

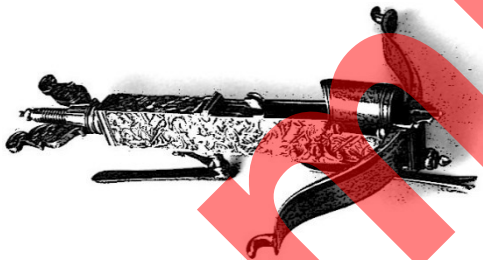
## Plumbata

Apparently originally invented by the Ancient Greeks, this weapon had become the Roman version of a war-dart by the Imperial era. Like its larger cousin the pilum, it had a long armor-piercing point and a lead weight. Typically, from three to five of these would be carried on the inside of the shield of a Roman Legionnaire. Apparently these can be thrown very far indeed.

They were considered the longest ranged weapon in the Roman arsenal at the time, out-ranging bows and slings. Only certain Legions appeared to use these, and they seem to have gone in and out of fashion but are well documented during the 3<sup>rd</sup>-4<sup>th</sup> Century AD.

## Hurlbat

A special type of throwing 'hammer' actually something like an axe-shaped blade with sharp pointy edges in all directions. Very similar to some African Throwing knives except for the overall cross-like shape. The whole thing was made of a single piece of metal, it was a handy weapon for striking out at close range, it was small, accurate and unlike a throwing knife heavy enough to cause some real harm, and almost guaranteed to cause some damage due to all of the sharp surfaces. These were used in Europe from circa 1400-1600, though the basic idea goes back much further to the Francisca etc.



An Italian "Balestrino" crossbow, circa 1450 AD

## Balestrino

This is a small but quite powerful crossbow with about a 200-300 lb draw weight (requiring a mechanical device to span) which can be shot one handed and can be somewhat easily concealed. For this reason, such weapons are often considered suspect by the authorities.

There may have been many types of 'serious' hand crossbows during pre-industrial times (in addition to toys or weapons for hunting very small game) but one specific type which did actually exist historically has been called a "balestrino", meaning small "balestra", "balestra" is the Italian name of the crossbow. The name is possibly derived from the ancient Latin

"ballista" (which, in its own turn, derives from the ancient Greek word "ballein" which is to throw... you can find it in the word "ballistic"). Though very small indeed, (some examples can almost fit on your hand), like most Renaissance or medieval crossbows, these *balestrino* had a much heavier draw weight than their modern equivalent. That is because with a short prod and a narrow spanning distance, you need a lot of power to move a dart at a sufficient speed to seriously injure a human being.

So to span these, you have to turn a screw, which you will notice as something like a butterfly wingnut on the surviving antiques such as the one pictured above. These weapons show up in auction sites from time to time, almost always with a similar design featuring the same type of spanning device.

There are rumors in the historical record that these were used as assassination weapons, which is a rather titillating idea. In spite of the powerful prods however, many modern scholars consider the *balestrino* a mere toy. They make the argument that a real assassin would not use such a relatively weak, and (since most surviving *balestrino* bows are expensive weapons made with rare materials and workmanship) instead of something cheaper and more effective. Like say, a stiletto or a pistol since these crossbows appeared contemporaneously with firearms. A reasonable argument to be sure.

But in Renaissance Italy, assassinations were not just the vocation of the kind of low-level professional criminals we typically think of today, but also the hobby of high ranking aristocrats, patrician burghers and even members of the college of Cardinals all of whom cheerfully assassinated one another fairly routinely particularly in the 16th and 17th Centuries. And these people liked their weapons to be beautiful and well made. Just like their jeweled rings with hidden poison compartments, and their silver inlaid stilettoes.

Small crossbows and pistols both created a minor outrage and a mini-legal crisis when they first appeared, due to the danger of assassinations. Pistols are much more effective as weapons, but they were also very loud and created a telltale plume of smoke, instantly marking the assailant. A crossbow like this could be concealed within the clothing, then used with some hope of effectiveness, concealed again, or discarded at the first opportunity, all without drawing any undue attention. It is also possible that these types of weapons were used with poison, like the Chinese repeating crossbow.

