures farther away have total concealment (50% miss chance, and the attacker can't use sight to locate the target). The smoke effect is replenished for the duration of the smoke bomb but dissipates after five rounds in still air, three rounds in a light wind, one round in a moderate wind and instantly in a stronger wind. Reduce the time in half if used outdoors or in an open area with good ventilation. Double the time if used indoors or in a confined space like a narrow hallway or small room. Crafting this item is a DC 20 Craft (alchemy) check.

Sparkler: This entry represents a long burning firework designed to be held in the hand and produce a light effect. It sheds normal light in a 30-foot radius and increases the light



level by one step for an additional 30 feet beyond that area (darkness becomes dim light and dim light becomes normal light). A sparkler does not increase the light level in normal light or bright light. A sparkler only produces this light effect while actively burning, fading once the duration of the firework is spent. While not designed to be used offensively, a sparkler does burn hot enough to injure creatures but it can be used to ignite fires (counts as tinder if the **Lighting Fire**s rules are being used, see sidebar below). Crafting this item is a DC 15 Craft (alchemy) check.

Salute: This entry represents a firework designed for the sole purpose of creating a loud banging noise when it explodes. Unless additional special weapon qualities are added, the majority of the power of a salute is focused on creating a sonic effect that only affects creatures and objects immediately sharing the same space as the salute. If enclosed inside an small object, increase the damage caused to 1d6 sonic damage and reduce the object's hardness by half. Salutes are incredibly loud and can be heard from great distances. A standard salute can be heard for half a mile, with the option to increase this distance by increasing the size of the salute (doubling the size triples the distance, etc.) Crafting this item is a DC 25 Craft (alchemy) check.

Thermite: This entry is not meant to represent only specifically the chemical known as thermite but instead any number of alchemical powders that when ignited burn superhot. Thermite burns with such intensity it can be used to melt metal and even burn straight through stone. Thermite however only works when concentrated to small areas and the entry as presented assumes one pound of material is being placed on a space less than one cubic foot in area. It is hard to use this powder attack against creatures unless then are helpless, but against objects that are not moving too much, the thermite deals all of its fire damage completely ignoring any mundane hardness of the object (but not any ability of the object to resist fire or magical bonuses to hardness). Creatures coming with a 5-foot radius of burning thermite take 1 point of fire damage due to its intensity. Igniting thermite is very difficult, it is treated as fuel if using the Lighting Fires rules below and is best accomplished with the intense fire of a flare. Crafting this item is a DC 35 Craft (alchemy) check.

Whistler: This entry is the same as the banshee ballerina firework found in the *Pathfinder Roleplaying Game: Ultimate Equipment* book, and is included to act as a base that can be modified by the various special weapon qualities above. The whistler represents a firework designed for the sole purpose of creating a long and incredibly loud noise over the duration of its use. It can be thrown to target an intersection as a splash weapon. Any creatures within 5 feet of the noise are effectively deafened while they remain in the area, as even the loudest sounds they make are drowned out by the piercing sound. Crafting this item is a DC 30 Craft (alchemy) check.

New Firearm Options

Realistic Explosive Powder Firearms (Optional Rules)

There are a number of real-world aspects of especially early firearms that are glossed over in the rules for firearms as presented in *Pathfinder Roleplaying Game: Ultimate Combat*. For one, gunpowder weapons produce enormous amounts of acridic smoke that blinds the gunner as much as their enemy. It was easy to spot in well lit conditions where a shot was fired from, and in darkness the muzzle flash of a black powder weapon would be even more noticeable. Also, the intense sound of an explosive powder weapon could be almost deafening, and mounts and soldiers alike would run in fear of the sight, sound and smell of a firearm unless they were

accustomed to it. Additionally, explosive powder in particular was made from mostly solid fuel sources and as such left a lot of residue after each shot being fired. Most of these optional rules are presented at the end of this text in the **Rules Appendix** to address some of these issues and more.

Primitive Firearms (Optional Rule)

The rules as written for early firearms like the fire lance and culverin lump all the different possible weapons into a few assumptions and choices. The rules are also made to try to keep firearms balanced, exchanging real-world reload times with usable game mechanics that don't put the gunslinger at a disadvantage to other classes. Some gamers can find even early firearms as presented to be too powerful for their game. These gamemasters may want to allow firearms with greater restrictions, for instance to only allow primitive handgonne firearms.

Firework-Firearms

In the original firearms rules published in the *Pathfinder Roleplaying Game: Ultimate Combat* book, the fire lance is a type of early firearm that is basically a javelin launched via gunpowder. Numerous similar weapons existed that launched everything from single balls of glass, porcelain, clay or stone to arrows and crossbow bolts to things as large as javelins or even as varied as pellets of clay, shards of porcelain or metal filings and even handfuls of stones and gravel. These weapons are included here as firework-firearms because unlike most firearms they behave slightly differently. First off, none are powerful enough to penetrate armor the way later firearms were able to, so they always resolve ranged attacks as normal attacks (never touch attacks, even in the first range increment) unless otherwise specified. All firework-firearms count as already possessing the broken condition when determining the effects of a misfire, meaning they always explode to create a burst effect the size noted in the misfire column, dealing damage to anyone in the area as if they were hit by the weapon (Reflex save DC 12 halves damage).

Reloading them is also handled differently, as they always count as two-handed early firearms requiring a full-round action to reload a single shot. Not all firework-firearms can even be reloaded either, as they often consist of little more than a wooden tube (bamboo where available) that can become useless even with normal use (gamemaster discretion if the design of your firework-firearm is reloadable or not). Others are specifically cast of bronze or forged of iron and are made to be reloadable.

All firework-firearms count as having fuses as their firing mechanisms (see below for additional rules). All firework-firearms with the

"Realistic" Loading Times

Most of the time when searching "how long does it take to reload a handgonne" or some similar phrase online, you'll find three types of answers. The first are people repeating what they think they've heard or read, generally with no backing or using nothing but personal experience. The next are people who fire modern black powder weapons, as hobbyists or reenactors. Finally you find historians or people referring to contemporary reports and accounts. What you will find most often though are drastic oversimplifications of the concept and trolling flame-wars -- what you won't find are good answers.

As an aside related to whether the loading times as presented are "accurate" or at least "better", keep in mind that rules governing other ranged weapons – like the longbow, sling or crossbow – can also often be picked apart. Additionally, professional handgonnners who would spend eight or more hours a day exclusively practicing with sword and gonne may be better at something than your modern-day hobbyist.

scatter weapon quality can only be used for firing scatter attacks, as they are not properly built to fit other types of ammunition. Firearm-fireworks are not as versatile as most firearms. Neither firearm special weapon qualities nor firework and explosive special weapon qualities be applied to firearm-fireworks without gamemaster approval.

New Special Weapon Qualities for Firework-Firearms

All of the following new firework-firearm weapon qualities must be added at the time of the crafting of the firearm. Most could not be added as an "after-market" addition without gamemaster approval. The costs presented generally assume the price of purchasing the weapon, not crafting it. See the **Rule Appendix** for new rules about crafting firearms for more information on having players craft firearms with these weapon qualities.

Stacking Costs: When designing a weapon with more than one cost increase or decrease, apply each price change in the order that makes the most sense to you and your gamemaster. For example, size changes affect the entire weapon, regardless of how many barrels it has or how it is loaded, so those values should be applied last.

Combined firearm: A combined firearm is any combination of a melee weapon and a firearm. These were particular popular in the early days of firearms when one good shot was all most people were able to get off. After the invention of the flintlock mechanism, it was more common for people to combine flintlock firearms with mundane items like walking sticks, jailor's keys or even dinning ware. Any object long and large enough to either act as a barrel (in the case of polearms or hafted weapons) or to be designed in-line with a barrel (in the case of swords and daggers) can be used as a combined firearm.

Melee weapons with combined firearms typically are made to have a "safety" engaged while the weapon is used in melee. Engaging or disengaging this safety is a swift action. Melee weapons designed to be fired after a blade is dug in or once a spear has found purchase will not include this kind of safety mechanism. In these cases, treat any roll of a natural 1 as a misfire for the combined firearm.

Cost: First double the price (200%) of the base item, including doubling the price of the cost to create it as a masterwork weapon or tool. Add this price to 125% of the price of the firearm. This accounts for increased difficultly of integrating the mechanisms into a weapon. When crafting a combined firearm, you must provide half this final price as raw materials (see **Rules Appendix** below).

Volley gun: The volley gun weapon quality can be added to any firearm design except those with the "pepperbox" weapon quality, increasing the number of barrels it has. Volley guns differ from pepperbox designs because all barrels are fired at the same time using a single firing mechanism. All the barrels of a volley gun must focus on the same target. Adding one barrel to a firearm applies a -4 recoil penalty on each attack. Each additional barrel of a volley gun increases the penalty by -2 recoil penalty cumulatively to each attack. For instance, a seven barreled gun takes a -14 recoil penalty to each of the weapon's seven attacks against a single target. Each additional barrel added to a volley gun increases the weight of the weapon by one-fifth the base weapons total weight. If a one-handed firearm design weighs more than twice what its base weapon weighs, it becomes a two-handed firearm. If a two-handed firearm weighs more than three times what its base weapon weighs, it must be mounted to fire or the recoil possibly knocks the wielder prone (Strength check DC 10, +1 per additional barrel) and doubles the recoil penalty when fired (see **Rules Appendix** below). Misfires are handled per-barrel, with individual barrels being able to gain the broken condition and even explode if used after having the broken condition. Unloaded barrels at the time the trigger is pulled just do not fire without any penalty or chance of a misfire.

Alchemical Weapons

Firework-Firearms	*Price*	*Dmg(S)*	*Dmg(M)*	*Critical*	*Range*	*Misfire*	*Capacity*	*Weight*	*Type*	*Special*
Fire arrow	35 gp	1d6	1d8	x4	15 ft.	1-3 (5 ft.)	1	3 lbs.	P	--
Fire blade	25 gp	1d4	1d6	x4	10 ft.	1-3 (5 ft.)	1	2 lbs.	P	--
Fire dart	20 gp	1d3	1d4	x4	20 ft.	1-3 (5 ft.)	1	2 lbs.	P	--
Fire gourd	25 gp	1d4	1d6	x3	15 ft. cone	1-4 (5 ft.)	1	5 lbs.	B and P	Scatter
Fire lance	25 gp	1d4	1d6	x4	10 ft.	1-4 (5 ft.)	1	4 lbs.	P	--
Makeshift firearm	--	1d6	1d8	x3	15 ft.	1-4 (5 ft.)	1	5 lbs.	B and P	--
Pyrotechnic bullet launcher	25 gp	1d2	1d3	x3	10 ft.	1-3 (5 ft.)	See text	2 lbs.	P	See text
Pyrotechnic candle launcher	5 gp	--	1/1	Blindness	5 ft.	1 (5 ft.)	See text	--	Fire/ nonlethal	See text
Pyrotechnic star launcher	25 gp	--	1d4/1d4	Blindness/ x2	10 ft.	1-2 (10 ft.)	See text	1 lb.	Fire/B	See text

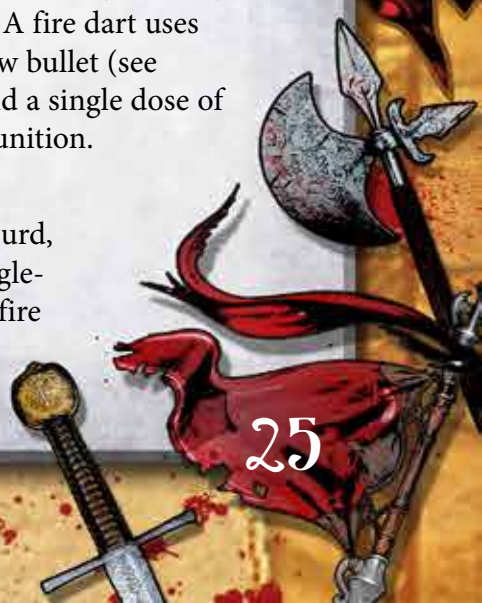
Cost: The price of each barrel added to a weapon is equal to one-half the price (50%) of the base weapon. For instance, a triple barreled volley gun fire arrow would cost 70 gp instead of 35 gp (and and have a -6 recoil penalty to each shot when all 3 barrels were fired simultaneously).

Fire arrow: The fire arrow represents those firework-firearms designed to launch an arrow or crossbow bolt out of a tube made of wood, bronze or iron and at a target. It can be considered the most effective form of firearm-firework and has the most number of refinements. Like all firework-firearms, a fire arrow is imprecise, targeting AC rather than touch AC and always is treated as having the broken condition for purpose of determining the effects of a misfire. Crafting this item is a DC 25 Craft (alchemy) or a DC 20 Craft (firearms) check (see **Rules Appendix**). A fire arrow uses an arrow, bolt or garros (see **New Ammunition** below) and a single dose of explosive powder as its ammunition.

Fire blade: The fire blade represents those firework-firearms designed to launch a dagger-like blade out of a tube made of wood, bronze or iron and at a target. Like all firework-firearms, a fire blade is imprecise, targeting AC rather than touch AC and always is treated as having the broken condition for purpose of determining the effects of a misfire. Crafting this item is a DC 25 Craft (alchemy) or a DC 20 Craft (firearms) check (see **Rules Appendix**). A fire blade uses a dagger and 2 doses of explosive powder as its ammunition.

Fire dart: The fire dart represents those firework-firearms designed to launch a dart or sling bullet out of a tube made of wood, bronze or iron and at a target. Like all firework-firearms, a fire dart is imprecise, targeting AC rather than touch AC and always is treated as having the broken condition for purpose of determining the effects of a misfire. Crafting this item is a DC 20 Craft (alchemy) or a DC 15 Craft (firearms) check (see **Rules Appendix**). A fire dart uses a dart, sling bullet or crossbow bullet (see **New Ammunition** below) and a single dose of explosive powder as its ammunition.

Fire gourd: The fire gourd, also called a fire vase, is a single-shot scatter weapon made to fire



stones, pellets or other ammunition as a scatter weapon. Those made of wood or dried gourds are generally single-use and can be made into improvised fragmentation weapons by plugging the top or even sticking the weapon upside down in the ground. Other types are made of bronze or iron with an almost vase-like shape. Like all firework-firearms, a fire gourd is imprecise, targeting AC rather than touch AC and always is treated as having the broken condition for purpose of determining the effects of a misfire. Crafting this item is a DC 20 Craft (alchemy) or a DC 18 Craft (firearms) check (see **Rules Appendix**). A fire gourd uses a handful of marbles, small stones or pellets and 2 doses of explosive powder as its ammunition.

Fire lance: This entry is the same as the fire lance found in the *Pathfinder Roleplaying Game: Ultimate Combat* book, and is included to act as a base that can be modified by the various special weapon qualities above. The fire lance represents those firework-firearms designed to launch a javelin or shortspear out of a tube made of wood, bronze or iron and at a target. Like all firework-firearms, a fire lance is imprecise, targeting AC rather than touch AC and always is treated as having the broken condition for purpose of determining the effects of a misfire. Crafting this item is a DC 20 Craft (alchemy) or a DC 18 Craft (firearms) check (see **Rules Appendix**). A fire lance uses a javelin and 2 doses of explosive powder as its ammunition.

Makeshift firearm: Any sturdy enough tube-like object could be made into a quick and dirty firearm. Loading a dose of explosive powder with a ball on the other end makes for a simple firearm weapon and only requires some method of igniting the powder once loaded (a small crack, touchhole or vent). Using such a weapon however is highly dangerous and any misfire counts as if the weapon already had the broken condition. Crafting this item is a specail DC 20 Craft (alchemy) or a DC 10 Craft (firearms) check (see **Rules Appendix**) that requires one minute, assuming an adequate material for a "barrel" is readily available. A makeshift firearm uses a bullet and a single dose of explosive powder as ammunition.

