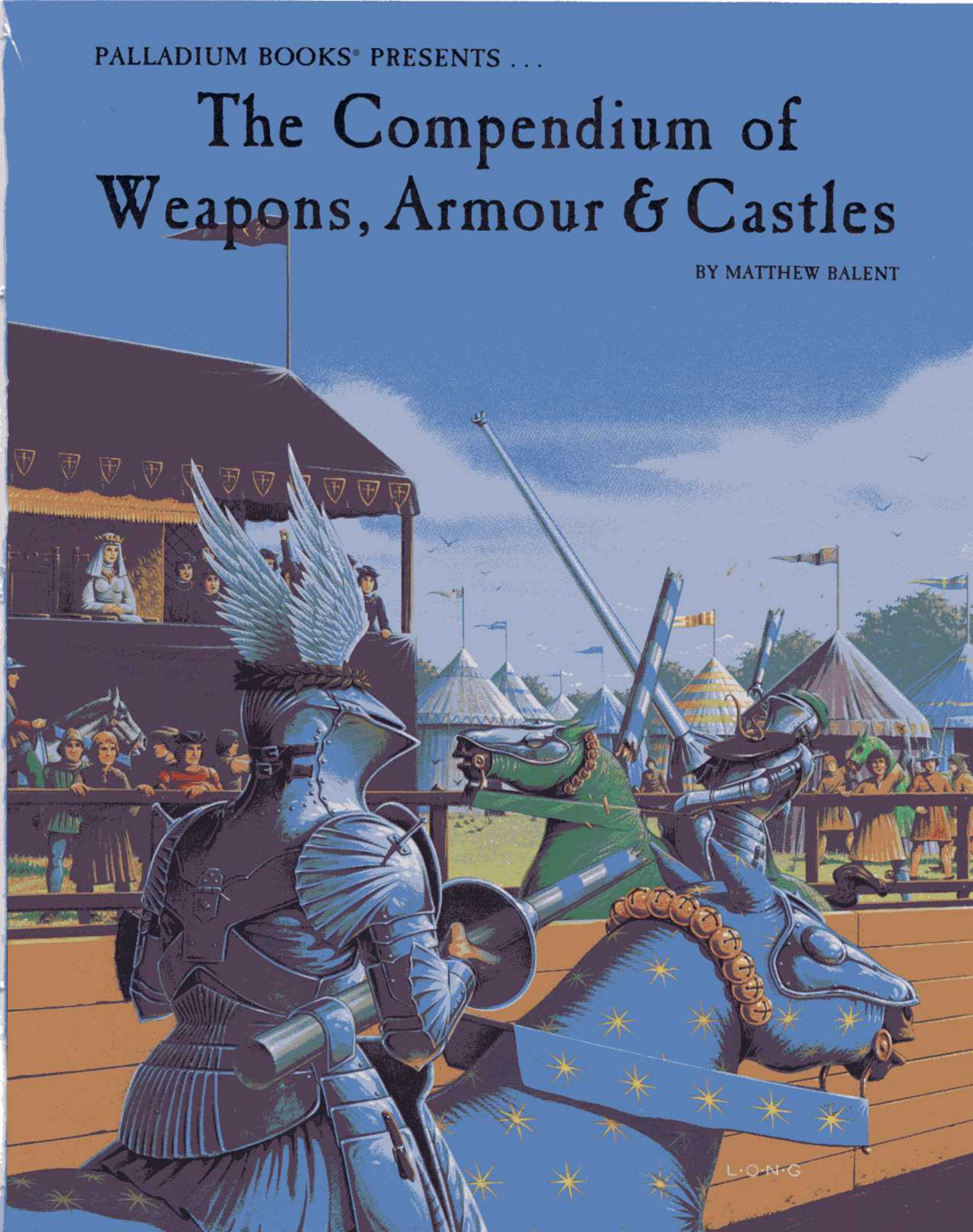
PALLADIUM BOOKS® PRESENTS . . .

The Compendium of Weapons, Armour & Castles

BY MATTHEW BALENT



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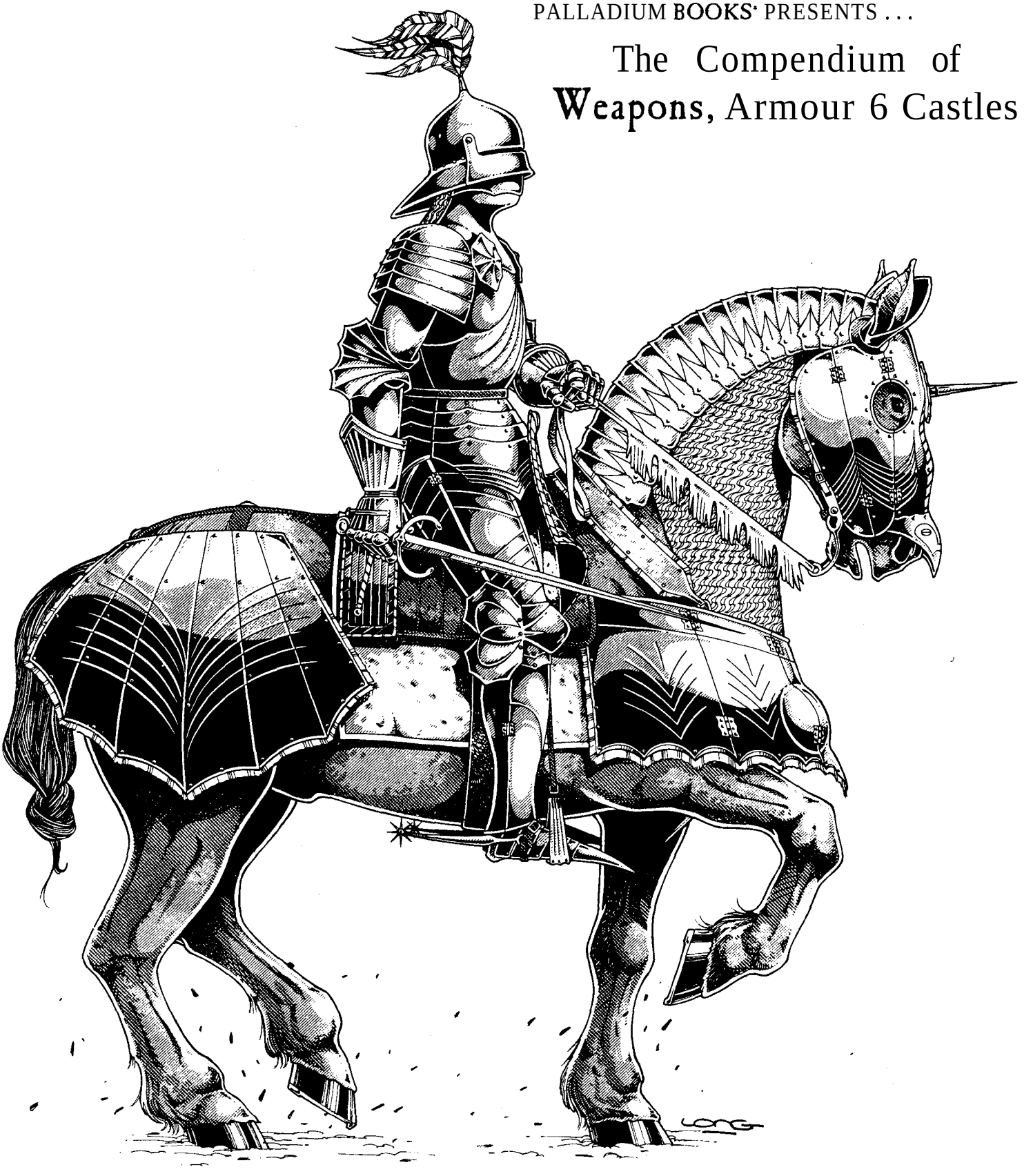

For use with all role-playing games.
Over 700 weapons, 40 types of armour, 40 castles with floor plans. 224 pages!
An ideal source book for the Palladium® Fantasy RPG, TMNT®, Heroes Unlimited™, or any role-playing game

Dedicated to my friend Kevin Siembieda.

Fifth Printing — November, 1999

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PALLADIUM **BOOKS**® PRESENTS . . .

The Compendium of Weapons, Armour 6 Castles

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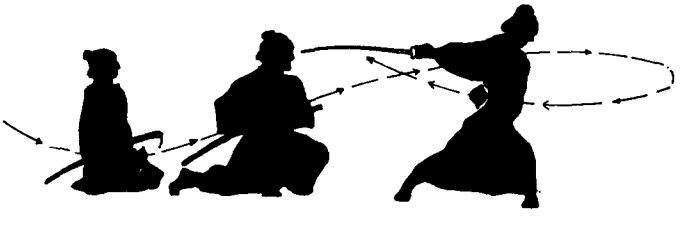


JAPANESE SWORD DRAWING EXERCISE TECHNIQUE

INTRODUCTION

The study of mankind is the study of conflict. In the modern age, where warfare can result in the decimation and destruction of an entire people or culture, and the weapons used so powerful and lethal that it seems that none might avoid them, we have the tendency to romanticize the conflicts of earlier ages. In ancient and medieval times wars were fought toe to toe; combatants faced one another at about arms length. It was a time where you could look your adversary in the eye and see his fear or determination. You could hear his grunts and cries of anguish or excitement, and you could smell his sweat or blood as the battle unfolded. Combat was very personal; it was ghastly.

This work is the result of nearly five years worth of effort spread out over the past twelve. It is intended for use with medieval fantasy role-playing games, but can also be useful to miniature enthusiasts and students of ancient and medieval history. The book is universal in nature in that it is not intended to be used with any specific game system.

As in my original work, Weapons and in my later weapons books published by Palladium®, great effort has been made to present historically accurate information. Although intended for use in a fantasy setting, this information **is fact.**

Adapting the Compendium Stats to Role-Playing

The Compendium of Weapons, Armour & Castles is designed to be adaptable to **all** game systems. The values for all items are in the opinion of the author, a *comparative system* of weight, balance, and over-all effectiveness. In this way, the weapons and armour can be adapted and modified by *comparing* the applicable values listed here, with comparable categories in the specific RPG system. *A simple comparison* would be if the item has the best ratings in **Compendium,** then it is safe to assume that it will be the best in your RPG, with the highest possible capabilities. If it is a weak or vulnerable item with low ratings in **Compendium,** then it will have the lowest or comparatively low capabilities in the RPG system. Simple, but effective.

Of course, you can always try to modify your RPG rules to fit with the various values provided in this book. However, this would be a laborious task and may bog down the RPG's combat system. So the amount of detail you take out of **Compendium** is really up to each individual game master. Remember, that this book presents *real* weapons, armour, castles, and items throughout man's history. We have presented them as factually and as historically accurate as possible. How you interpret and use this information is really left to your personal taste, needs, and discretion.

Adapting the Data to Palladium Books® is easy!

The following are optional rules for the use of items found in **Compendium** for use with the **Palladium Fantasy RPG®** and any of our other role-playing games.

Bonuses are applicable to *only* very high and superior quality weapons. Standard or poor quality items offer *no* bonuses whatsoever. In the Palladium RPG® these items would be of the highest quality *human* craftsmanship, or high quality (but not the best) creations of Dwarves and Kobolds *(See Palladium RPG, pg 47,* for the exceptional craftsmanship of these two races).

Unfortunately, these superior quality items will always cost at least two or three times the average price. Furthermore, availability and prices will vary from place to place (GM's discretion).

DAMAGE

Applicable to all weapons, good and poor quality alike.

Damage for Swords and Knives

0 = 1D4
1 = 1D6
2 = 1D8 + 2
3 = 2D6
4 = 3D6

Damage for Hafted Weapons

(Axes, Staves, Maces, Whips and Blunt)

0 = 1D4
1 = 1D6
2 = 1D8
3 = 2D6
4 = 3D6

Damage for Spears and Polearms

0 = 1D6
1 = 1D8
2 = 2D6
3 = 3D6
4 = 4D6

Damage for Bows and Crossbows

1 = 1D6 (Typical Bow & Arrow)
2 = 2D6 (Longbow or Modern Bow)
3 = 2D8
4 = 3D6
5 = 4D6

Bonus for High Quality Weapons

Dexterity Rating

0 (Best) = + 2 on initiative & + 1 to strike
1 = + 2 on initiative
2 = + 1 on initiative
3 = No bonus

Parry Rating

0 (Worst) = Penalty of - 1 to parry
1 = No bonus
2 = + 1 to parry
3 = + 2 to parry
4 = + 3 to parry

Throw Rating

Applicable only when thrown

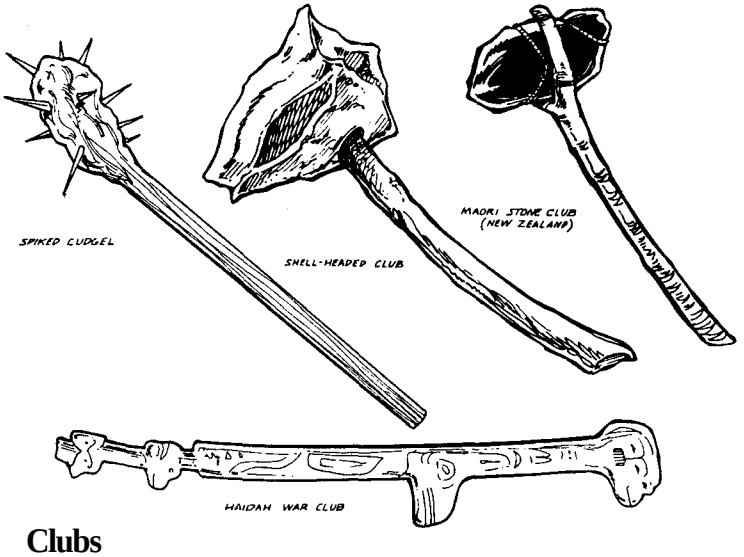
1 = + 2 to strike
2 = + 1 to strike
3 = No bonus

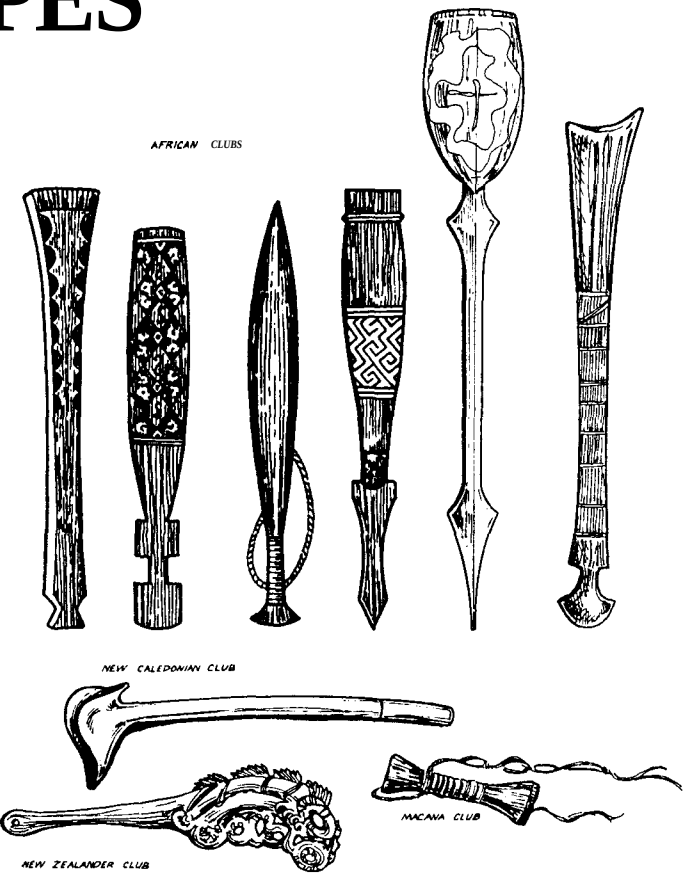
Durability is not easily applicable to the Palladium® system but could translate into *S.D.C. equivalents,* to be used when the weapon is placed under stress or if it is being *intentionally* destroyed.

DESCRIPTIONS OF WEAPON GROUPS AND TYPES

HAFTED WEAPON GROUPS

Hafted weapons represent some of the earliest and most widely used arms. These weapons normally consist of some sort of striking head attached to or incorporated onto a haft or handle. The two major groups of hafted weapons are clubs and axes, but also include war hammers, picks, and whips.

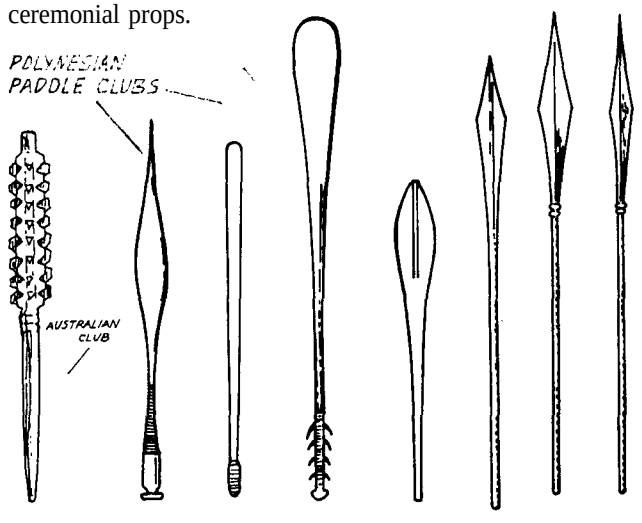


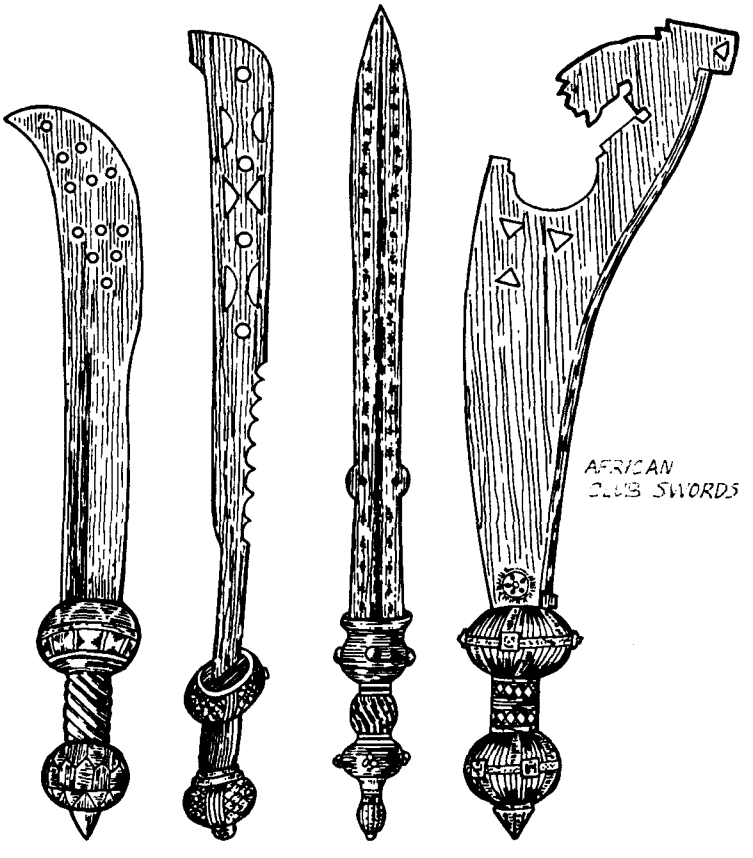


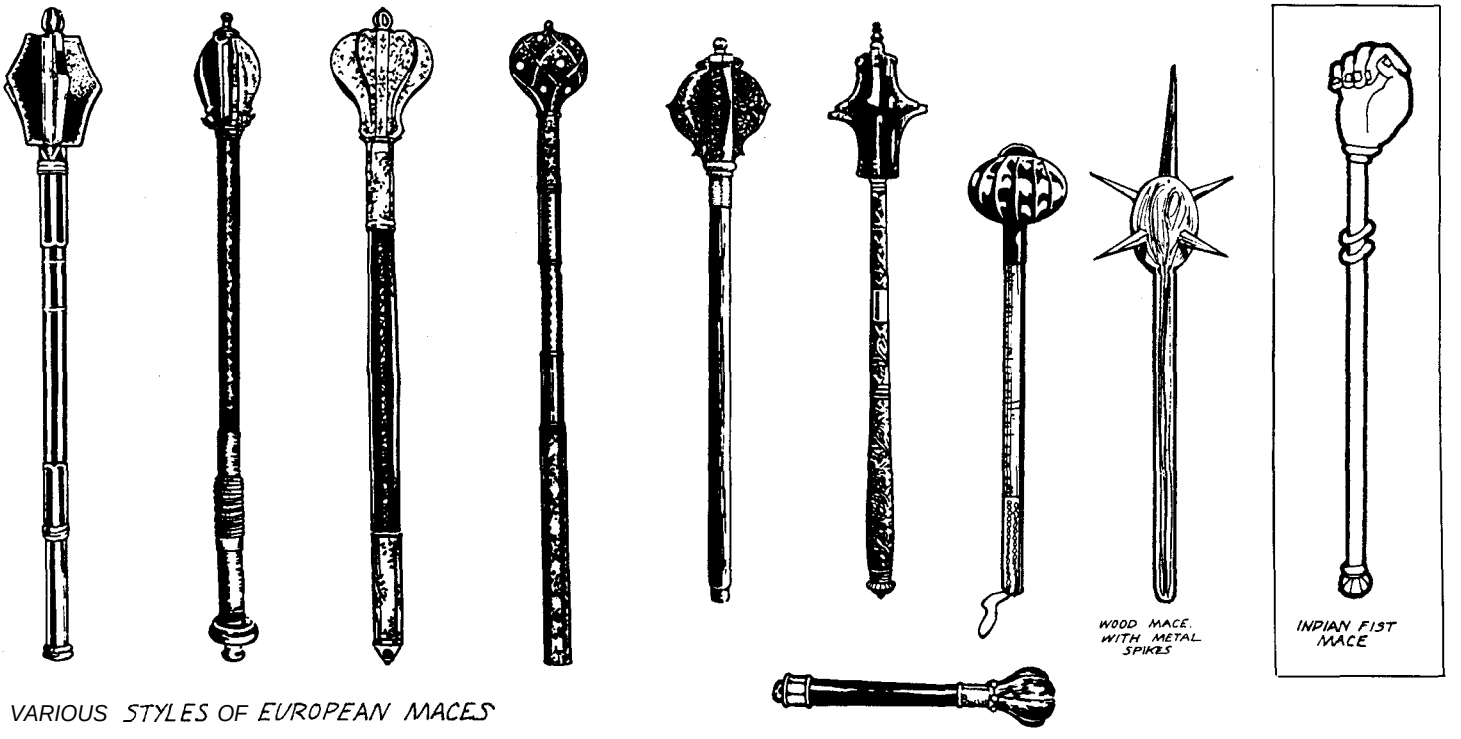
Clubs

Clubs are the older, as well as the more universally used, of the two forms. Clubs range in form from rough sticks to elaborately carved works of art. There are three basic types of clubs based on their materials and manufacture. These are: **simple clubs, maces, and flails/whips.**

Simple clubs are made entirely out of wood, stone, or bone. Simple clubs reached their highest degree of artistic development in Polynesia where they were not only implements of war, but also ceremonial props.

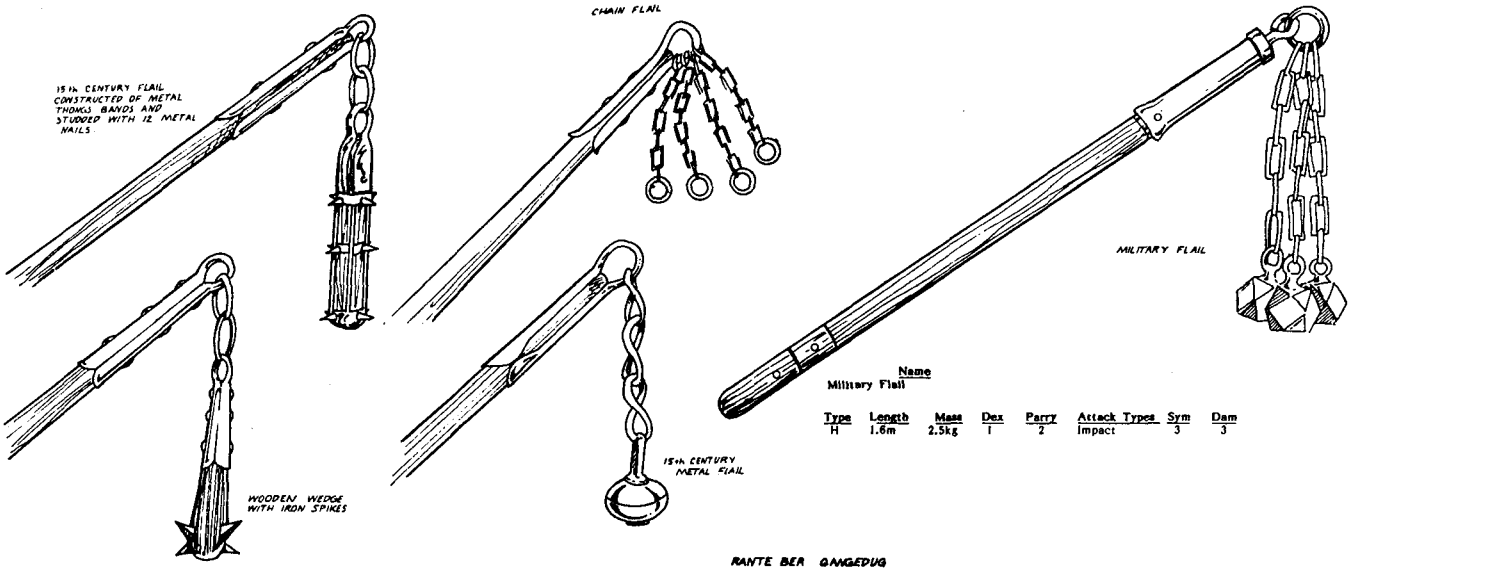




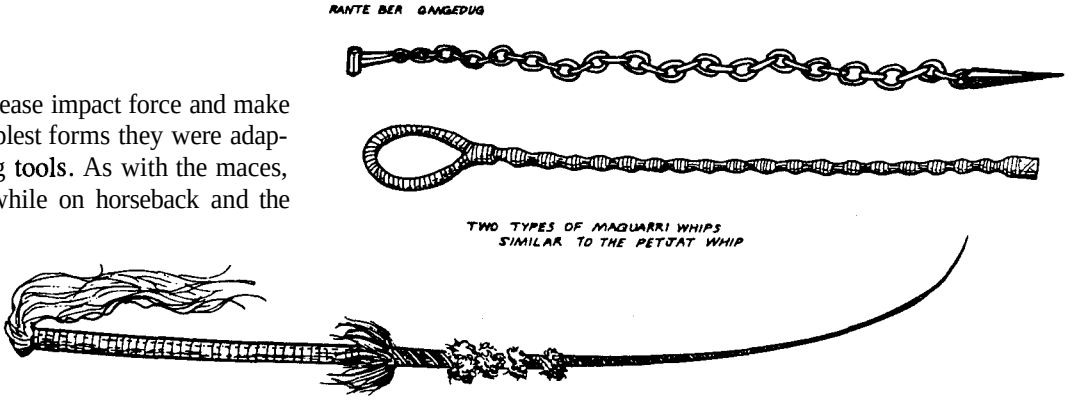


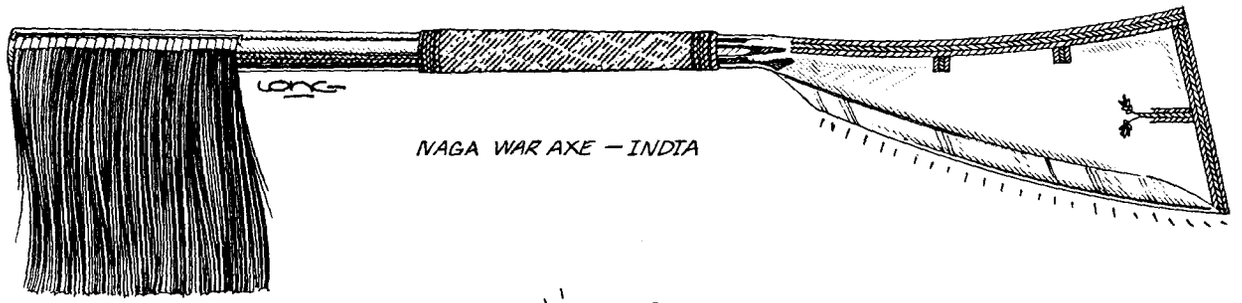
VARIOUS STYLES OF EUROPEAN MACES

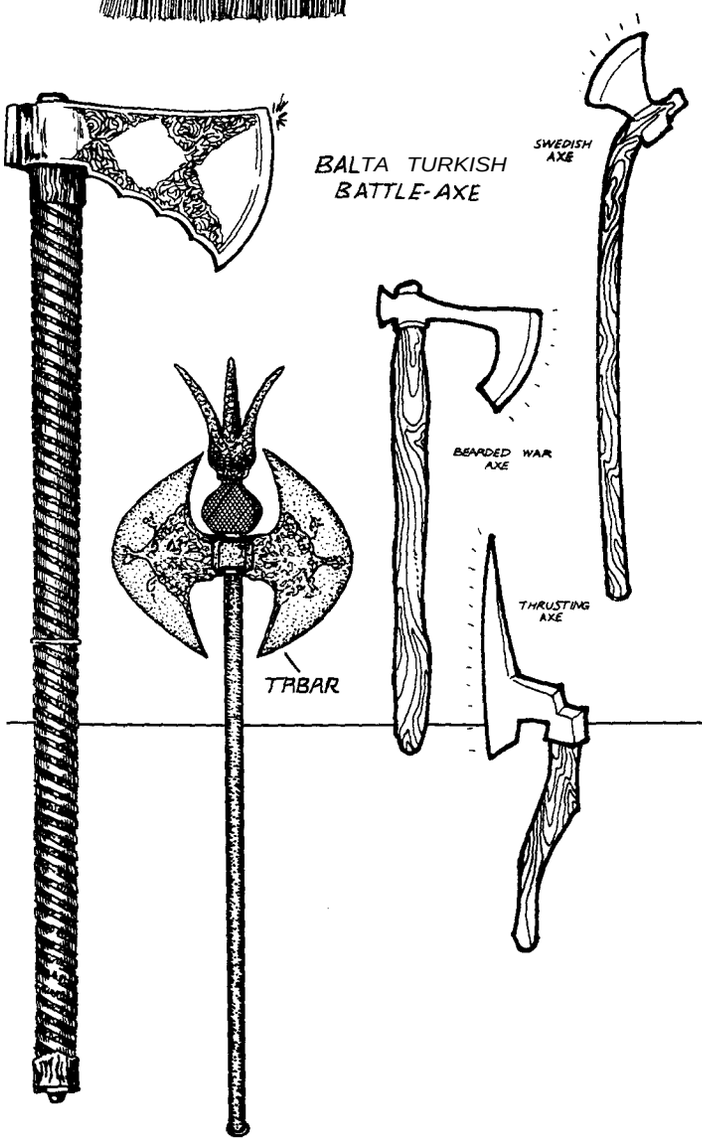
Maces are generally all metal or composite in nature. Most often a weighted head of hard material is attached to a wooden handle. The striking head served to focus the force of the blow. Spikes and/or flanges made these weapons more effective against armor. In ancient times, in the Middle East, mace heads were made of stone, copper, or bronze. In medieval times maces varied widely in size and form. A knight's mace was normally made entirely of metal. Oriental maces were often fitted with elaborate hand guards such as those found on certain types of swords.



Flails/whips use flexibility to increase impact force and make parrying more difficult. In their simplest forms they were adaptations of agricultural grain threshing tools. As with the maces, the smaller sized flails were used while on horseback and the large ones by foot soldiers.







Axes

This category can be divided into two groups: axes and picks.

Axes generally consist of a stone or metal head attached to a wooden haft. Various methods for attaching the head to the handle have been used throughout the ages.

The axe is a very ancient weapon and was favored for as long as armor was worn. Initially axes were made of stone which was flaked or chipped to form a cutting edge. During the *Bronze Age* various metals and alloys were used to cast *axe heads.* As methods and materials were improved, the *socketed axe head* became standard in most of Europe and Asia.

Picks are *adaptations* of the basic axe form and are used as a piercing weapon rather than for chopping. The narrow blade serves to *concentrate* the blow to make these very effective in penetrating armor, especially chain mail. *War hammers* are a combination of the pick and the mace and are used both as a concussion and penetration weapons.

HAFTED WEAPON TYPES

Adze. Normally an adze is a carpenter's tool. It consists of an axelike blade mounted with the edge at right angles to the handle. The Maoris used them regularly in combat. Their weapons had elaborately carved handles made of wood.

Ancus. This is the Indian elephant goad. These weapons can vary greatly in size, from about 40 to 120 centimeters in length. The shorter ones were used by riders, while the longer versions were used by the trainers who were on foot. Although most are plain and intended solely for work, many finely engraved and jeweled examples exist.

Angolan Battle-Axe. A weapon from the *Upper Congo* region of Africa. The blade is attached to the wooden handle by means of a thin tang (binding).

Arit Sickle. A Javanese *sickle* consisting of a rather pronounced half-moon blade mounted on a short handle. One of the standard weapons in *pentjak-silat* martial arts training.

Ay-Balta Axe. A Turkish battle-axe. The head is mounted with a pick opposite the blade. Broad metal bands extend down from the head along the wooden shaft for reinforcement.

Baculus. A heavy European club made of hardwood with a knotty striking head.

Baggoro Club. A flat club from Queensland, Australia. It is made of hardwood and has a sharpened edge.

Ball & Chain. A type of European flail. It consists of a metal ball attached to a short wooden handle by a chain.

Balta Axe. A Turkish battle-axe. Similar to some European forms. The axe head was normally engraved and often inlaid with silver or gold.

Balestarius Axe. A large Battak axe/adze. The head is fitted into the wooden handle and then lashed with reed.

Battle-Axe. *A generic term* for fighting axes, especially European ones. This example of axe generally consists *of a broad*, socketed head attached to a wooden handle. Metal reinforcement bands extend down from the head to help prevent it from being broken off in combat.

Bearded Axe. A large two-handed war axe used primarily in Northern Europe. Favored by the Vikings and Danes, there are tales of warriors felling both rider and horse with one stroke of these weapons. Socketed metal head fitted to wooden handle.

Bearded War Axe. A smaller, one-handed version of the Bearded Axe. For use as a missile or while mounted. Socketed metal head fitted to wooden handle.

Bec-de-Corbin (Hammer). A type of war-hammer used in Europe in the 14th and 15th centuries. The pick-like head was fitted with a spear like point for thrusting. Normally mounted on a wooden haft with metal reinforcing bands extending down from the head.

Bi-Teran (Club). A wooden Australian club having a round handle and a flattened end.

Biliong (Axe). A Malaysian axe/adze consisting of a square-tanged blade fitted into a wooden handle. The blade can be placed in line with the handle for use as an axe or at right angles for use as an adze. The handgrip is often quite large and the smaller portion of the handle is very flexible. The socket into which the head is fitted is normally bound with cane.

Binnol (Flail). An Indian flail consisting of a spiked ball head connected to a wooden handle by a short chain.

Bipennis (Axe). A double-bladed European war axe. Mounted on a wooden haft.

Bird's Head Club. Hardwood club used in Africa and in the South Pacific region. The pick-like design is an attempt to improve the wounding capabilities of the weapon. Often intricately carved.

Bisacuta (Pick). A double-pointed pick used by European foot soldiers in the 14th century. Metal head mounted on a wooden haft.

Bouzdykan (Mace). An all metal mace used in Poland in the 17th century.

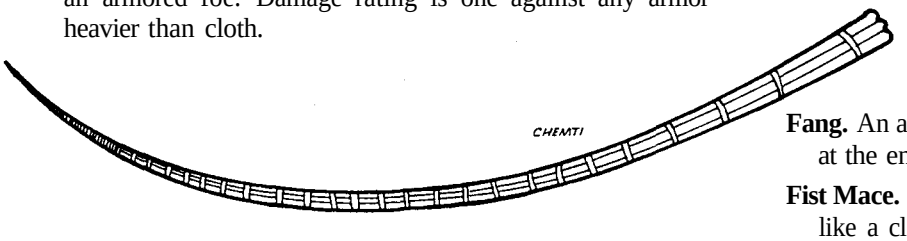
Broad Axe. A European war axe having a broad, rather straight edge. The head was socketed and attached to a wooden haft.

Bulawa (Mace). An all metal Russian mace.

Bullova (Axe). The war axe of the Chota Nagpur tribes of India. Although they vary greatly in shape, they basically consist of a wide-bladed head attached to a wooden handle. Some are fitted with a spike above the head for thrusting. They are normally used with both hands.

Burrong (Club). A wooden club from Australia with an axelike shape.

Cat-o'-Nine Tails (Whip). A European whip used in flogging. The leather thongs were usually knotted at their ends and were sometimes fitted with metal spikes to tear the flesh of the victim. This weapon would not be of much use against an armored foe. Damage rating is one against any armor heavier than cloth.



Chemeti (Whip). A Javan fighting whip used in the *tjambuk* combat system. Normally the whip is made of buffalo leather or human hair and attached to a hardwood handle, and a large knot is normally made in the end of the whip itself. The overall length of the weapon can vary from 90 to 160 centimeters.

Claw Hammer. A typical carpenter's tool. Metal head fitted to a wooden handle.

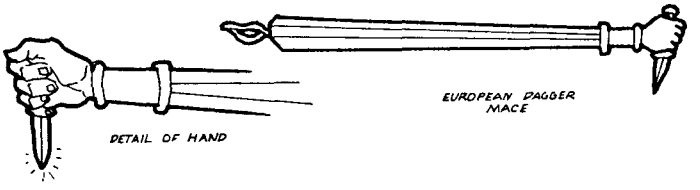
Club. A universal weapon of many cultures. This could be a tree branch, a table leg, a board or any blunt, striking object.

Crowbill (Hammer). A war-hammer-like fighting pick used in Europe. Normally made entirely of iron or steel. The point of the pick is very effective in piercing mail and joints in armor.

Cudgel. A European practice sword made of wood and fitted with a basket hilt. Used in broadsword practice.

Cumber-Jung (Flail). An Indian flail made by attaching two heavy quoits to a short handle of wood by chains.

Dabus (Mace). An Arab mace that consists of a piece of wood studded with nails.



Dagger Mace. A European mace/pick made entirely of steel. Shaped to look like a hand holding a dagger.

Dhara (Mace). A Mahrattan mace having six blades. Made entirely of steel with a padded hilt. Often richly engraved.

Dolabra. An axe-like Roman tool/weapon used by legionaires. It had a socketed head attached to a wooden handle.

Doloire (Axe). A European battle axe used in the 15th century. Its socketed steel head is fitted to a wooden haft. Sometimes referred to as a Wagoner's Axe.

Elephant Axe. A large two-handed axe used in Africa to hamstring elephants. The iron head is fitted into the wooden handle by means of a tang.

Epsilon Axe. An early axe form used in the ancient Middle East. The head of cast copper or bronze was fitted into a wooden handle by tangs. Its broad head made it suitable for use against unarmored foes since its penetration capabilities were not great.

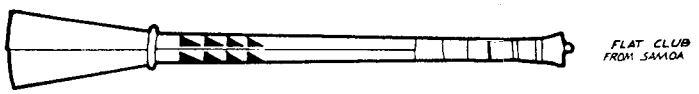
Eye Axe. An early axe form used in the ancient Middle East. The head was normally cast bronze and was socketed to fit onto a wooden handle. The somewhat narrow head made it suitable for use against armored foes due to its penetration capabilities.

Fang. An all iron Chinese weapon with two double-edged blades at the end, one mounted at right angles to the other.

Fist Mace. An all iron or steel mace used in Europe. It is shaped like a clenched fist.

Flagellum (Whip). A three-pronged whip used by the Romans. Ineffective against heavy armor (damage is 0).

Flail. A large foot soldier's flail used in Europe. Normally made of wood and reinforced with metal bands. Some were fitted with hooks to keep the head from swinging around while marching.



Flat Club. A Samoan hardwood club, often elaborately carved. It had rather sharp edges on the head to improve effectiveness.

Francisca (Axe). The characteristic weapon of the Franks from the 6th to the 8th centuries. It was normally used as a missile and the standard Frankish tactic was to hurl it at an enemy and then charge in with sword or spear. The heavy axe either incapacitated the enemy or broke his shield when it hit. Thus deprived of his shield, the warrior was at a disadvantage to the Frankish soldier. It consists of a socketed, iron head attached to a wooden haft. The head is attached at an angle larger than the normal ninety degrees to improve its flight performance. Effective range was about 15 meters.

Ga-Ne-U-Ga-O-Dus-Ha (Club). The deer-horn club of the Iroquois indians.

Gada (Mace). A Timorese mace of wood with a stone head. Normally the head is bound to the handle.

Galraki (Axe). An axe of the Veddahs of Ceylon. The socketed iron head is attached to a wooden handle.

Ganjing. An all iron club used in Java.

Gargaz (Mace). An Indian mace with six to ten blades on the head. They were made of steel, had padded hand guards, and sometimes were richly engraved.

Garz (Mace). An all steel Indian mace with no hilt. The head is rather small and has many flanges.

German War Hammer. A German war hammer/pick consisting of a metal head attached to a wooden haft. The head is also fitted with a short thrusting blade.

Goupillon (Flail). An all steel, three-pronged horseman's flail used in Europe. The flail heads could be spiked or plain.

Hatchet. A common woodcutter's tool. Socketed metal head is attached to a wooden handle.

Head Axe. A characteristic weapon/tool of the Ingorot people ofthe Philippines. It has a broad metal head with a thin point opposite the blade. The head is fitted into a wooden handle by means of a tang. Most often the handle is reinforced with brass. It is used as a knife by imbedding the point opposite the blade into the ground and then drawing the objects to be cut across the blade.

Hercules Club. European club of wood studded with nails.

Hoeroa. A Maori **whalebone club** with a double-curved blade and carved handle.

Holy Water Sprinkler (Mace). A European mace made of wood and having numerous spikes projecting from the head. It was a common foot soldier's weapon; also known as a *Morningstar*.

Hoolurge (Axe). An Indian axe/pick made entirely of steel. Often elaborately carved or engraved.

Horseman's Hammer. A European war hammer made of iron or steel, used by mounted fighters. *See War Hammer.*

Ice Pick. A tool consisting of a thin metal spike fitted into a wooden handle.

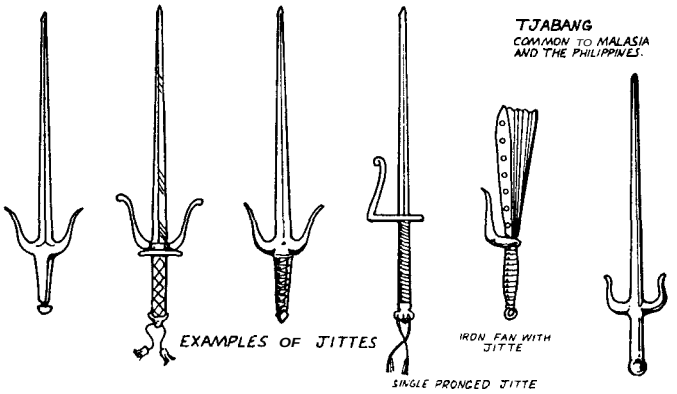
I-Wata-Jinga (Club). A plains indians club consisting of a stone head attached to a wooden handle. Normally the head was either wrapped in rawhide or fitted to the haft by a wide band of rawhide. These weapons were often fitted with a tassel of hair as well.

Iverapena (Club). The paddle club of the Tupis of Brazil. It was made of hardwood and slightly pointed.

Ja-Dagna (Club). An Omaha indian club made of ironwood. Sometimes it was fitted with a stone or metal spike in the head.

Ja-Weti (Club). A square-sectioned Omaha indian club made of hardwood.

Japurunga (Club). A wooden club with a double-pronged head used by the natives of the Melville Islands.



Jitte. A Japanese **parrying weapon** consisting of an iron bar with a hook attached to one side. The grip is often woven cord or leather.

Jo. A wooden Japanese **staff** slightly longer than the katana.

Kadjo (Axe). An Australian stone- headed axe. The stone head consists of two parts attached to the wooden handle by tree resin. One of the stones is blunt and the other sharp so the tool maycan be wielded as either a hammer or an axe. It is normally colored with red ochre.

Kalus (Whip). A Malaysian fighting whip used in the *tjatji* fighting art. Most commonly made of buffalo hide or rattan and fitted to a handle of wood. A whip duel with this weapon normally pits two bare-chested combatants, one the attacker and the other the defender. The defender holds a shield and may swing his whip in a circular fashion around his head, otherwise he is permitted no other offensive actions. The attacker, meanwhile, is permitted three blows with his whip upon the defender, after which they switch places. Only lash marks upon the face count in judging the winner. The first such mark terminates the contest. These weapons would be ineffective against armored foes (damage is 0).

Kama (Sickle). A Japanese rice sickle. Normally a tanged steel head fitted into a wooden handle. Fighting styles often utilize two such weapons, one in each hand.

Kamcha (Whip). A Turkish whip. Normally made of leather or cord attached to a wooden handle and often elaborately decorated. Useless against armored foes (damage is 0).

Kapak (Axe). A small throwing axe used by the Battak is Sumatra. It consists of a tanged metal head fitted into a flat wooden handle. Skilled users could pin an enemy's foot to the ground, or his hand or arm to a tree.

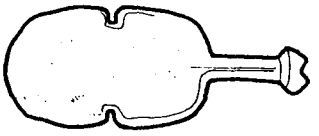
Kasrullah (Club). A Tripolitan club made of wood.

Keerli (Axe). An Australian stone axe. It consists of a sharpened stone glued onto a wooden handle.

Kharga (Axe). An indian sacrificial axe. Made entirely of steel and usually elaborately carved and engraved.

Kheten (Axe). An ancient Egyptian two-handed axe. The bronze head was fitted into the wooden haft by means of a tang.

Kodelly (Axe). A Sinhalese axe consisting of a socketed steel head attached to a wooden handle. Normally used as protection against animals.



Kotiate (Club). A Maori club. Normally these were elaborately carved and highly prized heirlooms. These weapons were often given names, like "face-eater," by their owners. The club was made of wood or whalebone and shaped somewhat like a violin.

Kujerong (Club). A wooden Australian club with a heavy, rounded end.

Laingtjat (Flail). A Malaysian flail used in various *kuntao* martial art styles. It consists of two wooden rods, one about half the length of the other, attached together by a short chain. Often the shorter rod is sharpened.

Leonile (Club). A hardwood club from Australia.

Lil-Lil (Club). A wooden fighting club from Australia. It is usually elaborately carved.

Lisan (Club). An ancient Egyptian club or throwing stick made of palm wood.

Lohangi (Mace). An Indian mace consisting of a bamboo shaft bound with strips of iron below where the head is attached. It was often decorated with strings of sea shells or beads.

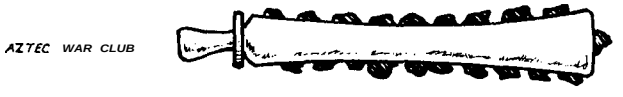
Lohar (Pick). A small, steel fighting pick used in the Khyber region. Normally inlaid with silver and brass.

Mabobo (Club). A long, wooden Australian club. It has a rounded head and squared handle, and is normally colored in red and white.

Macana (Club). A South American club made of wood and having a rectangular section. Normally the grip was covered with woven cane, and the head sometimes fitted with a stone blade. These weapons were sometimes thrown.

Mace. A common weapon of many cultures. The one pictured is European and consists of a wooden handle with a flanged metal head attached.

Mace & Chain. A European flail consisting of a spiked metal ball attached to a wooden handle by means of a chain. Used by footmen and horsemen alike.



Maquahuilt (Club). A wooden Aztec club with obsidian "blades" set around its edges.

Martel de Fer (Hammer). A European war hammer having a metal mallet-shaped head attached to a wooden handle.

Masakari (Axe). A Japanese battle-axe used by the *Yamabushi*, or warrior monks. It consists of a heavy metal head with a point opposite the blade, attached to a wooden handle by means of a socket.

Massuelle (Mace). A small, all metal mace from Europe. It normally had four blades on the head.

Mattina (Club). A wooden club from Australia with shark's teeth fitted into opposite sides of the head.

Maul. A heavy, hammer-like tool used for pounding stakes into the ground. Usually made entirely of wood and used with two hands.

Mazule (Mace). An all steel European mace with a pear-shaped, multi-bladed head.

Meat Cleaver. A common butcher's tool for chopping meat. It has a tanged metal blade fitted into a wooden handle.

Meeri (Club). A wooden Australian club with two short spikes on the end.

Merai (Club). A Maori jade club. Similar to the *kotiate* and the *patu*.

Military Flail. A common European foot soldier's weapon. Generally consisted of one to three metal heads attached to a wooden handle by chains. *See Flail.*

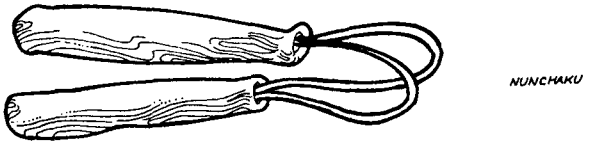
Miner's Axe. A European axe consisting of a socketed steel head fitted onto a wooden handle. These weapons were often elaborately decorated and carried as symbols of rank.

Mugdar (Club). Thick, lead-weighted, wooden clubs from India. Used by the sepoys.

Muragugna (Club). A wooden club of the Melville Islands with a deeply grooved head.

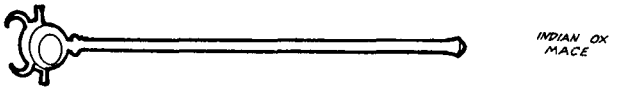
Nil-li (Club). A wooden club from Australia. It is made of wood and has a grooved striking head. Each end is pointed for use in stabbing.

Novacula (Sickle). An ancient Cypriot sickle-like tool consisting of a tanged, iron head fitted into a wooden handle.



Nunchaku. An Okinawan grain thresher, or **flail.** It is used both as a weapon of defense and offense. Basically, it consists of two short wooden sticks joined together at one end by a short length of rope, leather or chain. When properly used, it could be a devastating weapon to strike, parry, entangle, disarm or strangle. Normally a two- handed weapon.

Oncin (Pick). A one-sided pick from Europe. It had a socketed metal head fitted into a wooden handle and was used with both hands. It was generally a foot soldier's weapon.



Ox Mace. An Indian or Persian mace made entirely of metal. Its head was shaped like that of an ox's and often had holes in the nostrils so that it whistled when swung.

Pacho (Club). A wooden club from the South Pacific with shark's teeth "edges." *See tebutje*.

Pagaya (Club). A wooden, paddle-shaped club from Brazil.

Pahu (Club). A wooden club from New Zealand.

Pareh (Axe). An Australian stone axe. The head is attached to the wooden handle by plant resin.

Patu (Club). A short club used by the Maoris. They were made of basalt (*patu onewa*) bone (*patu paraoa*), or jade (*patu pounamou*). *See kotiate, merai, and wahaika.*

Periperiu (Club). A long wooden club from Australia. It has a blunt striking end and is decorated in red and white.

Pernat (Mace). A Russian mace consisting of an iron head attached to a wooden handle.

Petjut (Flail). A Malaysian whip/flail used in *ende* duels. It consists of a wooden handle to which is fastened a short length of leather thong tipped with a ball of knotted leather or sometimes a metal sphere. These whip duels have no time limit and are decided by knockout or resignation of one of the contestants.

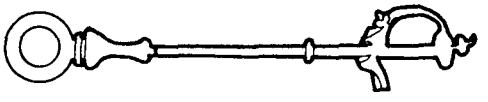
Plombee (Mace). A European lead-weighted mace with a wooden handle.

Potu. A wooden Guianian club, usually fitted with a woven cord grip.

Pouwhenua. A wooden Maori staff flattened on one end and pointed on the other.

Purijimala (Club). A wooden Australian club.

Quadrelle (Mace). A small European mace with four blades or flanges. Made entirely of metal.



Quoit Mace. An all steel Indian mace with a head made of a heavy quoit. Fitted with a hand guard.

Rang-kwan (Club). A wooden club used by women in Queensland, Australia. It is quite long and is pointed at both ends.

Rungu. African club generally made of one piece of wood. The handle was generally sharpened so it could be used as a stabbing weapon as well as a club.

Sabar (Pick). An Indian pick made of steel. Often it is elaborately engraved and embellished.

Sapakana (Club). A Guianian hardwood club.

Savage (Axe). Axes from Central Africa generally carried as symbols of rank. Their tanged metal heads were fitted into wooden handles. They were often used in rituals and sacrifices.

Sai. A metal Japanese **parrying baton** consisting of an iron bar with leather covered grip and two small side hooks mounted parallel to the bar. Sai with blades are also known. These weapons are often used in pairs.

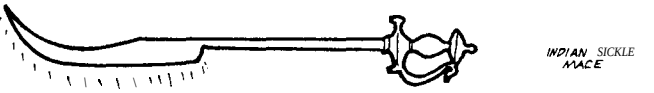
Sa Tjat Koen. A wooden, three-sectioned Malaysian flail used in the Kuntao fighting art. Used with both hands.

Schestopjor (Mace). A Russian mace with a many-bladed metal head. Generally the handle was wood.

Segu. A metal Malaysian parrying weapon used in the *Tapak Sutji* form of the martial art, *Pentjak Silat*. Also called the *Serba or Guna*, it is used to strike against the arms and head of the enemy.

Shashpar (Mace). An all steel Indian mace with six blades and fitted with a hand guard.

Shoka (Axe). An African battle-axe used in the region around Lake Tanganyika. The triangular metal head is fitted into a hardwood handle by means of a short, narrow tang.



Sickle Mace. An Indian mace made of steel. The striking head is actually a heavy, curved blade and thus the weapon resembles the various sickle swords used in the ancient Middle East.

Silepe (Axe). A Basuto axe consisting of a rather wide blade which is connected to the wooden handle by a flat tang. The wooden handle is sometimes reinforced by wire coils.

Siwalapa (Club). A wooden club from Surinam with a small, cylindrical handle and a square striking head.

Slung Shot (Club). Also called a sap or blackjack, this weapon consists of a lead weight with a flexible leather cover/handle woven over it. Often used by robbers.

Sparte (Axe). A battle-axe used by the Anglo Saxons. It consists of a broad, socketed head fitted onto a wooden handle.

Suan-Tou-Fung (Mace). An all metal Chinese mace with a globular head.

Taavish (Axe). A Tlinket stone axe with the wooden handle carved at the end to represent a man's head. The stone blade is fitted into the handle and represents the tongue.

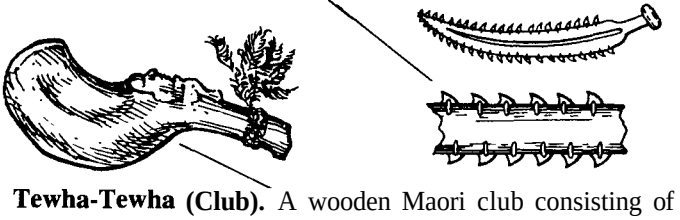
Tabar (Axe). An all steel Indian battle axe.

Tabar-I-Zin (Axe). A large two-handed axe used by the Afghans. It consists of a socketed metal head fitted onto a wooden shaft.

Tambara (Club). A wooden Australian club with two to four prongs at the end.

Taper (Axe). A European axe, it consisted of a socketed metal head fitted onto a wooden handle.

Tebutje (Sword/Club). Shark's tooth "swords" used in the South Pacific. They were made of light wood with shark's teeth lashed onto the edges of the club.



Tewha-Tewha (Club). A wooden Maori club consisting of a long, tapering shaft with a quarter-circle shaped head at one end. Feathers were hung from the head in order to flick them in the face of an enemy to confuse him. The Maoris developed a fighting system centered around these clubs which was taught at an early age.

Thin Axe. A European piercing axe consisting of a narrow, socketed head fitted onto a wooden handle.

Thrusting Axe. A European axe whose head has a long point extending up for use in thrusting attacks. The head was socketed and fitted onto a wooden handle.

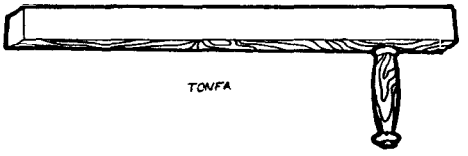
Tiglun (Club). An Eskimo club/dagger made of ivory.

Tindil (Club). A wooden Australian club.

Tjabang. A metal **Malaysian parrying weapon** similar in form and function to the sai. Used in the martial art.

Toki Kakauroa (Axe). A Maori fighting axe consisting of a socketed metal head fitted onto a tapering wood or bone handle. Often the handle is carved.

Tomahawk. The North American Indian combat axe and pipe. It normally has a narrow iron blade fitted with a pipe bowl opposite the blade. The wooden handle is hollow and forms the pipe's stem.



Tonfa. A wooden Okinawan rice husking tool. In combat this weapon can block attacks when it rests along the forearm, or it can be used to jab or club depending on the circumstances. Some modern police departments use nightsticks which are very similar to the basic design of the tonfa.

Tongia (Axe). An axe used by the Bygas of Central India. It has a socketed iron head with a semicircular blade attached to a wooden handle. Also used as a missile.

Toporok Axe. A Russian battle-axe consisting of a socketed steel head attached to a wooden handle.

Trombash. A wooden Abyssinian throwing stick with an angled end.

Truncheon Club. A European club made of wood.

Tschekan Hammer. A Russian war hammer with a steel head attached to a wooden handle. Generally the handle was reinforced with metal bands.

Tuagh-Gatha Axe. A Scottish battle- axe consisting of a socketed iron head fitted onto a wooden handle.

Tungi Axe. A fighting axe of the Khond of India. Its socketed steel head is attached to a short wooden handle.

Udlimau. A fighting adze from Point Barrow, Australia. Made of hardwood with a stone point fixed with resins and lashed to the head.

Uramanta. An Australian throwing stick made of wood and smeared with red ochre.

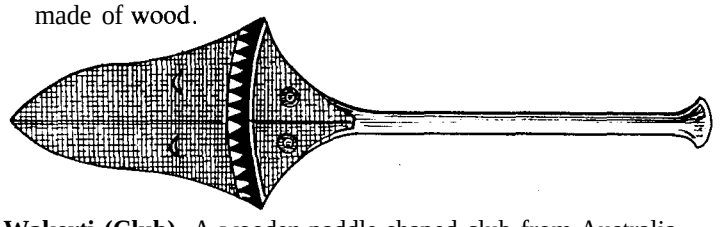
Veecharoval. An Indian scythe-type weapon consisting of a curved, metal blade attached to a wooden handle with a socket. The handle is reinforced with bands of iron.

Venmuroo (Axe). A Malabar battle-axe consisting of a tanged, steel head fitted into an ebony wood shaft which is reinforced with metal bands. These weapons were often richly ornamented with silver and brass.

Waddy (Club). An Australian wooden club.

Wahaika (Club). A Maori club made of wood or bone. They are often elaborately carved. *See kotiate, merai, and patu.*

Wairbi (Club). A women's fighting club from Australia and made of wood.



Wakerti (Club). A wooden paddle-shaped club from Australia. It is generally decorated in red and white.

War Club. A large hardwood club from Fiji. These were generally elaborately carved.

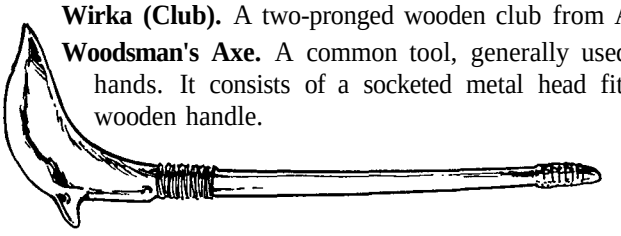
War Hammer. A piercing and impact weapon used extensively in Europe. These generally had a blunt hammerhead set opposite a pointed pick and were mounted on a wooden haft.

Watilikri. A wooden throwing stick of the Warramunga tribe of Australia.

Weerba (Club). A hardwood club from Australia.

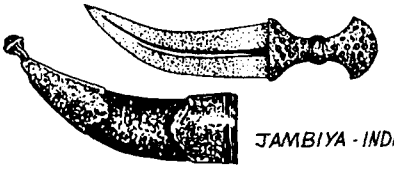
Wirka (Club). A two-pronged wooden club from Australia.

Woodsman's Axe. A common tool, generally used with two hands. It consists of a socketed metal head fitted onto a wooden handle.



Yeamberren (Club). A wooden club from Australia with a large conical head.

Zaghnal (Pick). An all steel pick or beaked axe from India. Some were richly engraved and inlaid with gold.



KNIVES

Knives are one of the basic weapons of mankind and have been used by every culture. In its most basic form, a knife consists of a short, pointed blade attached to a hilt or grip. Many knives have a sharpened blade for cutting, as well as thrusting.

In general, knives can range upwards of 50 centimeters in length, although longer examples do exist. The longer weapons begin to overlap with swords, so inevitable differences in classification result.

In the following notes, all of the weapons are made of *steel* and have tanged blades unless otherwise stated.

Knives of the World

Acinaces. A double-edged Persian dagger made of iron. It was carried in a sheath suspended from the left or the right side.

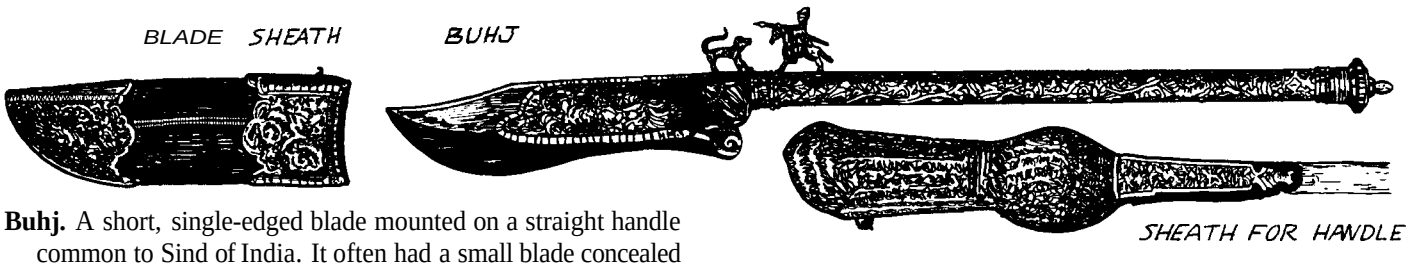
Aikuchi. A single-edged Japanese knife without a guard. Often the hilt and the scabbard were highly decorated.

Bade-Bade. A curved Malaysian knife with an edge on the concave side. The hilts were made of horn, bone, ivory, or wood and varied greatly.

Badik. A single-edged Javan knife with a pistol grip. It is normally worn on the right with the grip facing to the rear or sometimes on the left, also with the grip to the rear. When the weapon is shifted to the left side, or if worn on the left, the grip is turned to face the wearer's front, this is a sign of impending combat.

Bank. A double-edged Mahrattan knife with a sickle-shaped blade.

Barong. The national weapon of the Moros, these knives have broad, single-edged blades and curved handles. The pommels of the hilts are often elaborately decorated. The scabbards are generally made of wood.



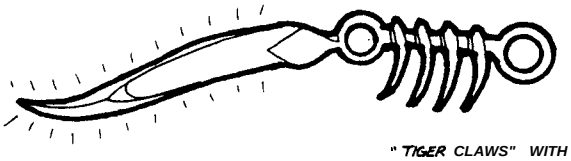
Buhj. A short, single-edged blade mounted on a straight handle common to Sind of India. It often had a small blade concealed in the handle. These knives were usually elaborately engraved.

Baswa Knife. A double-edged knife from the Congo region of Africa.

Batardeau. A single-edged European knife carried in a pocket on a sword's sheath.

Bayu. A double-edged Bornean knife with a pistol grip.

Beladau. A single-edged Sumatran knife with a convex blade.



Bich'hua. A double-edged Indian knife with a loop hilt. Its name is derived from its resemblance to the stinging tail of a scorpion. These were often elaborately decorated.

Bichaq. A single-edged Turkish knife with a straight blade. The handle was normally made of bone or ivory. The scabbard is usually covered with embossed metal.

Bodkin. A small European thrusting dagger. Normally made entirely of metal.

Bolo. A heavy, single-edged Philippine knife. The handle and scabbard are normally elaborately decorated.

Bracelet Dagger. A straight, double-edged weapon used extensively by the Hanssa tribe of the Sudan. A wrist bracelet was attached to the scabbard so that the weapon could be worn on the forearm and concealed under clothing.

Bundi Katari. An Indian dagger with a long, grooved blade. Often decorated with silver.

Butcher Knife. A common kitchen tool.

Buyu Knife. A straight-backed Malaysian knife with a long, curved handle.

Chaqu. A Persian folding knife with a straight, single-edged blade.

Chilanum. A double-curved, double-edged Indian dagger. Normally the hilt and ginard were forged in one piece with the blade.

Choora. A straight, heavy-bladed knife of the Mahsnd tribe of the Khyber.

Chopper. A broad, heavy-bladed tool. Mainly used as jungle knives in the Orient.

Cinquedea. A straight, double-edged Italian knife. The name refers to the width of the blade at the hilt, which was supposed to be five fingers. It was normally carried horizontally at the belt or back so it could be drawn with the left hand.

Cuchillo. A Spanish folding knife with a leaf-shaped blade.

Degan. A Cymbrian dagger of cuneiform shape.

Dhaw. A Burmese knife.

Dirk. A straight-bladed Scottish knife with a conical grip and single edge. The hilts were generally decorated with metal strips.

Estradoit. The double-edged Venetian eared daggers. The name arose from the two disks attached to each side of the pommel.

Fantail Dagger. A wide-tipped slashing knife of the Congo.

Falx Supina. A Roman sickle used by Thracian gladiators.

Forked Tongue Dagger. A widely forked knife of the Congo.

Golok. A heavy, single-edged Malaysian knife with a straight-backed blade. The hilts varied greatly in size and shape.

Haladie. A Rajput double dagger with curved blades.

Halasan. A short, thin-bladed Atjeh knife.

Hamidashi. A single-edged, slightly curved Japanese knife. The guard is slightly wider than the grip.

Harpe. A curved Greek knife with a large spur on the cutting edge. It was used by Perseus when he killed the Gorgon.

Heyazashi. A short, single-edged Japanese knife.

Himogatana. A thin thrusting dagger of Japanese origin. The weapon is made entirely of steel and the blade has a drainord section.

Horn Dagger. An Indian thrusting dagger made out of a buffalo horn.

Jambiya. A typical Arab knife with a curved, double-edged blade. Although the basic blade shape was constant, the forms of the hilt and the scabbard varied widely. These weapons were worn either attached to a belt or hung from a cord which went over the neck. They were often elaborately decorated and inlaid.

Jamdhar Katari. A straight, double-edged knife of the Hindu Kush. It has a wide, flat guard and pommel.

Karambit. A curved Sumatran knife, or "tiger's claw" type weapon. It is held with the blade facing downwards and the curved point to the right. Attacks are aimed at the victim's bowels with an upward, ripping action.

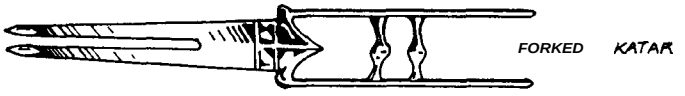
Kard. A straight-bladed Persian knife. Often the blade was reinforced at the tip to help in penetrating mail.

Karoula. A single-curved Indian knife.

Katar. A Hindu knife which is perhaps the most characteristic weapon of India. Its most outstanding characteristic is the handle which is made up of two parallel bars connected by

two crossbars. The crossbars are gripped and the attack is made as though punching. Often smaller blades were concealed within the larger.

Katar Bank. A double-curved, single-edged dagger from Nepal. Often richly decorated.



Katar Dorlicaneh. A fork-bladed katar.

Khanjar. A widely used Arabic dagger with a slightly double-curved blade and a pistol grip. The blades are normally of a fine steel. The grips are normally made of ivory or jade.

Khanjarli. A double-edged, double-curved Hindu knife with a knuckle guard and wide pommel. The blade is normally deeply grooved.

Khyber Knife. The national knife of the Afridis tribe of the Khyber Pass. It has a heavy, straight, single-edged blade. The handle is normally made of ivory, horn or bone. The scabbard is long enough to fit over the entire weapon, including the handle, and is normally thrust through the belt without being fastened to it.

Kidney Dagger. A European knife with a heavy thrusting blade attached to a round wooden handle. The guard is formed by two round lobes. Also known as the Ballocks Dagger.

Kindjal. A straight, double-edged knife normally carried by every man in the Caucasus region. The handle is normally made of wood or horn. The scabbard is normally decorated with silver.

Kira. A quartz-bladed knife of the Tjingilli tribe in Australia. The blade is fastened to the wooden handle by a lump of resin.

Koshigatana. A short, single-edged Japanese knife.

Kozuka. A small, single-edged knife carried in a pocket on the scabbard of a Japanese sword. The blades and handles were often elaborately engraved and carved. These knives were often thrown and creditable hits were those to the head, throat, or wrist.

Kubikiri. A slightly curved, single-edged Japanese knife used for cutting off the head of a slain enemy.

Kudi. A crescent-shaped knife used in the Madurese martial art, Pamur.

Kudi Tranchang. A Javan knife with a heavy, irregular, shaped blade.

Kujungi. A "mystic knife" used in the Malaysian martial art, *Pentjak-silat*.

Kukri. The national weapon of the Gurkas of Nepal. It has a heavy, curved blade and is generally carried in a leather scabbard. Two smaller knives are often carried in pockets on the scabbard as well.

Kummya. A Moroccan knife with a single edged blade and a wooden hilt which is normally covered with silver, brass or copper.

Kwaiken. A slightly curved, single, or double-edged dagger carried by Japanese women. Used in committing ritual suicide.

Labo Belange. The war knife of the Toradja people of the Celebes.

Lading. A double-edged Sumatran knife made by fitting an old spearhead to a handle.

Main Gauche. A European left-hand dagger used as a guard when fencing. It is double-edged and frequently has prongs to catch an opponent's blade. It is fitted with a triangular counter guard which is often elaborately decorated and engraved.

Mandaya Knife. A leaf-shaped, double edged-knife used by the Mandaza tribe of the Philippines.

Mattucashlass. A small Scottish dagger carried under the armpit.

Maushtika. A short Indian thrusting knife.

Misercorde. The European "dagger of mercy" used to administer the *coup de grace* to a fallen foe. It has a thin blade of diamond section.

Mit. A single-edged Siamese dagger.

Moplah. A broad-bladed, double-edged knife carried by the Moplah of Malabar. The hilt is straight and often elaborately carved. It is carried on the back, blade up, with the hilt thrust into the belt.

Pahua. A double-edged, wooden dagger of the Sandwich Islands. It is fastened to the user's wrist by a cord at the handle.

Paiscush. A katar with a hand guard for the back of the hand.

Palitai. A double-edged, straight- bladed knife used by the Mentawi. It has a slender, curved handle.

Panabas. A curved Moro knife used in executions. The grip is made of wood and reinforced with metal bands.

Para-I-Tutti. A double-curved, double-edged Mogul knife.

Parang Ginah. A sickle-shaped Malaysian knife with no guard.

Parang Latok. A Dyak knife with a heavy, single edged blade. It is carried in a wooden scabbard.

Parazonium. An ancient Greek and, later, Roman knife with a broad, tapering blade. Made of bronze and later iron.

Pavade. A single-edged European dagger.

Pesh-Kabz. A thin Persian dagger with a T-sectioned blade. It has a heavy hilt of horn or ivory and is designed for puncturing mail armor.

Phurbu. The Tibetan "ghost dagger" used in driving out evil spirits. It has a three-winged blade and an elaborately carved handle usually featuring thunderbolts and dragons. Usually made of iron and brass.

Pichangatti. The "hand knife" of the Coorg. It has a broad, single-edged blade and a plain hilt. Attached to the scabbard is a short chain with a variety of grooming tools (tweezers, nail cleaners, etc.) fastened to it.

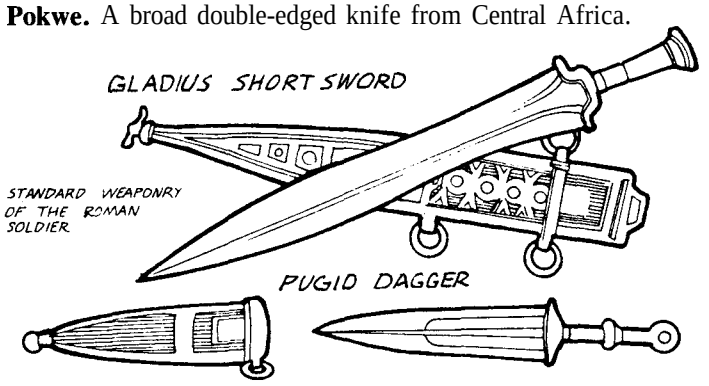
Piha Kaetta. A single-edged Sinhalese knife. The blade and hilt are normally inlaid with silver and brass. Often a stylus is carried in the scabbard with the knife.

Piso Raut. The Malay "rattan knife". It has a long, carved wooden handle and a short, single-edged blade.

Pisu Tonkeng. A single-edged Dyak knife.

Poignard. A small European thrusting dagger with a square or triangular sectioned blade.

Pokwe. A broad double-edged knife from Central Africa.



Pugio. A straight, double-edged dagger used by the Romans.

Qama. The national weapon of Soviet Georgia, it is a straight, double-edged dagger. They are normally richly decorated and engraved.

Raut. A slightly curved, single-edged Batak knife with a pistol grip.

Rentjong. The double-curved, double- edged Atjeh knife. The Atjeh decorate these knives with Arabic characters which tell of mystic powers. Normally it is worn on the left side.

Roundel Dagger. A European thrusting knife with a diamond section. The guard and pommel are two parallel, facing disks which give the weapon its name.

Sabit. The Sumatran sickle knife.

Sadoep. A single-edged knife from Borneo.

Saffdara. A double-edged Indian dagger, often elaborately engraved.

Sakin. A straight, thin-bladed, single-edged Sumatran knife with no guard.

Scramasax. A single-edged Frankish dagger with a broad blade.

Sekin. An incurved, single-edged Sumatran knife with a pistol grip.

Sewar. A slightly curved, single- edged Sumatran dagger.

Sgain Dubn. A small, single-edged Scotch knife carried in the top of a stocking.

Skain. A straight-bladed, double- edged, ancient Irish dagger. It is made of iron or bronze.

Stiletto. A European thrusting dagger. Normally hilt and blade are one piece of steel.

Tadji. A thin-bladed Balinese knife used for thrust attacks. The handle is wood carved in an undulating pattern.

Tanto. A single-edged Japanese dagger with a guard.

Telek. A straight-bladed, double-edged knife of the Tuareg. It has a cross-shaped handle and is sometimes worn on the arm like a bracelet dagger.

Tjaluk. A heavily curved, single- edged Malaysian knife. The handle is fitted with a loop knuckle guard. This weapon is favored in assassinations.

To-Su. A small thrusting knife carried by Japanese nobles.

Todo. A single-edged Ceramese knife with a guardless hilt. The wooden sheath, called katnen, is used as a blocking shield in combat.

Tolaki. A broad-bladed, single-edged Toradjan knife.

Tombak Lada. A double-edged Sumatran knife with a wooden handle.

Triple Dagger. A spring operated European parrying knife used by fencers.

Tuba. A curve hiked, straight-edged Moro knife. It is carried in a wooden sheath open on one side.

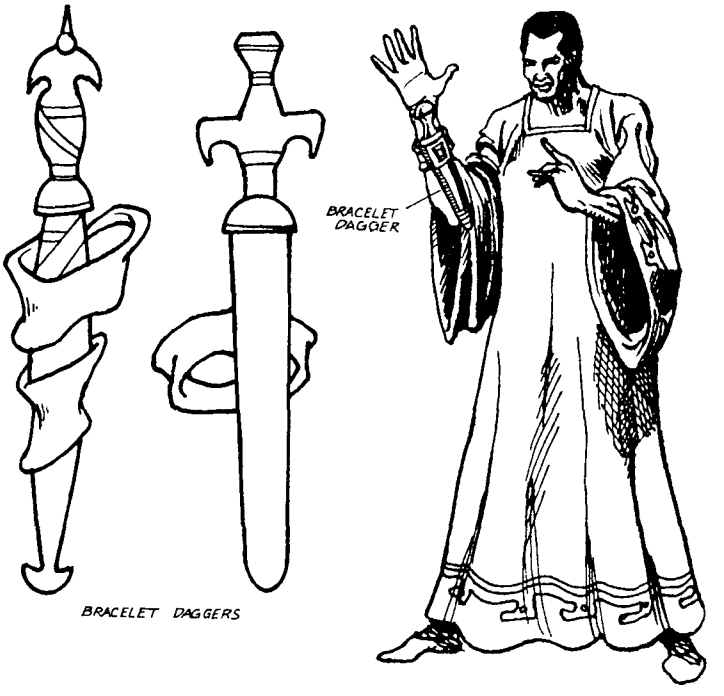
Vinchu. A single-edged Mahrattan dagger worn concealed in the sleeve.

Wedong. A heavy, single-edged Javan knife.

Zirah Bouk. A heavy "mail piercer" Persian knife.

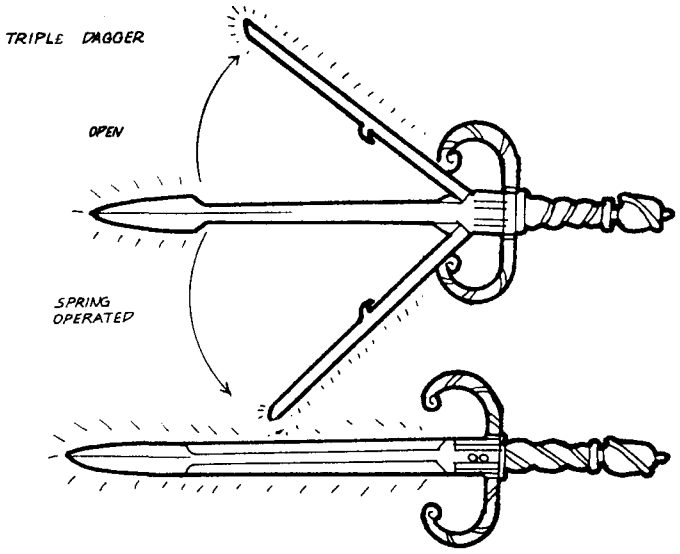
MISCELLANEOUS & EXOTIC WEAPONS

EXOTIC KNIVES

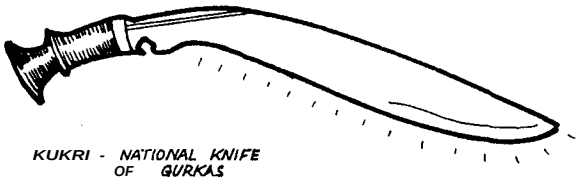


Bracelet Dagger. Although many societies developed weapons which could be concealed under clothes, the bracelet dagger is perhaps one of the simplest yet most effective designs. Generally, the dagger itself is a straight, double-edged weapon with a small hilt. The scabbard was attached to a wrist bracelet which could be fitted over the forearm. The whole affair was about one third of a meter in length and was concealed by a loose fitting robe or shirt.

An African tribe called the Haussa made extensive use of the bracelet daggers. The Haussa were shunned by the other peoples of the Sudan where they lived as a result of thier claims to originally being a tribe of smiths. Smiths were shunned out of fear of their magic skill which gave their works the power to kill.



Triple Dagger. The triple-dagger was a weapon used by European fencers. In its closed position this weapon appeared to be a plain dagger, but when a release catch was pressed, two side blades pushed out from the central blade to form a sort of trident. In this form the weapon was rather handy in parrying rapiers and other thrusting-type weapons.

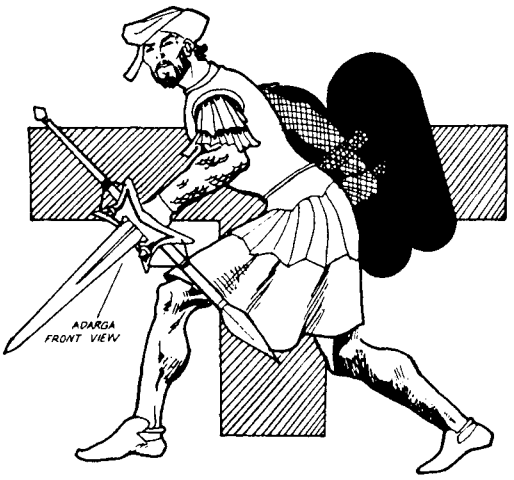


Kukri. This legendary knife is the principal weapon of the Gurkas of Nepal. The weapon is usually carried in a leather sheath along with two such smaller knives which are shaped the same way. The center of gravity of this weapon was well forward, and, as such, was very heavy. Devastating blows could be achieved. It was said that these knives, once drawn, were not to be sheathed until they drew blood.

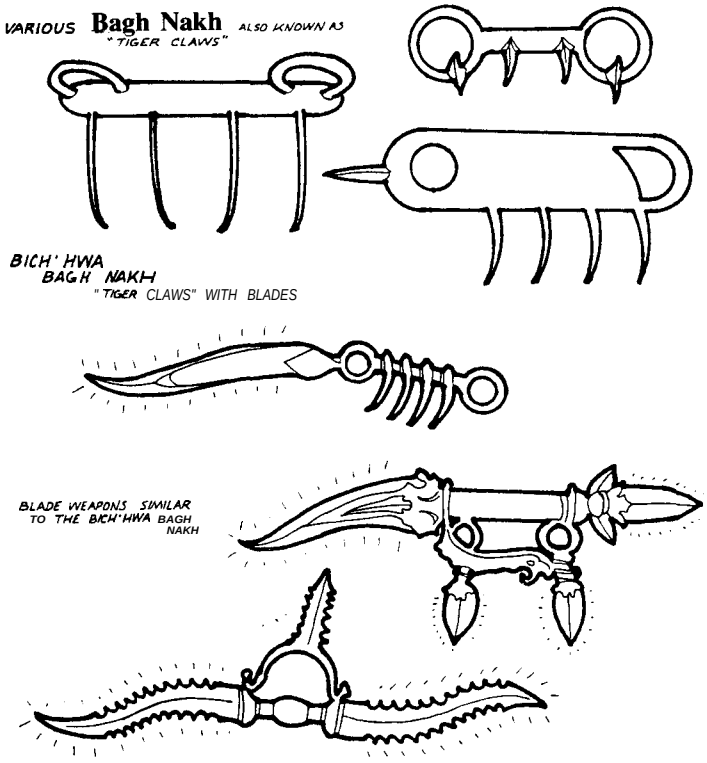
MISCELLANEOUS WEAPONS

The weapons under this heading are grouped by virtue of their unusual design and function.

Aclys. A wooden Roman throwing stick with a spiked head. It was attached to the user's arm by a strap which enabled it to be retrieved after it had been thrown.



Adarga. A Moorish *parrying weapon* consisting of a small bladed shield attached to a short spear. Both the blade attached to the shield and the spear blade are double edged.



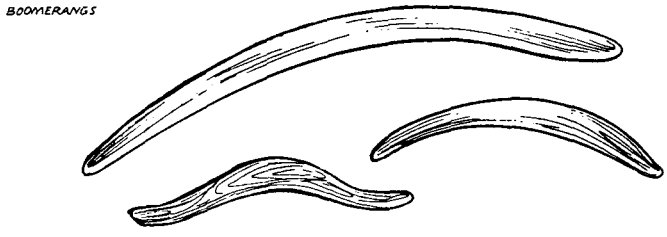
Bagh Nakh. The Indian *"tiger claw"* weapon. It consists of a bar with four or five curved blades attached. On each end of the bar a ring is attached. The forefinger and pinky are slipped through the rings, with the bar in the palm. Obviously this weapon could be easily concealed and was favored by thieves and assassins in India and the Middle East.

Sometimes these weapons were further fitted with dagger blades, as is the case of the Bich'Hwa Bagh Nakh combination.

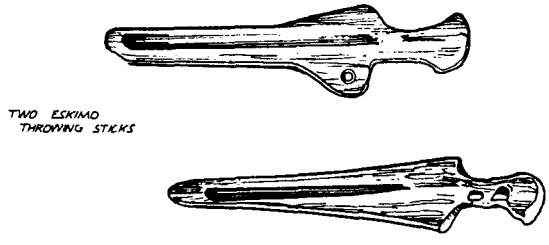
Bokken. A wooden Japanese practice sword.

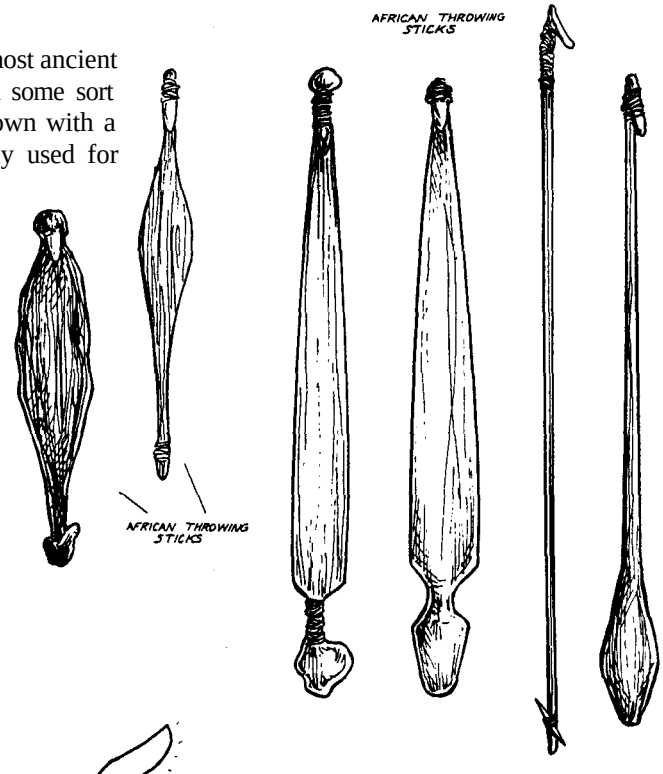
Bolas. A characteristic weapon of the South American indians, similar weapons are used by Eskimos. Basically, they consist of a cord or leather thong with stones attached to each end. A second cord with stone is attached to the center of the first to create a three-pronged weapon. The weapon is spun around the head and then thrown at the target animal's legs. The Eskimo version is lighter and used against birds.