Regardless of their actual historical use, it is plausible enough to use weapons of this types for assassins in role playing games.

### **Crossbow, Light**

An ordinary crossbow of a type which was very common in Medieval Europe, and also in many other parts of the world from the Middle East to Vietnam. The draw weight is between 80 and 120 lbs. Suitable for hunting small game, they can also take down larger game or people especially when used with poison darts as they often were in Asia. An example of this weapon is the *Skåne lockbow* found in southern Scandinavia during the Medieval period.

### **Crossbow Latchet**

This is yet another unusual type of crossbow which appeared in the late 15<sup>th</sup> or 16<sup>th</sup> Century and was known to have been used in several places, notably by border Reivers in the British Isles. It is a crossbow with a built in spanning device, similar to a goats-foot, (or more closely, like the break action pump used in many modern air guns) which makes spanning the weapon very fast and easy. They were expensive, and tended to be small, but the simplicity of spanning the weapon made it useful from horseback.

### **Crossbow, Hunting**

This is the type of heavy crossbow called a *knüttelarmbrüste* or *knottelarmbrüste* by the Germans, which first appeared in Europe around the 7<sup>th</sup> or 8<sup>th</sup> Century AD and remained in use for both hunting and warfare, through the 16<sup>th</sup>. Though not as powerful as the composite and steel prod types which came later, they had a notable effect on the battlefield.

A moderately powerful crossbow roughly equivalent to a modern hunting crossbow with a draw weight of roughly 150 - 250 lbs, this weapon launched fairly heavy quarrels with a variety of different types of heads for hunting or warfare. Quarrels were shorter and stouter than arrows, and less aerodynamic. They typically featured just two leather or paper vanes rather than feathers.

Crossbows are relatively accurate and can be held in readiness almost indefinitely, but are less suitable than bows for indirect shots, though they could be used that way. More typically they were used to individually target specific enemies or targets.

The *knottelarmbrüste* commonly featured a thick wooden prod made of different types of wood (most commonly yew) with strings that were vulnerable to moisture, and unlike a bow they could easily be unstrung. For this reason, they were typically carried with a leather sheath over both the prod (bow) and the string, and the quarrels or bolts were carried in a special type of wooden quiver covered in fur. Though of only moderate power, is weapon quickly achieved an important role in warfare and it had a disruptive social effect as well, because it was somewhat effective against armor.

### **Javelin, Light**

This is a smaller, lighter Javelin which can be thrown longer distances, sometimes these were vanded like darts.

### **Javelin**

A javelin is a relatively light spear specialized for throwing. This was arguably the most common weapon on the battlefields of both Europe and Asia from the Bronze Age through the late Medieval period. Javelins thrown individually can be caught and thrown back, but javelins thrown in volleys can be extremely devastating, especially to troops lacking shields or heavy armor. Javelins were used from chariots, from horseback, and by infantry.

### **Half-Spear, Thrown**

A half spear (see Codex Martialis: Melee Weapons of the Ancient World) that has been thrown.

### **Spear, Thrown**

An ordinary dual-purpose spear which has been thrown. At short range a thrown spear has greater penetration than one used in a thrust.



The 13<sup>th</sup> Century Byzantine monastery at Suemella, Turkey

Table II.2 Martial Missile Weapons

Weapons	Cost	Wt.	Ideal Range	Max Range	Prep Time	AP	Dam. Dice	Attack Type	STR Bonus	Plungin g shot
Swiss Arrow (S)	3d	0.5 lb	20'	120'	1	+2	1	P4	(Y)	Y
Javelin, Pilum (M)	6d	1 lb	30'	120'	0	+3	2	P4	(Y)	N
Javelin, Heavy Pilum (M)	10d	2 lb	20'	80'	0	+4	2	P4	(Y)	N
Javelin, Thong (M)	4d	3 lb	30'	180'	1	+3	2	P4	Y	N
Soliferrum (M)	3s	6 lb	Melee	30'	0	+6	3	P4	Y	N
Short Bow (M)	1s	1 lb	60'	360'	1	+1	1	P4	N	Y
Recurve Bow (M)	10s	2 lb	50''	600'	1	+2	2	P4	Y	Y
Crossbow, Slurbow	20s	5 lb	60'	240'	2	-	2	B4	N	N
Crossbow, Repeating	6s	8 lb	40'	300'	0	-	1	P4	N	N
Crossbow, Stirrup (M)	30s	5 lb	80'	600'	3	+2	2	P4	N	N
Long Bow	3s	2 lb	60'	900'	1	+2	2	P4	Y	Y
Staff Sling	6d	4 lb	30'	200'	1	-	3	B4	(Y)	Y

