By Bill Coffin

Siege warfare -- no fantasy world is truly complete without it. Sure, you can have all the daring sword fights and magical battles you want, but as long as there will be castles and armies in the Palladium Fantasy Role-Playing Game world, the there will be siege combat.

Attacking a castle in this setting isn't quite like it was in real-life medieval Europe because there was no magic to help you out. I mean, why bother besieging a castle when an earth warlock can shatter its walls with a snap of her fingers? Or when a summoner can call in a demon to do the same? Or when a fighter wielding the rune sword Castlerake can simply crumble the mightiest defenses?

But for those armies without magic (or a god) on their side, the next best thing is to roll out the Palladium fantasy equivalent of heavy artillery -- siege weapons.

These devices probably would probably enter most campaigns during times of war or siege, both of which are more the province of wargaming than role-playing. but for those of you who've always wanted to know how hard a trebuchet hits, or how far a ballista shoots, or would like an expanded description of the weaponry described in the back of the Adventures on the High Seas sourcebook, then this article is for you.

After reading this article you want more information on the nature and workings of siege weaponry, check out Palladium's Compendium of Weapons, Armour and Castles. Not only does it have fine descriptions of all major siege weapons, but it also has one of the best descriptions that I have ever read of how siege warfare was conducted.

Siege Weapon Training

All of the weapons described in this section require the W.P. Siege Weapons skill to effectively operate and maintain. While most adventurers never encounter or operate siege weapons, professional soldiers do. In the Western Empire, for example, the frequent civil wars there encourages many of that realm's mercenaries and soldiers to take the W.P. Siege Weapons

skill. And in the Timiro Kingdom, siege weapons are an essential part of that country's border defenses against bands of marauding ogres.

For many warriors, operating siege weapons is a coveted assignment -- how else does a simple fighter get the chance to knock down an entire castle wall? Plus, mercs and soldiers trained in siege weapons are specialists who get two or three times the going rate, too. And they usually aren't even on the first lines of combat! In general, knights and palladins disdain heavy weaponry as "grunt work," and tend to stick with their cavalry charges and hand-to-hand combat. As a result, knight or palladin characters aren't likely to take W.P. Siege Weapons unless they've had a lowlier background before they chose their current O.C.C.

If a siege weapon's crew is less than entirely skilled in W.P. Siege Weapons, then the following modifiers apply:

If 75% of a crew has W.P. Siege Weapons, then the weapon will fire at -4, the damage inflicted by the weapon will be reduced by 25%, and the rate of fire will be halved.

If only 50% of the crew has W.P. Siege Weapons, the weapon fires at -6 to hit, its damage is halved, and takes four times as long to operate That is, if a weapon shot once a melee round, it now fires once every four melee rounds.

If only 25% of the crew has W.P. Siege Weapons, the weapon fires at -8 to hit, has its damage reduced by 75%, and takes eight times as long to operate.

If less than 25% of the crew has W.P. Siege Weapons, the weapon is at -10 to hit, and will only do 10% of its normal damage. Moreover, crews this unskilled are very likely to hit somebody by else accidentally if they miss. When operating indirect-fire weapons, such unskilled crews might accidentally fire their projectile straight up in the event of a miss, in which case, damage to the weapon or its operators might result. Better warm up those dodge modifiers, boys! Also, operation takes sixteen times as long.

In case players ask, the reduction in damage accounts for the crew not knowing where to hit

their target -- this is especially applicable to castles and other reinforced structures. In addition, unskilled shots tend not to hit dead-center, causing only a glancing blow. Hence, less damage.

Other Modifiers

With the exception of arbalests, siege weapons are designed to hit large, stationary objects. But now and then, gunners might feel the need to hit a moving target -- say, a dragon or other large nasty. For hitting moving targets with large siege weapons, the following modifiers apply:

Ballistas (all types), light springals, light catapults, light onagers: -6 to strike small (man-sized or smaller) moving targets, -4 to strike large (giant-sized and larger) targets.

Medium springals: -4 to strike small moving targets, -3 to strike large moving targets.

Heavy springals: -3 to strike small moving targets, -2 to strike large moving targets.