Pyrotechnic bullet launcher:

This entry uses a similar firing mechanism to the pyrotechnic candle and star launchers, where a series of shots are prepared and each is fired in succession one round after the other by use of a long burning fuse. In the case of a bullet launcher, solid shots are fired. Traditionally these would be ceramic bullets (clay, glass or even porcelain), but later they became stone and even metal shots. Attacking with a pyrotechnic bullet launcher is a normal ranged attack and has a -4 nonproficiency penalty. On a misfire, the bullet does not leave the launcher and explodes, dealing the damage of all remaining bullets to the user of the firework-firearm. A pyrotechnic bullet launcher can be made to have any number of bullets, though after six, the nonproficiency penalty increases by -2 per additional bullet due to the additionally awkward size and shape of the firework. Once started, a pyrotechnic launcher can only be extinguished, otherwise each shot will continue to be fired regardless of where it is aimed. A pyrotechnic launcher uses a candle firework and a dose of explosive powder per shot to be fired. The cost of the firework-firearm assumes it is loaded with four bullets, and increases by +5 gp per additional bullet. Crafting this item is a DC 20 Craft (alchemy) check, with the DC increasing by +1 per shot after the first 4 bullets.

Pyrotechnic candle launcher:

This entry is the same as the star candle firework found in *Pathfinder Roleplaying Game: Ultimate Equipment*, and is included to act as a base that can be modified by the various special weapon qualities above. Each round this firework

burns for, a special type of pyrotechnic called a "candle" is launched. This candle deals 1 point of nonlethal damage and 1 point of fire damage if they hit a target; on a critical hit, the target is also blinded for 1 round. The candles shed light as a candle for 1 round and have a range increment of 5 feet. Attacking with a pyrotechnic candle launcher is a ranged touch attack and has a -4 nonproficiency penalty. On a misfire, the candle does not leave the launcher and explodes, dealing the damage of all remaining candles to the user of the firework-firearm. A pyrotechnic candle launcher can be made to have any number of candles, though after six, the nonproficiency penalty increases by -2 per additional candle due to the additionally awkward size and shape of the firework. Once started, a pyrotechnic launcher can only be extinguished, otherwise each shot will continue to be fired regardless of where it is aimed. A pyrotechnic launcher uses a candle firework and a dose of explosive powder per shot to be fired. The cost of the firework-firearm assumes it is loaded with four candles, and increases by +1 gp per additional candle. Crafting this item is a DC 20 Craft (alchemy) check, with the DC increasing by +1 per shot after the first 4 candles.

Pyrotechnic star launcher: This entry is a larger version of the star candle firework found in *Pathfinder Roleplaying Game: Ultimate Equipment*, and is included to act as a base that can be modified by the various special weapon qualities above. Each round this firework burns for, a special type of pyrotechnic called a "star" is launched. This star deals 1d4 point of bludgeoning damage and 1d4 point of fire damage if they hit a target; on a critical hit, the target is also blinded for 1 round. The stars shed light as a torch for 1 round and have a range increment of 10 feet. Attacking with a pyrotechnic star launcher is a ranged touch attack and has a -4 nonproficiency penalty. On a misfire, the star does not leave the launcher and explodes, dealing the damage of all remaining candles to the user of the firework-firearm. A pyrotechnic star launcher can be made to have any number of stars, though after six, the nonproficiency penalty increases by -2 per additional star due to the additionally awkward size and shape of the firework. Once started, a pyrotechnic launcher can only be extinguished, otherwise each shot will continue to be fired regardless of where it is aimed. A pyrotechnic launcher uses a star firework and a dose of explosive powder per shot to be fired. . The cost of the firework-firearm assumes it is loaded with four stars, and increases by +5 gp per additional star. Crafting this item is a DC 30 Craft (alchemy) check, with the DC increasing by +1 per shot after the first 4 stars.

Handgonnes

Throughout this book, the term "handgonne" is used as a catch-all for a number of primitive firearms that pre-date the pistols and muskets normally considered as "early firearms." Historically the terms applied to the weapons I am describing varied by location and time period; in Asia, you could find the *chongtong* and *huochong*, while in Europe they were the *baton a feu, couleuvrine a main* or *faustbuche*. Likewise in this book I differentiate between "hand bombards" and "hand cannons," though to a 15th century soldier they may have even used the terms interchangeably. It is a matter of convenience differentiating these terms, to account for some of the variation possible with these weapons. While the "hand gonne" also appears as specific weapon on the list, I will use the term handgonne in general to refer to all the firearms of this style (ex. hand bombards, hand cannons, hand culverins, hand gonnes, etc.).

As a quick reference to the possible sizes and measurements of handgonnes, here are some statistics.

Barrel lengths: 3 inches – 20 inches, average 12 inches
Pole lengths: 12 inches – 8 feet, average 3 feet
Weights: 1 lb – 25 lbs, average 8 lbs
Caliber: .50 to 1.50 caliber, average 1.0 caliber

When you read the descriptive text you will realize I am certainly not just misspelling the word "handgun" as the "hand" in these refers more to the idea that these are cannons that can be held in a single user's hands rather than being mounted on a wall, wheels or ship deck.

One final difference between handgonnes and other early firearms is that their simple design (a heavy metal barrel on the end of a pole) was almost always made to be resilient enough to function as a melee weapon in combat. Gonners particularly concerned with needing to use their weapons in melee combat were known to combine them into a basic polearm's design (see combined firearm special weapon quality below). Treat the firearm as a melee weapon and as a firearm as two separate weapons for rules concerning magically enhancing them.

Reloading and Firing Handgonnes

The simple design of various handgonnes may seem like they would make reloading times significantly faster than other firearms but they generally had awkward shapes and were not properly made to be easily reloaded. Their overly simple designs also required some care to pack a barrel correctly as powder could either fall out the touchhole or be too packed to allow proper ignition. Additionally, loading the early clay or glass balls was slower than loading metal bullets as they required more care to not break them before firing, let alone loading pellets or other improvised shrapnel into the barrel.

Optional rule: Increase reloading times by 1 full-round when loading ammunition fragile ceramic ammunition (clay, glass, etc.) or any form of pellets for scatter attacks.

Even more surprising might be that the weapons actually took a long time to fire accurately. The way a handgonne is held, either under the arm at mid-waist level or over the shoulder, as well as their very short, smoothbore barrel made accurate aiming with a handgonne impossible by today's standards. Instead, handgonners fired the weapons with both eyes open, letting themselves "feel" if the target was on rather than trying to precision aim the way we might think to with one eye open, the other closed looking down the length of the barrel. Most gonners wouldn't want to put their eyes that close to the touchhole/vent of the handgonne either as backfire was problematic to say the least (part of why it was kept an arms length away on a pole in the first place). This style of shooting required longer to aim and is accounted for in each weapon below. These firing times can be modified by using different firing mechanisms (see below).

Firing a primitive firearm is then typically a full-round action. This is due in part to the slow methods of igniting the explosive powder in the weapon. Firing a primitive firearm with a full-round action imparts a -4 penalty to attack rolls against any target that is not inanimate and unmoving due to the delay between lighting the powder and the shot. Firearms with a standard action as their firing time only suffer a -2 penalty to attack rolls in these conditions.

Fuse

Description: A direct adoption from early cannons and still common to all fireworks and firework-firearms, the use of a fuse in a firearm is actually quite beneficial – if time isn't important to you. A short fuse is inserted into a touchhole, lit by hand, and then the firearm is held in both hands and readied to be fired. This made it significantly easier to steady the weapon and brace against the recoil. Assume all firework-firearms use a fuse ignition system unless otherwise specified.
History: This was the first likely type of firing mechanism, though it was quickly replaced by just direct hand ignition.
Game mechanics: A fuse must be long enough to give a gonner time to lift a weapon and aim. This means the shortest a fuse would be set to burn for is 1 full-round, after having already spent a round lighting the fuse. A fuse can be even longer than that though. The extra time spent preparing for the shot does impart some practical benefits. First, reduce all recoil penalties by 2, because the gonner is able to hold the weapon more securely in two hands. Secondly, the longer aim time imparts a +1 attack bonus for taking the time to aim. Wise gonners would even take that extra time to brace the weapon fully (see **Rules Appendix** below).
Cost: Any weapon designed for hand ignition via touchhole (the base assumption of most handgonnes) can instead be fired using a fuse just by using one (see **New Adventuring Gear** below).

The High Cost of Handgonnes

Compared to other, more advanced early firearms, the cost of handgonnes is significantly worse despite their simple designs and lesser quality. The cost as listed should be considered the cost only in a world where firearms are almost non-existent. In a world where even the simplest matchlock musket or wheellock pistol is available, any gunsmith worth their salt could quickly and easily produce a handgonne. In this case, reduce the cost to 10% of the price as listed for handgonnes. Ammunition prices and the cost of explosive powder should remain consistent to their contemporaries as few major changes are occurring in that department.

Hand ignition

Description: Direct hand ignition is a firing mechanism from cannons that was common in primitive firearms like handgonnes. A small touchhole or vent would exist at the bottom of a barrel, into which a burning ember, hot wire from a brazier, or slow match would be placed igniting the powder. This method has a drawback in the form of needing one hand completely free to hold the igniter and the user must look at the weapon, not where they are aiming while doing it.
History: In primitive firearms, this was the most common method. While later methods developed, they were more for sophisticated weapons like the arquebus and musket, not just simple handgonnes. Assume all handgonnes use a hand ignition system unless otherwise specified.
Game mechanics: As the base assumption of handgonnes, the rules presented above for the time to reload and fire a handgonne is based on the assumption it uses this firing mechanism. If a firearm-firework or other weapon that normally uses a fuse is instead replaced with direct hand ignition, reduce the firing time to a single full-round action.
Cost: Any early firearm can

Reloading and Firing Times of Handgonnes

Handgonne Type	*Normal Reload Time*	*Reload with Rapid Reload Feat*	*Firing Time*
Hand bombard, hand mortar	2 full-rounds	1 full-round + 1 move action	1 full-round
Hand cannon	1 full-round + 1 move action	1 full-round	1 full-round
Hand culverin	1 full-round + 1 move action	1 full-round	1 full-round
Hand gonne, gonnette, petronel	1 full-round	1 standard action	1 standard action

automatically be made to be fired by hand, from tearing the fuse out of a firearm-firework and pushing an igniter into the hole to manually opening a flintlock musket's flashpan and placing an igniter into the powder there.

Serpentine

Description: With the introduction of a flashpan (a small indentation above a touchhole that can hold a small amount of powder) on a firearm, you increase the size of the area that a lit match needs to strike. Once that is common practice, the serpentine becomes a clear option. This is by far the simplest mechanical firing mechanism, in that it is a simple S-curve piece of metal that is hinged to a firearm and allows the user to pull up or down on one end of the curve to lower a slow match clamped into place on the other end into the flashpan, igniting the firearm. The biggest advantage of this method is that it can be used while both hands are on the firearm at the same time and without needing to take your eyes off your target to be sure you are hitting the touchhole.

History: By the 1400's firearms were becoming more commonplace and simple solutions like this were being introduced. The serpentine itself was the basis of later firearm firing mechanism designs like the matchlock, and so was short lived as an option itself.

Game mechanics: The primary benefit of using a serpentine is that the slow match is held by the firearm securely, freeing your other hand to still steady the weapon for firing. The serpentine still had to be lowered by hand and was thus very slow to use, meaning firing handgonnes with a serpentine still takes just as long as listed above, only reduce all recoil penalties by half.

See the matchlock entry below for some of the other effects of keeping a burning match attached to a weapon at all times.

Serpentine firearms have an uncovered open flashpan, meaning that the weapon must remain in an upright position once prepared for fire or the primer could fall out leaving nothing for the match to ignite. Moving with a firearm that has been primed in most situations is not difficult, but if the wielder crosses uneven terrain or makes any sudden movements, they must make an Acrobatics check, DC 15 or risk spilling the primer. Anytime a character is rocked by movement, struck in combat or otherwise violently shaken with a lit slow match, they need to make a Reflex save DC 14 or risk lighting the primer on fire. On the roll of a natural 1 on this Reflex save, assume the weapon was fired accidentally and treat it as a misfire. Adding primer to a prepared gun is a move action to perform safely with a burning match or a swift action with the Rapid Reload feat.

Cost: The serpentine is a very simple mechanical device. The S-curved piece of metal could be fashioned fairly quickly out of almost any metal and the hinge is a simple addition to the firearm. The actual cost of adding a serpentine should only be 1 gold piece, though it can only be added to handgonnes in a world where the idea has been first thought of.

Matchlock

Description: The matchlock was the first true firing "mechanism." The difference between a serpentine and a matchlock is the addition of a trigger and a spring. When the trigger was pulled, a spring attached to the serpentine would curl down and ignite the primer in the pan sending flames down a vent to ignite the powder charge in the barrel. This simple addition is a necessary development to making true muskets however and opened up an entirely new area of development and ways to improve firearms (for more on the development of firing mechanisms, see the book **Call to Arms:** *Pistols and Muskets*).

History: First produced in Europe by the 1440's, the matchlock firearm remained popular as a cheap and easy to use firearm until the true flintlock came into dominance around 1720. Matchlocks remained popular in Asian countries like Japan until significantly later, almost at the time of the introduction of actual cartridge-firing rifles (an advanced firearm).

Game mechanics: There is risk when working around a lit slow match, and either stowing it safely while handling gunpowder or dousing the match and relighting it between shots. Use a weapons normal reloading time unless reloaded when the slow match is either not actively lit or not attached to the firearm, in which case reduce the time needed by one step (2 full-round actions to 1 full-round action + 1 move action, 1 full-round action + 1 move action to 1 full-round action, 1 full-round action to 1 standard action, etc.). Lighting a slow match is typically a standard action itself and it was not uncommon for a slow match to have both ends lit incase wind or water extinguished one.

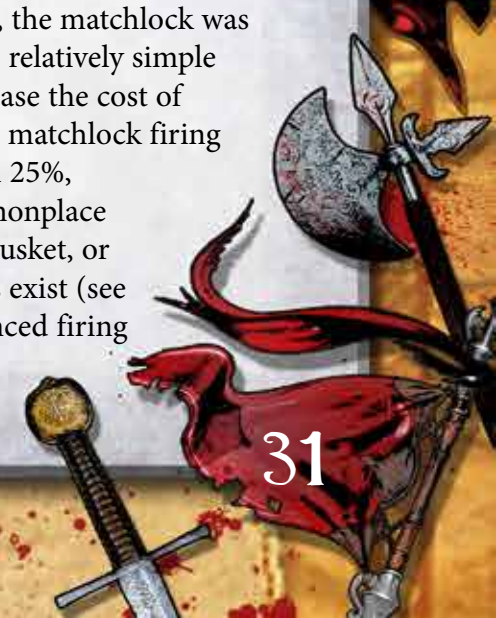
A burning slow match presented numerous problems. It had a strong odor when burning that was easy to detect and the end would glow in the dark, giving any attempt at concealing a matchlock firearm or hiding with a prepared firearm a -10 to all related skill checks. In addition, the slow match could ignite other easily flammable substances like paper, oil or gunpowder if mishandled. A slow match was also almost impossible to keep lit in wet and windy weather (see **New Adventuring Gear: Slow match** below).

Matchlock firearms have an uncovered open flash pan, meaning that the weapon must remain in an upright position once prepared for fire or the primer could fall out leaving nothing for the match to ignite. Moving with a matchlock that has been primed in most situations is not difficult, but if the wielder crosses uneven terrain or makes any sudden movements, they must make an Acrobatics check, DC 15 or risk spilling the primer. Anytime a character is rocked by movement, struck in combat or otherwise violently shaken with a lit slow match, they need to make a Reflex save DC 14 or risk lighting the primer on fire. On the roll of a natural 1 on this Reflex save, assume the weapon was fired accidentally and treat it as a misfire. Adding primer to a prepared gun is a move action to perform safely with a burning match or a swift action with the Rapid Reload feat.

Cost: When first introduced, the matchlock was an expensive addition to the relatively simple design of handgonnes. Increase the cost of any primitive firearm with a matchlock firing mechanism by an additional 25%, unless matchlocks are commonplace on other firearms like the musket, or more advanced mechanisms exist (see sidebar). If even more advanced firing

Additional Firing Mechanisms

The matchlock was only the first of many firing mechanisms invented for use on early firearms. Though more commonly associated with pistols and muskets, wheellocks, snaplocks, snaphance, flintlocks, and caplock mechanisms could in theory be added to a primitive firearm like a handgonne. Explicit rules detailing these locks and much else can be found in **Call to Arms:** *Pistols and Muskets*.



mechanisms exist, adding a matchlock to an primitive firearm should cost little to nothing.