Boomerang. A wooden **throwing stick** used by numerous cultures. They are generally incapable of returning to the thrower. Only those designed as toys would return to the thrower. Many primitive cultures had similar throwing sticks. These weapons had an effective range of about 20 meters.



Throwing Sticks. Sticks and rocks are certainly the most ancient of all missile weapons. Nearly every culture had some sort of specifically designed stick which could be thrown with a certain degree of accuracy. These were normally used for hunting birds and small game.

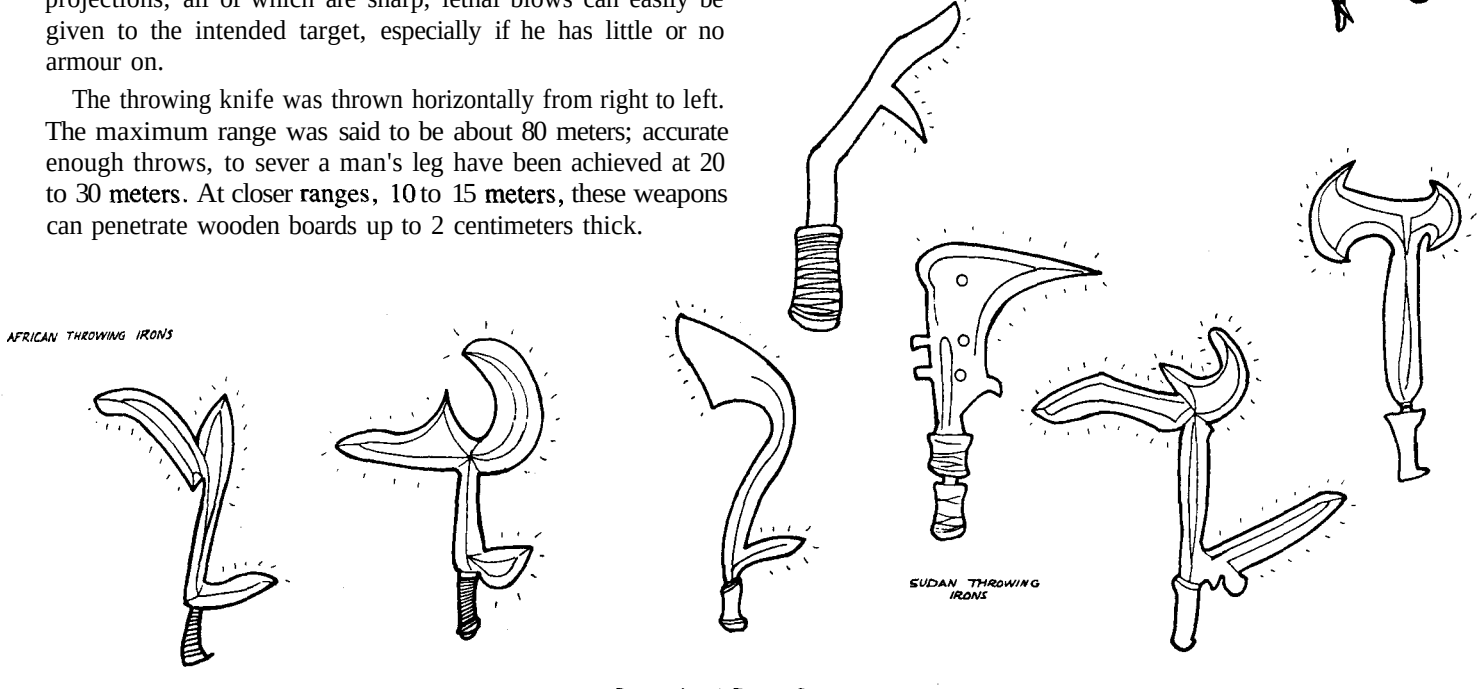




African Throwing Irons/Knives

In Central Africa the throwing knife was used rather extensively. These strangely shaped metal weapons would be of little combat value if used in any other fashion. Due to the numerous projections, all of which are sharp, lethal blows can easily be given to the intended target, especially if he has little or no armour on.

The throwing knife was thrown horizontally from right to left. The maximum range was said to be about 80 meters; accurate enough throws, to sever a man's leg have been achieved at 20 to 30 meters. At closer ranges, 10 to 15 meters, these weapons can penetrate wooden boards up to 2 centimeters thick.

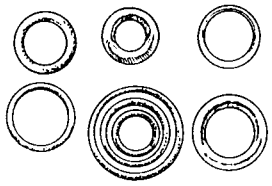


Type	Length	Mass	Dex	Parry	Attack Types	Sym	Dam
M	.7m	1.2kg	1	2	Chop	I	3

Bullwhip. A woven leather whip normally used as an animal herding tool.

Cestus. Wide leather thongs, often weighted with lead, which were worn wound around the hands of Roman boxers.

Cestrosphendone. A Greek sling dart consisting of a wooden pole with a leaf-shaped blade, attached behind which were two or three fixed vanes of wood. A sling was fitted at the tip and behind the vanes and the dart then spun above the head. Effective range was about fifty meters.



Chakram. A flat steel ring with a sharpened outer edge used as a thrown missile, like shirikins, by the Sikhs. Several were often carried on a pointed turban. They were thrown like a modern frisbee and were effective to about twenty-five meters.

Chijiriki. A double-edged Japanese spear with a weighted chain attached to the butt end. The weapon was used with both hands.

Dowak. A flat Australian **throwing stick.**

Fakir's Horns. A weapon carried by Indian fakirs, made of the horns of a black buck. Although the fakirs were not supposed to carry weapons, some examples have *spear points* attached to the ends of the horns to add even further to their martial character.

Fry Pan. An all iron skillet with a short handle.

Fukidake. This was a blowpipe. Not normally used in combat, they were often used to poison opponents. They were generally fairly long, about two meters in length. The darts were fitted with paper cones on the ends to ensure an airtight fit. The mouthpiece was fitted off to the side of the main tube, a feature which prevented the accidental inhaling of the dart. Effective range was approximately ten meters (30 feet). **Damage:** Dart 1, plus the effect of the poison.

Full Moon. A Chinese parrying weapon consisting of a steel ring attached to a handle with two curved blades fitted to either end. The outer edges of the ring and the blades are sharpened.

Gunsen. A folding war fan with iron sticks. It was used by the Japanese as a parrying weapon and a signal.

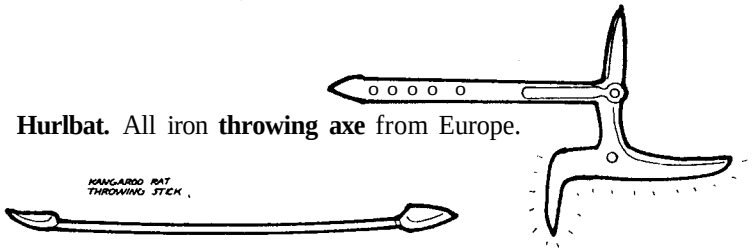
Hachiwara. A Japanese "helmet breaker", this weapon normally consisted of a slightly curved, square-sectioned bar with a hook near the grip. It was carried in a sheath like a knife and was used as a parrying weapon.

Hair Pin. A long metal pin used to hold the hair in place.

Hora. A horn knuckle-duster used by the Jettis in India.

Hui-Tho. A Malaysian **bladed rope** used in the *Kuntao* fighting art.

Hunga-Munga. A hooked throwing knife from Africa. The blade is double-edged, and the handle is covered in rawhide.



Hurlbat. All iron **throwing axe** from Europe.

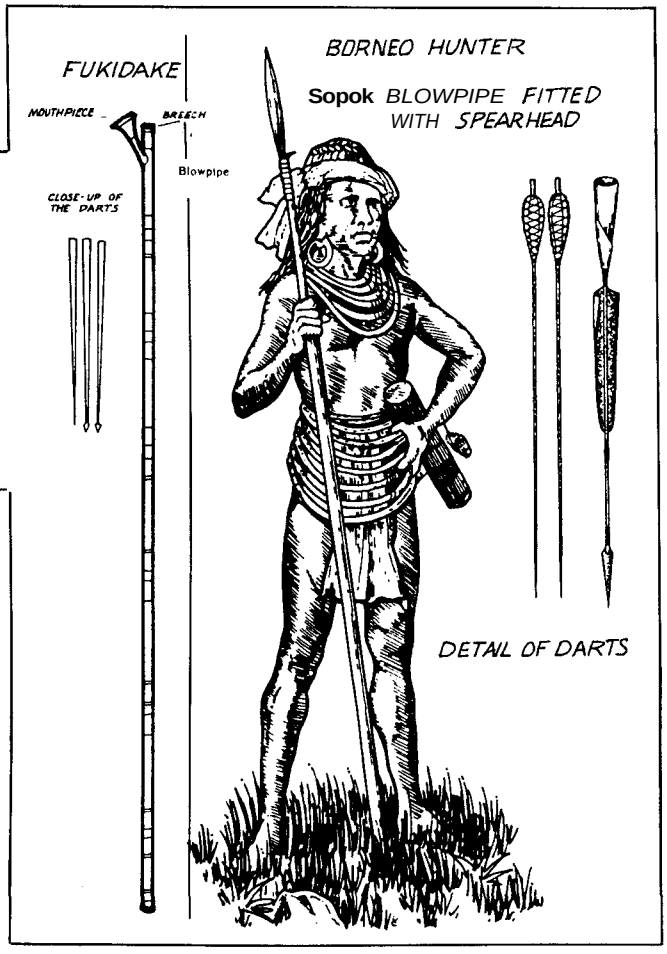
Kangaroo Rat. A slender, wooden Australian **throwing stick** with conical points on each end. It is thrown by swinging it back and forth several times and then letting go with a underhand jerk. Effective range is about 25 meters. Also known as Weet-Weet.

Kau Sin Ke. A Chinese **whipping chain** made up of short metal bars joined together with links. Used with both hands.

Kauah. A New Hebridian stone throwing club. It is cylindrical, with a diameter of about 10 centimeters. It is thrown with great accuracy up to 15 to 20 meters.

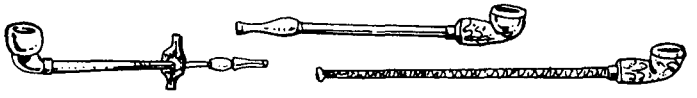
Kawanaga. An iron **Japanese grapple** attached to a long rope. It could be used to assist in climbing, tying up prisoners or a horse, or as an entanglement weapon. Used with both hands.

Kerrie. A wooden or rhinoceros horn **throwing stick** used by the Kaffirs of South Africa. The end is sometimes sharpened and used for stabbing.



Kiam Bokiam. A Chinese fighting/parrying **stick** with a hand guard. It is made of metal, with a wood and leather grip.

Kirasoo. An ironwood Indian **throwing stick,** spiral in form, with a knob on the end. It is thrown with an overhand jerk after twirling it over the hurler's head. Effective range is about 15 to 20 meters.

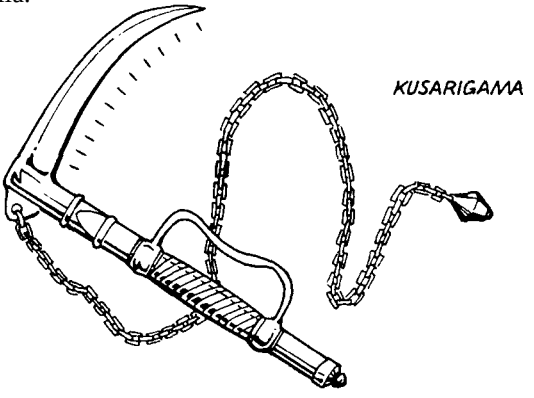


Kiseru. An iron Japanese **smoking pipe.** It could be used to parry sword strikes, as well as deliver effective counterattacks against a foe's head, neck, or abdomen due to its metal construction.

Knuckle Duster. An **iron bar** with finger holes in it to give weight to a punch. They are used by many societies, although normally by the criminal element.

Konnung. A straight, **wooden stick** from Australia which is held in the center and used for stabbing.

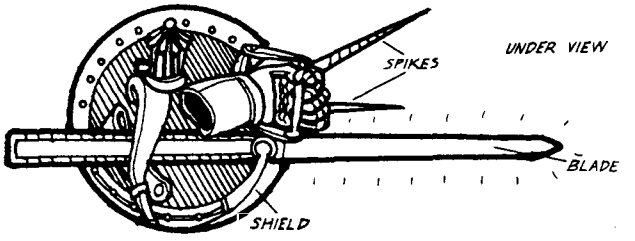
Kunnin. A wooden **throwing stick** used by the Kurnai tribe of Australia.

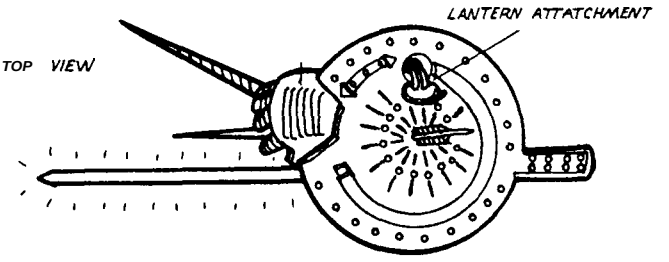


Kusarigama. A metal Japanese **parrying/whipping chain** attached to a metal sickle with hand guard. The chain portion of this weapon is used to entangle an opponent's weapon or legs to unbalance him/her. An excellent example of this weapon's use in combat can be seen in the *Samurai Trilogy,* starring Toshiro Mifune. Used with both hands.

Kyoketsu-Shogi. A Japanese **parrying weapon** used by ninja. It consists of a rope which connects a metal ring and a forked knife. Used in a way similar to the kusarigana in combat, this weapon could also be used to aid in climbing. Used with both hands.

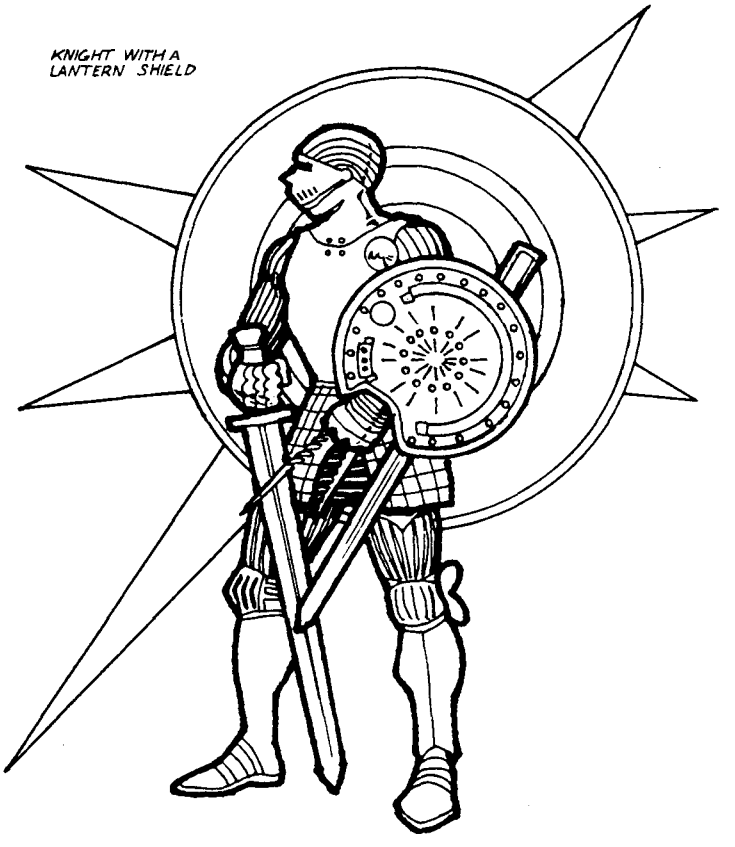
Lantern Shield. the lantern shield was a rather strange weapon which was developed in Italy in the sixteenth century. it consisted of a round buckler-type shield, about one-third of a meter in diameter, to which was attached a number of offensive weapons. A handle projected from the inside of the forward edge of the shield which was grasped by the hand, protected by a plate gauntlet of course. This particular gauntlet has two spikes protruding from it. The serrated edges of these spikes suggest that they were also used to try and trap an opponent's blade. Below the gauntlet, a long swordlike blade was fitted so that it ran roughly along the forearm. The sharpened blade could be effectively used as a thrusting weapon; the rear portion of this blade extended back from the shield





to protect the elbow. In addition, the center of the shield was fitted with a projecting spike which adds further to its lethal capabilities. Finally the shield was also provided with a round fitting in front and the necessary hardware in back so that a small lantern could be attached to it. Lanterns were sometimes used by fencers in attempts to dazzle their opponents and whole systems and schools of training centered around tneir use.

While the lantern did probably shed some light, it is doubtful as to how effective it would be in the darkness. In this instance I consider it to be an unnecessary, albeit interesting, addition to an already overcrowded weapon.



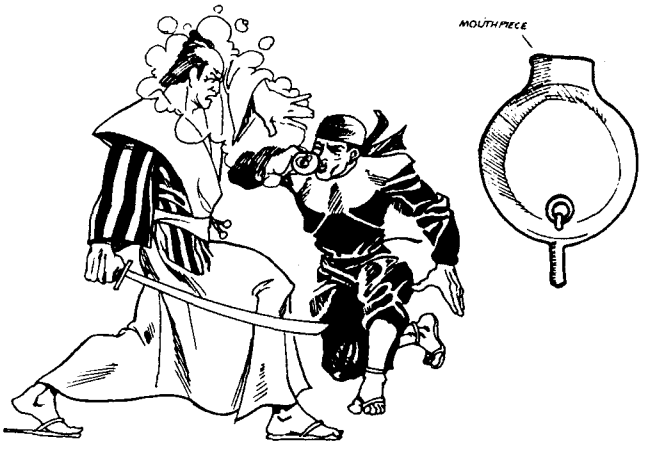
Type	Length	Mass	Dex	Parry	Attack Types	Sym	Dam
M	1.3m	2.7kg	2	4	Thrust	4	3

Lariat. A rope lasso normally used by wranglers and cattlemen. It causes no direct damage, but rather is used to entrap and ensnare. Used with both hands.

Madu. An Indian parrying shield/weapon. It consists of a leather or iron shield fastened over a curving pair of black buckhorns which point in opposite directions of one another. Often the horns are steel tipped. It is used by Hindu religious beggars, swordsmen, and various tribal warriors in India.

Mandehi Liguje. The wooden "bent spear" of the Omaha. Also called a "coup stick," this weapon was used by the braves to touch an opponent in battle to gain coup. By touching an enemy in combat, the brave showed his prowess and power over his enemies.

Manriki-Gusari. A metal Japanese **parrying chain** with weighted ends. It was used with one weight in each hand.



Metsubishi. A Japanese weapon which was designed to blind an enemy. It was popular among ninja as well as law enforcement officials who would want to take criminals alive.

The metsubishi was a small, wooden box, either round or square, which was hollowed out and could be opened. Either end of this flat box was fitted with a mouthpiece and a short tube. Because the weapon was so small, it could be easily concealed.

There were a number of substances which could be put inside the metsubishi; depending on what effect was desired. Ground pepper and dust could blind, powdered glass or nettles would blind and irritate. Naturally this weapon is very short range and would be relatively useless unless surprise was achieved.

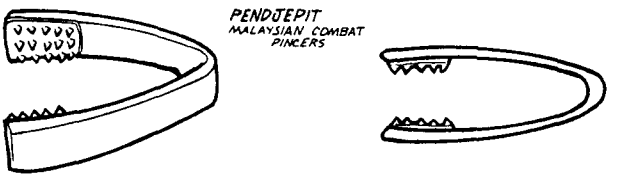
Mongwanga. An iron African throwing knife.

Nagegama. An iron **Japanese chain weapon** used mainly by the defenders of castles. It consists of a short sicklelike blade attached to a short handle to which its chain is attached. It is thrown down upon attackers and then drawn up by the chain. Used with both hands.

Paku. A small **metal throwing rod** or knife used in the Malaysian martial art, *PentjakSilat*. They were generally concealed in the hands or garments.

Piau. A Malaysian **throwing iron** resembling a small axe head.

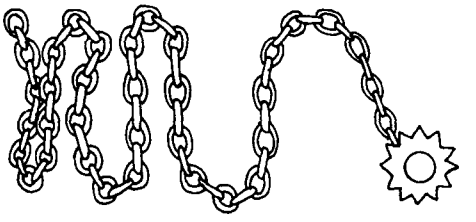
Pry Bar. A common demolition tool made of metal.



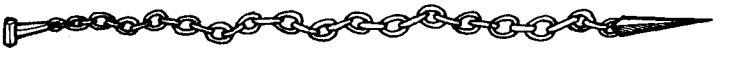
Pendjepit. Metal Malaysian **combat pincers** used in conjunction with the *Prisai Sakti Silat* martial art. They are used to grab, twist and tear the flesh of an enemy and are particularly devastating if holds on the neck, abdomen, or groin are achieved.

Quirriang-An-Wun. An Australian **throwing club** similar to the boomerang, but twisted in a complex manner.

Rante. A Malaysian **whipping chain** designed to entangle an opponent's weapon or ensnare his legs or arms. When it is twirled, centrifugal force keeps the chain stiff and straight as it flies through the air. The techniques used with the chain are similar to those of the staff. Normally a two-handed weapon.



Rante (star type). A Malaysian **whipping chain** with a sharp star-shaped weight on one end. The star makes it an effective slashing weapon when directed against unarmored foes.



Rante Ber Gangedug. A specialized Malaysian **whipping chain** with a T-shaped handle on one end and a sharpened metal rod on the other. Obviously for chain weapons to be successful, the user must be one who has fairly good coordination and dexterity. Also, these weapons would be useless in a confined space or in a grove of trees.

The Rante or weighted chain is a weapon which has its origins in China, but was also used in the Malayan Archipelago. In its basic form the rante consists of an iron ring chain about two meters in length. The ends of the chain are fitted with small weights about sixty grams in mass. Variations of the basic form consist of a shorter length of chain, about one meter, to which a saw toothed disk is attached or a chain fitted with a T-shaped grip on one end and a sharpened metal rod on the other.

The rante is essentially a parrying weapon, designed to entangle an opponent/s weapon or ensnare his legs or arms. The ones fitted with special ends would be very effective if directed at unarmoured portions of an opponent's body. When the chain is twirled, centrifugal force keeps it stiff and striaght as it flies through the air. The techniques used with the chain are similar to those of the staff.

Saintie. A steel Indian parrying weapon consisting of a metal spear with a hand guard mounted in the center of it. Some had a small thrusting dagger concealed in the shaft.

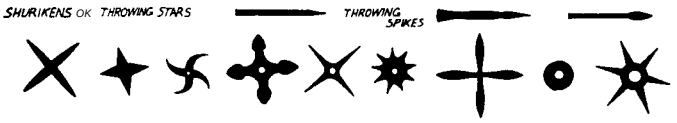
Sang Kauw. A Chinese parrying weapon, generally employed in pairs. It consists of a wooden staff with a sharp semicircular blade fitted to one end. About one-third of the way up the staff from the end is a metal hand guard consisting of two half-moon shaped blades connected by a crossbar.

Shakujo Yari. A wooden pilgrim's **staff** from Japan. The end was removable and covered a straight, double-edged steel blade. It was used by Samurai on undercover missions. Used with both hands.

Shears. A metal cutting implement used by many cultures.

Shinobi-Zue. A wooden Japanese **staff** with a concealed blade fitted on the end. Normally used with both hands.

Shuko. Iron Japanese **palm guards** with spikes on the palms for use on climbing. Normally used by ninja, they were very effective in parrying sword strikes.

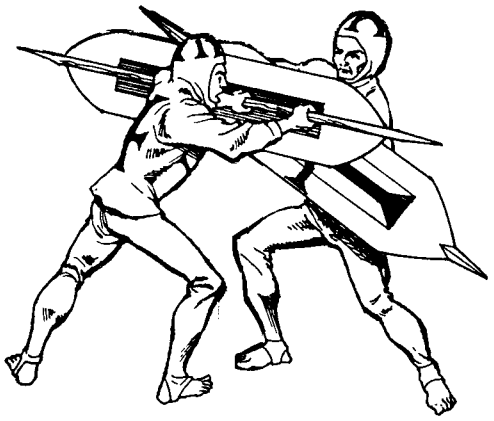


Shuriken. An all metal Japanese throwing knife or star.

Siangkam. Malaysian weapons used in conjunction with the *Kuntao* fighting art. Normally used in pairs, these weapons resemble long metal arrowheads to which are attached wooden handles. Although suited for thrusting, vicious slashes can be made with the point or the barbs.

Singa. A steel Indian boomerang.

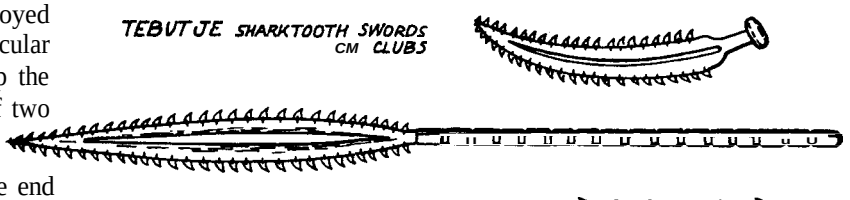
Sopok. A wooden Bornean **blowpipe** with an iron spearhead lashed to the end. Using poison tipped darts, the effective range is about eight meters. Normally used with two hands.



Sword Shield. A European parrying weapon normally made of metal. Sword shields took many forms. The simple ones were only a small metal shield protecting the forearm to which was fitted a blade or spike. This blade extended out over the back of the hand. More elaborate ones were large two-handed affairs with spikes extending out from each side of the shield.

Tau-Kiev. A metal, **swordlike** parrying weapon from China. Although pointed, these weapons were not sharpened. They consisted of a square-sectioned metal bar with a swordlike hilt.

Trident Weapon. A Timorese **parrying weapon** consisting of a L-shaped wooden handle to which a five-pronged horizontal head is attached. The three inner tines of the head are sharpened. A hand guard is also provided.



Tebutje — **Pacho.The** natives of the Gilbert Islands in the Pacific developed a number of club-like weapons which would be most effective against highly armoured enemies. Similar in basic design to the Aztec maquahuilt, the tebutje and pacho utilized shark's teeth instead of obsidian to provide a cutting edge.

U'U. A heavy **wooden club** used by the Marquesans. It is often elaborately carved and used with both hands.

Uchi-Ne. A short Japanese **throwing dart** made of wood, with a metal head. Often the shaft was fitted with feathers to stabilize its flight.

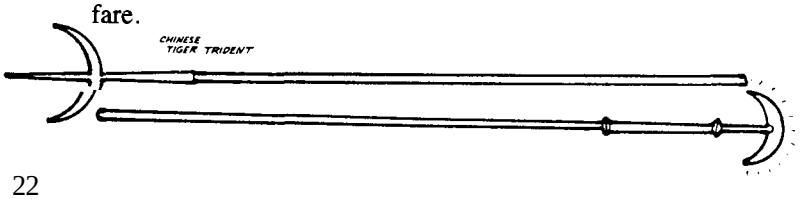
Ulas. A wooden **throwing club** from Fiji. The heads are often elaborately carved.

POLEARMS

The most basic definition of a polearm is any form of chopping or thrusting weapon mounted on a long handle. Often these weapons are difficult to classify because although there are some very distinctive forms, they are often called by different names. Adding to this confusion are the numerous intermediate forms which are in themselves difficult to classify.

The European Polearm was almost always a weapon of the foot soldier. Indeed, these weapons owe much of their ancestry to the modified agricultural tools used by peasant levies of many medieval armies. As time passed and newer, more efficient forms were developed, many polearms took on the look of can openers. This similarity in appearance is interesting, as their primary function was to open up the "cans" of heavily armored knights.

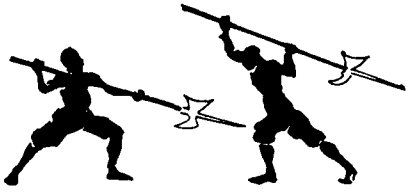
Depending on the specific type of polearm, that is to say, whether it was a thrusting, chopping, or a combination weapon, the methods of use varied accordingly. Heavy chopping types swung overhand could easily crush or cut through most armor. Thrusting types were good for penetrating joints in armor, as well as for breaking up cavalry charges if the soldiers using them held their ground. Large formations of Flemings, Swiss, and Germans often defeated armored knights in the later middle ages and redefined the art of warfare.



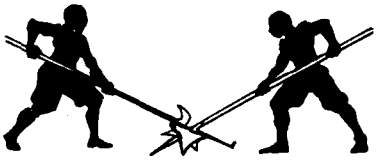
The most well-known polearm is the Halberd. In its basic form, a Halberd consisted of an axe blade mounted on a pole with a point opposing it. A long thrusting point was also part of the head, so that the weapon could be used to chop (with the axe or point) and thrust (with the spear point). On some weapons the thrusting point was elongated and sharpened on one side so that it resembled a Saber. As with most polearms, the shaft behind the head was reinforced with metal strips to prevent the weapon from being chopped off by an enemy's weapon. Another feature of many polearms was a cloth grip which helped the wielder maintain a firm grasp.

The points and hooks on so many polearms served a very important function. Not only did they come into play as weapons, but they were also used to hook onto and unhorse enemy knights.

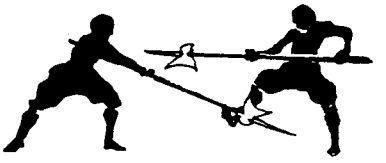
MEYER'S SCHOOL OF HALBERD COMBAT



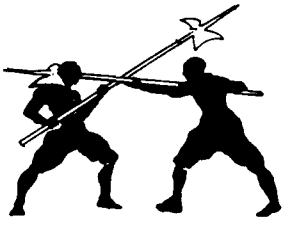
1. RAISING THE HALBERD TO DELIVER A GREAT BLOW.



2. BLOCKING THE ASSAILANTS WEAPON WITH ONES OWN HALBERD.

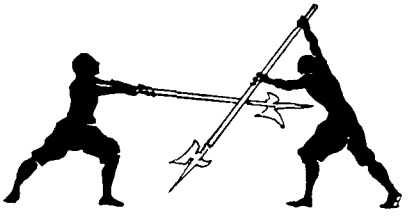


3. TRIPPING THE ENEMIES LEG WITH HALBERD.

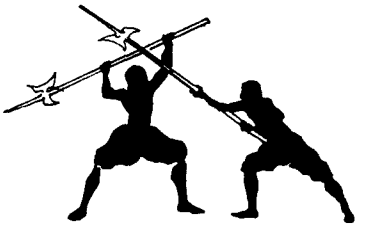


4. CATCHING THE ASSAILANT'S NAPE.

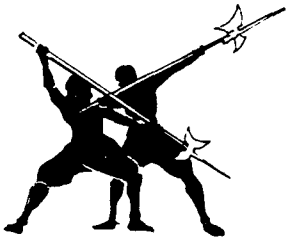
5. THRUST UNDER THE ATTACKER'S CHIN SIMULTANEOUSLY KICKING HIS LEFT KNEECAP.



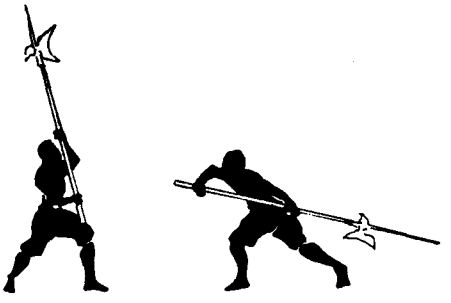
1. HALBERD STOP THRUST CHECKING A RIPOSTE



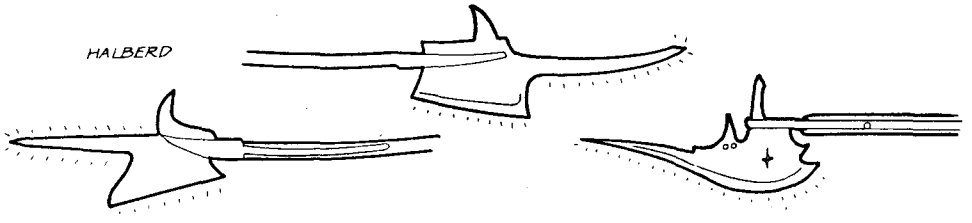
2. CHECKING A DIRECT BLOW WITH THE STAVE.

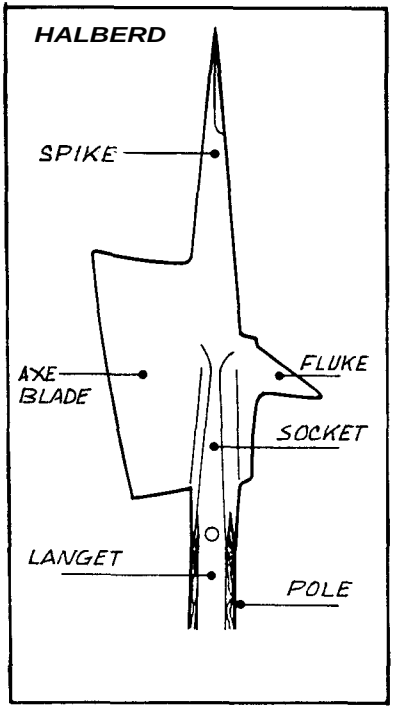


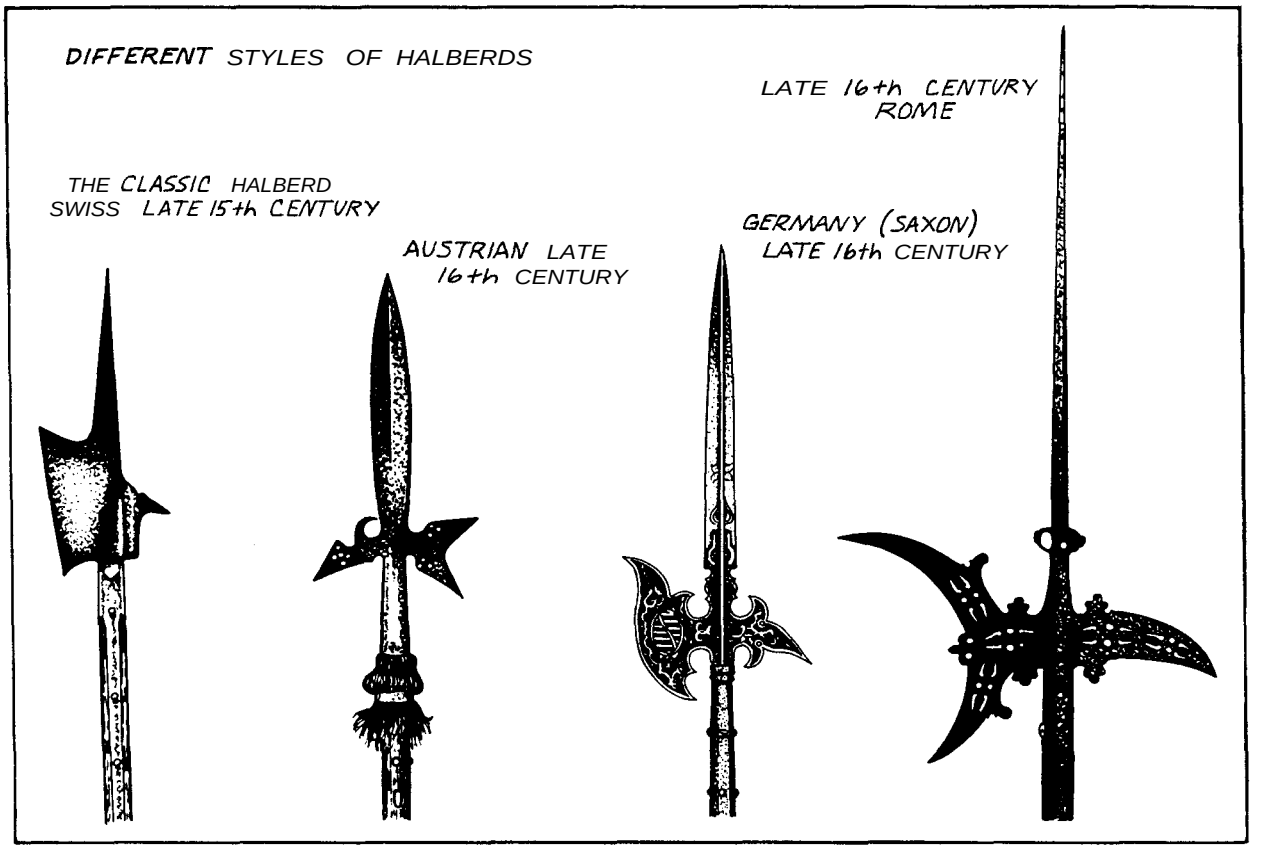
3. TRIPPING THE ENEMY WITH STAVE BUTT THRUST UNDER THE CHIN.

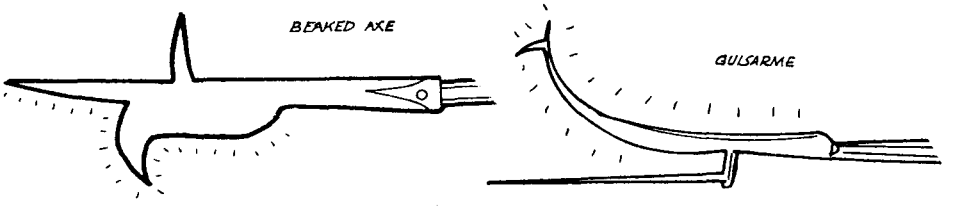


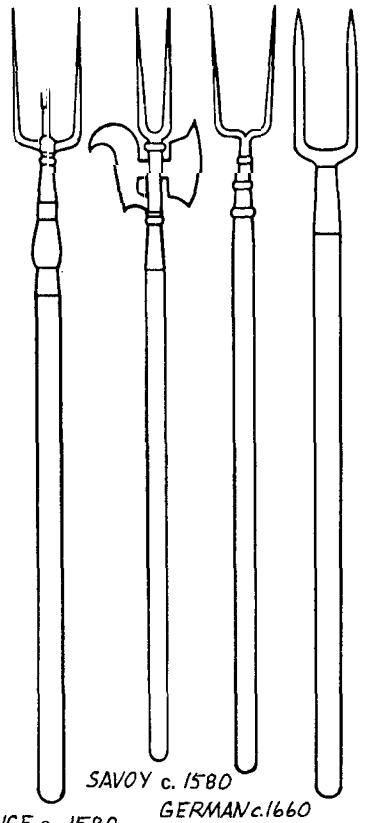
4. GREAT SWING, USING HALBERD AS A DEFENSIVE AND OFFENSIVE WEAPON.



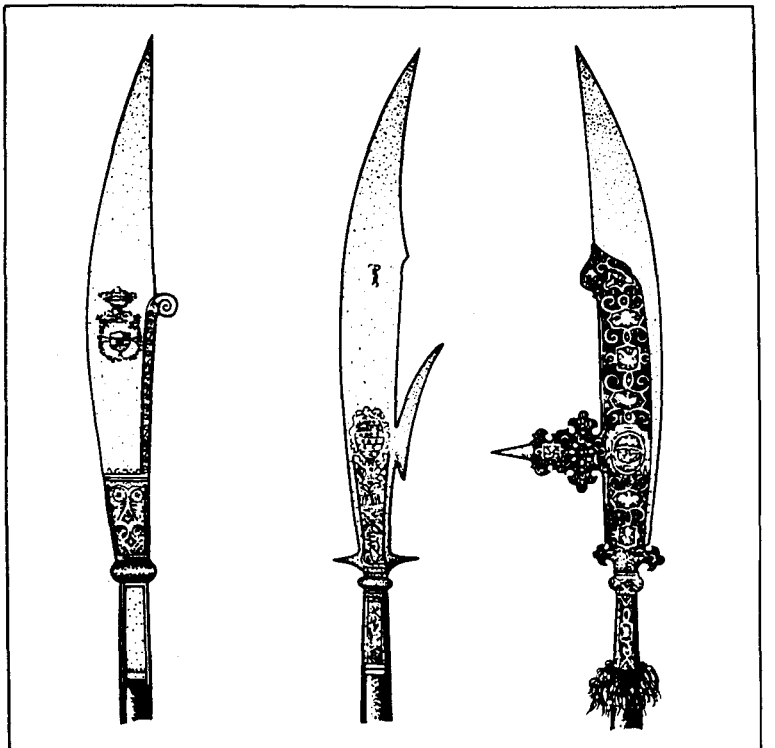








DIFFERENT STYLES OF MILITARY FORKS



POLEARMS

Basic Classification of Polearms

Thrust	Chop (cutting)	Combination
Awl Pike	Berdiche	Beaked Axe
Bohemian Ear-Spoon	Bill	Couteau de Breche
Chauves-Souris	Falcastra	Croc
Half Moon	Falx	Godendag
Korseke	Fauchard	Guisarme
Langue de Boeuf	Glaive	Halberd
Military Fork	Jedburg Axe	Hippe
Partizan	Lochaber Axe	Lucerne Hammer
Pike	Pole Axe	Scorpion
Spetum	Scythe	
Spontoon	Voulge	
Runka		

Ahlspiess. A European two-handed fighting *spear* with a long, square-sectioned spike fitted onto a wooden handle. A hand guard aids in blocks and parries. This weapon was favored by the Bohemian infantry.

Arbir. A *bladed staff* used on Java and other parts of Malaysia. It consists of a pointed wooden staff to which a wide, curved blade is attached. Attacks are made by cutting or thrusting with its blade or jabbing with the wooden point. The staff of the Arbir is grooved opposite the sharp edge of the blade, enabling the user to know exactly where the cutting edge is as he/she executes intricate maneuvers.

Awl Pike. A European polearm with a long square-sectioned spike on the end and a round guard between the head and shaft.

Beaked Axe. A European polearm, much like a bill, with a beak mounted opposite the blade.

Berdysh Berdiche. A European and Turkish poleaxe used from the 15th to the 17th century.

Bill. One of the earliest European polearms derived from an agricultural tool. Basically it consists of a broadly hooked blade mounted on a wood shaft.

Bisento. A broad-bladed, tanged Japanese sword staff with a wooden shaft.

Bo. A wooden Japanese staff. This weapon and its fighting style is very basic and many other weapon techniques are based on it.

Bohemian Ear-Spoon. A European polearm with a broad thrusting blade set between two smaller side points. Came into use in the 15th century.

Brandestoc. A two-handed **pole arm** with a long, double-edged blade concealed in the handle. The blade is brought into play by releasing a retaining pin at the top of the shaft and then swinging the weapon so it slides out. A spring pin locks the blade in place when extended.

Catch Pole. A forked polearm with spring blades which encircled the neck of a fleeing person. Introduced in Europe in the 16th century, it was used to unhorse enemies or catch criminals. A similar weapon is used in Malaysia.

Chacing Staff. An iron shod staff used by robbers in England.

Chauves-Souris. A European polearm with three similarly shaped blades, the central one being the largest. Introduced in the 15th century.

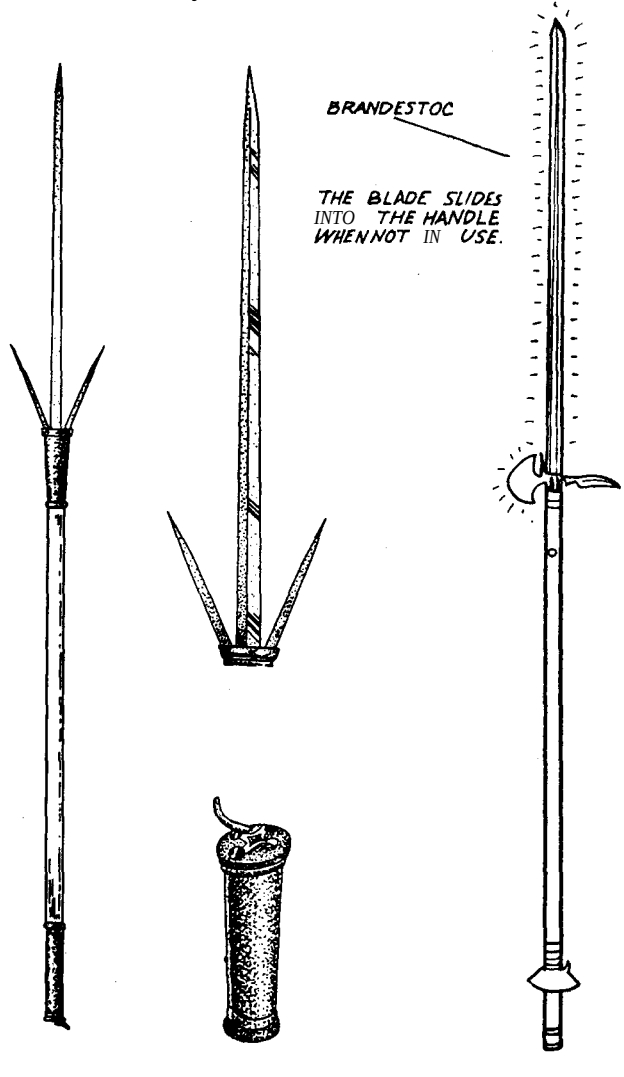
Couteau De Breche. A broad, single- edged blade mounted on a long shaft. Similar to the glaive.

Croc. A European bill, the polearm of the 13th century.

Falcastra. A European polearm consisting of a straight, single-edged blade with a hook or point opposite the edge. These weapons were often elaborately decorated.

Falx. A European polearm, similar to a bill, with a toothed blade and a point projecting out opposite the edge.

Feather Staff. A European walking stick with three concealed blades which could be brought into action by a downward jerk of the weapon. The blades are generally of diamond section. Normally used with both hands.



Feruzue. A Japanese staff weapon consisting of a hollow wooden tube, inside which is hidden a chain attached to an iron ball. The ball can be made to fly out at an enemy or used to whip and entangle.

Fuscina. (Trident) This weapon was well suited for close combat. The tines of the trident's head could not only be used to parry sword cuts and thrusts, but could also be used as a "sword breaker" or to wrench a weapon from an enemy's grasp as well.

Glaive. A broad-bladed European polearm used beginning in the 12th century.

Godendag. A Flemish halberd-like weapon.

Halberd. In its basic form, a Halberd consisted of an axe blade mounted on a pole with a point opposing it. A long thrusting point was also part of the head so that the weapon could be used to chop and thrust.

Half Moon. A Chinese polearm consisting of a crescent-shaped blade mounted so that its tips are facing the butt of the shaft.

Half Moon. A European polearm consisting of a crescent-shaped blade mounted so that its tips are facing forward from the shaft.

Hani. A hardwood staff, often elaborately carved, carried by the Maoris. The end was normally carved to depict a head defiantly sticking out its tongue.

Hippe. A 14th century European halberd with a short, wide point.

Hoe. A wooden shafted, iron-headed agricultural tool.

Hwa-Kek. A Malaysian polearm with a diamond-shaped blade set between two crescent side blades. Used in Kuntao.

Jedburg Axe. A Scottish poleaxe with a hook opposite the blade. Used from the 15th through the 18th century.

Khatramkha. A Tibetan trident.

Kongo-Zue. A wooden **Japanese staff** with iron rings at the end. It was favored by the Yamabushi, or warrior monks. Used with both hands.

Korseke. A European polearm used in the 15th century. It has a three pronged head similar to the chauves-souris and the runka.

Kumade. A Japanese pole grapple with a three-pronged head.

Kunjukdan. An Indian bill with a hand guard.

Lajatang. This is a bladed staff weapon used in Malaysia. The lajatang consists of a wooden shaft to which are attached two large metal crescents, one on each end. The metal crescents are also fitted with two curved points which project backward from the tips of the crescents.

Langue De Boeuf (Ox Tongue). A European polearm with a broad, double-edged blade. Used beginning in the 16th century.

Lochaber Axe. A Scottish polearm with a broad blade and a hook mounted on the end of the shaft. Used beginning in the 16th century.

Lucerne Hammer. A 15th century European polearm with a long spike mounted atop a hammer with a four-pronged face and a single-pronged claw.

Magari Yari. A Japanese trident. Like most Japanese weapons, the head is tanged.

Military Fork. A European polearm which owes its origins to an agricultural tool. Used by peasant levies from the 14th to the 18th century.

Naboot. A wooden staff used in ancient Egypt. A two-handed weapon.

Nagamaki. A Japanese bladed staff with a long, tanged head mounted on a long handle with a guard.

Naginata. A Japanese bladed staff. The blades of these, like all Japanese weapons, were of the highest quality. Naginatajutsu, the art of the curved spear, is the fighting art used with this weapon by trained fighter.

O-No. A Japanese poleaxe used by a the Yamabishi.

Partizan. A European polearm with a broad blade with short, curved points at its base.

Pike. A long European polearm used mainly as a defense against cavalry. Generally, the heads of these weapons were relatively small, with leaf, or diamond- shaped sections. This weapon is generally only used while in large formations rather than in single combat.

Pitch Fork. A common agricultural tool, generally with three tines, constructed out of wood.

Plancon A Picot. A European polearm consisting of a 1 ½meter spike mounted atop a shaft of equal length. A formation weapon like the pike.

Pole Axe. A European polearm consisting of a large axe blade with a spike or hammer opposite, mounted on a long shaft.

Quarterstaff. A European wooden staff used with two hands. It was held in the middle with the left hand and at one-quarter with the right.

Romphaea. A Greek weapon consisting of a curved, double-edged blade mounted on a wooden staff.

Runka. A European polearm used in the 15thand 16thcenturies. Its head consists of a long, double edged blade with two smaller side blades projecting out from it.

Sabre Halberd. A German polearm of the 16th century.

Sarissa. The Greek pike used in the phalanx.

Scaling Fork. A military fork with a hook attached to it to aid in the scaling of walls.

Scorpion. A type of European halberd with a narrow blade.

Scythe. A European polearm made by mounting an agricultural tool in line with a wooden shaft. Normally used by peasant levies.

Sjang Sutai. A Malaysian bladed staff. Used in the Kuntao fighting art, this weapon has a large blade separated from the shaft by a circular hand guard.

Shakwo. A wooden Japanese staff fitted with metal rings on the end. It was used by begging priests. Used with two hands.

Sode Garami. A Japanese polearm designed to catch thieves. The name means "sleeve tangler" and it has barbed hooks on its end for that purpose.

Spade. A common wooden tool with a metal reinforced blade. Used with two hands.

Spetum. A European polearm with a long, narrow blade set between two curved side blades.

Spontoon. A European half pike.

Sudis. A 12th century European pike.

Taru. A pike used in ancient Egypt.

Tepoztopilli. An Aztec fighting spear/polearm consisting of a wooden shaft to which is attached a triangular head of wood fitted with obsidian flakes to form a cutting edge.

Tetsubo. A heavy, iron-shod wooden club from Japan. Generally used with two hands.

Tiger Trident. A large Chinese trident used to hunt tigers.

Toyak. A Malaysian bladed staff used in the Bhakti Negara style of *Pentjak-silat*. It is generally employed with slashing strokes.

Voulge. A European polearm with a broad axe blade topped with a spike.

Yoribo. A wooden Japanese staff. Used with both hands.

SPEARS

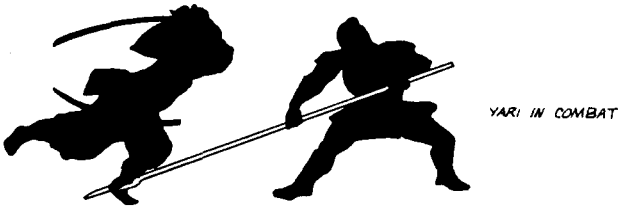
In general, spears are shafted weapons used almost exclusively for thrusting or throwing. Wooden spears have been used from the earliest times. A number of materials have been used as spear points, including stone, bone, horn, animal spines, and metal to name the more common ones. Most spears designed for throwing are quite long, often longer than the height of the wielder. This large shaft not only stabilizes the flight of the missile, but also provides mass behind the impact, increasing penetration.

Most cultures that have used spears extensively have also used spear throwers. Basically, spear throwers are devices to increase the force and therefore, the range of the throw. Many spear throwers are short wooden sticks with a hook on one end and a handgrip on the other. The spear is laid along the thrower with the butt resting against the hook. By moving the arm forward in the act of throwing, the spear thrower acts as a lever, increasing the momentum.

As combat weapons, the main disadvantage of spears is that they can be used only one time when thrown. Also, they have the tendency to be thrown back at the original owners. So, when used in combat they have the tendency to be thrown upon approach, but then the thrower would rely on other weapons, such as a sword or mace, in any other combat.

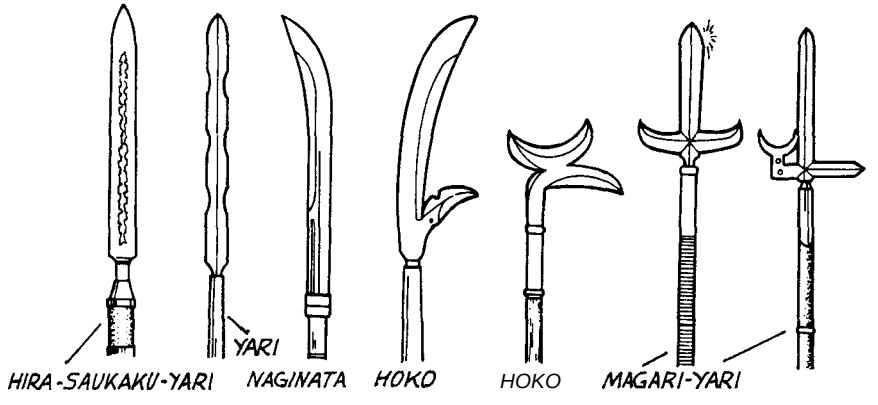
Spearheads are attached to their shafts by various means. These include sockets, tangs, lashing and glue.

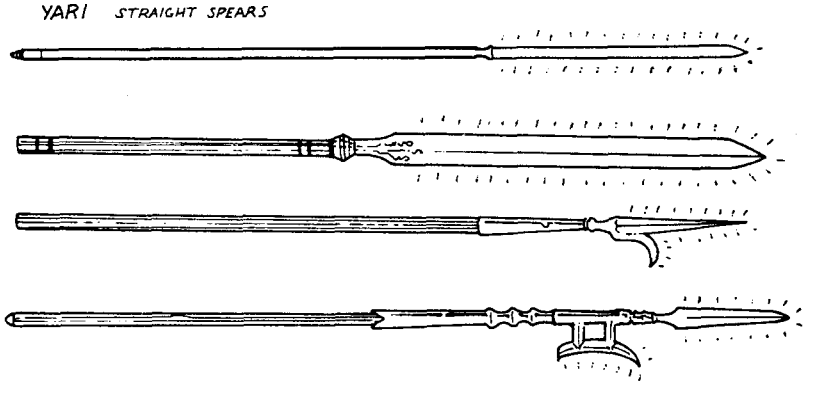
Many thrusting spears, i.e., those not used primarily for throwing, were used with both hands, although single-handed thrusts could also be used. All weapons in this category are considered two-handed weapons unless noted.

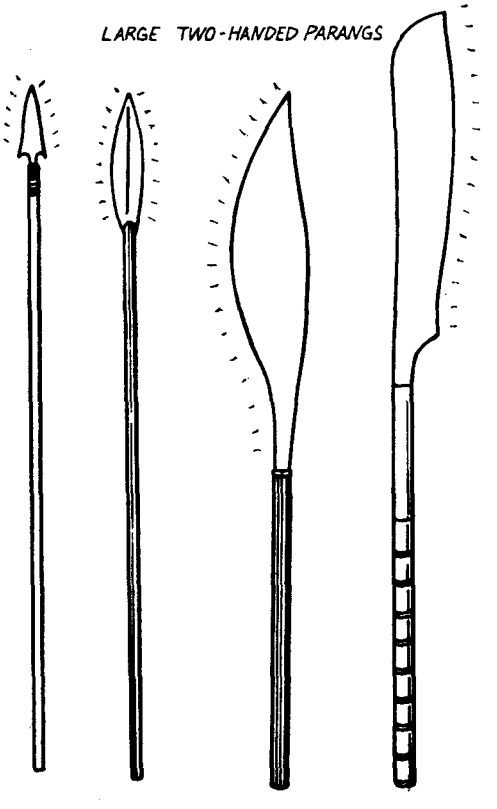


YARI IN COMBAT

AM LAYS/AN SPEARS







MALAYSIAN SPEARS

Angon. An Ancient Frankish spear similar to the Roman pilum. It consisted of a barbed iron head with a slender neck attached to a wooden shaft. It was designed to be hurled at an enemy prior to combat. When stuck in an enemy's shield, it would make it unwieldy, while the long iron neck made it hard to cut off. The attacker could then step on the trailing wooden end of the spear to drag down his enemy's shield.

Assegai. A Zulu throwing spear consisting of a lancet or barbed head with a long tang attached to a wooden shaft. The joint is reinforced with cord.

Aunurgith. A long wooden spear from the Melville Islands. The barbs are quite wide, some up to 5cm across and up to 12cm long. The spear has 24 such barbs, all arranged on one side.

Ballam. A broad Indian fighting spear consisting of a socketed steel head fitted onto a short wooden shaft.

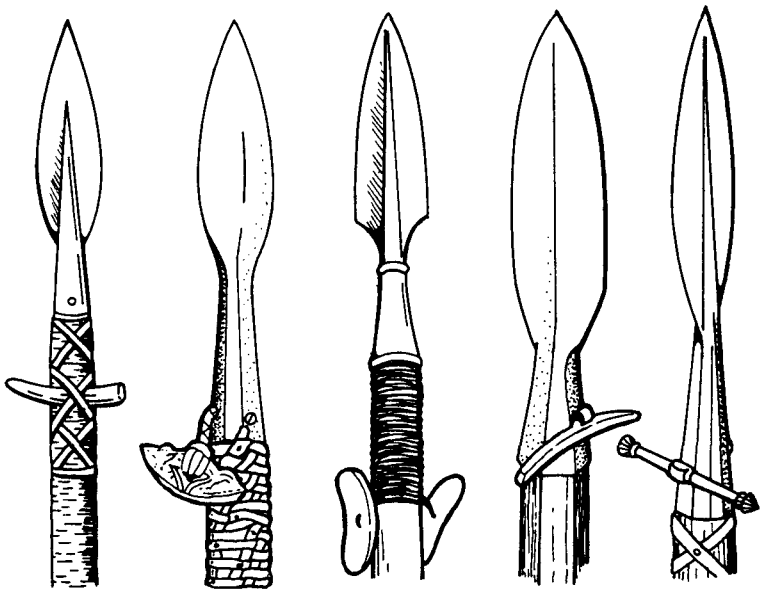
Bandang. A Javan spear with a tanged metal head attached to a wooden shaft. A tassel is attached to the butt of the shaft.

Barchi. A long Mahrattan spear or pike consisting of a tanged, square- sectioned head attached to a wooden shaft. The butt of the spear is fitted with a spike.

Bhala. A Mahrattan horseman's lance consisting of a socketed steel head attached to a wooden shaft. The blade is sometimes forked.

Bilari. A wooden hunting spear used with a spear thrower. Used in Australia.

BOAR SPEAR HEADS SHOWING CROSSPIECES



Boar Spear. A European hunting spear with a broad, leaf-shaped head. The heads were generally socketed and had a crosspiece below the edge to prevent the boar from running up the shaft and attacking the wielder.

Budiak. A broad-bladed Moro spear with a tanged head.

Cateia. A Celtic throwing spear with a pointed head nailed to a wooden pole. In the center of the weapon was a leather loop used for throwing and picking the weapon up.

Chimbane. A wooden Tookrooris spear with barbs set in opposite directions so it could neither be removed nor pushed through. The head is lashed to the shaft and made of metal.

Contus. A wooden Roman cavalry lance with a metal tip.

Do-War. An Australian spear consisting of a palm wood head glued and lashed onto a reed wood shaft.

Dung. An iron shod Tibetan spear consisting of a double-edged, socketed head attached to a wooden shaft fitted with an iron butt. The shaft is reinforced by a spiral of iron along its length.

Egchos. A Greek bronze-headed fighting spear.

Enhero. A Moluccan spear consisting of a tanged wooden head attached to a hardwood shaft. In combat the weapon is more often than not used as a staff than a spear.

Falarica. A heavy Roman spear with a long metal head and a round wooden shaft. At the joint where the head and shaft meet, a round lead weight was fitted to increase the impact of the weapon. It was also called "Saguntine Spear."

Fal-Feg. An Ingorot fighting spear consisting of a tanged metal head fitted onto a heavy, stout shaft.

Framea. A Frankish lance consisting of a socketed iron head fitted onto a wooden shaft.

Gaesum. A light Roman throwing spear made entirely of iron.

Garvo. An Indian spear with a socketed head of lozenge cross section.

Golo. A wooden Bongo spear with a barbed head and an additional set of long animal spine barbs lashed below the head.

Granggang. A wooden Javan spear with a straight, round point.

Hak. A Malaysian spear with a wavy- bladed, tanged head much like that of the kris.

Harpoon. A European spear with a wide, barbed head used for hunting large fish and marine mammals. The head is fitted to the shaft by a socket.

Hinyuan. A wooden spear used by the tribes of Nicobar. It consists of a long, round point with several rows of barbs lashed to it.

Hoko. A double-edged Japanese spear consisting of a tanged steel point with a side blade at right angles to it. The head is mounted on a wooden shaft and often has a butt cap.

Huata. A wooden Maori spear used in village defense.

Irpull. A Melville Island spear made of wood with wooden barbs lashed to the head.

Ja-Mandehi. A wooden Omaha lance with a tanged metal head.

Jaculum. A light Roman javelin with diamond-shaped steel heads. They are often carried in a quiver of three or in the pocket of a sword's scabbard.

Jarid. Light oriental javelins with diamond-shaped steel heads. They are often carried in a quiver of three or in the pocket of a sword's scabbard.

Javelin. A Greek throwing spear with a socketed metal head.

Jiboru. A long Australian spear made of wood with a bone point fastened to it by tree gum. The butt is fitted with a bamboo piece for use with a spear thrower.

Kadji. An Australian spear with a wooden shaft and a stone point lashed to it.

Kahsita. An Eskimo harpoon with a barbed bone head.

Kamayari. A double-edged Japanese spear with a tanged steel head with two side blades set at right angles to it.

Ken Shoka. A Micobar harpoon with a detachable barbed steel head. A cord is attached to the head to haul in the catch.

Kannai. A wooden Australian spear blackened by fire.

Kapun. A Point Barrow spear with a broad blade.

Kiero. A wooden fighting spear from Australia.

Kikuki. An East African spear with a long, soft iron head which is often barbed.

Koveh. An African spear with a long barbed head and numerous small barbs arranged such that the weapon could neither be withdrawn nor pushed through.

Koy-Yung. A wooden Australian spear with a long, polished point.

Koyun. A wooden Australian spear with a single barb cut from the solid shaft.

Kujolio. An Australian spear with a bamboo shaft and a wooden point.

Kuyan. An Australian spear with a long wooden head fitted with quartz chips. The chips are glued into grooves in the head and become smaller toward the tip of the weapon.

Laange. An Indian spear with a diamond-sectioned head.

Lance. A European horseman's spear often fitted with a hand guard. The tip of the lance was normally leaf-shaped for war. Lances for peaceful jousts were fitted with coronal points that were blunted. A coronal point had three blunt points to improve striking in jousts, but was still relatively safe. The butt of the lance was generally much wider than the shaft to serve as a counterweight and to help balance the weapon. It was used from horseback with one hand.

Lance-Ague. A light European lance sometimes thrown as a spear. It had a socketed steel head.

Larna-Pe. A wooden Australian spear with sting ray spines glued to the tip.

Lembing. A Malaysian spear with a diamond-shaped head fitted into a bamboo shaft.

Khundli P'Hansi. An Indian mace/crutch used by the Mahrattan fakirs. It is made of steel and has a small thrusting dagger concealed in the shaft.

Mahee. A Bongo spear made of wood, with a leaf-shaped metal head lashed onto the shaft.

Makrigga. A Bongo spear with a barbed head. The shaft below the head is fitted with numerous small barbs facing both forward and backward.

Makura Yari. A light wooden Japanese spear with a small tanged steel head.

Mkuki. A wooden East African spear with a socketed soft iron head. The shaft below the head is covered by animal fur. The shaft is generally further decorated by coils of metal wire.

Mon-Gil Mon-Gil. A reed-shafted Cape Bedford spear with a hardwood head fitted with wooden barbs.

Mongile. A light wooden spear from Australia with light barbs on its head.

Mongoli. A wooden Australian spear with a flat barbed head.

Mu-Rungal. An Australian spear having a long, barbed head made of hardwood.

Nageyari. A short Japanese throwing spear having a tanged steel head. Often the wooden shafts of these weapons were decorated with woven cane.

Nandum. An Australian wooden spear with a line of barbs, often stone chips, on one side only.

Nerau. A heavy wooden spear from New Hebrides with a long head.

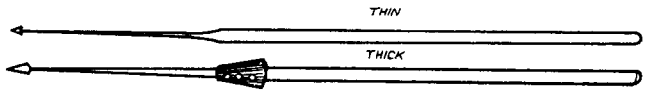
Paralyser. A Malaysian spear with two barbed heads. The longer head prevents someone who has been stabbed from withdrawing the weapon due to its barbs, while the shorter head stops him from running up the spear and killing the wielder.

Patisthanaya. A Sinhalese spear with a double-edged, socketed steel head. The head is often elaborately engraved and the wooden shaft is often decorated with bands of color.

Pelta. A Greek javelin with a tanged bronze head. In the center of the shaft was attached the *anknle*, a leather strap which helped in hurling the spear with greater accuracy and power.

Pill. A peasant weapon used in the Norman army, this spear was simply a sharpened stake.

Pillara. A long wooden Australian spear with two parallel heads fitted with barbs. It could be thrown with a spear thrower.



Pilum & Pilum (thin). The thick pilum had a long iron head with a pyramidal point. The end of the shaft was flat, like the tang of a sword. The second type or thin pilum, has a long, socketed iron head with a barbed point. This type was designed to be thrown.

Rummh. An Arabian lance with a socketed steel head fitted onto a wooden shaft. The head itself is long and thin, with a diamond-shaped cross section. The butt is fitted with a metal cap. These spears were stored upright, with their butts stuck into the ground while in camp.

Sang. An all metal or metal shod lajput lance used while fighting from camels. They have long, diamond-sectioned heads.

Sangkoh. A wooden Dyak spear with a metal point lashed onto the shaft.

Sangu. An all steel Indian spear with a quadrangular point.

Sanokat. A wooden Ceramese spear with a leaf-shaped, tanged metal point. It is a weapon of legend among the natives and vows of brotherhood among tribesmen are often sworn on spears thrust into the ground.

Saunion. A light wooden throwing spear of the Samnites. It has a tanged steel head.

Shail. A Rajput lance with a socketed steel head fitted onto a bamboo shaft.

Shanen Kopaton. A wooden war spear of the Nicobar Island natives. It has a broad, tanged blade fitted with barbs.

Siligis. A wooden throwing spear from Borneo. They were thrown first to save the more valuable iron-headed spears for close combat.

Simbilan. A light wooden throwing spear used by the Moro. Skilled warriors were said to have been able to throw four at once.

Sinan. A Persian spear with a socketed steel point, often highly engraved.

Sligi. A wooden Dyak spear with a point hardened by fire.

Spiculum. A light Roman throwing spear with a thin-bladed point.

Su **Yari.** A Japanese spear with a double-edged, tanged blade. Below the head is a hand guard made of steel as well.

Sudanese Spear. A wooden Sudanese spear with a wide-socketed blade.

Tahr Ruan. A wooden fighting spear from Wetter Island with a heavy, barbed head.

Tao. A hardwood Maori spear, usually unbarbed.

Tawok. A Javan spear with a tanged, diamond-shaped head.

Te-Yari. A light Japanese throwing spear with a socketed steel head.

Telempang. A Javan spear with a tanged willow-shaped blade and a spiked butt.

Tirrer. An Australian spear made of reed with round points of hardwood glued and lashed onto it.

Tjunkuletti. Long wooden spears from the Melville Islands with large heads. Each side of the spearhead has from 15 to 30 barbs. Normally, these weapons are decorated in red, white, and yellow.

To-Ono. An Australian heavy spear with a two-part wooden shaft and a barbed wooden head.

Tombak. A wooden Malaysian spear with a tanged metal head. It is used in conjunction with the *pentjak-silat* martial art form.

Tschehouta. An Indian spear with a socketed head and pointed butt.

Tumpuling. A barbed Javan spear with a tanged head.

Wainian. A stone headed Australian spear with a wooden shaft. The stone most commonly used is quartzite and it is attached with plant gum and cord.

Wallunka. A wooden Melville Island spear with a series of widely separated barbs on one side of the head. It is decorated with bands of red, white, and yellow.

Wi Valli. A heavy wooden Australian spear with a wide tip. It is made of a single piece of wood.

Yari. A Japanese spear with a trident shaped tanged blade. As with all Japanese fighting spears the art of the straight spear, *yarijutsu,* was used by the wielder.

Zagaye. A Venetian lance with socketed iron heads on both ends of the shaft.

SWORDS

In spite of the universal nature of the sword, there is no set definition of the weapon which puts it apart from all others. The reason is simple, the series of knife, sword, two-handed sword, and glaive is unbroken, and there is no point at which a division can always be made. Neither length of the blade, type of hilt, or method of use can define a sword; all of these things overlap.

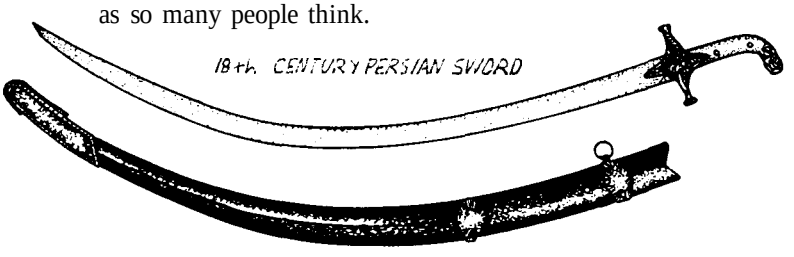
Swords may be divided into three classes: those for chopping only, those for thrusting only, and those for both chopping and thrusting. The chopping sword is probably the oldest of the three, being essentially an evolution from the club. Later, when it had been learned that thrusting was more effective and required less exertion than chopping, the design was modified to make the sword able to do both. After the development of fencing, and skill was found to be superior to force, swords were made for thrusting only.

There are five methods commonly used for attaching the hilt to the blade. In the first, the tang passes through the solid hilt and is riveted over the outside of the pommel. This gives a secure attachment and this method was generally employed in Europe. The next way is to rivet pieces forming the grip to the tang. This method is just as strong as the first and was commonly employed in the Near East. The Japanese method was to attach the hilt by a single removable wooden peg which passed through both the tang and the hilt. This gives a strong attachment if it is of first- class materials and workmanship. The fourth method was to rivet the blade to projections from the hilt. This was used in India. It was secure, but clumsy. The fifth method was to cement the tang into the hollow hilt. It gives a good hold, providing the correct type of cement was properly applied. This method was generally used in the Far East.

Swords intended for chopping only, nearly always have straight or slightly curved blades. They can be either single or double-edged. Curved swords that are sharp on the concave side have a large portion of their mass beyond the center of percussion (a point roughly one-third of the length from the point), which makes more powerful blows possible.

Swords intended for cutting only nearly always have curved blades. They rarely are double-edged, but often have a false edge. They are always sharp on the convex side of the blade.

Swords intended for thrusting only always have straight blades. The section of early ones was either a very flat diamond or four pointed star (see diagram). Later, triangular blades were adopted to give maximum stiffness with a minimum of weight. In many cases, they were lightened by making grooves on the sides of the blades. Blades of all kinds were frequently lightened by grooves. In many cases, this also strengthened the blade. These grooves were in no way designed to be a "blood gutter" as so many people think.



COMMON TERMS

Blade: The portion of the sword not included in the hilt; this includes the back, edge, fasle edge, point, and ricasso.

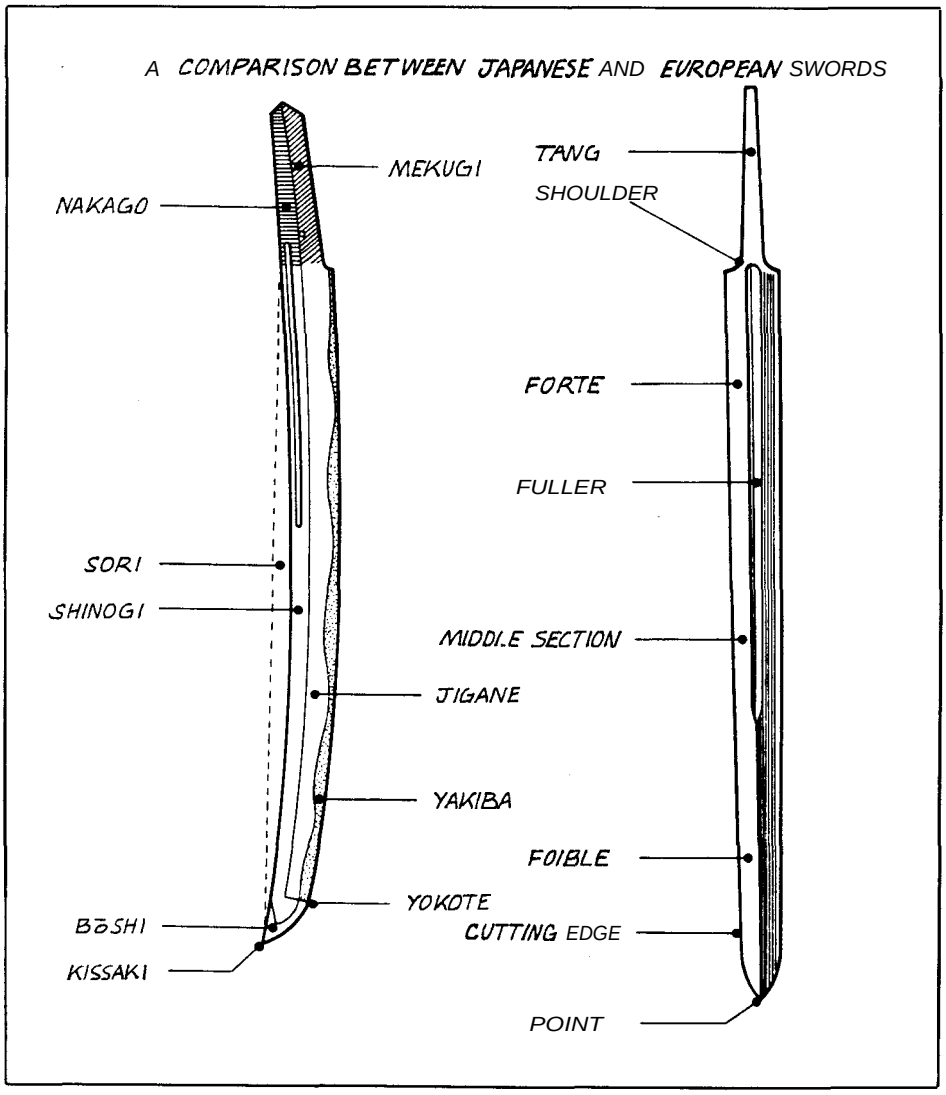
Back: The edge of the blade which is opposite the sharpened edge.

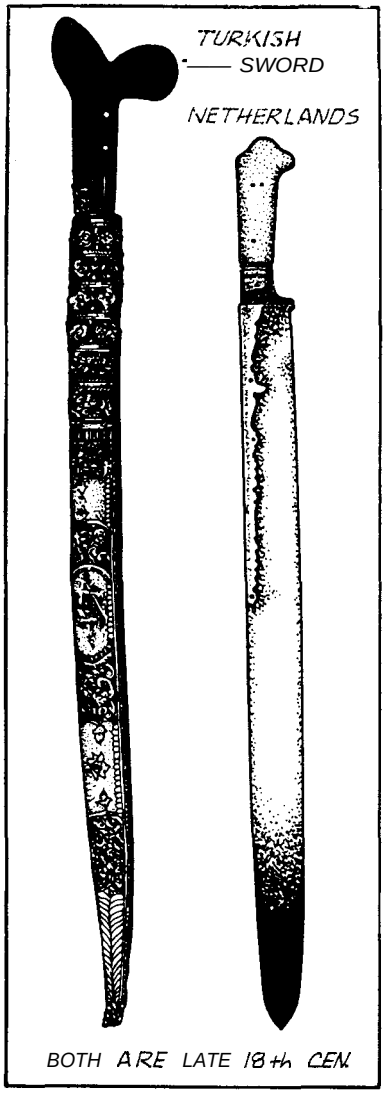
Edge: The sharpened portion of the blade.

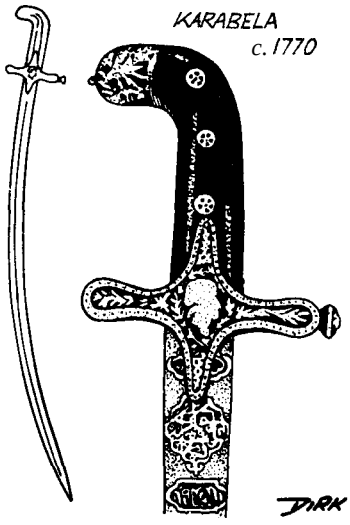
False Edge: The small portion of the back which is sharpened, on some swords, near the point.

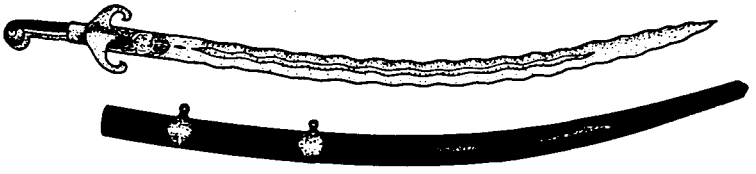
Point: The tip of the blade.

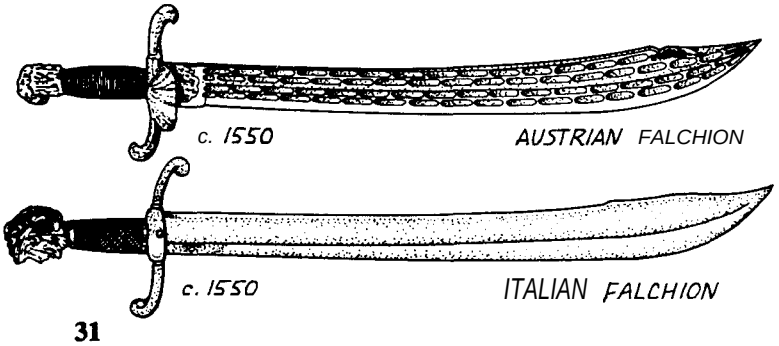
Ricasso: The square section of the blade between the tang and the edge.

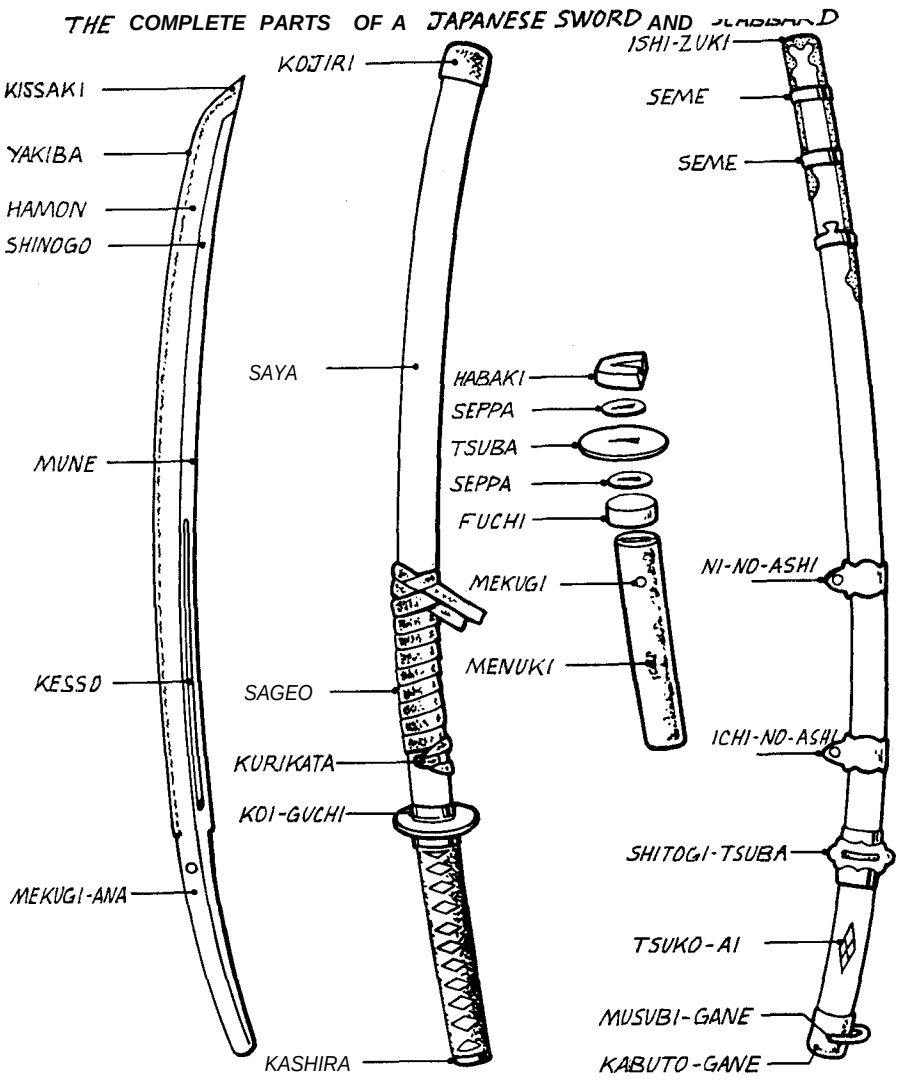


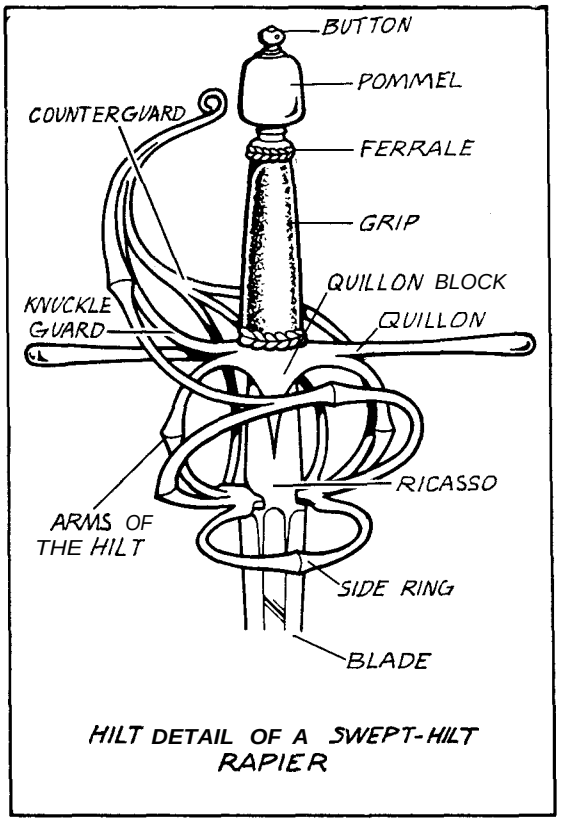


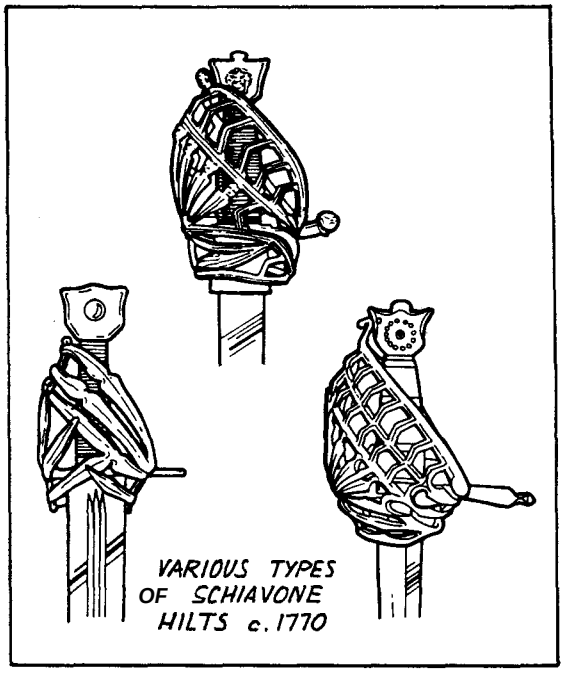












DIRK JOHNSTON ft

More than any other weapon, the sword has been granted a special status in many cultures throughout the ages. In Christian Europe during the Middle Ages, the cross-shaped form of the sword became a symbol of the church, the crusaders, and the cult of chivalry. In Japan the veneration of the sword was at the core of the Bushido code of the Samurai. Today the sword remains a symbol of rank, strength and retribution.