For explanation of the Chart Columns see table I.2 Simple Missile Weapons above.

### Swiss Arrow

A "Swiss Arrow" is not necessarily Swiss and is not really an arrow, it's basically a war-dart or a small javelin which has a notch in it for the use of an *amentum* (see **Javelin, Thong**, below) which gives it better range, as well as (typically) vanes like an arrow.

Weapons of this type were widely used in Europe from Classical times through the Renaissance, and are recorded in historical records, literature and artwork from Ireland to the Ukraine.

### Javelin, Thong (Weavers Beam)

This is an ancient type of javelin which is made with a strap or thong in the middle called an *ankyle*, or an *amentum*, which goes around the wrist and can be wound around the haft of the javelin. In throwing, this imparts a spin which stabilizes the weapon and vastly improves accuracy. The

Romans called this weapon a 'veritum' but it is far older than Rome, going back to pre-historic times. In fact, weapons of this type were shot from chariots by the ancient Egyptians and Babylonians.

Next to the armor-piercing pilum type this was probably the most popular type of javelins and also for smaller darts (see **Swiss Arrow**, above). Javelins were later used with detachable *amentums* which would uncoil when the weapon was launched, remaining in the throwers hand.

### Soliferrum

This is a solid iron javelin, a special armor-piercing weapon with a long pedigree. It was apparently invented by the ancient Celts as far back as the Hallstadt period, but disappeared in much of Europe during the late Iron Age except within the Iberian Peninsula. Celitiberian and

Lusitanian forces used it with success against the Romans during campaigns in the 1<sup>st</sup> and 2<sup>nd</sup> Century BC.

The weapon reappears in the historical record 1400 years later in the Middle Ages, as a favorite of the much feared Almogavar mercenaries of the Pyrennes region, and under their famous leader Roger De Fleur they re-introduced the weapon to Greece and Byzantium (point first). This weapon has very limited range but has outstanding armor-piercing characteristics which the Almogavars found useful against heavily armored knights.



Pilum, left, and heavy pilum, right. From Legio XV, Graz Austria, photo by Mathias Kabel

### Pilum

The pilum was a special type of armor-piercing javelin used by the Romans. It is fairly well known that pila were eventually modified to break or bend upon impact, so that they could not be thrown back, and that they were difficult to remove from shields once they had pierced a shield.

This was not the primary purpose of this weapon however, which was to *kill*. The pilum is an armor-piercing javelin, shields were the most common form of personal protection used in Antiquity, and disabling a shield removed most of the protection a typical soldier had. But this weapon could also punch through armor and helmets, not to mention skulls and ribs, and was just as hard to pull out of your leg as it was to remove from your shield (and a lot more painful).

*“As to the missile weapons of the infantry, they were javelins headed with a triangular sharp iron, eleven inches (279 mm) or a foot long, and were called pila. When once fixed in the shield it was impossible to draw them out, and when thrown with force and skill, they penetrated the cuirass without difficulty”*

*“They had likewise two other javelins, the largest of which was composed of a staff five feet and a half long and a triangular head of iron nine inches (229 mm) long. This was formerly called the pilum, but now it is known by the name of spiculum. The soldiers were particularly exercised in the use of this weapon, because when thrown with force and skill it often penetrated the shields of the foot and the cuirasses of the horse”*

Publius Flavius **Vegetius** Renuatus, De Re Militari 450 AD

The pilum was the primary battlefield weapon of the Roman Legions for roughly 500 years, during the period of the height of their power. In battle they were ideally thrown in three volleys just before the charge.