New Special Weapon Qualities for Handgonnes

All of the following new firearm weapon qualities must be added at the time of the crafting of the firearm. Most could not be added as an "after-market" addition without gamemaster approval. The costs presented generally assume the price of purchasing the weapon, not crafting it. See the **Rule Appendix** for new rules about crafting firearms for more information on having players craft firearms with these weapon qualities.

Stacking Costs: When designing a weapon with more than one cost increase or decrease, apply each price change in the order that makes the most sense to you and your gamemaster. For example, size changes affect the entire weapon, regardless of how many barrels it has or how it is loaded, so those values should be applied last.

Combined firearm: A combined firearm is any combination of a melee weapon and a firearm. These were particular popular in the early days of firearms when one good shot was all most people were able to get off. After the invention of the flintlock mechanism, it was more common for people to combine flintlock firearms with mundane items like walking sticks, jailor's keys or even dinning ware. In rare cases, two or more firearms may even have been built into a weapon. Any object long and large enough to either act as a barrel (in the case of polearms or hafted weapons) or to be designed in-line with a barrel (in the case of swords and daggers) can be used as a combined firearm.

Melee weapons with combined firearms typically are made to have a "safety" engaged while the weapon is used in melee. Engaging or disengaging this safety is a swift action. Melee weapons designed to be fired after a blade is dug in or once a spear has found purchase will not include this kind of safety mechanism. In these cases, treat any roll of a natural 1 as a misfire for the combined firearm. Treat creating any combined weapon and firearm as two separate weapons for rules concerning magically enhancing them.

Cost: First double the price (200%) of the base item, including doubling the price of the cost to create it as a masterwork weapon or tool. Add this price to 125% of the price of the firearm. This accounts for increased difficultly of integrating the mechanisms into a weapon. When crafting a combined firearm, you must provide half this final price as raw materials (see **Rules Appendix** below).

High/Low Caliber: Caliber is a standard measure of the size of the internal diameter of a barrel. Generally speaking, the ball or bullet fired from a barrel matched or was slightly smaller than the caliber of the weapon. Though subtle changes in caliber often existed, mechanically there is little difference between a .95 caliber handgonne and a 1.10 caliber handgonne. Though most gonne calibers were right around 1.0 (as in 1 inch barrel diameter), an impressive figure compared to modern firearms, the low speed at which exposive powder fired balls made them less powerful than a similarly sized modern cartridge fired weapon. A low caliber weapon is one that has a smaller enough of a bullet that it deals less damage. Decrease the damage die used by one size step, for instance from 1d10 to 1d8. A high caliber weapon is one that has a larger enough of a bullet that it deals more damage. Increase the damage die used by one size step, for instance from 1d10 to 1d12.

Cost: The caliber of the barrel is ultimately immaterial to base cost as presented for the firearms, so the cost of a lower or higher caliber weapon does not increase or decrease the cost of the weapon. Ammunition however is significantly affected. Decrease the cost of any ammunition for a low caliber firearm by half (50%). Increase the cost of any ammunition for a high caliber firearm by half (50%). Unless deemed so by

the gamemaster, additionally assume that all ammunition for the weapon must be custom cast as the size is non-standard to the most common weapons made. Is using the ammunition rules presented below (see **New Ammunition**), increase or decrease the multiplier by one instead of doubling or halving the cost when appropriate.

Hooked: Handgonnes can be fitted with a hook that allows them to be more easily braced against an object by digging the hook into a log or crack in a stone wall. Normally this is a standard action (see **Rules Appendix** below), but masterwork hooks can be added that are effective in combat and make bracing the handgonne a move action. *Cost:* Including a standard hook into a handgonne is relatively inexpensive, costing an additional 5 gp. Crafting a masterwork hook into a handgonne costs 100 gp, but a handgonne with a proper hook can be wielded as a light pick in melee combat. On the roll of a natural 1 when fighting with a hooked handgonne as a pick that is loaded to fire the ball and powder loosen becoming useless. A discharged handgonne can be used as a melee weapon without harm coming to the weapon.

Superposed load: This firearm is capable of having multiple shots prepared to be fired from a single barrel, each stacked in front of another and having their own firing mechanism making them able to be fired independently. If a shot is fired from further down the line than the one closest to the end of the barrel, the firearm suffers an automatic misfiring as if already had the broken condition, dealing damage for each shot still loaded. Each successive shot fired after the first takes cumulative a -2 penalty from the fouling of the barrel. Cleaning the barrel between shots removes this penalty (see **Rules Appendix** below). The weight of a superposed weapon only increases by one-fifth (20%) of the weapons normal weight for each additional shot added. The superposed load is more likely to misfire due to large number of shots being prepared on one another, increase the misfire chance by +1. *Cost:* Increase the cost of the firearm by half (50%) of the base firearms cost per additional superposed load. For instance, a hand gonne capable of firing 3 total shots superposed on one another would cost 4,000 gp instead of 2,000 gp.

Volley gun: The volley gun weapon quality can be added to any firearm design except those with the "pepperbox" weapon quality, increasing the number of barrels it has. Volley guns differ from pepperbox designs because all barrels are fired at the same time using a single trigger. All the barrels of a volley gun must focus on the same target. Adding one barrel to a firearm applies a -4 recoil penalty on each attack. Each additional barrel of a volley gun increases the penalty by -2 recoil penalty cumulatively to each attack. For instance, a seven barreled nock gun takes a -14 recoil penalty to each of the weapon's seven attacks against a single target. Each additional barrel added to a volley gun increases the weight of the weapon by one-fifth the base weapons total weight. If a one-handed firearm design weighs more than twice what its base weapon weighs, it becomes a two-handed firearm. If a two-handed firearm weighs more than three times what its base weapon weighs, it must be mounted to fire or the recoil possibly knocks the wielder prone (Strength check DC 10, +1 per additional barrel) and doubles the recoil penalty when fired (see **Rules Appendix** below). Misfires are handled per-barrel, with individual barrels being able to gain the broken condition and even explode if used after having the broken condition. Unloaded barrels at the time the trigger is pulled just do not fire without any penalty or chance of a misfire. *Cost:* The price of each barrel added to a weapon is equal to one-half the price (50%) of the base weapon. For instance, a quadruple barreled volley gun hand gonne would cost 5,000 gp instead of 2,000 gp (and have a -8 recoil penalty to each shot when all 4 barrels were fired simultaneously).

Firearms

Two-Handed Firearms	Price	Dmg(S)	Dmg(M)	Critical	Range	Misfire	Capacity	Weight	Type	Special
Gonnette	1,500 gp	1d6	1d8	x3	15 ft.	1-2 (5 ft.)	1	4 lbs.	B and P	--
Hand bombard	4,000 gp	2d6	2d8	x4	30 ft. cone	1 (10 ft.)	1	40 lbs.	B and P	Scatter, indirect fire
Hand cannon	4,000 gp	2d8	2d10	x4	30 ft.	1 (10 ft.)	1	40 lbs.	B and P	Indirect fire
Hand culverin	3,000 gp	1d10	1d12	x4	30 ft.	1-2 (5 ft.)	1	12 lbs.	B and P	--
Hand gonne	2,000 gp	1d8	1d10	x4	20 ft.	1-2 (5 ft.)	1	8 lbs.	B and P	--
Hand mortar	3,000 gp	Varies	Varies	Varies	25 ft.	1-3 (10 ft.)	1	15 lb.	Special	See text
Petronel	2,500 gp	1d8	1d10	x4	20 ft.	1-3 (5 ft.)	1	7 lbs.	B and P	--

Wall gun: Essentially oversized versions of a standard firearm, wall guns are designed to be braced or fired from a tripod (see **Rules Appendix** below). Firearms with the wall gun weapon quality are always two-handed firearms. Firing a wall gun without first bracing the weapon or using a mount imparts a -4 recoil penalty on attack rolls and the recoil possibly knocks the wielder prone (Strength check DC 20). A Large or larger creature can fire a wall gun one size smaller than it is without mounting it as a normal two-handed weapon and without the danger of being knocked prone, but takes the normal penalty for firing an inappropriately sized weapon and the recoil penalty. Wall guns often have hooks, lugs and other attachments built right into the basic design of the weapon to make for easy bracing and mounting. Increase the weight of the base weapon by one-half. Double the number of damage dice the weapon deals, for instance 1d12 becomes 2d12. The longer barrel of a wall gun increases the distance it can be fired, increasing the range increment of the firearm by 10 feet.

Cost: Increase the cost of the firearm by two and a half times the normal price (250%). For instance, a wall gun hand culverin would cost 7,500 gp instead of 3,000 gp.

Gonnette: The "small gonne" or "petit gonne" was almost as much a toy or amusement as a weapon. It consists of a miniaturized version of a handgonne, with a barrel only a few inches long and a short but sturdy handle about 12 to 18 inches and able to be held in one hand (though it still counts as a two handed firearm because the second hand needs to be used to ignite it). The gonnette uses 1 dose of explosive powder and a firearm bullet as ammunition. The gonnette counts as a club if used in melee.

Hand bombard: This entry is the same as the culverin found in the *Pathfinder Roleplaying Game: Ultimate Combat* book, and is included to act as a base that can be modified by the various special weapon qualities above. More akin to an early form of the blunderbuss or a miniaturized version of the standard bombard, this firearm has a relatively short barrel that is wide in caliber to allow for easy loading of powder and grapeshot (represent in-game as two handfuls of standard firearm bullets, or roughly 25 for simple mechanics) and often includes a vase-like shape attached to the end of a 6 to 7 foot pole. Firing a hand bombard without bracing it against a support (such as a wall, a window, or a stand) imparts a -4 recoil penalty on the attack rolls, and the wielder is knocked prone (see **Rules Appendix** below). The hand bombard is too heavy to wield adequately as a melee weapon (use improvised weapon rules). A hand bombard uses 4 doses of explosive powder and grapeshot as ammunition. The hand bombard is only a scatter

weapon, the hand cannon represents a similar weapon loaded with a single cannonball.

Hand cannon: The single ball-shot design of the hand bombard, the hand cannon is really a cannon just barely small enough to be carried and fired by as single gonner. Firing a hand cannon without bracing it against a support (such as a wall, a window, or a stand) imparts a -4 recoil penalty on the attack rolls, and the wielder is knocked prone (see **Rules Appendix** below). The hand bombard is too heavy to wield adequately as a melee weapon (use improvised weapon rules). A hand cannon uses 4 doses of explosive powder and a small cannonball as ammunition. The hand cannon is only a single bullet weapon, the hand bombard represents a similar weapon loaded with grapeshot for a scatter effect.

Hand culverin: The hand culverin is a refinement of the hand cannon and designed to fire a ball attached to the end of a 3 or 4-foot pole. The hand culverin is designed to be fired with the pole under the user's arm or over their shoulder, steadying the pole and barrel with one hand and using the other to ignite the touchhole. This was still not perfect, as the kick of the weapon was strong – imparting a -2 recoil penalty on attack rolls unless braced (see **Rules Appendix** below) but no longer threatened to knock a gonner prone. The hand culverin uses two doses of explosive powder and a larger-than-average firearm bullet as ammunition. The hand culverin counts as a greatclub when used in melee. A hand culverin uses 3 doses of explosive powder and a firearm bullet as ammunition.

Hand gonne: The hand gonne was a true refinement of earlier handgonnes into a weapon for a single footsoldier. The weapon was balanced and able to be fired without assistance or bracing by a single gonner by tucking the weapon under the gonner's arm or over their shoulder. The hand gonne counts as a heavy mace when used in melee. A hand gonne uses 2 doses of explosive powder and a larger-than-average firearm bullet as ammunition.

Hand mortar: Not too long after the development of handgonnes in general did someone begin experimenting with launching grenades and other explosive weapons with a cannon. The hand mortar is actually an attempt at that small enough to be used by a single user and launched by bracing the firearm against the shoulder. Hand mortars count as indirect fire weapons (see "Indirect-Fire Ranged Siege Engines" in the *Pathfinder Roleplaying Game: Ultimate Combat* for full rules) with a range increment of 25 feet (no minimum), a targeting DC of 20, and 10 maximum range increments requiring a crew of 1. The greatest difficulty when using a hand mortar is timing the grenade being launched. There were no impact-based triggers; instead a grenade must use a timed fuse. The fuse could reliably be ignited upon triggering the hand mortar, but the fuse needs to be long enough for the shot to reach

Indirect Fire with a Hand Bombard or Hand Cannon

Similar to a full-size siege engine bombard, the hand bombard and hand cannon can be used as indirect fire weapons. The statistics presented above represent using them as direct fire weapons. As an indirect fire weapon, they both have a range increment of 50 feet (minimum 25 ft.), and a targeting DC of 15 with a crew of 1 (see "Indirect-Fire Ranged Siege Engines" in the *Pathfinder Roleplaying Game: Ultimate Combat* book for full rules). Treat the area affected by a hand bombards scatter shot as a 10-foot radius burst rather than a cone shape, otherwise functioning exactly like a normal scatter shot from a firearm. The maximum number of range increments for both using indirect fire is 10 increments.

New Mundane Weapons

Simple Weapons

Ranged Weapons	*Price*	*Dmg(S)*	*Dmg(M)*	*Critical*	*Range*	*Weight*	*Type*	*Special*
Bullet-shooting crossbow	50 gp	1d4	1d6	19-20/x2	75 ft.	4 lbs.	B	Nonlethal, see text

its destination before exploding unless the user wanted to create an air burst. This often gave opponents time to move away from launched grenades. Hand mortars are not designed for use as weapons in melee (use improvised weapon rules). A hand mortar uses 3 doses of explosive powder and a grenade as ammunition.

Petronel: While most handgonnes are attached to a long pole to more easily control the weapon when fired, the petronel was instead made to be used by knights from horseback with only a short typically metal pole attached to the barrel. The difference in stability is made up for by having the base of the petronel held tightly or even mounted directly onto the chestpiece of their armor, generally with a strap keeping the gonne close if dropped while riding. Used with a saddle mount, the petronel allows a mounted warrior to effectively aim, fire and reload a handgonne without leaving the saddle. A petronel is effectively a hand gonne except when specifically used on a mount with a saddle mount. The firearm then counts as fully braced (see **Rules Appendix**) with all penalties for using a ranged weapon while mounted halved (this can be further reduced again by feats, spells and other abilities). A petronel counts as a heavy mace when used in melee. A petronel uses 2 doses of explosive powder and a firearm bullet as ammunition.

Bullet-shooting crossbow: A natural development of the traditional crossbow, the bullet-shooting crossbow was actually first used to hunt small game and birds. Bullet-shooting crossbows were first made to fire ceramic bullets but later adopted half ounce or greater lead bullets. The relatively low velocity and non-piercing shape of a bullet actual decreases the lethality of shots fired from the crossbow. Ceramic shots deal non-lethal damage at any range. Stone and lead shots deal lethal damage only within the first range increment, dealing non-lethal damage for any other distance. Bullet-shooting crossbows always deal lethal damage on critical hits. Any standard sling bullet or early firearm bullet can be fired from the pouch of a bullet-shooting crossbow, typically dealing lethal damage within only the first range increment unless magical in nature. Magical sling bullets fired from a bullet-shooting crossbow function normally unless otherwise specified.

New Ammunition

For ease of game mechanics, firearm ammunition is portrayed as being almost universal. A bullet for any firearm seems to be able to fit in any other firearm. While in later times, standard caliber (the origin of the word) weapons were mass produced for use in standing armies it was much more common for soldiers to need to cast their own balls for each firearm they owned. Bullets in early firearms, especially primitive ones like the firework-firearms and handgonnes, were never perfect fits always needing to be slightly smaller than the barrel they were being used in to allow for proper use. That being the case, using the wrong sized bullet in a firearm could be quite dangerous and is represented below as new ammunition type "loose-fitting shot."