Another distinction bestowed upon swords by many peoples is the name. The significance of the sword's name cannot be underestimated. They represented the spirit, soul, and personality of the arm and its importance to the wielder.

Hilt: The portion of the sword not included in the blade; this includes the crossbar, grip, guard, handle, pommel, quillion, and tang.

Crossbar: The portion of the hilt which is mounted perpendicularly to the blade to protect the hand.

Grip: The portion of the sword which is held.

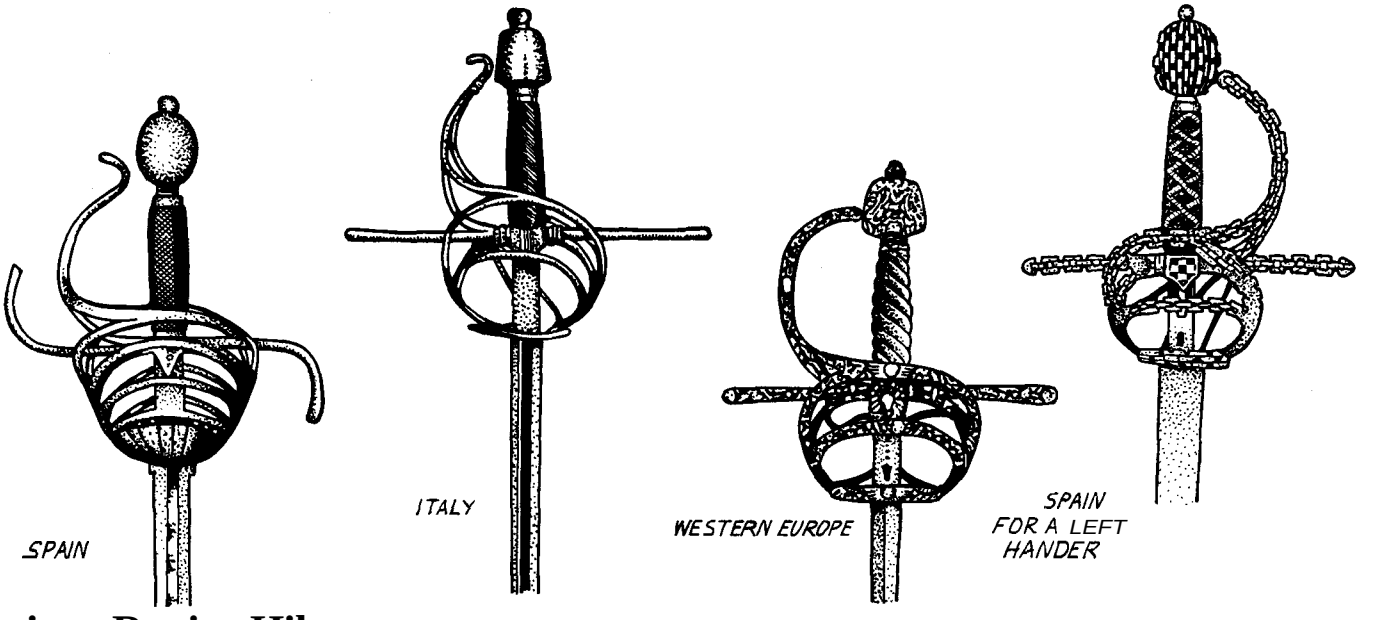
Guard: This is usually an outgrowth of the crossbar and may be designed to protect a portion of or the entire hand.

Handle: The portion of the hilt which is attached to the blade. Similar to the grip.

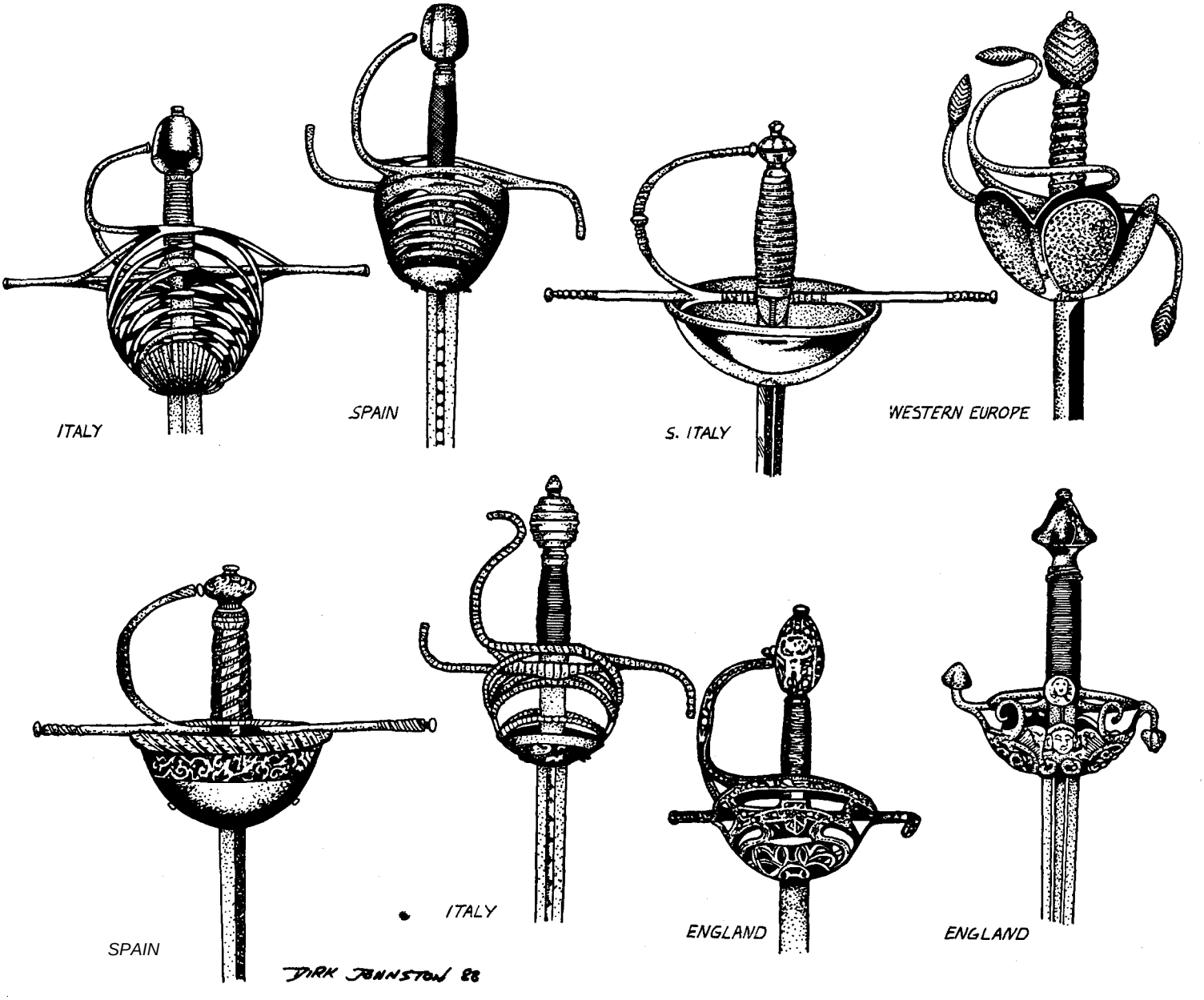
Pommel: The knob which is attached to the end of the hilt; opposite of point. Usually serves as a counter weight to the blade.

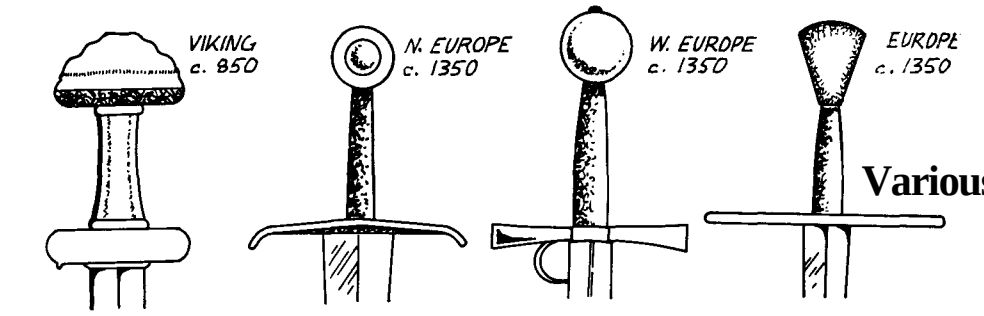
Quillion: One side of the crossbar; the arm of the crossbar.

Tang: That portion of the blade which fits into the handle.

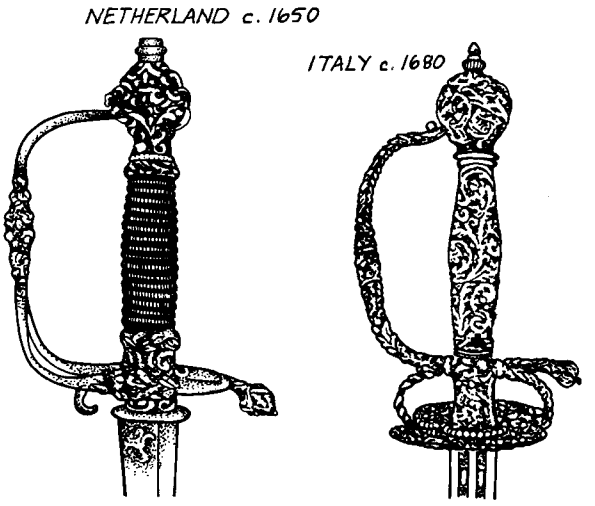


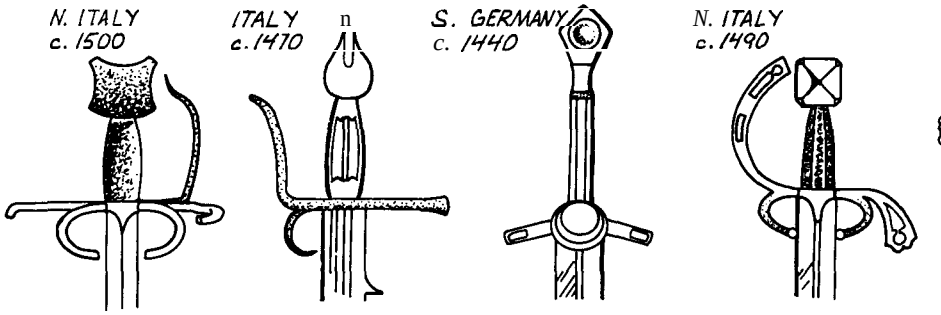
Various Rapier Hilts of the 16th and 17th Centuries

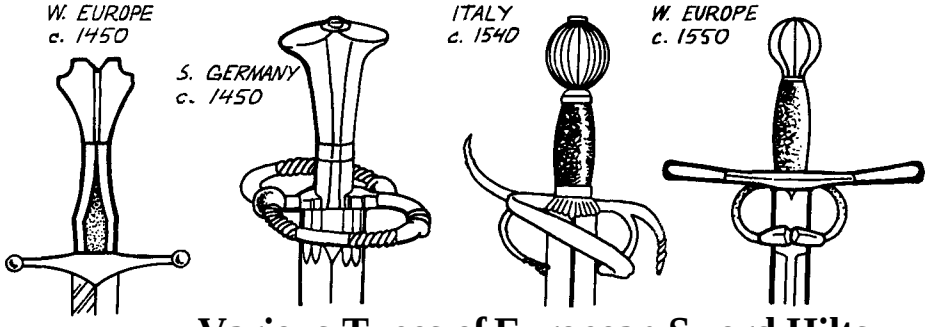


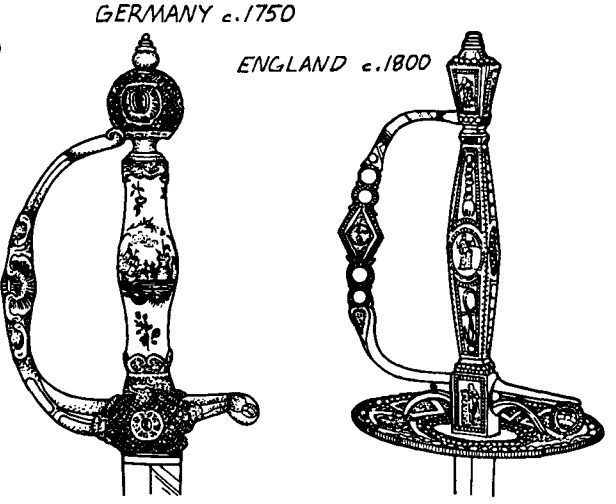


Various Types of Smallsword Hilts

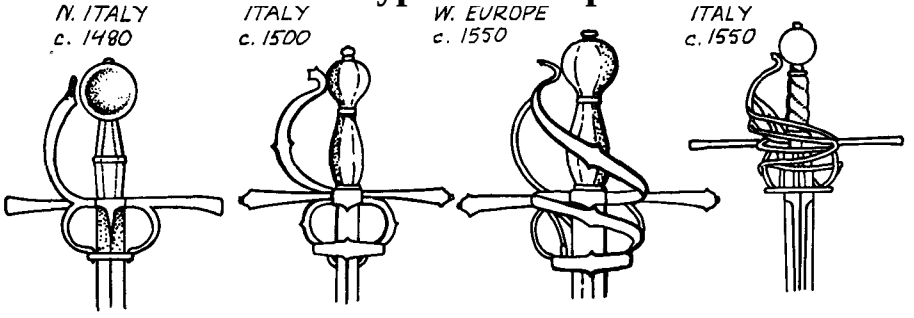


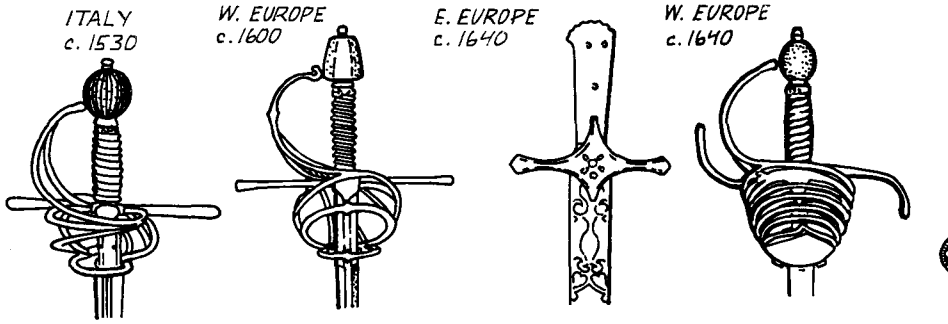


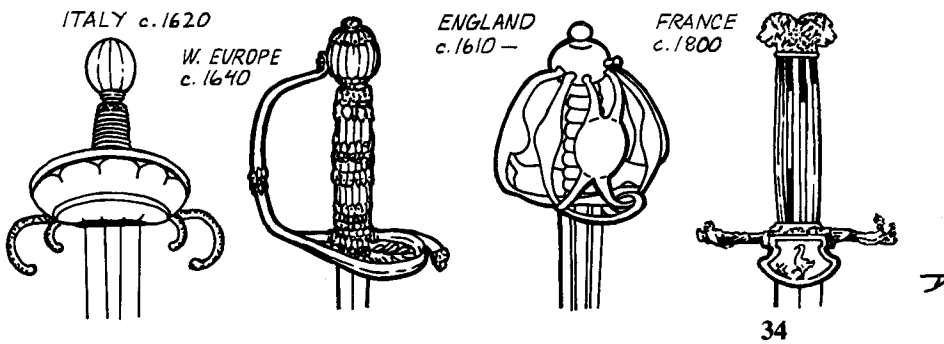


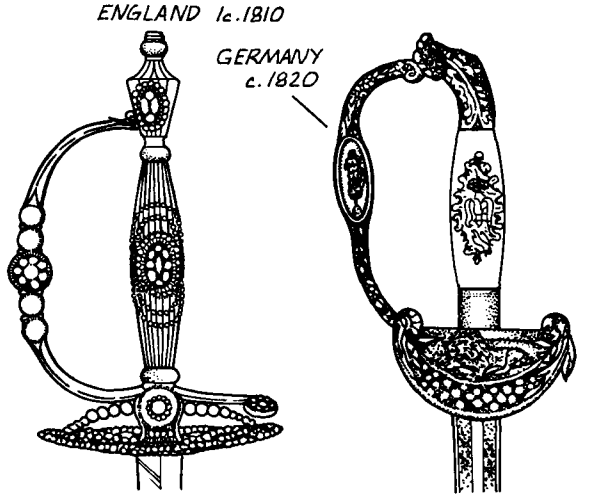


Various Types of European Sword Hilts

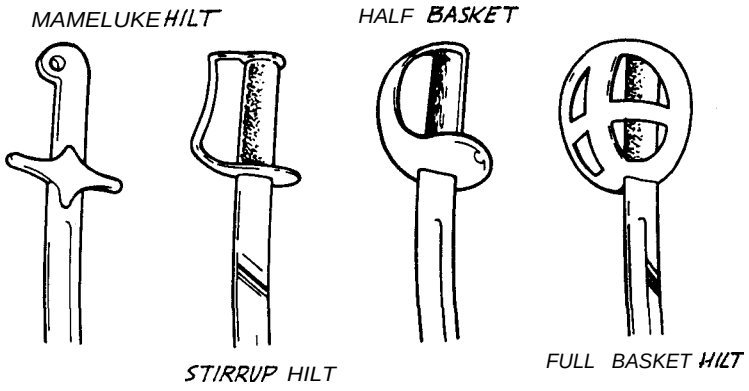








DIRK JOHNSTON 88



All of the following weapons are used with one hand unless otherwise noted.

Abbasi. A straight-bladed steel Rajput sword with a padded hilt. The back of the blade was strengthened by supports. Often highly decorated with gold inlay and gilt.

Ahir. A curved Mahrattan sword with a padded hilt. It is often highly decorated and inlaid.

Alamani. A curved steel Indian sword with a gilt handle.

Ama-Goi-Ken. A Japanese temple sword which represents *Amakurikara,* or rain dragon. It is a straight-bladed, double-edged sword.

Ayda Katti The national sword of the Coorgs of Malabar. It has a heavy, curved single-edged blade attached to an unguarded hilt. The weapon is carried unsheathed in the back from a belt.

Babanga. An African sword consisting of a metal leaf-shaped blade fitted onto a wooden hilt by means of a tang.

Backsword. A steel European sword with a slightly curved blade and a knuckle guard.

Badelaire. A European sword with a heavy, curved blade and S-shaped quillions. Used beginning in the 16th century.

Baselard. A 13th century European thrusting sword with a straight diamond-shaped blade.

Bastard Sword. A long straight-bladed sword with a plain grip. Although ordinarily used with one hand, the grip was long enough for it to be grasped with two or three fingers of the other hand when it was necessary. Used in the 15thcentury.

Beheading Sword. A long two-handed sword with a slightly curved blade and an unguarded hilt. Used in China to execute criminals.

Beladah. A steel Bomean sword with a sabrelike blade and a knuckle guard.

Bilbo. A small European thrusting sword with a rapierlike hilt and quillions.

Braquemar. A European sword with a short, double-edged blade. It was used in the 16th century.

Broadsword. A 17th century European sword with a straight, single-edged blade and a basket hilt.

Campilan. A Malaysian sword with a forked wooden pommel decorated with tufts of dyed hair. The blade is single-edged, with a curved projection behind the point. The scabbard is made of two pieces of wood lashed together. This scabbard design allows the sword to be cleared of it by striking a blow to cut the lashing. This feature made this sword very useful in situations where an unsheathed sword would be unacceptable, but attack might be imminent.

Carp's Tongue Sword. This Bronze Age European sword consists of a straight, double-edged blade with an unguarded hilt. The name refers to the shape of the blade.

Chereb. A straight bronze Hebrew sword with a double-edged blade.

Chundrick. A Javan sword with an incurved steel blade and a straight hilt.

Claymore. A 15th century Scottish two-handed sword with a long straight blade. It has straight quillions slanting towards the point.

Cglichemarde. A European fencing sword of the late 17th century. Its peculiar blade was triangular in section for about 20 centimeters from the hilt and then narrowed to a flat section for the remainder of its length. This design gave the blade great lightness and flexibility.

Coustil A Croc. A short sword with a straight blade and knuckle guard. It was used in Europe.

Craquemarte. A heavy European sword with a curved blade and a knuckle guard. It was generally used at sea.

Cutlass. A European sword with a curved blade and guarded hilt.

Dacian Falx. This sword consists of a curved, single-edged blade with a long wooden hilt. It was used by the Celts and Germanic tribes in their wars against Rome.

Dalwel. A Burmese two-handed sword with a tanged steel blade.

Dao. The national weapon of the Nagas of Assam, this sword has a heavy, square-ended blade fitted into an unguarded hilt of wood or ivory. It is carried in an open wooden scabbard.

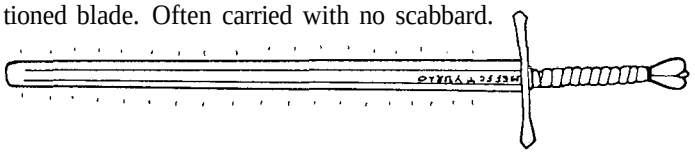
Dha. The national sword of Burma, this weapon consists of a slightly curved, single-edged blade fitted into an unguarded wooden hilt. Normally, it is carried in a wooden scabbard. Often the blade, hilt and scabbard are highly decorated with inlays of gold or silver.

Dukn. A Malaysian sword with a slightly curved blade, bronze crossbar and wooden handle. The scabbard is generally made of wood stained red. Often the hilt is decorated with human hair.

Dusack. A Southern European weapon made of a single piece of iron. It has a curved blade and guarded hilt.

Espadon. A European two-handed sword of the 15th century.

Estoc. A long European thrusting sword with a quadrangular-sectioned blade. Often carried with no scabbard.



Executioner's Sword. The executioner's, or beheading, sword was a relatively rare weapon which was developed from the hand-and-a-half sword during the Sixteenth century in Europe. As its name implies, this sword was used by medieval executioners to administer justice to criminals. Often the blade was etched with scenes of execution or short cliches dealing with law and order. The sword had a flat blade with parallel

edges and a blunt tip. The handle was long enough to ensure a good grip, as it was swung like a baseball bat.

Falchion. A European sword with a broad, curved blade.

Firangi. A Mahrattan straight-bladed sword made with blades imported from Europe. The hilts were padded and fitted with spiked pommels.

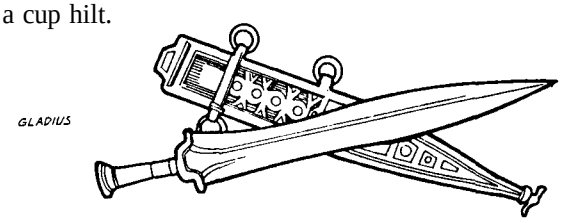
Fish Spine Sword. An Indian sword with a comb-like spring blade.

Flamberge. A European two-handed sword with a undulating blade.

Fleuret. A European fencing sword with a cup hilt.

Flyssa. The national weapon of the Kabyles of Morocco, this sword has a straight-backed blade with a long point. Often the blades are inlaid with bronze. The scabbard is made of wood, usually elaborately carved.

Foil. A European fencing sword with a square-sectioned blade and a cup hilt.



Gladius. The Roman legionaries sword, it had a short double-edged blade fitted into an unguarded wooden handle. It was carried in a sheath on the right side.

Goddara. A Turkish sword with a curved blade and padded hilt, often highly decorated.

Goliah. A heavy Indian sword with a padded hilt and spiked pommel. The blade is often engraved and inlaid.

Gupti. An Indian sword cane with a double-edged blade. Often the blades screwed into the scabbard which diminished their effectiveness in surprising an enemy.

Halab. A Sind sword with a double- grooved blade and a padded hilt.

Han-Dachi. A Japanese sword used with either one or two hands. It was fitted with a small, roughly circular hand guard and had a wooden scabbard. It was carried thrust into the belt with the blade facing upwards. It could be carried as part of the *Dai-Sho*. *See Katana*.

Herebra. A Phoenician sword with a double-edged, leaf-shaped blade.

Isau. A straight-bladed Bornean sword with a guardless wooden hilt.

Jumgheerdha. A straight-bladed Bornean sword with a padded hilt and hand guard.

Kamashimo Zashi. A short Japanese sword with a plain black lacquered scabbard.

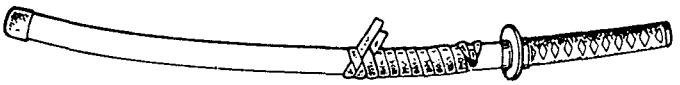
Kantschar. A steel Russian sword with a thin blade and drooping quillions.

Kapee Dha. An Assamese sword with a broad blade and a plain, unguarded handle. It was normally carried in a leather scabbard.

Karabela. A Turkish, and later Polish, sword consisting of a curved blade, short quillions and curved hilt. The pommel was a carved symbolic representation of an eagle's head. Often this weapon was highly decorated.

Kaskara. A straight, broad-bladed Saharan sword with a cross shaped hilt. They are carried in leather scabbards which are sometimes fitted with gold trimmings.

Kastane. The national sword of Ceylon, these swords often had European blades which were slightly curved and single-edged. The handle, the pommel, and ends of the quillions are carved in the form of monsters' heads. The entire hilt is often made of silver or gold and even inlaid with jewels. The scabbards are carved wood or horn and richly ornamental.



Katana. The Japanese treated their swords with great respect and kept them in special sword racks when not in use. When put away, the sword was put in an embroidered bag which was then put in a locked case. An elaborate code of conduct was developed concerning the sword and its handling. A visitor always left his katana upon entering a house. Often it was received on a piece of silk rather than the bare hand. Swords were not displayed unless a special request was made and the owner, holding the edge towards himself, never entirely removed it from the scabbard.

Japanese swords were often tested on humans to determine their quality. Blades were often tested on bodies of executed criminals, although any peasant who happened along could be killed as well. Sixteen different cuts were recognized during testing, with from the shoulder down through the chest being the easiest and crosswise through the hips, the hardest.

Katti Talwar. A Nepalese sword with a curved blade and a padded hilt with a spiked pommel. Often highly decorated.

Ken. One of the oldest forms of Japanese swords, it consists of a double-edged straight blade and metal hilt. The pommel is often in the shape of a ring.

Kenuki Gata Tachi. A Japanese sword with the blade and hilt in one piece. Often carried in temples as a symbol of mourning.

Khanda. The national sword of Orissa, this is the most typical of Indian swords. It consists of a curved blade with a broad, sometimes quite blunt tip. The hilt is richly padded and the pommel, dish-shaped. A spike on the end of the pommel acts as an arm guard and, a grip for delivering two-handed blows.

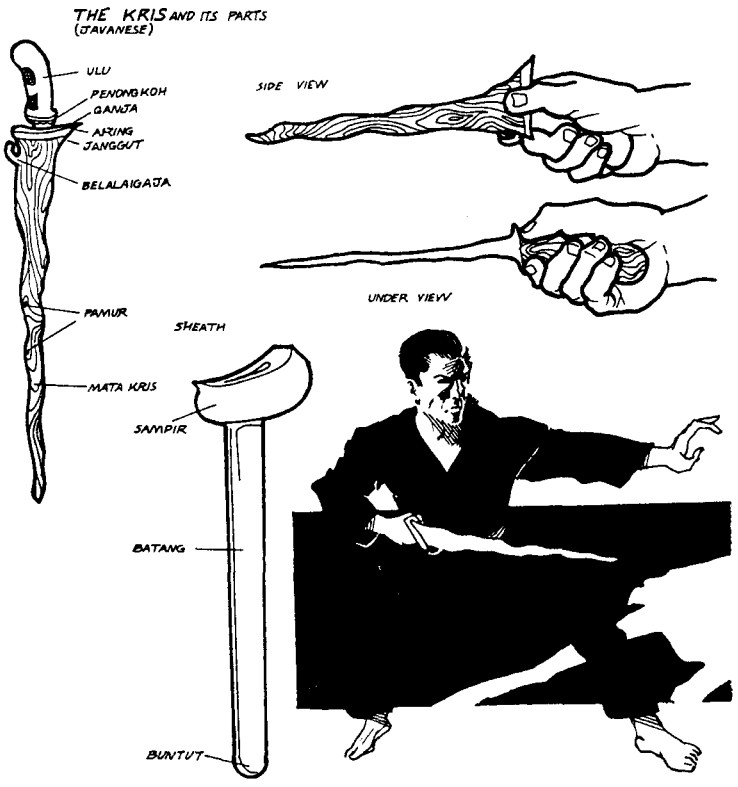
Killj. A Turkish sword with a strongly curved blade fitted with a pistol grip handle. Generally, the hilt is made of horn, bone, or stone, and the crossbar is carved at the end in the shape of acorns. The scabbard has an opening at the back of the top to allow the sword to be drawn or placed in it. Both the blade and scabbard are highly decorated on most examples.

Kledyv. An ancient Welsh sword with a leaf-shaped blade.

Klewang. A common Malaysian sword with a straight steel blade and an angled hilt. The hilt is generally unguarded and carved. A variety of styles exist, depending on the locality.

Kopsh. An ancient Egyptian bronze sword with a sicklelike blade. *See Sappara*.

Kora. The national sword of Nepal, this weapon consists of a heavily curved single-edged blade, which widens at the tip. There is always an eye or other Buddhistic symbol engraved or inlaid in its sides.



Kris. There is perhaps no more famous a weapon in Indonesia than the Kris. In its basic form, the kris is a double-edged, wavy-bladed knife/short sword designed primarily for thrusting.

A kris is somewhat more deadly than a straight-bladed knife in combat in that its wavy blade makes a larger wound and can more readily penetrate between bones. The number of waves in the blade is always odd, ranging from three to twenty-nine. The blade usually has some cracks in it and these are said to possess magical powers.

The pande, or smith, who forged the kris held an honored position in the Indonesian culture because they were believed to have access to the supernatural. His work was a secret art, veiled in mystery. The rough appearance of the blade, although desired, was due mainly to the crude methods and materials (usually iron meteorites) used by the smith.

It was believed that certain features would determine whether a kris would bring good or bad luck to its owner. The number of times it had shed blood was important, as was the reputation of its smith, the pattern of the blade, and other things as well. It was certainly better to inherit a kris than to buy one. There were a number of "tests" which could be performed on the weapon to determine its magical character.

Examples of a kirs' powers include: it could kill a victim when simply pointed at him, it could kill by being stabbed into the victim's shadow or footprints, it would sometimes leap from its sheath and fight for its owner, it could rattle in its sheath to warn of approaching danger, or could even turn wild animals in their tracks.

Longsword. A straight-bladed, double-edged European sword with a straight crossbar. This basic form of sword was used throughout most of Christian Europe during medieval times.

Lopu. A straight-bladed Ceramese sword with a guardless wooden hilt.

Luris Pedang. A thin-bladed Atjeh weapon with a wooden hilt. Used in conjunction with the *pentjak-silat* martial art form.

Machera. A bronze Greek cutting sword with a straight single-edged blade. The pommel was frequently in the form of an animal's head.

Manpau. The Dyak head-hunting sword which has a tanged steel blade which is slightly curved. The hilt was made of wood or deer horn, with no hand guard. The pommel is long on one side and carved with faces or other designs and decorated with tufts of hair. The scabbard is made of wood and wrapped with cane or rattan.

Manople. A Moorish gauntlet sword consisting of a double-edged blade with two short, curved side blades.

Mel Puhah Bemoh. An Indian two-handed sword with a long steel blade and two hand guards. It is normally highly decorated with engravings and silk fringes.

Mentok. A Javan sword with a slightly curved blade and a guardless wooden hilt.

Nagan. An undulating Indian sword with a serrated edge. The hilt is padded and fitted with a spiked pommel.

Ninjato. The ninjato was the sword of the Japanese ninja, the now famous society of assassins. This is not to say that the ninja always carried the ninjato, but rather it was one of their many specialized weapons. The ninjato was somewhat different from other Japanese swords in that it was somewhat shorter and the handle was longer than those on normal swords. This enabled somewhat different types of attacks to be launched as the blade was more flexible. When in its scabbard, the ninjato could be used as a stepladder of sorts or a climbing pole due to its somewhat oversized hand guard. The scabbard itself had a removable cap and could be used as a breathing tube or blowgun.

No-Dachi. A large Japanese two-handed sword carried in battle in addition to the regular swords. It was worn over the shoulder on the back.

Opi. A Malaysian sword with a straight blade and a horn hilt. Normally the hilt is decorated with tufts of hair. The scabbard is made of wood wound with rattan.

Pakayun. A curved Bornean sword with a forked wooden pommel. The scabbard is normally made of wood and decorated with red and white dyed patterns.

Pala. A Turkish sword with a heavy, curved blade with a horn grip. The blades were generally elaborately engraved.

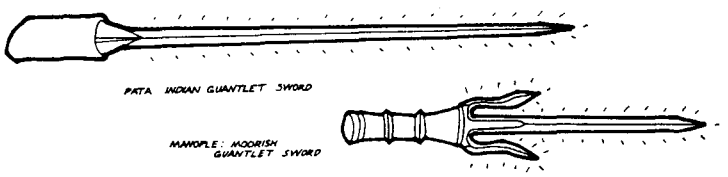
Palache. A 17th century Polish sword with a slightly curved blade and curved quillions. Often these weapons and their scabbards were highly decorated with gold and silver.

Pappenheimer. A European cut-and- thrust sword developed in the 17th century. The hilt consisted of a pair of oval guards pierced with holes, recurved quillions, and a knuckle guard. Named after the Count of Pappenheim who adopted it and encouraged its use in the Thirty Years War.

Parang Bedak. A Bornean sword with a butcher knife-shaped blade and a guardless hilt.

Parang Nabur. A Dyak sword with a metal blade and bone hilt. The quillions and knuckle guard are made of brass or iron. The hilt is generally highly ornamental.

Parang Pandit. A Dyak sword with a straight blade and bent hilt. Carried in a wooden scabbard.



Pata. An Indian gauntlet sword with a long, double-edged blade. The gauntlet normally extends to nearly the elbow and is highly embossed. This weapon was normally used only by cavalry as it was awkward to fence with.

Pahisa. An Indian sword with a broad, double-edged blade which widens at the tip. Often highly decorated.

Pedang. A straight-bladed Malaysian sword with a cross guard. It is one of the standard weapons of the *Pentjak-silat* fighting art.

Peudeueng. A thin-bladed Atjeh sword with a L-shaped hilt.

Pira. A Malaysian sword with a curved steel blade. The blade is tanged and fitted into a wooden hilt with a shoehorn-shaped pommel. It is carried in a flat wooden scabbard.

Piso Eccat. A Battak sword with a deer horn hilt and no guard.

Piso Halasan. A Battak sword with a cylindrical hilt made of horn and no guard.

Piso Podang. A Battak sword with a curved blade and a steel hilt with cross guards.

Pulouar. A heavily curved Indian sword with a metal hilt.

Quaddara. A Persian straight-bladed sword, often inlaid with gold. The hilt is of horn, with no guard.

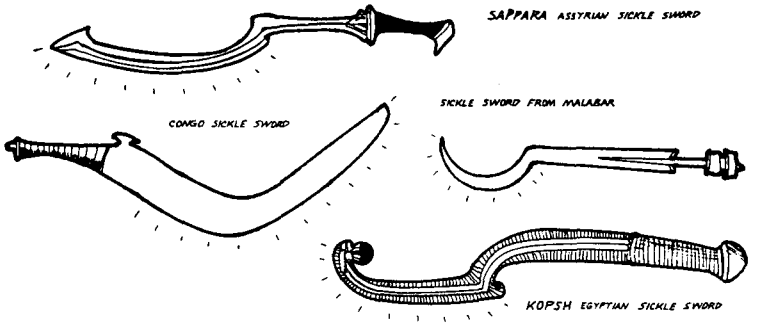
Ram Da'o. A sacrificial sword from Nepal with a broad, heavy blade. The handle is normally inlaid with brass. This sword is used in beheading animals.

Rapier. A straight-bladed thrusting sword used in Europe beginning in the 16th century. The normal guard was a cup and long quillions. Initially the rapier was used only for attack in fencing, and a cloak, dagger, lantern, or small shield was held in the left hand for defense. Eventually, as fencing systems became more refined and parrying with the rapier developed, these other forms of defense were dropped.

Reiterpallasch. A Danish cavalry sword with a straight blade and guarded hilt.

Sabre. A single-edged European sword with a slightly curved blade.

Saif. A curved Arab sword with a hooked pommel. It is often highly decorated with gold and silver.



Sapara. An ancient Assyrian sword made of bronze.

Sapola. An Indian sword with a curved blade and a forked point. The pommel is decorated with the figure of a griffin.

Sassanid Sword. A straight, single-edged sword used by the Sassanians. It has an unguarded, straight hilt made of horn. The scabbards were often highly decorated in gold.

Sauschwerter (or "Boar" sword). A boarsword was a European hunting weapon normally used by the nobility. As its name implies, this weapon was used against wild boars.

Typically these weapons consisted of a hand-and-a-half hilt; that is to say, it could be used with one or two hands if necessary. The blade itself can be divided into two sections, the shaft and the head. The shaft normally had a diamond or square cross section to insure against heavy impacts. The head was normally leaf-shaped and double-edged. Some boarswords had a removable crossbar fitted behind the head to insure that the weapon did not penetrate too deeply into the boar and enable him to slash the sword wielder with his tusks.

Schiavona. A Venetian broadsword with an elaborate basket hilt. It was used in the 16th century.

Schnepfer. A slightly curved Swiss sword with a broad hand guard and a knuckle guard.

Scimeter. A broad-bladed, curved Oriental sword.

Seax. A slightly curved Anglo-Saxon sword with a small cross guard. It has a tanged blade which is fitted into a wooden handle.

Seme. A heavy- bladed Masai sword with a double-edged blade. The hilt is unguarded and covered with rawhide. It is carried in a leather scabbard suspended from the neck by a cord.

Senangkas Bedok. A slightly curved Malaysian sword with wide grooves in the blade. The hilt is unguarded.

Shah Nawaz Khani. A slightly curved Indian sword with a disk pommel and reinforced back.

Shamshir. A curved Persian sword, although Indian and Turkish examples exist also. They have a heavily curved, thick blade and a short crossbar. Generally the swords and their scabbards are quite simple, with no decoration.

Shashqa. The national sword of the Circassians, this weapon consists of a slightly curved, single- edged blade fitted into an unguarded hilt. The scabbard is made of wood covered with black leather.

Shotel. The Shotel was the sword of the Abyssinians. It had a double-edged blade which had a diamond-shaped cross section. The extreme curvature of these swords made them nearly useless except for cutting attacks, although it also enabled attacks to be launched over or around an enemy's shield.

Sica. A short Roman sword worn under the armpit, close to the body. It was favored by assassins.

Sikim Gala. An Atjeh sword with a carved wooden handle and no guard.

Sirohi. A straight-bladed Rajput sword with a padded hilt. Slightly curved examples exist as well. Often these weapons were highly decorated.

Small Sword. A European thrusting sword with a triangular cross section. The guard consists of an oval plate and finger guard.

Sondang. A broad-bladed Malaysian sword without a hand guard.

Sosunpattah. An Indian sword with a straight blade and a spiked pommel. It was often highly decorated with engravings.

Spadroon. A European cut-and-thrust sword with a light, flexible blade, double-edged near the point.

Spatha. The Roman cavalry sword, it consists of a long, double-edged blade with an unguarded hilt.

Sultani. A slightly curved Indian sword with a hand guard.

Surai. A Mahrattan sword with a curved tip. It has a spiked pommel.

Takouba. A straight, double-edged Tuareg sword with no guard. Its hilt is fitted with a crosspiece below the pommel.

Talibon. A Philippine sword with a tanged blade fitted into a carved wooden handle with a cane grip.

Talwar. A curved Indian sword common to most of the country. They generally have disk pommels.

Tapak Kudak. An Atjeh sword with a broad cutting point and a wooden handle.

Tashi. A curved Japanese sword which is essentially the same as the katana. The differences between the two are the fittings and the way they are worn. The tashi is hung from the belt with the edge downward and the katana is thrust into the belt with the edge upward.

Tegha. An Indian sword with a broad curved blade and metal hilt.

Thinin. A broad-bladed Atjeh sword with an unguarded hilt.

Tuck. A European thrusting sword with a diamond-sectioned blade.

Verdun. A long European thrusting sword with a diamond or square-sectioned blade. It was used in the 16th century.

Wakizashi. The shorter of the two swords which make up the Japanese *dai-sho*. It is often highly decorated. Besides its use in combat, this sword was also used in ritualistic suicide, *seppuku*.

Wasa. An African sword with a tanged metal blade fitted into a plain wooden hilt.

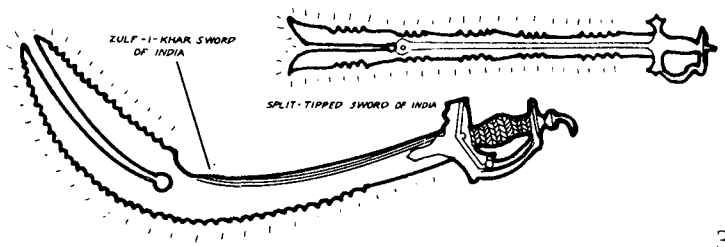
Xiphos. A bronze Greek sword with a tanged metal blade fitted into a plain wooden hilt.

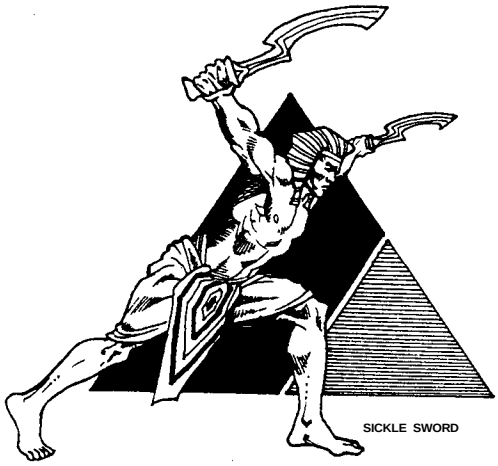
Yatagan. A Turkish sword with a long, incurved blade and unguarded hilt. The blades are frequently inscribed with texts from the Koran. The hilt is generally of ivory and highly decorated with silver. Users of this weapon often threw down their scabbards upon engaging in combat. Their reasoning being that if they won they would have plenty of time to find it and if they lost they wouldn't care.

Zafar Takieh. An Indian short sword with a slightly curved blade and a broad pommel which could be used as a crutch. It was called "the cushion of victory." Often these weapons were highly decorated.

Zulf-I-Khar. An Arabic sword modeled after the sword of the Prophet Mohammed. It has a curved blade ending in a bifurcated, or forked, tip. Often these weapons were inscribed with passages from the Koran.

Zweihander. A large German two-handed sword with long, straight quillions and extended ricasso.





WEAPONS OF THE ANCIENT PEOPLES OF THE MIDDLE EAST

The major weapons in use during ancient times were the bow and sling, for long range; the spear and javelin, for medium range; and the sword and axe, for short range combat.

The Sling

The sling consisted of a small patch of leather or cloth to which was attached two cords on opposite ends; it resembled a large eye-patch. The missile, generally a stone, was placed on the patch and the cords pulled taut so that it formed a pouch around the stone. The sling would then be swung around several times until the required momentum was achieved, at which time one of the cords would be released and the missile would be propelled forward. This weapon was a very simple one and its ammunition was provided by nature. In battle, the slingmen served close to the archer units.

A refinement of the sling was the *staff sling* which consisted of a normal sling attached to a short wooden rod. This improved the power and range of the weapon.

The Javelin & Spear

The javelin and the spear were weapons which were similar in appearance, but differed in size and function. The javelin was like a large arrow which was hurled by hand. Generally, the soldier would be armed with several javelins which would be carried in a quiver, like arrows. The body of the javelin was made of wood or reed, to which was fitted a head of metal. The shape of the head was determined by the armor of the enemy, just like the heads of arrows. These weapons were also often fitted with metal tips on their ends to enable them to be stuck into the ground when not in use. This tip also aided in balancing the weapon and contributed to a straighter, longer path when thrown.

To increase the range of the javelin, a cord was often attached to the center of its body. This cord would then be wound around the body of the shaft, like the threads of a screw, and the end, which had a loop tied in it, would be held in the thrower's fingers. When thrown the cord would unwind and give the weapon *spin* which contributed to a steadier, longer flight.

The spear was essentially a larger, heavier version of the javelin. The spear was not generally thrown, but was used as a thrusting or stabbing weapon. In this capacity it was not unlike a long stabbing sword.

The Sword, Mace & Axe

In ancient times there were two main types of *swords:* the sword for striking (chopping) and the sword for stabbing (thrusting). Both types consisted of two main parts: the handle (hilt) and the blade. *The striking sword* had only *one* sharp edge, and the thickest part of the blade was opposite this edge. This type of sword could also be curved, with the sharpened edge being on the outside. *The stabbing sword* had a long, straight blade tapering to a point. To give the blade strength, it was thickest at its center.

The mace **and** the axe are similar in that they both consist of a striking head attached to a short wooden handle. A key technique in the manufacture of both weapons was to attach the head to the handle in a way which would prevent it from flying off during use or break off when struck by the enemy. These weapons are different from one another in their function and, as a consequence of this, so is their appearance.

The head of the mace was usually made of stone or metal and was shaped like a pear, saucer, or oval. The saucer shape was an attempt to turn the mace into a cutting weapon, but this reduced its striking power. These weapons were always of the socket type; that is the handle fitted into a socket in the head. The effectiveness of this weapon in ancient times was greatly reduced by the introduction of armor, especially the helmet.

As with the sword, there were two main types of *axes:* those for piercing and those for cutting (chopping). The use of one type over the other during various times during this period was determined by the type of armor worn by the enemy. Against unarmored foes, the cutting axes were favored; against armor, axes with good penetrating qualities were needed.

There were two ways in which the axe head was attached to the handle. The first was by means of a socket in the head so that the handle fit into it (like a mace). The other was the tang type, in which the rear of the head was fitted into the handle. Using this method, the join area was strengthened by binding it with cords.

On some axes, the rear of the blade had three projections, or tangs, which fit into the shaft. These weapons are called epsilon axes due to their resemblance to the Greek letter. A similar type had the central tang projecting out from the rear of the shaft and these were called anchor axes. There were variations of the socket axes as well. One type had two large holes in the blade and is known as the eye axe. The duck-bill axe had a longer blade and smaller holes in it. Others, mainly piercing axes, had the rear part of the head decorated with animal heads, fingers, or a horse's mane.

EXAMPLES OF ANCIENT WEAPONS USED IN THE MIDDLE EAST

Disk Mace. These weapons were the result of an attempt by the early Egyptians to combine both the mace and the axe. They were not too efficient at either cutting or bashing except against unarmored foes.

Aat. The Egyptian mace was either round or pear-shaped. The hilts of these weapons were tapered towards the end to help prevent them from flying out of the hand when used; often a cord was wrapped around the grip to prevent its slipping out of the hand.

Socket Axe. One of the most remarkable technical achievements of the Sumerians was the development of the narrow bladed axe with a pipe-like socket. This piercing axe, with its blade firmly attached to the shaft by means of the socket, could be swung with great force to defeat the metal helmets which were now being used. Copper was used in the blade. It was the personal weapon of the spear carrying infantry, as well as the charioteers.

Anatolian Axe. This weapon could almost be called a double-bladed axe. The main blade was similar to the socket axe of the Sumerians: long and narrow for penetrating. On the other side of the socket was a smaller, secondary blade whose main function was to add weight to the swing and increase the penetrating capabilities of the main blade.

Epsilon Axe. This flat, multi-tanged fighting axe was designed for fighting enemies without armor. The head was fastened to the shaft by binding or with small nails which were fitted through the tang.

Anchor Axe. This axe is similar to the Epsilon Axe in that it was a cutting weapon with three tangs. In an attempt to strengthen the attachment of the blade to the shaft, the central tang was projected out from the rear of the shaft and a parallel bar was added to secure the head to it.

Duck Bill Axe. As a further refinement of the Eye Axe, the blade was lengthened and the edge narrowed. This improved the piercing capabilities of the axe. The holes in the blade are more for decoration at this time. Like most piercing axes, the shaft is curved to prevent it from slipping out of the wielder's grasp when swung.

Aqhu. The Egyptian Chisel Axe. This weapon was designed solely for piercing and was brought about by advances in armor. These were widely used in Mesopotamia and Egypt around the 18th century B.C.

Crescent Axe. This weapon marks the transition from axe to sword. It is a cutting weapon consisting of a small, curved head attached, by means of a socket, to a curved wooden shaft.

Crescent Dagger. An early form of dagger/short sword widely used around 2000 B.C. These weapons were for thrusting or stabbing only, and the ribs on the blade helped strengthen it for this purpose.

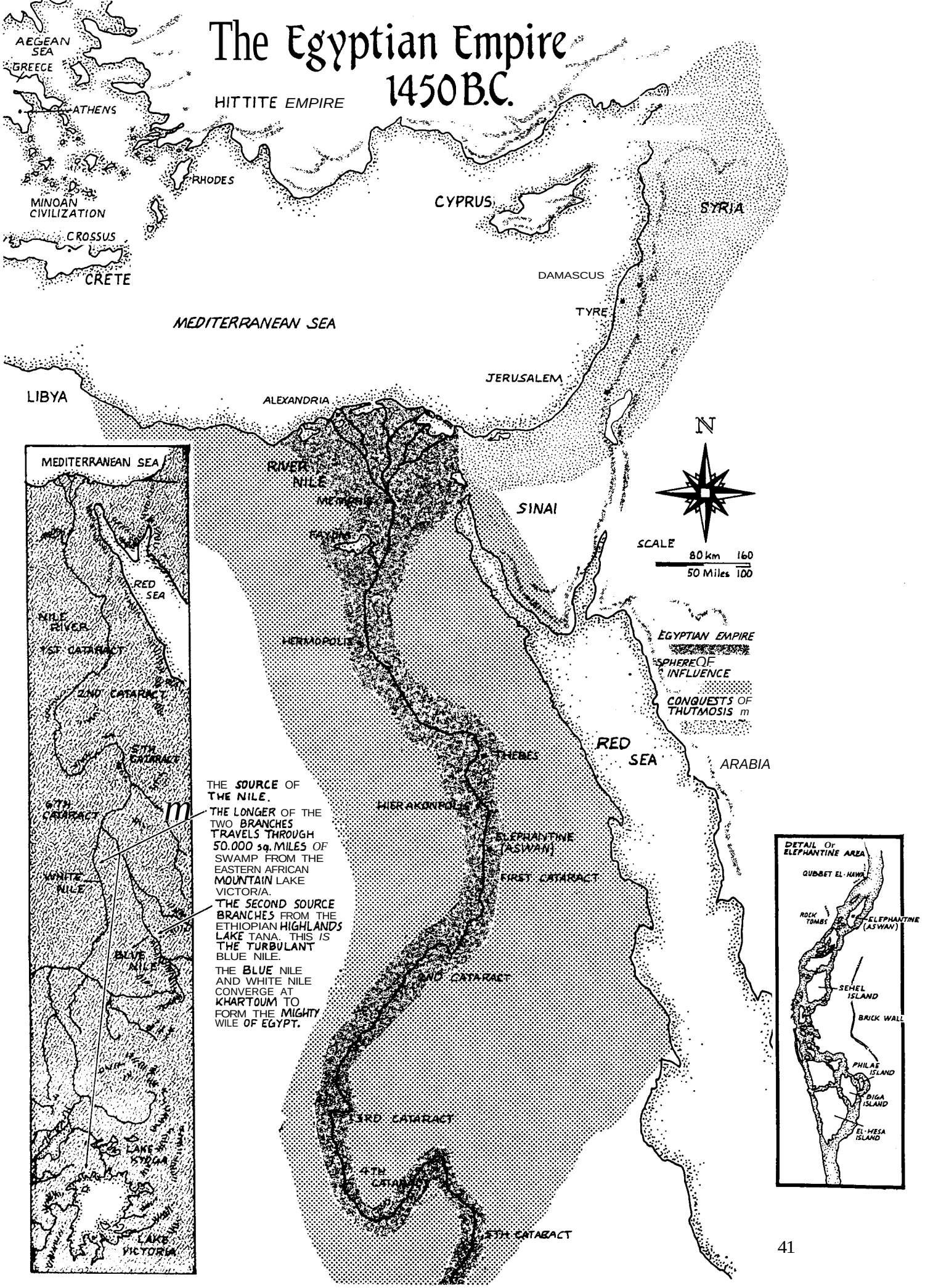
Hyksos Axe. These are piercing axes with long, narrow blades and a wide edge. This pattern of axe was copied by the Egyptians and used throughout the New Kingdom Period.

Finger Axe. A socketed piercing axe used in Mesopotamia around 1500 B.C. The decorative projections opposite the blade also served to increase the force of the blow.

Kopesh. The Egyptian sickle sword which now has a wide, long blade and a short hilt. It is named for its resemblance to the foreleg of an animal.

Sapara. The Assyrian sickle sword is typical in form for this type of weapon throughout the Middle East. The blade is much longer than the hilt.

Straight Sword. A further development of the stabbing sword.


The Egyptian Empire
1450 B.C.
AEGEAN SEA
GREECE
ATHENS
HITTITE EMPIRE
RHODES
MINOAN CIVILIZATION
CROSSUS
CRETE
CYPRUS
SYRIA
DAMASCUS
TYRE
MEDITERRANEAN SEA
JERUSALEM
LIBYA
ALEXANDRIA
N
SCALE
80 km 160
50 Miles 100
MEDITERRANEAN SEA
RIVER NILE
MEMPHIS
FAYUM
SINAI
RED SEA
NILE RIVER
1ST CATARACT
2ND CATARACT
3RD CATARACT
4TH CATARACT
5TH CATARACT
WHITE NILE
BLUE NILE
LAKE ALBERT
LAKE VICTORIA
HERMOPOLIS
EGYPTIAN EMPIRE
SPHERE OF INFLUENCE
CONQUESTS OF THUTMOSIS m
THEBES
RED SEA
ARABIA
HIERAKONPOLIS
ELEPHANTINE (ASWAN)
FIRST CATARACT
2ND CATARACT
3RD CATARACT
4TH CATARACT
5TH CATARACT
m
THE SOURCE OF THE NILE.
THE LONGER OF THE TWO BRANCHES TRAVELS THROUGH 50.000 sq. MILES OF SWAMP FROM THE EASTERN AFRICAN MOUNTAIN LAKE VICTORIA.
THE SECOND SOURCE BRANCHES FROM THE ETHIOPIAN HIGHLANDS LAKE TANA. THIS IS THE TURBULANT BLUE NILE.
THE BLUE NILE AND WHITE NILE CONVERGE AT KHARTOUM TO FORM THE MIGHTY WILE OF EGYPT.
DETAIL Of ELEPHANTINE AREA
QUBBET EL-HAWA
ROCK TOMBS
ELEPHANTINE (ASWAN)
SEHEL ISLAND
BRICK WALL
PHILAE ISLAND
BIGA ISLAND
EL-MESA ISLAND

BOWS, CROSSBOWS, and MISSILE WEAPONS

Mankind's use of the bow, both as a weapon of war and for hunting, dates from the Mesolithic period (c. 10000-6000 B.C.). In its simplest form, the bow consists of a flexible stave with a cord fastened to both ends. By drawing the cord and arrow back with one hand while holding the stave with the other, the stave bends. When the string is released the stave snaps back and the arrow is shot forth.

Bows can be classified by their structure, of which there are **two main types;** *self and composite. The self bow* had the simplest structure and was the type used since earliest times. It consists of a single piece of wood tapered at the ends. The cross sections of these bow staves were elliptical, rectangular, or semicircular.

The shape of a bow in early examples was a simple *convex arc,* so that the distance between the string and the body of the bow was greatest at their centers. Maximum tension was achieved when the hand on the string was pulled as far away from the hand on the bow as possible. However, it was discovered that this did not fully exploit the pliability of the wood to its utmost. This was achieved by reducing the distance between the string and the grip so that the bow took on a double-convex shape. The archer could then bring the bow under greater tension and thereby increase its range.

Composite Bows are those which have staves made from more than one piece, although not necessarily from more than one different type of material. Generally the core of the stave was made of wood (sometimes several pieces). The back of the bow stave (the part facing towards the target) has animal sinew glued to it, while the belly (the part facing the user) is covered with thin strips of animal horn or metal. Other examples of ancient bows are made out of different types of wood. Generally, when composite bows are unstrung, they have a reflex curve; that is to say, the stave curves away from the belly and towards its back.

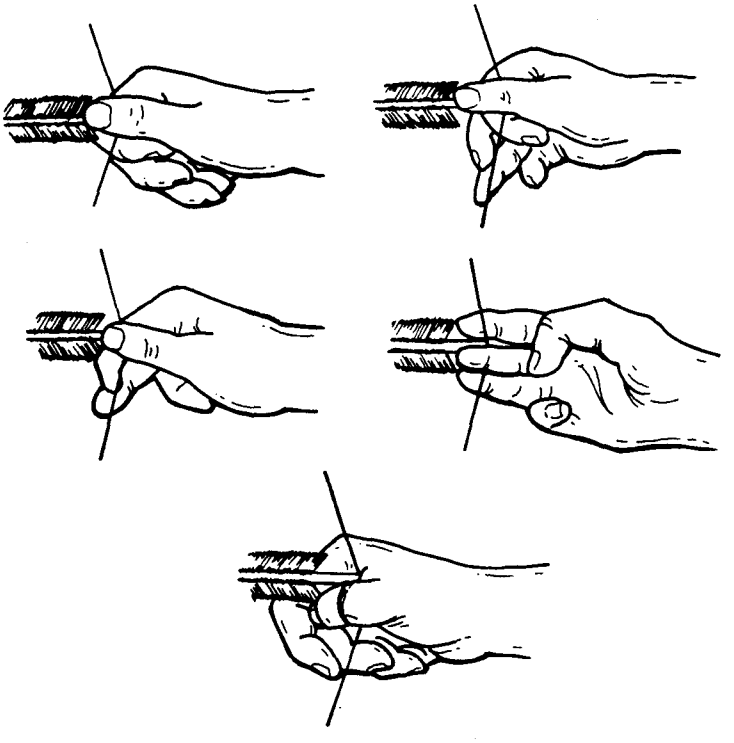
Bows are often categorized by the materials they are made from. The simplest bow is a single piece of wood; these are called "self bows." A bow made of several pieces of wood which are glued together is called a "built bow." A bow built with sinew stretched on the back is called a "backed bow." A bow made of wood, horn, and sinew is called a "composite bow."

The bows of most primitive peoples and those of most of Western Europe are self bows. Backed bows were used in places where suitable wood could not be found. Built bows were not common, but were most notably used in Japan. Composite bows were used throughout the Middle East and Asia.

Arrows of this period were generally tipped with either narrow-bladed, often triangular in cross section, points for armor piercing, or leaf-shaped points for use against lightly armored foes.

Each of the bows has the following data:
Name: Self-explanatory.
Type: The type of bow, self (S), built (BT), backed (BK), or composite (C).
Length: The length of the bow from tip to tip in meters.
Mass: The mass of the bow in kilograms.
Pull: The force required to pull the bow in newtons. One kilogram (2.2lbs) is equal to 9.6 newtons (N).
Effective Range: The maximum range at which one could reasonably expect to hit a target.
Maximum Range: The longest range possible.

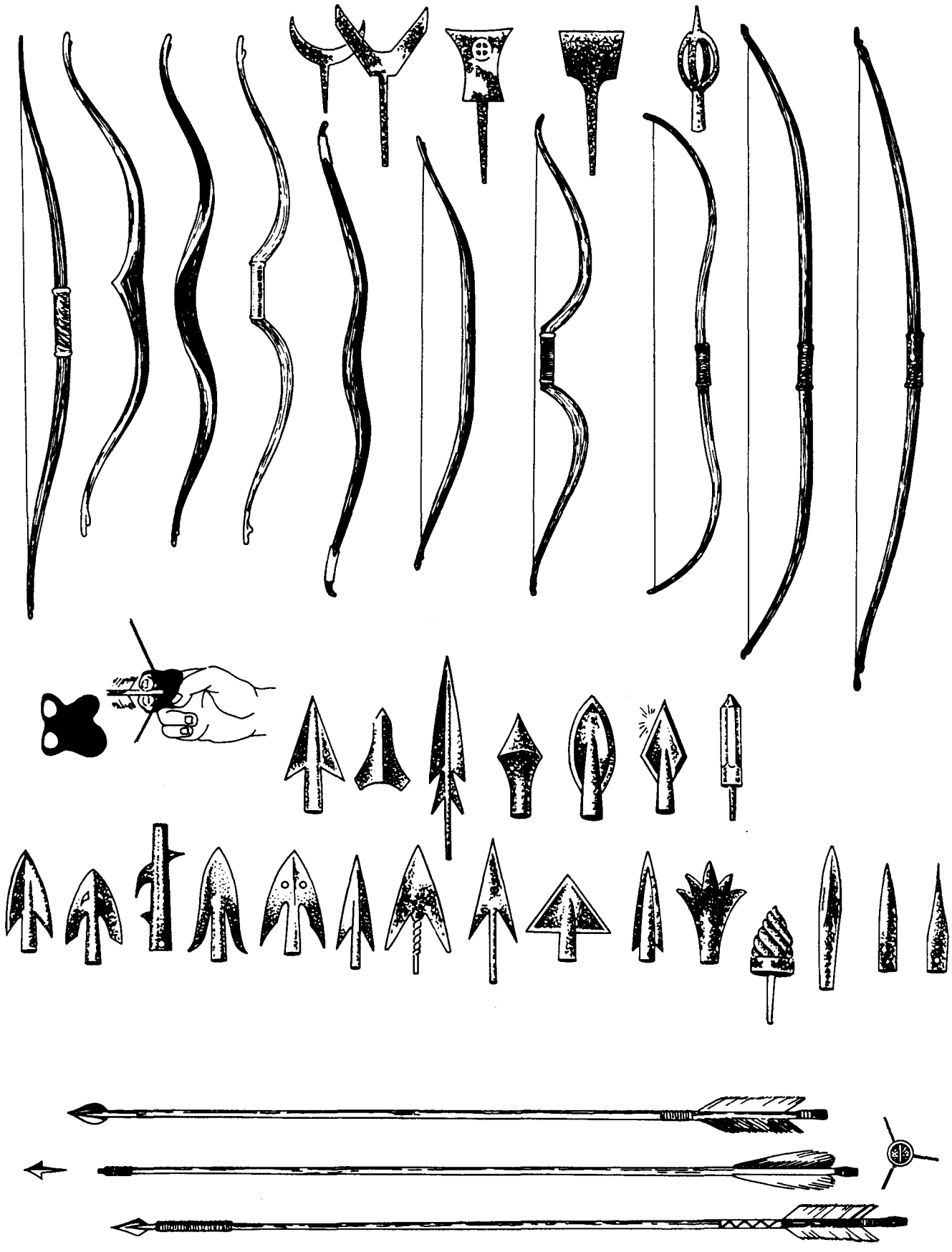
It should be noted that the power of any type of bow increases with its size up to a certain point, which varies for each. The shapes of arrows and the methods of release greatly affects performance. Each bow should use arrows designed for it and the correct release if it is to show its full power.



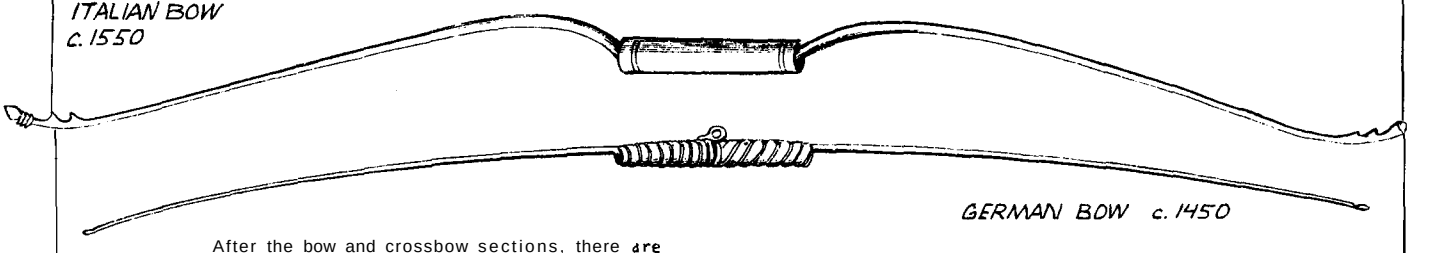
There are several different forms of arrow release. The primary, secondary, and tertiary are used by North American Indians and others with relatively light bows. The Mediterranean release is used throughout Europe and the Mediterranean. The Mongolian release is used throughout Asia and utilizes a ring worn on the thumb.

There is a damage rating given for the missile weapons, but the Game Master should adjust it to suit his/her needs. The actual damage done by an arrow depends a lot on the pull of the bow, the range to the target, and the type of arrow. The ratings should be adjusted downward for longer ranges. An arrow is assumed to be a thrust if an attack type is needed.

Examples of Bows, Arrows, and Arrow Heads

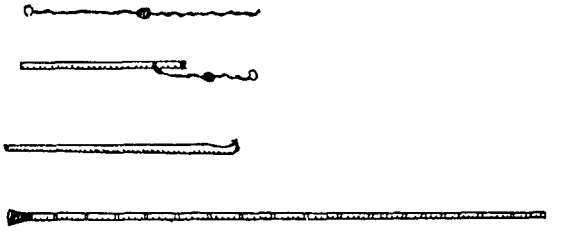


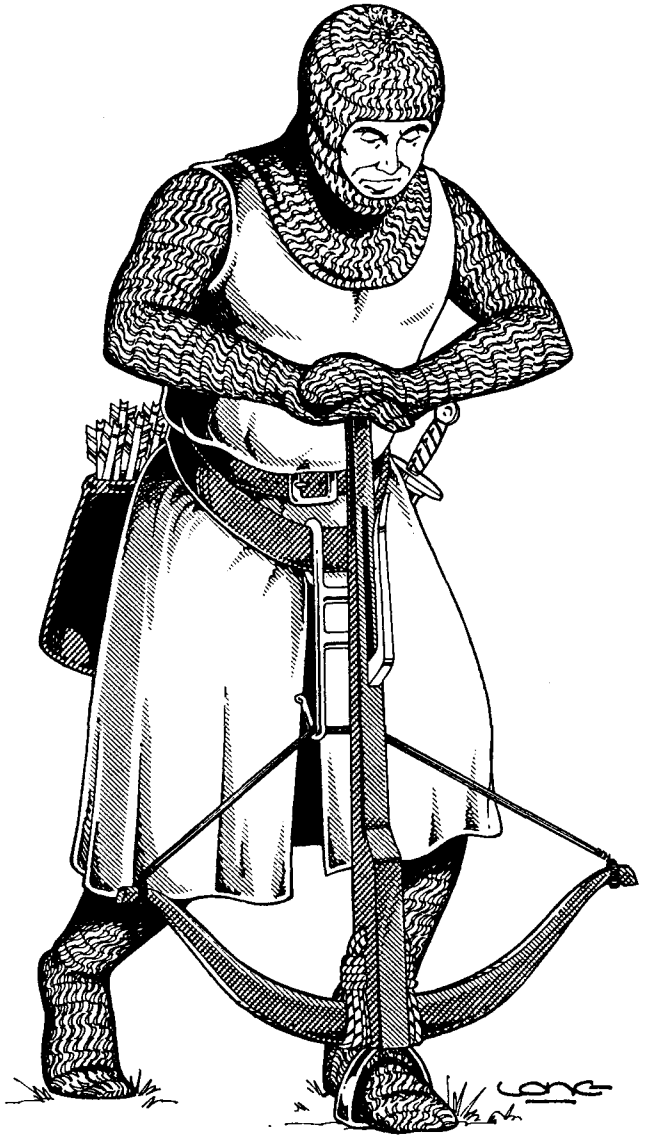
NAME	TYPE	LENGTH	MASS	PULL	EFFECTIVE RANGE	MAXIMUM RANGE	DAMAGE
GREEK BOW	S	1.4M	.6kg	175N/ 40lbs	90M	120M	1
SCYTHIAN BOW	C	1.2M	.7kg	300N/ 70lbs	130M	300M	2
EGYPTIAN BOW	C	1.2M	.6kg	225N/ 50lbs	120M	200M	1
ASSYRIAN BOW	C	1.1M	.7kg	250N/ 55lbS	120M	225M	1
TURKISH BOW	C	l.OM	.8kg	300N/ 70lbs	150M	550M	2
This weapon may be used while mounted.							
CHINESE BOW	C	1.9M	.7kg	350N/ SOlbs	100M	150M	2
Fires very long arrows, about 1.0 meter long.							
JAPANESE BOW	BT	2.1M	.9kg	300N/ 70lbs	90M	180M	2
This weapon may be used while mounted.							
LONG BOW	S	1.8M	.7kg	350N/ 80lbs	90M	275M	2
SHORT BOW	S	1.2M	.6kg	225N/ 50lbs	90M	225M	1
This weapon may be used while mounted.							
APACHE COW	BK	1.0M	.5kg	125N/ 30lbs	70H	110M	1
This weapon may be used while mounted.							
MOHAVE BOW	S	1.7H	.7kg	175N/ 40lbs	7OH	100M	1
This weapon may be used while mounted.							
STONE BOW	S	1.7M	.7kg	250N/ 55lbs	45M	125M	1
Fires lead bullets.							



After the bow and crossbow sections, there are only a few missile weapons left to be covered.

NAME	LENGTH	MASS	RANGE	SHOTS PER MINUTE	DAMAGE
SLING	varies- l.OM	.1kg	100M	4	1
STAFF SLING	l.OM	.3kg	120M	4	1
SPEARTHROWER	l.OM	.5kg	+50M	NA	+1
Used to increase the force behind a spear.					
BLOWGUN	2.3M	.7kg	30M	4	.5
Mainly used in South America & Malaysia - darts .2M long; usually tipped with poison.					





CROSSBOW

The crossbow came into common usage, at least as a hunting weapon, around the 4th century A.D. Basically, a crossbow consists of a bow mounted crosswise onto a stock (the tiller) which contains a cocking and trigger mechanism. This allows the bow to be pulled back and the bowstring cocked on a restraining cog (called a nut), an arrow (called bolts or quarrels) to be put in place, and then fired at the user's leisure by pressing the trigger lever.

The bow portion of the crossbow was also made of various materials. The lightest crossbows are made of one piece of wood. Next in power comes crossbows backed with sinew and, even further, those of composite construction. The most powerful crossbows were constructed with steel.

Each entry has the following data:

Name: Not only will the name of the weapon be here, but also the name of any drawing device it needs as well.

Type: The type of bow, wood (W), composite (C), backed (BK), or steel (S).

Length: The length of the weapon as measured along the stock.

Mass: The mass of the weapon in kilograms (2.2lbs = 1kg).

Pull: The force required to pull the bow in newtons. One kilogram (2.2lbs) is equal to 9.8 newtons.

Effective Range: The maximum range at which one could reasonably expect to hit a target one has aimed at.

Maximum Range: The longest range possible.

Shots Per Minute: The average number of shots per minute.

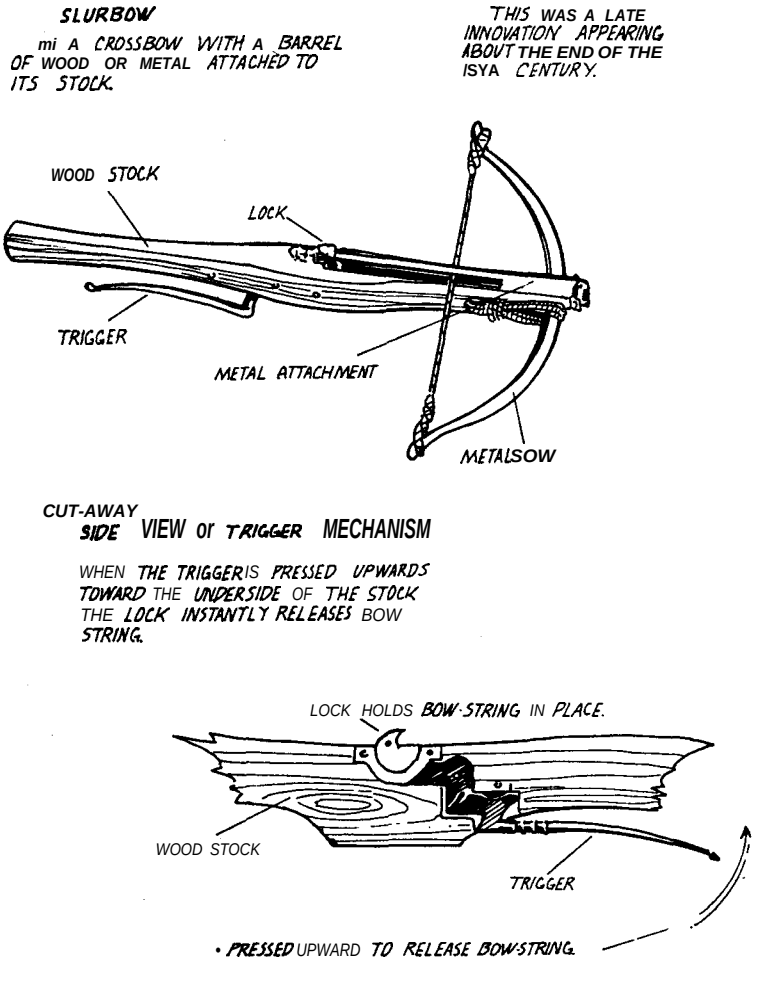
An average European crossbow arrow, called "bolt" or "quarrel," was about 30 centimeters long, 2 centimeters in diameter, and had a mass of 70 grams (2.5oz).

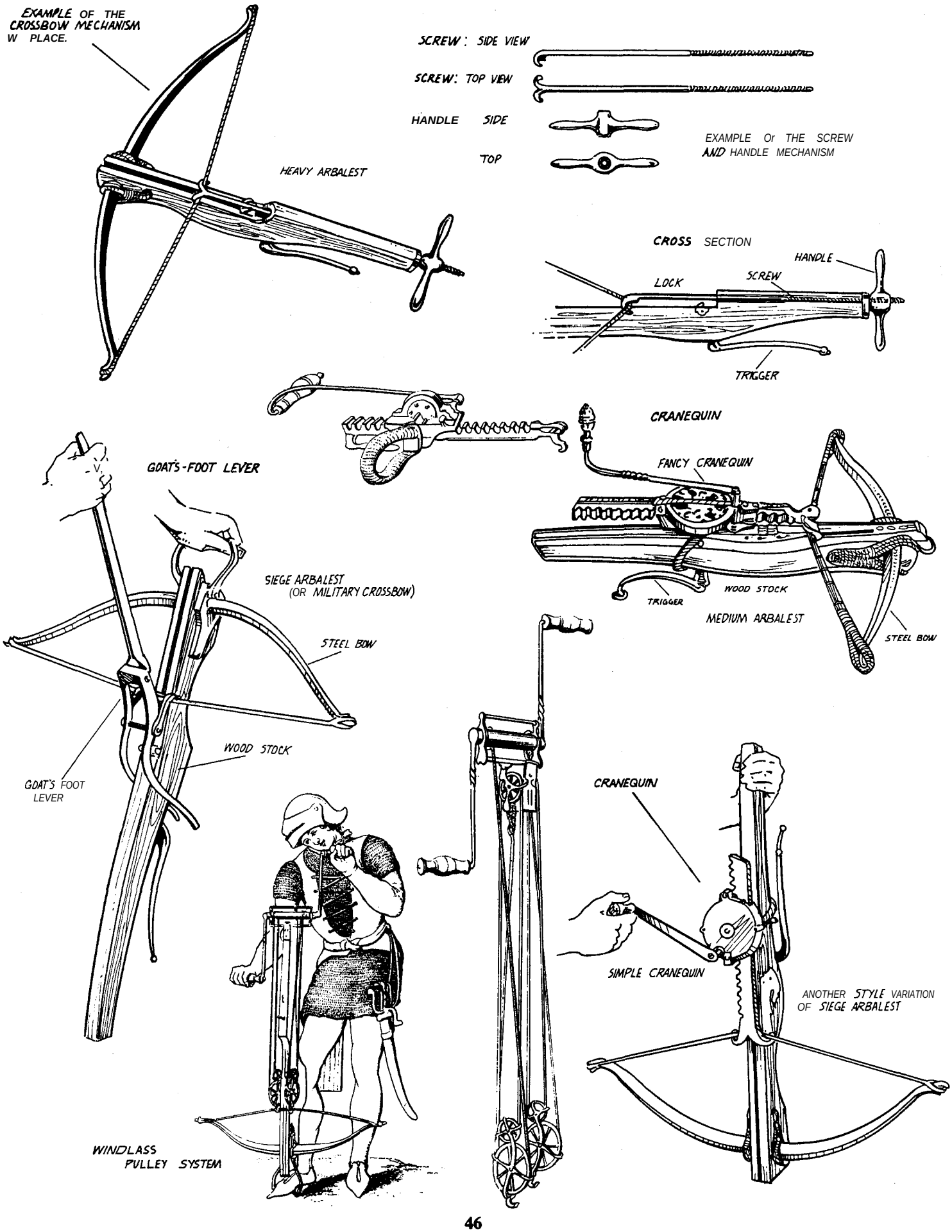
The most popular crossbows for use from horseback were the goat's foot types. Heavy arbalests with a cranequin were also used when mounted.

It should also be noted the some crossbows, from the sixteenth century and later, were equipped with "safeties" and could be kept cocked without the danger of accidental discharge.

In comparing crossbows and regular bows, one comes across the following differences:

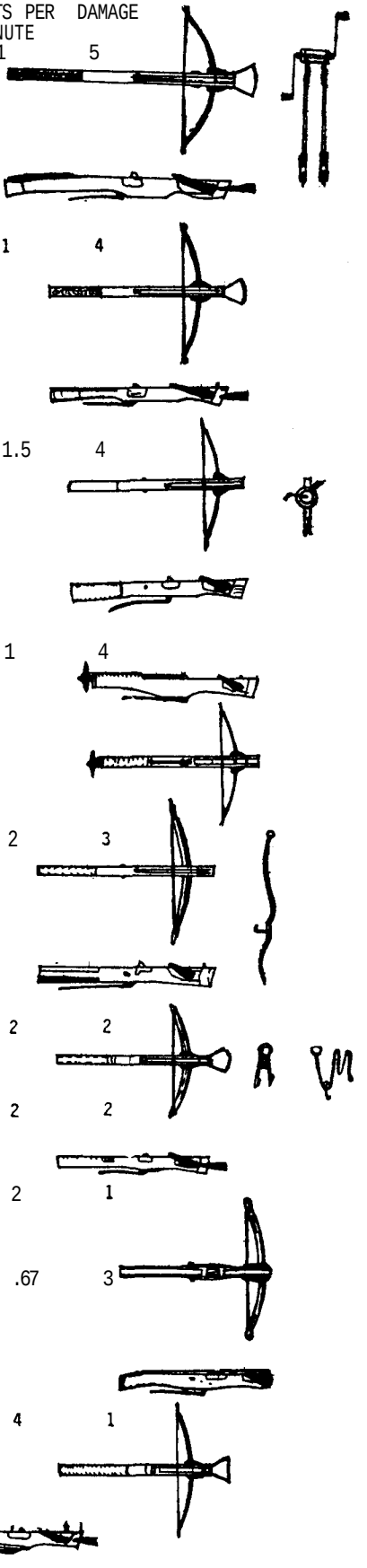
- The crossbow is more powerful than the bow.
- The crossbow needs less vertical space than the bow.
- Because of its mass, a heavy crossbow is not good against a moving target.
- Crossbows were very susceptible to water damage; steel crossbows with beeswax coated strings were somewhat waterproof.
- Crossbows were easier to use by untrained people than bows, but were harder to maintain.
- An average military crossbow with windlass attachment could fire one shot per minute; the average longbow could fire six times per minute.




EXAMPLE OF THE CROSSBOW MECHANISM W PLACE.
HEAVY ARBALEST
SCREW : SIDE VIEW
SCREW: TOP VIEW
HANDLE SIDE
TOP
EXAMPLE Or THE SCREW AND HANDLE MECHANISM
CROSS SECTION
HANDLE
SCREW
LOCK
TRIGGER
CRANEQUIN
FANCY CRANEQUIN
WOOD STOCK
TRIGGER
MEDIUM ARBALEST
STEEL BOW
GOAT'S-FOOT LEVER
SIEGE ARBALEST
(OR MILITARY CROSSBOW)
STEEL BOW
WOOD STOCK
GOAT'S FOOT LEVER
CRANEQUIN
SIMPLE CRANEQUIN
ANOTHER STYLE VARIATION OF SIEGE ARBALEST
WINDLASS PULLEY SYSTEM

Cross Bows

NAME	TYPE	LENGTH	MASS	PULL	EFFECTIVE RANGE	MAXIMUM RANGE	SHOTS PER MINUTE	DAMAGE
SIEGE ARBALEST (WINDLASS)	S	1.0M	8.2kg 2.0kg	5300N/ 1200lbs	80M	425M	1	5
HEAVY ARBALEST (WINDLASS)	S	.8M	7.0kg 1.5kg	3550N/ 800lbs	65M	330M	1	4
HEAVY ARBALEST (CRANEQUIN)	S	.7M	6.0kg 2.0kg	3300N/ 750lbs	55M	300M	1.5	4
This weapon may be used while mounted.								
HEAVY ARBALEST (SCREW & HANDLE)	S	.7M	7.5kg	3400N/ 760lbs	60M	330M	1	4
This weapon may be used while mounted.								
MEDIUM ARBALEST (GOAT'S FOOT)	C	.7M	3.8kg 1.0kg	675N/ 150lbs	50M	275M	2	3
This weapon may be used while mounted.								
MEDIUM ARBALEST (CLAW & BELT)	B	.7M	3.3kg .8kg	450N/ 100lbs	40M	275M	2	2
MEDIUM ARBALEST (CORD & PULLEY)	B	.7M	3.3kg .5kg	450N/ 100lbs	40M	275M	2	2
LIGHT ARBALEST	W	.7M	3.4kg	250N/ 55lbs	40M	225M	2	1
This weapon may be used while mounted.								
SLURBOW (CRANEQUIN)	S	.6M	6.0kg 2.0kg	3000N/ 675lbs	50M	300M	.67	3
This weapon may be used while mounted.								
STONE ARBALEST	S	.7M	3.4kg	200N/ 45lbs	30M	200M	4	1
This weapon may be used while mounted.								



NAYIN	U	1.2M	3.2kg	200N/ 45lbs	30M	100M	4	1

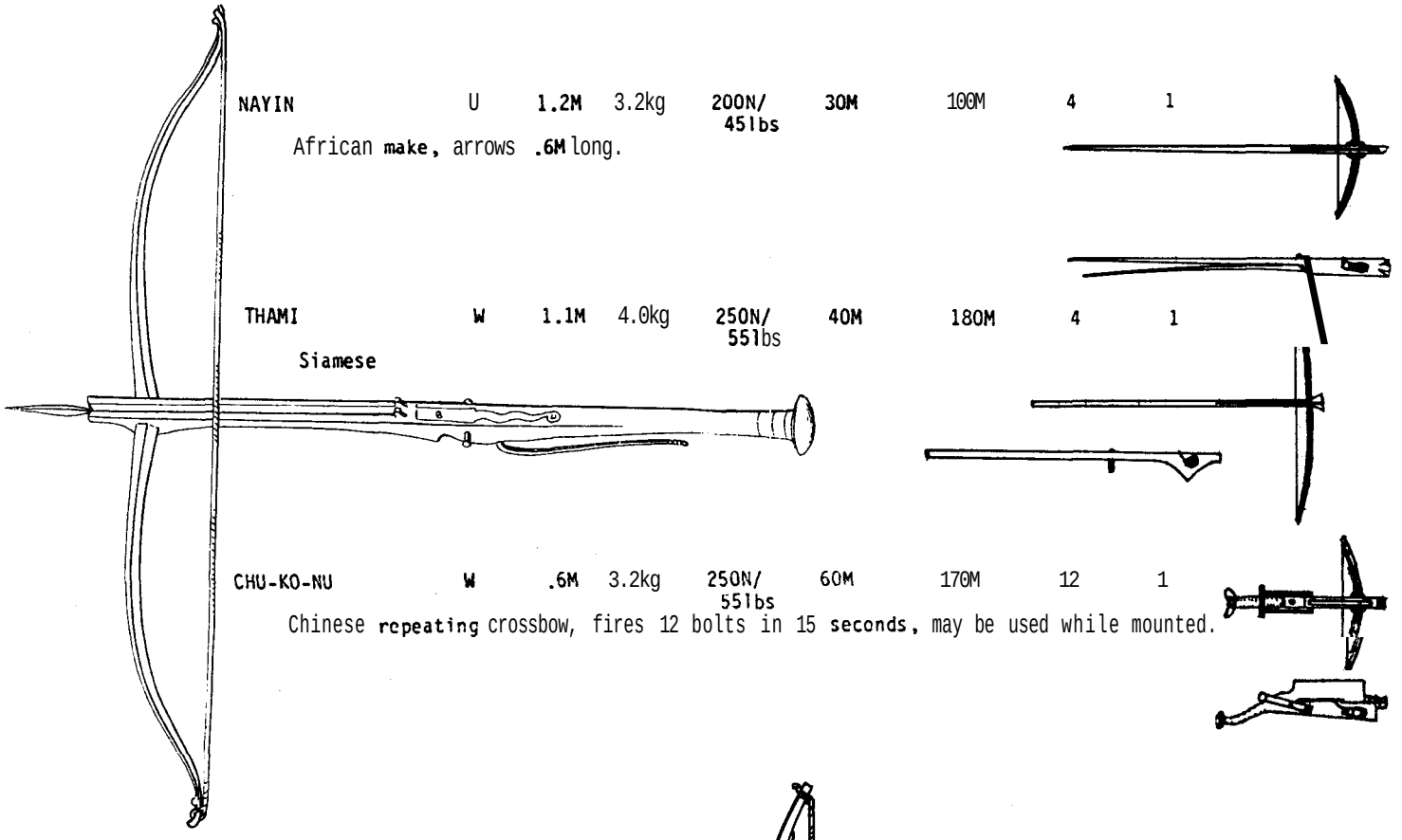
African make, arrows .6M long.