Medium and heavy catapults: -8 to strike small moving targets, -6 to strike large moving targets

Trebuchets cannot be aimed at moving targets. Period.

Siege Weapons

For the purposes of the Palladium Fantasy Role-Playing Game, there are six basic types of siege weaponry: arbalests, ballistas, springals, catapults, onagers and trebuchets. Each of these weapons falls into one of two categories: direct-fire weapons and indirect-fire weapons.

Direct-fire Weapons

Arbalests, ballistas and springals are direct-fire weapons, that is they fire their projectiles in a straight line. The advantage to direct-fire weapons is that they have no minimum range. The drawback is that they tend to have shorter ranges than indirect-fire weapons.

Arbalests essentially are very heavy crossbows with greater range and hitting power than conventional crossbows. Since these things are so powerful, they are cocked by a crank, winch, or other hand-held mechanism. Sometimes these cocking devices are built into the arbalest, as is the case with cranks and winches. Otherwise, cranking devices such as cocking hooks are separate tools that the operator must keep around for reloading. (A common tool was a pair of hooks worn on the gunner's belt.) Although they resemble normal crossbows, W.P. Archery DOES NOT give one bonuses to strike or an increased rate of fire when using an arbalest. These are W.P. Siege Weapons devices ONLY. G.M.s, don't let your players get away with cranking off 4 or 5 arbalest shots around -- the increased power of these weapons requires a lengthy reloading time, so the maximum rate of fire for all arbalests is two shots per melee round. No exceptions. Giant-sized arbalests do inflict an extra 1D6 damage, however. (Arbalests are the one and only type of siege weapon that has a giant-sized damage bonuses. All other siege weapons do the same damage whether they are giant-sized or not.)

Light arbalests cost 100 gold, medium arbalests cost 110 gold, and heavy arbalests cost 120 gold. arbalest bolts cost 30 gold per dozen.

- Light arbalest: Damage: 2D6; Range: 740 ft./225m; Weight: 7.5 lbs./3.4 kg
- Medium arbalest: Damage: 3D6; Range: 1,090 ft./330m; Weight: 12 lbs./6.0 kg
- Heavy arbalest: Damage: 4D6; Range: 1,400 ft./425m; Weight: 18 lbs./8.0 kg

Ballistas resemble wagon-sized arbalests that fire javelin- or spear-sized projectiles. Typically, they are crewed by two or three gunners. Although ballistas cause much less damage than the heavier indirect-fire weapons, they remain a popular and effective battlefield device -- probably because they are light, easy to transport, and use cheap ammunition. Ballistas also are commonly used on warships (including well-equipped pirates and merchants) as an anti-personnel weapon and as an anti-ship weapon. Small vessels, such as corsairs, lighters, and trimarans aren't large enough to support a ballista. Medium-sized vessels such as barks, caravels, merchantmen and Wolfen longboats can support one or two ballistas. Large vessels such as war galleys, behemoths, destroyers and frigates can support up to four ballistas. The maximum rate of fire for ballistas is once every five minutes (20 melees rounds).

- Light ballistas cost 2,000 gold and heavy ballistas cost 5,000 gold. Ballista arrows cost 40 gold each (480 gold per dozen).
- Light ballista: Damage: 1D4x10; Range: 1,155 ft./350m; 100 S.D.C.
- Heavy ballista: Damage: 1D6x10; Range 1,320 ft./400m; 125 S.D.C.

NOTE: The aforementioned damage is for ballista arrows. Flaming arrows will do an extra 4D6

per melee round until extinguished, and will have a 12% chance of igniting what they hit (if it is combustible). Ballistas can also fire small rocks (@ 10 lbs./4.5 kg). The range is the same, but the damage for these is only 5D6.