The varying sizes of bullets and balls can become particularly important for handgonnes as essentially each type is firing a significantly

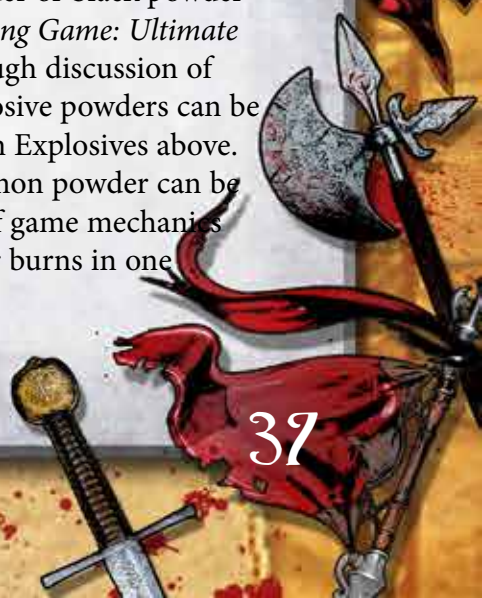
Ammunition Costs

Firearm	*Cost Multiplier*
Gonnette	1x
Hand bombard	See text
Hand cannon	3x
Hand culverin	2x
Hand gonne	1.5x
Petronel	1x

Item	*Cost*	*Weight*
Ceramic bullet (1)	-	-
Ceramic bullet (50)	1 sp	1 lb.
Ceramic pellets (1 handful)	-	-
Ceramic pellets (50 handfuls)	1 cp	1 lb.
Common explosive powder (1 dose)	10 gp	--
Common explosive powder (keg of 100 doses)	1,000 gp	5 lbs.
Garros (1)	2 sp	--
Garros (5)	1 gp	1 lb.
Lead bullet (for crossbow) (1)	1 sp	--
Lead bullet (for crossbow) (30)	3 gp	1 lb.
Loose-fitting shot	See text	See text
Simple explosive powder (1 dose)	1 gp	--
Simple explosive powder (keg of 100 doses)	10 gp	--
Stone bullet (1)	-	--
Stone bullet (40)	1 sp	1 lb.
Stone pellets (1 handful)	-	-
Stone pellets (40 handfuls)	1 sp	1 lb.
Superior explosive powder, dazzling (1 dose)	22 gp	--
Superior explosive powder, quieted	(1 dose) 25 gp	--
Superior explosive powder, smokeless (1 dose)	20 gp	--
Superior explosive powder, sulfur-free (1 dose)	20 gp	--

different sized ball that requires different amounts of explosive powder (which comparatively can easily be represented as units of powder needed for a standard firearm). Rather than list prices for every firearm's design per bullet or cannonball plus material, use the following table to find a cost multiplier to apply to any type of firearm bullet here or elsewhere (for instance, a adamantine firearm bullet for a hand cannon would cost X gp instead of 61 gp).

Common explosive powder: This entry represents standard gunpowder or black powder from the *Pathfinder Roleplaying Game: Ultimate Combat* book. A more thorough discussion of the differences between explosive powders can be found above in the section on Explosives above. A loose pile in a line of common powder can be used as a fuse, and for ease of game mechanics assume 25-feet of the powder burns in one second.



Ceramic bullet (firearm or crossbow): Clay, porcelain and glass bullets were some of the earliest projectiles used in firearms because of how easy it was to craft them into round shapes. The main disadvantage of ceramic bullets is that they lack the penetrating power of other bullets, meaning the firearm always resolves as normal ranged attack, even in the first range increment. Additionally, beyond the first range increment ceramic bullets deal non-lethal damage breaking on impact with even flesh except in the case of the roll of a critical hit (resolved normally). Rules specific to using ceramic bullets in a bullet-shooting crossbow are detailed in that weapons description.

Ceramic pellets (firearm): Ceramic pellets always resolve attacks as normal ranged attacks, not touch attacks and always deal their damage as non-lethal except when they roll a critical hit. See ceramic bullets above for more information.

Garros: Also known as "musket arrows" these are an all-metal crossbow-style bolt with metal fins designed to be fired from a smoothbore early firearm. They were expensive to make and though they had further range increments, they were not any better at penetrating armor at significantly greater distances. Increase the range increment of any firearm they are used in by an additional 10 feet, but only resolve as touch attacks in the normal range increment of the firearm. Garros are typically only made to be fired from early firearms and have a wad of leather or hemp in the middle of the arrow to keep a tight seal for use in firearms. Without this wadding, they can be fired as crossbow bolts in most crossbows suffering a -2 to attacks because of design differences. When a garros is used in a fire arrow, resolve attacks in the first range increment as ranged touch attacks using normal early firearm rules.

Lead bullet (crossbow): Weighing at least a half ounce each, lead bullets for bullet-shooting crossbows work effectively in small slings but are often loose-fitting shots for firearms because they don't typically have the more rounded shape desired in firearms bullets.

Loose-fitting shot: The exact caliber of a firearm varies from maker to maker. Firearms before the musket, like the handgonne, are even more prone to having odd sizes. Though most firearms were loaded with shot slightly smaller than their actual barrel for ease of loading, balls loaded into smoothbore firearms that are too loose-fitting are not as effective. Firing a loose-fitting ball from an explosive powder firearm takes a -2 penalty on your attack roll. The total number of range increments possible is also reduced by 1. The chance of a misfire slightly increase by 1. Rifled firearms that fire loose-fitting shots gain no bonus from the rifling as the spin is not imparted onto the shot. Loose-fitting shot typically costs as much as the ammunition normally does.

Simple explosive powder: This entry is given only as a go-to price to assume for simple explosive powder. A more thorough discussion of the differences between explosive powders can be found above in the section on Explosives above. A loose pile in a line of simple powder can be used as a fuse, and for ease of game mechanics assume one-foot of the powder burns in one second.

Stone bullet (firearm or crossbow): Before the use of lead or other metal types of bullets, stones were shaped and fitted to be fired out of early firearms and cannons. While stone is not as hard as metal, it still retained a decent amount of penetration until more powerful firearms began to be used and the loss of penetration over distance become a bigger concern. Stone bullets when shot from a firearm only resolve attacks in the first range increment as touch attacks, regardless of what other qualities the weapon

has. Properly fitting stones also takes a long time, requiring 10 minutes per stone bullet to properly shape the bullet to a specific firearm. Various Craft skills can make the DC 10 check with access to artisan tools, but any failure means that stone is useless for the firearm and can only be used in the firearm as loose-fitting shot if at all.

Stone pellets: Stone pellets are basically just handfuls of small pebbles and gravel. They are harder than ceramic pellets but lack any ability to pierce armor. When used in scatter weapons, they count as normal shot except that they never count as ranged touch attacks, resolving as normal ranged attacks instead.

Superior explosive powder: These entries are only included to give examples of some superior explosive powders that can exist. When adding an explosive or firework quality to a superior powder, assume the cost listed to add the quality is for 50 doses of powder. A loose pile in a line of superior powder can be used as a fuse, and for ease of game mechanics assume 50-feet of the powder burns in one second.

Dazzling: When used in a firearm, dazzling powder produces an effect that will dazzle for 1 round any creature standing within a 10-foot burst centered on the end of the barrel of the firearm used (Fortitude save DC 15 negates). The wielder of the firearm can also be affected by this effect if they do not shield their eyes.

Quieted: This superior explosive powder has a significantly quieter report than common explosive powder. While far from completely silent, quieted powder halves the distance at which an explosion or shot can be heard and doubles the difficulty of hearing-based Perception checks to locate it. Otherwise, this powder functions normally.

Smokeless: Smokeless superior explosive powder produces little to no smoke effect when used in a firearm (see the **Rules Appendix** for additional rules).

Non-fouling: While still producing smoke, this sulfur-less superior explosive powder does not foul a firearm like normal powders (see the **Rules Appendix** for additional rules).

New Armor and Shields

Proofed Breastplate: In the earliest ages of the introduction of firearms like the handgonne to the battlefield, armorers would often test the new breastplates of a man-at-arm's plate armor against an actual firearm. The small dent was often encircled as proof of this test. These breastplates were typically heavier than the standard of that time and more angular helping to deflect rather than absorb a gunshot. Treat creatures wearing a proofed breastplate as having DR 3/- against any ranged attack that deals 1d10 or less as its damage die that occurs beyond its first range increment. Weapons of a larger caliber like the heavy arquebus and musket were better able to defeat this armor even at range but smaller firearms and pistols could possibly be stopped as could most bows and crossbows.

Proofed breastplates can be worn as part of breastplate armor, half-plate or full-plate armor (i.e. any armor with a large metal plate as its chest piece). It does not increase the armor bonus of the armor, but it does increase the weight by 5 lbs. Additionally, increase the armor check penalty by -1 and the arcane spell failure chance by 10% and decrease the maximum Dexterity bonus by 1 (minimum 0).

Cost: Proofing increases the cost of the armor by +150 gp.

Mantlet

A generic term for a number of forms of portable shield-walls, the mantlet was essentially mobile cover. From a simple wooden wall with staked legs and a stand to a proper steel reinforced wall on wheels, a mantlet was designed for stopping arrows, bolts and firearm bullets. When using any of the mantlets described below, a creature always chooses one edge of their space to have the mantlet set up on and that edge is treated as a solid wall for deciding which attacks the types of cover provided affect.

Simple Mantlet

The simplest form of mantlet was a wooden wall, either lashed or woven together and held in place by a set of stakes and standing legs or by a person. This would normally be designed to be large enough for an archer, crossbowman or handgonnner to be able to hide behind and gain total cover while reloading a weapon. The very simple design of this kind of object doesn't have the finesse that improved designs below do, so rarely could a creature easily fight from behind a simple mantlet. At gamemaster discretion, a character may gain partial or normal cover by fighting from behind a mantlet. Likewise, a sturdy door or other large wooden object like a table can be considered to act as an improvised simple mantlet. Setting up a simple mantlet is typically a full-round action and requires a standard action to take back down. A simple mantlet has a hardness of 5 (wood) and 20 hit points per 5-foot section.

Cost: 10 gp per 5-foot section

Improved Mantlet

Purpose made for open warfare, an improved mantlet was generally some form of wheeled wall that was often made for a single person to use, typically in siege warfare. Traditionally set on wheels with a built-in angled stand, an improved mantlet could be wheeled into place, dropped to the ground and provided improved or total cover depending on if the user were attacking or reloading. A Medium creature with a well made improved mantlet can move at base speed of 20 with a well-made mantlet. Once set up, a creature can attack through an arrow slit or rounded corner of the mantlet gaining improved cover (+8 to AC and a +4 bonus on Reflex saving throws, in addition to temporarily gaining improved evasion). Even against attacks not perfectly lined up with a mantlet, a creature can gain normal or partial cover while fighting from behind the mantlet. Dropping an improved mantlet to the ground is a standard action and it is only a move action to prepare it to be moved again. When not dropped to the ground an improved mantlet leaves a creatures feet exposed to attack.

An improved mantlet has a hardness of 7 (wood reinforced with metal strapping) and 30 hit points per 5-foot section.
Cost: 100 gp per 5-foot section

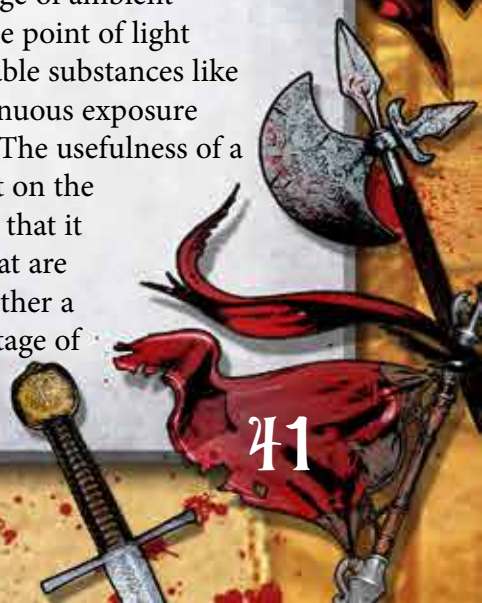
Pavise
Essentially a tower shield made to stand on its own, they were originally intended to protect archers and crossbowmen during sieges, but strongly adopted by early gonners as the only safe way to always have a way to reload your handgonne in the field and protect yourself from incoming fire. A pavise can be held up by someone else or it can be staked into the ground or otherwise held up by supports. In well equipped armies with an abundance of soldiers, the pavise is likely to have a dedicated groom or extra archer known as the pavisier who is in charge of carrying and setting up the pavise. Pavises historically have been elaborately decorated with saints or a town's coat of arms.
You do not need to be proficient in tower shields to be able to set up and take cover behind a pavise. Setting up a pavise is a full-round action, after which it can grant a bonus to your AC in one of two ways. Actively fighting from behind a pavise with a ranged attack against creatures not in melee with you grants you partial cover (+2 to AC and a +1 bonus on Reflex saving throws). This bonus does apply to even magical ranged touch attacks since the pavise is not connected to you and cannot be targeted and still effect you. You can also choose to take cover behind a pavise (+4 to AC and a +2 bonus on Reflex saving throws). A wooden pavise has a hardness of 5 and 20 hit points, but a steel pavise has a hardness of 10 and 25 hit points. A pavise can be used as a tower shield by characters proficient with them. Unstaking or otherwise taking down a pavise is standard action.
Cost: 60 gp

New Adventuring Gear

Item	*Price*	*Weight*
Amadou	5 cp	1 lb.
Burning glass	10 gp	--
Charcloth	1 sp	--
Custom bullet-casting tools	5 gp	2 lbs.
Driptorch	15 gp	3 lbs.
Fire piston	5 gp	--
Fire steel	2 gp	--
Fuse (1 foot)	1 gp	--
Fuse (50 feet)	50 gp	2 lbs.
Punk (1)	1 cp	--
Punks (100)	1 gp	1 lb.
Saddle mount	50 gp	30 lb.
Saltpeter (niter)	1 gp	1 lb.
Shooting stick (monopod, musket fork)	2 gp	1 lbs.
Shooting sticks (bipod)	4 gp	2 lbs.
Shooting sticks (tripod)	6 gp	4 lbs.
Slow match (1 foot)	1 cp	--

Amadou: Made from the top portion of various types of fungus, amadou is a highly flammable spongy substance that works as a natural tinder for starting fires. Using amadou with any form of igniter (ex. flint and steel) makes getting a flame going much faster, reducing the time it takes to get a tinder burning by one step (see **Lighting Fires** sidebar). Only a few ounces of amadou are needed to start most fires, though it is often sold as whole dried fungus pieces by the pound.

Burning glass: Whether a lens designed to focus sunlight or concave mirrors angled to reflect many beams of sunlight to a single point, a burning glass takes advantage of ambient sunlight to produce an intense point of light that can ignite highly flammable substances like tinder with 5 rounds of continuous exposure (see **Lighting Fires** sidebar). The usefulness of a burning glass is so dependent on the presence of clear, sunny skies that it is rarely used for purposes that are dire or time-dependent. Whether a burning glass can take advantage of



the light produced by magic like the *daylight* spell to ignite fires is left to gamemaster discretion.

Charcloth: This cotton or linen fabric has been slowly charred in a controlled fire so that it is ideal tinder for lighting a fire. Using charcloth with any form of igniter (ex. flint and steel) makes getting a flame going much faster, reducing the time it takes to get a tinder burning by one step (see **Lighting Fires** sidebar). The price above assumes the charcloth is either a 10-foot roll of 1 inch wide cloth or a square patch 1-foot by 1-foot.

Custom bullet-casting tools: Many early firearms required custom-made bullets, either to account for their unique caliber as is the case for handgonnes or to design specific shapes to gain the benefits of rifling. Lead has such a low melting point that a properly made campfire can be used to melt it down. Assume it takes one hour of work to cast a set of ten new balls using this method per set of tools you have. Alternately, singular balls can be cast in 10 minutes of work per set used. These times can be reduced to ten minutes and 1 minute if you have access to a controlled flame source like a blacksmith's furnace. Using a different metal requires the use of the Craft (firearms) skill or the Gunsmithing feat (see **Rules Appendix** below). Ceramics are made using a similar tool that requires a third of the time to cast lead bullets.

Driptorch: A driptorch is the name for a number of different tools designed to have a continuously burning flame on the tip of a watering-can style device that can be tipped to pour a fuel onto objects with the purpose of igniting them. While first used as a forest management tool and to start multiple fires in a large army's camp, the device is so simple a design that any firebug with determination could improvise one from a container with a spout a burning rag and a liquid fuel. Using the **Lighting Fires** rules (see sidebar), a driptorch counts as kindling that can ignite fuel as a move action.