THAMI	W	1.1M	4.0kg	250N/ 55lbs	40M	180M	4	1

Siamese

CHU-KO-NU	W	.6M	3.2kg	250N/ 55lbs	60M	170M	12	1

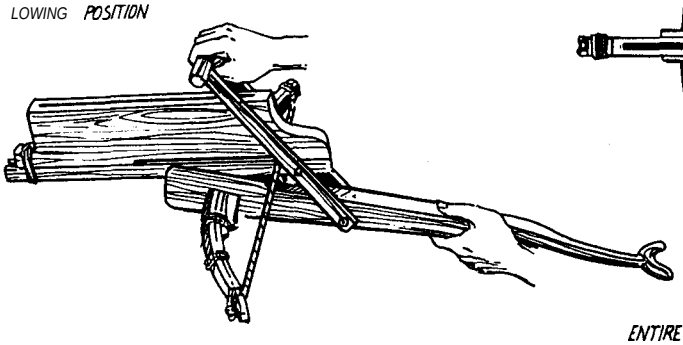
Chinese repeating crossbow, fires 12 bolts in 15 seconds, may be used while mounted.

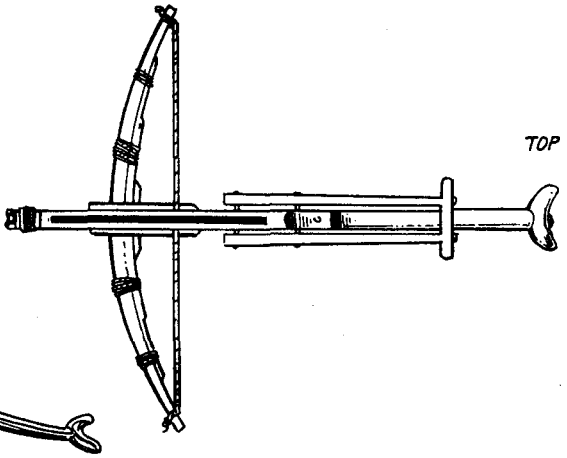


CHU-KO-NU *CHINESE REPEATING CROSSBOW*
COULD FIRE 12 BOLTS IN 15 SECONDS.

TOP VIEW

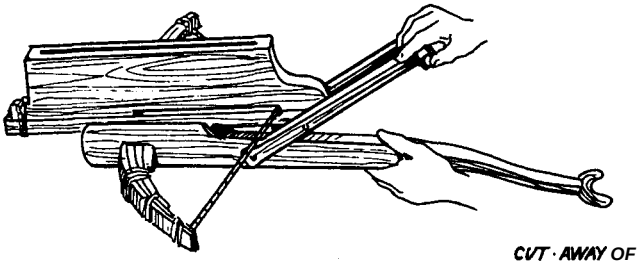
LOWING POSITION



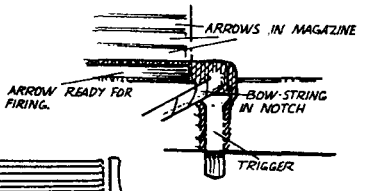


ENTIRELY CONSTRUCTED FROM BAMBOO.
DATE Or ORIGINAL CONCEPTION IS UNKNOWN, BUT IS QUITE ANCIENT.

READY TO FIRE

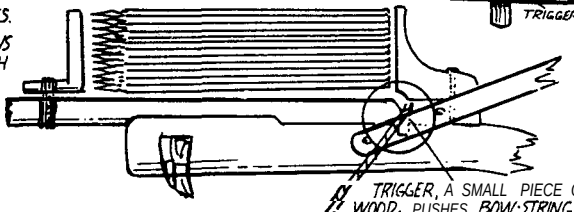


CLOSE-UP CUT-AWAY OF TRIGGER MECHANISM



CUT-AWAY OF THE MAGAZINE

HOLDS 10 TO 12 BOLTS.
THESE SMALL LIGHT ARROWS WERE OFTEN SMEARED WITH POISON.



TRIGGER, A SMALL PIECE OF WOOD, PUSHES BOW-STRING OUT OF NOTCH FIRING ARROW.

Ancient Weapons: A Complete Guide

What the Ratings Mean

Each weapon in this book is described by a set of ratings which give the pertinent data for role playing purposes. The ratings are not designed for any specific game; they are intended to serve as comparisons for game players to use in converting the weapons to the specific system played.

GLOSSARY

NAME: This is the name of the weapon. Variations in spelling and name are normally not given.

TYPE: This is the basic category to which the weapon belongs. These classifications are based mainly on form, with function a secondary consideration. The types are:

Hafted **(H):** These weapons consist of a striking head attached to a handle. This group includes: clubs, axes, and flails.

Knives (K): These are short-bladed, edged weapons. Many of the longer specimens overlap into the sword category.

Miscellaneous (M): These weapons are those whose unique design doesn't allow them to be placed into the other groups.

Pole Arms (P): These are normally large two-handed weapons. Many of these consist of large-bladed heads mounted on a long shaft or pole.

Spears (Sp): These normally consist of thrusting or stabbing type heads mounted on shafts. Many of these weapons are normally thrown as missiles.

Sword (Sw): These are long-bladed, edged weapons. Although most are one-handed, many are designed to be used with both.

LENGTH: The length of the weapon in meters. Normally this figure is for the longest dimension of an irregularly shaped weapon.

MASS: The mass of the weapon in kilograms. Both mass and length can vary greatly for any given weapon since in most cases a wide variety of examples exist.

DEXTERITY (DEX): This is an indication of how quickly and easily the weapon can be used in combat. This rating is based on the weapon's balance, size, and weight. The values range from 0 (best) to 3 (worst), with the majority being 0 or 1.

PARRY: This is an indication of how well the weapon can be used to block attacks. The rating is based on whether the weapon has guards for the hand, as well as its size. This value ranges from 0 (worst) to 4 (best), with the majority being 1 or 2.

ATTACK TYPE: There are four basic attack types: chop, cut, thrust and impact.

A chop is a heavy cleaving action designed to hack or sever. Chopping weapons are normally heavy and straight-bladed. Often secondary impact damage can be done by chopping weapons even if armor is not penetrated.

A cut is a drawing of a weapon's blade across a target in order to slice it. Slashing and ripping attacks are similar to cuts in their motions and effects. Cutting weapons are normally curved, and often fairly light. A sharp weapon edge is important in cutting attacks.

Thrust attacks are designed to penetrate and stab. Thrusting blades are generally stiff and rigid, especially if they are designed to puncture armor.

Impact attacks damage by shock and concussion. Normally impact weapons are heavy.

DURABILITY (DUR): This is an indication of a weapon's sturdiness and resistance to breaking. Major factors in this rating are materials, construction. Techniques used in making the weapon. The rating itself can range from 1 to 100 and could, of course, be influenced by wear, damage, and repairs.

THROW(ING): This is a relative indication of how well the weapon would perform as a missile. The ratings are: 1 = good, 2 = fair, and 3 = poor.

DAMAGE: This is an indication of how destructive a weapon is in relation to the others. This value ranges from 0, (does damage), to 4, (does a lot of damage).

Blade Edge is indicated by hash marks (,,,,,,,,,,,,,,,).
For Example:

ROLE-PLAYING APPLICATIONS

A certain amount of preparation must be done in order to use the weapons shown in this book in most games. Consistency is the watchword in this department; treat all weapons equally.

The Dex ratings are most easily used in systems which have initiative rolls to determine first strikes or actions. Differences in Dex ratings or the ratings themselves can be used as die roll modifiers.

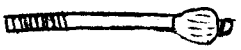
In systems which have parrying, comparisons between a weapon's rating and size offer a basis in which each one can be evaluated for use in that system.

Durability can be used when weapon breakage is a factor in a system. The rating can be used as straight percentage of remaining unbroken when put under severe stress.

Damage values of weapons can be evaluated on three factors: the damage ratings, the weapon's mass, and the attack type employed. *See page 5.*

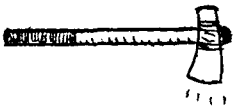
Comparison Chart of Ancient Weapons

Hafted Weapons

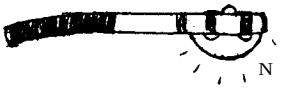


Weapon Name: Aat, Type: H, Length: .6m, **Mass:** .8kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Adze, **Type: H, Length:** .3m, **Mass:** .6kg, **Dex: 2, Parry: 1, Attack Types:** Chop, **Dur:** 60, **Throw:** 2, **Damage: 2, Hand: 1**



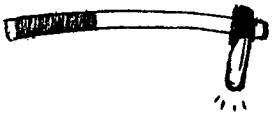
Weapon Name: Anatolian Axe, **Type: H, Length:** .6m, **Mass:** 1.0kg, **Dex:** 0, **Parry: 1, Attack Types: Impact, Dur:** 85, **Throw:** 1, **Damage: 3, Hand: 1**



Weapon Name: Anchor Axe, **Type: H, Length:** .7m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

Weapon Name: Ancus, **Type: H, Length:** .4m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

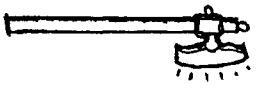
Weapon Name: Angolan Battle Axe, **Type: H, Length:** .6m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types: Chop, Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**



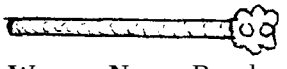
Weapon Name: Aqhu, **Type: H, Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types: Chop, Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Arit, **Type: H, Length:** .4m, **Mass:** .4kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage:** 1, **Hand: 1**

Weapon Name: Amis, **Type: H, Length:** .7m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 1**

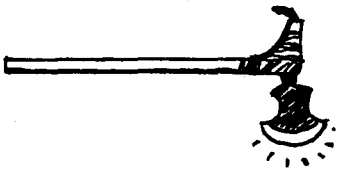


Weapon Name: Ay-Balta, **Type: H, Length:** .6m, **Mass:** 1.6kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage:** 3, **Hand: 1**



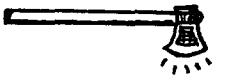
Weapon Name: Baculus, **Type: H, Length:** .7m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Baggoro, **Type: H, Length:** .7m, **Mass:** 2.1kg, **Dex: 2, Parry: 2, Attack Types:** Impact, **Dur:** 60, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Balestarius, **Type: H, Length:** .8m, **Mass:** 1.8kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 70, **Throw: 2, Damage: 3, Hand: 2**

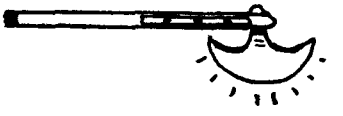
Weapon Name: Ball & Chain, **Type: H, Length:** .9m, **Mass:** 2.0kg, **Dex:** 2, **Parry: 2, Attack Types: Impact, Dur:** 80, **Throw: 3, Damage: 2, Hand: 1**



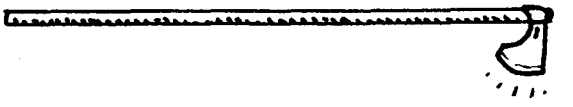
Weapon Name: Balta, **Type: H, Length:** .5m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Barkur, **Type: H, Length:** .8m, **Mass:** 2.0kg, **Dex:** 2, **Parry: 1, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 1**

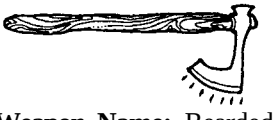
Weapon Name: Baston, **Type: H, Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 80, **Throw:** 1, **Damage: 1, Hand: 1**



Weapon Name: Battle Axe, **Type: H, Length:** .8m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



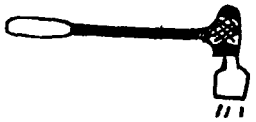
Weapon Name: Bearded Axe, **Type: H, Length:** 1.4m, **Mass:** 2.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 2**



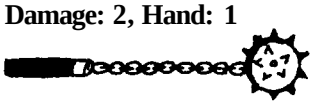
Weapon Name: Bearded War Axe, **Type: H, Length:** .6m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Bec-de-Corbin, **Type: H, Length:** .6m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

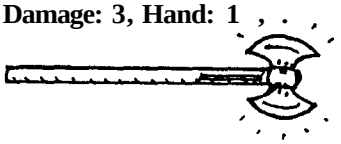
Weapon Name: Bi-Teran, **Type: H, Length:** .4m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 60, **Throw:** 1, **Damage: 1, Hand: 1**



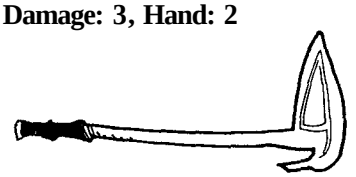
Weapon Name: Biliong, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 1**



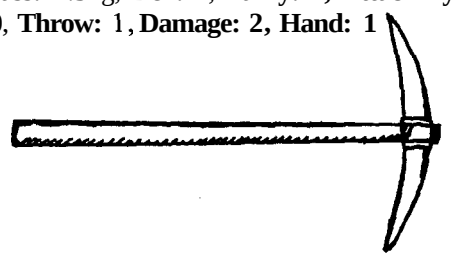
Weapon Name: Binnol, Type: H, Length: .8m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 1**



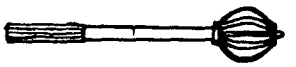
Weapon Name: Bipennis, **Type: H, Length:** .8m, **Mass:** 2.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



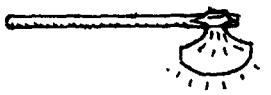
Weapon Name: Bird's Head Club, **Type: H, Length:** 1.0, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 60, **Throw:** 1, **Damage: 2, Hand: 1**



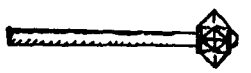
Weapon Name: Bisacuta, **Type: H, Length:** 1.1m, **Mass:** 2.6kg, **Dex:** 2, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**



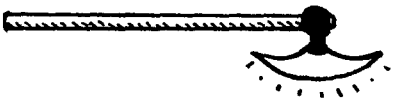
Weapon Name: Bouzdykan, **Type: H, Length:** .7m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw:** 1, **Damage: 3, Hand: 1**



Weapon Name: Broad Axe, **Type: H, Length:** .6m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage:** 3, **Hand: 1**

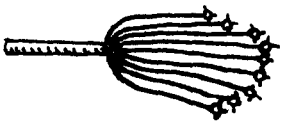


Weapon Name: Bulawa, **Type: H, Length:** .6m, **Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 0, Damage: 2, Hand: 1**

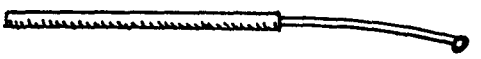


Weapon Name: Bullova, **Type: H, Length:** 1.0m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**

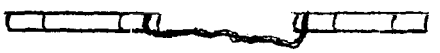
Weapon Name: Burrong, **Type: H, Length:** .5m, **Mass:** .8kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 60, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Cat 'o Nine Tails, **Type: H, Length:** .8m, **Mass:** .5kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 65, **Throw: 4, Damage:** 1(2), **Hand: 1**



Weapon Name: Chemeti, **Type: H, Length:** 1.2m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage:** 1, **Hand: 1**

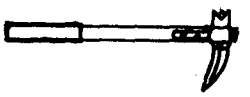


Weapon Name: Chinte, **Type: H, Length: 1.0m, Mass:** .3kg, **Dex: 2, Parry:** 1, **Attack Types:** Impact, **Dur:** 70, **Throw: 3, Damage:** 1, **Hand: 2**

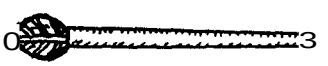
Weapon Name: Claw Hammer, **Type: H, Length:** .25m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 1, Hand: 1**

Weapon Name: Club, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Crescent Axe, **Type: H, Length:** .7m, **Mass:** 1.2kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**

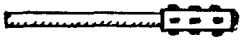


Weapon Name: Crowbill, **Type: H, Length:** .6m, **Mass:** 1.5kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**



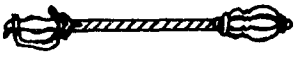
Weapon Name: Cudgel, **Type: H, Length:** .8m, **Mass:** 1.0kg, **Dex:** 0, **Parry: 3, Attack Types:** Impact, **Dur:** 65, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Cumber-Jung, **Type: H, Length:** .8m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 1**

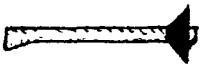


Weapon Name: Dabus, **Type: H, Length:** .7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 1**

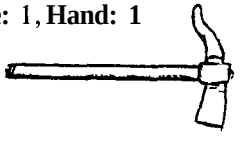
Weapon Name: Dagger Mace, **Type: H, Length:** .5m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 1, Attack Types: Impact, Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



Weapon Name: Dhara, **Type: H, Length:** .7m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 3, Attack Types:** Impact, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

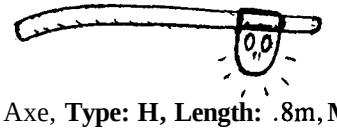


Weapon Name: Disk Mace, **Type: H, Length:** .5m, **Mass:** .6kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

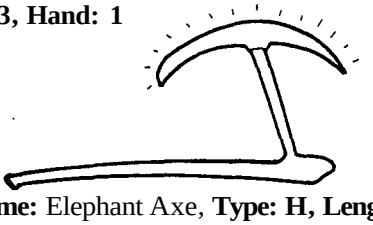


Weapon Name: Dolabra, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex: 0, Parry: 1, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Doloire, **Type: H, Length:** .8m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**

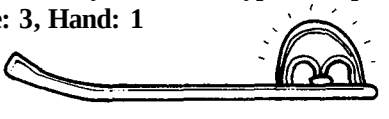


Weapon Name: Duck Bill Axe, **Type: H, Length:** .8m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types: Chop, Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



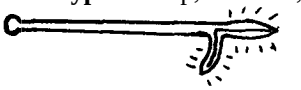
Weapon Name: Elephant Axe, **Type: H, Length:** .7m, **Mass:** 2.1kg, **Dex: 2, Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 3, Damage: 3, Hand: 2** , ,

Weapon Name: Epsilon Axe, **Type: H, Length:** .8m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 2, Attack Types: Chop, Dur:** 65, **Throw: 2, Damage: 3, Hand: 1**

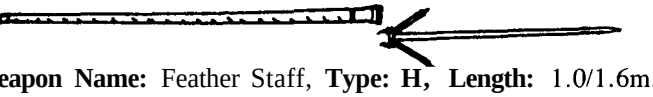


Weapon Name: Eye Axe, **Type: H, Length:** .9m, **Mass:** 1.6kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

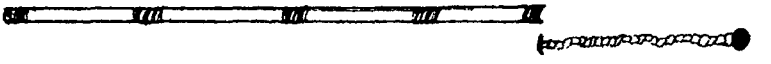
Weapon Name: Falx Supina, **Type: H, Length:** .3m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



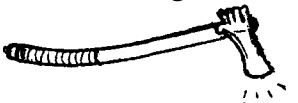
Weapon Name: Fang, **Type: H, Length:** .7m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



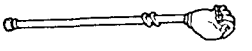
Weapon Name: Feather Staff, **Type: H, Length:** 1.0/1.6m, **Mass:** 1.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 2**



Weapon Name: Feruzue, **Type: H, Length: 1.4m, Mass:** 1.8kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 2**



Weapon Name: Finger Axe, **Type: H, Length:** .7m, **Mass:** 1.4kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Fist Mace, **Type: H, Length:** .5m, **Mass:** 1.8kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Impact, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**

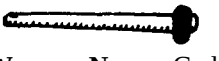
Weapon Name: Flagellum, **Type: H, Length:** .7m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage:** 1, **Hand: 1** __

Weapon Name: Flail, **Type: H, Length: 1.6m, Mass:** 2.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage: 3, Hand: 2**

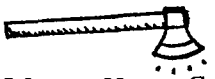
Weapon Name: Flat Club, **Type: H, Length: 1.0m, Mass:** 1.8kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Francisca, **Type: H, Length:** .5m, **Mass:** 1.4kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw:** 1, **Damage: 3, Hand: 1**

Weapon Name: Ga-Ne-U-Ga-O-Dus-Ha, Type: H, **Length:** .3m, **Mass:** .8kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 60, **Throw: 1, Damage: 2, Hand: 1**



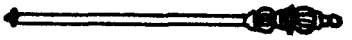
Weapon Name: Gada, **Type: H, Length:** .5m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 1**



Weapon Name: Galraki, **Type: H, Length:** .5m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

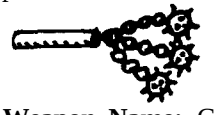
Weapon Name: Ganjing, **Type: H, Length:** .5m, **Mass:** 1.4kg, **Dex: 0, Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Gargaz, **Type: H, Length:** .8m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Impact, **Dur:** 90, **Throw:** 1, **Damage: 3, Hand: 1**

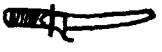


Weapon Name: Garz, **Type: H, Length:** .8m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw:** 1, **Damage: 2, Hand: 1**

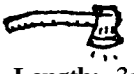
Weapon Name: German War Hammer, **Type: H, Length:** 1.2m, **Mass:** 2.6kg, **Dex:** 2, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 2**



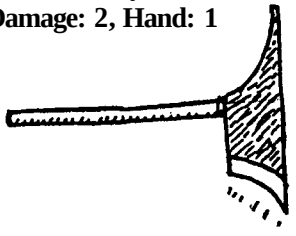
Weapon Name: Goupillon, **Type: H, Length:** .5m, **Mass:** 2.2kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**



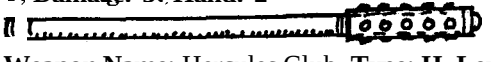
Weapon Name: Hachiwara, **Type: M, Length:** .3m, **Mass:** 1.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw: 1, Damage:** 1, **Hand: 1**



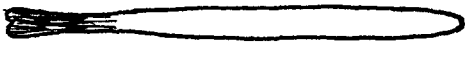
Weapon Name: Hatchet, **Type: H, Length:** .3m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 1, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**



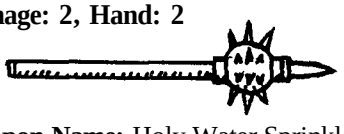
Weapon Name: Head Axe, Type: H, Length: .7m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw:** 1, **Damage: 3. Hand: 2**



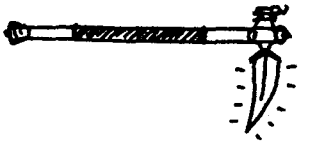
Weapon Name: Hercules Club, **Type: H, Length:** 1.2m, **Mass:** 2.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 1, Damage: 3, Hand: 2**



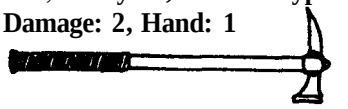
Weapon Name: Hoeroa, **Type: H, Length:** 1.2m, **Mass: 1** .0kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage: 2, Hand: 2**



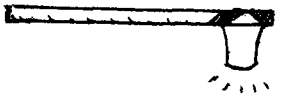
Weapon Name: Holy Water Sprinkler, **Type: H, Length: .8m, Mass:** 2.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Hoolurge, **Type: H, Length:** .7m, **Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



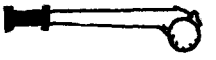
Weapon Name: Horseman's Hammer, **Type: H, Length:** .8m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



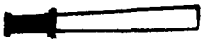
Weapon Name: Hyksos Axe, **Type: H, Length:** .7m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

Weapon Name: I-Wata-Jinga, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 1**

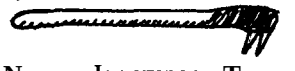
Weapon Name: Iverapena, **Type: H, Length:** .6m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 1**



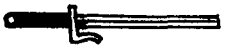
Weapon Name: Ja-Dagna, **Type: H, Length:** .5m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 1**



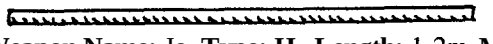
Weapon Name: Ja-Weti, **Type: H, Length:** .5m, **Mass: 1.Okg, Dex: 0, Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**



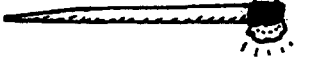
Weapon Name: Japurunga, **Type: H, Length:** .7m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 65, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Jitte, **Type: H, Length:** .5m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 3, Attack Types:** Thrust/Impact, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

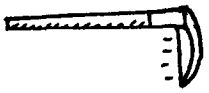


Weapon Name: Jo, **Type: H, Length:** 1.2m, **Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**

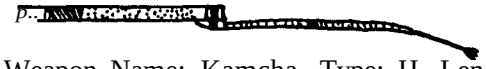


Weapon Name: Kadjo, **Type: H, Length:** .6m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Impact, **Dur:** 60, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Kalus, **Type: H, Length:** 1.0m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw:** 3, **Damage:** 1, **Hand: 1**

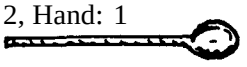


Weapon Name: Kama, Type: H, Length: .5m, Mass: 1.0kg, Dex: 0, Parry: 2, Attack Types: Chop, Dur: 80, Throw: 2, Damage: 2, Hand: 1

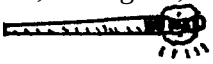


Weapon Name: Kamcha, Type: H, Length: 1.2m, Mass: 1.3kg, Dex: 1, Parry: 2, Attack Types: Cut, Dur: 75, Throw: 3, Damage: 1, Hand: 1

Weapon Name: Kapak, Type: H, Length: .4m, Mass: 1.1kg, Dex: 0, Parry: 2, Attack Types: Chop, Dur: 70, Throw: 1, Damage: 2, Hand: 1

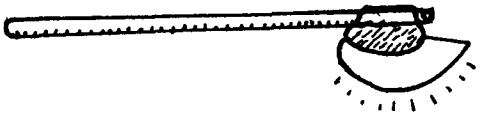


Weapon Name: Kasrullah, Type: H, Length: .7m, Mass: 1.2kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 75, Throw: 2, Damage: 2, Hand: 1

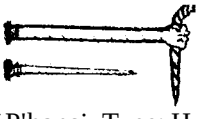


Weapon Name: Keerli, Type: H, Length: .5m, Mass: .8kg, Dex: 0, Parry: 2, Attack Types: Chop/Impact, Dur: 65, Throw: 2, Damage: 2, Hand: 1

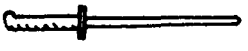
Weapon Name: Kharga, Type: H, Length: .8m, Mass: 1.8kg, Dex: 1, Parry: 2, Attack Types: Chop, Dur: 85, Throw: 3, Damage: 2, Hand: 1



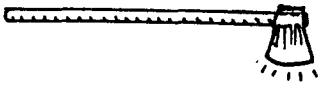
Weapon Name: Kheten, Type: H, Length: 1.2m, Mass: 2.5kg, Dex: 1, Parry: 2, Attack Types: Chop, Dur: 75, Throw: 2, Damage: 3, Hand: 2



Weapon Name: Khundli P'hansi, Type: H, Length: .5m, Mass: 1.0kg, Dex: 0, Parry: 1, Attack Types: Thrust/Impact, Dur: 90, Throw: 1, Damage: 1, Hand: 1



Weapon Name: Kiam Bokiam, Type: H, Length: .6m, Mass: .9kg, Dex: 0, Parry: 3, Attack Types: Thrust/Impact, Dur: 85, Throw: 2, Damage: 1, Hand: 1



Weapon Name: Kodelly, Type: H, Length: .8m, Mass: 1.8kg, Dex: 0, Parry: 2, Attack Types: Chop, Dur: 80, Throw: 2, Damage: 2, Hand: 1

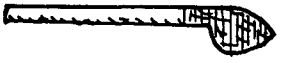
Weapon Name: Konnung, Type: M, Length: .8m, Mass: .7kg, Dex: 1, Parry: 2, Attack Types: Thrust, Dur: 70, Throw: 2, Damage: 2, Hand: 1

Weapon Name: Kotiate, Type: H, Length: .4m, Mass: 1.2kg, Dex: 0, Parry: 1, Attack Types: Impact, Dur: 65, Throw: 2, Damage: 2, Hand: 1

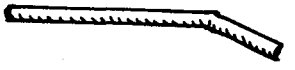
Weapon Name: Kujerong, Type: H, Length: .4m, Mass: I.ikg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 60, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Laingtjat, Type: H, Length: .6m, Mass: .8kg, Dex: 1, Parry: 2, Attack Types: Impact, Dur: 80, Throw: 3, Damage: 1, Hand: 1

Weapon Name: Leonile, Type: H, Length: .4m, Mass: .8kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 60, Throw: 1, Damage: 1, Hand: 1



Weapon Name: Lil-Lil, Type: H, Length: .7m, Mass: .8kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 65, Throw: 1, Damage: 1, Hand: 1

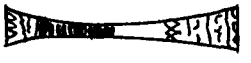


Weapon Name: Lisan, Type: H, Length: .7m, Mass: 1.3kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 60, Throw: 2, Damage: 2, Hand: 1

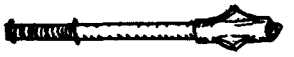
Weapon Name: Lohangi, Type: H, Length: 1.3m, Mass: 2.0kg, Dex: 1, Parry: 2, Attack Types: Impact, Dur: 80, Throw: 2, Damage: 3, Hand: 2

Weapon Name: Lohar, Type: H, Length: .4m, Mass: 1.7kg, Dex: 0, Parry: 2, Attack Types: Chop/Impact, Dur: 90, Throw: 2, Damage: 3, Hand: 1

Weapon Name: Mabobo, Type: H, Length: 1.1m, Mass: 1.4kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 75, Throw: 2, Damage: 2, Hand: 2

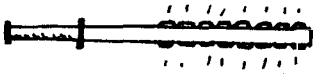


Weapon Name: Macana, Type: H, Length: .6m, Mass: .7kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 75, Throw: 1, Damage: 2, Hand: 1

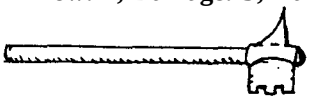


Weapon Name: Mace, Type: H, Length: .7m, Mass: 2.0kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 85, Throw: 2, Damage: 3, Hand: 1

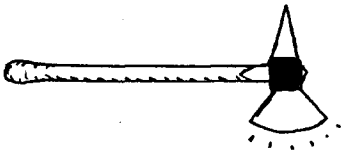
Weapon Name: Mace & Chain, **Type: H, Length:** .9m,**Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw:** 3, **Damage:** 3, **Hand: 1**



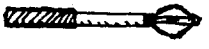
Weapon Name: Maquahuilt, **Type: H, Length:** .8m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 3, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Martel de Fer, **Type: H, Length:** .8m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

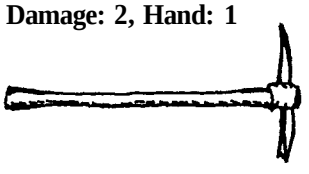


Weapon Name: Masakari, **Type: H, Length:** .8m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

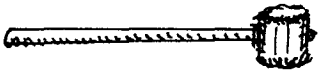


Weapon Name: Massuelle, **Type: H, Length:** .5m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types: Impact, Dur: 80, Throw: 2, Damage: 2, Hand: 1**

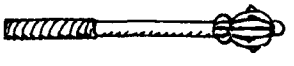
Weapon Name: Mattina, **Type: H, Length:** .7m,**Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Mattock, **Type: H, Length:** .8m,**Mass:** 2.2kg, **Dex:** 2, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 2**

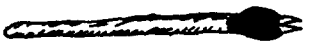


Weapon Name: Maul, **Type: H, Length:** 1.1m, **Mass:** 4.0kg, **Dex:** 3, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 2**

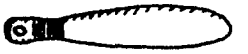


Weapon Name: Mazule, **Type: H, Length:** .7m,**Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**

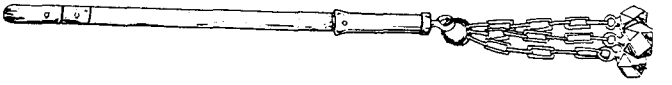
Weapon Name: Meat Cleaver, **Type: H, Length:** .3m, **Mass:** 1.3kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**



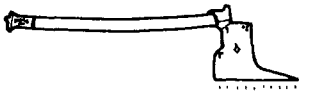
Weapon Name: Meeri, **Type: H, Length:** .8m,**Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Merai, **Type: H, Length:** .6m, **Mass:** 1.6kg, **Dex:** 0, **Parry:** 1, **Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

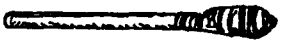


Weapon Name: Military Flail, **Type: H, Length:** 1.6m, **Mass:** 2.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 1**

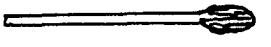


Weapon Name: Miner's Axe, **Type: H, Length:** .4m, **Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

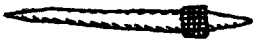
Weapon Name: Moon Axe, **Type: H, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 1**



Weapon Name: Mugdar, **Type: H, Length:** .7m, **Mass:** 6.3kg, **Dex:** 3, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage: 4, Hand: 2**



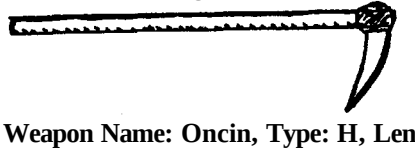
Weapon Name: Muragugna, **Type: H, Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**



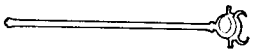
Weapon Name: Nil-Li, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 65, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Novacula, **Type: H, Length:** .2m,**Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage:** 1, **Hand: 1**

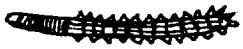
Weapon Name: Nunchaku, **Type:** H, **Length:** .8m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage: 2, Hand: 2**



Weapon Name: Oncin, Type: H, Length: 1.0m, **Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**



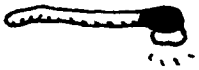
Weapon Name: Ox Mace, Type: H, Length: .5m, Mass: 1.7kg, Dex: 1, Parry: 1, Attack Types: Impact, Dur: 90, Throw: 2, Damage: 3, Hand: 1



Weapon Name: Pacho, Type: H, Length: .6m, Mass: .8kg, Dex: 0, Parry: 1, Attack Types: Cut, Dur: 65, Throw: 2, Damage: 2, Hand: 1

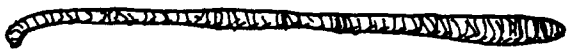
Weapon Name: Pagaya, Type: H, Length: .6m, Mass: 1.4kg, Dex: 1, Parry: 2, Attack Types: Impact, Dur: 75, Throw: 2, Damage: 2, Hand: 1

Weapon Name: Pahu, Type: H, Length: .6m, Mass: 1.3kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 70, Throw: 1, Damage: 2, Hand: 1

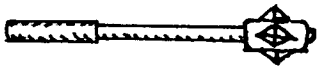


Weapon Name: Pareh, Type: H, Length: .5m, Mass: 1.3kg, Dex: 1, Parry: 2, Attack Types: Chop/Impact, Dur: 65, Throw: 2, Damage: 2, Hand: 1

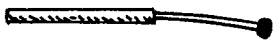
Weapon Name: Patu, Type: H, Length: .5m, Mass: 1.0kg, Dex: 0, Parry: 1, Attack Types: Impact, Dur: 75, Throw: 1, Damage: 2, Hand: 1



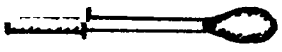
Weapon Name: Periperiu, Type: H, Length: 1.5m, Mass: 2.1kg, Dex: 2, Parry: 2, Attack Types: Impact, Dur: 70, Throw: 3, Damage: 3, Hand: 2



Weapon Name: Pernat, Type: H, Length: .8m, Mass: 2.0kg, Dex: 1, Parry: 2, Attack Types: Impact, Dur: 80, Throw: 2, Damage: 3, Hand: 1

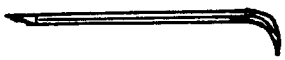


Weapon Name: Petjut, **Type: H, Length:** .7m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage: 2, Hand: 1**



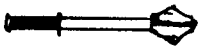
Weapon Name: Plombee, Type: H, Length: .7m, Mass: 2.4kg, Dex: 2, Parry: 2, Attack Types: Impact, Dur: 80, Throw: 2, Damage: 3, Hand: 1

Weapon Name: Potu, Type: H, Length: .6m, Mass: 1.4kg, Dex: 0, Parry: 1, Attack Types: Impact, Dur: 75, Throw: 1, Damage: 2, Hand: 1



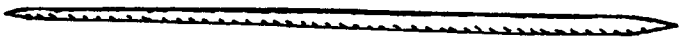
Weapon Name: Pry Bar, **Type: H, Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Purijimala, **Type: H, Length:** .6m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 1**

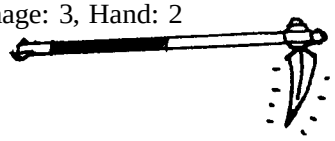


Weapon Name: Quadrelle, Type: H, Length: .5m, Mass: 1.5kg, Dex: 0, Parry: 2, Attack Types: Impact, Dur: 80, Throw: 2, Damage: 2, Hand: 1

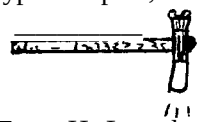
Weapon Name: Quoit Mace, Type: H, Length: .6m, Mass: 1.8kg, Dex: 1, Parry: 3, Attack Types: Impact, Dur: 90, Throw: 2, Damage: 2, Hand: 1



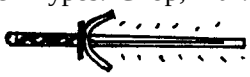
Weapon Name: Rang-Kwan, Type: H, Length: 1.8m, Mass: 1.9kg, Dex: 2, Parry: 2, Attack Types: Thrust/Impact, Dur: 70, Throw: 2, Damage: 3, Hand: 2



Weapon Name: Sabar, Type: H, Length: .8m, Mass: 1.8kg, Dex: 1, Parry: 2, Attack Types: Impact, Dur: 85, Throw: 2, Damage: 3, Hand: 2



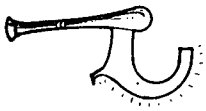
Weapon Name: Sagaris, **Type:** H, Length: .5m, Mass: .8kg, Dex: 0, Parry: 2, Attack Types: Chop, Dur: 85, Throw: 1, Damage: 2, Hand: 1



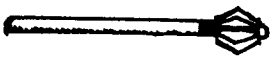
Weapon Name: Sai, Type: H, Length: .6m, Mass: 1.3kg, Dex: 0, Parry: 3, Attack Types: Thrust, Dur: 90, Throw: 2, Damage: 2, Hand: 1

Weapon Name: Sa Tjat Koen, **Type: H, Length: 1.6m, Mass:** 1.4kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 3, Damage:** 1, **Hand: 2**

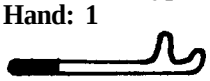
Weapon Name: Sapakana, **Type: H, Length:** .6m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**



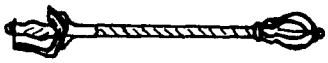
Weapon Name: Savage Axe, **Type: H, Length:** .4m, **Mass:** 1.3kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 1**



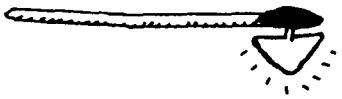
Weapon Name: Schestopjor, **Type: H, Length:** .7m, **Mass:** 1.7kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



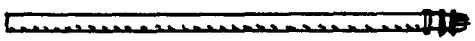
Weapon Name: Segu, **Type: H, Length:** .5m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**



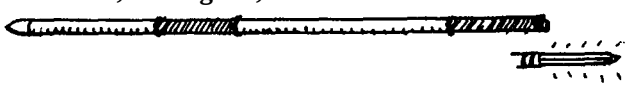
Weapon Name: Shashdar, **Type: H, Length:** .8m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 3, Attack Types:** Impact, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**



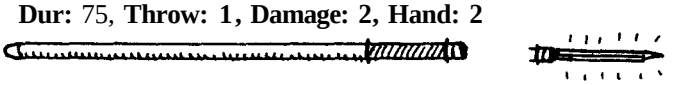
Weapon Name: Shoka, **Type: H, Length:** .8m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 1, Attack Types:** Chop, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**



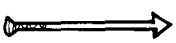
Weapon Name: Shakujo, **Type: H, Length:** 1.2m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



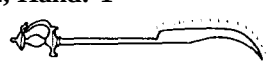
Weapon Name: Shakujo Yari, **Type: M, Length:** 1.4/1.6m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



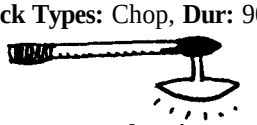
Weapon Name: Shinobi-Zue, **Type:** H, **Length:** 1.2/1.5m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



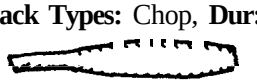
Weapon Name: Siangkam, **Type: H, Length:** .5m, **Mass:** .5kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 1**



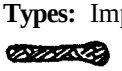
Weapon Name: Sickle Mace, **Type: H, Length:** .6m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



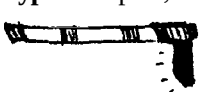
Weapon Name: Silepe, **Type: H, Length:** .6m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**



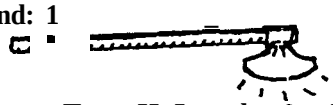
Weapon Name: Siwalapa, **Type: H, Length:** .6m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 1**



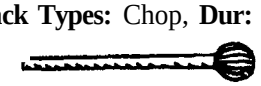
Weapon Name: Sling Shot, **Type: H, Length:** .25m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 1**



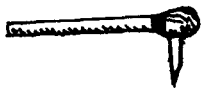
Weapon Name: Socket Axe, **Type: H, Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry: 1, Attack Types:** Chop, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 1**



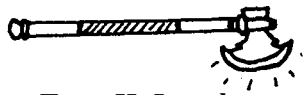
Weapon Name: Sparte, **Type: H, Length:** .8m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



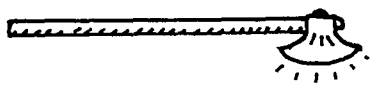
Weapon Name: Suan-Tou-Fung, **Type: H, Length:** .6m, **Mass:** 1.8kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Taavish, **Type: H, Length:** .7m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 65, **Throw: 2, Damage: 3, Hand: 1**

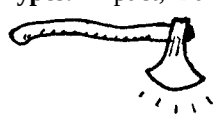


Weapon Name: Tabar, **Type: H, Length:** .7m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw:** 2, **Damage: 3, Hand: 1**



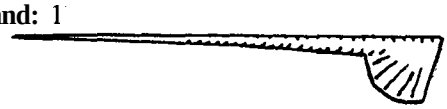
Weapon Name: Tabar-I-Zin, **Type: H, Length:** .9m, **Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**

Weapon Name: Tambara, **Type: H, Length:** .7m, **Mass:** 1.2kg, **Dex: 0, Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**

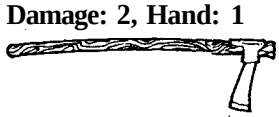


Weapon Name: Taper Axe, **Type: H, Length:** .5m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

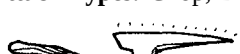
Weapon Name: Tebutje, **Type: H, Length:** .9m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types: Cut, Dur:** 70, **Throw: 2, Damage: 2, Hand:** 1



Weapon Name: Tewha-Tewha, **Type: H, Length:** 1.1m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 1, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

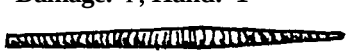


Weapon Name: Thin Axe, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 1, Hand: 1**

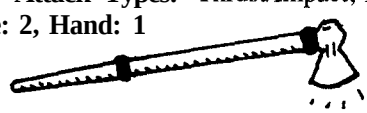


Weapon Name: Thrusting Axe, **Type: H, Length:** .5m, **Mass:** 1.7kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**

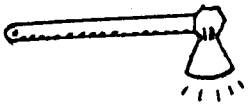
Weapon Name: Tiglvn, **Type: H, Length:** .25m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 70, **Throw:** 1, **Damage:** 1, **Hand: 1**



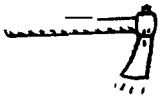
Weapon Name: Tindil, Type: H, Length: .9m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Toki Kakauroa, **Type: H, Length:** .9m, **Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**



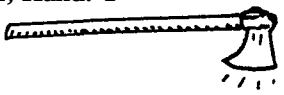
Weapon Name: Toki Poto, **Type: H, Length:** .6m, **Mass:** 1.5kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**



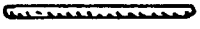
Weapon Name: Tomahawk, **Type: H, Length:** .4m, **Mass:** 1.5kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Tonfa, **Type: M, Length:** .6m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 1**

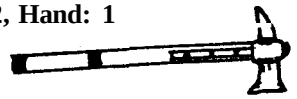
Weapon Name: Tongia, **Type: H, Length:** .5m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**



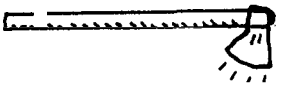
Weapon Name: Toporok, **Type: H, Length:** .7m, **Mass:** 1.8kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Truncheon, **Type: H, Length:** .5m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

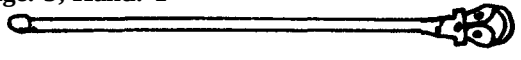


Weapon Name: Tschekan, **Type: H, Length:** .7m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

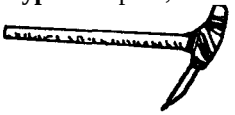


Weapon Name: Tuagh-Gatha, **Type: H, Length:** .7m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 1**

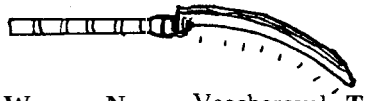
Weapon Name: Tungi, **Type: H, Length:** .4m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 1**



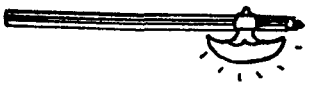
Weapon Name: U'U, **Type: M, Length:** 1.3m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 2**



Weapon Name: Udlimau, **Type: H, Length:** .6m, **Mass:** 1.4kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 70, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Veecharoval, **Type:** H, **Length:** .4m, **Mass:** 1.8kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 2, Damage: 3, Hand: 1**



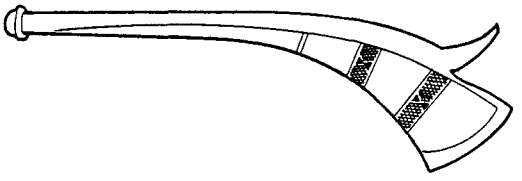
Weapon Name: Venmuroo, **Type: H, Length:** .8m, **Mass:** 1.9kg, **Dex: 1, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

Weapon Name: Waddy, **Type: H, Length:** .6m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Trust/Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 1**

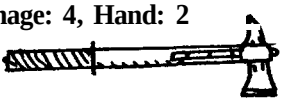
Weapon Name: Wahaika, **Type: H, Length:** .4m, **Mass:** 1.4kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Wairbi, **Type: H, Length:** .8m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Wakerti, **Type: H, Length:** 1.0m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 1**

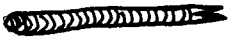


Weapon Name: War Club, **Type: H, Length:** 1.4m, **Mass:** 4.6kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 4, Hand: 2**

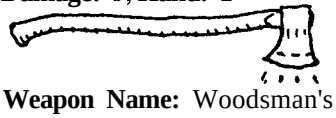


Weapon Name: War Hammer, **Type: H, Length:** .7m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

Weapon Name: Weerba, **Type: H, Length:** .8m, **Mass:** 2.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 3, Hand: 1**

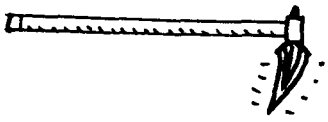


Weapon Name: Wirka, **Type: H, Length:** .6m, **Mass:** 1.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage:** 1, **Hand: 1**



Weapon Name: Woodsman's Axe, **Type: H, Length:** .8m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**

Weapon Name: Yeamberren, **Type: H, Length:** .7m, **Mass:** 1.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**



Weapon Name: Zaghnal, **Type: H, Length:** .8m,**Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**

Knives

Weapon Name: Acinaces, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**

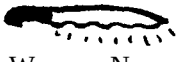
Weapon Name: Aikuchi, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Bade-Bade, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Badik, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 2, Damage: 1, Hand: 1**

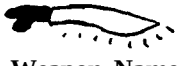
Weapon Name: Bank, Type: K, Length: .25m, **Mass:** .4kg, **Dex: 0, Parry: 0, Attack Types:** Cut, **Dur:** 80, **Throw: 2, Damage:** 1, **Hand: 1**

Weapon Name: Barong, Type: K, Length: .4m, Mass: .5kg, Dex: 0, Parry: 1, Attack Types: Cut/Thrust, Dur: 80, Throw: 1, Damage: 2, Hand: 1



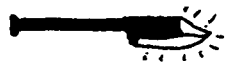
Weapon Name: Baswa Knife, Type: K, Length: .4m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Cut/Thrust, Dur: 75, Throw: 1, Damage: 2, Hand: 1

Weapon Name: Batardeau, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**



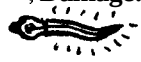
Weapon Name: Bayu, **Type: K, Length:** .4m, **Mass:** .5kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Beladau, **Type: K, Length:** .4m,**Mass:** .4kg, **Dex: 0, Parry: 0, Attack Types:** Cut/Thrust, **Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Bhuj, **Type: K, Length:** .5m, **Mass:** .8kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Bichaq, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**

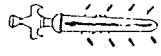


Weapon Name: Bich'Hwa, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 2, Damage:** 1, **Hand: 1**

Weapon Name: Bich'Hwa Bagh Nakh, **Type: K, Length:** .25m, **Mass:** .95kg, **Dex:** 0, **Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 2, Damage: 1, Hand: 1**

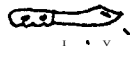
Weapon Name: Bodkin, Type: K, Length: .25m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Bolo, **Type: K, Length:** .4m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types: Chop, Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Bracelet Dagger, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 85, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Bundi Katari, **Type: K, Length:** .5m, **Mass:** .5kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw:** 1, **Damage: 2, Hand: 1**



Weapon Name: Butcher Knife, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw:** 1, **Damage: 1, Hand: 1**

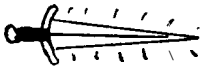
Weapon Name: Buyo Knife, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw:** 1, **Damage: 1, Hand: 1**

Weapon Name: Chaqu, **Type: K, Length:** .2m, **Mass:** .3kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Chilanum, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Choora, **Type: K, Length:** .25m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Chopper, **Type: K, Length:** .4m,**Mass:** .6kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**



Weapon Name: Cinquedea, **Type: K, Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw:** 1, **Damage: 2, Hand: 1**

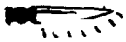
Weapon Name: Crescent Dagger, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Cuchillo, **Type: K, Length:** .25m,**Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage:** 1, **Hand: 1**

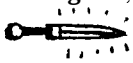
Weapon Name: Darn Do, **Type: K, Length:** .5m,**Mass:** .4kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Degan, **Type: K, Length:** .25m,**Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Dhaw, **Type: K, Length:** .2m, **Mass:** .3kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**



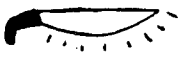
Weapon Name: Dirk, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Estradoit, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Fantail Dagger, **Type: K, Length:** .3m,**Mass:** .25kg, **Dex:** 0, **Parry: 0, Attack Types: Cut, Dur:** 80,**Throw:** 1, **Damage:** 1, **Hand: 1**

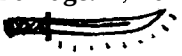
Weapon Name: Forked Tongue Dagger, **Type: K, Length:** .3m, **Mass:** .25kg, **Dex:** 0, **Parry: 0, Attack Types: Cut, Dur:** 80, **Throw:** 1, **Damage: 1, Hand: 1**



Weapon Name: Golok, **Type: K, Length:** .4m, **Mass:** .6kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Haladie, **Type: K, Length:** .55m,**Mass:** .6kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

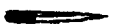
Weapon Name: Halasan, **Type: K, Length:** .25m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**



Weapon Name: Hamidashi, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw:** 1, **Damage: 2, Hand: 1**

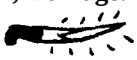
Weapon Name: Harpe, **Type: K, Length:** .4m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 85, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Heyazashi, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 90, **Throw: 1, Damage:** 1, **Hand: 1**

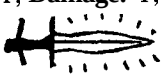


Weapon Name: Himogatana, **Type: K, Length:** .25m,**Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 85,**Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Horn Dagger, **Type: K, Length:** .25m,**Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 70, **Throw: 2, Damage:** 1, **Hand: 1**

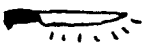


Weapon Name: Jambiya, **Type: K, Length:** .3m,**Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw:** 1, **Damage:** 1, **Hand: 1**



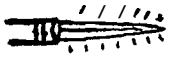
Weapon Name: Jamdhar Katari, **Type: K, Length:** .4m,**Mass:** .5kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Karambit, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types: Cut, Dur:** 80, **Throw: 2, Damage:** 1, **Hand: 1**



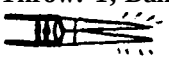
Weapon Name: Kard, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Karoula, **Type: K, Length:** .4m,**Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**



Weapon Name: Katar, **Type: K, Length:** .4m, **Mass:** .5kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

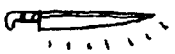
Weapon Name: Katar Bank, **Type: K, Length:** .4m, **Mass:** .5kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**



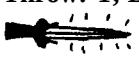
Weapon Name: Katar Dorlicaneh, **Type: K, Length:** .4m, **Mass:** .5kg, **Dex: 1, Parry:** 1, **Attack Types:** Thrust, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Khanjar, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 1, Damage:** 1, **Hand: 1**

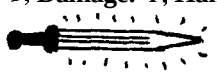
Weapon Name: Khanjarli, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 2, Damage:** 1, **Hand: 1**



Weapon Name: Khyber Knife, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 1**



Weapon Name: Kidney Dagger, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**



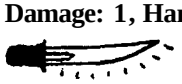
Weapon Name: Kindjal, **Type: K, Length:** .5m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Kira, **Type: K, Length:** .25m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 60, **Throw: 2, Damage:** 1, **Hand: 1**

Weapon Name: Korambi, **Type: K, Length:** .25m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Koshigatana, **Type: K, Length:** .2m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Kozuka, **Type: K, Length:** .2m, **Mass:** .3kg, **Dex: 0, Parry: 0, Attack Types: Thrust, Dur:** 80, **Throw: 1, Damage: 1, Hand: 1**



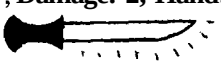
Weapon Name: Kubikiri, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 90, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Kudi, **Type: K, Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Kudi Tranchang, **Type: K, Length:** .5m, **Mass:** .7kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

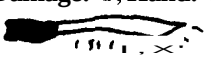
Weapon Name: Kujungi, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Kukri, **Type: K, Length:** .5m, **Mass:** .6kg, **Dex: 0, Parry:** 1, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw:** 1, **Damage: 2, Hand: 1**



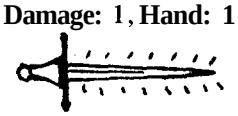
Weapon Name: Kummya, **Type: K, Length:** .5m, **Mass:** .6kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 1, Damage: 1, Hand: 1**

Weapon Name: Kwaiken, **Type: K, Length:** .2m, **Mass:** .25kg, **Dex:** 0, **Parry: 0, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**



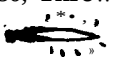
Weapon Name: Labo Belange, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Lading, **Type: K, Length:** .4m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**

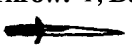


Weapon Name: Main Gauche, **Type: K, Length:** .5m, **Mass:** .6kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage:** 1, **Hand: 1**

Weapon Name: Mandaya Knife, **Type: K, Length:** .25m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**



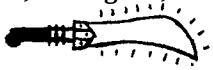
Weapon Name: Mattucashlass, **Type: K, Length:** .25m, **Mass:** .25kg, **Dex:** 0, **Parry: 1, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage:** 1, **Hand: 1**



Weapon Name: Maushtika, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage:** 1, **Hand: 1**

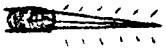
Weapon Name: Misercorde. Type: K, Length: .4m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types: Thrust, Dur: 95, Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Mit, **Type: K, Length:** .25m, **Mass:** .25kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur: 80, Throw: 1, Damage: 1, Hand: 1**

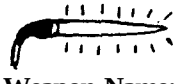


Weapon Name: Moplah, **Type: K, Length:** .5m, **Mass:** .7kg, **Dex:** 1, **Parry:** 1, **Attack Types: Chop, Dur: 80, Throw: 1, Damage: 2, Hand: 1**

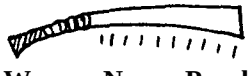
Weapon Name: Pahua, **Type: K, Length:** .6m, **Mass:** .6kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur: 65, Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Paischush, Type: K, Length: .4m, **Mass:** .7kg, **Dex: 1, Parry: 2, Attack Types: Thrust, Dur: 90, Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Palitai, Type: K, Length: .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur: 80, Throw: 1, Damage:** 1, **Hand: 1**

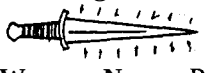


Weapon Name: Panabas, Type: K, Length: .6m, **Mass:** .7kg, **Dex: 1, Parry: 1, Attack Types: Chop, Dur: 80, Throw: 1, Damage: 2, Hand: 1**

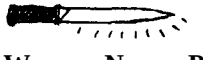
Weapon Name: Para-I-Tutti, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur: 85, Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Parang Ginah, Type: K, Length: .6m, **Mass:** .7kg, **Dex: 10, Parry:** 1, **Attack Types: Chop, Dur: 80, Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Parang Latok, Type: K, Length: .7m, Mass: .8kg, Dex: 1, Parry: 1, Attack Types: Chop, Dur: 80, Throw: 2, Damage: 2, Hand: 1



Weapon Name: Parazonium, **Type: K, Length:** .5m, **Mass:** .5kg, **Dex: 0, Parry: 2, Attack Types: Chop/Thrust, Dur: 80, Throw:** 1, **Damage: 2, Hand: 1**



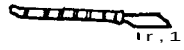
Weapon Name: Pavade, Type: K, Length: .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types: Thrust, Dur: 85, Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Pesh-Kabz , Type: K, Length: .3m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types: Thrust, Dur: 85, Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Phurbu, Type: K, Length: .25m, **Mass:** .25kg, **Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 85, Throw: 2, Damage:** 1, **Hand: 1**

Weapon Name: Pichangatti, **Type: K, Length:** .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types: Chop/Thrust, Dur: 85, Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Piha-Kaetta, Type: K, Length: .3m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Cut/Thrust, **Dur: 75, Throw:** 1, **Damage: 1, Hand: 1**

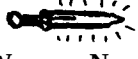


Weapon Name: Piso Raut, **Type: K, Length:** .4m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**

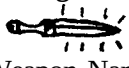
Weapon Name: Piso Tonkeng, Type: K, Length: .3m, **Mass:** .3kg, **Dex:** 1, **Parry:** 1, **Attack Types: Chop, Dur: 80, Throw: 2, Damage: 1, Hand: 1**

Weapon Name: Poignard, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 95, Throw: 1, Damage:** 1, **Hand: 1**

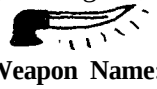
Weapon Name: Pokwe, Type: K, Length: .3m, **Mass:** .4kg, **Dex: 0, Parry:** 1, **Attack Types:** Cut/Thrust, **Dur: 75, Throw:** 1, **Damage:** 1, **Hand: 1**



Weapon Name: Pugio, **Type: K, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types: Thrust, Dur: 80, Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Qama, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Chop/Thrust, Dur: 85, Throw: 1, Damage: 1, Hand: 1

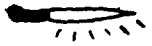


Weapon Name: Raut, Type: K, Length: .3m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1**

Weapon Name: Rentjang, Type: K, Length: .4m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 2, Damage: 1, Hand: 1

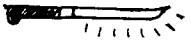
Weapon Name: Roundel Dagger, Type: K, Length: .6m, **Mass:** .45kg, **Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 85, Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Sabit, Type: K, Length: .25m, Mass: .3kg, Dex: 0, Parry: 1, Attack Types: Cut, Dur: 80, Throw: 2, Damage: 1, Hand: 1



Weapon Name: Sadoep, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Saffdara, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 85, Throw: 1, Damage: 1, Hand: 1



Weapon Name: Sakin, Type: K, Length: .4m, Mass: .3kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Scramasax, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Chop/Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Sekin, Type: K, Length: .3m, Mass: .3kg, Dex: 0, Parry: 1, Attack Types: Cut/Thrust, Dur: 85, Throw: 2, Damage: 1, Hand: 1

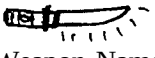
Weapon Name: Sewar, Type: K, Length: .4m, Mass: .5kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Sgain Dubh, Type: K, Length: .15m, Mass: .2kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

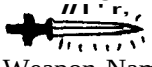
Weapon Name: Skain, Type: K, Length: .25m, Mass: .3kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Stiletto, Type: K, Length: .3m, Mass: .3kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 90, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Tadji, Type: K, Length: .4m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 75, Throw: 2, Damage: 1, Hand: 1



Weapon Name: Tanto, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Cut/Thrust, Dur: 90, Throw: 1, Damage: 1, Hand: 1



Weapon Name: Telek, Type: K, Length: .35m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Tjaluk, Type: K, Length: .25m, Mass: .3kg, Dex: 1, Parry: 1, Attack Types: Cut, Dur: 80, Throw: 2, Damage: 1, Hand: 1

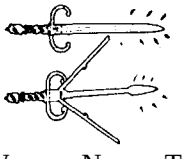
Weapon Name: Todo, Type: K, Length: .4m, Mass: .5kg, Dex: 0, Parry: 1, Attack Types: Chop, Dur: 80, Throw: 1, Damage: 2, Hand: 1

Weapon Name: Tolaki, Type: K, Length: .4m, Mass: .5kg, Dex: 0, Parry: 1, Attack Types: Chop/Thrust, Dur: 80, Throw: 1, Damage: 2, Hand: 1

Weapon Name: Tombak Lada, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 75, Throw: 1, Damage: 1, Hand: 1

Weapon Name: To-Su, Type: K, Length: .15m, Mass: .2kg, Dex: 0, Parry: 0, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Triangular Dagger, Type: K, Length: .4m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 85, Throw: 1, Damage: 1, Hand: 1



Weapon Name: Triple Dagger, Type: K, Length: .3m, Mass: .3kg, Dex: 0, Parry: 2, Attack Types: Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

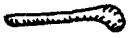
Weapon Name: Tuba, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Chop/Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Vinchu, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Chop/Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

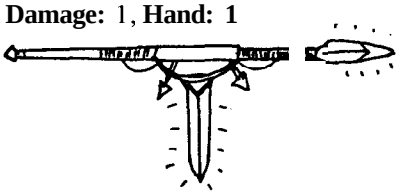
Weapon Name: Wedong, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Chop/Thrust, Dur: 80, Throw: 1, Damage: 1, Hand: 1

Weapon Name: Zirah Bouk, Type: K, Length: .3m, Mass: .4kg, Dex: 0, Parry: 1, Attack Types: Thrust, Dur: 90, Throw: 1, Damage: 1, Hand: 1

Miscellaneous Weapons

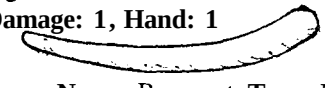


Weapon Name: Aclys, **Type: M, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 70, **Throw: 1, Damage:** 1, **Hand: 1**

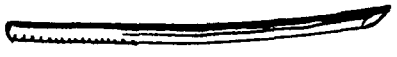


Weapon Name: Adarga, **Type: M, Length:** 1.1m, **Mass:** 1.9kg, **Dex: 2, Parry: 4, Attack Types:** Thrust, **Dur:** 80, **Throw: 4, Damage: 2, Hand: 1**

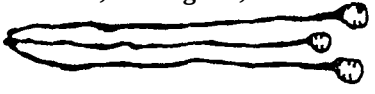
Weapon Name: Bagh Nakh, **Type: M, Length:** .1m, **Mass:** .05kg, **Dex:** 0, **Parry: 0, Attack Types:** Cut, **Dur:** 95, **Throw: 2, Damage: 1, Hand: 1**



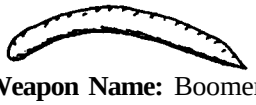
Weapon Name: Barngeet, **Type: M, Length:** .8m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Bokken, **Type: M, Length: 1.0m, Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 2**

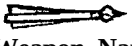


Weapon Name: Bolas, **Type: M, Length: 1.0m, Mass:** 1.0kg, **Dex:** 3, **Parry:** 1, **Attack Types:** Impact, **Dur:** 60, **Throw:** 1, **Damage:** 1, **Hand: 1**



Weapon Name: Boomerang, **Type: M, Length:** .6m, **Mass:** .4kg, **Dex:** 0, **Parry: 1, Attack Types:** Impact, **Dur:** 65, **Throw:** 1, **Damage:** 1, **Hand: 1**

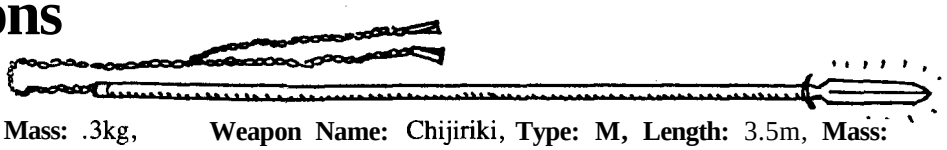
Weapon Name: Bullwhip, **Type: M, Length:** 2.5m, **Mass:** 1.4kg, **Dex:** 2, **Parry: 2, Attack Types:** Cut/Impact, **Dur:** 70, **Throw: 4, Damage: 2, Hand: 1**



Weapon Name: Cestrosphendone, **Type: M, Length:** .3m, **Mass:** .1kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Cestus, **Type: M, Length:** 2.5m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 0, Attack Types:** Impact, **Dur:** 80, **Throw:** —, **Damage:** 1, **Hand: 1**

Weapon Name: Chakram, **Type: M, Length:** .3m, **Mass:** .2kg, **Dex: 0, Parry: 0, Attack Types: Cut, Dur:** 85, **Throw: 1, Damage:** 1, **Hand: 1**

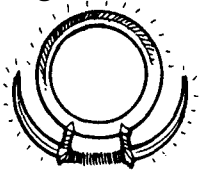


Weapon Name: Chijiriki, **Type: M, Length:** 3.5m, **Mass:** 2.5kg, **Dex:** 2, **Parry: 3, Attack Types:** Thrust/Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 2**

Weapon Name: Dowak, **Type: M, Length:** .4m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 65, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Fakir's Horns, **Type: M, Length:** .4m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 85, **Throw: 3, Damage:** 1, **Hand: 1**

Weapon Name: Fry Pan, **Type: M, Length:** .4m, **Mass:** 2.3kg, **Dex:** 2, **Parry:** 1, **Attack Types:** Impact, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**

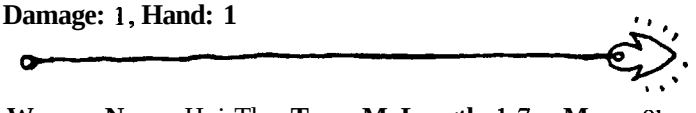


Weapon Name: Full Moon, **Type: M, Length:** .5m, **Mass:** 1.9kg, **Dex: 1, Parry: 3, Attack Types:** Cut, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**

Weapon Name: Gunsen, Type: M, Length: .3m, **Mass:** .5kg, **Dex: 0, Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**

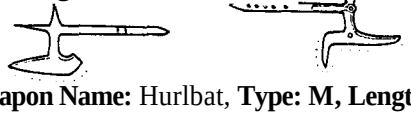
Weapon Name: Hair Pin, **Type: M, Length:** .15m, **Mass:** .01kg, **Dex:** 0, **Parry: 0, Attack Types:** Thrust, **Dur:** 50, **Throw: 1, Damage: 1/2, Hand: 1**

Weapon Name: Hora, Type: M, Length: .1m, **Mass:** .05kg, **Dex:** 0, **Parry: 0, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage:** 1, **Hand: 1**



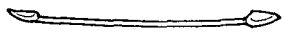
Weapon Name: Hui-Tho, **Type: M, Length:** 1.7m, **Mass:** .8kg, **Dex: 2, Parry: 2, Attack Types:** Cut, **Dur:** 65, **Throw: 3, Damage: 2, Hand: 2**

Weapon Name: Hunga-Munga, **Type: M, Length:** .6m, **Mass:** 1.2kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Chop, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 1**

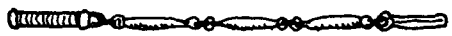


Weapon Name: Hurlbat, **Type: M, Length:** .5m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 90, **Throw:** 1, **Damage: 3, Hand: 1**

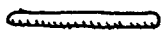
Weapon Name: Ice Pick, **Type: M, Length:** .2m, **Mass:** .1kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Kangaroo Rat, **Type: M, Length:** .6m, **Mass:** .5kg, **Dex:** 1, **Parry:** 1, **Attack Types:** Thrust, **Dur:** 65, **Throw: 1, Damage:** 1, **Hand: 1**

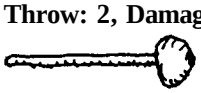


Weapon Name: Kau Sin Ke, **Type: M, Length:** 1.1m, **Mass:** .8kg, **Dex: 2, Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage:** 1, **Hand: 2**



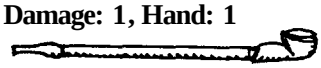
Weapon Name: Kauah, **Type: M, Length:** .4m, **Mass:** .8kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Kawanaga, **Type: M, Length:** 5.0m, **Mass:** 3.0kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 2, Damage: 1, Hand: 2**



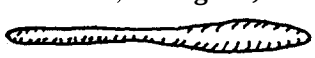
Weapon Name: Kerrie, **Type: M, Length:** .5m, **Mass:** .9kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Kirasoo, **Type: M, Length:** .9m, **Mass:** .4kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 2, Damage: 1, Hand: 1**



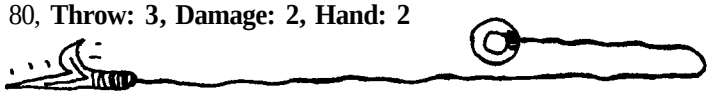
Weapon Name: Kiseru, **Type: M, Length:** .8m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Knuckle Duster, **Type: M, Length: .1m, Mass:** 1.4kg, **Dex:** 0, **Parry: 0, Attack Types:** Impact, **Dur:** 90, **Throw:** 1, **Damage: 1, Hand: 1**



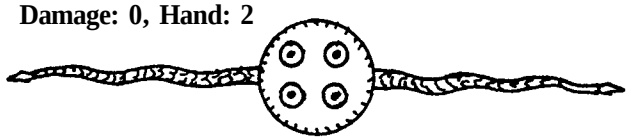
Weapon Name: Kunnin, **Type: M, Length:** .7m, **Mass:** .5kg, **Dex: 0, Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 1, Damage:** 1, **Hand: 1**

Weapon Name: Kusarigama, **Type: M, Length:** 2.2m, **Mass:** 1.6kg, **Dex:** 2, **Parry: 3, Attack Types:** Chop/Impact, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 2**

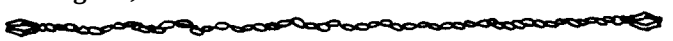


Weapon Name: Kyoketsu-Shogi, **Type: M, Length:** 2.5m, **Mass:** 1.4kg, **Dex:** 2, **Parry: 2, Attack Types: Chop/Thrust, Dur:** 70, **Throw: 3, Damage: 2, Hand: 2**

Weapon Name: Lariat, **Type: M, Length:** 2.0m, **Mass:** .8kg, **Dex: 2, Parry: 2, Attack Types:** Special, **Dur:** 70, **Throw: 2, Damage: 0, Hand: 2**

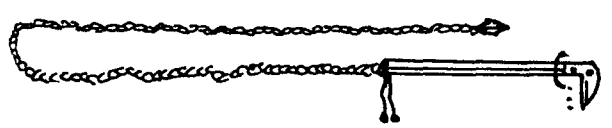


Weapon Name: Madu, **Type: M, Length:** 1.6m, **Mass:** 2.8kg, **Dex:** 1, **Parry: 4, Attack Types:** Thrust, **Dur:** 85, **Throw: 3, Damage: 1, Hand: 1**

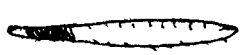


Weapon Name: Manriki-Gusari, **Type: M, Length:** 1.7m, **Mass:** I.ikg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 3, Damage: 1, Hand: 2**

Weapon Name: Mongwanga, **Type: M, Length:** .7m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw:** 1, **Damage: 3, Hand: 1**



Weapon Name: Nagegama, **Type: M, Length:** 3.0m, **Mass:** 2.0kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**

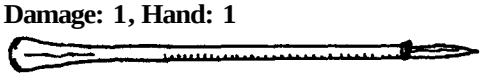


Weapon Name: Nolla-Nolla, **Type: M, Length:** .6m, **Mass:** .4kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Paku, **Type: M, Length:** .03m, **Mass:** .01kg, **Dex:** 0, **Parry: 0, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage:** 1, **Hand: 1**

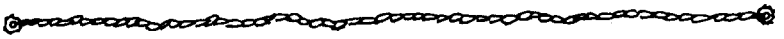
Weapon Name: Pendjepit, **Type: M, Length: .1m, Mass: .1kg, Dex: 0, Parry: 0, Attack Types:** Special, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 1**

Weapon Name: Piau, Type: M, Length: .1m, **Mass:** .1kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 90, **Throw: 1, Damage: 1, Hand: 1**

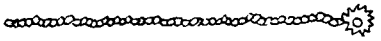


Weapon Name: Pouwhenua, **Type: M, Length:** 1.2m, **Mass:** .8kg, **Dex: 0, Parry: 1, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw: 2, Damage: 1, Hand: 2**

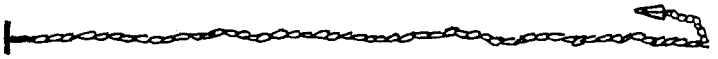
Weapon Name: Quirriang-An-Wun, **Type: M, Length:** .9m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 70, **Throw:** 1, **Damage: 1, Hand: 1**



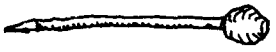
Weapon Name: Rante, **Type: M, Length: 2.0m, Mass:** .7kg, **Dex: 2, Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage:** 1, **Hand: 2**



Weapon Name: Rante (star type), **Type: M, Length: 1.0m, Mass:** .5kg, **Dex: 2, Parry: 2, Attack Types:** Cut/Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



Weapon Name: Rante Ber Gangedug, **Type: M, Length:** 2.2m, **Mass:** .7kg, **Dex: 2, Parry: 2, Attack Types:** Cut/Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



Weapon Name: Rungu, **Type: M, Length:** .4m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**

Weapon Name: Saintie, **Type: M, Length:** .7m, **Mass:** 1.8kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage: 2, Hand: 1**

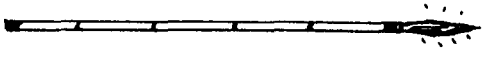
Weapon Name: Sang Kauw, **Type: M, Length: 1.0m, Mass:** 1.8kg, **Dex:** 1, **Parry: 4, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**

Weapon Name: Shears, **Type: M, Length:** .25m, **Mass:** .3kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 75, **Thro** **2, Damage:** 1, **Hand: 1**

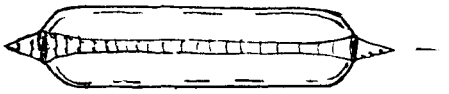
Weapon Name: Shuko, **Type: M, Length:** .1m, **Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**

Weapon Name: Shuriken, **Type: M, Length:** .05-.4m, **Mass:** .1kg, **Dex: 0, Parry: 0, Attack Types:** Thrust, **Dur:** 90, **Throw:** 1, **Damage:** 1, **Hand: 1**

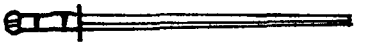
Weapon Name: Singa, **Type: M, Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 1**



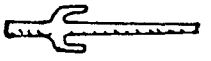
Weapon Name: Sopok, **Type: M, Length:** 1.2m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrust, **Dur:** 60, **Throw:** 1, **Damage:** 1, **Hand: 2**



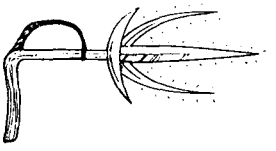
Weapon Name: Sword Shield, **Type: M, Length:** 1.5m, **Mass:** 2.5kg, **Dex:** 2, **Parry: 4, Attack Types:** Thrust, **Dur:** 90, **Throw: 4, Damage: 2, Hand: 1**



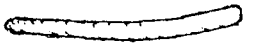
Weapon Name: Tau-Kieu, **Type: M, Length:** .9m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust/Impact, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Tjabang, **Type:** M, **Length:** .5m, **Mass:** 1.1kg, **Dex: 0, Parry: 3, Attack Types:** Thrust/Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

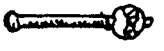


Weapon Name: Trident Weapon, **Type: M, Length:** .5m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 1**

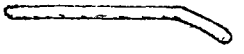


Weapon Name: Tromgash, **Type: M, Length:** .6m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 1**

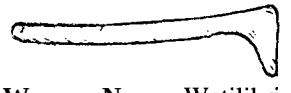
Weapon Name: Uchi-Ne, **Type: M, Length:** .3m, **Mass:** 1.2kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**



Weapon Name: Ulas, **Type: M, Length:** 1.3m, **Mass:** 1.4kg, **Dex:** 0, **Parry:** 1, **Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 1**



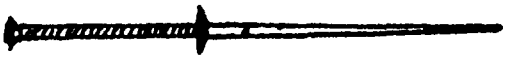
Weapon Name: Uramanta, **Type: M, Length:** .6m, **Mass:** .2kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 1**



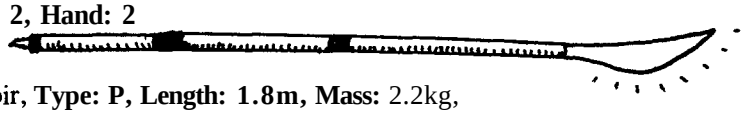
Weapon Name: Watilikri, **Type: M, Length:** .7m, **Mass:** .5kg, **Dex: 0, Parry:** 1, **Attack Types:** Impact, **Dur:** 80, **Throw:** 1, **Damage:** 1, **Hand: 1**

Weapon Name: Wind Fire Wheel, **Type: M, Length:** .3m, **Mass:** .3kg, **Dex: 0, Parry: 1, Attack Types: Cut, Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

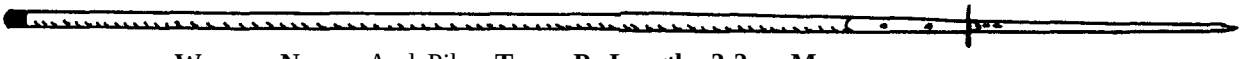
Polearms



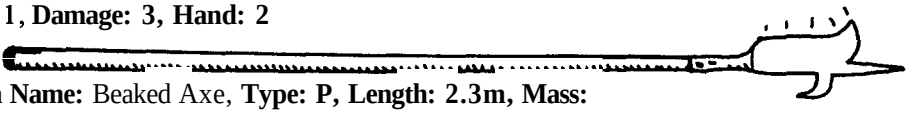
Weapon Name: Ahlspiess, **Type: P, Length: 1.5m, Mass:** 1.9kg, **Dex: 1, Parry: 3, Attack Types:** Thrust, **Dur:** 90, **Throw:** 1, **Damage: 2, Hand: 2**



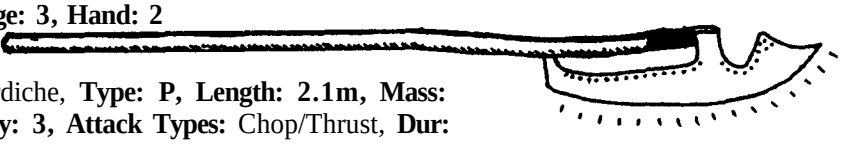
Weapon Name: Arbir, Type: P, Length: 1.8m, Mass: 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw:** 1, **Damage: 3, Hand: 2**



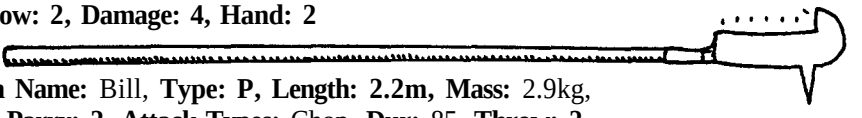
Weapon Name: Awl Pike, **Type: P, Length: 3.2m, Mass:** 2.7kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw: 1, Damage: 3, Hand: 2**



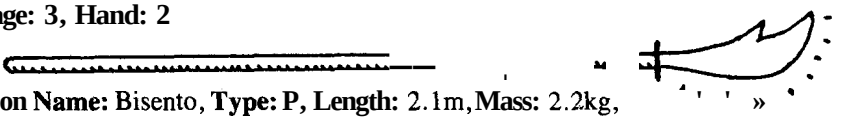
Weapon Name: Beaked Axe, **Type: P, Length: 2.3m, Mass: 2.9kg, Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2 Damage: 3, Hand: 2**



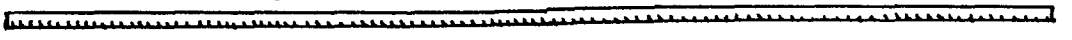
Weapon Name: Berdiche, **Type: P, Length: 2.1m, Mass:** 3.1kg, **Dex:** 2, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 4, Hand: 2**



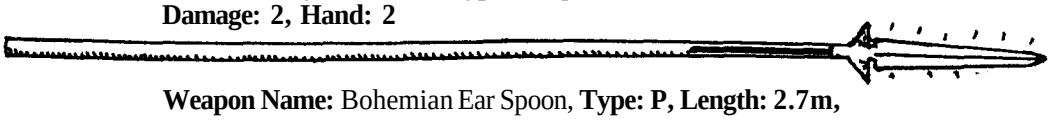
Weapon Name: Bill, **Type: P, Length: 2.2m, Mass:** 2.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 2**



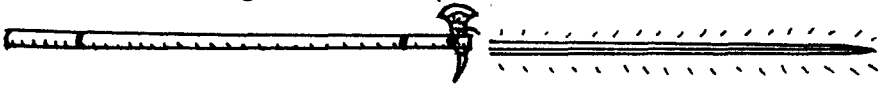
Weapon Name: Bisento, Type: P, Length: 2.1m, **Mass:** 2.2kg, **Dex: 1, Parry: 2, Attack Types: Cut/Thrust, Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



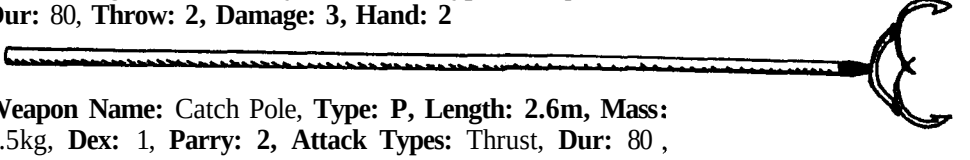
Weapon Name: Bo, Type: P, Length: 2.8m, Mass: 1.4kg, **Dex: 1, Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**



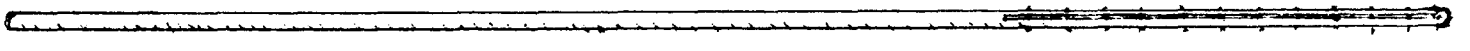
Weapon Name: Bohemian Ear Spoon, **Type: P, Length: 2.7m, Mass:** 2.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw: 1, Damage: 3, Hand: 2**



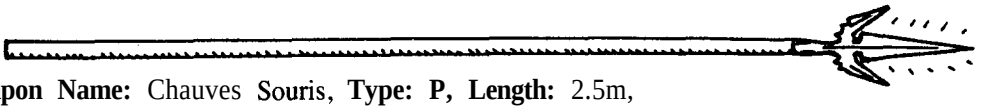
Weapon Name: Brandestoc, **Type: M, Length:** 1.2m/2.2m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



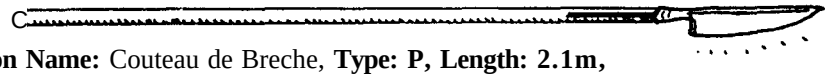
Weapon Name: Catch Pole, **Type: P, Length: 2.6m, Mass:** 2.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 80 , **Throw: 2, Damage: 2, Hand: 2**



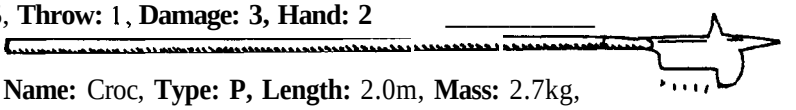
Weapon Name: Chacing Staff, **Type: P, Length:** 3.75m, **Mass:** 3.0kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 2**



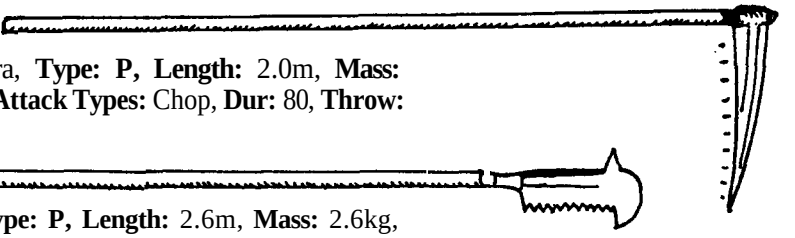
Weapon Name: Chauves Souris, **Type: P, Length:** 2.5m, **Mass:** 2.5kg, **Dex: 1, Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage: 3, Hand: 2**



Weapon Name: Couteau de Breche, **Type: P, Length: 2.1m, Mass:** 2.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw:** 1, **Damage: 3, Hand: 2**

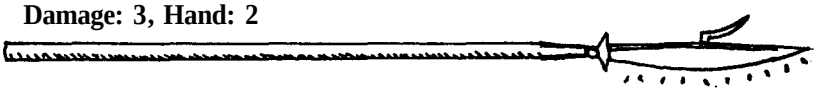


Weapon Name: Croc, **Type: P, Length:** 2.0m, **Mass:** 2.7kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 2**