### Heavy Pilum

This is simply the heavier version of the pilum, weighted either by a removable lead weight near the base of the iron part of the shaft, or by a heavier overall construction. When available, it was the last of the three pilum volley, it had shorter range but better penetration.

### Short Bow

This is the ordinary, ubiquitous type of bow, used for hunting or warfare, but not extraordinarily powerful. It is the equivalent of a modern hunting bow. Bows of moderate power were still used in combat in antiquity, but were not primary battlefield weapons.



Matt Easton of Schola Gladiatoria UK, takes aim with his replica Hungarian recurve, of 65 lb draw. Image used with permission.

### Recurve Bow

This is a type of bow which originated on the Central Asian steppes probably as far back as the second millennium BC. The recurve bow has a characteristic ‘double-humped’ or w

shape and designed to be spanned in the opposite side of the curve (hence, re-curve). Recurves are made of at least some composite materials such as horn or bone and different types of wood and sinew on the back, often covered over with birch bark or even leather to provide some protection from the elements. Recurves were far more powerful than ordinary bows while also small enough to be shot from horseback.

Various tribes of the Central Asian Steppes gradually perfected this complex weapon over the centuries, notably the Parthians (inventor of the 'Parthian shot'), the Scythians, the Sarmatians, the Turks, the Huns, the Magyars and the Bulgars, among others. The Mongols later developed a more powerful version called a **Composite Bow** in this document, though in Academia the term recurve often applies to all weapons of this general type. The recurve bow was particularly vulnerable to moisture with its glued and lashed together organic materials, and on the steppe both bow and arrows were stored in a dual-purpose sheath called a gorytos.

### Crossbow, Slurbow

This is a special type of crossbow which shoots lead bullets or shaped stones, similar to sling stones. It is essentially a smaller version of many more ancient forms of torsion spring 'artillery' (siege weapons) used by the Romans and Greeks and their various rivals in Antiquity. The slurbow appears in the late Medieval period as a hunting weapon, which has the benefit of stunning or crushing small game rather than puncturing them. It was not primarily intended as a weapon of war though it could cause serious injuries.



FIG. 171.—SIDE VIEW OF THE CHINESE REPEATING CROSSBOW.

Chinese repeating crossbow

### Crossbow, Repeating

This is a light crossbow with a built in cocking-lever and an integral magazine containing up to ten quarrels. These weapons were used by the Chinese from the Bronze Age into the 19<sup>th</sup> Century, and this technology was also apparently known to the ancient Greeks.

They were also not extremely powerful, and because of the magazine-loading design, this weapon used quarrels with no fletchings, making them relatively inaccurate except at short range, though the weapon could shoot darts a long way. They were in fact designed for use en-masse, and the quarrels were frequently coated with poison to make them more dangerous. Unlike most crossbows this weapon was often used for indirect shooting in high arcs, with a large

number of quarrels or darts launched (a rate as high as 10 shots per minute was possible) and holding a magazine of up to ten darts, these could be quite dangerous. They were often used during sieges.

It is worth keeping in mind that this weapon **does have** to be spanned after each shot, it's **not** a clockwork machine gun as often portrayed on TV.



From the left, two European heavy crossbows with foot stirrups and a belt hook, heavy crossbow with foot stirrup and a windlass.

### Crossbow, Stirrup

During the 13<sup>th</sup> Century Mongol invasion of Europe the European heavy crossbow created a profound impression on the Mongols. They mentioned it several times in their surviving records and reported that it was the cause of many casualties. The Arabs and Turks also learned to fear this new weapon, naming it *qaws Ferengi*, or "Frankish bow." They soon adopted it for themselves primarily for siege warfare, though it also appears in Mamluk training manuals.