Fire piston: A fire piston, also called a slam rod, is a unique method of igniting tinder using a piston to rapidly compress air so fast that it ignites. This method was likely first developed as an adaptation of blowpipe weapons and was historically popular in the real-world in South East Asia. Using the **Lighting Fires** rules (see sidebar), a fire piston creates sparks, igniting tinder as a swift action.

Fire steel: Also called a fire striker, is a simple steel tool that is some form of stylized metal shape curled around on itself so that a steel edge can be easily pressed against a piece of flint chert held in place by the fire steel. This makes creating sparks to light a fire a simple matter of depressing or flexing the steel edge against the flint being held in place. Fire steels are typically made well enough to consistently produce sparks and are small enough to fit in tinder boxes or a small pouch or pocket. Using the **Lighting Fires** rules (see sidebar), a fire steel creates sparks and can ignite tinder as a swift action.

Fuse: A fuse is the most common method of igniting an explosive, firework or even some firearms. Fuses can take many forms; from paper tubes filled with explosive powder to cotton string treated in a slurry of flammable products like explosive powder (this is commonly called a "black match"). Fuses can also be designed to be "quick match" or "piped" to burn rapidly, covering hundreds of feet in mere seconds using a superior explosive powder, or it can be used as a timing device or "delayed fuse" that burns at a set rate (typically 1 inch per second). Assume all devices that use a fuse come with a short fuse attached as part of the cost of the device. This entry is specifically for those that wish to have an abundance of additional feet of fuse for either longer fuse times or being able to be further from a device when it is ignited. Most

pyrotechnicians will have many different fuse types and lengths on hand for whatever purpose they need. Particularly large fuses made for siege warfare and called "saucissons" cost significantly more than the relatively thin fuse presented here (ex. use the price per foot to calculate the price per inch). See the rules under **Explosives** above titled **Fuses and Timing Detonation** for how to use fuses. Using the **Lighting Fires** rules (see sidebar), a fuse counts as tinder and can be ignited with sparks.

Punks: Punks are thin pieces of wood or other stiff but flammable material covered in a slow burning alchemical substance (like manure or treated sawdust) designed for the purpose of easily igniting fireworks and explosives. Punks are difficult to accidently extinguish from passive rain or wind, though they easily are put out if ground into a hard surface or stuck into sand, water, etc. Punks typically come 12 inches long, though significantly larger and longer versions are purpose-made for use with cannons, large fireworks, or in situations where someone wants a little more distance between themselves and a pyrotechnic. Assume a punk burns at the rate of 1 foot per hour. Using the **Lighting Fires** rules (see sidebar), a punk counts as tinder and can ignite kindling as a standard action or tinder as a swift action.

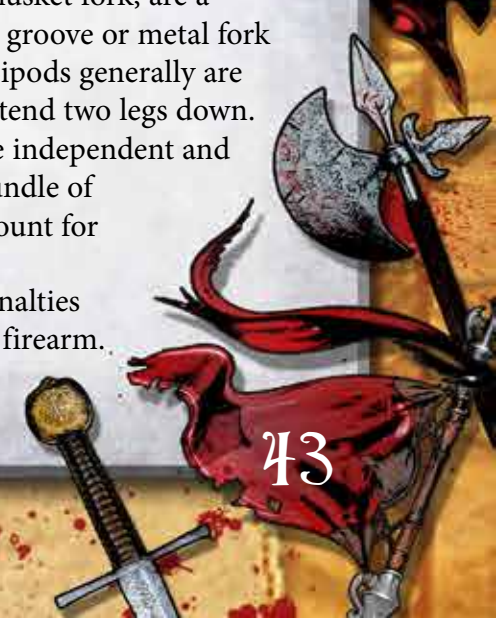
Saddle mount: The saddle mount is an attachment for your typical saddle that was often employed by mounted soldiers to help them steady their early firearms. Saddle mounts are as effective in general as other monopod shooting sticks, reducing recoil penalties by 1 for all attacks with a firearm using the mount. The penalty for using a firearm while mounted for being a ranged weapon is also reduced by 1 overall as it offers some stability, but isn't as good as bracing the firearm against a solid, unmoving object. A saddle mount can be added to any type of saddle for the price listed. The petronel is a type of handgonne made specifically to work with a saddle mount. Rules for their combined effect are detailed under that weapons description above.

Saltpeter (niter): The effects of saltpeter, also called niter, have been known since ancient times. While not particularly combustible by itself, when added to a fire that uses an organic fuel source (like wood or charcoal), the saltpeter acts as a powerful oxidizer, causing the flame to burn three times as fast but also twice as hot. While it can be used to aid in activities like arson and the destruction of objects, it was historically used more often as tool to produce fires hot enough to melt certain metals and create substances like gunpowder. If an adequate amount of niter is present in a flame (assume one pound per 5 foot by 5 foot square or 50 pounds of fuel using the rules in the **Lighting Fires** sidebar), then decrease the duration the fuel will burn in by two thirds and double all fire damage dealt. This fire burns so hot it can even ignore the first two points of hardness of most materials that are not specifically heat resistant. In addition to significantly more intense flame, large amounts of smoke are produced (double the area of any smoke effects). Saltpeter counts as fuel when trying to ignite it (see **Lighting Fires** sidebar).

Shooting stick: Holding a firearm steady is one of the surest ways to hit targets at a greater distance. Shooting sticks come in different varieties, some attaching to a firearm directly others being independent. Shooting sticks come in many forms, but can be grouped into how many legs they have and how stable they are.

Monopods, often called a musket fork, are a single stick, generally with a groove or metal fork for balancing a firearm in. Bipods generally are attached to a firearm and extend two legs down. Tripods are most likely to be independent and could be anything from a bundle of sticks to a purpose-made mount for a firearm.

Monopods reduce recoil penalties by 1 for all attacks with that firearm.



Lighting Fires

Almost all of the weapons presented in this book rely upon igniting a flammable substance. The rules as written for firestarting in the Pathfinder Roleplaying Game are relatively limited because it normally isn't a vital aspect of combat. In the case of devices like simple firearms and fireworks however it is important to know if it took you one or several seconds to ignite the fuse because it means the difference between an attack occurring in one round or the next.

The arguably best text in the *Pathfinder Roleplaying Game Core Rulebook* concerning the starting of fires comes from the flint and steel entry, "Lighting a torch with a flint and steel is a full-round action. Lighting any other fire with them takes at least that long." The alchemical tindertwig, which is a stand-in for the real world strike-anywhere match, breaks down the lighting of a torch into two different actions: the first a move action to ignite a tindertwig on a rough surface, the second a standard action to ignite a torch.

To anyone accustomed to working with fire in the real world, there are many stages to the "life cycle" of a fire. Simplified for our purposes, simple **sparks** from an object like flint and steel are used to ignite highly flammable **tinder** which is then used to ignite **kindling** which will hopefully ignite the proper **fuel**, be it wood logs, cow pies or pieces of dry sod, producing bright flames that will eventually die down to **coals** that often are hotter than the flames they gave off before.

Sparks for these rules can actually be almost any source of heat that is hot enough, even the change of gas under pressure (see fire piston) or by being in the presence of a heating source like active lava. Tinder is any highly flammable object that will burn for longer than a few seconds (so it would normally exclude explosive powder), like dry leaves, grass, twine, paper, bark, small twigs, or almost anything soaked in a flammable substance like oil. Kindling for lack of a better definition is any product that couldn't be ignited by sparks alone, requiring tinder to ignite it and would include small sticks, book covers, most cloth, etc. Fuel for a fire can only be ignited by tinder if it is covered in a flammable substance like oil, otherwise at least a full-round of exposure to the fire produced by kindling is necessary. Fuel would include everything from thick logs and boards to books and furniture to even dead bodies. Coals from a fire count as kindling when trying to ignite any other object from tinder to fuel as they burn hot enough to make most things ignite.

Creating sparks by themselves is a swift action with most igniters (ex. flint and steel), though sparks are only likely to ignite tinder in ideal conditions on the first try, so consider igniting a tinder a move action. All lit tinders shed light as a candle and can ignite kindling or other highly flammable objects like a torch as a standard action, dealing 1 point of fire damage when held against a person or object. An object that burns as kindling can be used to ignite a fuel by holding the flame to the fuel as a full-round action, dealing 1d3 fire damage in the process. Burning fuel counts as an object that has caught fire (see "Catching on Fire" under Heat Dangers in Chapter 13 Environments of the *Pathfinder Roleplaying Game Core Rulebook* for more information.) Coals deal at least 1d6 fire damage if held against an object or creature as a full-round action.

Bipods reduce recoil penalties by half for all attacks with that firearm. Tripods reduce recoil penalties to -2 total (or less if applicable) and the firearm counts as being braced (see **Rules Appendix** below).

Slow match: A slow match is normally made out of hemp twine alchemically treated to burn slowly, typically at a rate of 1 foot per hour. Slow matches are used to ignite early firearms and cannons. A slow match smolders rather than burns but can easily be extinguished if any amount of water hits it or if blown on strongly. Using the **Lighting Fires** rules (see sidebar), a slow match counts as tinder and can ignite kindling as a standard action or tinder as a swift action. Slow match is often wrapped around a short, forked stick known as a "linstock," to allow for handgonners and cannoneers to not need to hold the burning match in their hand.

New Magic Items

Special abilities denoted with a "UE" can be found in Paizo Publishing's *Pathfinder Roleplaying Game: Ultimate Equipment*. Spells denoted with "APG" , "UC" and "UM" can be found in Paizo Publishing's *Pathfinder Roleplaying Game: Advanced Player's Guide* , *Ultimate Combat* or *Ultimate Magic* respectively.

New Weapon Special Abilities for Explosives and Fireworks

Special Ability	Base Price Modifier[1]
Blinding	+1 bonus
Deconstructive	+1 bonus
Captivating	+1 bonus
Lancinating	+2 bonus
Shaped	+1 bonus
Smoking	+1 bonus

[1]*Add to enhancement bonus to determine total market price.*

Blinding

Price +1 bonus; **Aura** faint transmutation; **CL** 3rd; **Weight** --

This ability can be added to any explosive weapon or firework. A weapon with this ability explodes with a particularly powerful flash of light that can blind any creature with 120 feet with line of sight of the weapon when it explodes (Will save DC 14 negates).

CONSTRUCTION

Requirements
Cost +1 bonus
Craft Magic Arms and Armor, *pyrotechnics*

Captivating

Price +1 bonus; **Aura** faint illusion; **CL** 3rd; **Weight** --

This ability can be added to any explosive weapon or firework. A weapon with this ability naturally grabs the attention of anyone within a 60-foot radius of the weapon when it ignites. For the duration of the weapon plus one additional round an affected creature is fascinated (Will save DC 13 negates). Creatures with 5 HD or more are unaffected by this effect as if they automatically succeeded on their Will saving throws.

CONSTRUCTION

Requirements
Cost +1 bonus
Craft Magic Arms and Armor, *hypnotic pattern*

Lancinating

Price +2 bonus; **Aura** moderate transmutation; **CL** 6th; **Weight** --

This ability can be added to any explosive weapon, firework or firearm projectiles used to produce a scatter effect. A weapon with this ability is especially vicious when dealing damage, tearing through armor, objects and flesh with equal ferocity. If the weapon makes an attack roll, treat it as a ranged touch attack. Regardless of if an attack roll is needed, piercing damage dealt by the weapon ignores the first 5 points of damage reduction of creatures or 3 points of the hardness of objects.

CONSTRUCTION

Requirements
Cost +2 bonus
Craft Magic Arms and Armor, *keen edge*

Shaped
Price +1 bonus; **Aura** minor transmutation; **CL** 3rd; **Weight** –
This ability can be added to any explosive weapon or firework. A weapon with this ability is able to take on some fanciful shape or design. Some crafters set a specific shape at the time of crafting but others leave a small blank space on the device that an artist can draw any shape or design. The total volume of any weapon's area of effect remains unchanged and any continuous shape is possible. Calculate the total possible volume of an effect in cubic feet and use these as building blocks to create any possible combination as long as at least one cubic-foot connects to each other. Shaped effects can even bend around blind corners, but the artist or crafter needs to accurately scale their drawing. If an incredibly simple shape like a line, square or circle is drawn, the explosion creates as large of an effect that shape as possible, for instance, as many 1-foot cubes in a row for a single straight line or a perfect sphere effect for a circle. Gamemasters may require an appropriate Craft skill or related check to create especially elaborate shapes or designs.

CONSTRUCTION

Requirements
Cost +1 bonus
Craft Magic Arms and Armor, *pyrotechnics*

Smoking
Price +1 bonus; **Aura** minor transmutation; **CL** 3rd; **Weight** --
This ability can be added to any explosive weapon or firework. A weapon with this ability explodes with a particularly large amount of thick, dense smoke lingering long after the explosive goes off. The smoke effect fills a 20-foot spread centered on the weapon and lasts for 5 rounds. All sight, even darkvision is ineffective in or through the smoke. All creatures in the cloud become fatigued (Fortitude save DC 14 negates) while in the smoke and for 1d6 rounds after exposure from chocking and coughing.

CONSTRUCTION

Requirements
Cost +1 bonus
Craft Magic Arms and Armor, *pyrotechnics*

Weapon Special Abilities for Firearms

Special Ability	Base Price Modifier[1]
Armor-piercing	+4 bonus

[1]*Add to enhancement bonus to determine total market price.*

Armor-piercing
Price +4 bonus; **Aura** strong transmutation; **CL** 12th; **Weight** --
This ability can only be place on firearms. Unlike most magical ranged weapons, firearms with the *armor-piercing* quality always impart this effect onto ammunition fired from the weapon, stacking with the effects of the ammunition fired. Bullets fired from a firearm with the *armor-piercing* quality treat attacks to their maximum range as touch attacks rather than just those within the first range increment for early firearms or first five for advanced firearms. Penalties from range and other sources still apply. This effect cannot apply to firearms with the scatter weapon quality.

CONSTRUCTION

Requirements
Cost +4 bonus
Craft Magic Arms and Armor, *disintegrate*

New Specific Magic Weapons

Specific Weapon	Market Price
Anit-invisibility fountain	750 gp
Anti-magic fountain	6,750 gp
Cloud bomb	Varies
Distracting firecrackers	750 gp
Elemental arrow	1,500 gp
Elemental explosive	1,500 gp
Fireless fragmentation grenade	750 gp
Ignus Fatuus	750 gp
Pyrotechnic mote launcher	1,400 gp
Sonorous whistler	Varies

Anti-invisibility fountain
Price 750 gp; **Aura** faint evocation; **CL** 5th; **Weight** 1 lb.

This ground fountain appears to spray no flares or lights into the air, but the transparent medium being sprayed into the air creates a 10-foot radius spread hemi-sphere centered on the firework where magical invisibility is negated and even extraordinary invisibility is suppressed as the creature creates a disturbance in the flow of the medium. An *anti-invisibility fountain* will burn and produce the invisibility negating effect for 1 minute once ignited. Extinguishing the ground fountain or otherwise containing it through mundane means removes this items magical properties. Activating this weapon requires igniting its fuse as a standard action.

CONSTRUCTION

Requirements
Cost 375 gp
Craft Magic Arms and Armor, *invisibility purge*

Anti-magic fountain
Price 6,750 gp; **Aura** moderate abjuration; **CL** 11th; **Weight** 1 lb.

This ground fountain sprays a colorful stream of lights that rise in the air falling to the ground, creating a 5-foot radius spread hemi-sphere centered on the firework where most magic effects are suppressed. An *anti-magic fountain* acts as an *anti-magic field* (as the spell) but only against spells of 4th level or lower. Higher level spells function normally in the area and on creatures standing in the *fountain*. An *anti-magic fountain* will burn and produce the anti-magic light effects (which shed light as the *daylight* spell) for 5 rounds once ignited. Extinguishing the ground fountain or otherwise containing it through mundane means removes this items magical properties. Activating this weapon requires igniting its fuse as a standard action.

CONSTRUCTION

Requirements
Cost 3,375 gp
Craft Magic Arms and Armor, *anti-magic field*

Cloud Bomb
Price varies; **Aura** varies; **CL** varies; **Weight** 1 lb.
Ash cloud bomb 6,000 gp; ***Caustic cloud bomb*** 3,300 gp; ***Cloud bomb*** 300 gp; ***Choking cloud bomb*** 750 gp; ***Glittering cloud bomb*** 500 gp; ***Killing cloud bomb*** 2,250 gp; ***Thick cloud bomb*** 1400 gp.