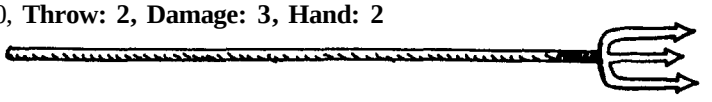


Weapon Name: Falcastra, **Type: P, Length:** 2.0m, **Mass:** 2.6kg, **Dex:** 2, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**

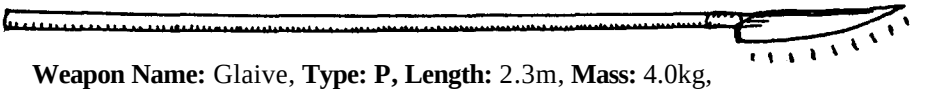
Weapon Name: Falx, **Type: P, Length:** 2.6m, **Mass:** 2.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



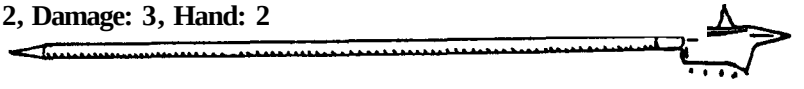
Weapon Name: Fauchard, **Type: P, Length: 2.1m, Mass:** 2.9kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



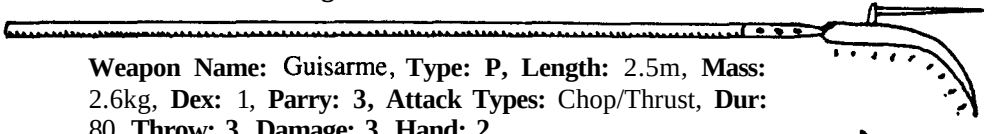
Weapon Name: Fuscina, **Type: P, Length:** 1.8m, **Mass:** 2.1kg, **Dex: 1, Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 3, Hand: 2**



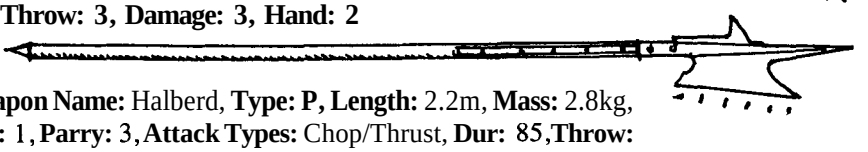
Weapon Name: Glaive, **Type: P, Length:** 2.3m, **Mass:** 4.0kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 2**



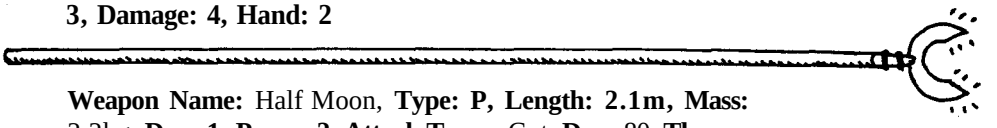
Weapon Name: Godendag, **Type: P, Length:** 2.0m, **Mass:** 2.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



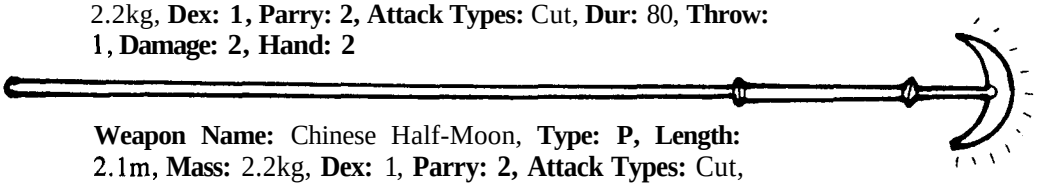
Weapon Name: Guisarme, **Type: P, Length:** 2.5m, **Mass:** 2.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**



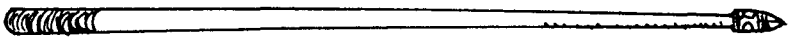
Weapon Name: Halberd, **Type: P, Length:** 2.2m, **Mass:** 2.8kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 4, Hand: 2**



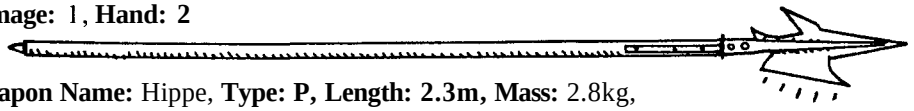
Weapon Name: Half Moon, **Type: P, Length: 2.1m, Mass:** 2.2kg, **Dex: 1, Parry: 2, Attack Types:** Cut, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



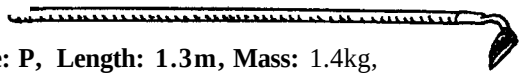
Weapon Name: Chinese Half-Moon, **Type: P, Length:** 2.1m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut, **Dur:** 85, **Throw: 1, Damage: 1, Hand: 2**



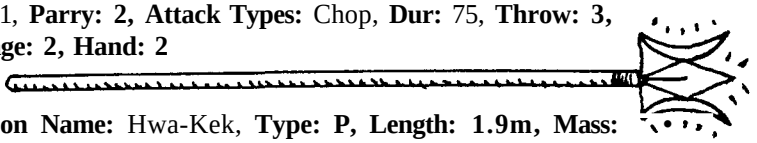
Weapon Name: Hani, **Type: P, Length:** 2.0m, **Mass:** 1.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 75, **Throw: 1, Damage:** 1, **Hand: 2**



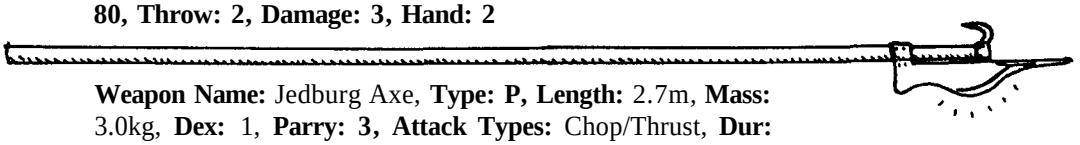
Weapon Name: Hippe, **Type: P, Length: 2.3m, Mass:** 2.8kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 2**



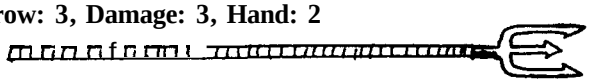
Weapon Name: Hoe, Type: P, Length: 1.3m, Mass: 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 75, **Throw: 3, Damage: 2, Hand: 2**



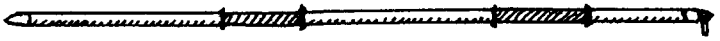
Weapon Name: Hwa-Kek, **Type: P, Length: 1.9m, Mass:** 2.4kg, **Dex:** 1, **Parry: 2, Attack Types: Chop/Thrust, Dur: 80, Throw: 2, Damage: 3, Hand: 2**



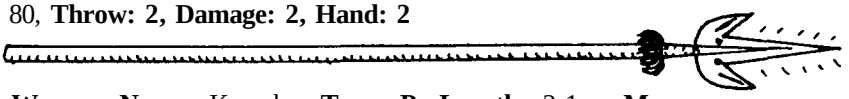
Weapon Name: Jedburg Axe, **Type: P, Length:** 2.7m, **Mass:** 3.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**



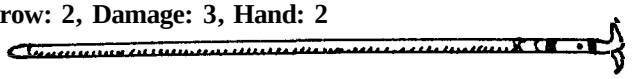
Weapon Name: Khatramkha, **Type: P, Length:** 1.5m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage: 3, Hand: 2**



Weapon Name: Kongo-Zue, **Type: M, Length:** 1.8m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**

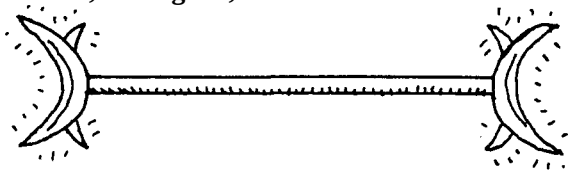


Weapon Name: Korseke, **Type: P, Length:** 2.1m, **Mass:** 2.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 2**

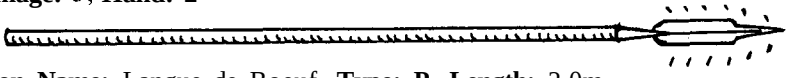


Weapon Name: Kumade, **Type: P, Length: 1.6m, Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 2**

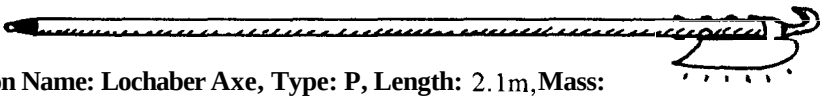
Weapon Name: Kunjukdan, **Type: P, Length:** 2.2m, **Mass:** 2.7kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 2**



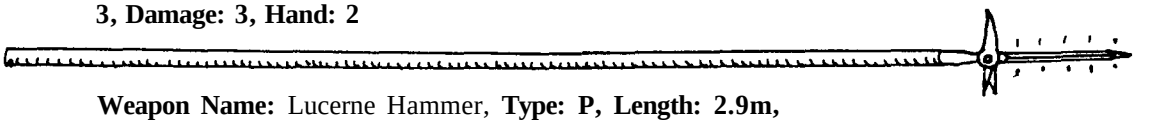
Weapon Name: Lajatang, **Type: P, Length: 1.4m, Mass:** 2.3kg, **Dex:** 2, **Parry: 3, Attack Types:** Cut, **Dur:** 80, **Throw:** 3, **Damage:** 3, **Hand: 2**



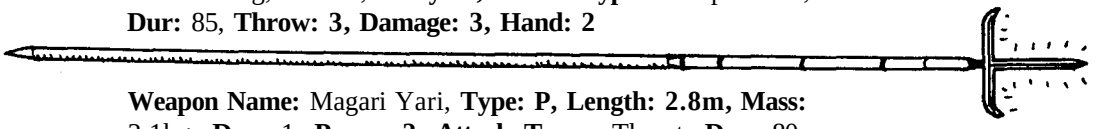
Weapon Name: Langue de Boeuf, **Type: P, Length:** 2.0m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



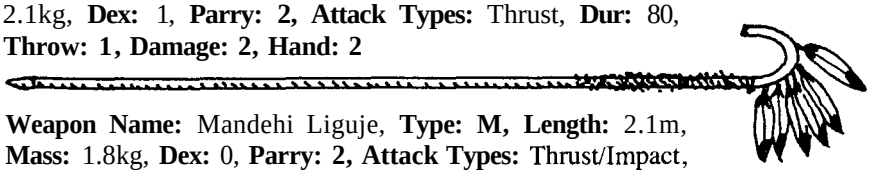
Weapon Name: Lochaber Axe, Type: P, Length: 2.1m, **Mass:** 2.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**



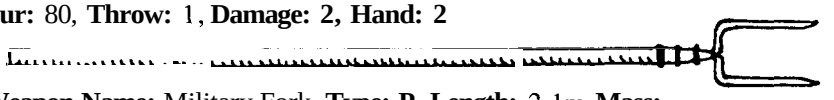
Weapon Name: Lucerne Hammer, **Type: P, Length: 2.9m, Mass:** 3.5kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 2**



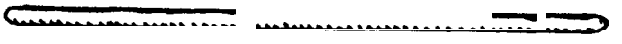
Weapon Name: Magari Yari, **Type: P, Length: 2.8m, Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



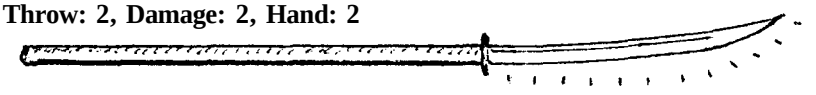
Weapon Name: Mandehi Liguje, **Type: M, Length:** 2.1m, **Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 2**



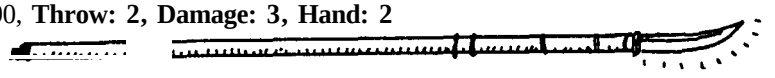
Weapon Name: Military Fork, **Type: P, Length:** 2.1m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



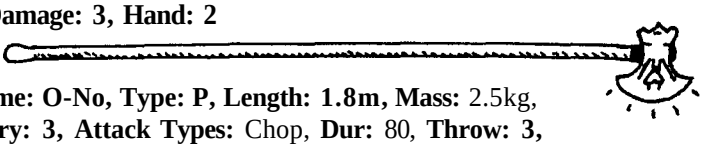
Weapon Name: Naboot, **Type: M, Length:** 1.6m, **Mass:** 1.4kg, **Dex: 0, Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 70, **Throw: 2, Damage: 2, Hand: 2**



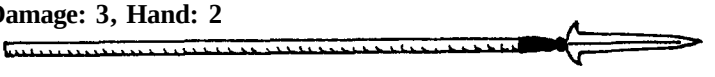
Weapon Name: Nagamaki, **Type: P, Length: 2.1m, Mass:** 2.0kg, **Dex:** 2, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 2**



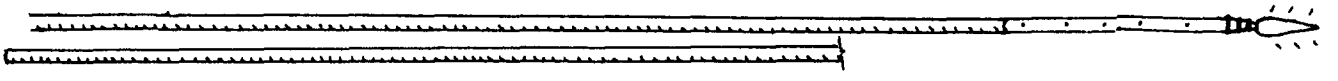
Weapon Name: Naginata, **Type: P, Length: 2.2m, Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 2**



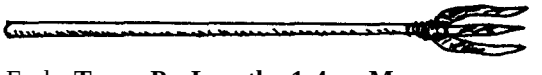
Weapon Name: O-No, Type: P, Length: 1.8m, Mass: 2.5kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**



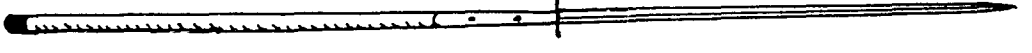
Weapon Name: Partizan, **Type: P, Length:** 1.8m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 2**



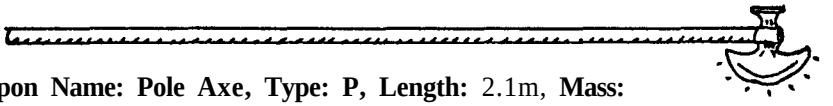
Weapon Name: Pike, **Type: P, Length:** 5.5m, **Mass:** 6.5kg, **Dex:** 3, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



Weapon Name: Pitch Fork, **Type: P, Length: 1.4m, Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 2, Damage: 2, Hand: 2**

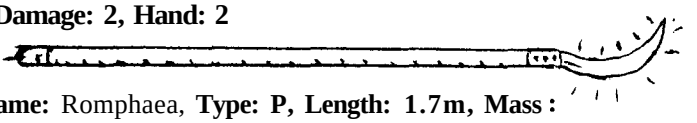


Weapon Name: Plancon a Picot, **Type: P, Length:** 3.0m, **Mass:** 2.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 1, Damage: 3, Hand: 2**

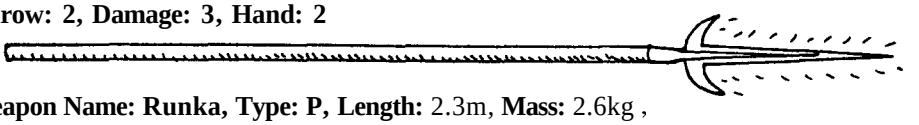


Weapon Name: Pole Axe, Type: P, Length: 2.1m, **Mass:** 2.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 2**

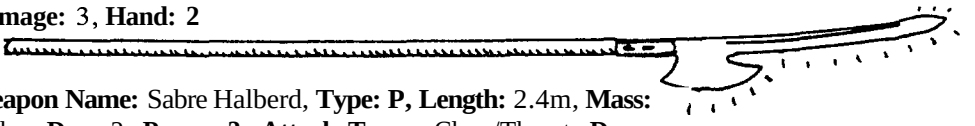
Weapon Name: Quarterstaff, **Type: P, Length:** 1.8m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



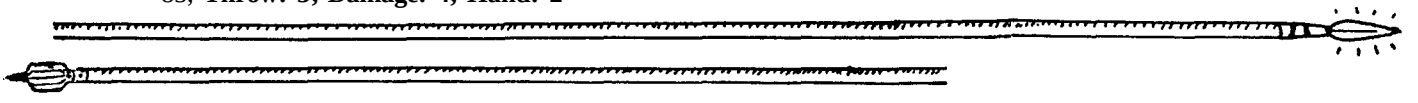
Weapon Name: Romphaea, **Type: P, Length: 1.7m, Mass:** 1.8kg, **Dex:** 2, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



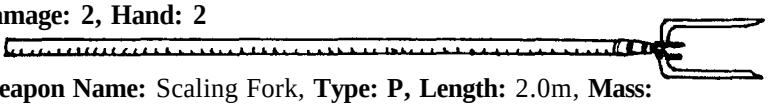
Weapon Name: Runka, Type: P, Length: 2.3m, **Mass:** 2.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw: 2, Damage:** 3, **Hand: 2**



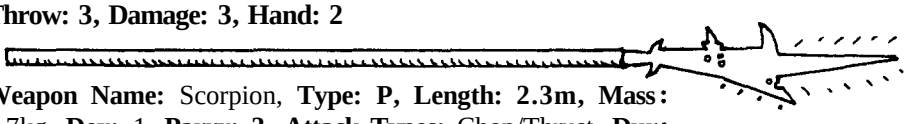
Weapon Name: Sabre Halberd, **Type: P, Length:** 2.4m, **Mass:** 3.2kg, **Dex:** 2, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 4, Hand: 2**



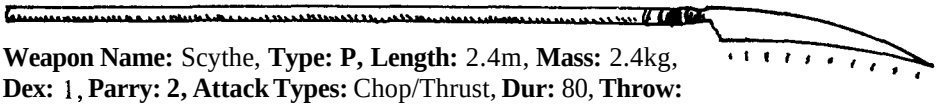
Weapon Name: Sarissa, **Type: P, Length: 6.0m, Mass:** 7.0kg, **Dex:** 3, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



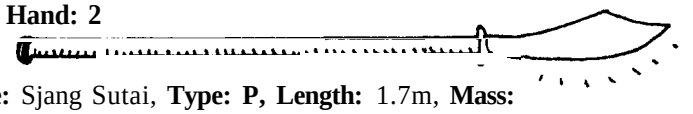
Weapon Name: Scaling Fork, **Type: P, Length:** 2.0m, **Mass:** 2.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 2**



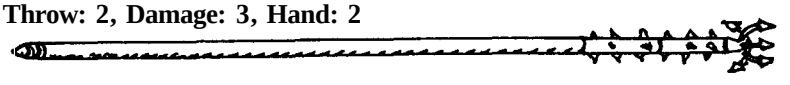
Weapon Name: Scorpion, **Type: P, Length: 2.3m, Mass:** 2.7kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 4, Hand: 2**



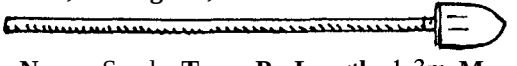
Weapon Name: Scythe, **Type: P, Length:** 2.4m, **Mass:** 2.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



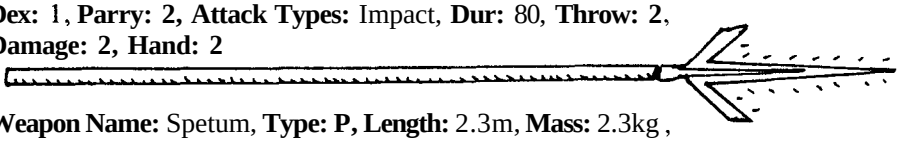
Weapon Name: Sjang Sutai, **Type: P, Length:** 1.7m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



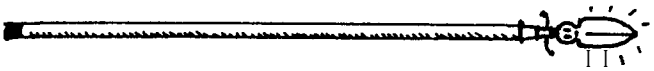
Weapon Name: Sode Garami, **Type: P, Length:** 2.0m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust/Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 2**



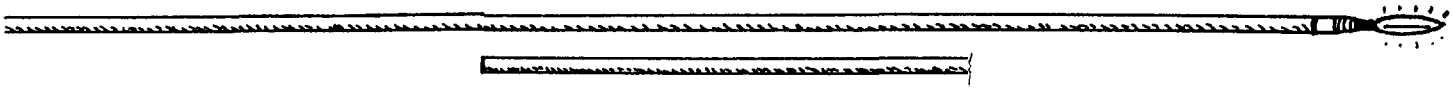
Weapon Name: Spade, **Type: P, Length:** 1.3m, **Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Impact, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 2**



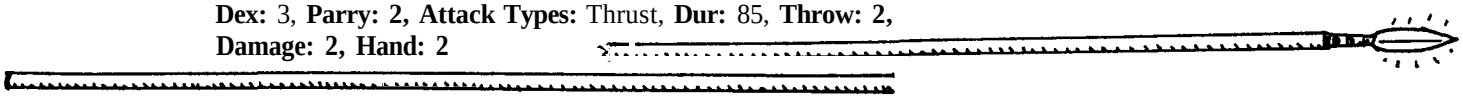
Weapon Name: Spetum, **Type: P, Length:** 2.3m, **Mass:** 2.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



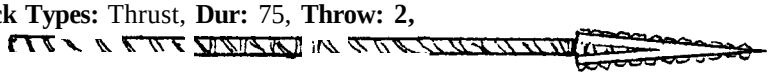
Weapon Name: Spontoon, Type: P, Length: 1.6m, Mass: 2.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 2**



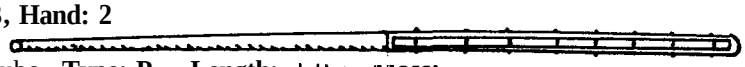
Weapon Name: Sudis, **Type: P, Length:** 5.0m, **Mass:** 6.0kg, **Dex:** 3, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 2**



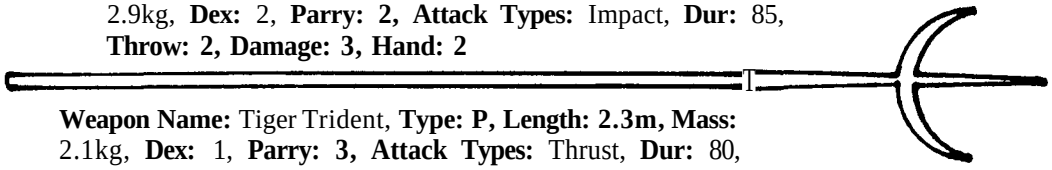
Weapon Name: Taru, Type: P, Length: 4.5m, **Mass:** 4.0kg, **Dex:** 3, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 2, Damage: 2, Hand:** 2



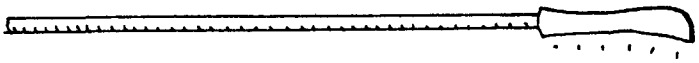
Weapon Name: Tepoztopilli, **Type: P, Length:** 1.9m, **Mass:** 1.8kg, **Dex:** 2, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 2**



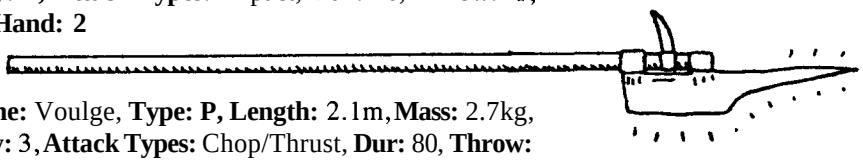
Weapon Name: Tetsubo, **Type: P, Length:** 1.9m, **Mass:** 2.9kg, **Dex:** 2, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 2**



Weapon Name: Tiger Trident, **Type: P, Length: 2.3m, Mass:** 2.1kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 4, Hand: 2**

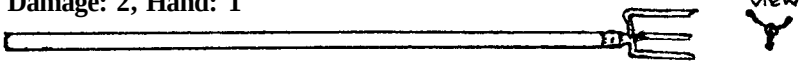


Weapon Name: Toyak, **Type: P, Length: 1.8m, Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Voulge, **Type: P, Length:** 2.1m, **Mass:** 2.7kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 4, Hand: 2**

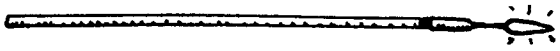
Weapon Name: Yoribo, **Type: P, Length: 1.8m, Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Impact, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



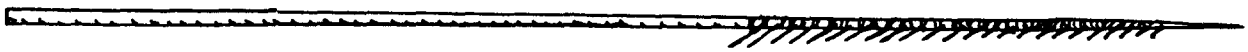
Weapon Name: Zinnor, **Type: P, Length: 1.8m, Mass: 1.2kg, Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage: 3, Hand: 2**

Spears

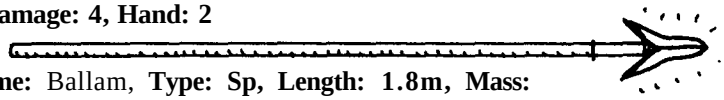
Weapon Name: Angon, **Type: Sp, Length:** 1.5m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types: Thrust, Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**



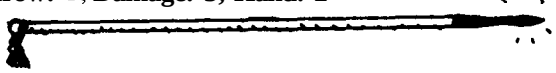
Weapon Name: Assegai, **Type: Sp, Length: 1.4m, Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



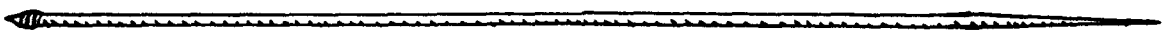
Weapon Name: Aunurgith, **Type: Sp, Length:** 3.2m, **Mass:** 3.2kg, **Dex:** 2, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw: 1, Damage: 4, Hand: 2**



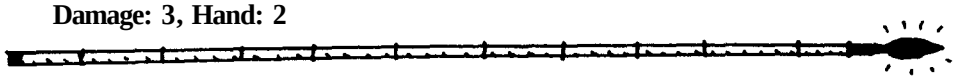
Weapon Name: Ballam, **Type: Sp, Length: 1.8m, Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 3, Hand: 2**



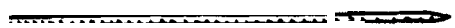
Weapon Name: Bandang, **Type:** Sp, **Length:** 1.4m, **Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Barchi, **Type: Sp, Length: 3.0m, Mass:** 2.8kg, **Dex:** 2, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 3, Hand: 2**



Weapon Name: Bhala, **Type:** Sp, **Length:** 2.4m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**

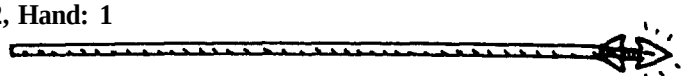


Weapon Name: Bilari, **Type:** Sp, **Length:** 1.2m, **Mass: 1.1kg, Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**

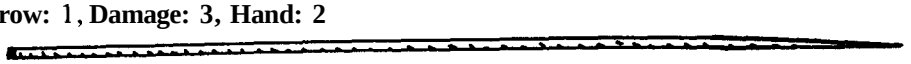
Weapon Name: Boar Spear, **Type: Sp, Length: 1.5m, Mass:** 2.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**

Weapon Name: Budiak, **Type:** Sp, **Length: 1.6m, Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**

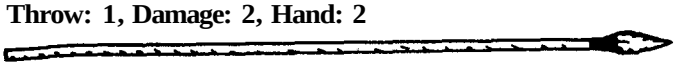
Weapon Name: Cateia, **Type: Sp, Length:** 1.7m, **Mass: .9kg, Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 1**



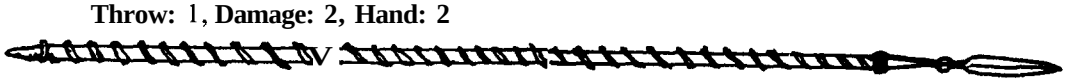
Weapon Name: Chimbane, **Type:** Sp, **Length:** 1.7m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 3, Hand: 2**



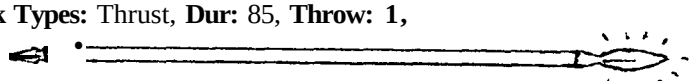
Weapon Name: Contus, Type: Sp, **Length:** 2.3m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



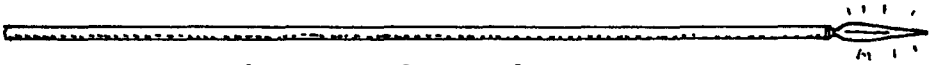
Weapon Name: Do-War, **Type:** Sp, **Length: 1.7m, Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types: Thrust, Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



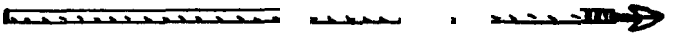
Weapon Name: Dung, Type: Sp, **Length:** 2.7m, **Mass:** 3.3kg, **Dex:** 2, **Parry: 3, Attack Types:** Thrust, **Dur:** 85, **Throw: 1, Damage: 3, Hand: 2**



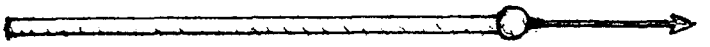
Weapon Name: Egchos, **Type:** Sp, **Length:** 1.7m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage: 2, Hand: 2**



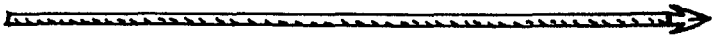
Weapon Name: Enhero, **Type: Sp, Length:** 2.4m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



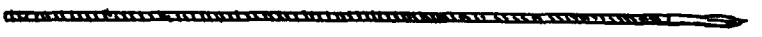
Weapon Name: Fal-Feg, **Type: Sp, Length: 1.7m, Mass:** 2.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**



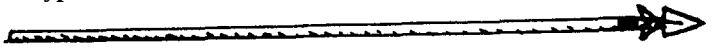
Weapon Name: Falarica, **Type: Sp, Length: 1.8m, Mass:** 2.0kg, **Dex:** 1, **Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 3, Hand: 1**



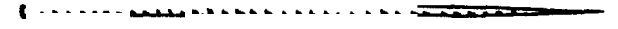
Weapon Name: Framea, **Type: Sp, Length: 1.8m, Mass:** 2.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



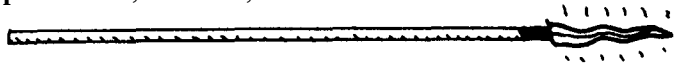
Weapon Name: Garvo, **Type:** Sp, **Length: 1.9m, Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



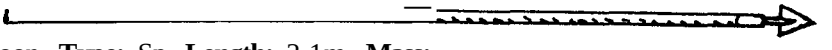
Weapon Name: Golo, **Type:** Sp, **Length: 1.8m, Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



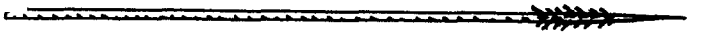
Weapon Name: Granggang, **Type: Sp, Length: 1.5m, Mass:** 1.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Hak, **Type: Sp, Length: 1.7m, Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**



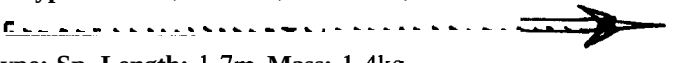
Weapon Name: Harpoon, **Type:** Sp, **Length:** 2.1m, **Mass:** 2.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



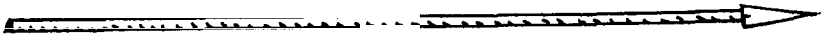
Weapon Name: Hinyuan, **Type: Sp, Length: 1.7m, Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw:** 1, **Damage: 3, Hand: 2**

Weapon Name: Hoko, **Type: Sp, Length:** 1.8m, **Mass:** 2.1kg, **Dex: 0, Parry: 3, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 2**

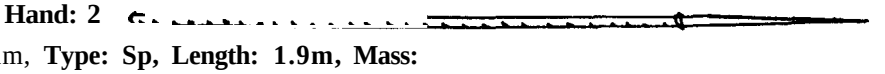
Weapon Name: Huata, **Type: Sp, Length: 1.5m, Mass:** 1.0kg, **Dex:** 0, **Parry:** 2, **Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



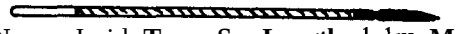
Weapon Name: Irpull, **Type: Sp, Length:** 1.7m, **Mass:** 1.4kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



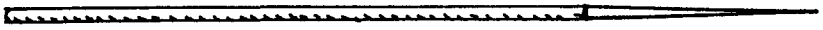
Weapon Name: Ja-Mandehi, **Type:** Sp, **Length:** 2.1m, **Mass:** 1.7kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



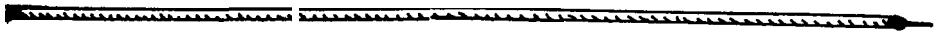
Weapon Name: Jaculum, **Type: Sp, Length: 1.9m, Mass:** I.ikg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



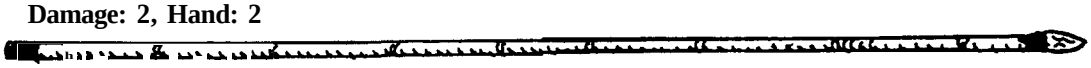
Weapon Name: Jarid, **Type: Sp, Length:** 1.1m, **Mass:** 1.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage:** 1, **Hand: 2**



Weapon Name: Javelin, **Type: Sp, Length: 2.1m, Mass:** 1.7kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**

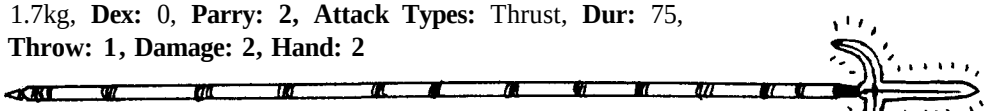


Weapon Name: Jiboru, **Type: Sp, Length:** 2.7m, **Mass:** 1.8kg, **Dex: 1, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**

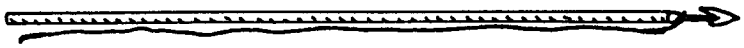


Weapon Name: Kadji, **Type: Sp, Length: 2.8m, Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw: 1, Damage: 2, Hand: 2**

Weapon Name: Kahsita, **Type: Sp, Length:** 2.1m, **Mass:** 1.7kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**

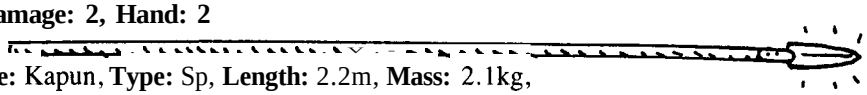


Weapon Name: Kamayari, **Type: Sp, Length:** 2.5m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 3, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 3, Hand: 2**

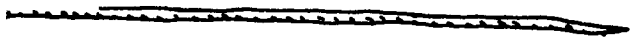


Weapon Name: Kan-Shoka, **Type: Sp, Length: 1.9m, Mass:** 2.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 3, Hand:** 2

Weapon Name: Kannai, **Type: Sp, Length: 2.1m, Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**

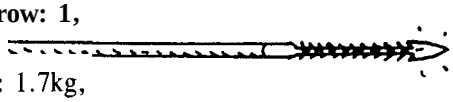


Weapon Name: Kapun, **Type:** Sp, **Length:** 2.2m, **Mass:** 2.1kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**

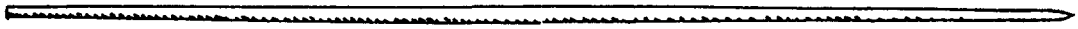


Weapon Name: Kiero, **Type: Sp, Length:** 1.8m,**Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw:** 1, **Damage: 2, Hand: 2**

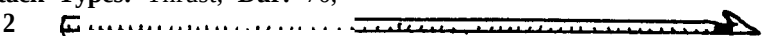
Weapon Name: Kikuki, **Type: Sp, Length:** 1.4m,**Mass:** 1.2kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



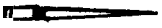
Weapon Name: Koveh, **Type:** Sp, **Length:** 2.0m, **Mass:** 1.7kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 3, **Hand: 2**



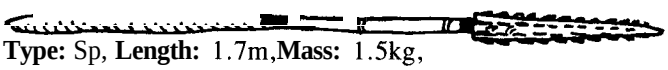
Weapon Name: Koy-Yung, **Type: Sp, Length: 2.8m, Mass:** 2.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 3, Hand: 2**



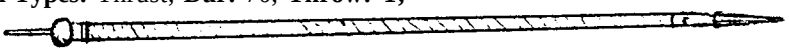
Weapon Name: Koyun, **Type:** Sp, **Length:** 1.8m,**Mass:** 1.7kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



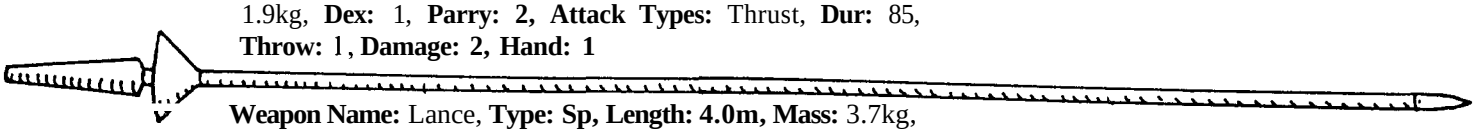
Weapon Name: Kujolio, **Type: Sp, Length:** 1.4m,**Mass:** .3kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 60, **Throw: 1, Damage: 2, Hand: 2**



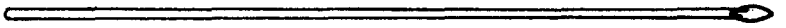
Weapon Name: Kuyan, **Type:** Sp, **Length:** 1.7m,**Mass:** 1.5kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



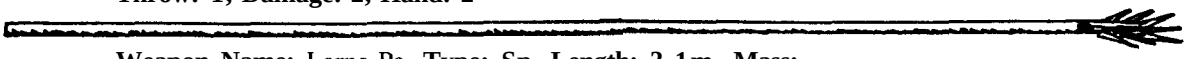
Weapon Name: Laange, **Type:** Sp, **Length:** 2.0m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw:** 1, **Damage: 2, Hand: 1**



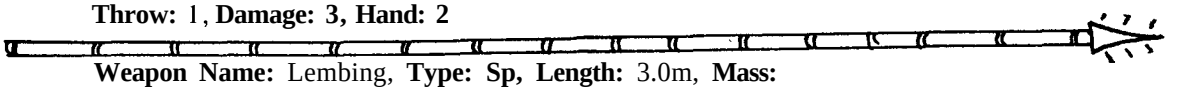
Weapon Name: Lance, **Type: Sp, Length: 4.0m, Mass:** 3.7kg, **Dex:** 2, **Parry: 3, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 3, Hand: 1**



Weapon Name: Lance-Ague, **Type: Sp, Length: 2.0m, Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**

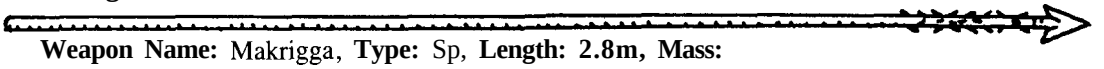


Weapon Name: Larna-Pe, **Type: Sp, Length: 3.1m, Mass:** 2.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 3, Hand: 2**

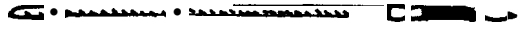


Weapon Name: Lembing, **Type: Sp, Length:** 3.0m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw:** 1, **Damage: 2, Hand: 2**

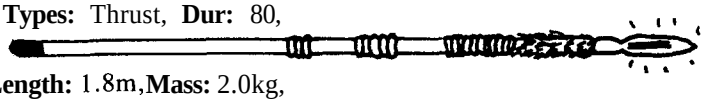
Weapon Name: Mahee, **Type: Sp, Length: 2.8m, Mass:** 1.9kg, **Dex: 1, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



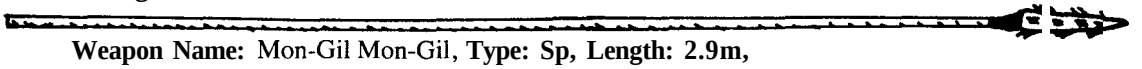
Weapon Name: Makrigga, **Type:** Sp, **Length: 2.8m, Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**



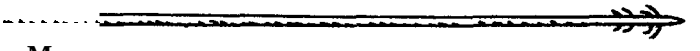
Weapon Name: Makura Yari, **Type: Sp, Length:** 1.3m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



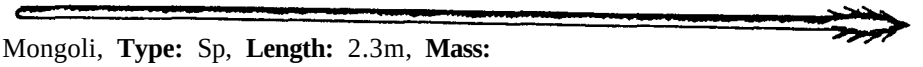
Weapon Name: Mkuki, **Type: Sp, Length:** 1.8m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



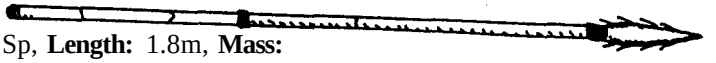
Weapon Name: Mon-Gil Mon-Gil, **Type: Sp, Length: 2.9m, Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



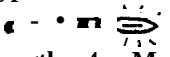
Weapon Name: Mongile, **Type: Sp, Length:** 2.1m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



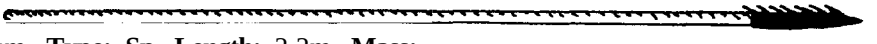
Weapon Name: Mongoli, **Type:** Sp, **Length:** 2.3m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



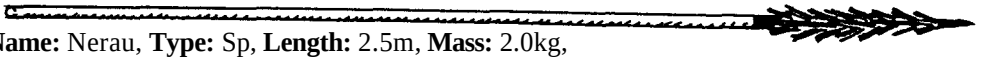
Weapon Name: Mu-Rongal, **Type:** Sp, **Length:** 1.8m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw:** 1, **Damage: 2, Hand: 2**



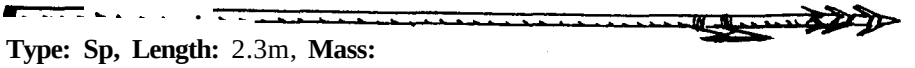
Weapon Name: Nageyari, **Type:** Sp, **Length:** .4m, **Mass:** .8kg, **Dex: 0, Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage:** 1, **Hand: 1**



Weapon Name: Nandum, **Type: Sp, Length:** 2.2m, **Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Nerau, **Type:** Sp, **Length:** 2.5m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 3, Hand: 2**

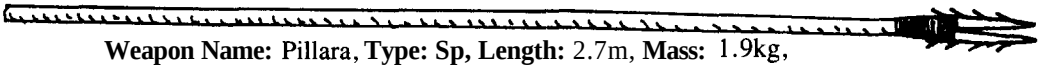


Weapon Name: Paralyser, **Type: Sp, Length:** 2.3m, **Mass:** 1.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 3, Hand: 2**

Weapon Name: Patisthanaya, **Type:** Sp, **Length: 2.0m, Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 2**

Weapon Name: Pelta, **Type: Sp, Length:** 2.1m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**

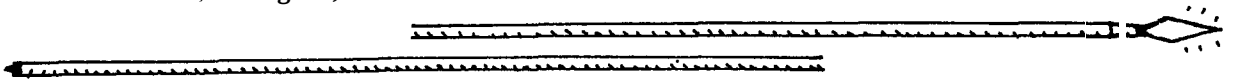
Weapon Name: Pill, **Type: Sp, Length:** 2.0m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Pillara, **Type: Sp, Length:** 2.7m, **Mass:** 1.9kg, **Dex: 1, Parry: 2, Attack Types:** Thrast, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**

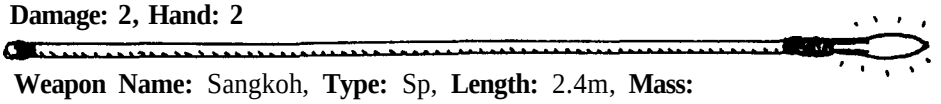
Weapon Name: Pilum, **Type:** Sp, **Length:** 1.9m, **Mass:** 2.1kg, **Dex: 1, Parry: 3, Attack Types:** Thrast, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**

Weapon Name: Pilum (thin), **Type: Sp, Length: 1.8m, Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrast, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 1**

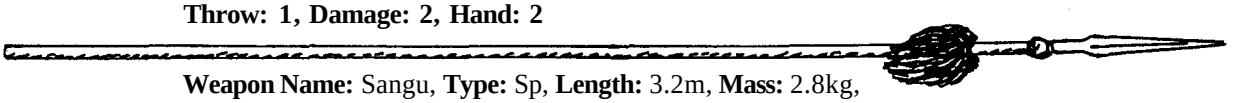


Weapon Name: Rummh, **Type:** Sp, **Length:** 4.2m, **Mass:** 3.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrast, **Dur:** 75, **Throw:** 1, **Damage: 3, Hand: 2**

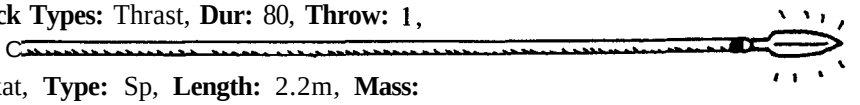
Weapon Name: Sang, **Type:** Sp, **Length: 1.9m, Mass:** 2.5kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrast, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 2**



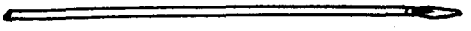
Weapon Name: Sangkoh, **Type:** Sp, **Length:** 2.4m, **Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrast, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Sangu, **Type:** Sp, **Length:** 3.2m, **Mass:** 2.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrast, **Dur:** 80, **Throw: 1, Damage: 3, Hand: 2**

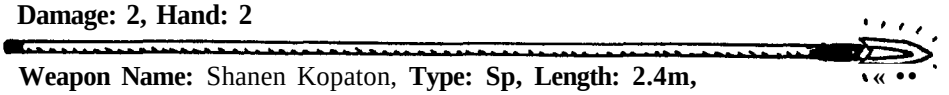


Weapon Name: Sanokat, **Type:** Sp, **Length:** 2.2m, **Mass:** 1.7kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrast, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Saunion, **Type:** Sp, **Length:** 1.2m, **Mass: .8kg, Dex: 0, Parry: 2, Attack Types:** Thrast, **Dur:** 75, **Throw:** 1, **Damage:** 1, **Hand: 2**

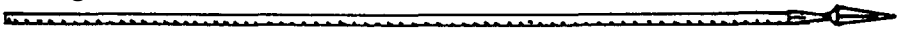
Weapon Name: Shail, **Type:** Sp, **Length: 1.9m, Mass:** 2.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrast, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 2**



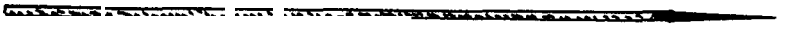
Weapon Name: Shanen Kopaton, **Type: Sp, Length: 2.4m, Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrast, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**

Weapon Name: Siligis, **Type:** Sp, **Length:** 1.8m, **Mass: 1.Okg, Dex: 0, Parry: 2, Attack Types:** Thrast, **Dur:** 70, **Throw: 1, Damage: 2, Hand: 2**

Weapon Name: Simbilan, **Type:** Sp, **Length:** 1.4m, **Mass:** .6kg, **Dex: 0, Parry:** 1, **Attack Types:** Thrast, **Dur:** 65, **Throw: 1, Damage:** 1, **Hand: 2**



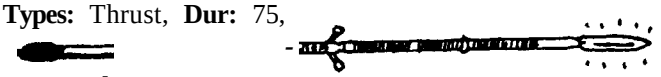
Weapon Name: Sinan, **Type: Sp, Length:** 2.3m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrast, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



Weapon Name: Sligi, **Type:** Sp, **Length: 2.0m, Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrast, **Dur:** 65, **Throw:** 1, **Damage: 2, Hand: 2**

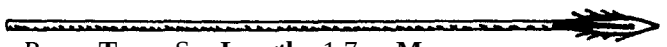
Weapon Name: Soliferrum, **Type:** Sp, **Length:** 2.0m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 1, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 1**

Weapon Name: Spiculum, **Type: Sp, Length: 1.8m, Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**

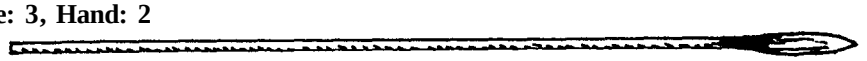


Weapon Name: Su Yari, **Type:** Sp, **Length:** 1.7m, **Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**

Weapon Name: Sudanese Spear, **Type:** Sp, **Length:** 1.8m, **Mass:** 1.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 3, Hand: 2**



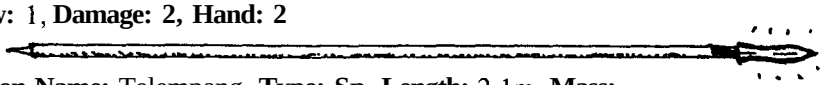
Weapon Name: Tahr Ruan, **Type:** Sp, **Length:** 1.7m, **Mass:** 1.7kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 3, Hand: 2**



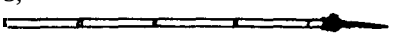
Weapon Name: Tao, Type: Sp, Length: 2.2m, **Mass:** 2.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**

Weapon Name: Tawok, **Type:** Sp, **Length:** 1.6m, **Mass:** 1.3kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**

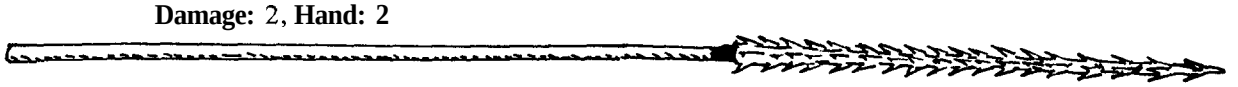
Weapon Name: Te-Yari, **Type: Sp, Length: 1.2m, Mass:** 1.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw:** 1, **Damage: 2, Hand: 2**



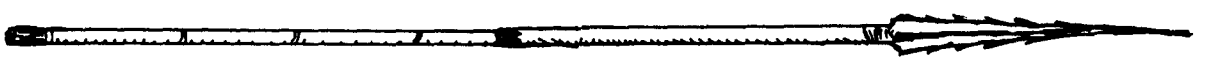
Weapon Name: Telempang, **Type: Sp, Length:** 2.1m, **Mass:** 1.8kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 75, **Throw: 1, Damage: 2, Hand: 2**



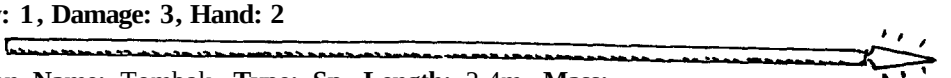
Weapon Name: Tirrer, **Type: Sp, Length:** 1.7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 65, **Throw: 1, Damage:** 2, **Hand: 2**



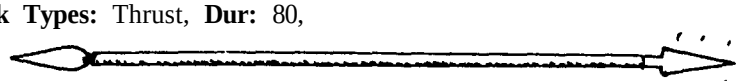
Weapon Name: Tjunkuletti, **Type: Sp, Length: 3.2m, Mass:** 2.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 4, Hand: 2**



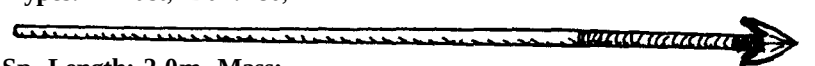
Weapon Name: To-Ono, **Type: Sp, Length: 3.1m, Mass:** 2.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw: 1, Damage: 3, Hand: 2**



Weapon Name: Tombak, **Type: Sp, Length:** 2.4m, **Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



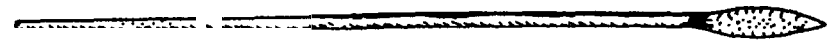
Weapon Name: Tschehouta, **Type:** Sp, **Length: 1.9m, Mass:** 2.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw: 1, Damage: 2, Hand: 2**



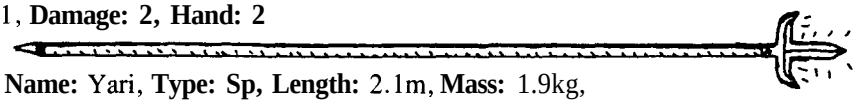
Weapon Name: Tumpuling, **Type: Sp, Length: 2.0m, Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 2**

Weapon Name: Wainian, **Type:** Sp, **Length:** 2.5m, **Mass:** 2.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**

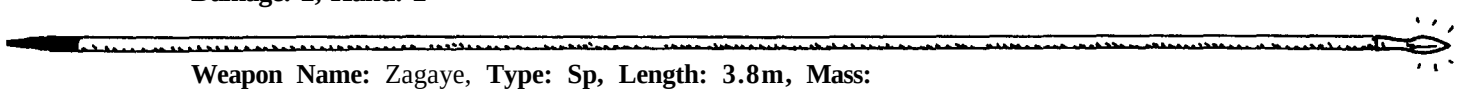
Weapon Name: Wallunka, **Type:** Sp, **Length:** 2.5m, **Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



Weapon Name: Wi-Valli, **Type: Sp, Length: 2.1m, Mass:** 2.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 70, **Throw:** 1, **Damage: 2, Hand: 2**



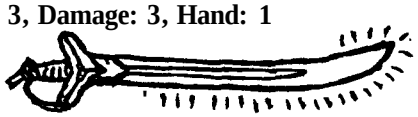
Weapon Name: Yari, **Type: Sp, Length:** 2.1m, **Mass:** 1.9kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 2, Hand: 2**



Weapon Name: Zagaye, **Type: Sp, Length: 3.8m, Mass:** 2.9kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 80, **Throw:** 1, **Damage: 3, Hand: 2**

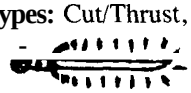
Swords

Weapon Name: Abbasi, **Type:** Sw, **Length: 1.0m, Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

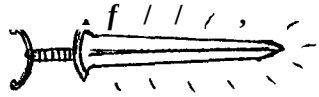


Weapon Name: Ahir, **Type:** Sw, **Length: 1.0m, Mass:** 1.4kg, **Dex: 1, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

Weapon Name: Alamani, **Type:** Sw, **Length:** .6m, **Mass:** .8kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**

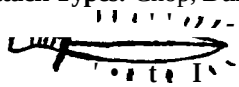


Weapon Name: Ama-Goi-Ken, **Type:** Sw, **Length:** .4m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**

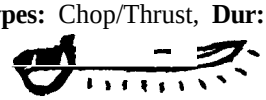


Weapon Name: Antler Sword, **Type:** Sw, **Length:** .7m, **Mass:** .9kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 1**

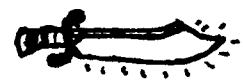
Weapon Name: Ayda Katti, **Type:** Sw, **Length:** .6m, **Mass:** 1.5kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**



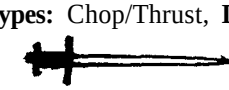
Weapon Name: Babanga, **Type:** Sw, **Length:** .6m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



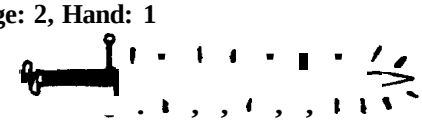
Weapon Name: Backsword, **Type: Sw, Length:** .6m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 2, Hand: 1**



Weapon Name: Badelaire, **Type: Sw, Length:** .5m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 2, Hand: 1**

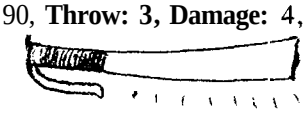


Weapon Name: Baselard, **Type:** Sw, **Length:** .5m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

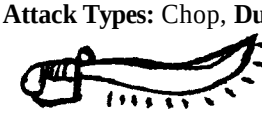


Weapon Name: Bastard Sword, **Type:** Sw, **Length: 1.0m, Mass:** 2.1kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 2**

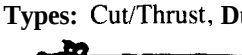
Weapon Name: Beheading Sword, **Type:** Sw, **Length: 1.3m, Mass:** 2.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage:** 4, **Hand: 2**



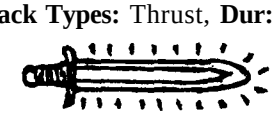
Weapon Name: Beidana, **Type: Sw, Length:** .7m, **Mass:** 1.2kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



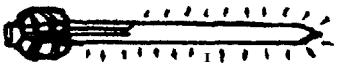
Weapon Name: Beladah, **Type:** Sw, **Length:** .6m, **Mass:** 1.1kg, **Dex:** 0, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**



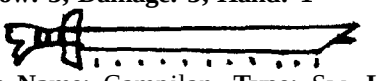
Weapon Name: Bilbo, **Type:** Sw, **Length:** .5m, **Mass:** .65kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**



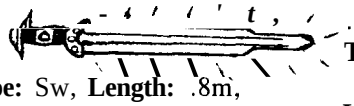
Weapon Name: Braquemar, **Type:** Sw, **Length:** .6m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



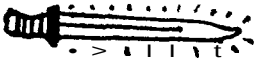
Weapon Name: Broadsword, **Type:** Sw, **Length:** .8m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



Weapon Name: Campilan, **Type:** Sw, **Length:** .9m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

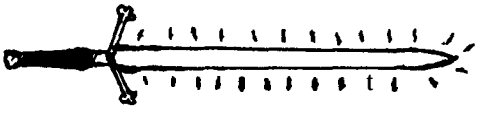


Weapon Name: Carp's Tongue, **Type:** Sw, **Length:** .8m, **Mass:** 1.5kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



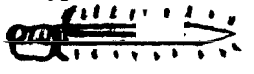
Weapon Name: Chereb, **Type:** Sw, **Length:** .6m, **Mass:** 1.1kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 1**

Weapon Name: Chundrick, **Type:** Sw, **Length:** .6m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**

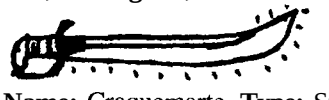


Weapon Name: Claymore, **Type:** Sw, **Length: 1.2m, Mass:** 2.9kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 4, Hand: 2**

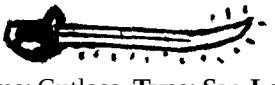
Weapon Name: Colichemarde, **Type: Sw, Length:** .8m, **Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Coustil a Croc, **Type:** Sw, **Length:** .6m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

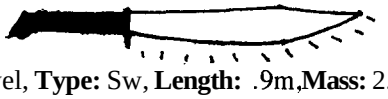


Weapon Name: Craquemarte, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**

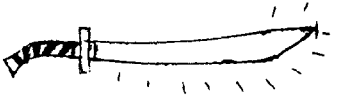


Weapon Name: Cutlass, **Type: Sw, Length:** .6m, **Mass:** 1.1kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 3, Damage: 2, Hand: 1**

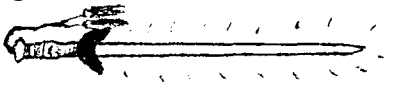
Weapon Name: Dacian Falx, **Type:** Sw, **Length:** 1.4m, **Mass:** 3.1kg, **Dex:** 2, **Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 4, Hand: 2**



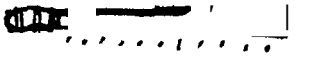
Weapon Name: Dalwel, **Type:** Sw, **Length:** .9m, **Mass:** 2.0kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 2**



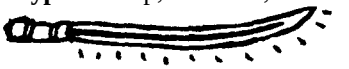
Weapon Name: Dan-Dao, **Type: Sw, Length:** .8m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**



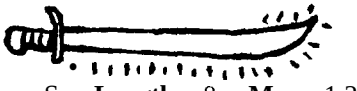
Weapon Name: Dan-Gien, **Type:** Sw, **Length:** .9m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 1, Damage: 2, Hand: 1**



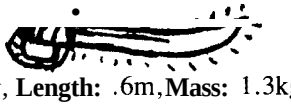
Weapon Name: Dao, Type: Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



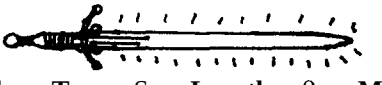
Weapon Name: Dha, Type: Sw, **Length:** .8m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



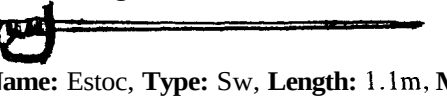
Weapon Name: Dukn, **Type:** Sw, **Length:** .8m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



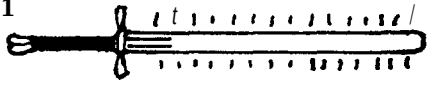
Weapon Name: Dusack, **Type:** Sw, **Length:** .6m, **Mass:** 1.3kg, **Dex: 1, Parry: 2, Attack Types: Cut, Dur: 95, Throw: 3, Damage: 2, Hand: 1**



Weapon Name: Espadon, **Type:** Sw, **Length:** .9m, **Mass:** 2.1kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 2**

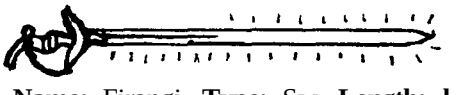


Weapon Name: Estoc, **Type:** Sw, **Length:** 1.1m, **Mass:** .7kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**

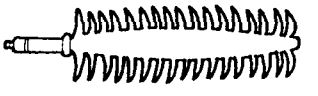


Weapon Name: Executioner's Sword, **Type:** Sw, **Length: 1.1m, Mass:** 2.2kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 2**

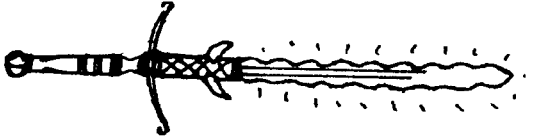
Weapon Name: Falchion, **Type:** Sw, **Length:** .8m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Firangi, **Type:** Sw, **Length: 1.1m, Mass:** 1.3kg, **Dex:** 1, **Parry: 3, Attack Types: Cut, Dur: 90, Throw: 2, Damage: 3, Hand: 1**

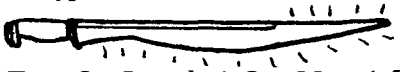


Weapon Name: Fish Spine Sword, **Type:** Sw, **Length:** .8m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**



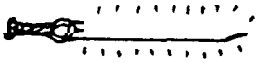
Weapon Name: Flamberge, **Type: Sw, Length: 1.3m, Mass:** 3.4kg, **Dex:** 2, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 4, Hand: 2**

Weapon Name: Fleuret, **Type: Sw, Length:** .8m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



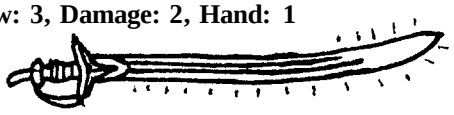
Weapon Name: Flyssa, **Type:** Sw, **Length: 1.Om, Mass:** 1.5kg, **Dex: 1, Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**

Weapon Name: Foil, **Type:** Sw, **Length:** .8m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**

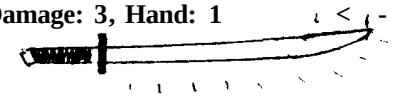


Weapon Name: Gladius, **Type: Sw, Length:** .6m, **Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

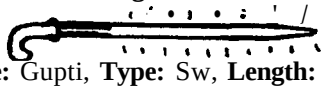
Weapon Name: Goddara, **Type:** Sw, **Length:** .7m, **Mass:** 1.2kg, **Dex: 1, Parry:** 3, **Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**



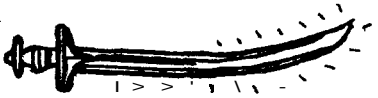
Weapon Name: Goliah, **Type:** Sw, **Length: 1.1m, Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



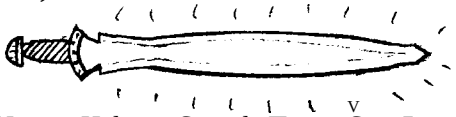
Weapon Name: Goose-Feather Sabre, **Type:** Sw, **Length:** .9m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Gupti, **Type:** Sw, **Length:** .8m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**

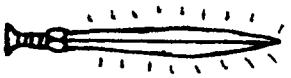


Weapon Name: Halab, **Type:** Sw, **Length:** .9m, **Mass:** 1.2kg, **Dex:** 3, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 3, Damage: 2, Hand: 1**

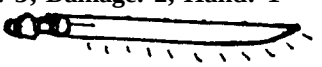


Weapon Name: Halstatt Sword, **Type:** Sw, **Length: 1.1m, Mass:** 1.6kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

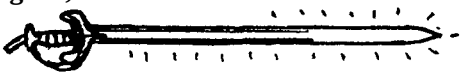
Weapon Name: Han-Dachi, **Type:** Sw, **Length:** .8m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Herebra, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 1**

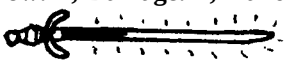


Weapon Name: Isau, **Type:** Sw, **Length:** .7m, **Mass:** I.ikg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**



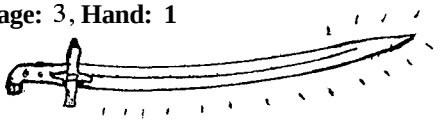
Weapon Name: Jumgheerdha, **Type:** Sw, **Length:** 1.1m, **Mass:** 1.1kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

Weapon Name: Kamashimo Zashi, **Type:** Sw, **Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

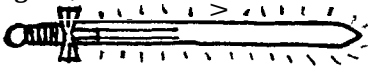


Weapon Name: Kantschar, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw:** 3, **Damage:** 2, **Hand: 1**

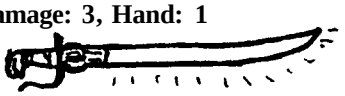
Weapon Name: Kapee Dha, **Type:** Sw, **Length:** .5m, **Mass:** .8kg, **Dex: 1, Parry: 2, Attack Types:** Cut/Chop, **Dur:** 90, **Throw:** 3, **Damage:** 3, **Hand: 1**



Weapon Name: Karabela, **Type:** Sw, **Length: 1.0m, Mass:** .8kg, **Dex: 1, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**

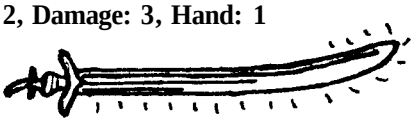


Weapon Name: Kaskara, **Type:** Sw, **Length:** .9m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**

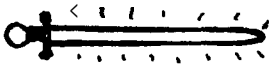


Weapon Name: Kastane, **Type:** Sw, **Length:** .8m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

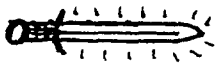
Weapon Name: Katana, **Type:** Sw, **Length: 1.1m, Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 2, Damage: 3, Hand: 1**



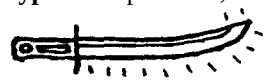
Weapon Name: Katti Talwar, **Type: Sw, Length: 1** .0m, **Mass:** 1.3kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



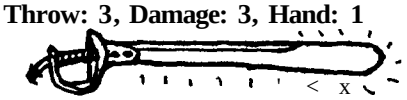
Weapon Name: Katzbalger, **Type:** Sw, **Length:** .7m, **Mass:** 1.5kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 2, Damage: 3, Hand: 1**



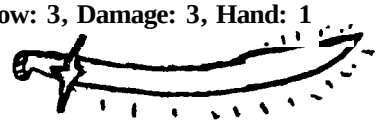
Weapon Name: Ken, Type: Sw, **Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



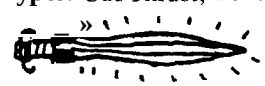
Weapon Name: Kenuki Gata Tachi, **Type:** Sw, **Length:** .6m, **Mass:** .7kg, **Dex: 0, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



Weapon Name: Khanda, **Type:** Sw, **Length:** .9m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur: 90, Throw: 3, Damage: 3, Hand: 1**

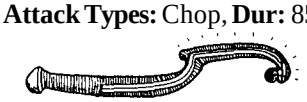


Weapon Name: Killj, **Type: Sw, Length:** .9m, **Mass:** I.ikg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**

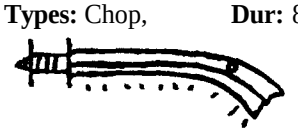


Weapon Name: Kledyv, **Type:** Sw, **Length:** .6m, **Mass:** 1.3kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 2, Hand: 1**

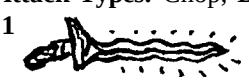
Weapon Name: Klewang, **Type: Sw, Length:** .7m, **Mass: 1.Okg, Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw:** 3, **Damage:** 3, **Hand: 1**



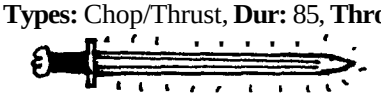
Weapon Name: Kopsh, **Type: Sw, Length:** .6m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw:** 3, **Damage: 2, Hand: 1**



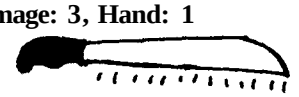
Weapon Name: Kora, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



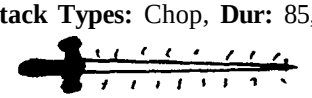
Weapon Name: Kris, **Type:** Sw, **Length:** .5m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



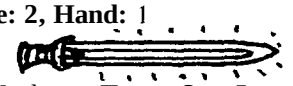
Weapon Name: Longsword, **Type: Sw, Length:** .8m, **Mass:** 1.5kg, **Dex:** 0, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 2, Damage: 3, Hand: 1**



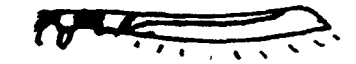
Weapon Name: Lopu, **Type:** Sw, **Length:** .7m, **Mass:** 1.0kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



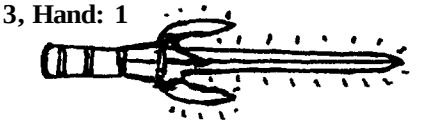
Weapon Name: Luris Pedang, **Type:** Sw, **Length:** .7m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand:** 1



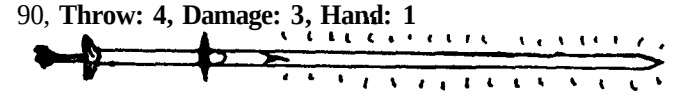
Weapon Name: Machera, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 3, Damage: 3, Hand: 1**



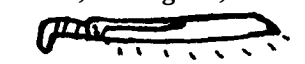
Weapon Name: Manaau, **Type: Sw, Length:** .7m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**



Weapon Name: Manople, **Type:** Sw, **Length:** .6m, **Mass:** 2.2kg, **Dex:** 1, **Parry: 4, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 4, Damage: 3, Hand: 1**

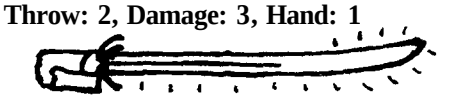


Weapon Name: Mel Puttah Bemoh, **Type:** Sw, **Length: 1.6m, Mass:** 2.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 2**



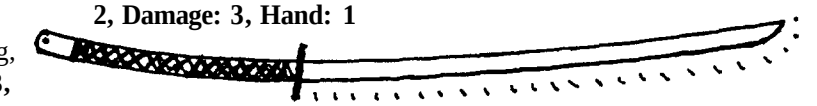
Weapon Name: Mentok, **Type:** Sw, **Length:** .6m, **Mass:** .9kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**

Weapon Name: Nagan, **Type:** Sw, **Length:** 1.1m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types: Chop/Thrust, Dur: 90, Throw: 2, Damage: 3, Hand: 1**

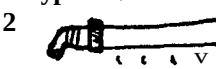


Weapon Name: Nimcha, **Type:** Sw, **Length: 1.0m, Mass:** 1.3kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage:** 3, **Hand:** 1

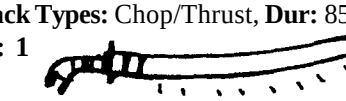
Weapon Name: Ninjato, **Type:** Sw, **Length:** .9m, **Mass:** 1.4kg, **Dex: 0, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**



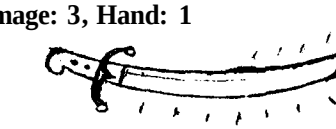
Weapon Name: No-Dachi, **Type:** Sw, **Length: 1.9m, Mass:** 4.0kg, **Dex:** 2, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 4, Hand: 2**



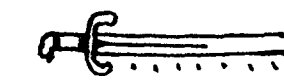
Weapon Name: Opi, Type: Sw, **Length:** .5m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



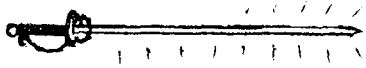
Weapon Name: Pakayun, **Type:** Sw, **Length:** .8m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



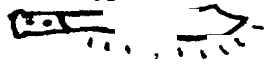
Weapon Name: Pala, **Type:** Sw, **Length:** .8m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



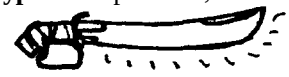
Weapon Name: Palache, **Type: Sw, Length:** .7m, **Mass:** 1.2kg, **Dex: 0, Parry:** 3, **Attack Types:** Cut/Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



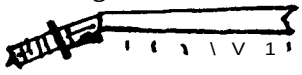
Weapon Name: Pappenheimer, **Type:** Sw, **Length:** .9m, **Mass:** 1.3kg, **Dex: 1, Parry: 3, Attack Types:** Cut, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**



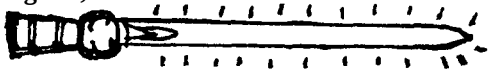
Weapon Name: Parang Bedak, **Type:** Sw, **Length:** .6m, **Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



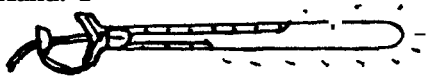
Weapon Name: Parang Nabur, **Type:** Sw, **Length:** .6m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



Weapon Name: Parang Pandit, **Type:** Sw, **Length:** .7m, **Mass:** 1. **1kg, Dex:** 1, **Parry: 3, Attack Types:** Chop, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**

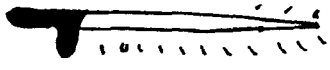


Weapon Name: Pata, **Type:** Sw, **Length: 1.0m, Mass:** 2.1kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 4, Damage: 3, Hand: 1**

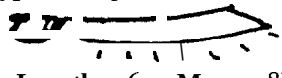


Weapon Name: Pattisa, **Type:** Sw, **Length: 1.0m, Mass:** 1.3kg, **Dex: 1, Parry: 3, Attack Types:** Chop, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

Weapon Name: Pedang, **Type:** Sw, **Length:** .6m, **Mass:** .8kg, **Dex: 0, Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 2, Hand: 1**

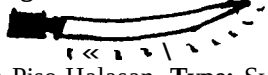


Weapon Name: Peudeueng, **Type:** Sw, **Length:** .8m, **Mass:** .9kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 3, Hand: 1**

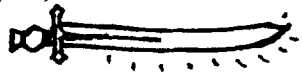


Weapon Name: Pira, **Type:** Sw, **Length:** .6m, **Mass:** .8kg, **Dex: 1, Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**

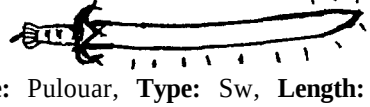
Weapon Name: Piso Eccat, **Type:** Sw, **Length:** .6m, **Mass:** .6kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



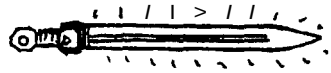
Weapon Name: Piso Halasan, **Type:** Sw, **Length:** .6m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



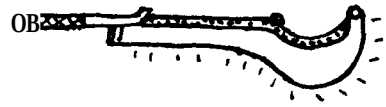
Weapon Name: Piso Podang, **Type:** Sw, **Length:** .7m, **Mass:** .9kg, **Dex:** 1, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



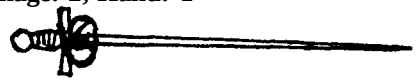
Weapon Name: Pulouar, **Type:** Sw, **Length:** .8m, **Mass:** 1. **1kg, Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



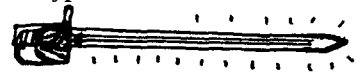
Weapon Name: Quaddara, **Type:** Sw, **Length:** .8m, **Mass:** I.ikg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



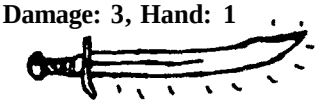
Weapon Name: Ram Da'o, Type: Sw, **Length:** .9m, **Mass:** 1.8kg, **Dex:** 1, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



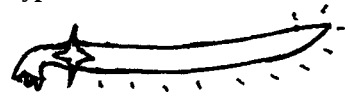
Weapon Name: Rapier, **Type:** Sw, **Length: 1.0m, Mass:** .8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Reiterpallasch, **Type:** Sw, **Length:** .9m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**

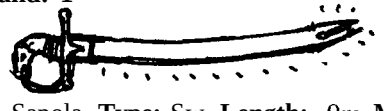


Weapon Name: Sabre, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**

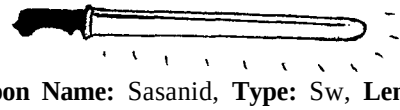


Weapon Name: Saif, **Type:** Sw, **Length:** .8m, **Mass:** 1.2kg, **Dex: 1, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

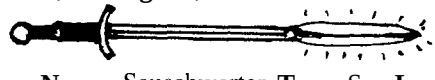
Weapon Name: Sapara, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex: 0, Parry: 2, Attack Types:** Chop, **Dur:** 80, **Throw: 3, Damage:** 3, **Hand: 1**



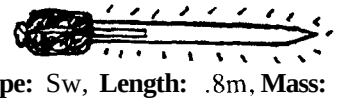
Weapon Name: Sapola, **Type:** Sw, **Length:** .9m, **Mass:** 1.3kg, **Dex: 1, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



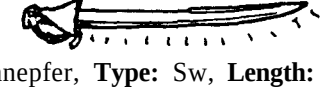
Weapon Name: Sasanid, **Type:** Sw, **Length:** .9m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



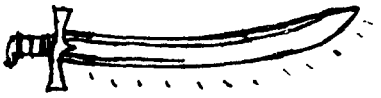
Weapon Name: Sauschwerter, **Type:** Sw, **Length:** 1.1m, **Mass:** 1.6kg, **Dex:** 0, **Parry: 2, Attack Types:** Thrust, **Dur:** 95, **Throw: 2, Damage: 2, Hand: 1**



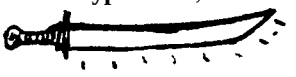
Weapon Name: Schiavona, **Type:** Sw, **Length:** .8m, **Mass:** 1.6kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage:** 3, **Hand: 1**



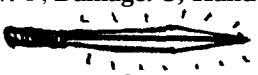
Weapon Name: Schnepfer, **Type:** Sw, **Length:** .7m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



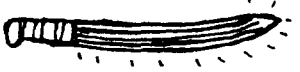
Weapon Name: Scimitar, **Type:** Sw, **Length:** .9m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut, **Dur: 90, Throw:** 3, **Damage:** 3, **Hand: 1**



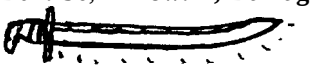
Weapon Name: Seax, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 85, **Throw:** 3, **Damage: 3, Hand: 1**



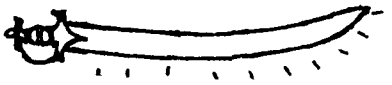
Weapon Name: Seme, **Type:** Sw, **Length:** .8m, **Mass:** .9kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



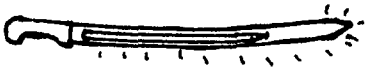
Weapon Name: Senangkas Bedok, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



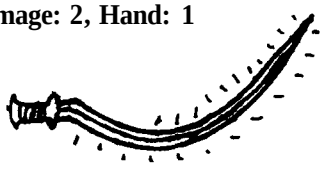
Weapon Name: Shah Nawaz Khani, **Type:** Sw, **Length:** .7m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



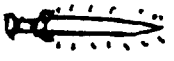
Weapon Name: Shamshir, **Type:** Sw, **Length:** .9m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types: Cut, Dur:** 95, **Throw: 3, Damage: 3, Hand: 1**



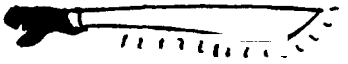
Weapon Name: Shashqa, **Type: Sw, Length:** .9m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



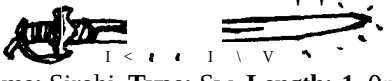
Weapon Name: Shotel, **Type:** Sw, **Length:** .8m, **Mass:** 1.2kg, **Dex:** 0, **Parry: 2, Attack Types:** Cut/Chop, **Dur:** 80, **Throw: 3, Damage: 2, Hand: 1**



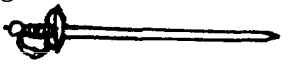
Weapon Name: Sica, **Type:** Sw, **Length:** .4m, **Mass:** .5kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



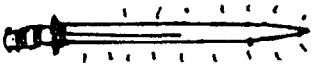
Weapon Name: Sikim Gala, **Type:** Sw, **Length:** .8m, **Mass:** 1.3kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur: 85, Throw: 3, Damage: 3, Hand: 1**



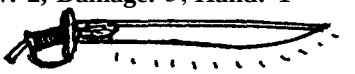
Weapon Name: Sirohi, **Type:** Sw, **Length: 1** .0m, **Mass:** 1.2kg, **Dex: 1, Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



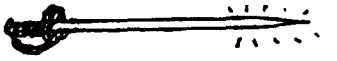
Weapon Name: Small Sword, **Type:** Sw, **Length:** .7m, **Mass:** .7kg, **Dex: 0, Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



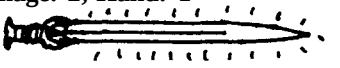
Weapon Name: Sondang, **Type:** Sw, **Length:** .8m, **Mass:** 1.3kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage:** 3, **Hand: 1**



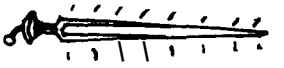
Weapon Name: Sosunpattah, **Type:** Sw, **Length:** .8m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



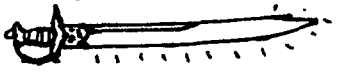
Weapon Name: Spadroon, **Type:** Sw, **Length:** .8m, **Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



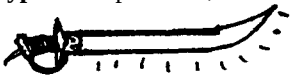
Weapon Name: Spatha, **Type:** Sw, **Length:** .8m, **Mass:** 1.3kg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



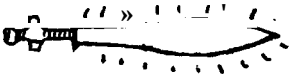
Weapon Name: Straight Sword, **Type:** Sw, **Length:** .6m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Sultani, **Type:** Sw, **Length:** .8m, **Mass:** 1.4kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

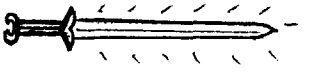


Weapon Name: Surai, **Type:** Sw, **Length:** .7m, **Mass:** 1.2kg, **Dex:** 0, **Parry:** 3, **Attack Types:** Cut/Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

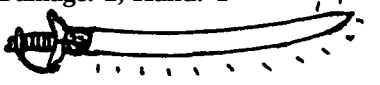


Weapon Name: Takouba, **Type:** Sw, **Length:** .6m, **Mass:** I.ikg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

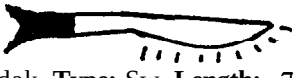
Weapon Name: Talibon, **Type:** Sw, **Length:** .6m, **Mass:** 1.0kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 3, Damage: 2, Hand: 1**



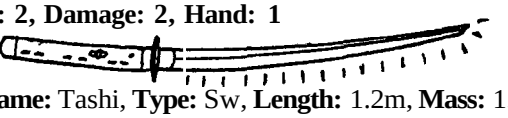
Weapon Name: Talon Sword, **Type:** Sw, **Length:** .7m, **Mass:** I.ikg, **Dex:** 1, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 1, Damage: 2, Hand: 1**



Weapon Name: Talwar, **Type:** Sw, **Length:** .9m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 95, **Throw: 3, Damage: 3, Hand:** 1



Weapon Name: Tapak Kudak, **Type:** Sw, **Length:** .7m, **Mass:** .9kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

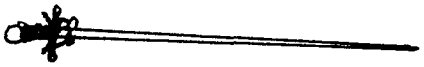


Weapon Name: Tashi, **Type:** Sw, **Length:** 1.2m, **Mass:** 1.4kg, **Dex:** 0, **Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 3, Hand: 1**

Weapon Name: Tegha, **Type: Sw, Length: 1.0m, Mass:** 1.4kg, **Dex: 1, Parry: 3, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

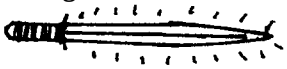
Weapon Name: Thinin, **Type: Sw, Length:** .6m, **Mass:** .9kg, **Dex: 0, Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 2, Hand: 1**

Weapon Name: Tuck, **Type: Sw, Length: 1.0m, Mass:** .8kg, **Dex:** 1, **Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

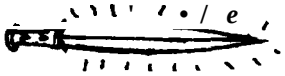


Weapon Name: Verdun, **Type: Sw, Length:** 1.1m, **Mass:** .8kg, **Dex: 1, Parry: 2, Attack Types:** Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**

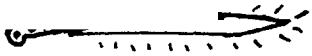
Weapon Name: Wakizashi, **Type: Sw, Length:** .6m, **Mass:** .8kg, **Dex: 0, Parry: 2, Attack Types:** Cut/Thrust, **Dur:** 90, **Throw: 2, Damage: 2, Hand: 1**



Weapon Name: Wasa, **Type: Sw, Length:** .7m, **Mass:** 1.3kg, **Dex:** 1, **Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**

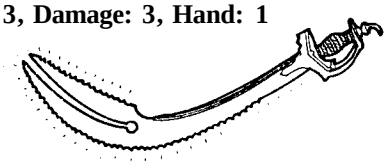


Weapon Name: Xiphos, **Type:** Sw, **Length:** .7m, **Mass:** 1.3kg, **Dex: 1, Parry:** 3, **Attack Types:** Chop/Thrust, **Dur:** 80, **Throw: 2, Damage: 3, Hand: 1**

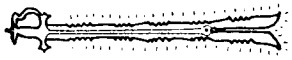


Weapon Name: Yatagan, Type: Sw, Length: .7m, **Mass:** I.ikg, **Dex:** 0, **Parry: 2, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**

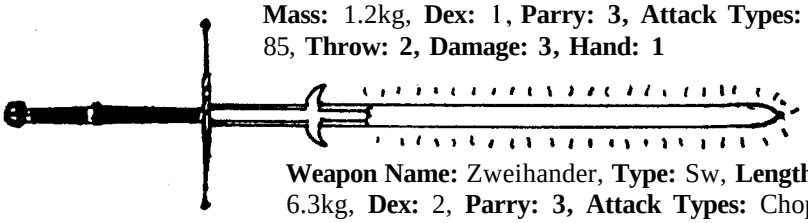
Weapon Name: Zafar Takieh, **Type: Sw, Length:** .6m, **Mass:** 1.4kg, **Dex:** 1, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 90, **Throw: 3, Damage: 3, Hand: 1**



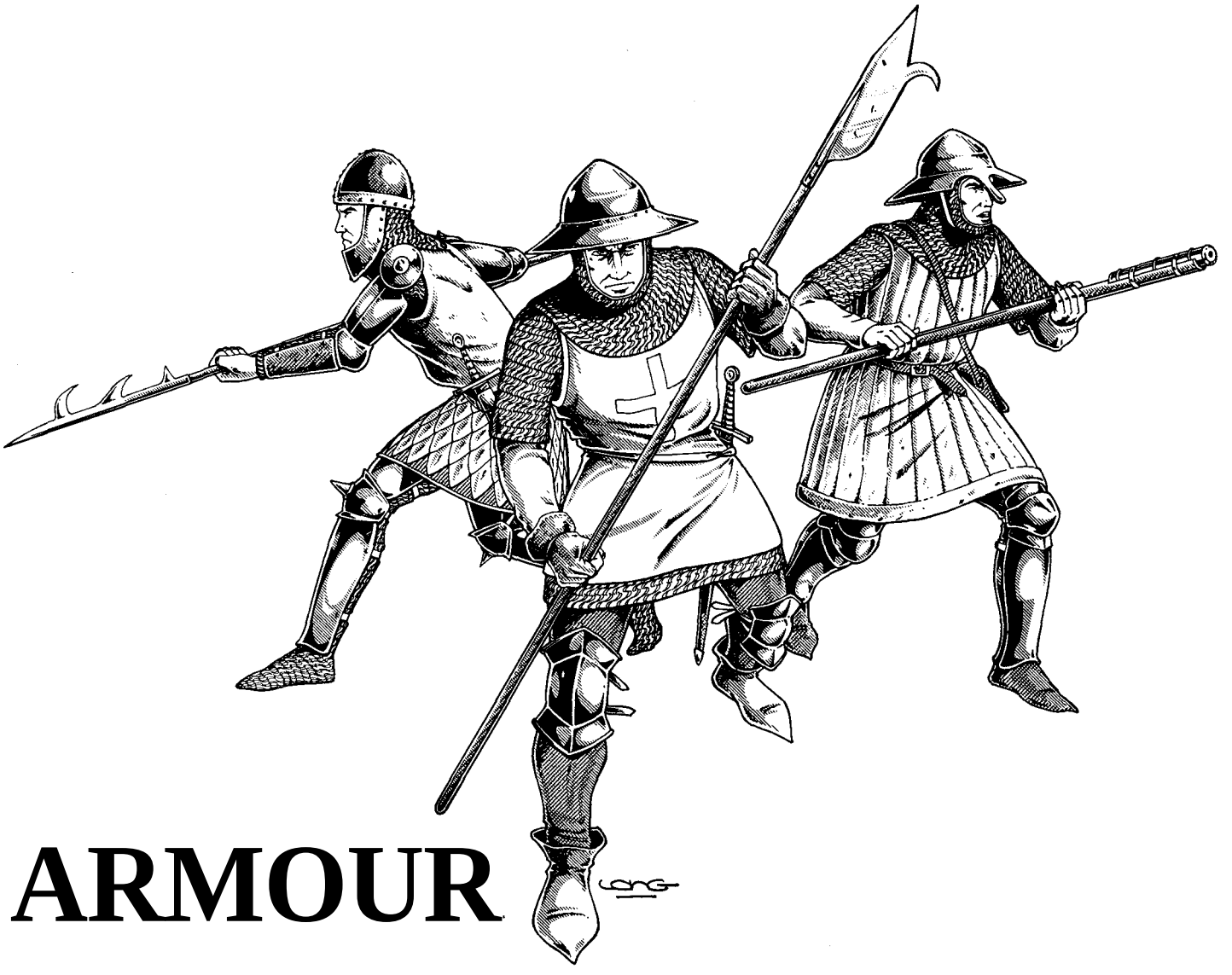
Weapon Name: Zulf-I-Khar, **Type: Sw, Length:** .8m, **Mass:** 1.4kg, **Dex: 1, Parry: 3, Attack Types: Cut, Dur: 90, Throw: 3, Damage: 3, Hand: 1**



Weapon Name: Split-Tipped Sword, **Type: Sw, Length:** .9m, **Mass:** 1.2kg, **Dex:** 1, **Parry: 3, Attack Types: Chop, Dur:** 85, **Throw: 2, Damage: 3, Hand: 1**



Weapon Name: Zweihander, **Type:** Sw, **Length: 2.0m, Mass:** 6.3kg, **Dex:** 2, **Parry: 3, Attack Types:** Chop/Thrust, **Dur:** 95, **Throw: 3, Damage: 4, Hand: 2**



ARMOUR

Since earliest times, man has sought to protect his body from attack by both human and animal enemies. The earliest form of armour consisted of the animal hides ancient man clothed himself in. They protected him from the slashing claws of attacking animals and softened the impact of stones and clubs.