This new crossbow was the *steigbügelarmbrust*, the 'stirrup crossbow', with which the Crusader armies faced well-trained and highly mobile Arab and Turkish horse-cavalry armed with their formidable recurve bows. That this could actually be done with success, most notably by Richard Ceour De Leon during the Second Crusade, is testament to the effectiveness of the weapon, which ironically utilized the same composite-bow technology of Arabic recurves to make more powerful type of composite crossbow prods. These new weapons were used in early European arbalists beginning in the early 13<sup>th</sup> Century.

The *steigbügelarmbrust* was a medium sized, powerful weapon, with a draw weight of roughly between 250 - 350 lbs (a 14<sup>th</sup> Century document from the Teutonic order refers

specifically to a 330 lb draw weapon). Prods were usually made of composite materials including different types of wood, the nuchal ligament of a horse, whalebone or baleen, and goat or bulls horn. Though somewhat rare initially, these became an increasingly common military weapon in the 13<sup>th</sup> Century and remained in use through the 16<sup>th</sup>, long after being eclipsed by the more powerful arbalest crossbow, the longbow and the firearm.

Due to their power spanning (cocking) was difficult, requiring a foot stirrup mounted onto the prod of the weapon, often augmented with a belt hook. Simple mechanical devices such as an iron goats-foot (*geissfuss*) or the wooden lever (*wippe*) were also not uncommon. These aided in repeated spanning and re-spanning of the weapon in battle, particularly on horseback.

On the battlefield crossbows would ideally be deployed behind a pavise shield, a wall, or a wagon. With two people working together, one weapon would be spanned while the other was deployed. By this method a trained crossbowman with an assistant could manage as many as 6 or 7 shots per minute vs. 2 -3 shots for an individual marksman working alone. But in a fast-moving close combat type situation, the crossbow was essentially a one-shot weapon, the same as early firearms.

The crossbow had three major differences in use from a bow. First and most infamously, heavier crossbows had a relatively slow rate of shots, equivalent to early firearms. Also it shot in more of a strait-line and was not as effective for plunging shots, (though more so than firearms).

The small, heavy bolts of the most powerful crossbows did not fly as well as an arrow after the energy from the weapon had dissipated, but the initial energy was higher than that of an arrow and they had a somewhat longer 'direct' range, in the neighborhood of 80 meters. For longer range shots special flight bolts and 'whistling bolts' (gadflies) were used which caused relatively little damage but were useful for harassment of enemy troops to a distance of up to 300 meters. (Damage D4)

On the plus-side, like early firearms, a crossbow once loaded could be kept in readiness indefinitely, making it easier to aim. Of all the Medieval and Renaissance ranged weapons, the crossbow arguably had the best effective range for a direct shot, and therefore made the best 'sniper' weapon. The most powerful crossbows also had a longer total range than any bow. Unlike a culverin or a matchlock arquebus, a crossbow did not require a lit match which would give away the shooters position. These factors combined to make the crossbow the most popular and ubiquitous high-powered missile weapon in Central Europe through the Medieval and early Renaissance periods.

## Longbow

*"...and he should proceed like those prudent archers who, aware of the strength of their bow when the target they are aiming at seems too distant, set their sights much higher than their designated target, not in order to reach to such a height with their arrow but rather to be able, with the aid of such a high aim, to strike their target."*

Niccoló Machiavelli, the Prince, 1513 AD



An archer strings a longbow, painting is circa 16h Century, artist unknown

One of the three or four most iconic weapons of the Medieval period, the Longbow was also one of the very few pre-industrial European weapons which survived the Victorian era with its reputation fully intact, probably due in large part to the propagandizing skill of William Shakespeare, one of the few artists who truly transcended the cultural gap between the Renaissance and the Industrial Age. The longbow has also emerged from the current period of intense re-examination of many of the myths and legends of Medieval weaponry unscathed, and if anything, its reputation has been enhanced by modern testing and scientific analysis.