Each of the many different *cloud bombs* are built from a similar design, releasing different noxious or harmful gases into their area of effect. Though mundane smoke bombs can produce similar effects through alchemical methods, it is only by infusing the standard smoke bomb design with magical potency that these weapons move from mere distractions to offensive weapons.

Unless otherwise specified, a *cloud bomb* once ignited billows forth a 10-foot radius spread fog effect that obscures all sight, including darkvision, beyond 5 feet. A creature within 5 feet has concealment (attacks have a 20% miss chance). Creatures further away have total concealment (50% miss chance, and the attacker can't use sight to locate the target). A moderate wind (11+ mph) disperses the fog in 4 rounds; a strong wind (21+ mph) disperses the fog in 1 round. These effects do not work underwater unless otherwise specified.

A typical *cloud bomb* is command-word activated and detonates in as many rounds as

the creature activating the weapon chooses (minimum end of round, maximum 10 rounds). Once activated, a *cloud bomb* produces its fog effect for 1 minute or until the firework is either destroyed or contained. The fog effect remains stationary around the explosive, though moving the bomb also moves the effect.

Ash cloud bomb: The fog of an *ash cloud bomb* is grey with burning embers. Creatures in or later entering the fog are affected as if by the *incendiary cloud* spell for as long as they are in the fog. The Reflex save to halve damage is DC 22. Strong conjuration; CL 15th; Craft Magic Arms and Armor, *fog cloud*, *incendiary cloud*.

Caustic cloud bomb: The fog of a *caustic cloud bomb* burns with acrid vapors. Creatures in or later entering the fog are affected as if by the *acid fog* spell for as long as they are in the fog. Moderate conjuration; CL 11th; Craft Magic Arms and Armor, *fog cloud*, *acid fog*.

Cloud bomb: The standard *cloud bomb* has no additional effects besides those listed above. Faint conjuration; CL 3rd; Craft Magic Arms and Armor, *fog cloud*.

Choking cloud bomb: The *choking cloud bomb* fills its fog effect with a noxious toxin. Creatures in or later entering the fog are affected as if by the *stinking cloud* spell for as long as they are in the fog and 1d3 rounds after leaving it. The Fortitude save to negate becoming nauseated is DC 14. Minor conjuration; CL 7th; Craft Magic Arms and Armor, *fog cloud*, *stinking cloud*.

Glittering cloud bomb: The fog of a *glittering cloud bomb* seems to shimmer with a golden metallic hue as if filled with gold flecks. Creatures in or later entering the fog are affected as if by the *glitterdust* spell for as long as they are in the fog and 1d3 rounds after leaving it. The Will save to negate blindness is DC 13. Moderate conjuration; CL 10th; Craft Magic Arms and Armor, *fog cloud*, *glitterdust*.

Killing cloud bomb: The fog of a *killing cloud bomb* is deadly. Creatures in or later entering the fog are affected as if by the *cloudkill* spell for as long as they are in the fog. Unlike the *cloudkill* spell, the fog effect does not move instead remaining centered on the bomb. The Fortitude save is DC 17. Moderate conjuration; CL 9th; Craft Magic Arms and Armor, *fog cloud*, *cloudkill*.

Thick cloud bomb: The fog of a *thick cloud bomb* is particularly thick, hampering movement and combat. Creatures in or later entering the fog are affected as if by the *solid fog* spell for as long as they are in the fog and 1d3 rounds after leaving it. Moderate conjuration; CL 7th; Craft Magic Arms and Armor, *fog cloud*, *solid fog*.

CONSTRUCTION

Requirements
Ash cloud bomb 3,000 gp; ***Caustic cloud bomb*** 1,650 gp; ***Cloud bomb*** 150 gp; ***Choking cloud bomb*** 375 gp; ***Glittering cloud bomb*** 250 gp; ***Killing cloud bomb*** 1,125 gp; ***Thick cloud bomb*** 700 gp.
Craft Magic Arms and Armor, *fog cloud*, additional spells (see text)

Distracting firecrackers
Price 750 gp; **Aura** faint evocation; **CL** 5th; **Weight** --
A chain of *distracting firecrackers* is a particularly loud and obnoxious series of explosive pops and cracks. The sound is so disruptive, any creature attempting a concentration check has the DC increased by 5 (casting a spell requires a concentration check DC 15 + the level of the spell being cast). Hearing-based Perception checks also have their DC increased by 5. *Distracting firecrackers* are activated by igniting their fuse. Once activated, the *firecrackers* pop and crackle for 3 rounds.

CONSTRUCTION

Requirements
Cost 375 gp
Craft Magic Arms and Armor, *distracting cacophony*[UM]

Elemental Arrow
Price 500 gp; **Aura** faint evocation; **CL** 3rd; **Weight** 1 lb.
This firearm-firework weapon has been magically-enhanced to deal all of its damage as a single form of energy of the creator's choice: acid, cold, electricity or fire. The weapon fires an arrow of pure energy with a command word as a standard action. The weapon acts as a mundane fire arrow firework-firearm for all other game mechanics, except it deals all of its damage as 2d6 points of the chosen energy type and attacks as a ranged touch attack to its maximum range. As the weapon is magically powered, it is able to work underwater and in airless environments.

CONSTRUCTION

Requirements
Cost 250 gp
Craft Magic Arms and Armor, *elemental touch*[APG]

Elemental Explosive
Price 1,500 gp; **Aura** moderate evocation; **CL** 7th; **Weight** 1 lb.
This explosive weapon has been magically-enhanced to deal all of its damage as a single form of energy of the creator's choice: acid, cold, electricity or fire. The explosive is activated with a command word and detonates in as many rounds as the creature activating the weapon chooses (minimum end of round, maximum 10 rounds). When the device explodes it releases a 20-foot burst of the chosen energy, dealing 5d6 damage of that type (Reflex save DC 16 halves). As the weapon is magically powered, it is able to work underwater and in airless environments.

CONSTRUCTION

Requirements
Cost 750 gp
Craft Magic Arms and Armor, *detonate*[APG]

Fireless fragmentation grenade
Price 750 gp; **Aura** faint evocation; **CL** 5th; **Weight** 1 lb.
This grenade uses magical energy instead of explosive powder to create an explosion that projects pellets, shards of metal and glass or other projectiles. The item looks like a completely normal grenade only in place of a fuse there will typically be a small button with a safety cover to prevent accidental detonation. Activating a *fireless fragmentation grenade* is a swift action and it detonates at the end of that round, dealing 3d6 piercing damage in a 20-foot burst (Reflex save DC 14 halves). As the weapon is magically powered, it is able to work underwater and in airless environments.

CONSTRUCTION

Requirements
Cost 375 gp
Craft Magic Arms and Armor, *pellet blast*[UC]

Ignus Fatuus
Price 750 gp; **Aura** faint illusion; **CL** 5th; **Weight** 1 lb.
The *ignus fatuus* or "foolish fire" is more a class of firework than a specific item. It is a firework that once ignited produces an impressive fireworks display, taking on any possible shape, size or style. The effects however are completely illusionary. More often than not, tricksters or party-goers use *ignus fatuus* fireworks to distract and amuse crowds than do any real harm. The exact effects of the firework mimic the spell *major image* except that the show lasts for 1 minute once ignited and the Will save DC to disbelieve the illusion is DC 14.

CONSTRUCTION

Requirements
Cost 375 gp
Craft Magic Arms and Armor, *major image*

Pyrotechnic mote launcher
Price 1,400 gp; **Aura** moderate illusion; **CL** 7th; **Weight** 1 lb.
This weapon functions similar to a pyrotechnic candle launcher, except launching harmless motes of iridescent light rather than

pyrotechnic candles. On a successful ranged touch attack, the creature takes no damage but is surrounded by a mote of multi-color radiance that sheds light as if it were a sunrod, negating any concealment for the target (Will save DC 16 negates) regardless of source. Each mote launched from the firework-firearm lasts for 6 rounds, revealing creature that fail their Will saving throws. The pyrotechnic mote launcher is loaded with four motes, which each count as their own attack and require their own save to negate and dismiss. A creature can be surrounded by more than one mote and each can be resisted one time. Motes launched from a pyrotechnic launcher are particularly well attuned to magical invisibility, and the wielder gains a bonus +4 to attack against magically invisible creatures.

CONSTRUCTION

Requirements
Cost 700 gp
Craft Magic Arms and Armor, *wandering star motes*[APG]

Sonorous Whistler
Price varies; **Aura** varies; **CL** varies; **Weight** 1 lb.
Mesmerizing whistler 300 gp; ***Message whistler*** 300 gp; ***Mimic whistler*** 25 gp; ***Musical whistler*** 30 gp; ***Shattering salute*** 500 gp; ***Silencing whistler*** 300 gp; ***Sonorous whistler*** 25 gp

Each of the many different *sonorous whistlers* are built from a similar design, producing special sound effects once ignited. Though mundane fireworks can produce similar effects through alchemical methods, it is only by infusing the standard whistler design with magical potency that truly remarkable effects are possible. The standard *sonorous whistler* creates a sound equal to or less than about 12 humans. The exact sound needs to be set at the time of the creation of the firework. A *whistler* remains active for 1 minute once ignited, either repeating the sound if short enough or running through the whole series of noises if a full minutes worth as specified. *Whistlers* can be heard for much further, but special effects generally only affect creatures within a 30-foot radius of the active firework. As the fireworks are magically powered, they are able to work underwater and in airless environments though they do produce actual sound waves and will be affected by their medium.

Mesmerizing whistler: A *mesmerizing whistler* sounds different to each creature that hears it, but creatures in the fireworks area of effect are affected by the *enthrall* spell. The Will save to negate the effect is DC 13. This is a mind-effect. Faint enchantment; CL 3rd; Craft Magic Arms and Armor, *ghost sound*, *enthrall*.

Message whistler: A *message whistler* has a blank area where a short message can be written. Once ignited, a *message whistler* repeats the words in the voice of the person that wrote the words on the firework. The message must be fairly short, typically 25 words or less. Faint illusion; CL 3rd; Craft Magic Arms and Armor, *ghost sound*, *magic mouth*.

Mimic whistler: A *mimic whistler* actually has two fuses. When the first is ignited, the *mimic whistler* essentially records all sounds that occur around it. When the second fuse is ignited, the *mimic whistler* repeats the sounds verbatim. Faint illusion; CL 1st; Craft Magic Arms and Armor, *ghost sound*.

Musical whistler: A *musical whistler* is just a standard *sonorous whistler* that specifically will make music and has no additional effects besides those listed above. Faint illusion; CL 1st; Craft Magic Arms and Armor, *ghost sound*.

Shattering salute: A *shattering salute* is salute rather than a whistler, meaning its duration is instantaneous. When ignited, a *shattering salute* releases a 5-foot radius spread of sonic energy. A shatter salute can act as a *shatter* spell for any objects in its radius, otherwise dealing 1d6 sonic damage to any creature or objects in the salutes area of effect. Faint evocation; CL 3rd; Craft Magic Arms and Armor, *ghost sound*, *ear-piercing scream*[UM], and *shatter*.

Silencing whistler: A *silencing whistler* actually projects a small area where in sound is negated as if by the *silence* spell. The area of effect for a *silencing whistler* is a 10-foot radius emanation centered on the firework. Faint illusion; CL 3rd; Craft Magic Arms and Armor, *ghost sound*, *silence*.

Sonorous whistler: The standard *sonorous whistler* has no additional effects besides those listed above. Faint illusion; CL 1st; Craft Magic Arms and Armor, *ghost sound*.

CONSTRUCTION

Requirements
Mesmerizing whistler 150 gp; ***Message whistler*** 150 gp; ***Mimic whistler*** 14 gp; ***Musical whistler*** 15 gp; ***Shattering salute*** 250 gp; ***Silencing whistler*** 150 gp; ***Sonorous whistler*** 14 gp
Craft Magic Arms and Armor, *ghost sound*, additional spells (see text)

New Armor Special Abilities

Armor Special Abilities	Base Price Modifier[1]
Impenetrable, Light	+1 bonus
Impenetrable, Moderate	+3 bonus
Impenetrable, Heavy	+5 bonus

[1]*Add to enhancement bonus to determine total market price.*

Impenetrable
Price varies; **Aura** strong abjuration; **CL** 13th; **Weight** –
Lightly +1 bonus; **Moderately** +3 bonus; **Heavily** +5 bonus

This suit of armor reinforces its ability to deflect bullets using magical force. When being attacked by a firearm, reduce the number of range increments that the weapon can be resolved as a touch attack depending on the strength of the effect. Reduce the number of range increments resolved as a touch attack by 1 for *lightly impenetrable* armor (minimum 1 range increment), by 3 for *moderately impenetrable* armor (minimum 1 range increment), and by 5 for *heavily impenetrable* armor (no minimum number). Firearms fired at any *impenetrable* armor can still be resolved as a touch attack if made within 5 feet of the wearer of the armor.

CONSTRUCTION

Requirements
Lightly +1 bonus; **Moderately** +3 bonus; **Heavily** +5 bonus
Craft Magic Arms and Armor, *bullet shield*[UC], *limited wish* or *miracle*

New Wondrous Items

Item	Market Price
Everburning slow match	100 gp
Fireless fuse	50 gp
Magical Explosive Powder	Varies

Everburning slow match
Slot none; **Price** 100 gp; **Aura** faint evocation; **CL** 1st; **Weight** --

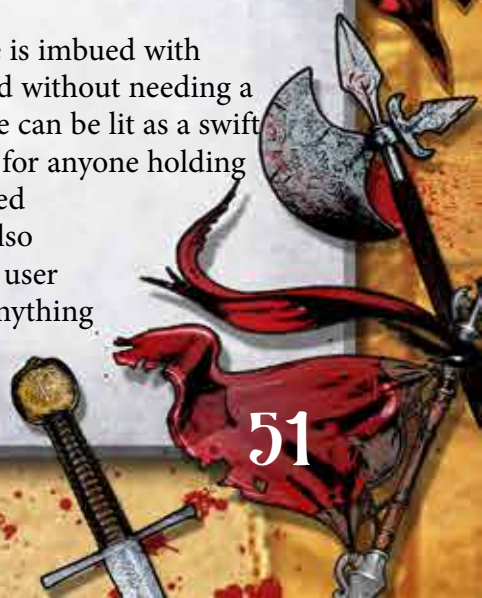
This slow match has been enchanted to always smolder, just hot enough to ignite highly flammable substances like oil, gunpowder or perfectly dry paper but can be kept safely wrapped in damp cloth without igniting it or going out. Wind, rain and even complete submersion will not inhibit the igniting power of this slow match, though firing a matchlock underwater still requires additional protections of the powder to be lit.

CONSTRUCTION

Requirements
Cost 50 gp
Craft Wondrous Items, *spark*[APG]

Fireless fuse
Slot none; **Price** 50 gp; **Aura** faint transmutation **CL** 1st; **Weight** --

This magically prepared fuse is imbued with power so that it can be ignited without needing a source of fire. Instead the fuse can be lit as a swift action as a mental command for anyone holding or touching a weapon prepared with a *fireless fuse*. The *fuse* also burns down as quickly as the user desires and can function in anything



except total submersion in water. A *fireless fuse* is completely destroyed once used.

CONSTRUCTION

Requirements
Cost 25 gp
Craft Wondrous Items, *spark*[APG]

Magical Explosive Powder

While most magic weapon qualities are applied to either the launcher or the projectile for firearms, some enterprising crafters began adding enhancements directly to the explosive powder used in their firearms. This can have various effects, from just improving the quality of the powder, to adding interesting secondary effects. Treat explosive powder as ammunition for the purpose of enhancing it, meaning you can empower 50 doses of powder for the costs listed. Like other forms of magic weapon, all enchanted explosive powders need a minimum of a +1 bonus, and all count as at least *improved explosive powder*. The following list is set by what effects occur by adding various special weapon qualities. Unlike other types of ammunition, bonuses from *enchanted explosive powders* stack with enhancement bonuses from the use of special bullets or firearms.