The step from simple hides and furs to specifically designed armour was simple enough. The earliest armours were made of commonly available materials: animal hide, horn, wood, bone, or cloth. Unfortunately, due to their perishable nature, few samples of this early armour exists today. There are, however, enough modern primitive cultures who use these same forms of armour, as well as depictions in ancient artwork, that we can get a good idea of how early armour looked.

In general, there are four requirements for armour. 1. Armour must be flexible enough to allow the wearer freedom of movement. 2. It must be lightweight enough to be worn without tiring the wearer. 3. It must protect against the opponent's weapons. 4. It must also be fanciful enough to satisfy the wearer's ego. These four points have influenced armour design in virtually every culture and time period.

The earliest armour, made of animal hides, offered both padding and adornment. The hide armour could be improved upon by *hardening*. Layering the leather provided even tougher armour. Adding plates of horn, bone, or wood augmented the protection of the leather.

Wood was a common material in the manufacture of early armour. Shields are easily made from wooden slabs and helmets were often carved out of wood. Wooden body armour was usually in the form of plates or scales attached to a leather backing.

Many cultures lashed or wove sticks or reeds together to use as shields and body armour.

Various forms of cloth were also used as armour. Armour woven out of cord and *quilted* armour are two examples.

With the introduction of metal, the first really effective armour could be made. Metal is hard enough to protect against the blows of club, sword, and axe and the thrust of spear or arrow. Because of its strength, metal can be worked into thin plates so it need not be too heavy. Its malleability allowed for reworking and refitting, so that the armour was not too cumbersome. Metal also allowed for engraving, inlay and polish.

The Armour Types

Armour can be classified by its basic components and method of manufacture. Three major armour groups exist. These are: 1. simple textile and leather types, 2. reinforced foundation types, and 3. non-foundation types.

The armour chart is set up with these three groups in mind and lists each armour type within the particular main group.

ONE: Simple Textile & Leather

These soft armours are made without wood or metal reinforcement. Although most armours of this type can be worn alone, they were often worn under many of the heavier armour types. The types of armour found in this group are: thin, medium, and heavy cloth; soft and hard leather, cuir-bouilli, quilt, padded and woven.

Thin cloth is equivalent to linen, medium cloth is equivalent to denim, and heavy cloth is equivalent to two or three thicknesses of medium cloth.

Woven Armour was made of cord or reed and resembles a modern floor mat or carpet.

Soft leather is equivalent to the outer covering of a modern-day leather jacket. Hard leather is approximately equal to five millimeters of leather.

Cuir-bouilli is leather which has been boiled in oil. In this condition it may be molded into the desired shape and then upon drying it becomes very hard.

Quilt armour consists of two layers of cloth between which cotton or some other such material is sandwiched. Padded armour usually consists of a heavy layer of felt from four to eight centimeters thick.

TWO: Reinforced Foundation

These armours consist of some sort of protective plate attached to a leather or cloth foundation. The types of armour found in this group are: ring mail, pourpoint or studded, bezainted, jazeraint, and brigandine.

Ring mail is simply metal rings sewn *onto* a suitable backing, usually leather.

Studded armour, sometimes called pourpoint, consists of metal studs fastened to a suitable backing.

Bezainted armour, named because of its resemblance to a type of medieval coin, consists of metal discs secured with studs to a suitable backing.

Jazeraint armour, also known as scale armour, consists of scales of various sizes sewn or riveted onto a suitable backing.

Brigandine armour consists of scales riveted inside a leather garment and then backed by another layer of leather.

THREE: Non-Foundation

These armours consist of smaller pieces of material (generally metal) fastened to one another without being attached to a foundation. For example: A mail shirt/coat is made completely of chain mail linked together. There is no leather or cloth backing to which it is attached. The types of armour in this group are: mail, lamellar, laminated plate, and plate.

Mail is a fabric made of small **metal rings.** The most common form consists of four rings linked to a fifth, and in this configuration it lies flat. The links themselves were made of wire which had been wound tightly around a cylindrical bar. By cutting the wire at each turn in the resulting coil, a series of uniform rings could be made. The better mail nearly always has the ends of the rings riveted together, as simply butting the wire ends together would result in a weaker garment.

Bar mail differs from common mail in that two types of links are used, the normal type as described above and a *barred link,* normally punched out of a metal plate. This form was used in the Middle East and India.

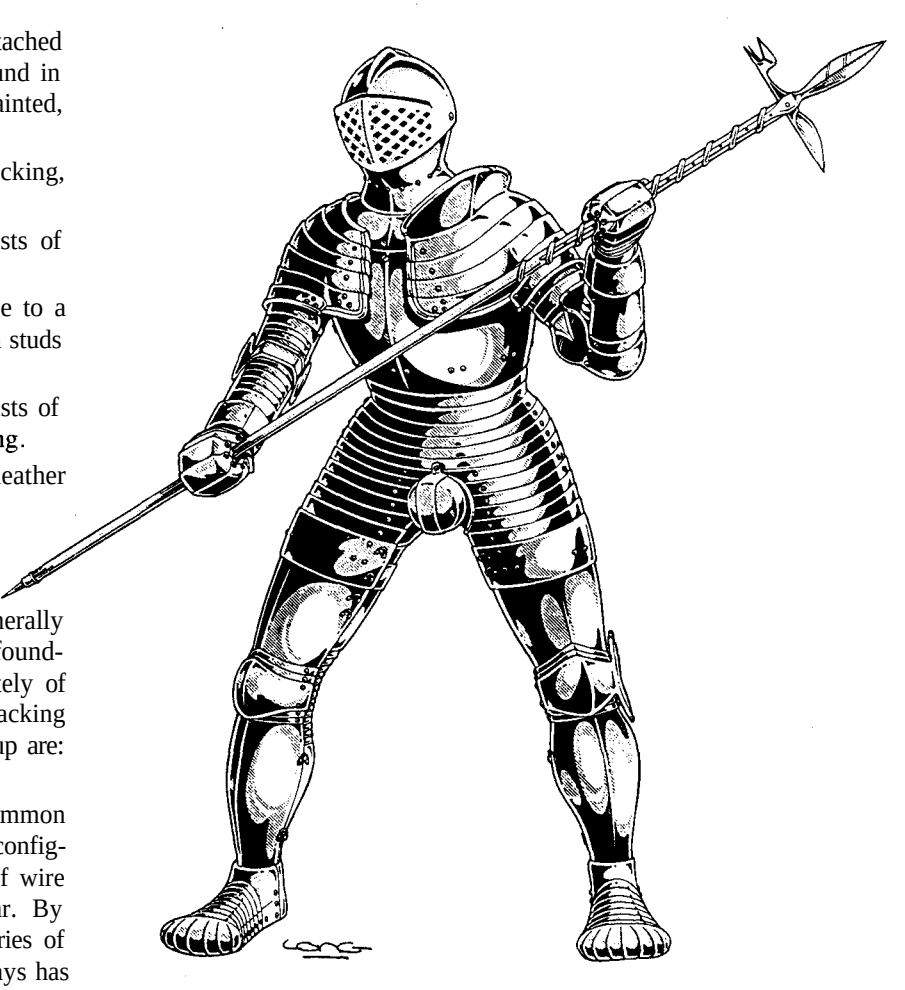
Double mail is a variation of normal mail only in that the rings are thicker and closer together.

Augmented mail consists of normal mail with strips of leather put through the links.

Laminated armour consists of metal strips which are overlapped and articulated.

Lamellar armour, also known as splint armour, consists of a series of splints or scales laced together. The size of the splints depend on the portion of the body each is to cover.

Plate armour consists of large pieces of metal which are either worn over other armour or are attached to one another by a series of straps, lacing, buckles, or screws. Ribbed plate is a variation of normal plate, with many artistic ribs which also serve to deflect the blows of weapons. An average suit of plate in the early fifteenth century had a mass of approximately 25 to 30 kilograms (55 to 66 pounds), but a trained person could carry out most activities without undue strain; modern experiments have shown that a man in full plate can run, jump, and lie down and rise without too much trouble. The main disadvantage of this type of armour was not its weight, but its stuffiness, which is caused by lack of air and the sweating due to heat and physical exertion.



What the Armour Values Mean

Resistance Factor (R.F.): Each type of armour is given a set of ratings based on its effectiveness against the four basic attack types: cut, chop, thrust, and impact. This effectiveness is called the armour's *"Resistance Factor" or "R.F."*

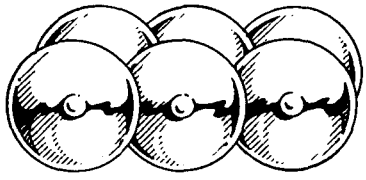
Dexterity (DEX) is an indication of how much a suit of this type would inhibit movement. The *lower* this number the better.

Mass: When considering a suit of armour from the above list, it must be remembered that the various values and masses do not reflect the normal practice of wearing padding or other such garments under the armour to prevent chafing and to lessen the impact of blows. Characters in most forms of metallic armour should wear some sort of padding under it. When doing this or when layering different types of armour over one another, simply add all of the values in each category together.

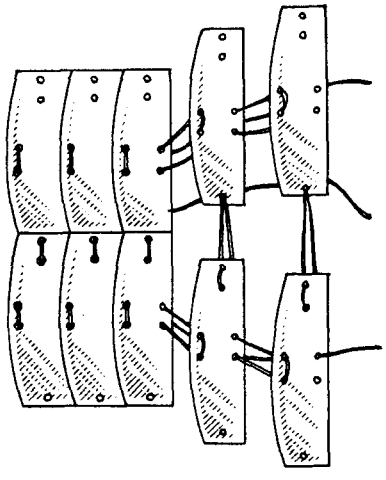
ARMOUR VALUE CHART

ARMOUR GROUP	CUT	CHOP RF	THRUST RF	IMPACT RF	DEX RF	MASS
SIMPLE TEXTILE & LEATHER TYPES						
Thin cloth	1	0	0	0	0	1.3kg
Medium cloth	2	0	0	0	0	2.5kg
Heavy cloth	3	1	1	1	1	3.7kg
Soft leather	2	1	1	1	1	3.7kg
Hard leather	3	2	3	1	1	5kg
Cuir-bouilli	5	3	5	1	1	5kg
Quilt	3	1	2	2	1	5kg
Padded	4	1	2	3	1	5kg
Woven cord	4	2	3	2	2	5kg
REINFORCED FOUNDATION TYPES						
Heavy cloth ringmail	5	3	3	1	1	7.5kg
Soft leather ringmail	4	3	3	1	1	7.5kg
Hard leather ringmail	5	4	5	1	2	10kg
Quilt ringmail	5	3	4	2	2	10kg
Studded heavy cloth	3	1	1	1	1	6kg
Studded soft leather	3	1	1	1	1	6kg
Studded hard leather	4	2	3	1	2	7.5kg
Soft leather bezainted	6	5	3	1	2	7.5kg
Hard leather bezainted	7	6	5	1	2	10kg
Cuir-bouilli bezainted	8	7	7	1	2	10kg
Quilt bezainted	6	5	4	2	2	10kg
Hard leather jazeraint	7	6	4	1	2	10kg
Cuir-bouilli jazeraint	8	7	6	1	2	10kg
Hard wood jazeraint	6	5	4	1	2	10kg
Horn/bone jazeraint	8	7	6	1	2	15kg
Metal jazeraint	9	8	8	1	2	20kg
Hardwood brigandine	6	6	5	2	3	13kg
Horn/bone brigandine	8	8	7	2	3	15kg
Metal brigandine	9	9	8	2	3	22kg
NON-FOUNDATION ARMOUR TYPES						
Mail	7	6	2	1	1	20kg
Double mail	9	7	4	1	2	22kg
Augmented mail	9	7	5	1	2	22kg
Bar mail	8	6	3	1	2	20kg
Combined mail	8	7	5	1	2	22kg
Laminated	9	9	9	1	2	20kg
Cuir-bouilli lamellar	8	7	7	1	3	10kg
Hard wood lamellar	6	6	5	1	3	10kg
Horn/bone lamellar	8	7	7	1	3	13kg
Metal lamellar	9	9	8	1	3	18kg
Plate	11	11	11	1	2	25kg
Ribbed plate	12	12	12	1	2	25kg

HALF NAKED MAIL



15th CENTURY LACED MAIL



ANOTHER STYLE OF
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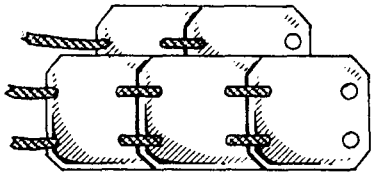
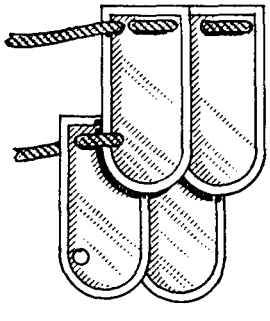
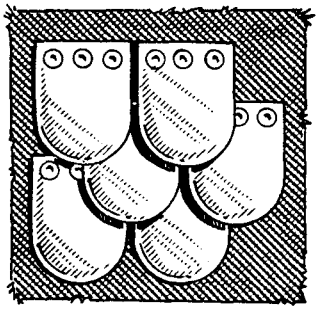


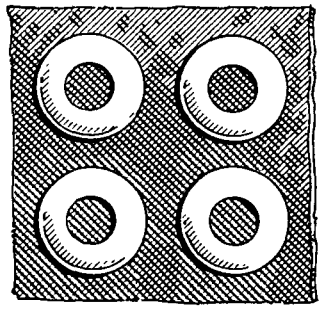
14th CENTURY LACED AWL



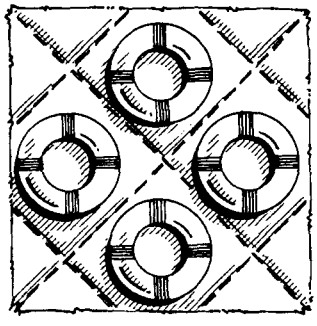
JAZERAINT



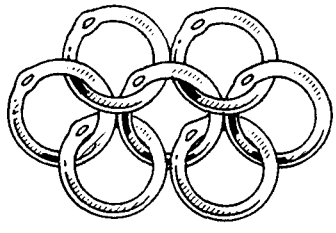
BEZAINTED
STUDS ON LEATHER



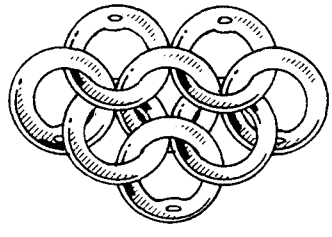
RING MAIL ON QUILT



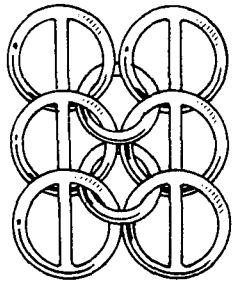
CHAIN MAIL



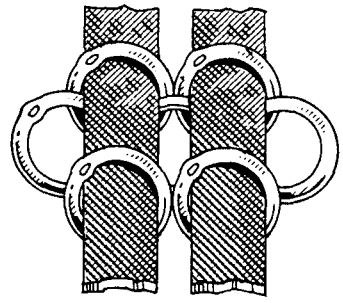
DOUBLE MAIL



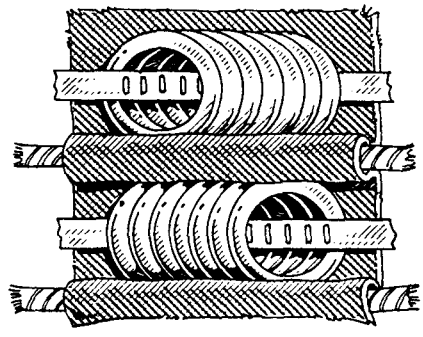
BAR MAIL



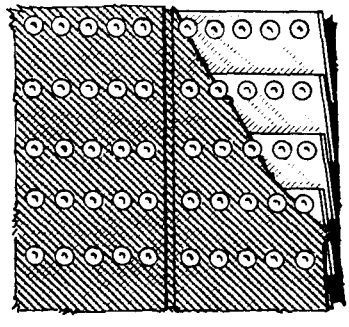
AUGMENTED MAIL



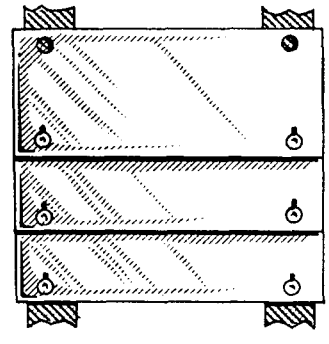
HORIZONTAL MAIL



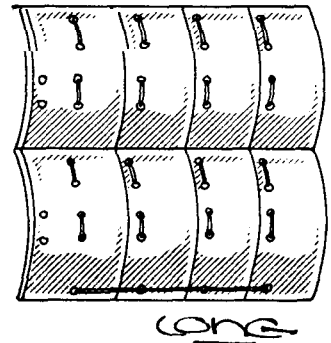
BRIGANDINE



LAMINATED



LAMELLAR



GREEK & ROMAN ARMOUR

Mycenaean (1500-1200 B.C.)

These ancient peoples developed a fairly wide range of armour, from simple leather and cloth garments augmented with bronze discs, to elaborate bronze plate armour. A common form of helmet was the boar's tusk type.

Hoplite (700-500 B.C.)

This type of armour consisted of a bronze "bell" cuirass made of breast and back-plate, a large bronze helmet, and bronze greaves. A large wood and bronze shield, the Hoplon, completed the defensive arms of these warriors.

About the time of Persian Wars (500 B.C.), the bronze cuirass had been discarded in favor of a linen one, often with bronze scales attached to some parts. This form of armour remained in vogue through the Macedonian era and into Roman times.

ROMAN ARMOUR

Roman armour was generally made of mail, jazeraint or laminated metal.

Throughout Roman times the Greek linen *Quirass* was worn. Soldiers also made use of mail, (until mid-1st century A.D.) and later laminated metal body armour. The standard Roman shield was the Scutum which was made out of layered wood (like plywood) covered with animal hide.

PERSIAN/TURKISH ARMOUR (14-17th centuries)

The main type of armour used by these people was made out of mail and combined mail. Often large plates or sections of laminated metal were incorporated into the mail suit. Separate pieces for the arms and legs were worn, as well as additional plating for the torso (Charaina). "Turban" helmets were worn, normally fitted with long aventails of mail.

MONGOL ARMOUR

The predominant armour worn by the Mongol heavy cavalry was metal lamellar hanberks. This type of armour predominated in the areas the Mongols dominated, which stretched from China to India, to Turkey and the Middle East. Helmets were normally conical with lamellar neck guards.

INDIAN ARMOUR

Although information on early Indian armour is sketchy, much of their suits were copied stylistically from their neighbors. Indian armour was made of leather and quilted cotton, brigandine, jazeraint, and mail. Most of their mail suits resemble Persian and Turkish types.

MEDIEVAL EUROPEAN ARMOUR

The history of medieval European armour can be divided into three phases, or "ages," based on the predominant type worn by the knightly classes. The three phases are the Age of Mail (10th through 13th century), the Age of Mail and Plate (14th century), and the Age of Plate (15th and 16th century).

AGE OF MAIL

The predominant form of armour defense in this period was mail, largely in the form of a garment called the hauberk. The hauberk was a long coat, generally of mail, which covered the body from the head to about the knees. Initially its sleeves reached to about the elbow, but gradually they lengthened to cover the entire arm. If the garment was meant to be used by a mounted soldier, it was slit in the front for ease in riding.

The hauberk was improved upon and altered over the course of time. Eventually the sleeves ended in *mail mittens* to protect the hands. The headpiece became a separate unit, called a coif, which was put on over the hauberk itself. Small shoulder plates, called ailettes, were added as well.

Early in this period, the common form of head protection was a *nasal,* or "Norman," helmet which was worn over the mail coif. Later, a closed helmet which completely covered the head, called a heaume, came into use. These helmets were worn over the coif, which was now worn over a metal cap. Early heaumes were worn and supported solely by the head; later, conical heaumes rested on the shoulders.

Initially the legs were left unprotected; a pair of leather leggings were about the extent of the leg protection. Eventually, specific pieces of armour, called *chansses,* were worn to protect the legs below the hauberk. Chansses were made of a variety of armour types, bezainted, lamellar, and mail being the most common. Mail chansses were expanded upon until they resembled mail trousers and protected the legs down to the feet. Late in the age of mail, special knee plates, called *genouilleres*, were introduced and incorporated into the mail chansses. These plates not only improved the protection of the knee, but also helped reduce the drag of the mail.

AGE OF MAIL AND PLATE

This era in European armour saw the gradual reinforcement of the mail hauberk with metal plates. The major portions of the body which were protected by plate, were the trunk, the arms, the legs, and the head.

The trunk was protected by the *plastron-de-fer*, or breastplate. Normally this plate was attached to the mail hauberk by a series of laces or staples. The arms were gradually encased in metal plates as well. The ailettes were replaced by laminated plates called *epaulieres*. The upper portion of the arm was protected by the *brassart,* the lower, by the *vambrace.* An elbow guard, called the *coudiere*, completed the arm defense.

Like the arms, the legs were also gradually encased by plates during this era. The *genouilleres* were retained; *cuissarts* (upper leg plates) and *grevieres* (lower leg plates) were added as well. Late in this era laminated metal *sollerets* were worn to protect the feet. The main protection of the head was now the *bascinet.* A type of helmet generally conical in shape and worn over a padded cap. It could open or visored. Often the visors could be completely removed, if so desired. To protect the neck, a piece of mail, called *camail,* was attached to the lower rim of the bascinet and hung down over the shoulders.

AGE OF PLATE

This period saw the emergence of armour suits made *entirely* of metal plates. Although mail was still used, it was used only for small, specially designed pieces used to protect areas left

open by the metal plates (armpits, elbow crook, knee crook, and groin).

The bascinet was still used early in this era, but without the camail. Instead, a metal plate, called the *gorget*, protected the throat. It rested on the shoulders and, although it wasn't as flexible as the carmail, which allowed complete freedom of movement, it was not as heavy and cumbersome. Later on, the *salade* and then the *armet* replaced the bascinet as the main form of helmet.

To protect the waist and groin, armour pieces, called *taces*, were introduced during this era. As time progressed, this plate skirt was shortened and fitted with thigh plates called *tuilles*.

The shoulders were protected by plates called *pauldrons*. These were fitted over the epaulieres. Towards the end of the 15th century, the shield was discarded by knights as a defense. As a result, the left side of the armour suit became more and more strengthened (the left side being the exposed side of a right-handed fighter). Suits soon had large pauldrons and coudieres fitted to their left sides as compensation for the lack of a shield.

ARMOUR COVERINGS

Throughout most of the medieval period in Europe, some sort of *cloth covering* was worn over the armour suit. These coverings served three important purposes.

1.) They provided recognition for the wearer. As the head and face were normally covered in battle, it became necessary to wear some sign which could be recognized by your allies.

2.) They protected against the weather. A covering helped keep the sun from heating up the metal of the armour, as well as helped keep rain off.

3.) They provided an additional layer of armour. This was small protection as compared to the main suit, but it was protection nonetheless.

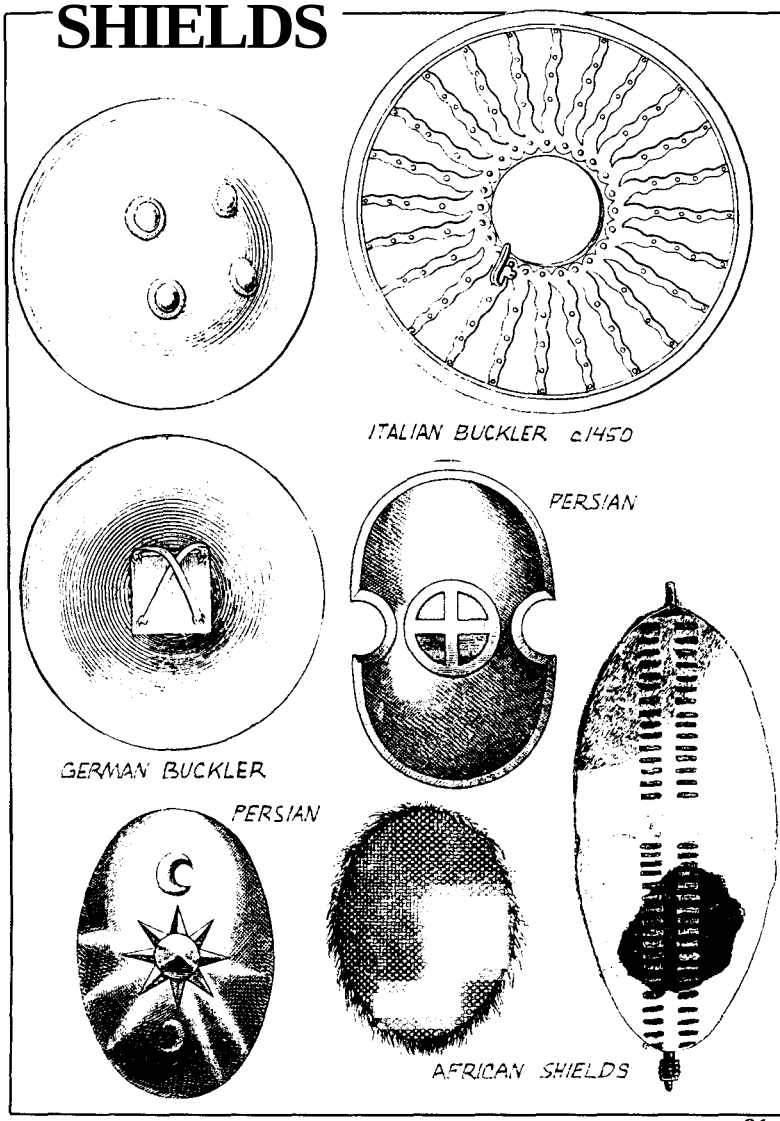
These garments were generally lightweight and made of cloth. The earliest garment was the *surcoat*, which was used until the mid 1300's. **The surcoat** was a long, sleeveless garment which extended to below the knees. It was slit up the front for riding.

The cyclas came into use during the 1300's and differed from the surcoat in that it was laced up on the sides of the chest and the front of the skirt was cut shorter than the back.

The jupon was worn in the latter part of the 1300's and was a form fitting, sleeveless garment. It was laced up the sides.

The tabard was worn throughout the 1400's. It was a short-sleeved garment which reached to about mid-thigh. Sometimes it was laced up tightly and other times it hung loose.

SHIELDS



Shields are certainly one of the earliest forms of armour, with their use dating from before recorded history. Throughout the ages they were made out of a wide variety of materials, metal, wood, animal hide, wicker and turtle shell to name some of the more common. As with weapons and body armour, the form and function of the shield depended largely upon the local environment and its resources. Shields were made in an equally wide variety of shapes and sizes. They were often used by many cultures as a place to put symbols or pictures, generally to either identify the user or protect him through their mystical power.

Ancient shields were generally round, oval or rectangular. Often a warrior might carry a large, nearly man-sized, shield if fighting in formation or a smaller, lighter one if involved in single combat. Often shields of this period were made up of a number of layers of materials, like wood, leather, and bronze. This was especially so in the larger ones.

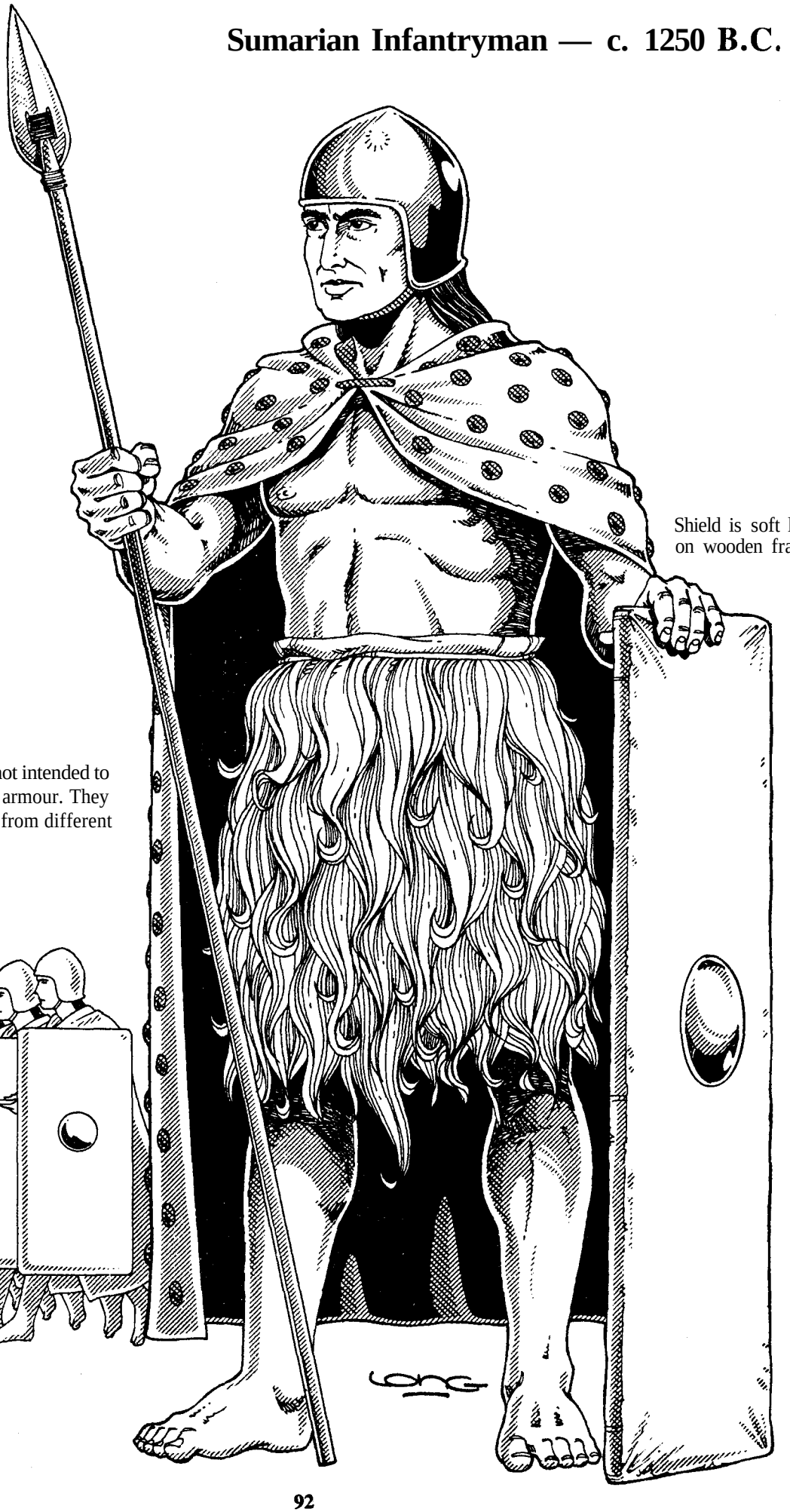
The Romans used two basic varieties of shields throughout their history: the *scutum*, a curved, generally rectangular shield, and the round, bronze *chipens*. The barbarians, who were the contemporaries of Rome, used either round or oval shields.

In medieval Europe, the kite-shaped Norman shield came into use in the 11th century and gradually (13th-14th centuries) changed into a more triangular shape called a "heater" shield. During this time the practice of emblazoning heraldic arms upon shields came into heavy use. Later in Europe, three general categories of shields developed; those large enough to serve as shelters for footmen (Pavise), those worn on the arm (Target), and those held with the hand (Buckler).

In the Middle East and most of Asia, the round shield has predominated. They are generally made of metal.

In Africa, the New World, and the Pacific regions, a great variety of shields exist, all generally made of animal hide, wood or wicker.

Sumarian Infantryman — c. 1250 B.C.

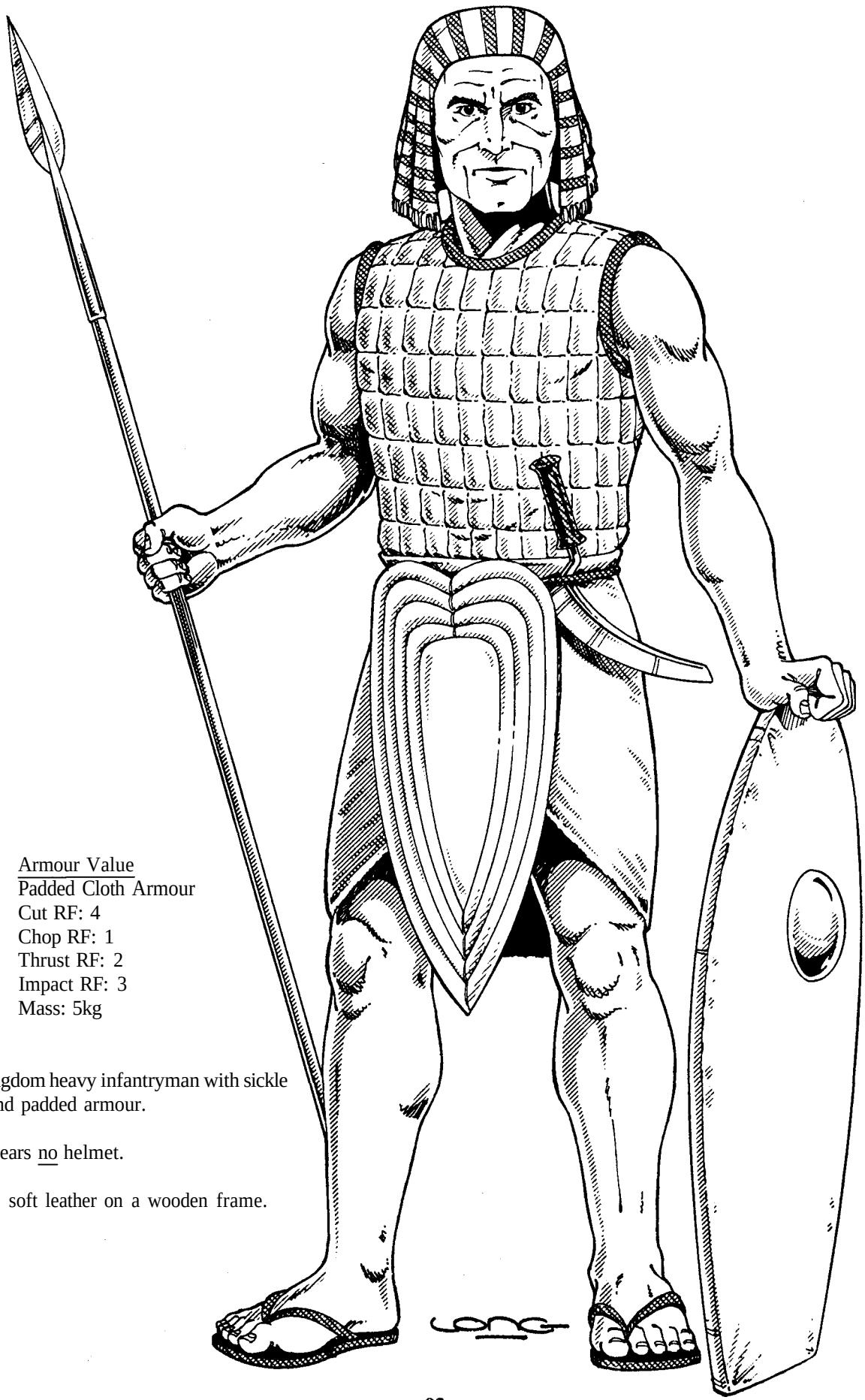


Shield is soft leather on wooden frame

Note: The illustrations are not intended to be the last word in medieval armour. They only represent average suits from different places and periods.

Phalanx Battle Formation

Egyptian Heavy Infantryman — 19th Dynasty



Armour Value
Padded Cloth Armour
Cut RF: 4
Chop RF: 1
Thrust RF: 2
Impact RF: 3
Mass: 5kg

New Kingdom heavy infantryman with sickle sword and padded armour.

Note: Wears no helmet.

Shield is soft leather on a wooden frame.

Hitite Warrior and Charioteer — c. 1250 B.C.

Bronze helmet with horse hair crest.

Shield is wicker with soft leather face.

Lamellar Hauberk

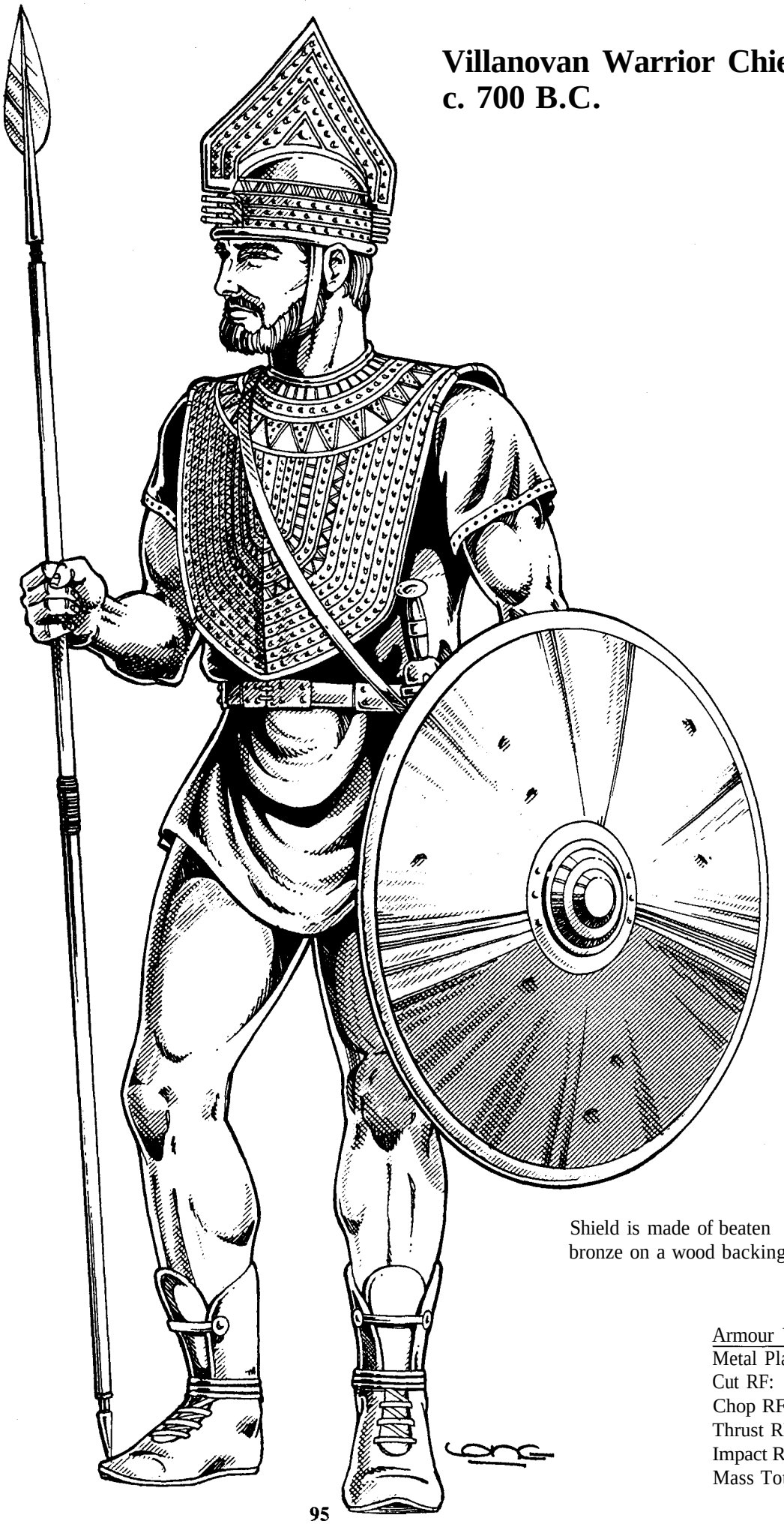
Heavy cloth armour.

Shield is solid wood covered with leather.

Armour Value
Cloth & Helmet
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass Total: 5kg

Armour Value
Laminated Metal Over Medium Cloth
Cut RF: 11
Chop RF: 9
Thrust RF: 9
Impact RF: 1
Mass Total: 22kg

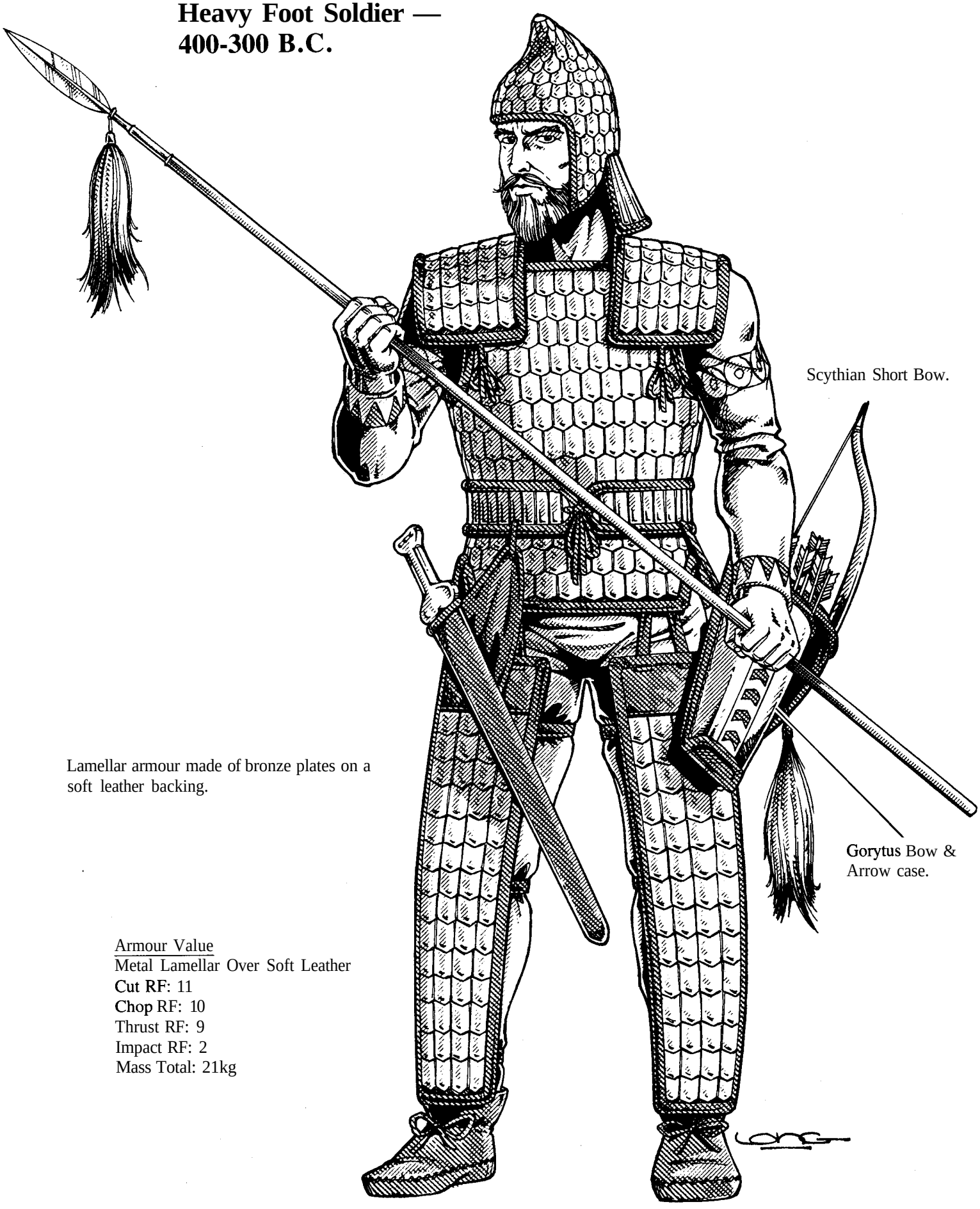
Villanovan Warrior Chief — c. 700 B.C.



Shield is made of beaten bronze on a wood backing.

Armour Value
Metal Plating
Cut RF: 11
Chop RF: 11
Thrust RF: 11
Impact RF: 1
Mass Total: 20kg

Scythian Warrior
Heavy Foot Soldier — 400-300 B.C.



Scythian Short Bow.

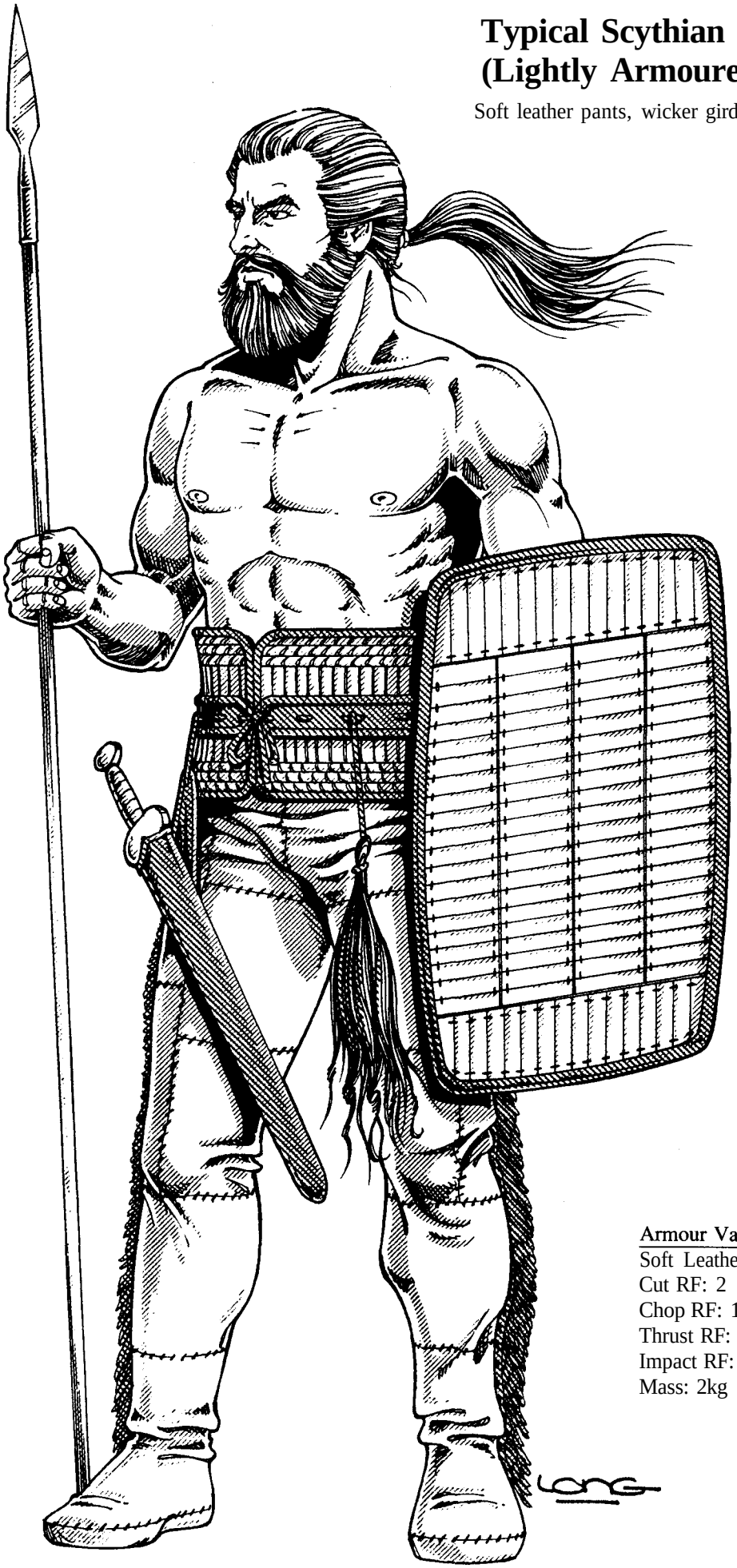
Lamellar armour made of bronze plates on a soft leather backing.

Gorytus Bow & Arrow case.

Armour Value
Metal Lamellar Over Soft Leather
Cut RF: 11
Chop RF: 10
Thrust RF: 9
Impact RF: 2
Mass Total: 21kg

Typical Scythian Warrior (Lightly Armoured)

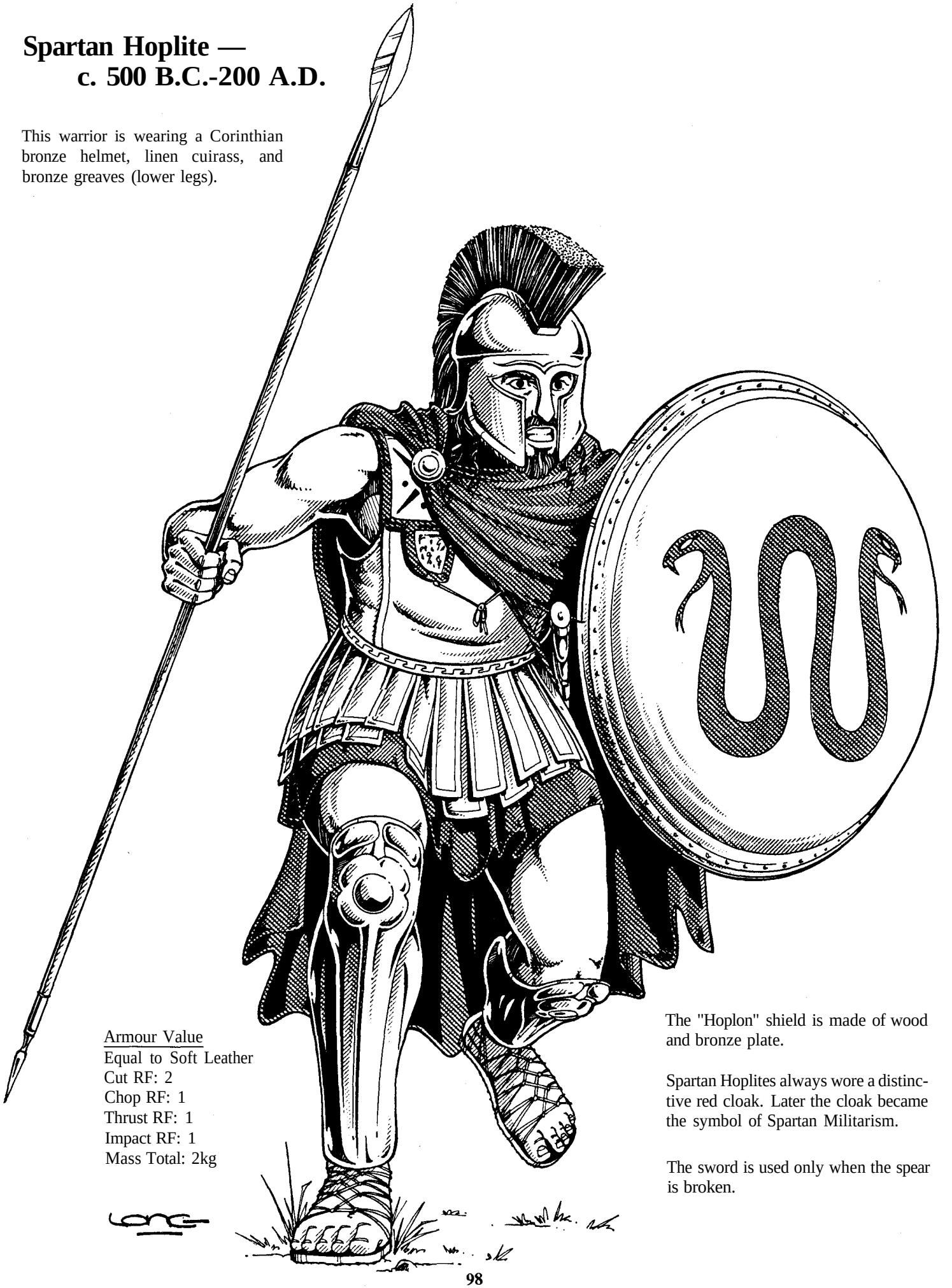
Soft leather pants, wicker girdle and shield.



Armour Value
Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass: 2kg

Spartan Hoplite — c. 500 B.C.-200 A.D.

This warrior is wearing a Corinthian bronze helmet, linen cuirass, and bronze greaves (lower legs).



Armour Value
Equal to Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass Total: 2kg

The "Hoplon" shield is made of wood and bronze plate.

Spartan Hoplites always wore a distinctive red cloak. Later the cloak became the symbol of Spartan Militarism.

The sword is used only when the spear is broken.

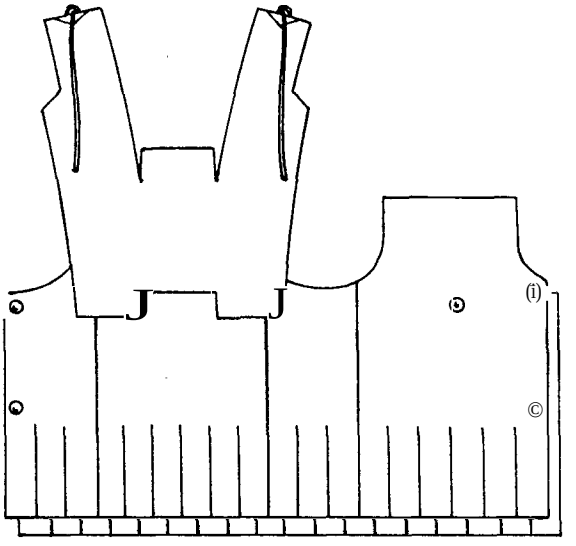
Greek Linen Cuirass —c. 500 B.C.-200 A.D.

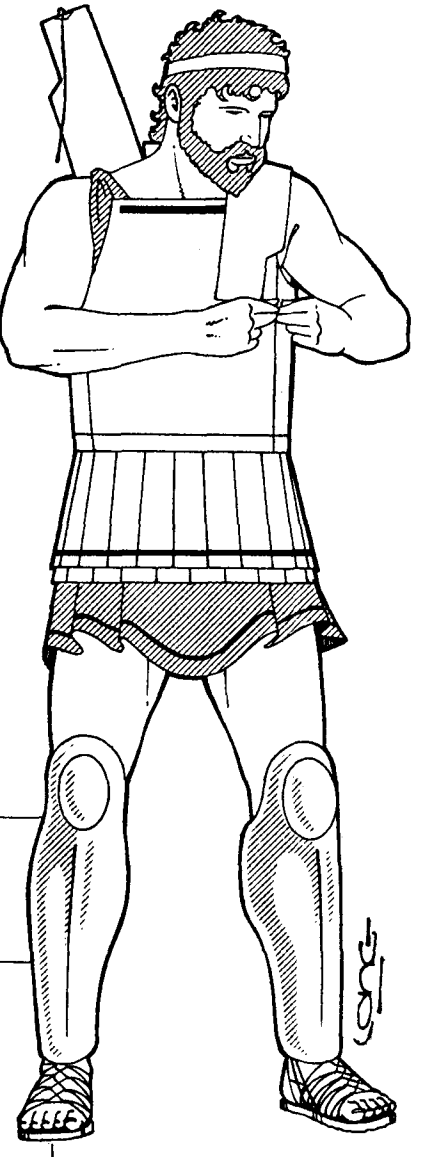
Hoplite warrior putting on multi-layered linen cuirass.

The cuirass was made of many layers of linen glued together about ½ centimeter thick.

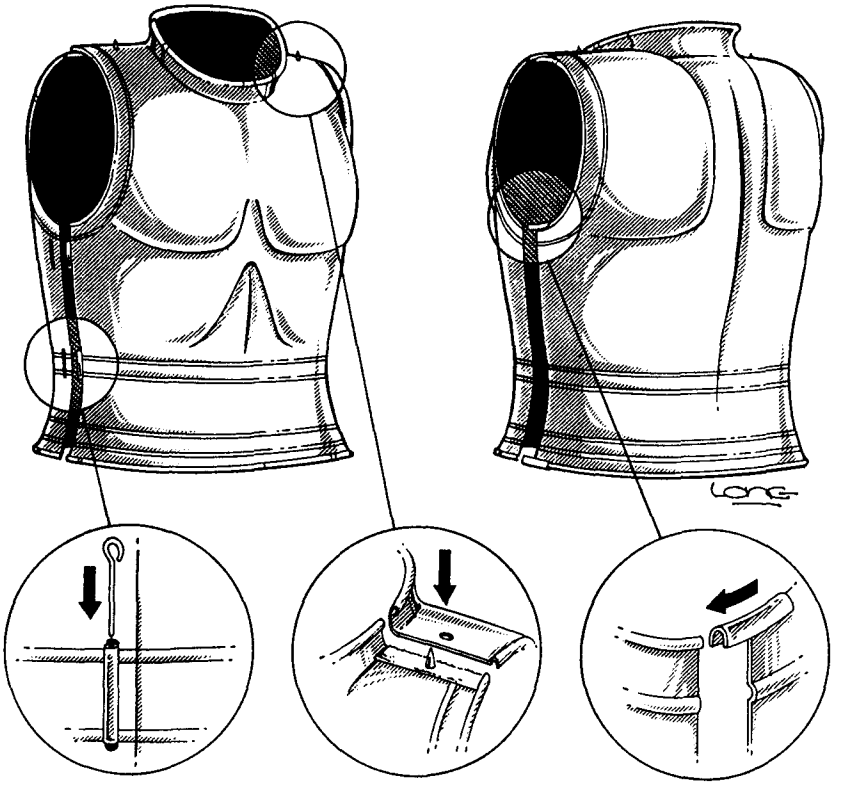
Also known as "stiff shirt." Very resilient. Its advantages were its light weight, flexibility and cheapness to produce.

Linen types of armour very similar to this were used by Greek and Romans till about 500 A.D. It was eventually replaced by chain mail.





Armour Value
Equal to Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass Total: 2kg

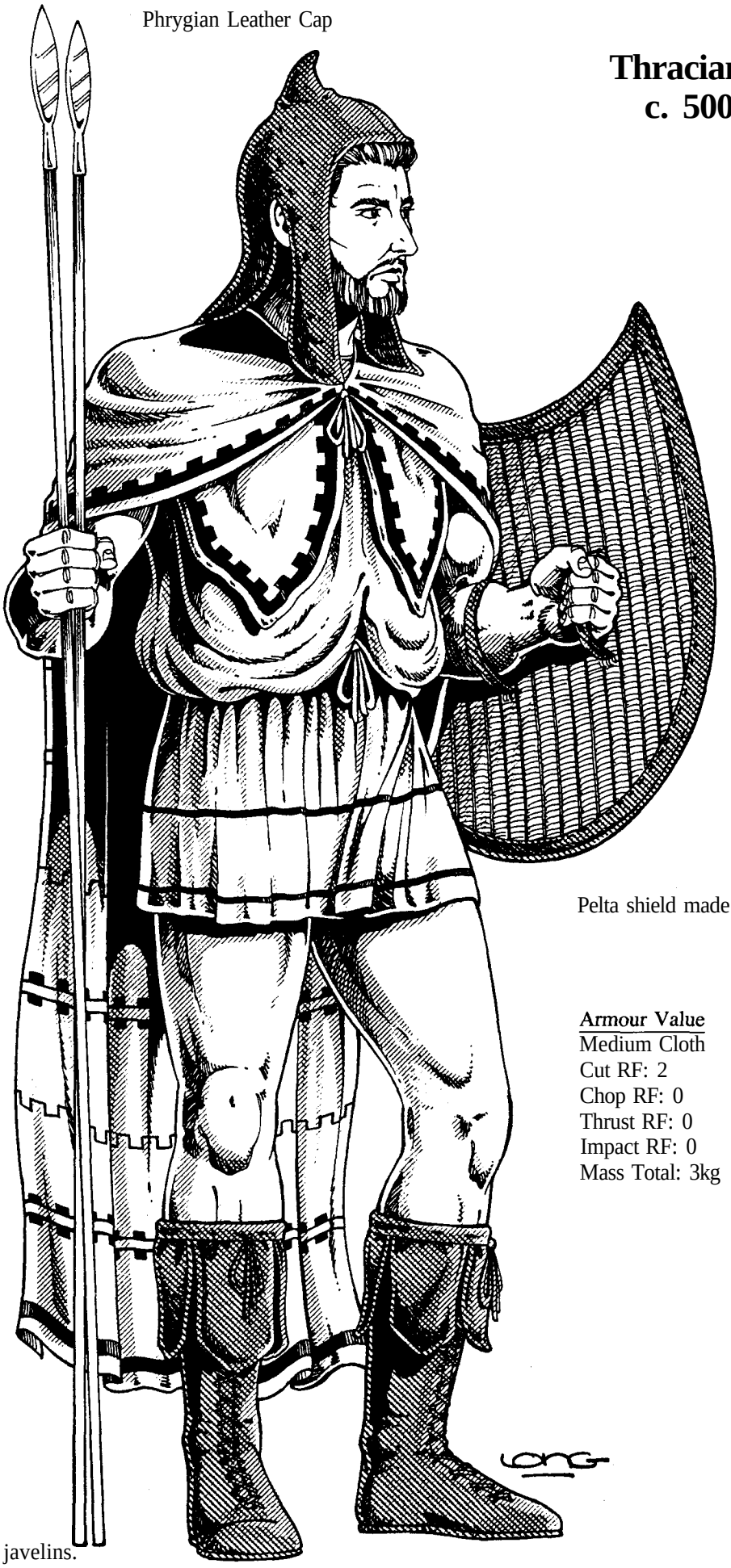


Greek Bell Cuirass and Joining Methods 525 B.C.-500 A.D.

The famous Bell Cuirass was made of bronze, which is much softer than steel or iron.

Armour Value
Bronze Plating
Cut RF: 7
Chop RF: 7
Thrust RF: 7
Impact RF: 1
Mass Total: 18kg

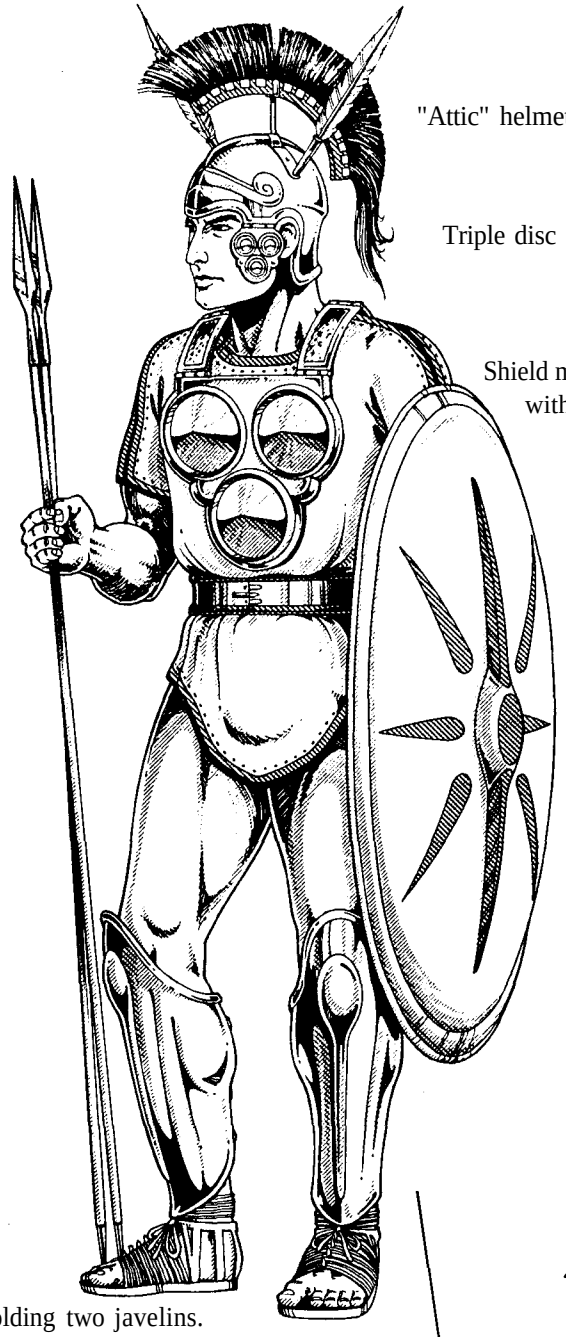
Thracian Peltast Foot Soldier
c. 500-400 B.C.



Pelta shield made of wicker and covered in goatskin.

Armour Value
Medium Cloth
Cut RF: 2
Chop RF: 0
Thrust RF: 0
Impact RF: 0
Mass Total: 3kg

Samnite Warrior (Early Italian)
c. 900-50 B.C.



"Attic" helmet made of Bronze

Triple disc cuirass.

Shield made of wood with leather cover.

Holding two javelins.

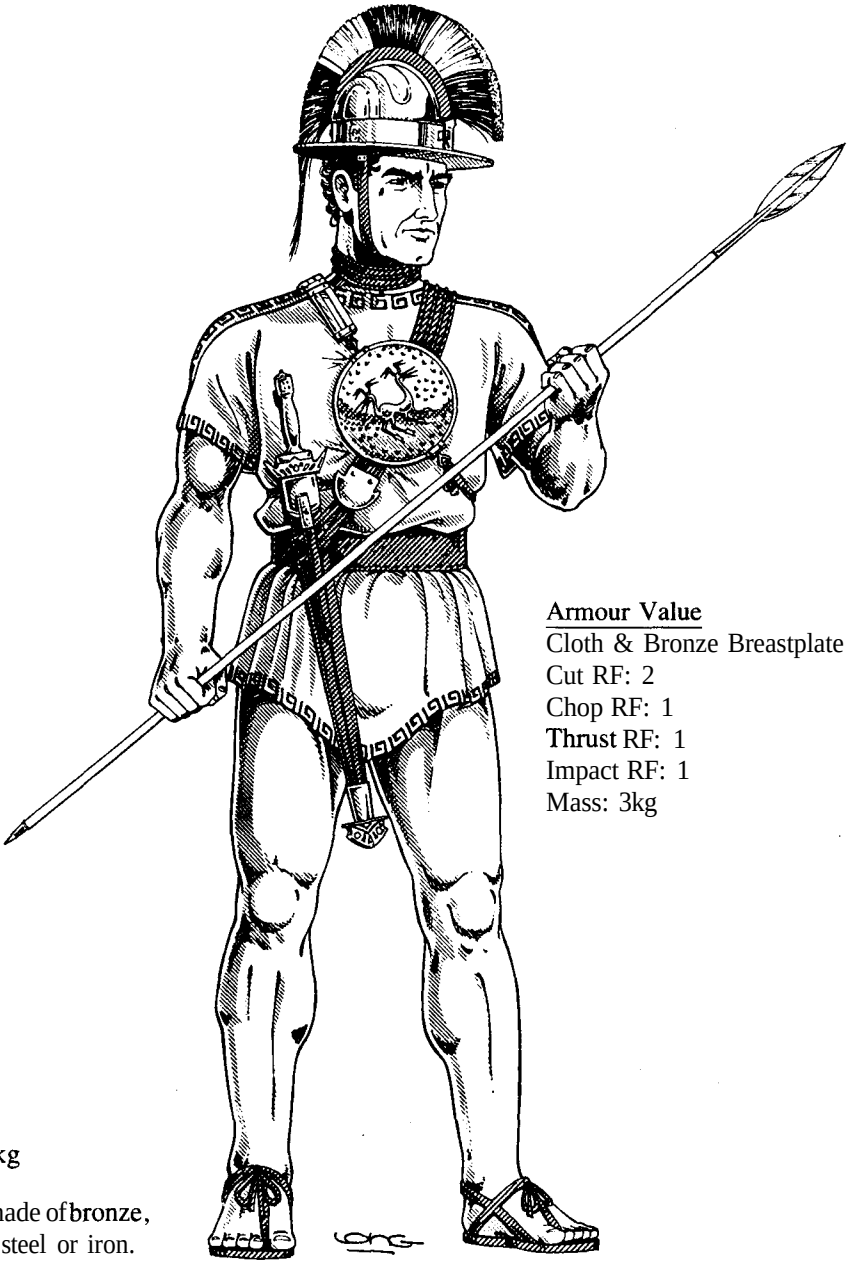
Metal Greaves
Protective Leg Plate

Armour Value
Bronze Plating
Cut RF: 7
Chop RF: 7
Thrust RF: 7
Impact RF: 1
Mass Total: 18kg

This armour was typically made of bronze, which is much softer than steel or iron.

Central Italian Soldier
c. 400-50 B.C.

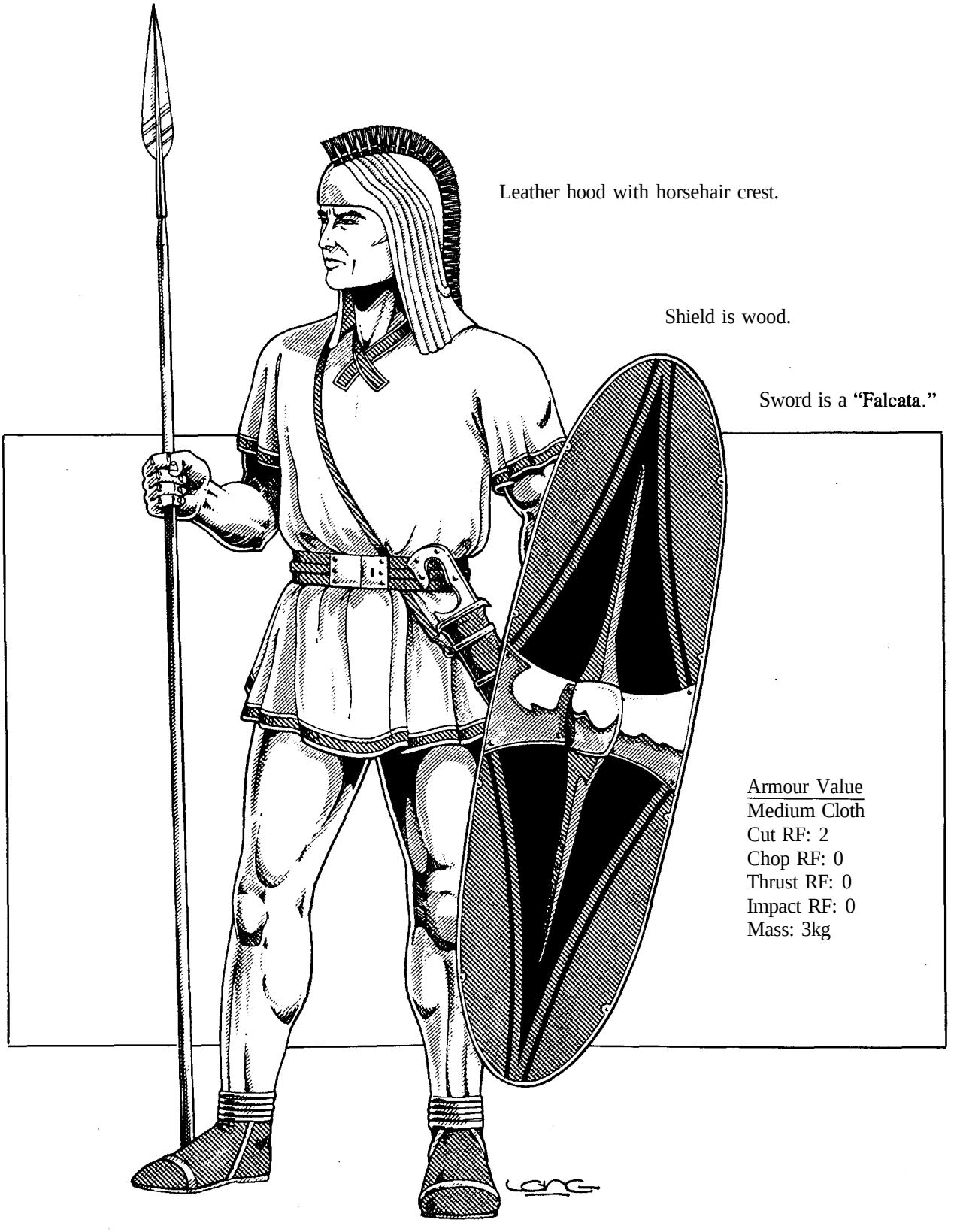
No armour to speak of except a bronze helmet and breast and backplate.



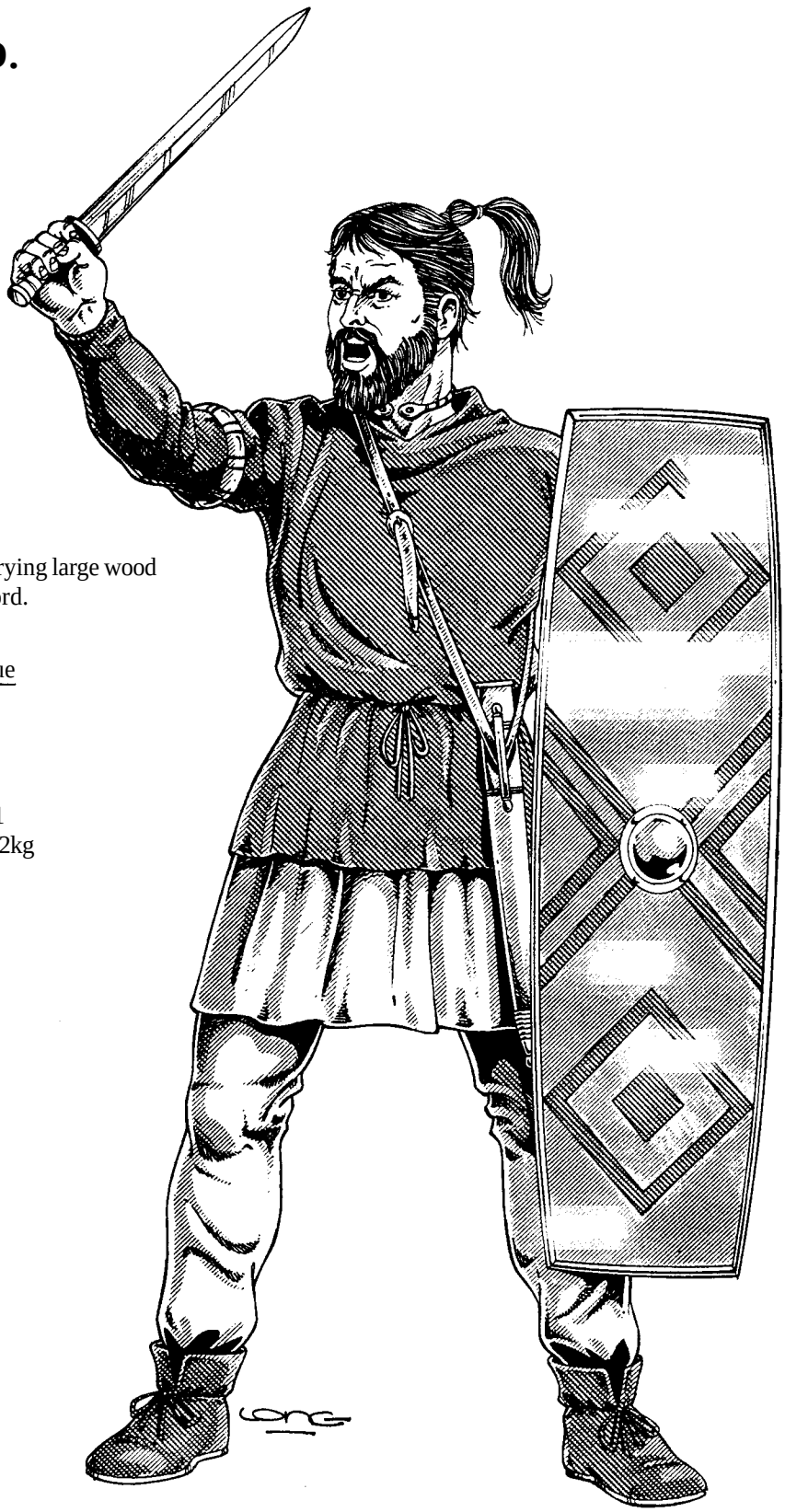
Armour Value
Cloth & Bronze Breastplate
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass: 3kg

Spanish Infantryman

70,000 of these soldiers were used as mercenaries by Hannibal



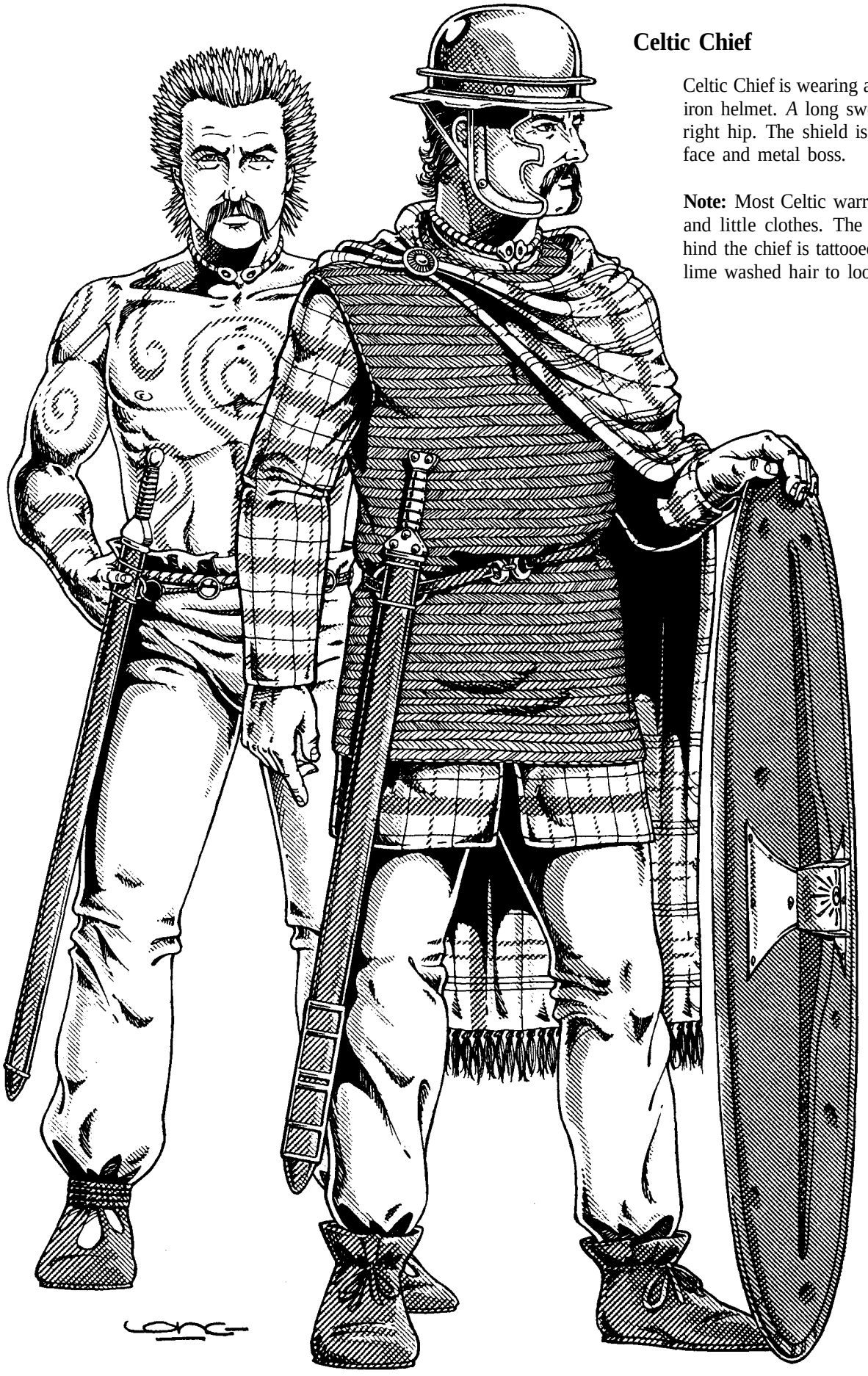
Celtic Warrior
c. 300 B.C.-100 A.D.



No armour, just cloth, carrying large wood shield and iron short sword.