The efficacy of the longbow is certainly no myth, it was a formidable weapon. Archeological evidence indicates the design originated in the Bronze Age, and was indigenous to the British Isles and Scandinavia. It did not become a

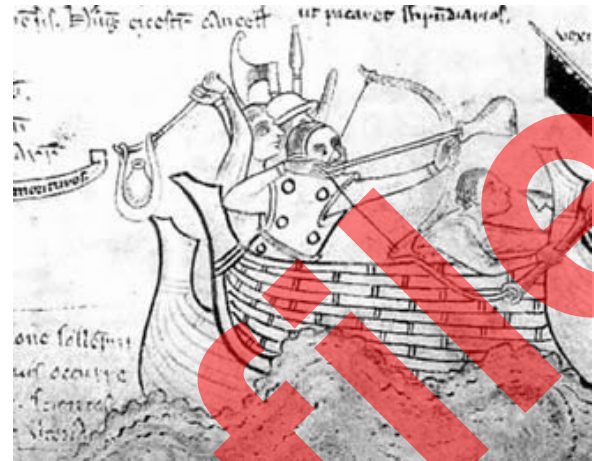
prominent weapon until the early Medieval period, originally during the English campaign to conquer Wales by Edward I in the late 13<sup>th</sup> Century.

Immediately subsequent to that invasion, the English adopted the weapon and made it their own. It swiftly became the most important ranged weapon in England until the late 15<sup>th</sup> Century, and remained in wide use in the British Isles and in their wars on the Continent through the 16<sup>th</sup>. During the 100 Years War and afterward, the Duchy of Burgundy, often allied with England, also cultivated the art of archery and the use of the longbow among their own yeomanry.

The longbow differed from ordinary bows in that it was stiffer, longer, and was generally speaking used to shoot larger heavier arrows. The bow itself was of fairly simple construction, typically made from yew staves, sometimes a second piece of wood would be inserted into a slot cut out at the compression point, enhancing the stiffness of the bow.

The Welsh used the longbow to good effect during their long but ultimately futile guerilla struggle against the conquest of their land completed by Edward I in the 13<sup>th</sup> Century. After subduing Wales, the English monarchs recruited Welsh archers as soldiers, and not long after began to train their own subjects in the use of the weapon, as well as encouraging marksmanship contests and generally raising the prestige of the culture of archery, which they astutely recognized as a strategic asset.

The English made effective use of their new cadre of trained archers, influencing their tactical doctrine in the centuries to come. The longbow archer formed a critical part of the highly effective English infantry-heavy combined-arms units of the 14<sup>th</sup>-15<sup>th</sup> Century, contributing to a series of dramatic victories against many opponents (most famously the French during the 100-years-war at Crecy, Poitiers, and Agincourt). The longbow was also an important asset in both naval and land battles against the Scots, the Spanish, the Dutch, and every other enemy of England. It soon evolved into an even more feared weapon, the **English warbow**.



English soldier (left) using a staff-sling to throw a pot of quicklime while another prepares a fire-arrow in the battle of Sandwich, 1219 AD

### Staff-Sling

This is a sling mounted on a staff. Standard damage in the table represents throwing a large rock, but these were more typically used to throw firepots, quicklime, or grenades (see Firearms)



The Renaissance Flemish version of "Paladin in Hell", as a deranged peasant matron: "Mad meg", a character from Flemish folklore, wielding a longsword and wearing a breast plate while on her famous raid to pillage hell, from a Pieter Bruegel the Elder painting, 1562 AD

## Table II.2a: Height advantage of thrown missile weapons

One of the reasons defensive fortifications were put on top of hills is that throwing things at people far below you is much more fun and effective than having things thrown at you from above. Height confers a major advantage with missiles of all types, particularly thrown weapons like spears, javelins and rocks.

Height over target*	To Hit	Ideal Range	Max Range	Damage Mod.
10-25'	-	-	+20'	+1
26-50'	-1	+5'	+50'	+2
51+	-2	+10'	+100'	+3

\* the height over the target must be included in considering the total distance to the target for determining range category.



Crossbows from a 15<sup>th</sup> Century painting (Detail of a martyrdom of St. Sebastian), image courtesy "Gunpowder Ma". Note the smaller size of the cranequin weapon, and the discarded cranequin itself on the ground next to the red-clad archers knee, the cut-thrust sword, and the fur covered wooden quiver with three bolts.