Improved: All enchanted explosive powder counts as having been "improved." If simple explosive powder is enchanted with at least a +1 bonus, it functions as common explosive powder. If common explosive powder is empowered with at least a +1 bonus, it functions as a superior explosive powder and gains some inherent benefit like being smokeless or non-fouling. Superior explosive powder that is empowered with at least a +1 bonus gains additional qualities of other types of superior powders. See **Qualities of Explosive Powders** above for more information.

Conductive: Using this powder in an explosive, firework or firearm allows the wielder to use the *conductive*[UE] magic weapon quality with the weapon.

Corrosive: When used in a firearm that shoots a single projectile, this powder has no special effect beyond projecting a short 5-foot line of acid out the end of the barrel after each shot is fired. When used in firearms with the scatter weapon quality it deals an additional 1d4 acid damage to all creatures in the weapons area of effect damaged by the pellets fired.

Cruel: A frightened, shaken or panicked creature struck by an attack from this weapon is sickened for 1 round.

Dry load: Explosive powder with the *dry load*[UC] special ability functions just like dry *load cartridges* once a weapon has been loaded or prepared, potentially functioning underwater or in an airless environment.

Flaming: When used in a firearm that shoots a single projectile, this powder has no special effect beyond projecting a short 5-foot gout of flame out the end of the barrel after each shot is fired. When used in firearms with the scatter weapon quality it deals an additional 1d4 fire damage to all creatures in the weapons area of effect damaged by the pellets fired.

Frost: When used in a firearm that shoots a single projectile, this powder has no special effect beyond projecting a short 6-inch icicle out the end of the barrel after each shot is fired. When used in firearms with the scatter weapon quality it deals an additional 1d4 cold damage to all creatures in the weapons area of effect damaged by the pellets fired.

Ghost touch: Any incorporeal creature the target of or in the area of effect of a weapon loaded with this enhanced powder is affected as if the weapon had the *ghost touch* weapon quality.

Limning[UE]*:* All creatures, including those affected by a means of magical concealment, that are the target of or in the area of effect of a weapon loaded with this magic powder outlines the creature in *faerie fire* (as the spell) for 1 round.

Phase locking[UE]*:* All creatures damaged by a weapon loaded with this magical powder is affected as though by the *dimensional anchor* spell for 1 round.

Shock: When used in a firearm that shoots a single projectile, this powder has no special effect beyond projecting a short 6-inch spark out the end of the barrel after each shot is fired. When used in firearms with the scatter weapon quality it deals an additional 1d4 electricity damage to all creatures in the weapons area of effect damaged by the pellets fired.

Thundering: Explosives and fireworks loaded with this magical powder deal an additional amount of damage equal to their bludgeoning damage in sonic energy. All weapons loaded with this powder are ten times as loud when ignited and can be heard for over a mile away. (See **Rules Appendix** below for additional rules concerning the sound of gunfire).

New Cursed Item

Bad Powder
Slot none; **Aura** moderate transmutation; **CL** 10th; **Weight** --

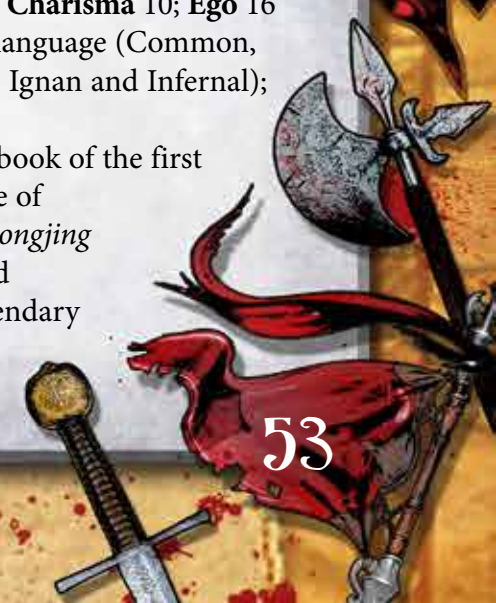
Especially in the early days of the creation of explosive powder, it was not uncommon for soldiers to be on the battlefield and realize they had "bad powder" which could be caused by anything from a bad recipe, bad ingredients, separation while being transported as well as a host of other methods. Even after processes were refined however, some unlucky soldiers would suffer similar problems and blame it on "bad powder" with it being sometimes a handful to even a whole kegs worth. True *bad powder* has a hint of chaotic energies coursing through it and can have unpredictable results when used in explosive powder weapons. When used in firearms, increase the firearm's misfire chance by 4 points and treat any firearm loaded with *bad powder* as if it already possessed the broken condition. Otherwise consult the table below:

1d8 Roll	% Roll	Effect
1	1-14	Misfire, the weapon explodes immediately upon being handled or set by the user
2	15-29	Dead powder, the powder won't ignite and the weapon is useless until cleaned out
3	30-44	Damp powder, treat the weapon as if it were loaded with damp explosive powder
4	45-59	Flash powder, the weapon ignites but just as a bright but ineffective flash dealing no damage
5	60-74	Simple powder, the weapon ignites normally, but treat it as if it were loaded with simple explosive powder
6	75-89	Explosion, the weapon ignites normally, but also suffers a misfire dealing half the normal damage to the person using the weapon, even if they are not near the weapon when it goes off
7	90-94	Common powder, the weapon functions normally
8	95-100	Superior powder, the weapon ignites normally, but treat it as if it were loaded with a random superior explosive powder (gamemaster's choice)

New Intelligent Item

Huolongjing (The Fire-Drake Manual)
Price 47,515 gp; **Slot** none; **Aura** strong divination; **CL** 11th; **Weight** 3 lbs.
Alignment lawful neutral; **Senses** 120 ft., blindsense
Intelligence 20; **Wisdom** 10; **Charisma** 10; **Ego** 16
Language Speech and read language (Common, Abyssal, Celestial, Draconic, Ignan and Infernal); *read magic*

Thought to be the formula book of the first alchemist to discover the use of explosive powders, the *Huolongjing* now possess the intellect and strategic mind of a once legendary



general of a far off land who devised every possibly use and stratagem for using explosives, fireworks and firearms in war – though the knowledge of what is actually contained in the pages focuses mostly on primitive firearms and explosives having been written so long ago. General Fire-Drake, as the book prefers to be called in Common, will always give his opinion of the "right" course of action in any situation, and it will almost always include heavy reliance on an explosion or two. The skills the General possess can be used either to aid in the crafting of battle plans or weapons, or the *Manual* includes the complete instructions necessary to teach the use of explosives, fireworks and firearms with no other teacher. When making checks concerning these kinds of weapons, treat General Fire-Drake as possessing Craft (alchemy) +15, Craft (firearms) +15 and Knowledge (engineering) +15. Spending one month reading and working the *Huolongjing* makes you an expert in explosive weapons and you gain proficiency in firearms.

CONSTRUCTION

Requirements
Cost 23,758 gp
Craft Magic Arms and Armor, must possess the alchemist's bomb ability, *read magic*

New Mythic Item

This item uses rules found in Paizo Publishing's *Pathfinder Roleplaying Game: Mythic Adventures*.

Fury of the Gods
Price 3,500 gp; **Aura** moderate necromancy; **CL** 7th; **Weight** 5 lbs.

The first soldiers that faced an enemy armed with firearms believed their opponents had captured the power of the gods in their weapons. The awe and fear of those warriors which ran in terror were captured in these weapons and can be activated when wielded by a mythic character. The *Fury of the Gods* functions as *+1 fire gourd* normally, but when used by a creature possessing at least one mythic tier, the weapon also produces a 120-foot cone effect that counts as the spell *fear* (Will save DC 20 + 1 per mythic tier) when used to attack. The wielder of the *fury of the god* can also expend one use of mythic power to automatically reform and reload the weapon after it has been used to attack.

CONSTRUCTION

Requirements
Cost 1,750 gp
Craft Magic Arms and Armor, Mythic Crafter, *fear*

New Minor Artifact

The Devil's Barrel (XXX)
Slot none; **Aura** strong conjuration; **CL** 20th; **Weight** 5 lbs.

The barrel seems to appear out of nowhere, mixed in with any number of other barrels of explosive powder. Its only adornment is a simple "*XXX*" burned into the wood of the otherwise unremarkable barrel. The only clue most have that something about this particular batch of powder is "different" comes from its stronger than normal smell of brimstone. Commonly referred to as "The Devil's Barrel" or "The Devil's Brand," this particular barrel of *magical explosive powder* is a hazard as much as a boon.

The Devil's Barrel is an enchanted powder keg of superior powder that changes properties depending on how it is used. If used to load firearms, the powder acts as *improved fiery explosive powder* that never fouls a barrel and produces no smoke, but fills the air with a noxious sulfur smell. When loaded into explosives or fireworks, it adds twice as many damage die as the explosive would normally deal (all forms) in fire damage. For example, a standard grenade made using explosive powder from the *Barrel* would deal 2d6 bludgeoning and 1d6 fire damage plus an additional 6d6 fire damage. If a whole barrel of *The Devil's Brand* is ignited as a powder keg explosive, it deals

25d6 fire damage in as a 40-foot burst. A *Barrel*, despite always feeling full, can only ever provide a single dose of explosive powder as a full-round action. No matter how many handfuls of powder are taken out at one time, or if it's poured out into a pile, excess powder from the same round immediately disappears. Any number of doses, one per round, can however be taken out of a barrel over time.

Every time a full barrel of *The Devil's Batch* explodes, there is a 1% chance that a dimensional rift will open up releasing devils into the world. The chance that a dimensional rift will form increases by 1% every time a dose of powder is taken from the *Barrel*. Treat the opening of a rift as the *summon monsters IX* spell for devils, but they count as native outsiders (not as summoned monsters).

DESTRUCTION

The typical use of the *Barrel* as an explosive inherently destroys the artifact, however it is rumored to merely reappear in a new place with a new war to be used in. Most believe that the only way to take the artifact out once and for all is to empty its contents into a sanctified body of water on a good aligned outer plane, though some claim this is just another lie surrounding the *Barrel*.

New Character Options

New Alchemist Class Options

Pyrotechnician (Alchemist Archetype)

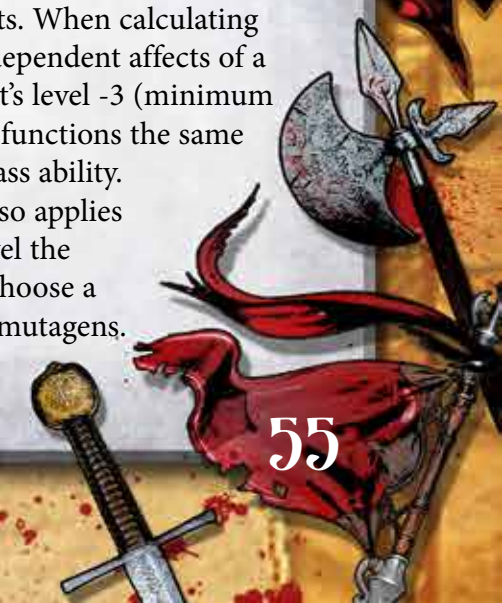
The pyrotechnician is an alchemist that is more interested in exploring the world of explosives and fireworks than mutating their own body. By focusing more time and energy on the various explosives, fireworks and even firework-firearms that can be made using alchemical methods, they learn to enhance them with their special ability to make bombs infused with their own essense.

Firework-firearm Proficiency: Pyrotechnicians are proficient with all firework-firearms as well as any other firearms that they make themselves using the Craft (alchemy) skill.

Additive Bombs (Su): In addition to being able to create normal alchemist's bombs, the pyrotechnician is able to add their bomb damage to explosives and fireworks they have crafted with a duration of instantaneous. This functions almost identically to creating bombs, only the damage is added to that of a weapon being used. The addition of the catalyst to an existing weapon acts as igniting the weapon, which will normally then detonate or activate at the end of the round if not sooner. For example, if a 3rd level pyrotechnician possessed a grenade they had crafted they could as a standard action add a catalyst and throw the grenade, dealing 2d6 bludgeoning damage plus 3d6 fire damage (1d6 from the grenade normally plus 2d6 from their bomb class skill). This ability replaces the alchemist's normal bomb class ability.

Craft Magic Arms and Armor (Ex): At 5th level, alchemists receive Craft Magic Arms and Armor as a bonus feat. An alchemist can craft any weapon or armor with this feat, but most commonly focus on the crafting of magically-enhanced explosives and fireworks. He uses his alchemist level as his caster level and can craft magic arms and armor using any formulae he knows. This ability replaces receiving Brew Potion as a bonus feat at first level.

Weak Mutagen (Su): Mutagens created by pyrotechnicians are not as potent as those created by other alchemists. When calculating duration and other level dependent affects of a mutagen use the alchemist's level -3 (minimum 1). Otherwise, this ability functions the same as the normal mutagen class ability. This three level penalty also applies when calculating what level the alchemist needs to be to choose a discovery related to their mutagens.



For instance, an alchemist needs to be 15th level before choosing the greater mutagen discovery instead of 12th level.

Additional Bomb Discoveries: At 2nd, 5th, 8th, and 10th level, a pyrotechnician can gain an additional alchemist discovery so long as it specifically modifies their bomb class ability. Each time this is done, it replaces the poison resistance and poison immunity gained ability gained at that level. Pyrotechnicians are not completely ignorant of poisons, so they gain poison use and swift poisoning at the normal levels and can gain any of these other abilities as well instead of the additional discovery.

New Fighter Archetype

Coulevrinier (Fighter Archetype)

In the early days of firearm warfare, even soldiers equipped with firework-firearms and handgonnes were still heavily armored and martially trained. The coulevrinier was one such soldier, relying on their armor and a melee weapons as much as their firearms.

Firearm Proficiency: A coulevrinier is proficient with all firearms available in his game setting. This is generally limited to primitive firearms like the firework-firearm and handgonnes, though some gamemasters may want to include all early firearms or even advanced firearms.

Deadshot (Ex): At 1st level, when a coulevrinier attacks with a firearm as a readied action, he may add 1/2 his Dexterity bonus (minimum +1) on his damage roll. This ability replaces bravery.

Firearm Expert (Ex): At 5th level, a coulevrinier gains a +1 bonus on attack and damage rolls with firearms. This bonus increases by +1 per four levels after 5th. This ability replaces weapon training 1.

Improved Deadshot (Ex): At 9th level, when a coulevrinier attacks with a firearm as a readied action, his target is denied its Dexterity bonus to its AC. This ability replaces weapon training 2.

Greater Deadshot (Ex): At 13th level, when a coulevrinier attacks with a firearm as a readied action, he may add his Dexterity bonus (minimum +1) on his damage roll. Additionally, a coulevrinier does not provoke attacks of opportunity when making ranged attacks with a firearm. This ability replaces weapon training 3.

Penetrating Shot (Ex): At 17th level, when a coulevrinier confirms a critical hit with a firearm, the bullet pierces the target and can strike another creature in line behind it. The coulevrinier must be able to trace a line starting at his space and passing through both targets to make this additional attack. The secondary attack is made at a –4 penalty, in addition to any modifiers for added range but can still be treated as a ranged touch attack if close enough. If this attack is also a critical hit, the bullet can continue to hit another target, but the penalties stack. This ability replaces weapon training 4.

Weapon Mastery (Ex): A coulevrinier must choose a type of firearm.

Early Gunslingers

It is difficult to imagine a gunslinger using firework-firearms. Many of their deeds are unable to apply because of the nature of firework-firearms. The coulevrinier above would be a better choice for those players that wish to focus on firearms in a setting that only allows firework-firearms. With the introduction of handgonnes however, most of the gunslinger class abilities would be able to apply. It is recommended that you use the Gun Tank archetype from the *Pathfinder Roleplaying Game: Ultimate Combat* book to represent a traditional handgonner, as most still wore at least some armor during those early days of explosive powder. Replace the list of available firearms gained at first level with the various handgonne varieties.

Rules Appendix

Though this book focuses primarily on early firearms, the following rules are generally written as optional rules to apply to any firearm.

Bracing a Firearm (New Rules)

Recoil, the natural knockback of a firearm as it is fired, is a problem in almost any firearm. With single-shot weapons it is less important in general to the initial firing of a weapon, as the bullet is often out of the barrel before the full impact of recoil is affecting the shooter. In either slow velocity firearms or those with particularly large caliber, the recoil can be devastating – knocking the gunner flat on their back or injuring them.