Armour Value
Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass Total: 2kg

Typical Celtic Warrior

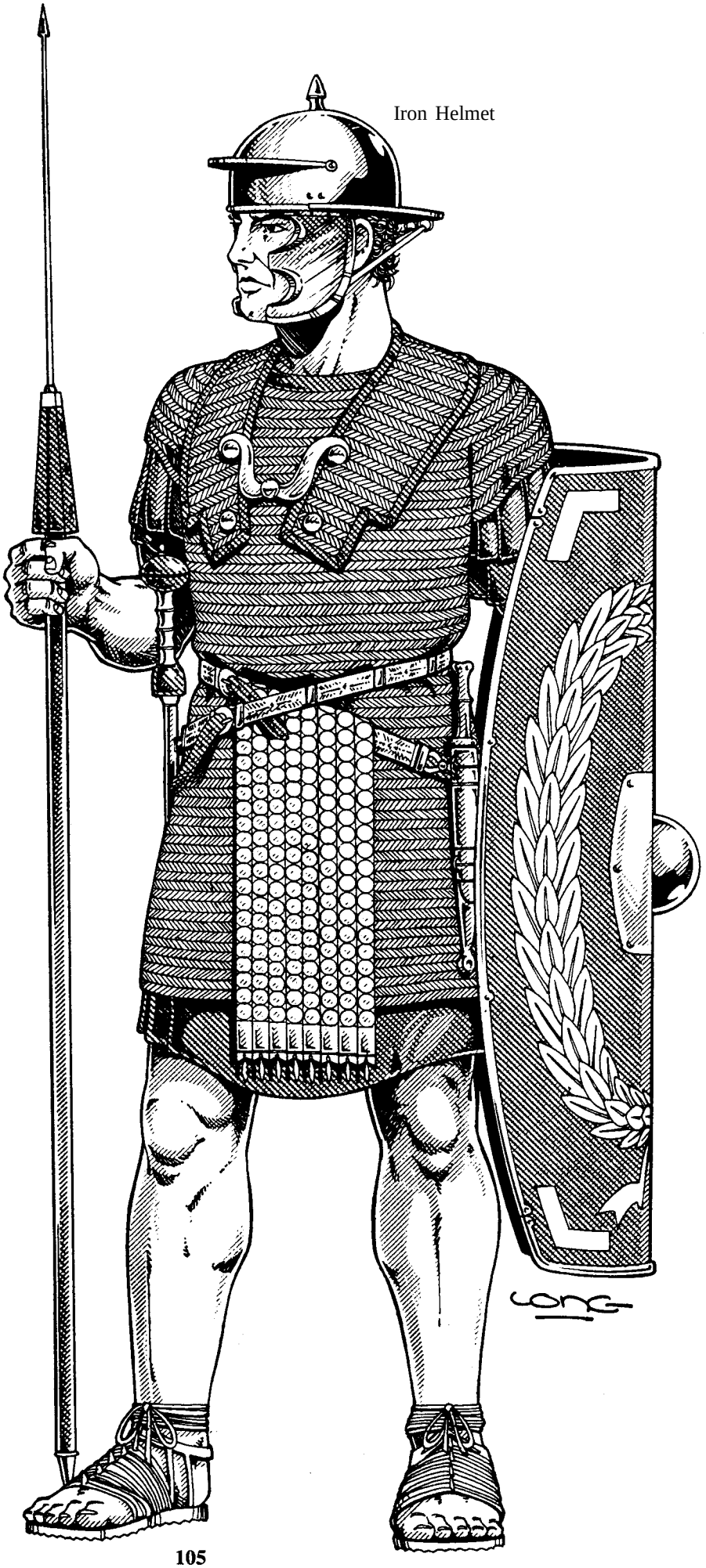


Celtic Chief

Celtic Chief is wearing a chain mail shirt and iron helmet. *A* long sword dangles from his right hip. The shield is wood with a leather face and metal boss.

Note: Most Celtic warriors wore no armour and little clothes. The warrior depicted behind the chief is tattooed with woad and has lime washed hair to look more fierce.

Roman Legionnaire
c. 200 B.C.-100 A.D.



Mail shirt; weight: 12kg (281bs)

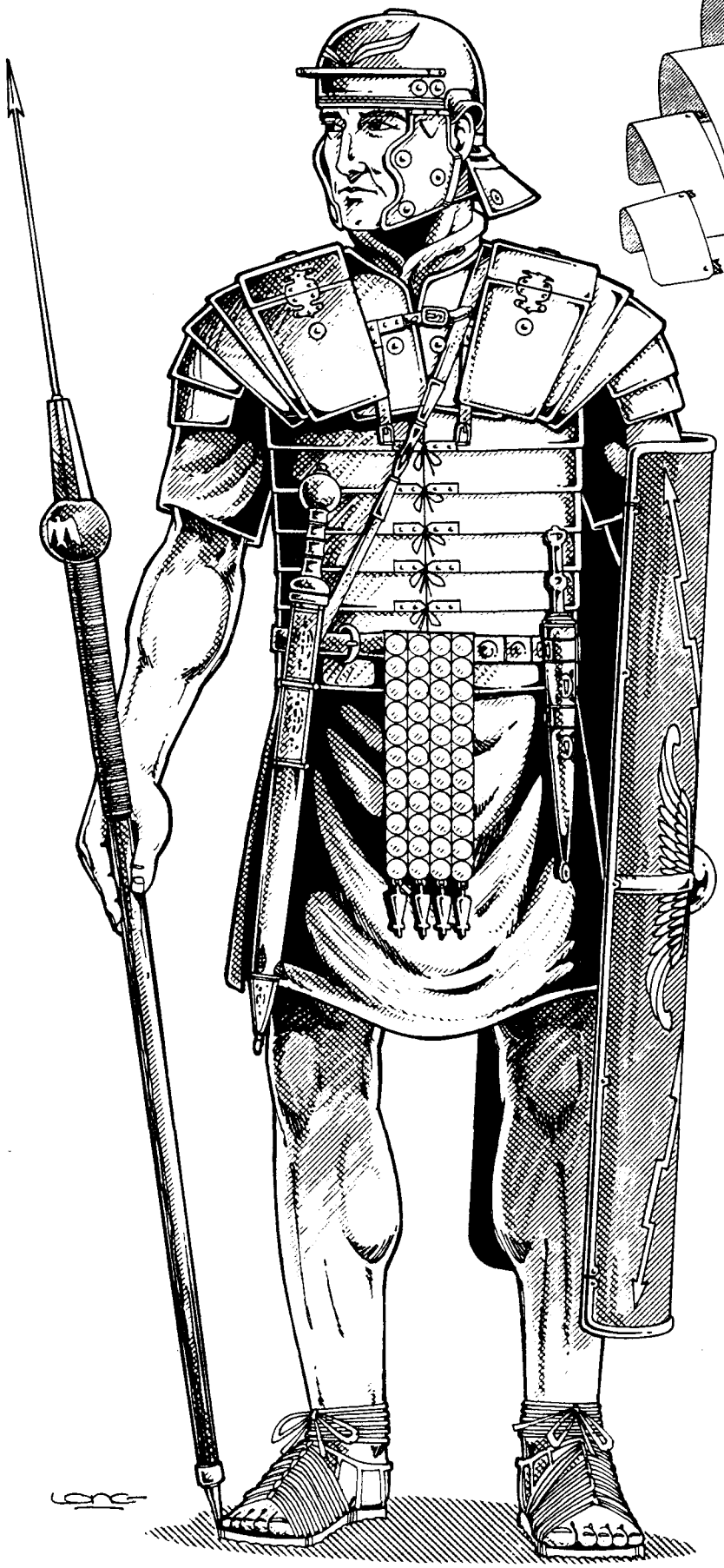
Protective apron of leather strips with metal discs attached to belt.

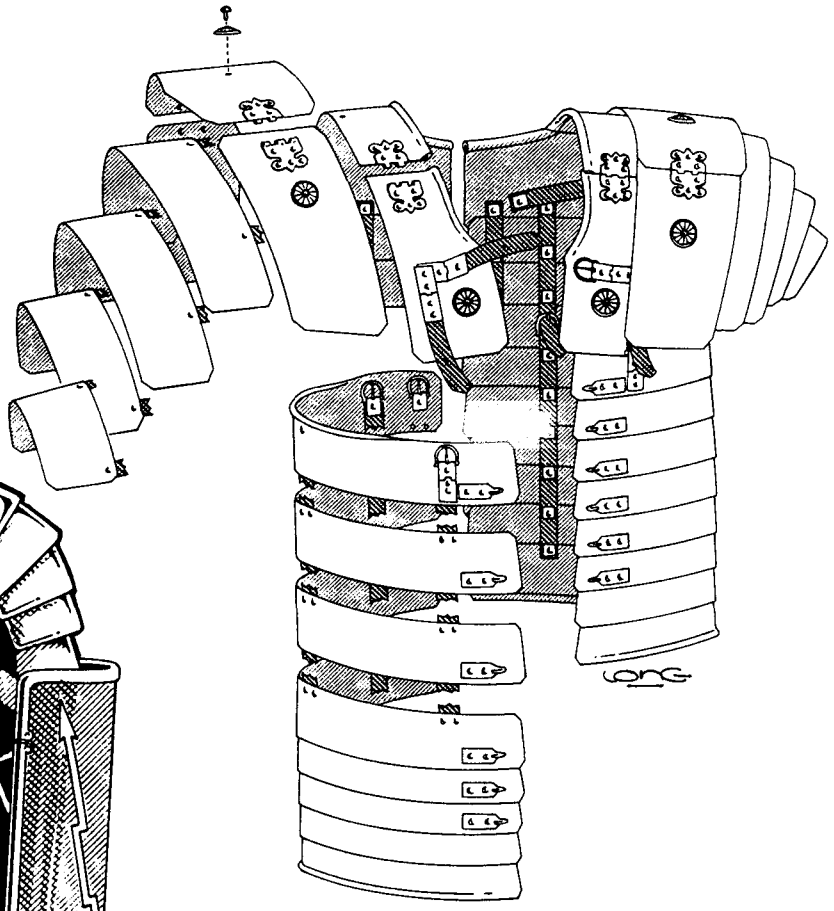
Weapons Include:
Thick Pilum (spear-like), dagger, gladius short sword, and scutum shield.

The shield is made of shaped wood strips covered in linen and leather with metal trim.

Armour Value
Mail Over Heavy Cloth
Cut RF: 10
Chop RF: 7
Thrust RF: 3
Impact RF: 2
Mass Total: 16kg

Roman Legionnaire
c. 50-250 A.D.





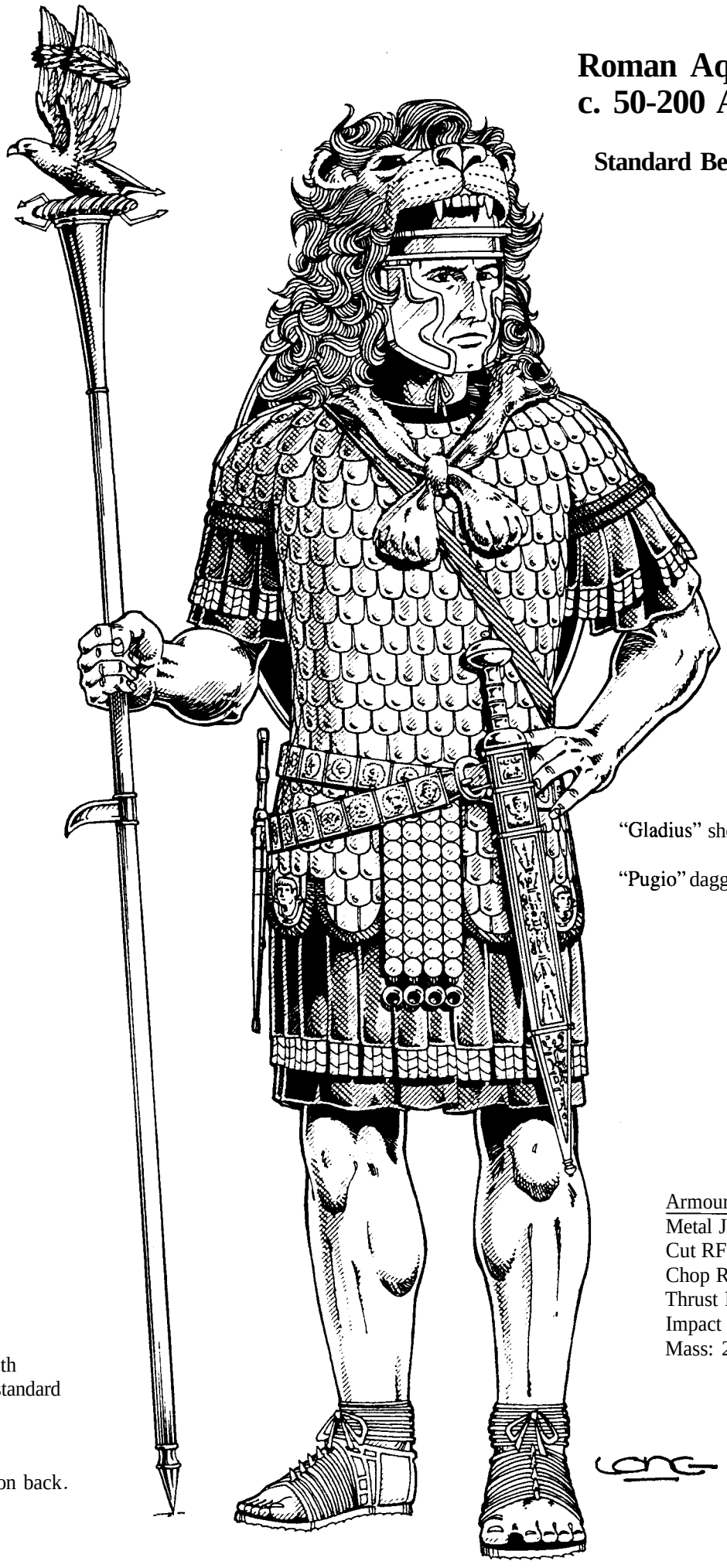
Exploded View of Roman Legionnaire's Laminated Armour

"Lorica Segmentata" cuirass with hinged laminated steel pieces riveted to leather straps and laced together in the front & back. Weight: 9kg (201bs).

Armour Value
Laminated Over Medium Cloth
Cut RF: 11
Chop RF: 9
Thrust RF: 9
Impact RF: 1
Mass: 16kg

Roman Aquilifer
c. 50-200 A.D.

Standard Bearer



"Gladius" short sword

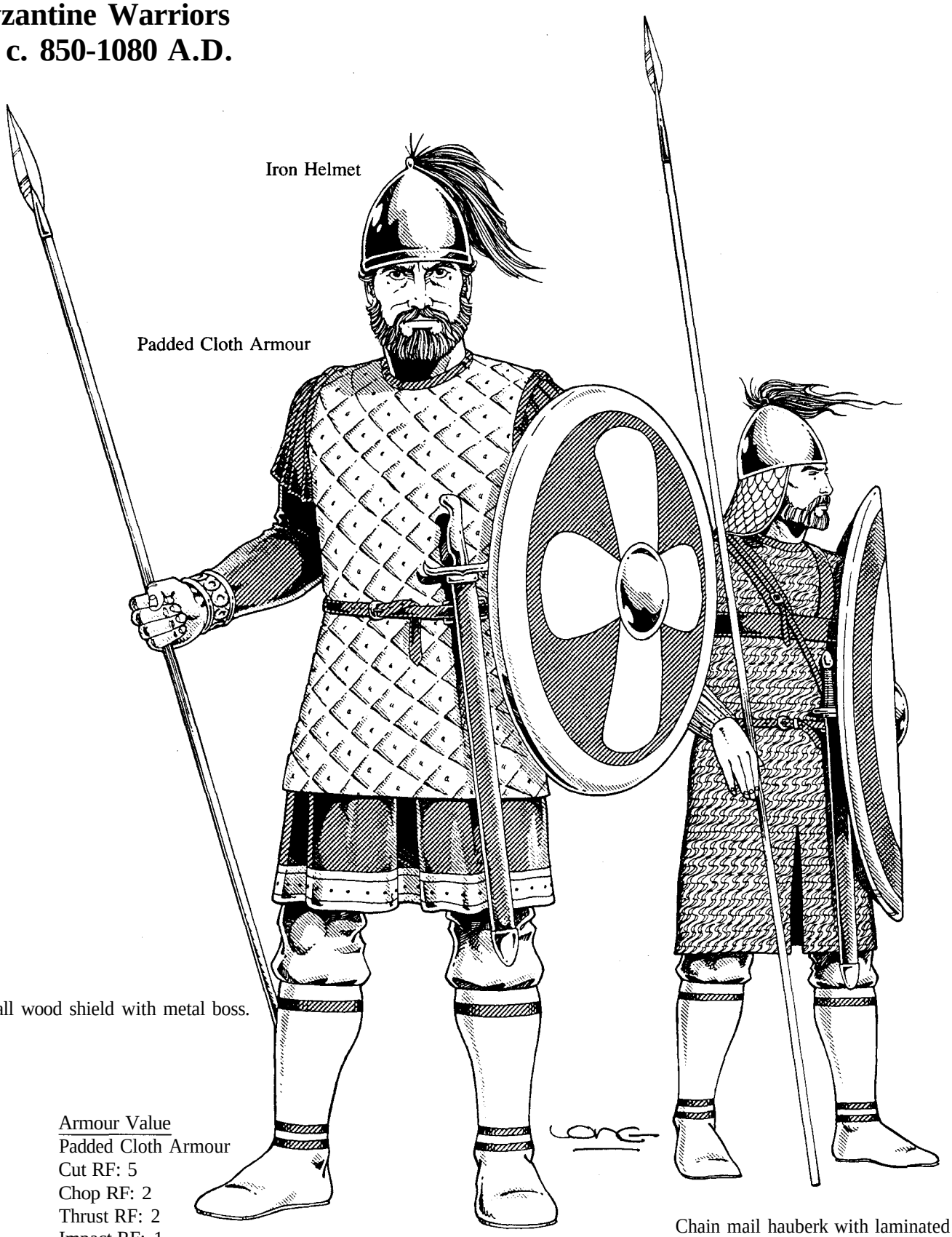
"Pugio" dagger

Armour Value
Metal Jazeraint
Cut RF: 9
Chop RF: 8
Thrust RF: 8
Impact RF: 1
Mass: 20kg

Metal Jazeraint shirt with lion headdress worn over a standard iron helmet.

Carries a small circular shield on back.

Byzantine Warriors
c. 850-1080 A.D.



Small wood shield with metal boss.

Armour Value
Padded Cloth Armour
Cut RF: 5
Chop RF: 2
Thrust RF: 2
Impact RF: 1
Mass Total: 5kg

Armour Value
Mail Over Heavy Cloth
Cut RF: 10
Chop RF: 7
Thrust RF: 3
Impact RF: 2
Mass Total: 16kg

Chain mail hauberk with laminated metal vambrace.

Iron helmet with leather Jazeraint neck guard.

Roman style shield of wood and leather with metal reinforcement.

Bizantine Cataphractos Heavy Infantrymen c. 400-1050 A.D.

Armour Value
Jazeraint Shirt
Over Chain Mail
Over Padding
Cut RF: 20
Chop RF: 15
Thrust RF: 12
Impact RF: 4

Armour Value
Greaves & Vambraces
Laminated Metal Over
Medium Cloth
Cut RF: 11
Chop RF: 9
Thrust RF: 9
Impact RF: 1

Armour Value
Mail over Padding
Cut RF: 11
Chop RF: 7
Thrust RF: 4
Impact RF: 4
Total Mass: 32kg

The lead figure is dressed in a chain mail Hauberk with a metal Jazeraint shirt and laminated metal grevieres (lower leg guards), as well as metal laminated vambraces (forearm). The helmet is iron, with a mail coif to protect the neck. The shield is wood with a leather face.

The second figure is dressed in a metal Jazeraint shirt, padded cloth armor covers the arms, chest and legs, with a metal helmet and chain mail coif. The spear is a long cavalry-type lance.

Armour Value
Jazeraint Shirt
Cut RF: 13
Chop RF: 9
Thrust RF: 10
Impact RF: 3
Mass: 25kg

Armour Value
Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass: 12kg

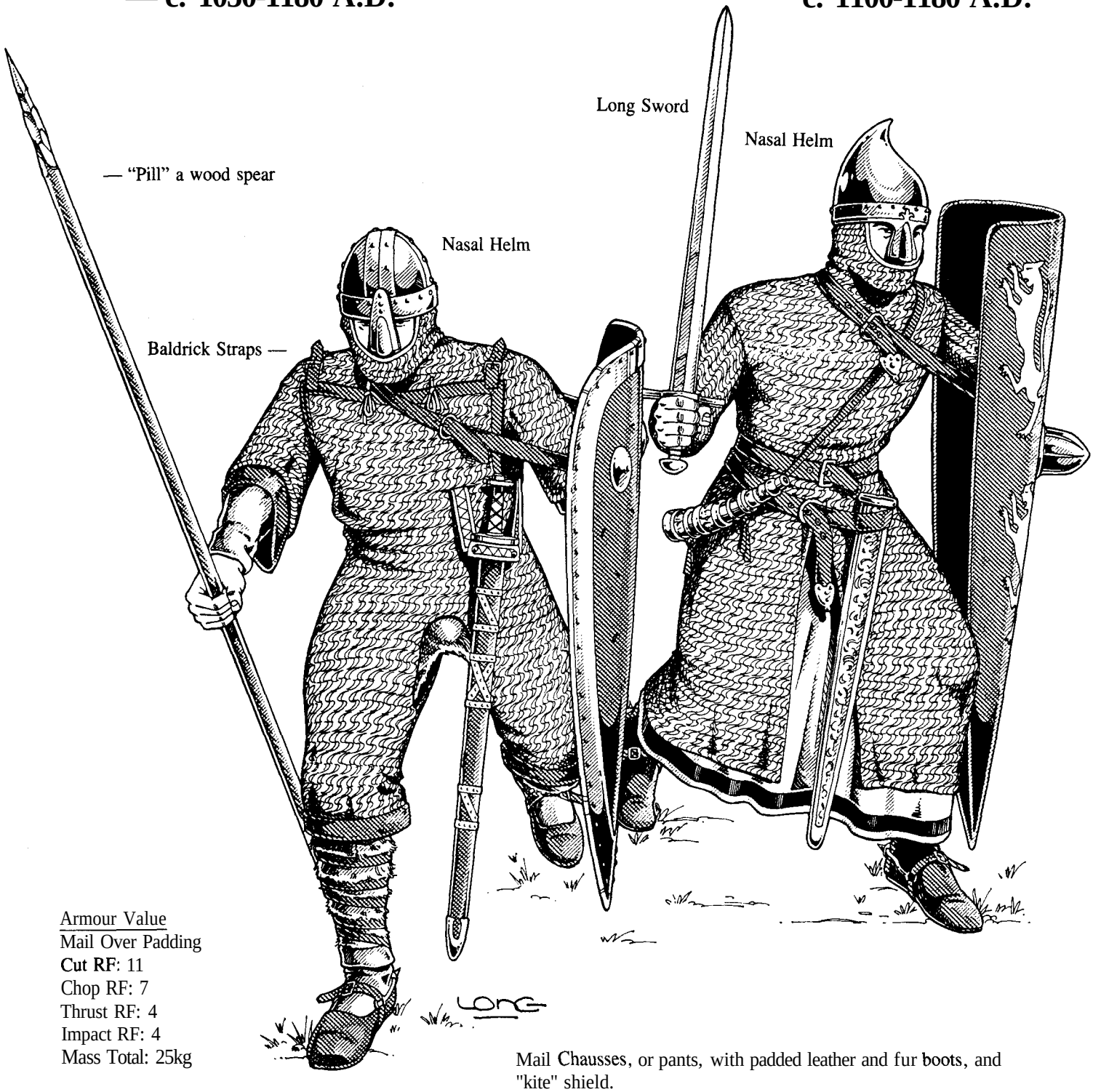
Early Norman Infantryman
c. 1000-1080 A.D.

Chain mail hauberk with haqueton padded undergarment, and leather chausses (leggings). The helmet is a "Nasal Helm" made of iron. The "kite" shield is made of wood with a decorative leather face and metal reinforcement.

Armour Value
Mail Over Padding
Cut RF: 11
Chop RF: 7
Thrust RF: 4
Impact RF: 4
Mass: 25kg

Norman Cavalry Soldiers — c. 1050-1180 A.D.

c. 1100-1180 A.D.



Armour Value
Mail Over Padding
Cut RF: 11
Chop RF: 7
Thrust RF: 4
Impact RF: 4
Mass Total: 25kg

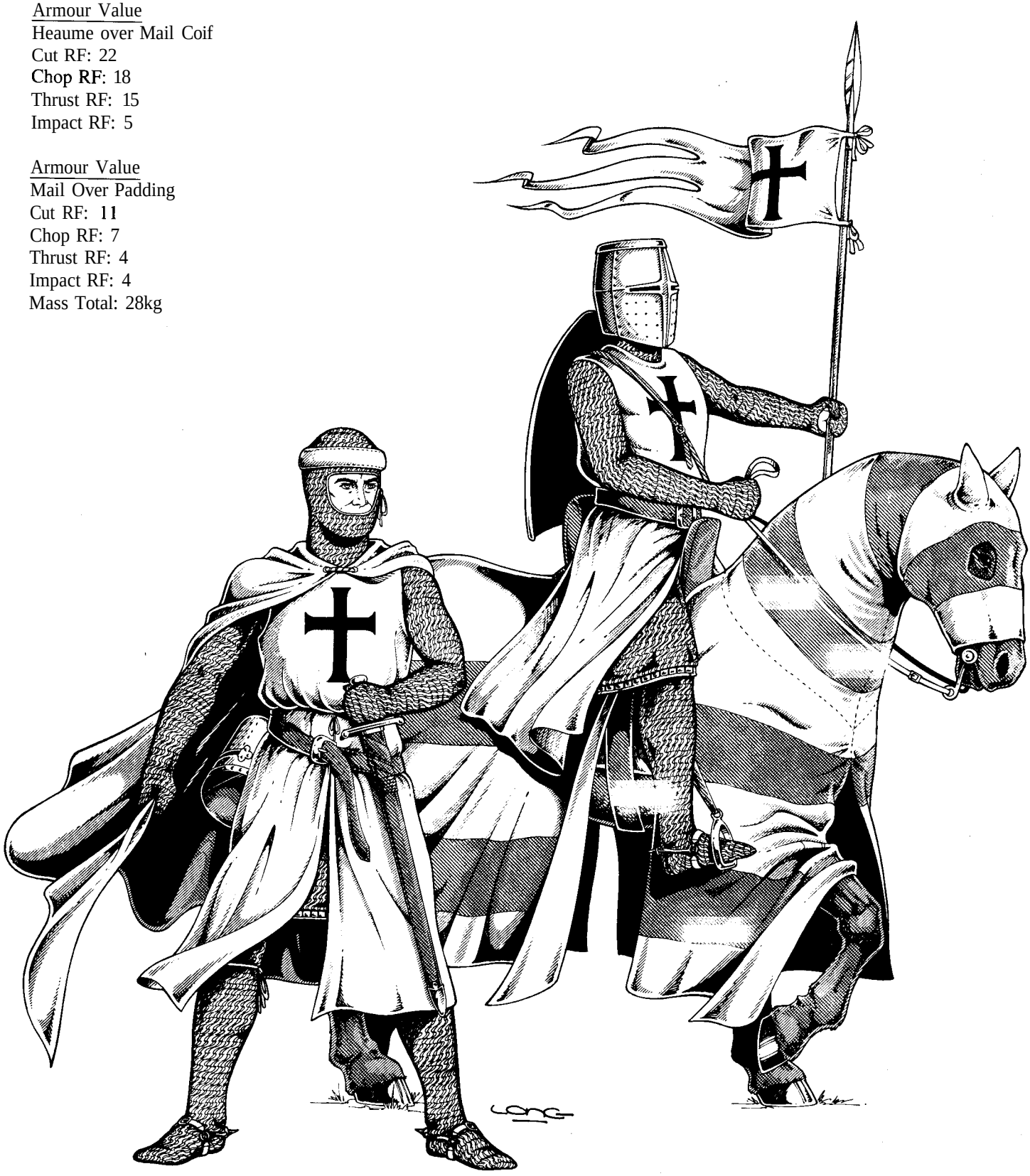
Mail Chausses, or pants, with padded leather and fur boots, and "kite" shield.

Note that the kite shield was designed to be strapped to the soldier's chest so that the shield could lay draped on the left side when mounted on a horse. On foot, the shield was hand held.

Crusaders
c. 1095-1250 A.D.

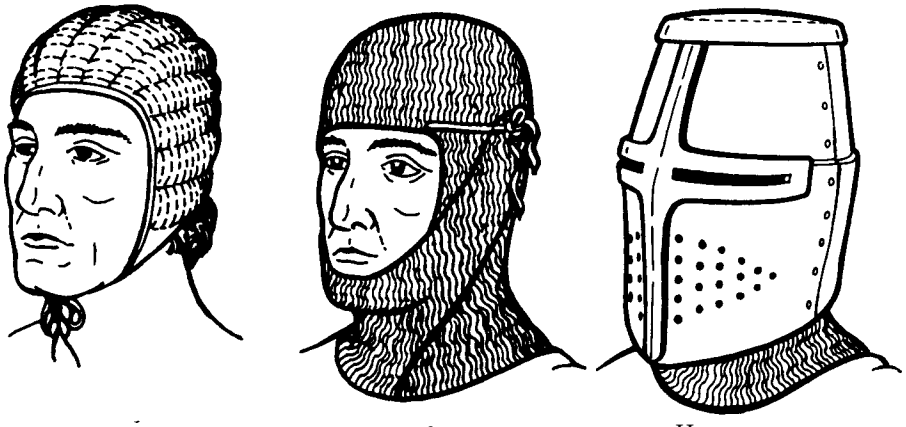
Armour Value
Heaume over Mail Coif
Cut RF: 22
Chop RF: 18
Thrust RF: 15
Impact RF: 5

Armour Value
Mail Over Padding
Cut RF: 11
Chop RF: 7
Thrust RF: 4
Impact RF: 4
Mass Total: 28kg



Note: Generally, the hauberk is slit in the middle for cavalrymen and slit on the side for foot soldiers.

The 13th Century Coif c. 1250 A.D.



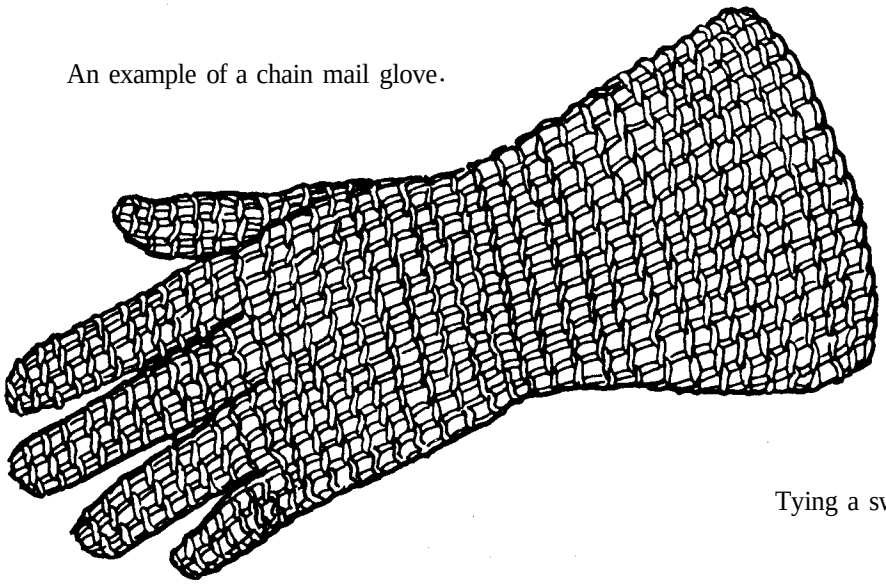
padded Arming Cap | Coif | Heaume

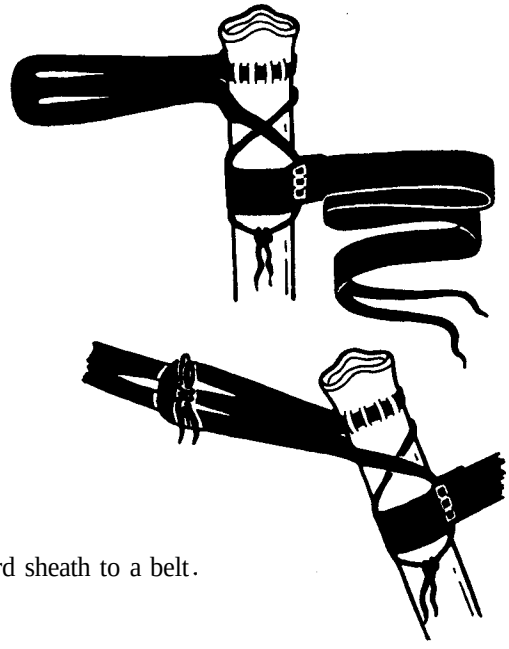
Armour Value
Heaume Over Mail Coif
Cut RF: 22
Chop RF: 18
Thrust RF: 15
Impact RF: 5

DIRK JOHNSTON 88

Putting on the Coif.

An example of a chain mail glove.

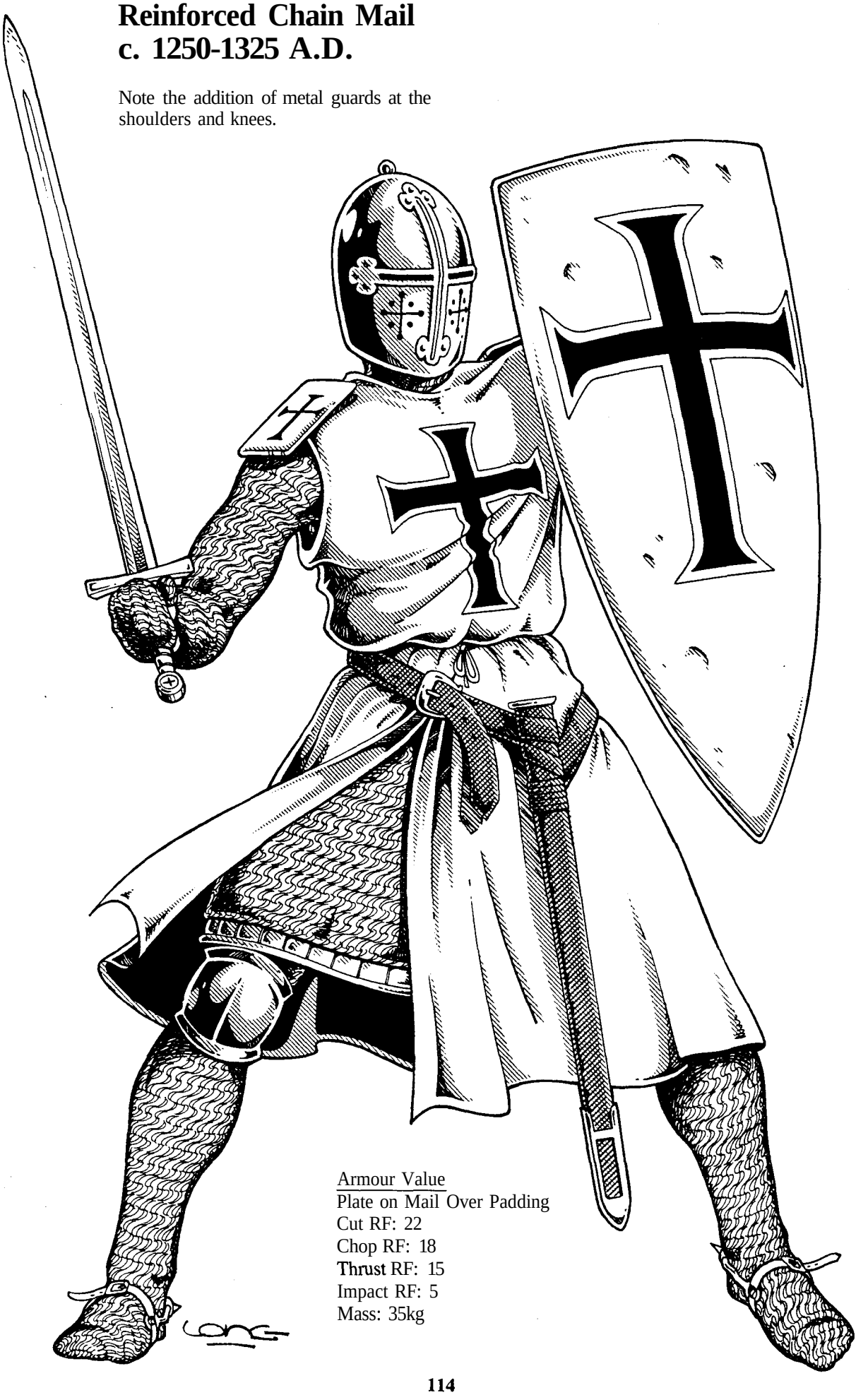




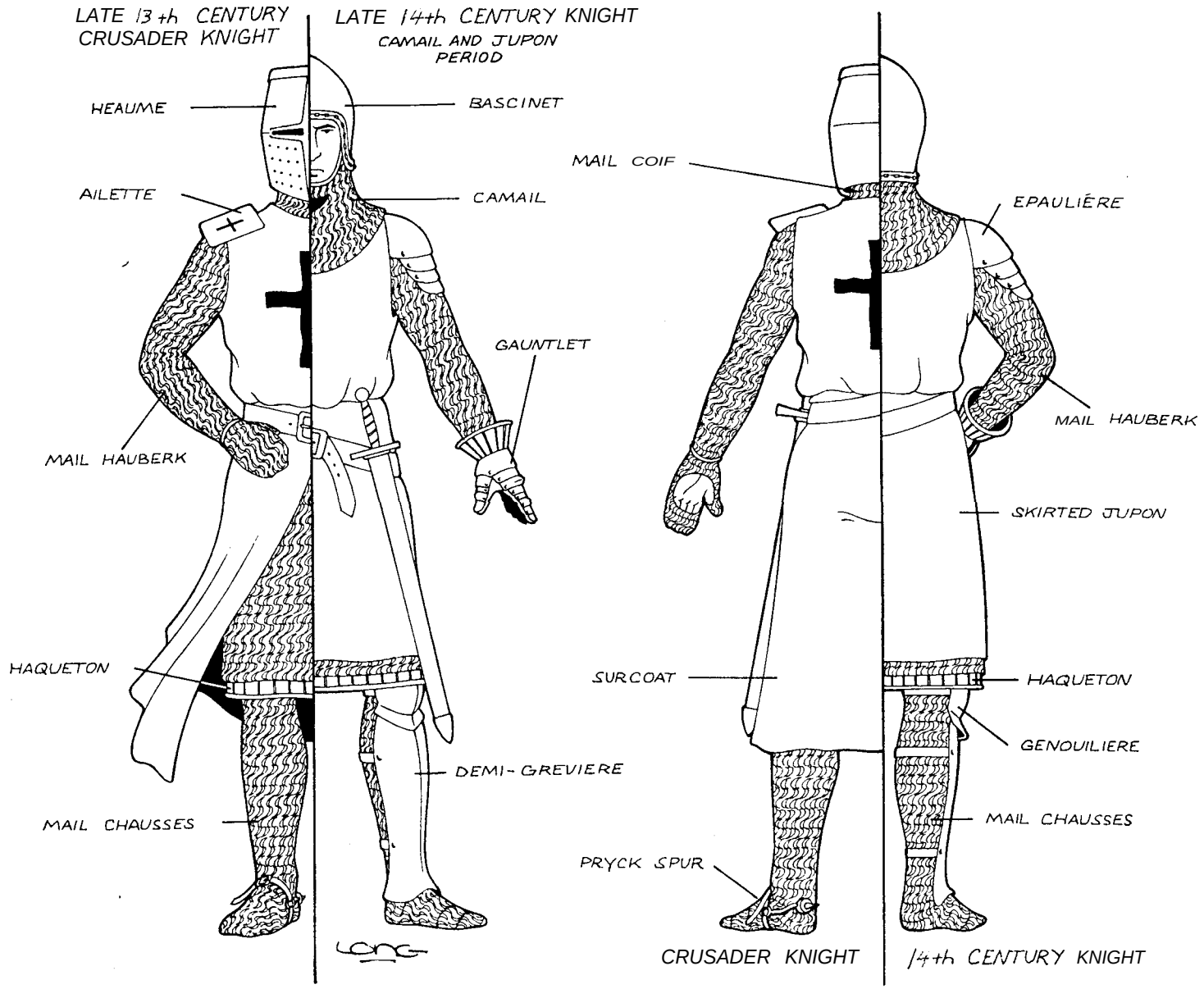
Tying a sword sheath to a belt.

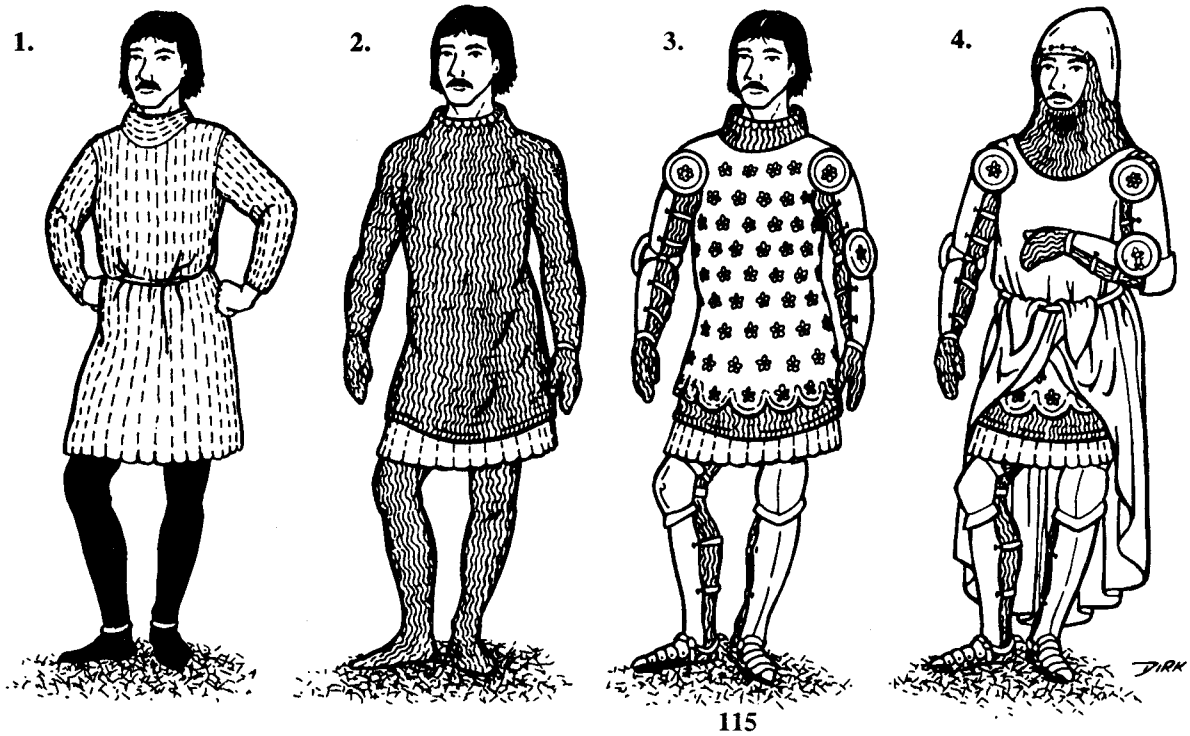
Reinforced Chain Mail
c. 1250-1325 A.D.

Note the addition of metal guards at the shoulders and knees.



Armour Value
Plate on Mail Over Padding
Cut RF: 22
Chop RF: 18
Thrust RF: 15
Impact RF: 5
Mass: 35kg





14th Century Plate & Mail

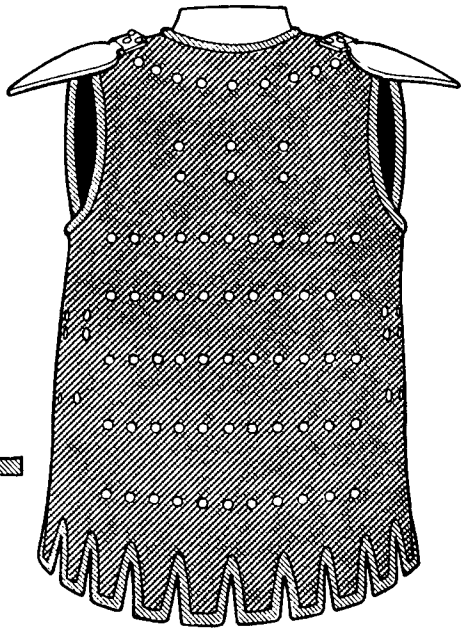
Drawing sequence show the consecutive layers of armour.

1. Haqueton undergarment.
2. Mail Hauberk
3. Gambeson: wool fabric & metal plates.
4. Complete with surcoat, helmet, and Cyclas (silk cape).

Coat of Plates
c. 1300-1361 A.D.

One of the most common armors of its day.

Coat of Plates



View from inside the garment.

Leather garment lined with metal plates

Armour Value
Metal Brigandine Over
Soft Leather
Cut RF: 11
Chop RF: 10
Thrust RF: 9
Impact RF: 3
Mass: 25kg

Knight in Plate and Mail
c. 1325-1350

A Transitional Period

The helmet is a Bascinet with camail attached.

Under the surcoat is a breastplate attached to a chain mail hauberk. The upper arm is protected by a demi-brassart (plate) and elbow guard, the lower legs are covered by greviere and knee guards, and the entire body is protected by a suit of chain mail.

Armor Value
Mail Over Padding
Cut RF: 11
Chop RF: 7
Thrust RF: 4
Impact RF: 4
Mass: 28kg

Armor Value
Plate on Mail Over Padding
Cut RF: 22
Chop RF: 18
Thrust RF: 15
Impact RF: 5
Total Mass: 40kg

Plate and Mail
c. 1335-1360 A.D.

A Transitional Period

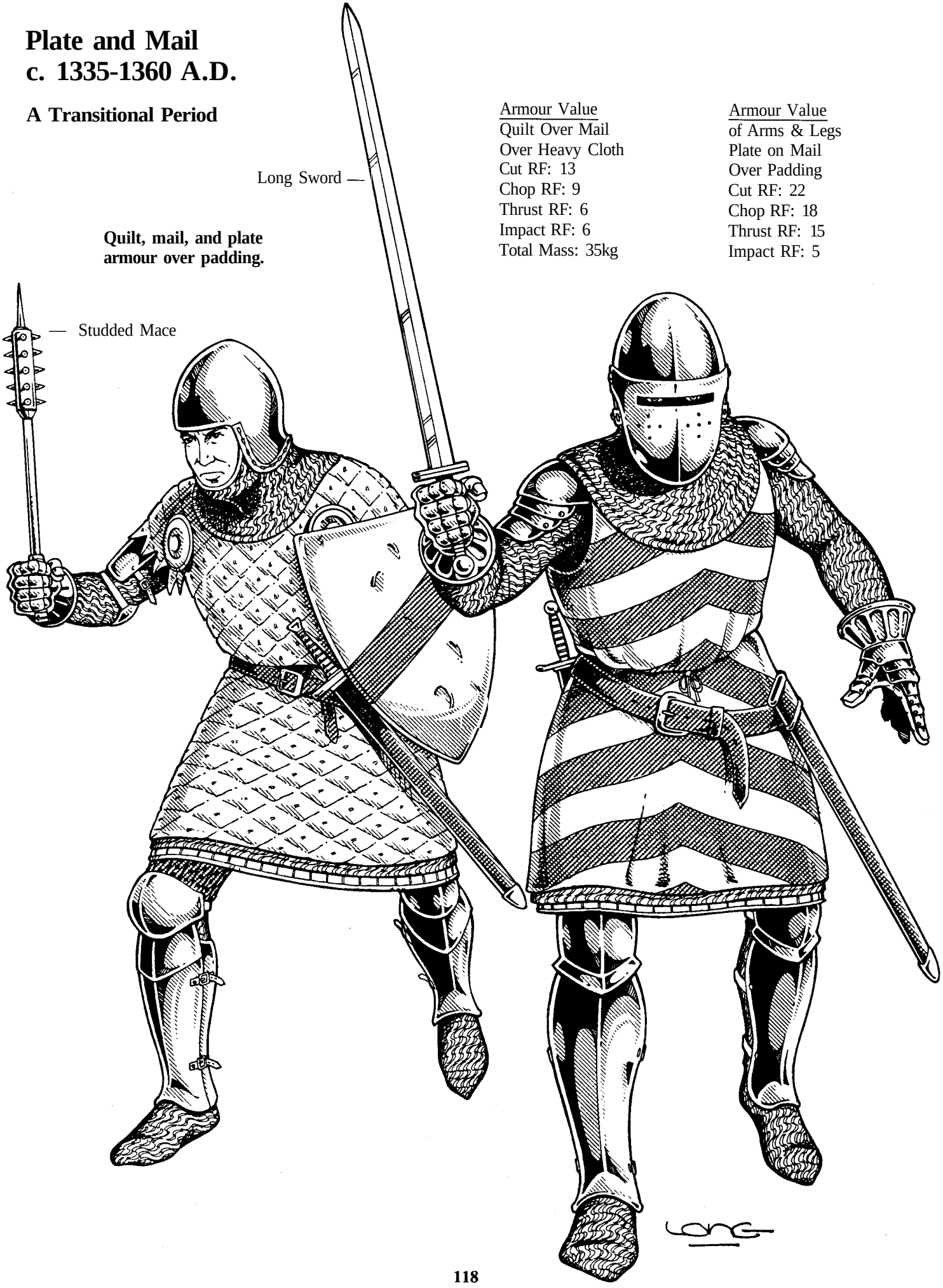
Long Sword —

Quilt, mail, and plate armour over padding.

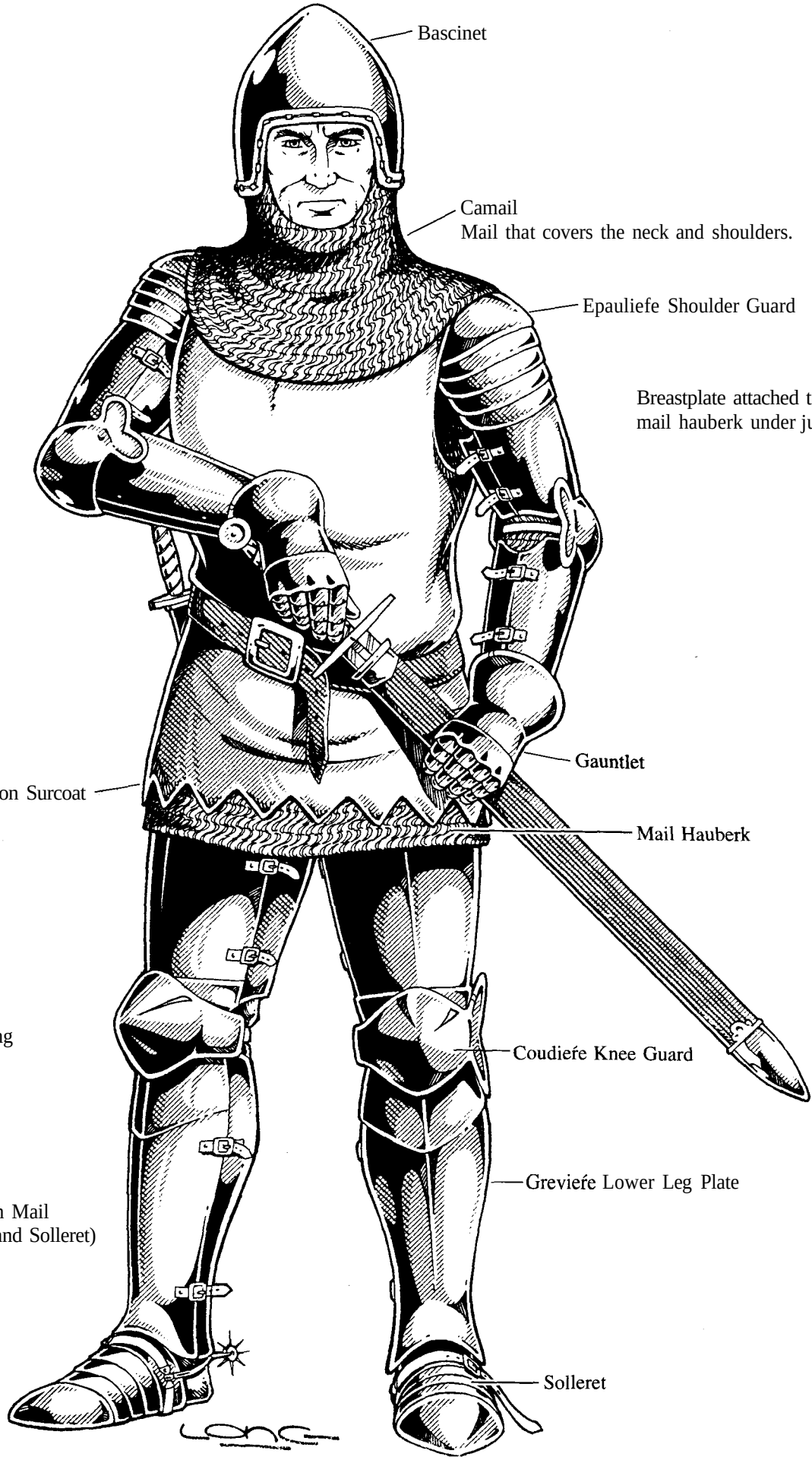
— Studded Mace

Armour Value
Quilt Over Mail
Over Heavy Cloth
Cut RF: 13
Chop RF: 9
Thrust RF: 6
Impact RF: 6
Total Mass: 35kg

Armour Value
of Arms & Legs
Plate on Mail
Over Padding
Cut RF: 22
Chop RF: 18
Thrust RF: 15
Impact RF: 5



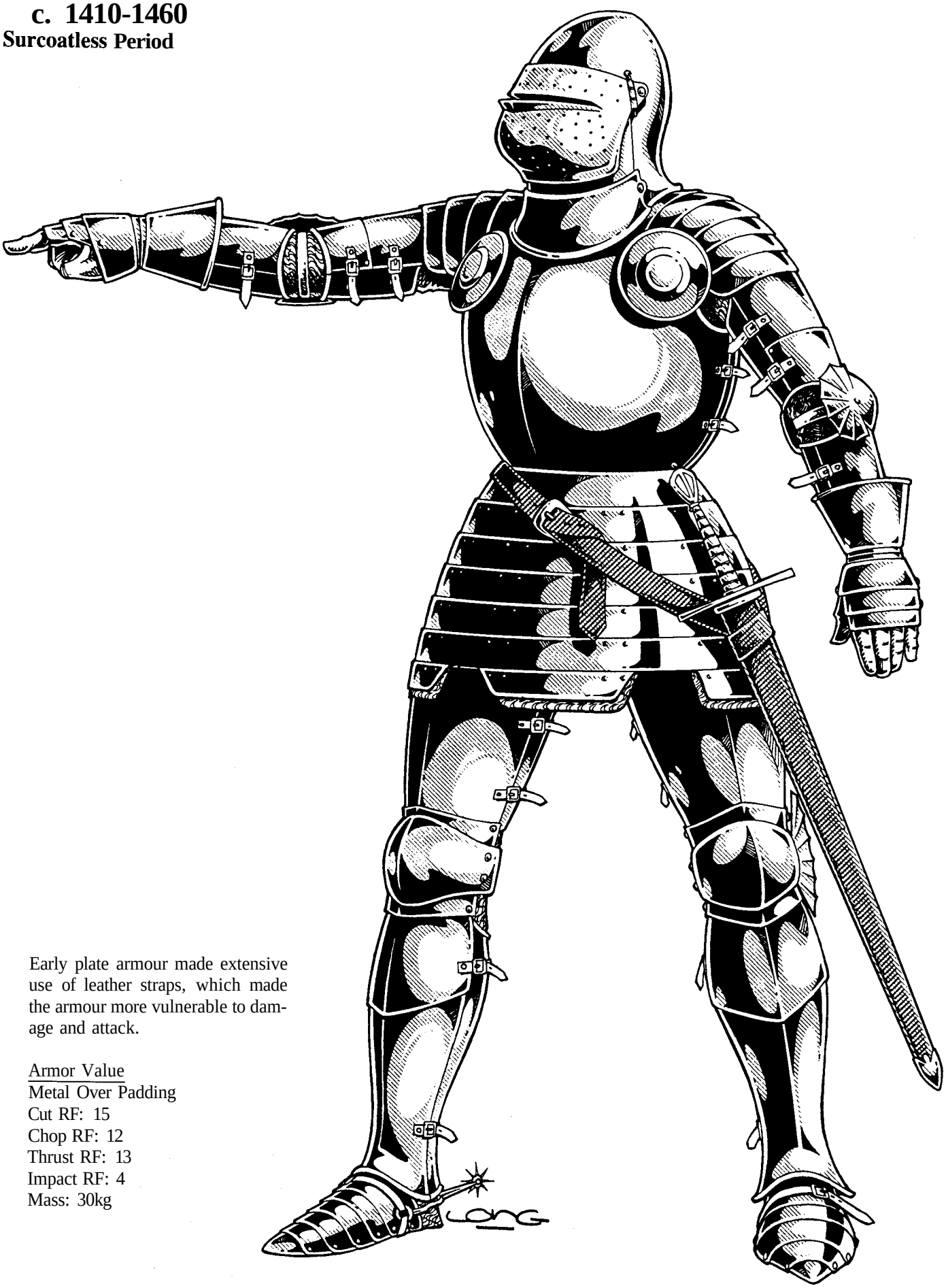
Camail and Jupon Period c. 1360-1410



Armour Value
Plate on Mail Over Padding
Cut RF: 22
Chop RF: 18
Thrust RF: 15
Impact RF: 5

Armour Value
Laminated Metal on Chain Mail
Over Padding (Epauliere and Solleret)
Cut RF: 20
Chop RF: 16
Thrust RF: 13
Impact RF: 5
Total Mass: 45kg

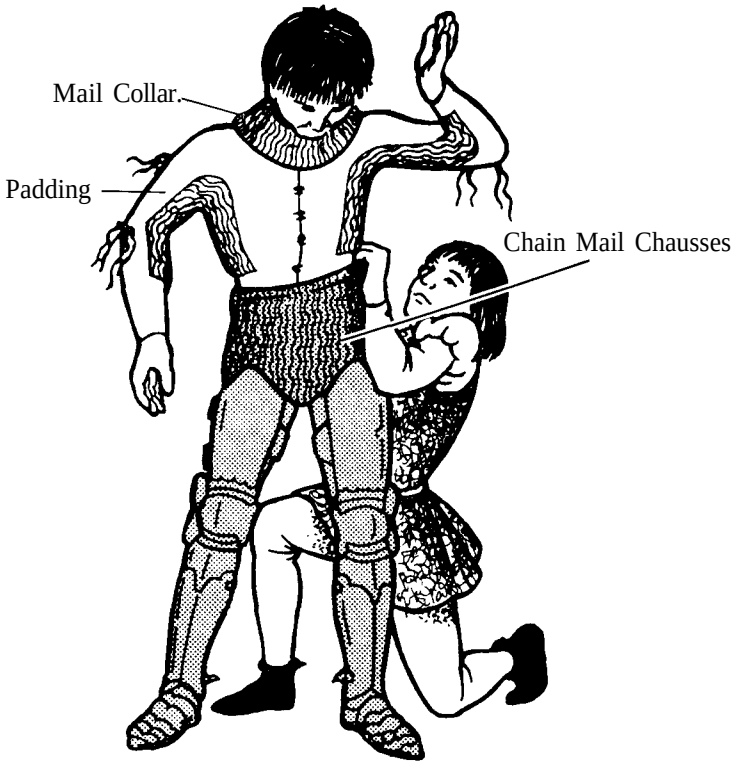
Plate Armour
c. 1410-1460
Surcoatless Period



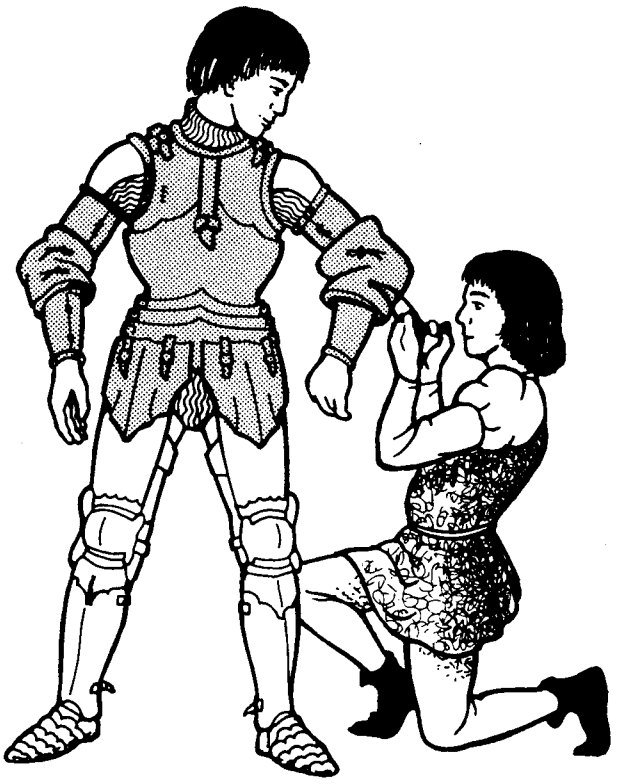
Early plate armour made extensive use of leather straps, which made the armour more vulnerable to damage and attack.

Armor Value
Metal Over Padding
Cut RF: 15
Chop RF: 12
Thrust RF: 13
Impact RF: 4
Mass: 30kg

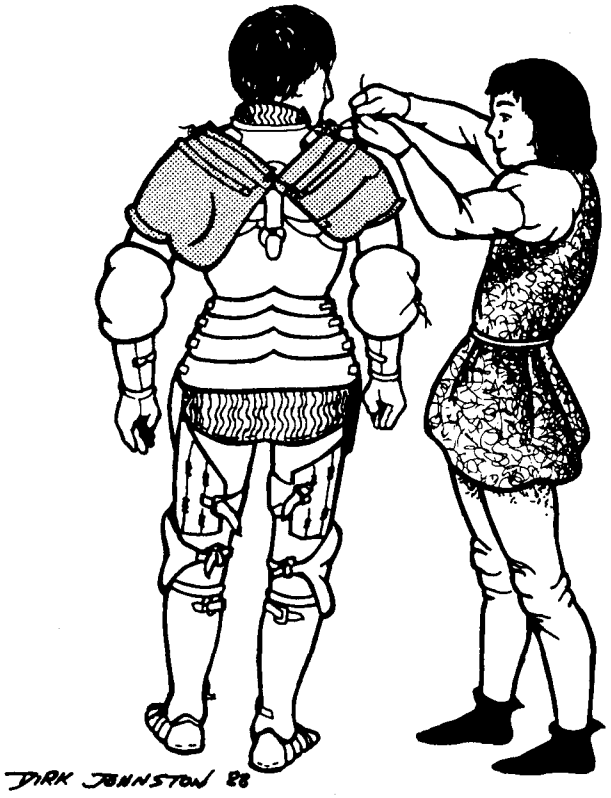
A Knight donning his plate armour c.1430A.D.



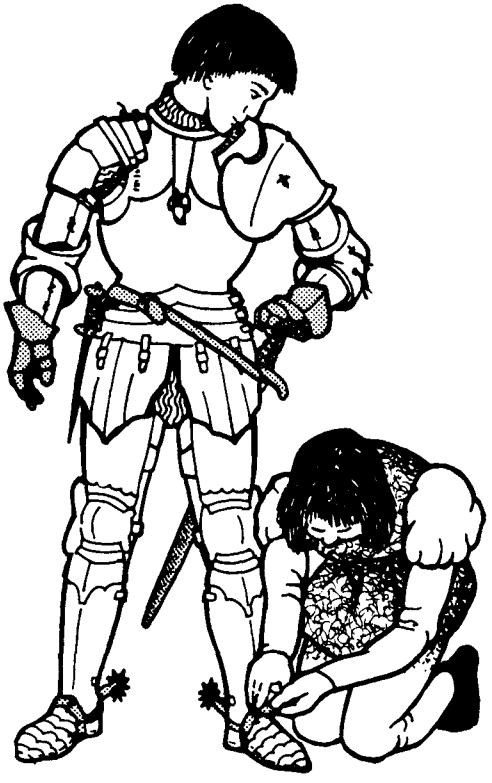
First, the leg section is put on.



Second, the torso and arms.

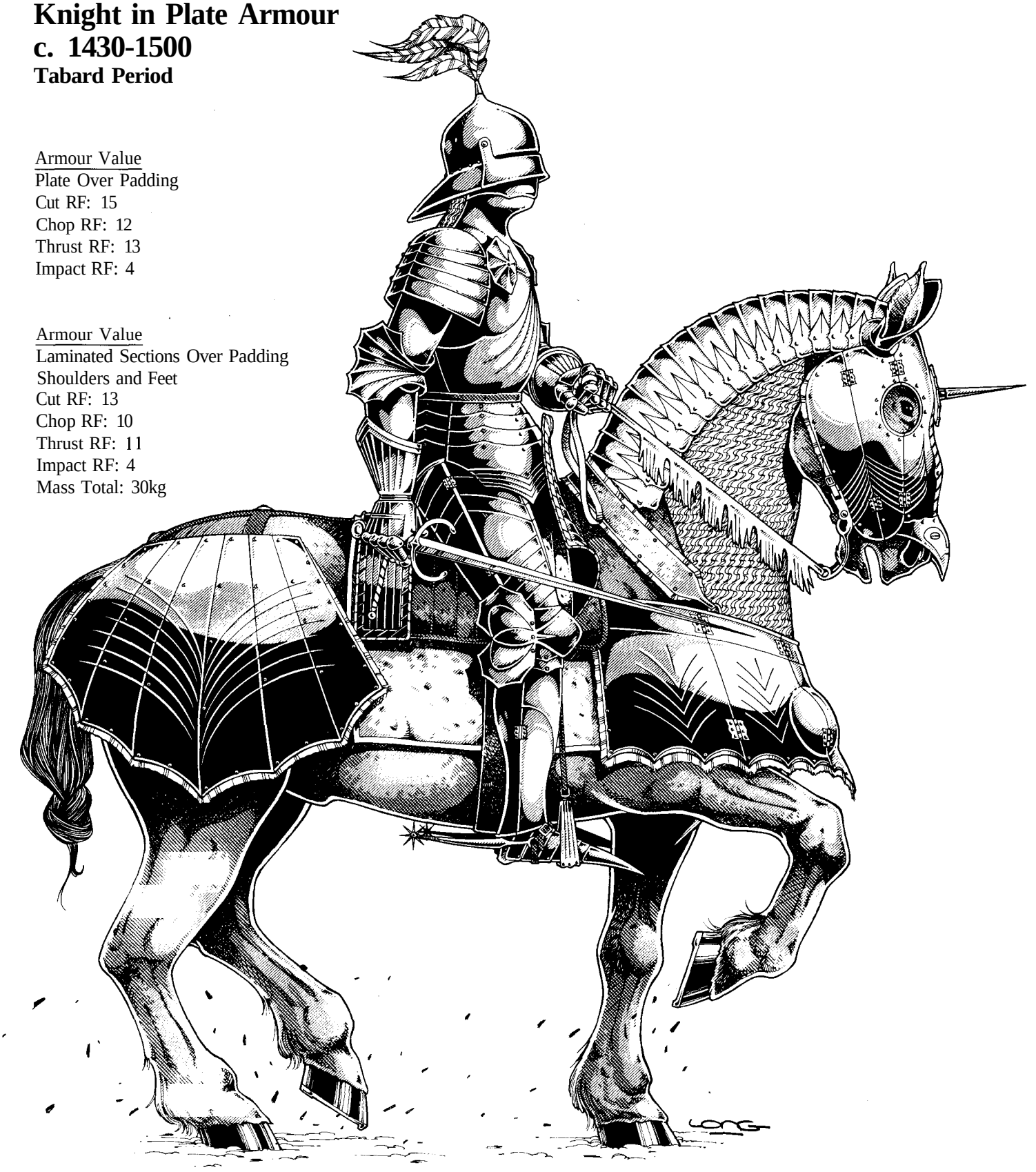


Third, the shoulder plates.



Lastly, guantlets, spurs, and head piece.

Knight in Plate Armour
c. 1430-1500
Tabard Period



Armour Value
Plate Over Padding
Cut RF: 15
Chop RF: 12
Thrust RF: 13
Impact RF: 4

Armour Value
Laminated Sections Over Padding
Shoulders and Feet
Cut RF: 13
Chop RF: 10
Thrust RF: 11
Impact RF: 4
Mass Total: 30kg

Horse Armour Value
Laminated Metal The Crinet
Cut RF: 9
Chop RF: 9
Thrust RF: 9
Impact RF: 1
Mass Total: 34kg

Horse Armour Value
Metal Plates
Cut RF: 11
Chop RF: 11
Thrust RF: 11
Impact RF: 1

French Archer
c. 1430-1500
Tabard Period

Armour Value Plate on Mail Over Padding	Armour Value Mail Over Padding	Armour Value Medium Cloth	
Cut RF: 22	Cut RF: 11	Cut RF: 2	
Chop RF: 14	Chop RF: 7	Chop RF: 0	Total Mass: 20kg
Thrust RF: 15	Thrust RF: 4	Thrust RF: 0	
Impact RF: 5	Impact RF: 4	Impact RF: 0	

Maximillian Jousting Armour
c. 1525-1600

Since jousting was the most dangerous sport European knights undertook, it was natural that the protective armour would be extreme. This suit would not be worn for any other purpose.

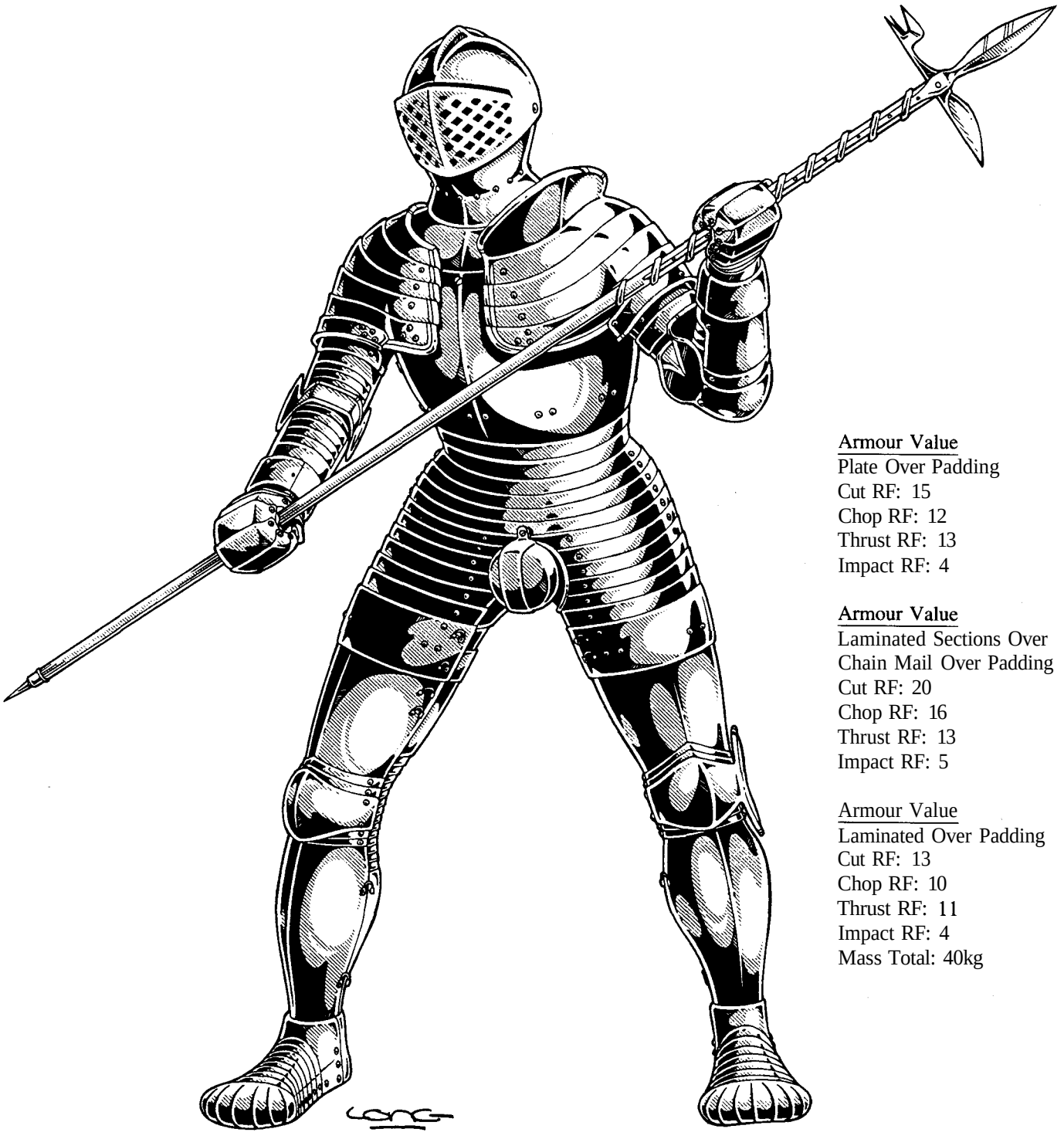
Armour Value
Plate Over Plate
All RF: at least 22
Mass: 43kg

Suit of armour used for the German course joust.

Heaume bolted to the breastplate. This helmet is bolted in one position.

Shield suspended from shoulder.

Maximillian Plate Armour
c. 1500-1600 A.D.



Armour Value
Plate Over Padding
Cut RF: 15
Chop RF: 12
Thrust RF: 13
Impact RF: 4

Armour Value
Laminated Sections Over
Chain Mail Over Padding
Cut RF: 20
Chop RF: 16
Thrust RF: 13
Impact RF: 5

Armour Value
Laminated Over Padding
Cut RF: 13
Chop RF: 10
Thrust RF: 11
Impact RF: 4
Mass Total: 40kg

This illustration is from a suit built for King Henry VIII. The joints were so well fitted that they did not permit the passage of a pin! The suit contained over 200 separate pieces.

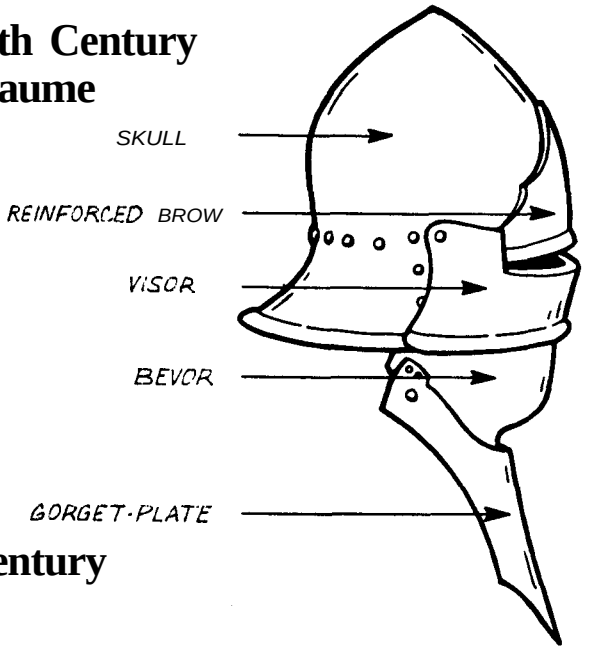
Although suits of full plate give excellent protection, they do have drawbacks. A man in this armour would be able to perform strenuous tasks, like fighting, for only 15-20 minutes. These suits were also very expensive.

The armet is a helmet with visor that totally encloses the head. It is capable of turning (movement).

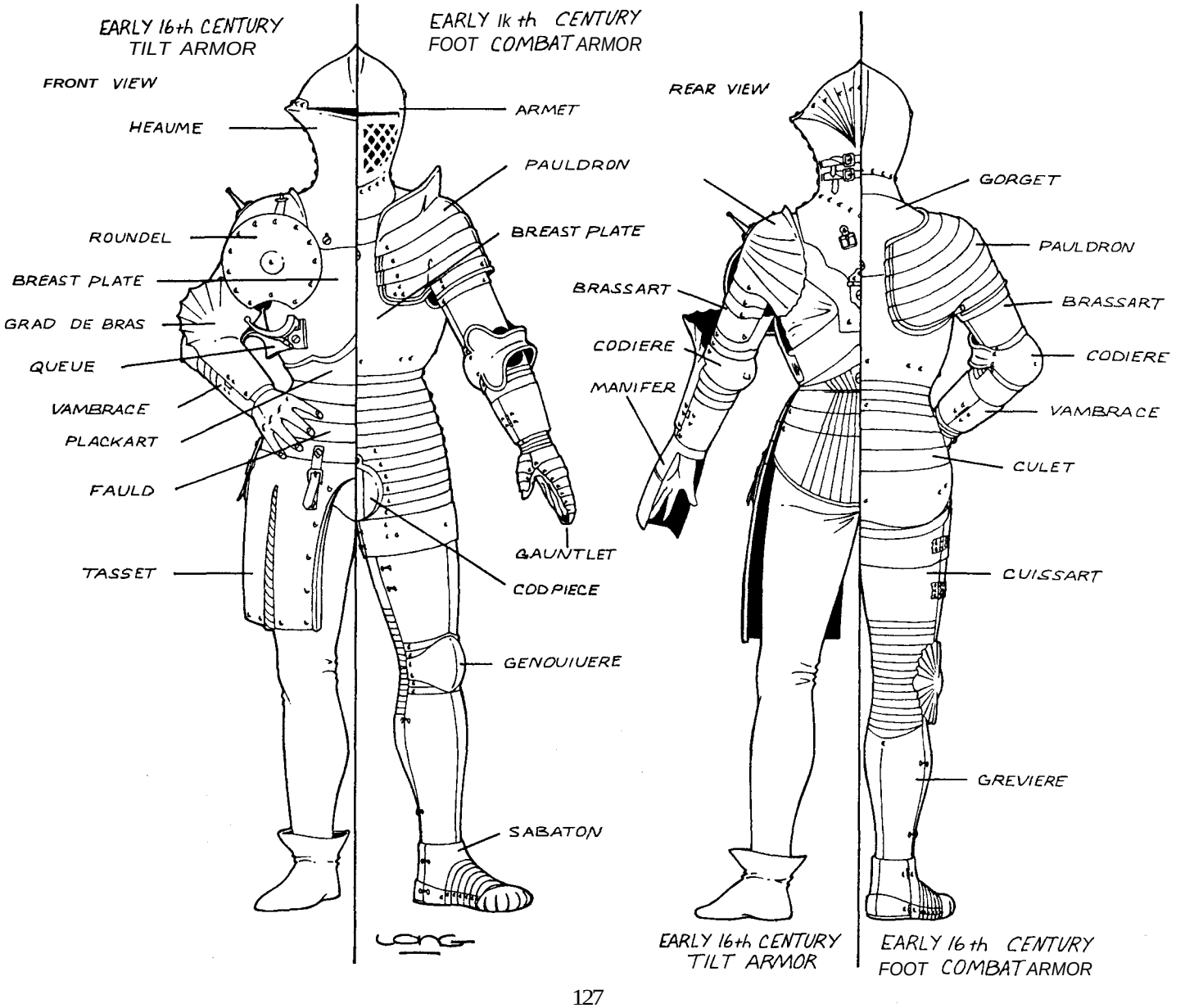
Maximillian Ribbed Plate Armour
c. 1500-1600 A.D.

Armour Value
Ribbed Plate Over Padding
Cut RF: 16
Chop RF: 13
Thrust RF: 14
Impact RF: 4
Mass: 35kg

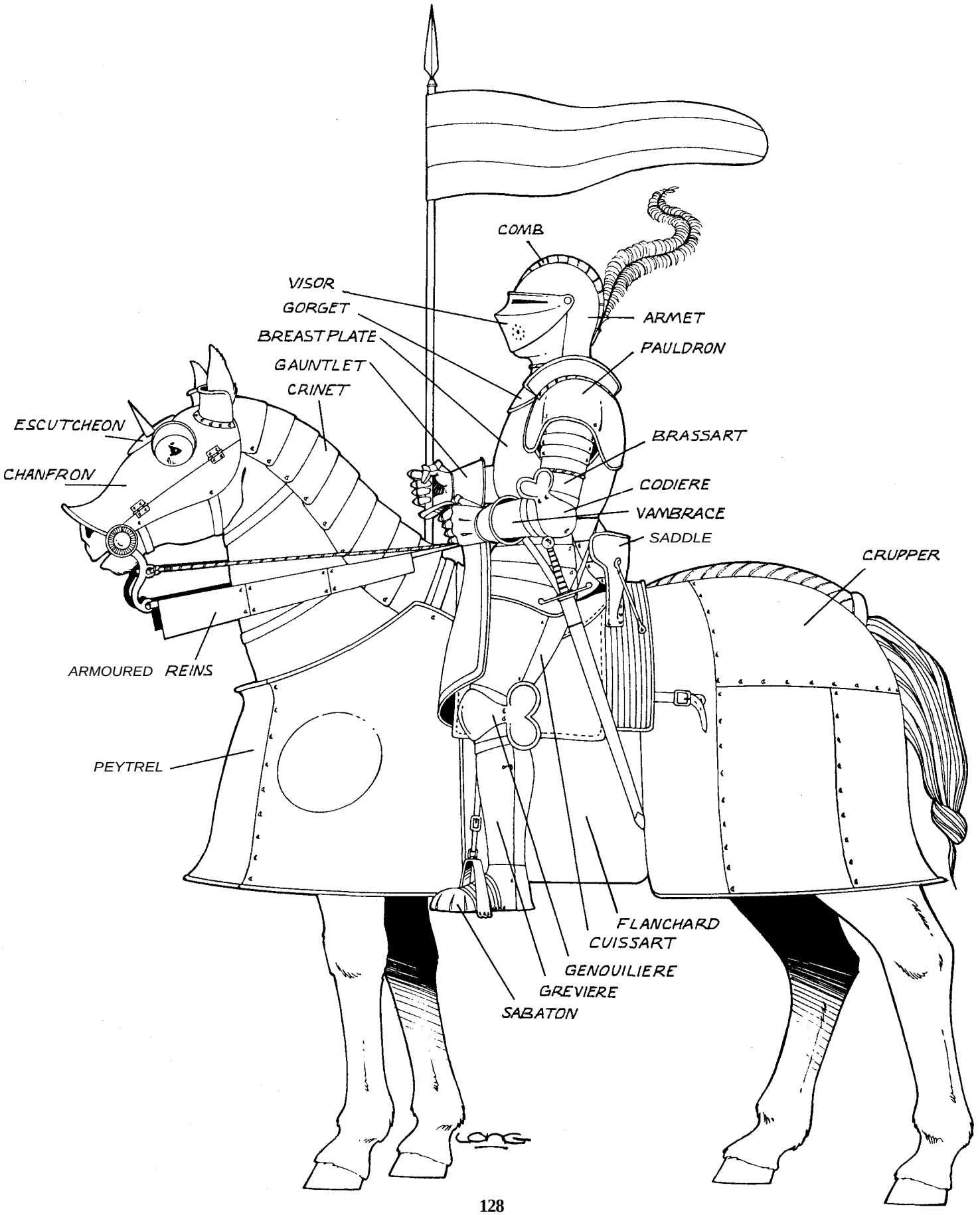
Detail of 15th Century Armour Heaume



Comparison of Two 16th Century Suits of Armour



Knight with Later Plate Armour and Horse Barding
c. 1530-1600 A.D.

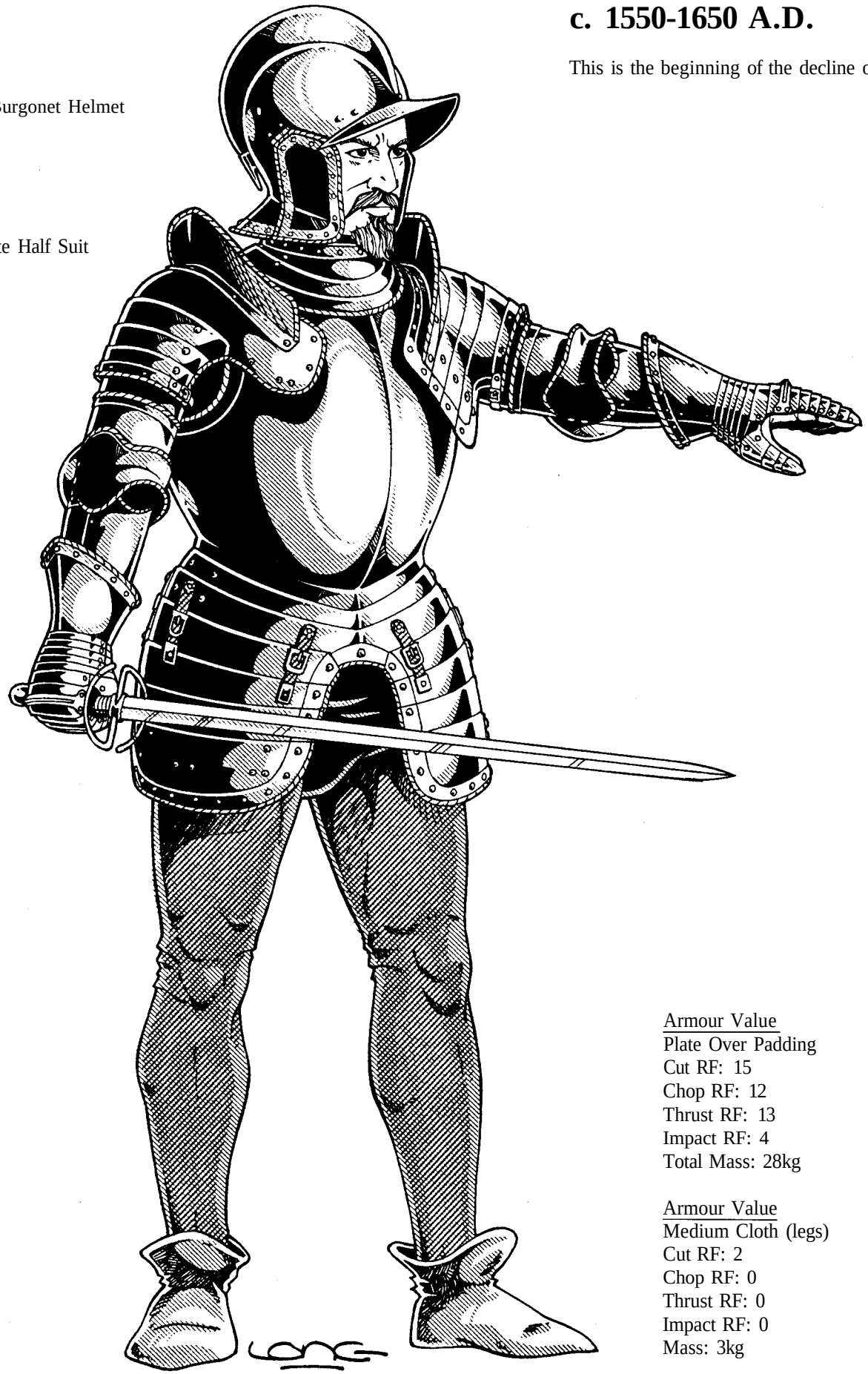


Half Plate
c. 1550-1650 A.D.