**Table II.3 Exotic Missile Weapons**

Exotic Missile Weapons	Cost	Wt.	Ideal Range	Max Range	Prep Time	AP	Dam. Dice	Attack Type	STR Bonus	Plunging shot
Thrown Dagger, Small (T)	-	1 lb	Melee	40'	0	-	1	P4	(Y)	N
Thrown Dagger, Large (T)	-	2 lb	Melee	20'	0	-	1	P4	(Y)	N
Chakrum / Quoit (T)	5s	1 lb	30'	120'	0	-	1	S8	(Y)	N
Axe, Throwing (S)	1s	2 lb	15'	90'	0	-	2	C6	(Y)	N
Francisca Axe, Thrown (S)	2s	2 lb	20'	120'	0	-	2	C6	(Y)	N
Hatchet or Hand Axe (S)	-	-	Melee	60'	0	-	2	C6	(Y)	N
Atlatl (M)	1s	5 lb	10'	80'	1	+3	2	P4	(Y)	N
Crossbow, Windlass (L)	50s	12 lb	80'	900'	5	+4	3	P4	N	N
Crossbow, Arbalest (M)	60s	7 lb	100'	1200'	4	+4	3	P4	N	N
Crossbow, Heavy Arbalest (M)	80s	8 lb	120'	1400'	4	+4	3	P4	N	N
Crossbow, Bankarmbrust (L)	90s	15 lb	120'	1600'	6	+4	4	P4	N	N
Springald	120s	30 lb	60'	800'	8	+6	4	P4	N	N
Crossbow, Gastrophetes (L)	12s	10 lb	60'	600'	3	+3	3	P4	N	N
Flat Bow (L)	6d	6 lb	40'	300'	1	+2	2	P4	Y	Y
Yumi Bow (L)	2s	7 lb	60'	600'	1	+2	2	P4	Y	Y
Heavy Composite Bow (M)	15s	6 lb	50'	1200'	2	+3	2	P4	Y	Y
English Warbow (L)	5s	8 lb	40'	1000'	2	+3	3	P4	Y	Y
Indian Steel Bow (M)	10s	12 lb	25'	400'	2	+4	2	P4	Y	Y
Sling (S)	-	-	60'	800'	0	-	2	B4	(Y)	N
Lasso	-	-	20'	30'	2	-	-	Special		N

For explanation of the Chart Columns see Table I.1 Simple Missile Weapons

### Thrown Dagger, Small

An ordinary dagger is hard to throw accurately so that the point will touch in the target rather than the pommel or the side of the weapon. This is much easier to achieve with a weapon like a throwing knife which is designed and balanced to be thrown. The tradeoff with throwing knives is that an ordinary dagger is heavier and does more damage.

### Thrown Dagger, Large

Same as a small thrown dagger, only bigger.



Sikh warriors with Chakrum and muskets, 1844 AD, artist unknown

### Chakrum / Quoit

The Chakrum is an ancient, unique weapon of the Punjab region of what is now Northern India and Pakistan, made famous by the Sikhs, who used them against the Mughal Empire and against the British Empire well into the 19<sup>th</sup> Century. Apparently with good effect, as the Sikhs were some of the toughest opponents faced by either group. This is a flattened, hollow metal disk, sharpened on the edges, somewhat similar to a modern Frisbee style toy called an aerobie. The weapons were carried worn on a turban, could be flung with a finger to arc into attackers from the side, which made them more effective at causing wounds.

### Axe, Throwing

This is an axe specifically balanced for throwing. Many hand-axes and battle-axes were balanced in this way.

*"...each man carried a sword and shield and an axe. Now the iron head of this weapon was thick and exceedingly sharp on both sides while the wooden handle was very short. And they are accustomed always to throw these axes at one signal in the first charge and thus shatter the shields of the enemy and kill the men."*

The Wars of Justinian Procopius, circa 500 AD

### Francisca Axe

Much as the Sax became the ethnonym of the Saxons, a special type of throwing axe popular among a large confederacy of various Northern tribes called the