Springals are another type of javelin-projecting weapon in which missiles are placed on a frame and a wooden arm, or springer, is drawn back and released. The springer hits the butt of the missile, firing it. Springers are made of several layers of glued wood, similar to a compound bow. Springals are roughly the same size as ballistas, but they fire much smaller projectiles, about the size of a normal javelin. The real advantage to springals is that they can be built to fire more than one projectile at once, making them an effective anti-personnel weapon. Like ballistas, springals also can be used as shipboard weapons (and, it is rumored, are very popular among the pirates of the southern Yin-Sloth coastlines). Light springals fire a single projectile, like a cross between a ballista and an arbalest. Medium springals typically fire 8 projectiles upon a 20 square foot target area that can accommodate up to 5 man-sized humanoids, 3 giant-sized humanoids, and 7 small (dwarf-sized or smaller) humanoids. When hit by a big cluster shot like this, all targets within the target area must successfully dodge the shot or get hit my multiple projectiles. Large springals typically fire 16 projectiles upon a 40 square foot area that can accommodate up to 10 man-sized humanoids, 6 giant-sized humanoids or 15 small humanoids. Like with a medium springal, all targets in the target area for a heavy springal must dodge to avoid getting hit. Of course, if a medium or large springal is fired against a large object like a building or ship, then the damage is just to the structure. The maximum rate of fire for a springal is once every five minutes (20 melee rounds). Springals require a four-man crew to operate.

Light springals cost 2,000 gold, medium springals cost 3,500 gold, and heavy springals cost 5,000 gold. Springal ammunition costs 30 gold each. needles to say,a heavy springal can rack up quite an ammunition tab.

- Light springal: Damage: (1 projectile)4D6; Range: 825 ft./250m; 100 S.D.C.
- Medium springal: Damage: (8 projectiles)1D4x10; Range: 825 ft./250m; 110 S.D.C.
- Heavy springal: Damage: (16 projectiles) 1D6x10; Range: 990 ft./300m; 125 S.D.C.

NOTE: Springals can fire flaming projectiles. The extra damage and chance of causing a fire as the same for ballistas.

Indirect-fire Weapons

Catapults, onagers and trebuchets are indirect-fire weapons, which means they fire their

projectiles in an arcing trajectory. While this affords them better range than direct-fire weapons, they have the disadvantage of requiring their targets to be a certain distance away, or else the projectiles will simply shoot over the target. Having a minimum range is especially troublesome when firing on moving targets, because if they're quick enough, they can move to within the weapon's minimum range, effectively rendering the weapon useless, and attack the crew.

Catapults consist of a 3.5m x 1.5m frame with a heavy crossbeam mounted and braced perpendicular to it. Behind the cross beam, a large system of cords called a skein holds the arm of the machine. A winch-like apparatus is used to tighten the skein and crank back the catapult's arm. Once cranked back, the arm was locked into place, usually with a metal loop and hook. A heavy rock or flaming bundle is loaded into a basket at the end of the arm, then the catch holding the arm in place is released. The arm snaps forward and hits the crossbeam, hurling the rock. Light catapults require 4-man crews, medium catapults require 6-man crews and heavy catapults require 8-man crews. The difference in crew size is because heavier catapults require more brute strength to rachet the arm back into firing position.

Like ballistas, catapults are used as shipboard weapons - medium ships can accommodate one catapult, heavy ships can accommodate two. (Ships can hold more ballistas than catapults because their ammunition is smaller and weighs less.) Catapults often are built with wheels so they can be towed to and from the battlefield. The maximum rate of fire for a catapult is once every five minutes (20 melee rounds).

Light catapults cost 5,000 gold. Medium catapults cost 7,500 gold. Heavy catapults cost 10,000 gold. Ammunition is free where you can find it. otherwise, specially carved stones typically cost 25-50 gold each. Specially prepared flaming bundles cost 50 gold each. Crews tend to buy specially prepared bundles rather than make their own (the specially prepared ones almost always burn better and have better explosive dispersal).

- Light catapult: Damage (10 lbs./4.5 kg): 5D6; Minimum range: 100 ft./30m; Maximum range: 900ft./275m; 250 S.D.C.
- Medium catapult: Damage (20-30 lbs/9-13 kg): 1D6x10; Minimum range: 100 ft./30m; Maximum range: 1,070 ft./325m; 300 S.D.C.
- Heavy catapult: Damage (40-80 lbs./18-36 kg): 2D4x10+10; Minimum range: 100 ft..30m; Maximum range: 1,240 ft./375m; 350 S.D.C.