For this reason, bracing or otherwise securing a firearm to an object is often desirable and reduces not just the recoil but also the unsteadiness of the shooter. Bracing a firearm is a standard action regardless of if it is attaching a firearm to a tripod, resting the weapon properly on a wall or digging a shooting hook into a log. A properly braced firearm reduces all recoil penalties to -2 (or lower if applicable) and negates any chance of knocking a wielder prone. In addition, at extreme range the weapon is more accurate. The penalty for shooting a braced firearm beyond the first 3 range increments is reduced to -1 per range increment, rather than -2. For instance, shooting at a creature with a braced handgonne that is 5 range increments out incurs only a -8 penalty from range (-2 each for the first three range increments and -2 more for the additional two).

Crafting Explosives and Fireworks

Craft (alchemy) Addendum

According to the *Pathfinder Roleplaying Game: Ultimate Equipment* book, explosives and fireworks are created using Craft (alchemy). Many of the earliest forms of firearms are little more than fireworks. Therefore a number of these weapons can be crafted using either Craft (alchemy) or the new skill, Craft (firearms). For someone knowledgeable in firearms, they are easier to craft as firearms due to their primitive designs. Rules are then presented for crafting using either skill though the DCs change. Likewise, explosive powder can be crafted just by the Craft (alchemy) skill or the new Craft (firearms) skill presented below.

Craft DCs for Exploding Powder

Item Crafted	Craft DC
Simple explosive powder	18
Common explosive powder	20
Superior explosive powder	30

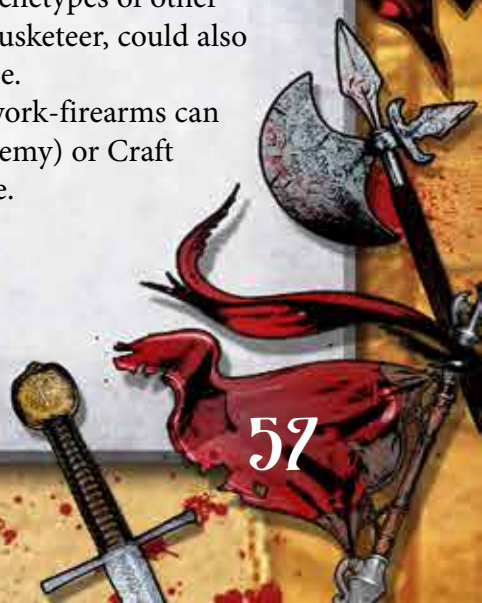
Crafting Firearms

New Skill: Craft (firearms) (Int) Untrained - No

Due to the inflated prices listed in the original *Pathfinder Roleplaying Game: Ultimate Combat* book for firearms, crafting a 2,000 gp hand gonne would be impractical using the standard rules of the Craft skill. In the event that you want to allow characters to craft their own firearms, the standard crafting rules can apply; you just need to adjust the price of the firearms (see **The Cost of Explosives, Fireworks and Firearms** above).

Unlike most craft skills however, Craft (firearms) is not something that the untrained can attempt. Without a working understanding of gunpowder, firing mechanisms and the basic principles of a firearm the average commoner has about as much of a chance of crafting a firearm correctly as they do creating a wand or magic potion. The gunslinger is the only class as written that should receive Craft (firearms) as a class skill. Particular archetypes of other classes, like the cavalier's musketeer, could also receive the class skill for free.

Makeshift firearms and firework-firearms can be crafted using Craft (alchemy) or Craft (firearm), characters' choice.



Craft DCs for Various Firearms

Item Crafted	Craft DC
One-handed early firearms (pistol)	15
Two-handed early firearms (handgonne, musket, arquebus)	18
Hand bombard or hand cannon	22
One-handed advanced firearms (revolver)	20
Two-handed advanced firearms (rifle, shotgun)	25
Simple explosive powder	15
Common explosive powder	18
Superior explosive powder	25
Normal early firearm ammunition (lead ball, pellets)	10
Special early firearm ammunition (silver bullet, adamantine bullet)	15
Normal advanced firearm ammunition (metal cartridge)	12
Special advanced firearm ammunition (alchemical cartridge)	18

Gunsmithing Feat: Treat any character with the Gunsmithing feat as if Craft (firearms) was a class skill. A character with the Gunsmithing feat also receives a +2 bonus to Craft (firearms).

Masterwork Firearms: Firearms can be made to be masterwork weapons the same as any other. Adding the masterwork quality to a weapon you are crafting is handled the same as any other weapon. In addition to the normal benefits of the masterwork quality, masterwork firearms reduce their misfire chance by 1 (minimum 0). This reduction takes place after any other built in modifications or magical enhancements, but not increases to misfire ranges that occur from use, damage or misfires.

Crafting Firearms Using Special Materials: Unlike most weapons, crafting firearms out of special materials rarely imparts much benefit to the weapon. Making the stock of a firearm out of darkwood or crafting the barrel of the weapon out of adamantine wont impart many effects, though there are some specific components that those gunsmiths with wealthy patrons may prefer to make for minor boons. Dueling pistols, for instance, may include mithral barrels to keep the weapons light and easier to move or the wooden portions of a firearm used to shoot flaming shots may be wrapped in dragonhide to prevent it from becoming burnt with use.

Crafting ammunition on the other hand is another story, but one that's mostly covered by the rules as they are already written in *Ultimate Combat*.

Fast Firearm Proficiency Training (Optional Rule)

Historically, one of the most important aspects of why the early firearm came to dominate war versus the crossbow or longbow was the economics of time related to training a soldier in each weapon. The longbow was arguably the far superior weapon but required at a minimum years worth of training, normally started at a young age. The crossbow, while easier to operate than a longbow, was costly to produce and still required a year or more of dedicated training to be considered truly proficient.

The early firearm, on the other hand, required mere weeks to prepare a solider for battle. A commoner could easily be drafted into the military, sent through an intensive six to

twelve weeks of firearm drilling and they could be marched onto the battlefield. While not crackerjack soldiers at this point, the fact that you could quickly train almost anyone and do it in large groups (rather than the more master-apprentice method of say archery) became an important aspect of historical battles. This idea is utterly lost in the rules as presented using exotic weapon proficiencies for instance. Presented below are two optional character backgrounds that supply a limited understanding of firearms for militia-like characters.

Firearm Militiaman (Combat Trait): You have served as a draftee in a militia that used firearms. You are considered proficient in one or two very specific firearms (for instance, a fire lance or hand bombard and hand cannon). This understanding of how to use firearms helps you when using unfamiliar weapons of a similar design, meaning you only take a -2 penalty when trying to use a different firearm without the proper proficiency. This proficiency rarely can be applied toward siege engines like cannons and bombards.

Firearm Proficiency (Downtime Retraining Option): Learning to use firearms requires very little direct instruction and time. Choose a single firearm (like a fire lance or hand gonne) you are not proficient in and one weapon you technically are proficient in but rarely use (like light mace or short sword). You become proficient in the firearm and lose proficiency in the selected weapon. This process takes 30 days and counts as a form of retraining. See the *Pathfinder Roleplaying Game: Ultimate Campaign* for more rules on retraining during a character's downtime.

Fouling a Firearm (Optional Rule)

Smoothbore explosive powder firearms tend to collect massive amounts of residue with each shot fired from their barrel. Smoothbore firearms generally fire bullets slightly smaller than their barrel diameter for ease of loading, but any additional grime on the walls of the barrel can impart unexpected changes in direction to a ball. Additionally, the buildup of residue increases the chances of a misfire occurring as a ball becomes jammed or partially burned powder reignites.

To add a level of realism to your game, you can have it that after each shot fired from an early firearm, the weapon incurs a cumulative -2 penalty to subsequent attacks, so firing a handgonne, then reloading it without first cleaning the barrel leads to a -2 penalty on your next attack and -4 on the attack after that, etc. Cleaning a barrel negates all these penalties. Cleaning a barrel is a standard action unless you have the Rapid Reload feat, which reduces it to a move action. Gunslingers can use their Lighting Reload deed to clean a barrel as a swift action.

In addition, after every three shots fired, the chance of a misfire increases by 1. This penalty is also cumulative and doubles if the weapon has a misfire occur. Cleaning a barrel negates this penalty as well.

Advanced firearms and other rifled firearms that use properly fitted bullets have some natural clearing of a barrel occur with each shot. Additionally, loading from a breech rather than the muzzle reduces the chance of knocking residue free or getting it stuck onto a bullet before it is fired. Only add the penalty after the first five shots, though both the misfire and penalty to your attack go up after each additional five shots fired.

Gunpowder includes large amounts of sulfur and niter, which are not fully burned off during the firing of the weapon. This residual material if left in the barrel and after it was exposed to any type of moisture could form sulfuric acid, which would corrode the barrel and other components to the point of destroying them. For each week a fouled firearm is left unmaintained after being fired, deal 1d4 acid damage to the weapon, bypassing all hardness. Once the weapon has lost half its hit points this way it is

broken and needs to be repaired. Once it has lost all its hit points this way it is destroyed and unrecoverable. Magic firearms can be affected by this rule as well at gamemaster discretion. Using paper cartridges in early firearms treats them as if they were advanced firearms as most paper cartridges included lubricants and anti-fouling agents to aid use in battle.

Magical Maintenance: Magically cleaning a firearm is possible. The most direct spell is the simple *prestidigitation*, which can clean the barrel of most firearms in one round (the firearm is clean the round after the spell is cast on it). For particularly large weapons, like a bombard or cannon, it can take one round per three foot length of the barrel. An *unseen servant* can also be commanded to clean a firearm, but it takes a full-round action for the *servant* to complete. Finally, despite not being a form of writing, many casters have discovered that the spell *erase* is able to instantaneously clean a firearm's barrel.

Just as cleaning a barrel can be done with *prestidigitation*, so can fouling it. Each time the spell is cast on a firearm, count its barrels as having fired one shot without being cleaned. The spell *grease* can likewise be used to jam up a firearm, though that spell makes the penalty count as if the firearm has been fired 5 times without being cleaned.

Placing Explosive Charges

Having an understanding of engineering and construction can enable a character to exploit inherent weaknesses of a material or design, given enough time and the proper placement of explosive materials. There a number of in-game effects that proper placement of an explosive can do. Each of the following actions requires one minute per explosive device being used unless otherwise specified in the description.

Knowledge (engineering) Addendum	
Desired In-game Effect	**Knowledge (engineering) DCs**
Create Fragmentation	Hardness of Material + 5
Bypass Hardness	Hardness of Material + 10

Create Fragmentation: When using an explosive to create fragmentation, you are purposefully redirecting the energy of the blast to turn debris or material of an object into deadly projectiles. This can occur one of two ways, either loose debris is purposefully mounded over an explosive to be projected when the explosive is set off or an explosive is placed so as to maximize the number of shards and other pieces of an object that was whole before the blast hits it. The DC needed for properly placing loose debris over an explosive is 5, as the hardness of the material being used is immaterial. Reduce the concussive damage (bludgeoning damage die) of the explosive by half, adding as many damage die minus 1 as fragmentation that deals bludgeoning and piercing damage. Also reduce the area of effect by half. When trying to create shards using a solid object, use the hardness of the material + 5 and reduce the damage die by two-thirds, with only half of those die (round up) becoming fragmentation that deals bludgeoning and piercing damage. Reduce the area of effect by two-thirds as well for this type of explosive.

Bypass Hardness: Use of this ability requires two separate checks against the same DC, each requiring one minute to perform. You must first inspect the object you wish to bypass the hardness of for one minute. Failing this check means you have found no weaknesses in the object and you cannot try to use this ability (no retry) until your Knowledge (engineering) skill has increased by 1 rank. After a successful inspection check, you must spend one minute placing the explosive to take advantage of any weaknesses found. Once the explosive is properly set, it is able to ignore the first 5 points

of hardness of the object being blown up. For every five points over the base DC of hardness + 10, you are able to ignore one additional point of hardness (minimum 0 hardness). Assuming a structure or object survived the first explosion, you still need to inspect the area before placing the next set of charges to take advantage of any additional weakness created or made more pronounced from your first attack.

Vision and Sound Hazards of Gunpowder (Optional Rules)

Firearms are dangerous even when used properly. Early firearms in particular have a number of hazards associated with them due to the components that make up gunpowder: brimstone (sulfur), charcoal and saltpeter (potassium nitrate). Brimstone causes an acrid stench, charcoal produces dark smoke, and saltpeter is known to build static electricity and ignite. All these solid chemicals combine with heat to produce a large flash, leaving behind about 50% of the mass of the powder as a residue that can be corrosive if exposed to moisture.

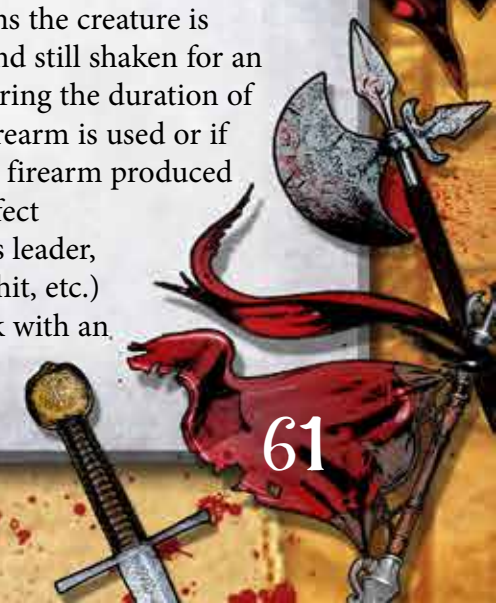
As the Weapon Fires: When fired at night, the muzzle of a barrel will flash (called muzzle-flash) as the explosion of the powder expels the shot out the end of the barrel with an incredibly loud explosion. The sound of a firearm going off can be heard for up to half a mile away (Perception check DC 5, +5 per 1,000 feet from the shot fired, barring additional obstructions) and the muzzle-flash can be seen in the dark nearly as far (Perception check DC 10, +5 per 1,000 feet from the shot fired, barring additional obstructions).

After the Weapon Fired: In the moment immediately after a firearm goes off, a small smoke effect is created. For one-hand handed firearms, the 5-foot square of the wielder of the firearm fills with a smoke effect. For two-handed firearms, the 5-foot squares of the wielder and immediately in front of the wielder fills with a smoke effect. A character who breathes smoke for a full round must make a Fortitude save (DC 10, +1 per previous check) or spend the next round choking and coughing. A character who chokes for 2 consecutive rounds takes 1d6 points of nonlethal damage. Smoke obscures vision, giving concealment (20% miss chance) to characters within it.

The smoke effect of a one-handed firearm dissipates after three rounds in still air, two rounds in a light wind, one round in a moderate wind and instantly in a stronger wind. The smoke effect of a two-handed firearm dissipates after five rounds in still air, three rounds in a light wind, one round in a moderate wind and instantly in a stronger wind. Reduce the time in half if used outdoors or in an open area with good ventilation. Double the time if used indoors or in a confined space like a narrow hallway or small room.

If a second shot is fired before the smoke effect of the first shot completely dissipates, then the duration continues and the DC of the Fortitude save increases (DC 15, +1 per previous check). In situations where many firearms are going off at the same time, increase the durations and the concealment percentage as well.

Mounts and Morale: Animals, including humanoids, unaccustomed to the raw power of a firearm discharging can easily be frightened or even stunned by the roar and flash of a weapon. For those creatures a gamemaster deems appropriate, make a Will save (DC 13) when first exposed to a firearm. A successful saving throw leaves the creature shaken for 1d3 rounds. A failed saving thrown means the creature is frightened for 1d3 rounds and still shaken for an additional 1d3 rounds. If during the duration of either fear effect a second firearm is used or if the shot taken from the first firearm produced a particularly spectacular effect (like dropping the warband's leader, destroying an object in one hit, etc.) then the fear effect can stack with an



additional Will save, with those shaken becoming frightened and those frightened becoming panicked.

Creatures, especially humanoids, readily adapt to this effect. It is generally only effective once unless the first time they were exposed a creature failed their save and was panicked. Generally if a creature is the one using the firearm they are unaffected by this fear effect, and most fear effects instantly go away if someone using a firearm is slain. Controlling a frightened mount is a Ride check (DC 22).

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