Flaming bundle: 5D6 damage + 4D6 damage per melee until extinguished to all targets within a 10 ft./3m target area. 75% of starting a fire if it hits something combustible. This can be

especially devastating if it hits straw-roofed buildings or other flammable objects. The resulting fire will cause 1D4x10 the first melee round after the initial hit, then will double in damage each subsequent round as the fire spreads. Keep in mind, however, that a stone building with a thatched roof will only lose the roof this way, while a wooden building will be consumed. Use common sense when determining the spread of fire -- a stone castle isn't going to burn to the ground, period.

Onagers are identical to catapults except they use a sling to hold their missiles instead of a basket. While this gives onagers a slightly better range, they cannot be used to fire flaming projectiles. The crew requirements and rate of fire for onagers is the same as for ballistas.

Light onagers cost 5,000 gold. Medium onagers cost 7,50 gold. Heavy onagers cost 10,000 gold. Ammunition is free where you can find it. otherwise, specially carved stones typically cost 25-50 gold each.

- Light onager: Damage (10 lbs./4.5 kg): 5D6; Minimum range: 100 ft./30m; Maximum range: 990 ft./300m; 250 S.D.C.
- Medium onager: Damage (20-30 lbs/9-13 kg): 1D6x10; Minimum range: 100 ft./30m; Maximum range: 1,155 ft./350m; 300 S.D.C.
- Heavy onager: Damage (40-80 lbs./18-36 kg): 2D4x10+10; Minimum range: 100 ft..30m; Maximum range: 1,320 ft./400m; 350 S.D.C.

Trebuchets are the grand-daddy of all siege weapons. These monstrosities hurl large stones like catapults and onagers, but instead of using torsion to fling their projectiles, a trebuchet arm is attached to a counterweight . When a trebuchet is fired, this counterweight rotates downward due to gravity, seesawing the firing end high in the air, where it fired its missiles. Trebuchets were favorite siege weapons because they hurled massive (250 kg and heavier!) stoned at their target. One hit from a trebuchet will shake all but the stoutest of fortresses, and a sustained bombardment will eventually destroy whatever it is shooting at. The downside? Trebuchets are about the size of a large house, and typically must be constructed at the siege spot. Moreover, a trebuchet counterweight could weigh up to 10,000 kg, and the ammunition isn't light either, so there better be a ready supply of stone nearby. (This is one of the reasons why the Western Empire's army prefers to employ earth warlocks to wreck castles instead of using such large and cumbersome machinery). Also, a trebuchet's large size makes it an easy target for other siege weapons and magical defenses. But if you're in the market for a super-massive engine of destruction, look no farther.

Trebuchets have no easily defined market value because they are built at a siege site. And even if you could buy these on the open market, it is highly doubtful the local authorities would allow it.

Light trebuchets require 12-man firing crews. Medium trebuchets require 16-man crews. Heavy trebuchets require 20-man crews. The maximum rate of fire for a trebuchet is once every 15 minutes (60 melee rounds).

- Light trebuchet (an oxymoron): Damage (550 lbs/250 kg): 1D4x100; Minimum range: 100 ft./30m; Maximum range: 900 ft./275 m; 400 S.D.C.
- Medium trebuchet: Damage (825 lbs./375 kg): 1D6x100; Minimum range: 150 ft./45m; maximum range: 990ft./300m; 450 S.D.C.
- Heavy trebuchet: Damage (1,100 lbs./500 kg): 1D8X100; Minimum range: 200 ft./60m; maximum range: 1,155 ft./350m; 500 S.D.C.

NOTE: In mega-damage environments, calculate all trebuchet damage as mega-damage.

Other siege weapons

For information on a variety of other commonly used siege weapons such as siege towers, battering rams, the mouse, mantelets and quicklime, refer to The Compendium of Weapons, Armour and Castles. Enterprising Gms can extrapolate damage statistics from the descriptions given.

Rifts Conversion Note

Whether or not the siege weapons here inflict mega-damage in a mega-damage environment is up to the G.M. Personally, I would keep these as S.D.C. weapons, since I can't envision a ballista missile going through a Glitter Boy's chest. But if you want to give that Wolfen expeditionary force a chance when it goes up against Josef Prosek's forces, then go ahead and convert to mega-damage.