This is the beginning of the decline of armour.

Burgonet Helmet

Plate Half Suit

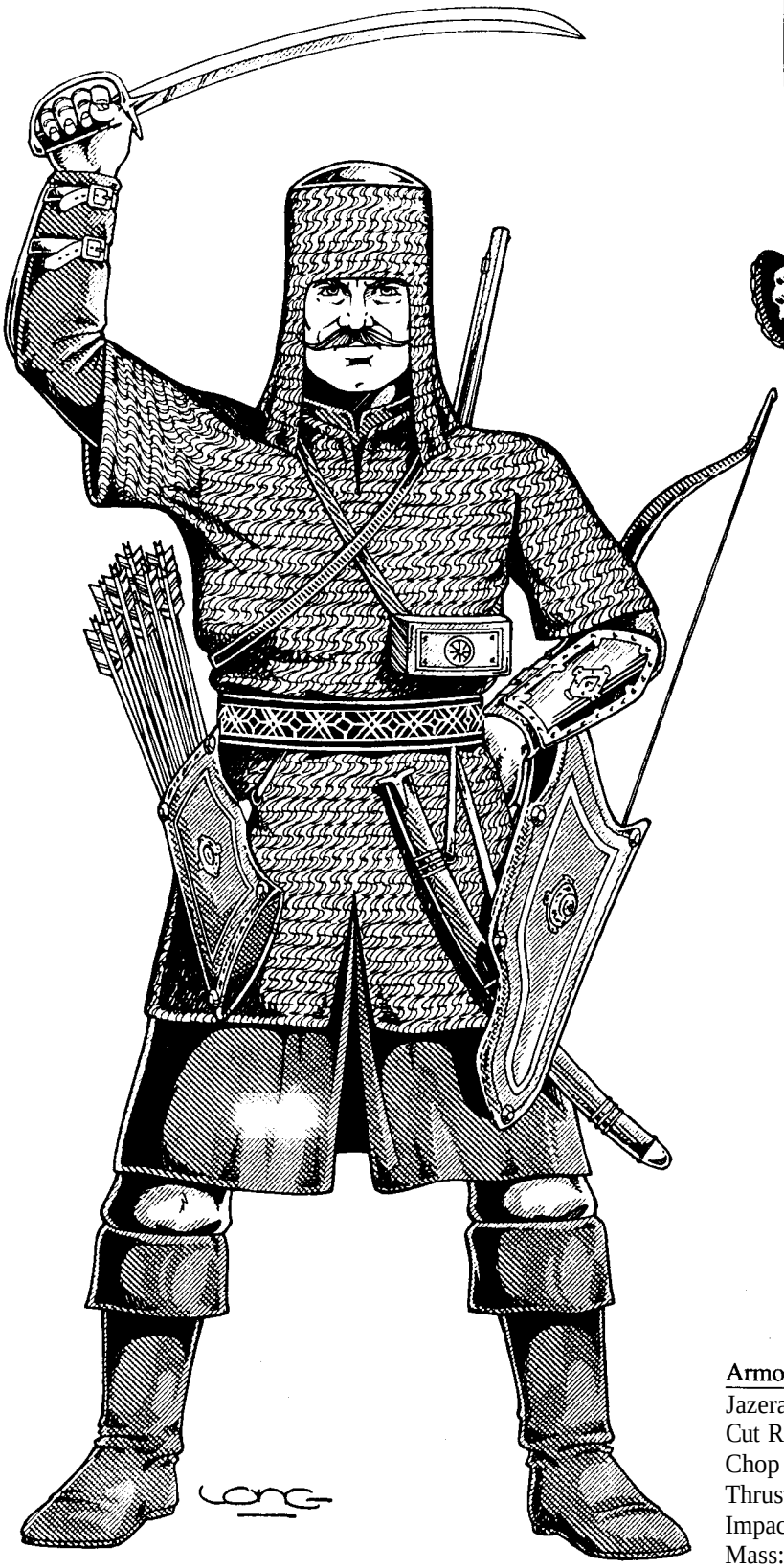


Armour Value
Plate Over Padding
Cut RF: 15
Chop RF: 12
Thrust RF: 13
Impact RF: 4
Total Mass: 28kg

Armour Value
Medium Cloth (legs)
Cut RF: 2
Chop RF: 0
Thrust RF: 0
Impact RF: 0
Mass: 3kg

Polish Cavalry Soldiers
c. 1650-1700 A.D.

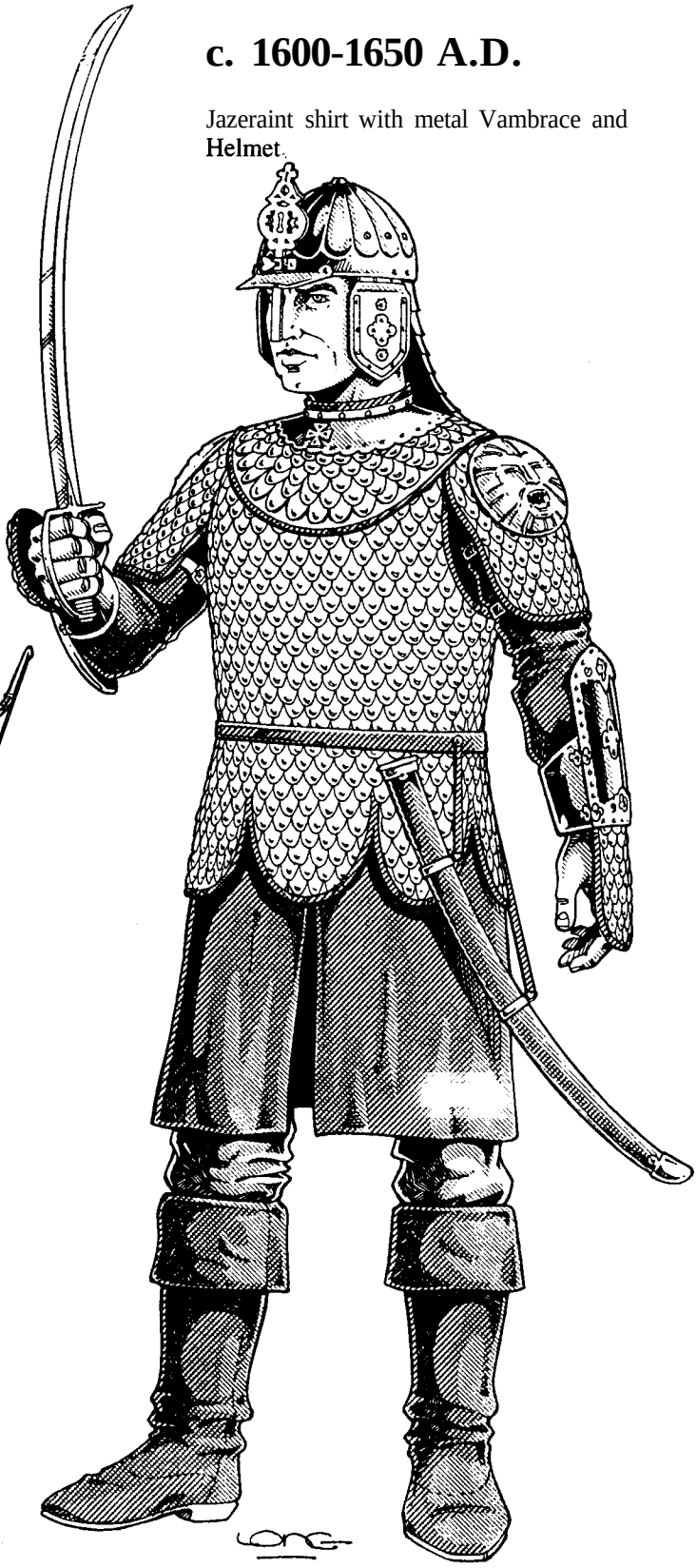
Because Poland was conquered by different powers, we see the influence of many cultures.



Armour Value
Jazeraint Shirt Over Padding
Cut RF: 13
Chop RF: 9
Thrust RF: 10
Impact RF: 3
Mass: 28kg

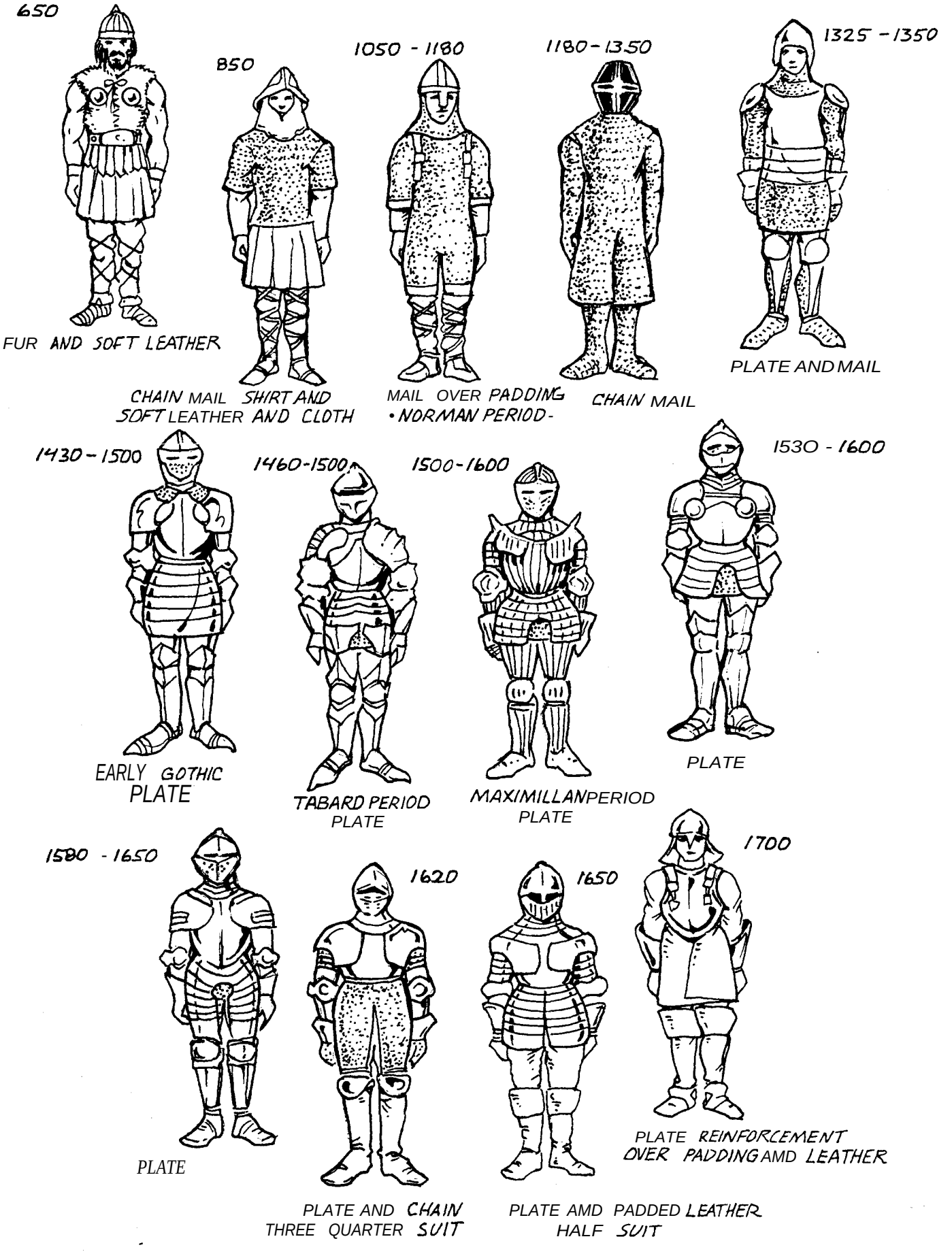
c. 1600-1650 A.D.

Jazeraint shirt with metal Vambrace and Helmet.



Armour Value
Soft Leather Over Medium Cloth
Cut RF: 4
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass: 4kg

The Evolution of European Armour



Noble Rajput India c. 1600-1700 A.D.

Suits of armour in the Middle East tended to be much lighter than their European counterparts, due to the prevailing climate being much hotter.

Armour Value
Laminated Metal Over
Medium Cloth
Cut RF: 11
Chop RF: 9
Thrust RF: 9
Impact RF: 1

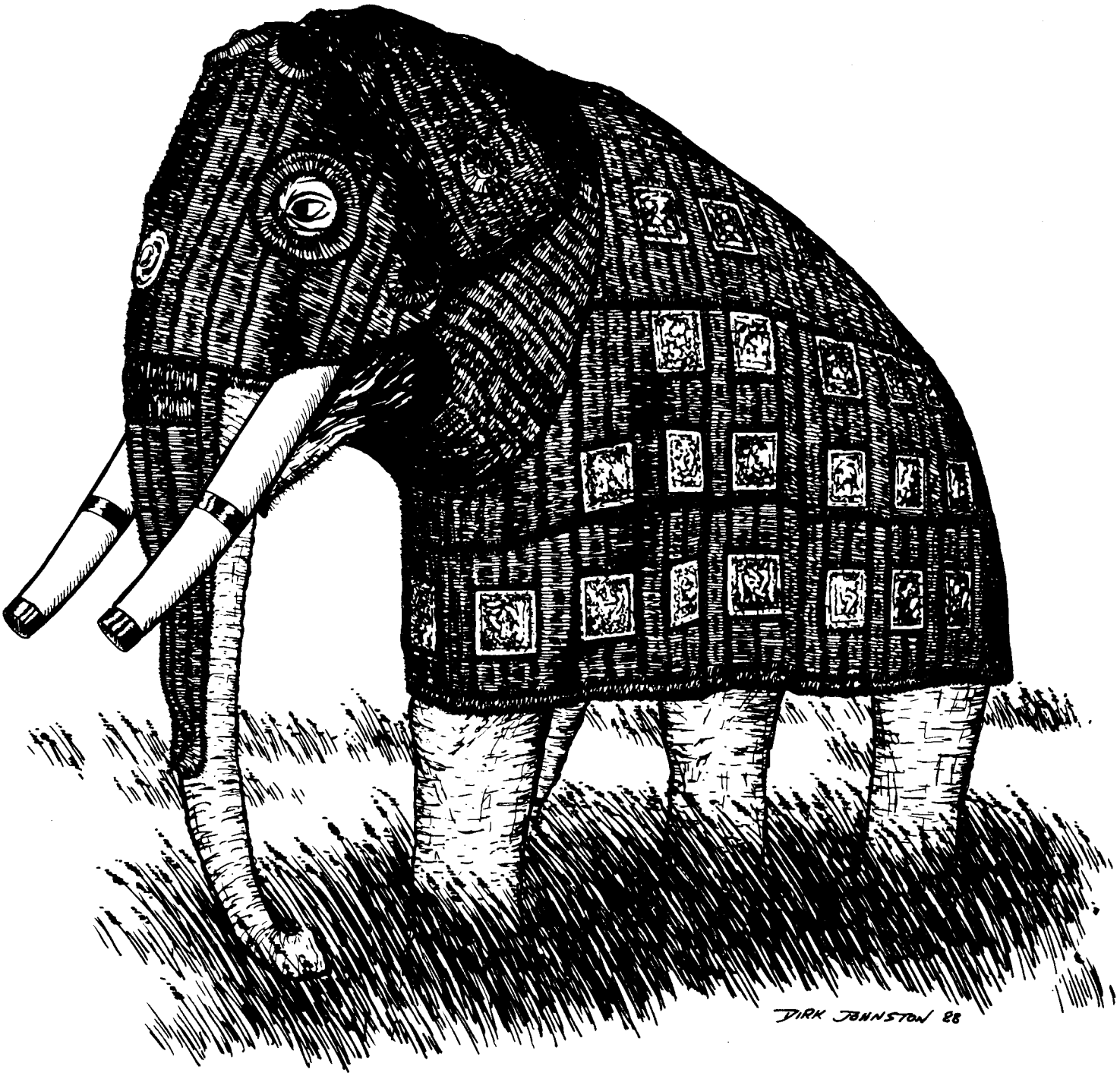
Armour Value
Bar Mail Over
Medium Cloth
Cut RF: 10
Chop RF: 6
Thrust RF: 3
Impact RF: 1
Mass Total: 22kg

Armoured Indian Warrior in Combined Mail c. 1600-1700 A.D.

Armour Value
Metal Lamellar
Over Combined Mail
Cut RF: 17
Chop RF: 16
Thrust RF: 13
Impact RF: 2
Total Mass: 30kg.

Indian Elephant Armour
c. 1600-1700 A.D.

Armour Value
Mail Over Padding
Cut RF: 11
Chop RF: 7
Thrust RF: 4
Impact RF: 4
Mass: 150kg



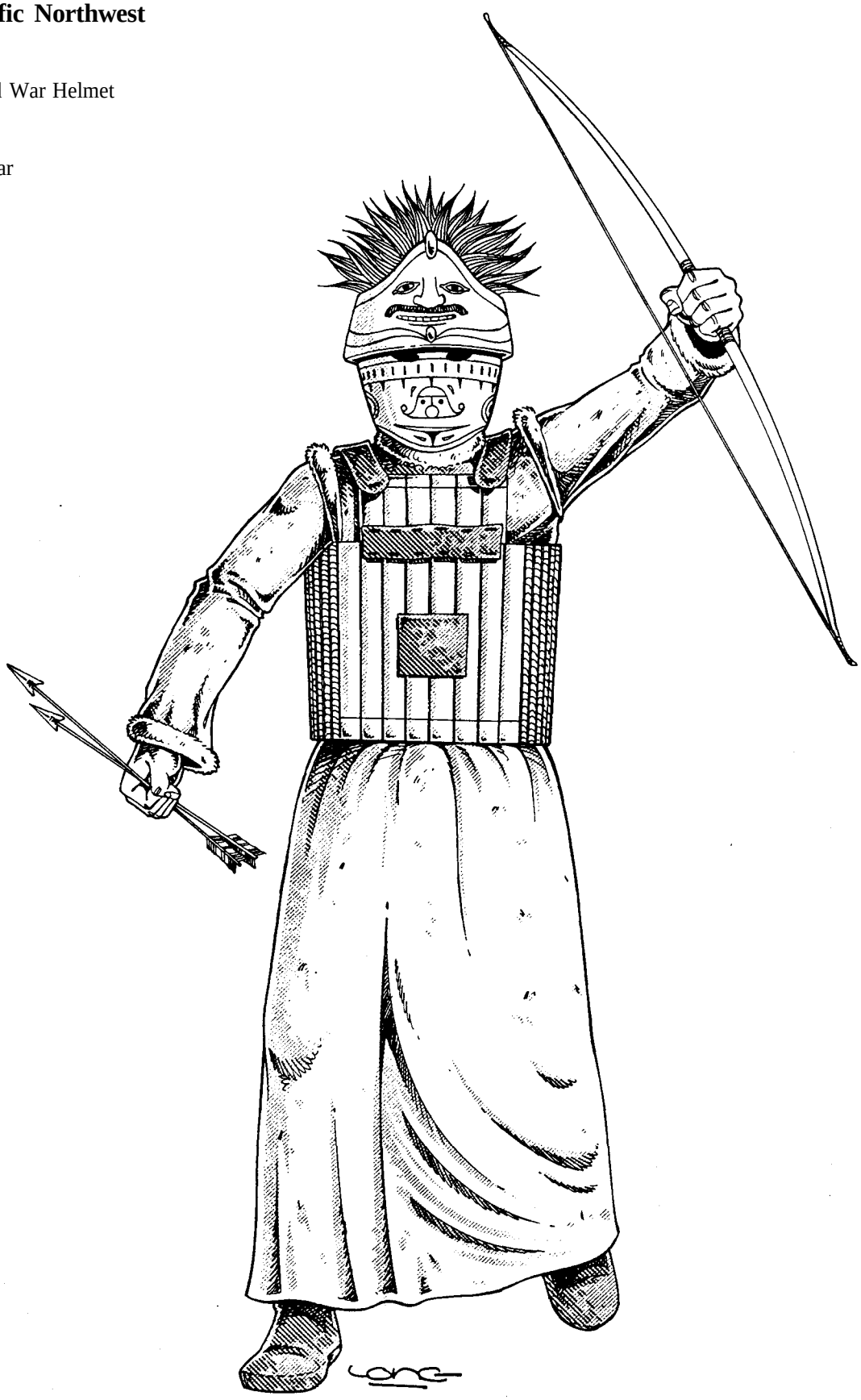
Tlingit American Indian
c. 1000-1800 A.D.

From the Pacific Northwest

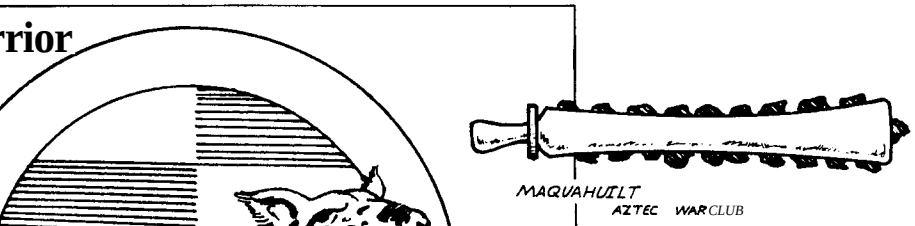
Wood Armour and War Helmet

Armour Value
Hardwood Lamellar
Cut RF: 6
Chop RF: 6
Thrust RF: 5
Impact RF: 1
Mass: 12kg

Armour Value
Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass Total: 5kg



Aztec Warrior



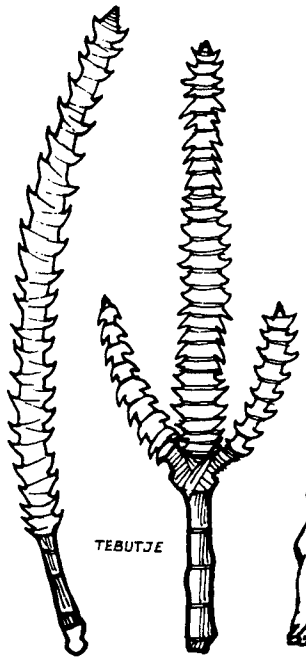
Armour Value
Soft Leather
Cut RF: 2
Chop RF: 1
Thrust RF: 1
Impact RF: 1
Mass: 2kg

South Pacific

Armour Value
Area Covered by Backplate
Cut RF: 8
Chop RF: 4
Thrust RF: 6
Impact RF: 4

Armour Value
Other Areas
Cut RF: 4
Chop RF: 2
Thrust RF: 3
Impact RF: 2

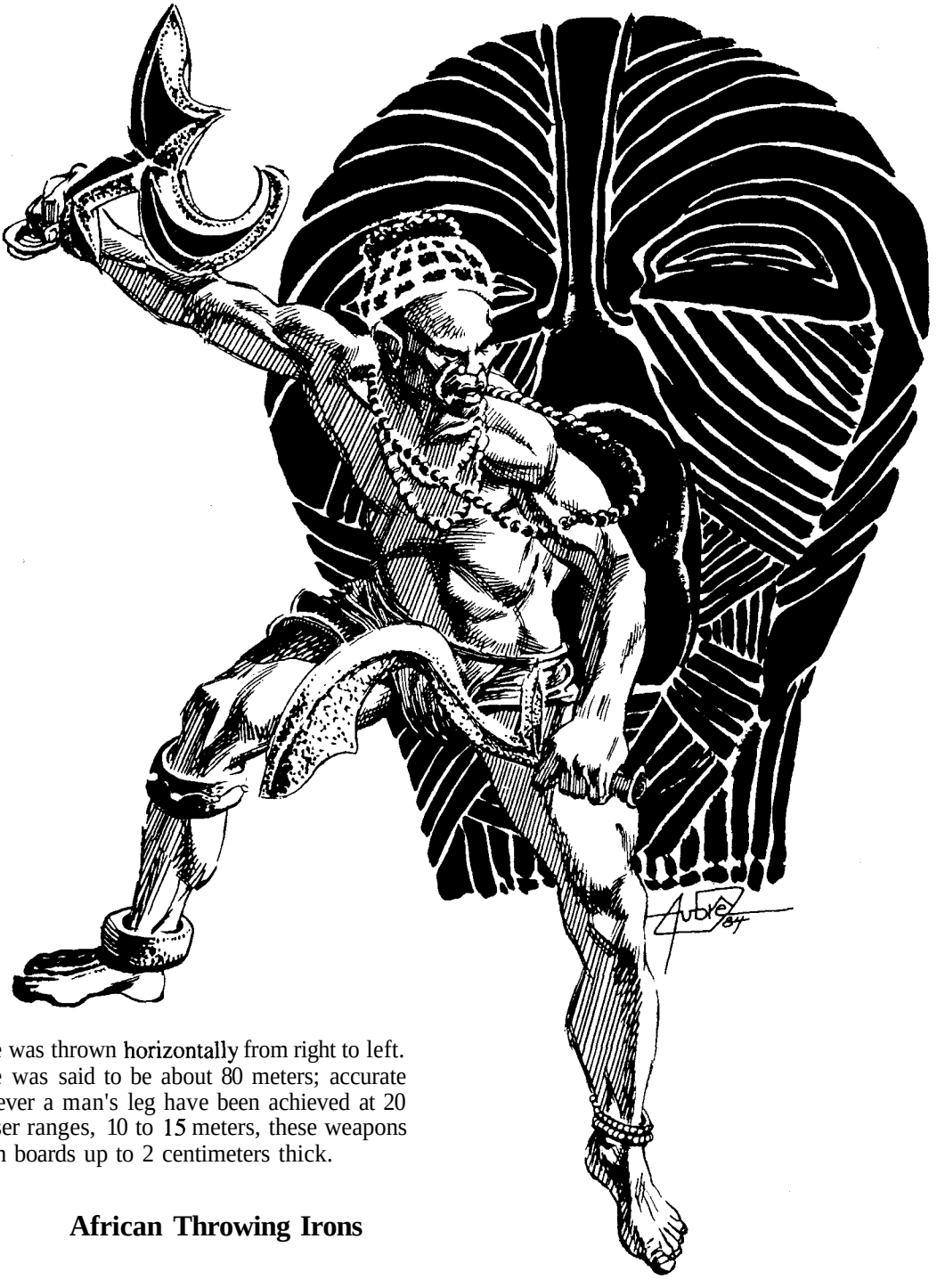
Armour Value
Helmet — Considered Hard Leather
Cut RF: 3
Chop RF: 2
Thrust RF: 3
Impact RF: 1
Mass Total: 8kg



Java Pentjak-Silat Warrior

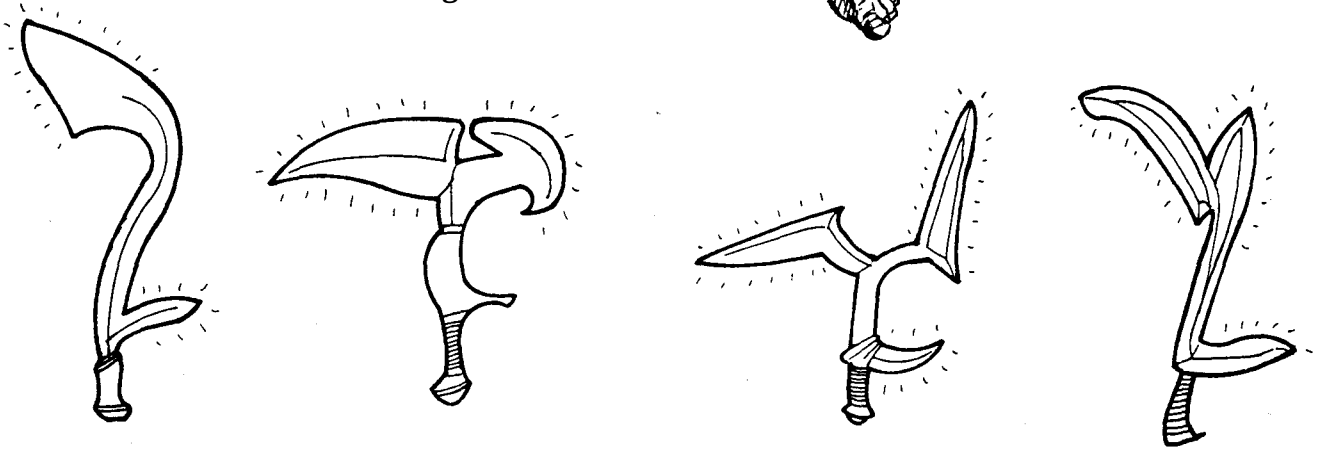
Armour Value
Padded Cloth Armour
Cut RF: 4
Chop RF: 1
Thrust RF: 2
Impact RF: 3
Mass: 5kg

Central African Warrior

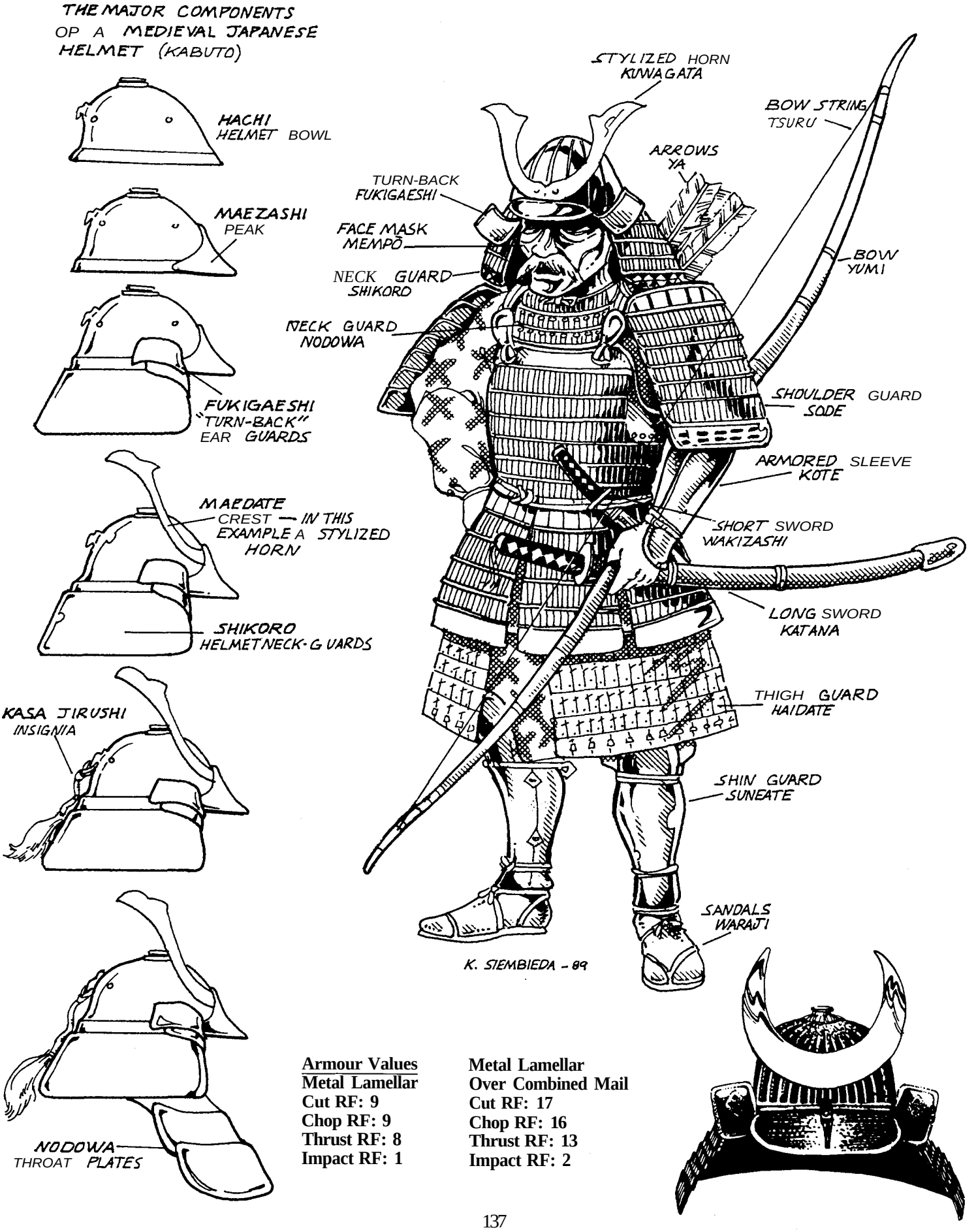


The throwing knife was thrown horizontally from right to left. The maximum range was said to be about 80 meters; accurate enough throws, to sever a man's leg have been achieved at 20 to 30 meters. At closer ranges, 10 to 15 meters, these weapons can penetrate wooden boards up to 2 centimeters thick.

African Throwing Irons



Japanese Samurai Armour
c. 1500-1700 A.D.

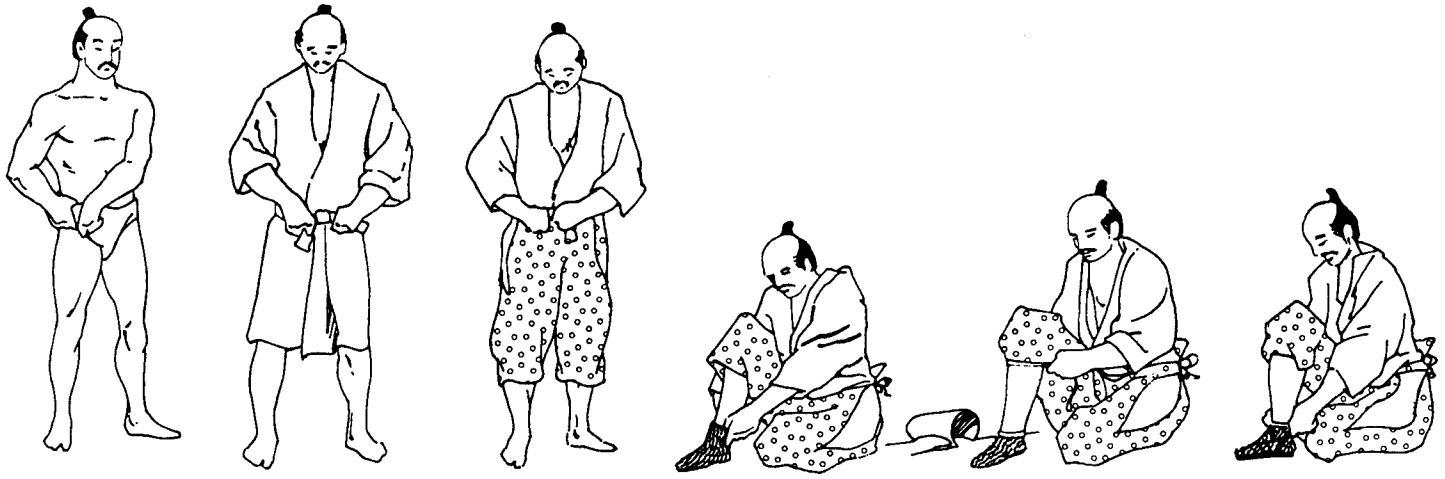


Armour Values

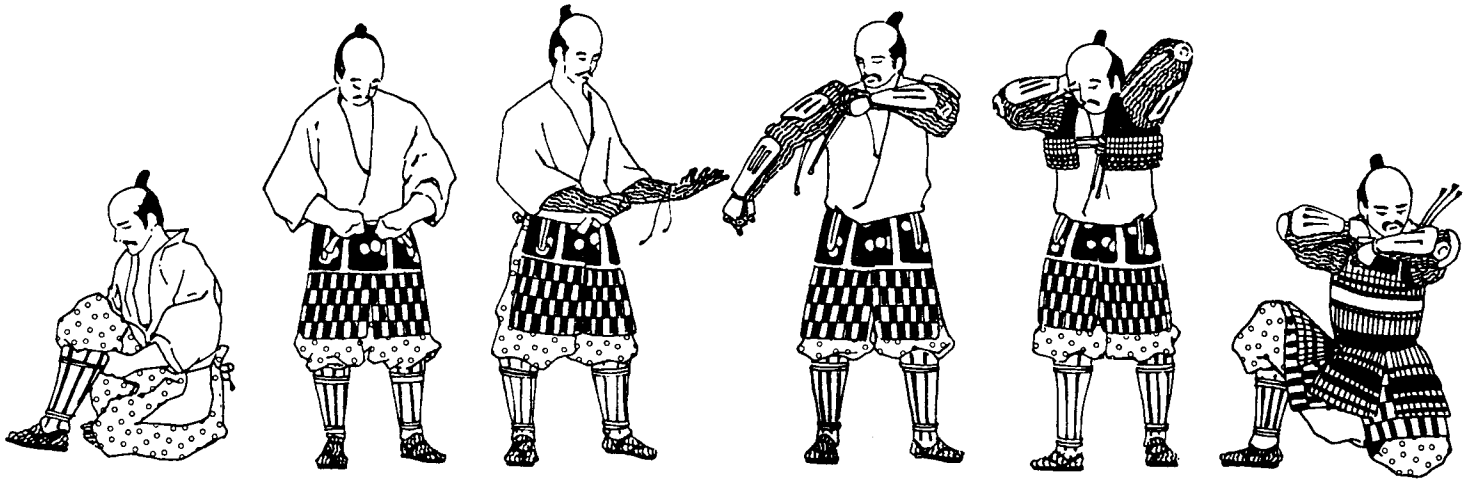
Metal Lamellar
Cut RF: 9
Chop RF: 9
Thrust RF: 8
Impact RF: 1

Metal Lamellar Over Combined Mail
Cut RF: 17
Chop RF: 16
Thrust RF: 13
Impact RF: 2

Steps in Donning Japanese Armour



SHORT FUNDOSHI SHITAGI AW OBI KOBAKAMA TABI SPLIT roe BOOT KYAHAN WARAJI SANDALS



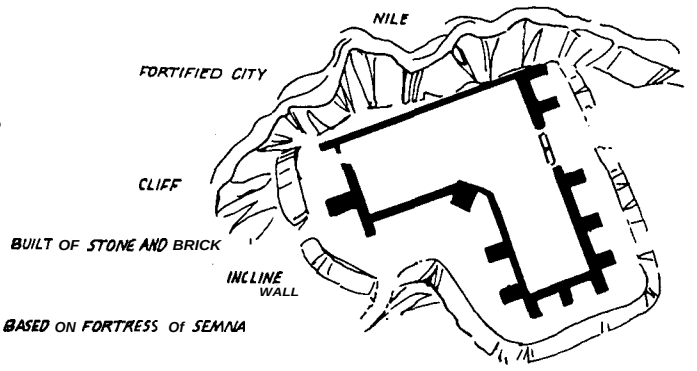
SUNE-ATE SHIN GUARDS HAIDATE THIGH GUARDS CHAIN MAIL SLEEVES KOTE ARMOUR SLEEVES WAKIBIKI DO

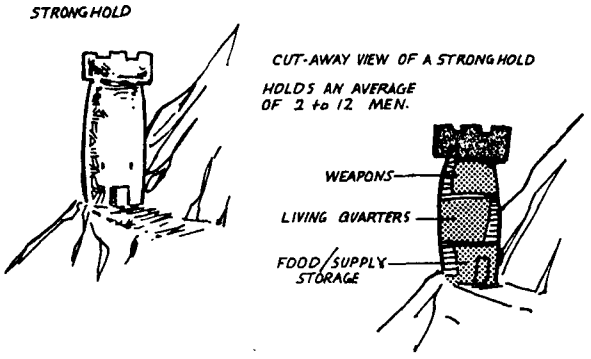
UWA-OBI BELT SODE SHOULDER GUARD DAISHO WAKIZASHI AND KATANA SWORDS NODOWA NECK GUARD AND HACHIMAKI MEMPO FACE MASK AND KABUTO HELMET

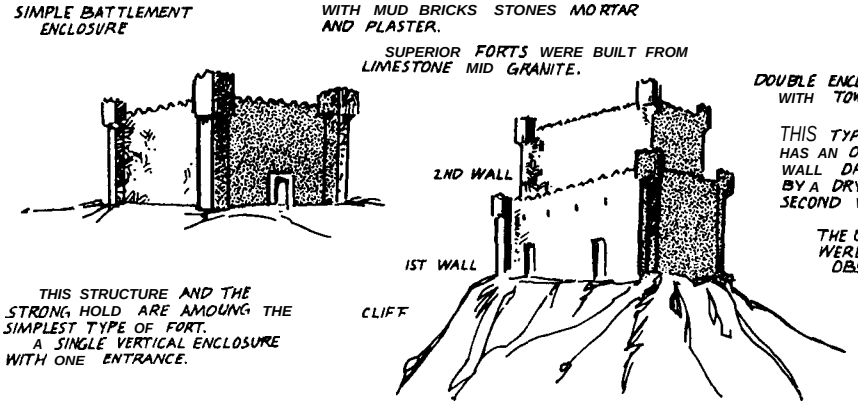
CASTLES & FORTIFICATIONS

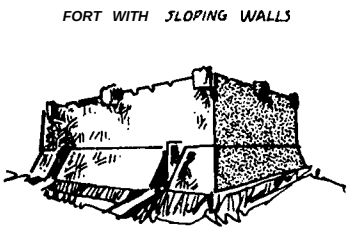
Since earliest times, cities, palaces, and other important places have been protected by fortifications.

All of the ancient civilizations in the Middle East and eastern Mediterranean area constructed fortifications. Similar techniques and materials were used by all of the ancient cultures and as a result, the fortifications are similar in appearance.





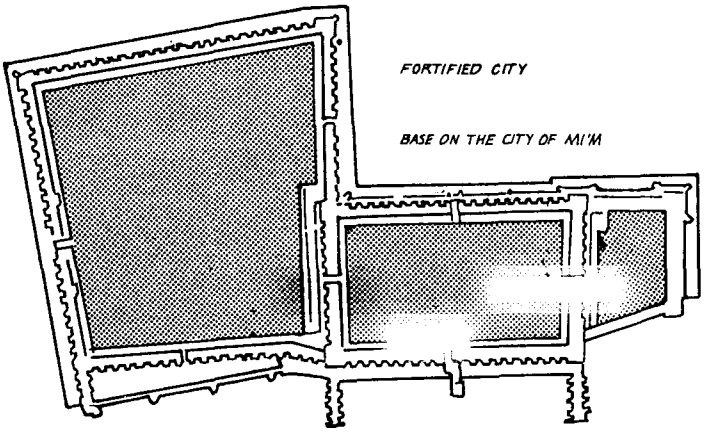




Quite often the walls and battlements of ancient forts were quite immense, both in thickness and height. Many times two or three lines of walls were erected as protection.

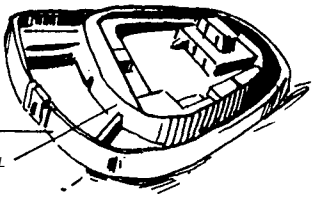
The earliest walls were constructed of rammed or packed earth and clay bricks. The brick courses gradually widened towards the base of the wall, forming a glacis. As stone replaced brick in later times, the pronounced outward slant of the glacis was reduced. At regular intervals along the walls, buttresses projected out from the walls. These buttresses were often built up into wall towers so the defenders could fire missiles along the length of the walls.

Gateways evolved from simple passageways through a buttress or bastion in the wall to elaborate systems of chambers and right angle turns designed to reduce the chance of a large enemy force quickly entering the city or fort. Often the approach to the gate ran along the walls as well, so that the defenders could rain down missiles and rocks upon the attackers. The gates themselves were usually a massive set of double-rung doors made of wood.

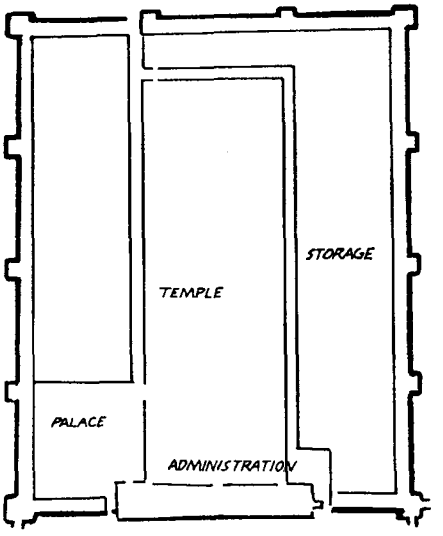


BASED ON OVAL TEMPLE AT KHAFATE

TEMPLES WERE OFTEN FORTIFIED STRUCTURES.

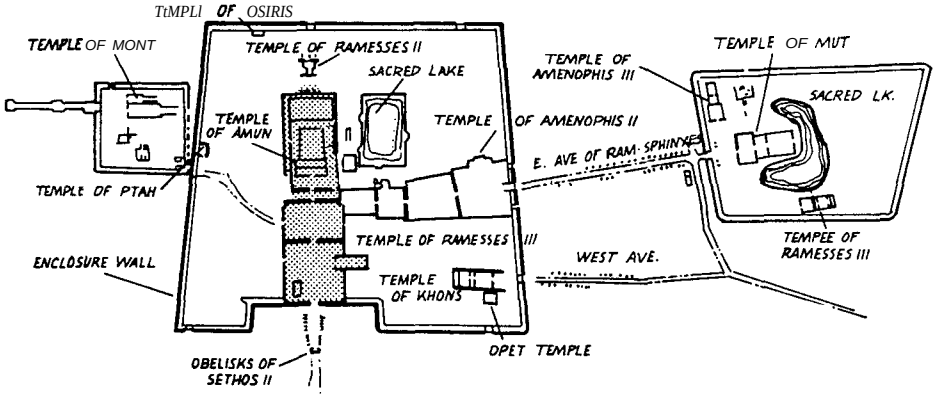


BASED ON TIMPLE AT LUXOR

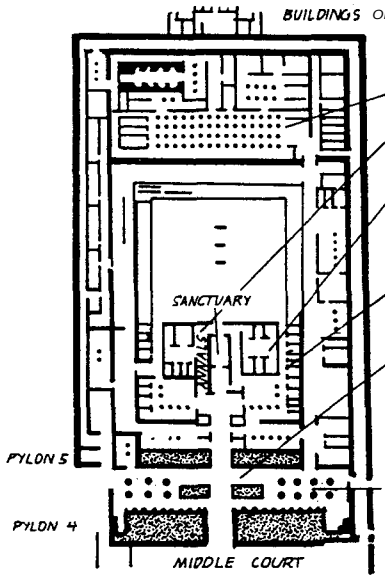


FORTIFIED ENCLOSURE WALLS

THE IMPERIAL TEMPLE AT KARNAK WITH ASSOCIATED TEMPLE PRECINCTS



TEMPLE OF AMUN



•••••• ORNATE PILARS AND STATUES

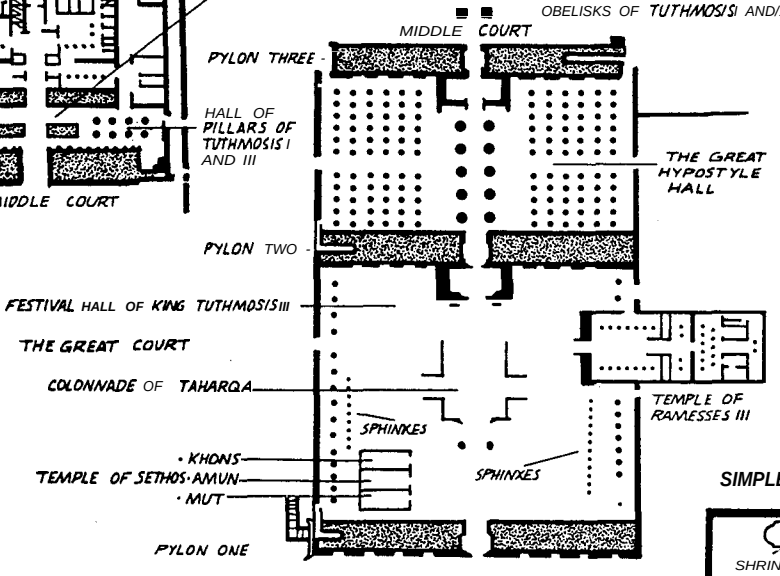
FESTIVAL HALL OF KING TUTHMOSIS III WITH THE TWO WINGS KNOWN AS THE SECOND HALL Or ANNALS OF TUTHMOSIS III

ADJOINING APARTMENTS OF QUEEN HATSHEPSUT TO THE NORTH AMD SOUTH

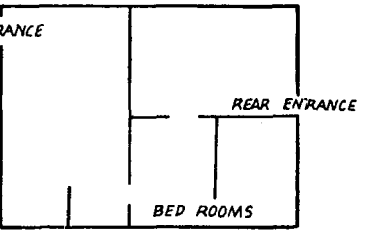
FIRST HALL OF ANNALS OF TUTHMOSIS III

OBELISKS Of QUEEN HATSHEPSUT

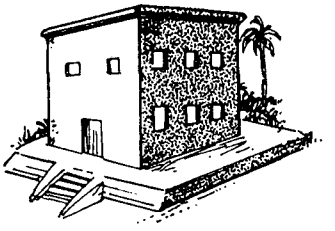
COURTS AND HALLS OF THE TEMPLE



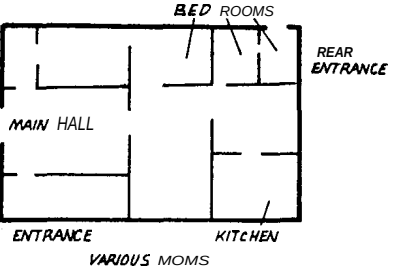
SIMPLE BARRACKS STYLE HOUSE



BUILT FROM BRICK AND MUD AND OK LIMESTONE.

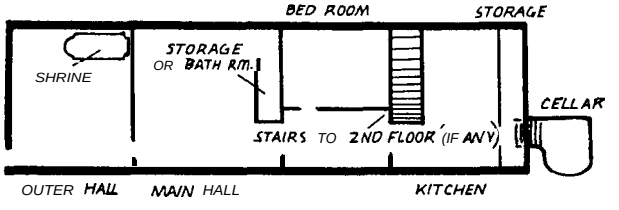


SIMPLE HOUSE



VARIOUS MOMS

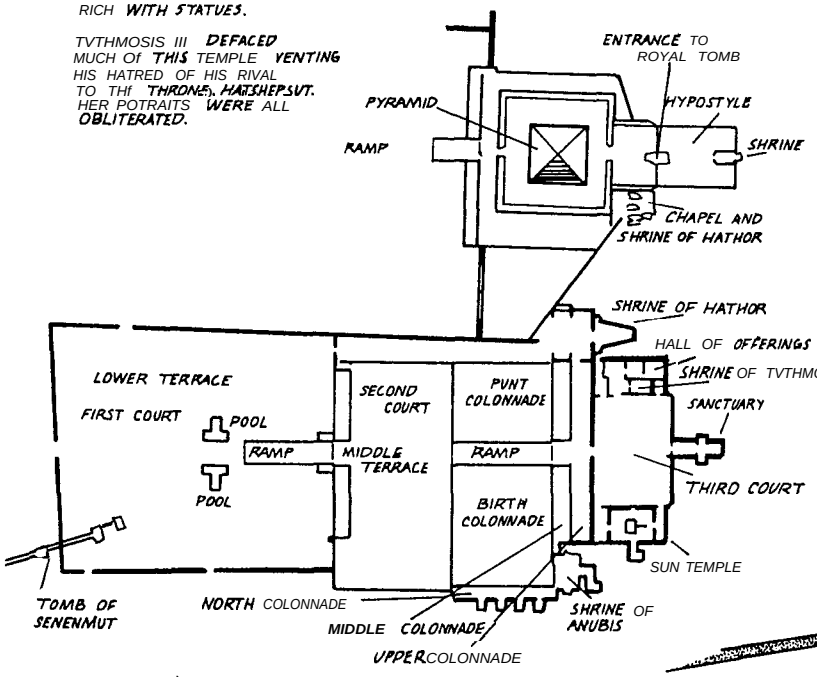
SIMPLE HOUSE

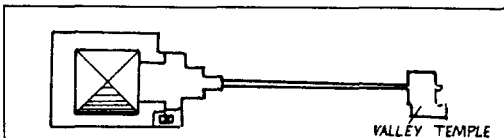


THE TEMPLE OF **QUEEN HATSHEPSUT** AT **THEBES** WAS **DEDICATED TO THE SUPREME** GOD AMUN, ALTHOUGH OTHER GODS ARE ALSO **HONORED.**

THE TEMPLE AND **SHRINE AREAS** ARE RICH **WITH STATUES.**

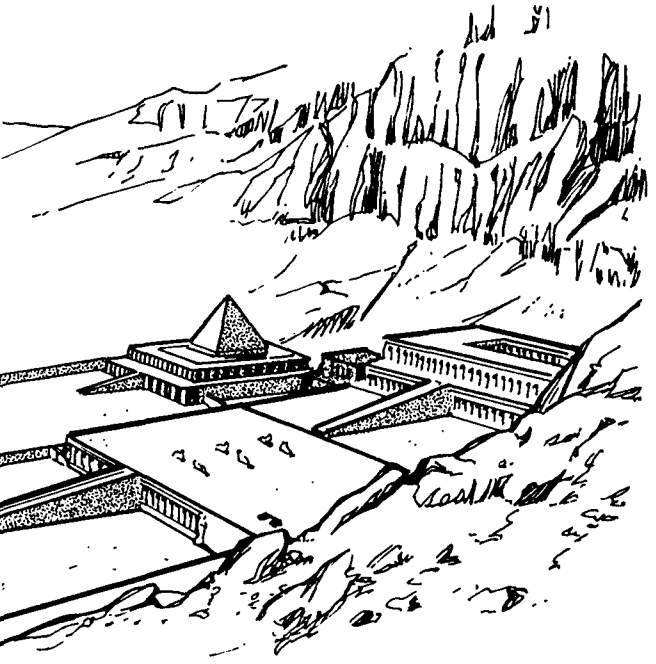
TVTHMOSIS III **DEFACED** MUCH Of **THIS** TEMPLE **VENTING** HIS HATRED OF HIS RIVAL TO THf **THRONE**, HATSHEPSUT. HER POTRAITS **WERE** ALL **OBLITERATED.**

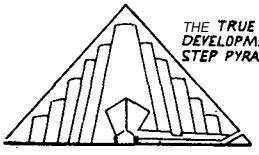




OVER-HEAD VIEW OF LAYOUT

THE **PYRAMID** COMPLEX OF **SAHURE** AT **ABUSIR.**

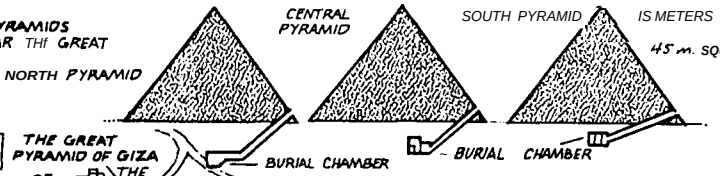


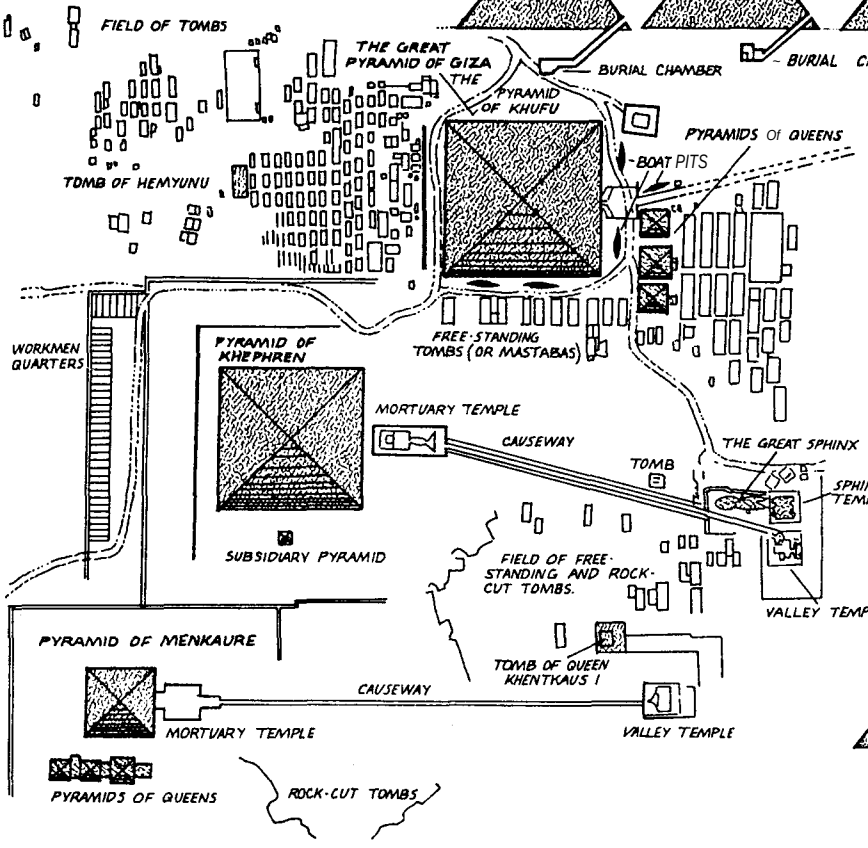


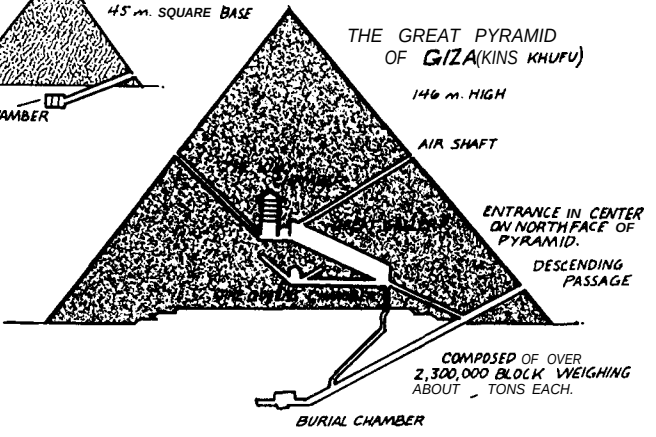
THE **TRUE PYRAMID** WAS A **NATURAL DEVELOPMENT** OF THE **EARLIER STEP PYRAMID.**

THC **INTERIORS** OF **MOST** PYRAMIDS ARE **REACHED BY** A **DESCENDING PASSAGE** IN THE NORTH FACE. THE BURIAL CHAMBERS **ROOF** IS **FORMED BY** THE **LARGEST** AND **HEAVIEST BLOCKS** IN THE **PYRAMID.**

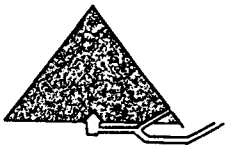
THE THREE PYRAMIDS Of **QUEENS** NEAR THf **GREAT PYRAMID**





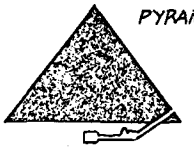


PYRAMID OF KHEPHREN



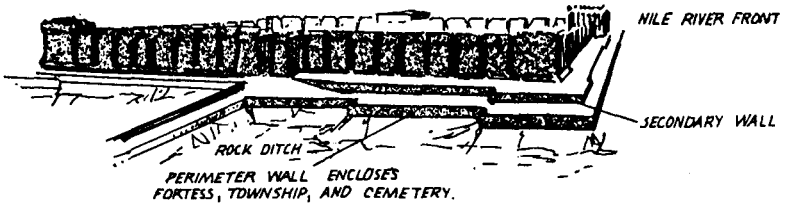
The Giza Necropolis

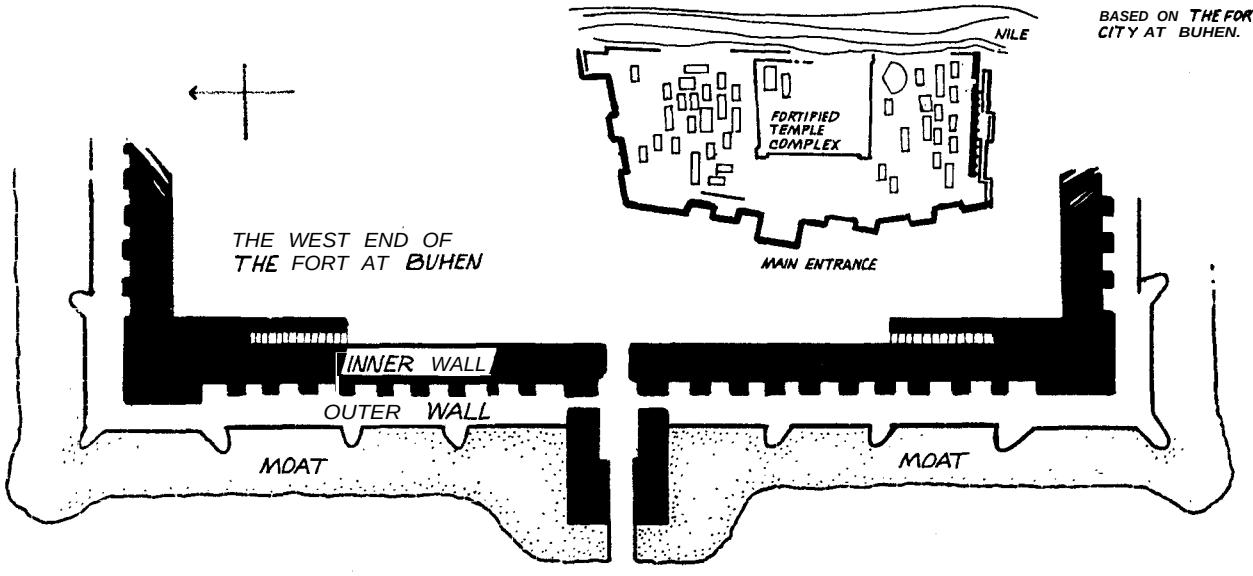
PYRAMID OF MENKAURE



The Buhen Fortress

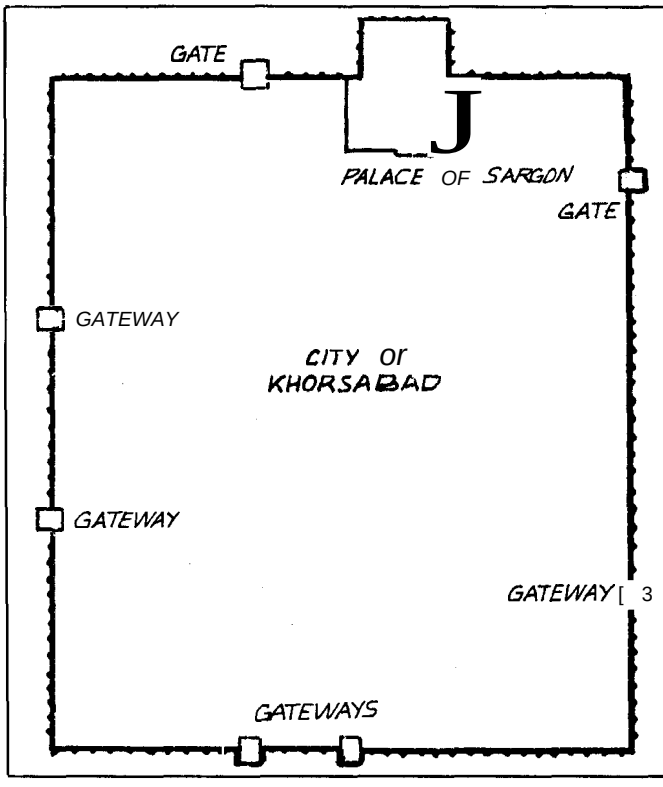
This ancient Egyptian fortress, from the 12th dynasty (ca. 2000 B.C.), helped protect the area around the second Cataract that divided Egypt and Mubia. The inner wall was 16 feet (4.8m) thick and was built to a height of 9 meters. The smaller outer wall encloses a terraced area between the two walls and is pierced with a double row of arrow loops, allowing both standing and kneeling archers to fire simultaneously.

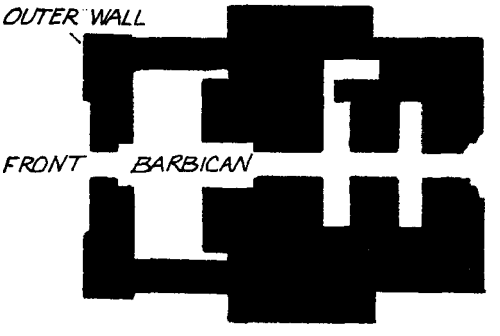




City of Boghazkoy (Hattussas)

As the capital of the Hittite Empire, this city was among the largest of the Bronze Age. As its height, the city boasted over six kilometers (4 miles) of walls. The walls themselves were casemented in construction; the inner and outer skins were about 10 feet (3m) thick each, with a 7 foot (2m) space between, offering a 27 foot (8m) effective thickness.





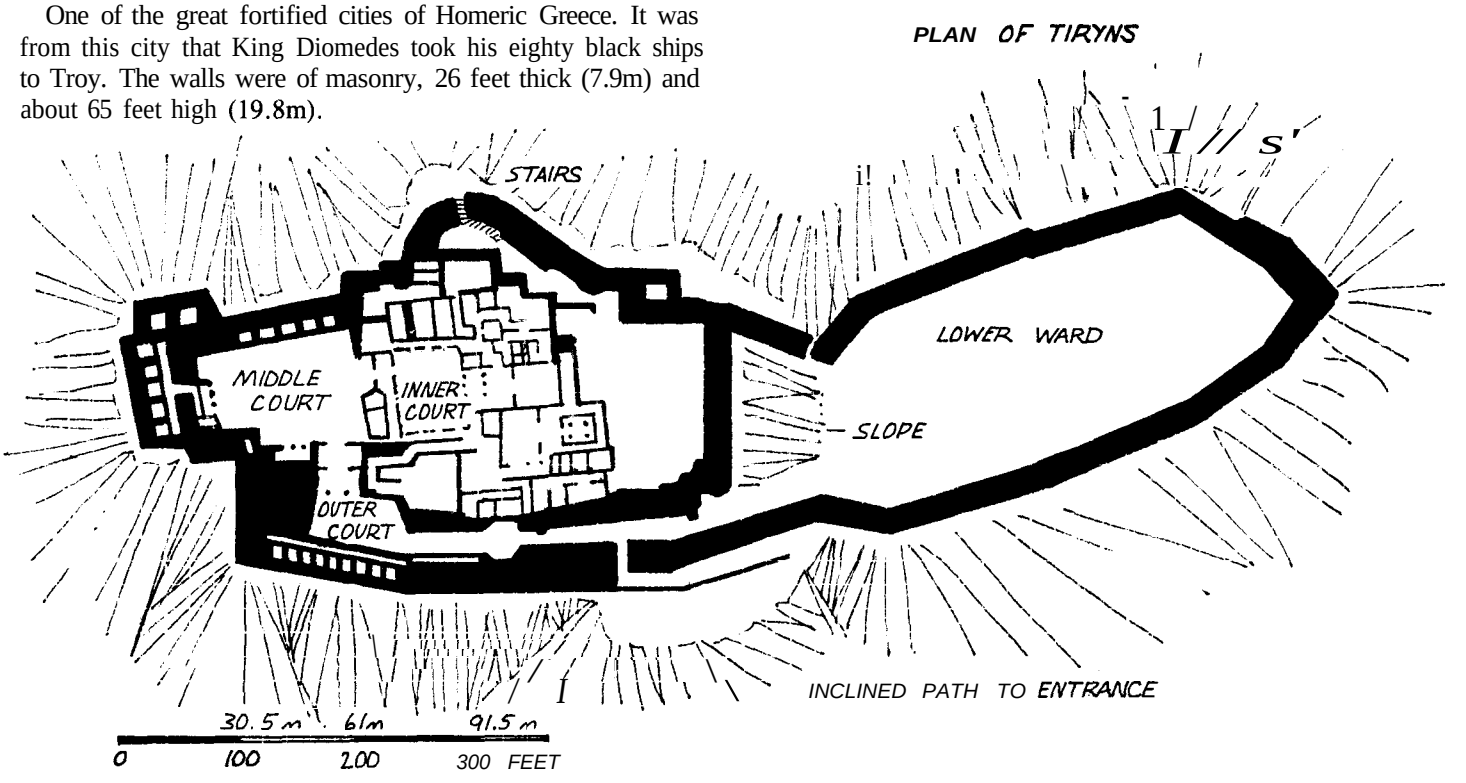
PLAN OF A GATEWAY AT KHORSABAD

City of Khorsabad (Dur Sharrukin)

The new Assyrian capital of Sargon II was built between 722-705 B.C. The 80 foot (24m) thick city walls were built of brick on a stone foundation. The palace complex was located on the northern wall and extended out slightly from the main city wall. This complex had two enclosures, with the inner one atop a terrace. The palace itself was entered from a ramp and a large doorway flanked by Lamassu, the man-headed bulls who represented the god-protector of the city. Near the southwest corner of the city was a secondary citadel established as a check against internal riots, as well as outside attacks.

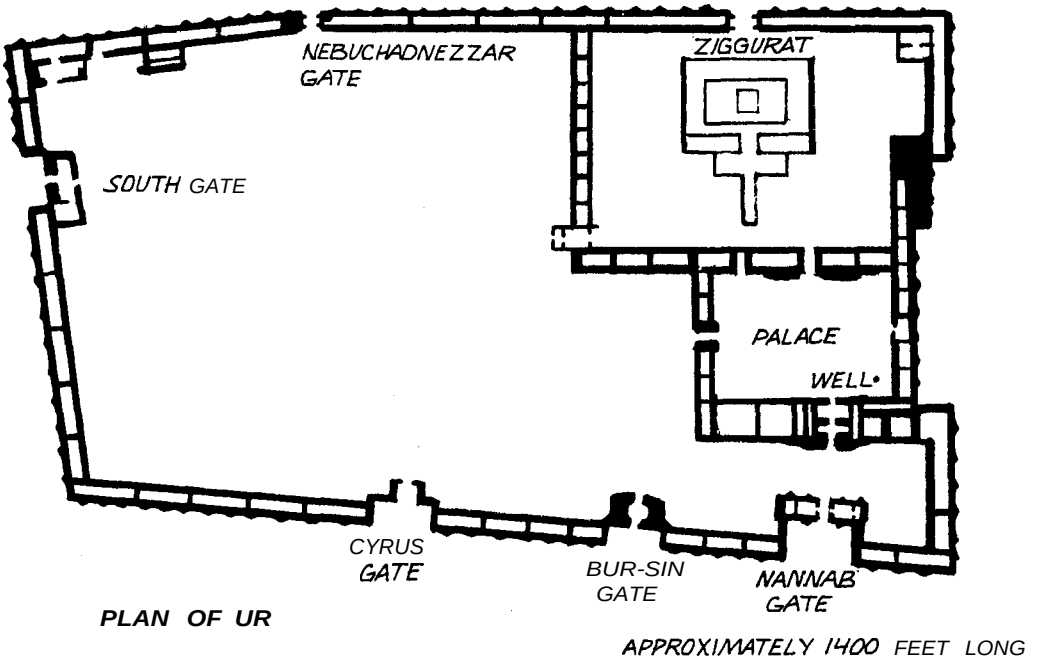
City of Tiryns

One of the great fortified cities of Homeric Greece. It was from this city that King Diomedes took his eighty black ships to Troy. The walls were of masonry, 26 feet thick (7.9m) and about 65 feet high (19.8m).



City of Ur

Extensively strengthened by neo-Babylonian King Nebuchadnezzar II around 600 B.C. This ancient Sumerian city boasted caisson-type walls with a 40 foot (12.2m) effective thickness. The walls were reinforced on both sides with a series of closely spaced buttresses giving them a corduroy-like appearance.



Danish Camp (Trelleborg)

This large, near circular encampment enclosed 16 barracks some 100 feet (30m) long. The earth wall itself is reinforced by two wooden walls and topped by a wooden palisade. The four gates were actually tunnels through the wall and were reached after crossing bridges over a 33 foot (10m) wide ditch.

Hillforts (Old Winchester Hill)

Many hillfort defenses existed in Britain and France prior to the Roman era. These were quite often ring-shaped earthen mounds with wooden palisade walls atop them. In many instances there were two or three successive rings. The rampart wallways were made of stone or wooden boards.

Roman Forts

The Romans built a vast number of forts throughout their history and empire. Although influenced by the particular circumstances of the time, as well as the local geography, these forts were generally of a single basic type. The Romans viewed these forts not as strongholds, but as *bases* from which they could send forth troops to battle in the open, where their superior training and equipment could be used to its fullest advantage.

Normally a fort was surrounded by a system of defensive ditches, to prevent a hostile force from breaking in. While the attackers were hindered by the ditches arrows, slingstones, and other missiles could be rained down upon them from the ramparts of the fort. Normally the ditch had a v-shaped cross section with a rectangular slot at the bottom. The angle of the sides of the trench depended on the condition of the soil; heavy clay soils could maintain a sharper angle than loose gravel or sandy soils. The ditch was 10 to 13 feet (3 to 4m) wide at the top and about 8 feet (2 to 2.4m) deep. An attacker was prevented from leaping over the ditch by its width and would have to scramble up the sloped side to get by. Occasionally, the bottom of the ditch was planted with thorn hedge to act as barbed wire. Normally three lines of these ditches were constructed, although more could be dug if attack was feared.

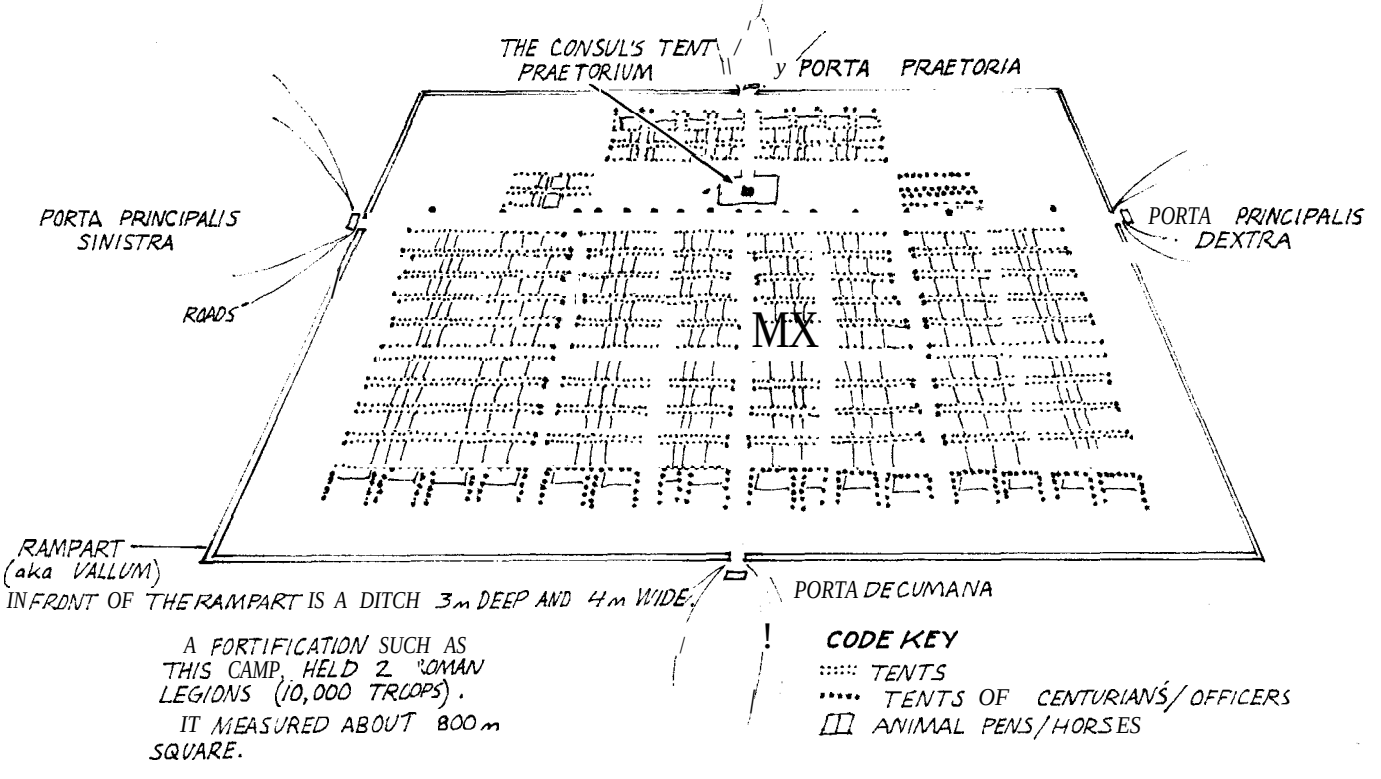
It was normal to have a ditch directly against the rampart wall (indeed, the dirt from the ditch usually made up the rampart). A second line of ditch was placed about 25 feet (7 to 8m) away from the first. The third line could be up to 140 feet (42m) from the wall. Sometimes, the outward facing wall of the second (middle) ditch was made to be near vertical. This would make this trench easier to cross by an attacker; but in reality it was bait for a sinister trap. By allowing an attacking force to cross the middle trench line and reach the area between it and the ramparts, the Romans were setting them up for a nasty surprise. When the enemy had entered this area, the Romans concentrated missile fire, which had been held back until this time. In the face of this withering fire, the attackers would retreat, only to be faced with a near vertical wall to scale. Now trapped, they could be decimated by the continued missile fire.

The greatest obstacle to overcome in a Roman fort was the rampart. Being outstanding siege engineers themselves, they considered siege techniques in planning their own walls. The chief material used in building the rampart, was sod (when it was available). Sod is a resilient and fireproof material and was used like bricks. The normal rampart was of earth from 10 to 16 feet (3 to 5m) thick with sod faces. Timber was used to stiffen the rampart, especially the foundations and at the corners of the fort. A wooden parapet completed the rampart by providing a fighting area safe from enemy missiles.

Roman forts had four gateways, one at each side. Normally the gateway consisted of *two towers* flanking the roadway. The towers were of wood, to a height of about 30 feet (9 meters). Two sets of double doors secured the gateway.

PLAN & PRINCIPLE FEATURES

All Roman forts had the same basic pattern of streets. The



via principalis led to the main headquarters building, or principia. At right angles to this was the via praetoria, which ran along the front of the principia.

Principia

This was the center of command and administration for the fort. This area consisted of a complex of buildings to house clerks, quartermasters, and supplies, as well as meeting areas for courts, recruitment, and religious ceremonies.

Praetorium

This was the house of the legionary commander and, since he was a senator, it was rather large and opulent. This building complex was normally as large as the *principia* and it enabled the commander to bring his family and belongings from Rome and live in a style not too different from that enjoyed at home, even on a remote frontier.

Tribunes' Houses

The legions' tribunes, normally six, each required separate houses, with the senior among them being more elaborate than the others.

Barracks

The barracks took up the greater part of the fortress. These barracks were long rectangular buildings with 10 to 12 pairs of rooms, with a larger suite of rooms attached to one end. The soldiers were accommodated in the pairs of rooms, one for storage, the other for sleeping, and the centurion lived in the suite. A veranda runs along the front of the structure.

Hospital (Valetudinarium)

The hospital was a large rectangular building built around a central courtyard. There were usually sixty wards, grouped in pairs, and arranged around a central corridor that led around the entire building. The wards themselves do not open directly onto the corridor; access through a foyer helped ensure quietness for the inmates.

Granaries (Horrea)

The buildings which housed and protected the troops, food supplies were carefully planned and built. The buildings were long and narrow and the floor was raised above ground level to reduce dampness and help in the off-loading of supplies from wagons. The main walls were fairly massive to allow the roof to project at least one meter beyond them to ensure that rain water did not run down the walls. Inside the building was a central corridor flanked by storage bins. Normally four to six granaries were built in each fortress.

Bath House

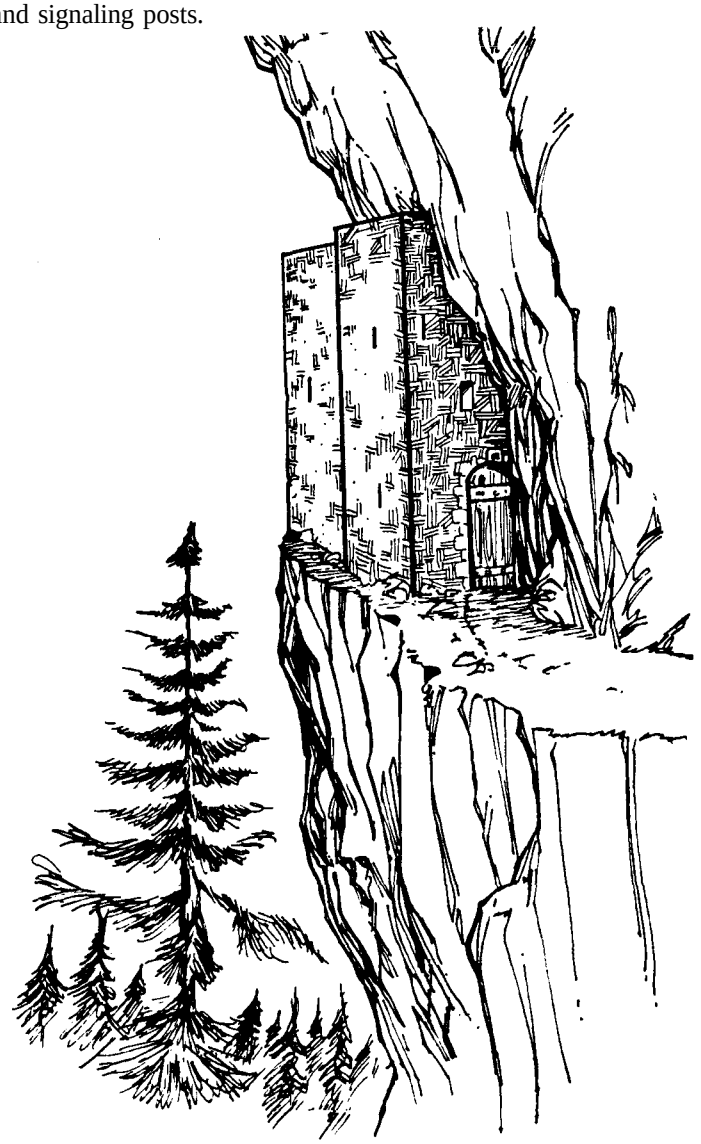
The bath house was a fairly large structure with a series of rooms designed for varying temperatures and humidity levels, as well as massage areas, latrines, and storage areas.

HADRIANS' WALL

Perhaps the most famous of all Roman fortifications, Hadrians' Wall was built between 122 and 126 A.D. to stabilize the northern frontier of Britain. Between the River Tyne and the River Irthing, the wall was 10 Roman feet wide and 15 Roman feet high (3m x 4.5m). Above the wall was a crenelated rampart 1.5 meters high (5ft).

West of the River Irthing, the wall was made of turf blocks, because suitable stone was no longer available. The turf blocks, measuring $51/2 \times 41/2 \times 21/2$ inches (34cm x 29cm x 14cm), were stacked up to form a vertically faced rampart 14 feet (4.3m) high and 20 feet (6 meters) wide. A wooden walkway and parapet 6 feet (1.8m) high stood atop the turf walls. As in the fort described previously, a v-shaped ditch was dug in front of the wall.

For every Roman mile, about 1.5km, there was a *castellum* designed to hold 32 men. Each castellum had dimensions of about 50×70 feet (15×20m) and housed a barracks room, a store, kitchen and latrine. Each of these protected the gateways through the wall to the north. Flanking towers, spaced 1500 feet (500m) apart, helped protect the castellum. These stone towers stood 10 feet (3m) above the wall itself and served as observation and signaling posts.



STRONGHOLDS WERE SIMPLE STRUCTURES BUILT OF MASONRY ACROSS THE MOUTH OF A CAVE OR ON THE OVERHANGING NARROW LEDGE OF A CLIFF FACE, AS PICTURED ABOVE.

THESE SIMPLE WALLED STRUCTURES WOULD UTILIZE AS MUCH OF THE MOUNTAIN'S NATURAL PROTECTION AS POSSIBLE. WITH ONLY ONE OR TWO MAN-MADE WALLS.

SITUATED WHERE THEY WOULD NOT BE SUBJECT TO ATTACK FROM SEIGE MACHINES, THE WALLS WERE NOT AS STRONG OR THICK AS TYPICAL CASTLES.

STRONGHOLD OUTPOSTS WERE USUALLY OCCUPIED BY 10 TO 20 MEN.

WALL RATING I

CASTLE BUILDING

The first task in constructing a castle was to select a suitable site. In choosing a site, a number of things needed to be considered: it should not be too remote, a ready source of water should be available, natural obstacles should be incorporated into the defense design, and building materials should be readily accessible. Site selection required the talent of builders and soldiers, and often a committee of them surveyed and selected the site.

Where the castle was to be built determined for the most part what the major building material was to be. Stone was the strongest building material. An ideal situation would be one in which the stone was hewn from the ditches or moats which would become part of the overall defenses. Most often, however, local stone was suitable for little more than rubble filling between walls. This meant that dressed stone had to be brought to the site, usually at great cost. In many areas, brick was used, especially if suitable clay was at hand.

Enormous quantities of sand, lime and water were also needed to make mortar. Wooden timber was used in large amounts for scaffolding and support beams. Iron and steel were important as well, for nails, hinges, spikes, and other hardware.

Often the design of the castle was influenced heavily by its owner. Many knights had a good working knowledge of military architecture due to their exposure to wars and the Crusades. As the castle was a vital weapon, it was only fitting that owners be influenced by the available military minds of the time.

Even though the owner might have a hand in the design process, the actual work of supervising the construction was left to the skilled professionals. Working in stone is a highly detailed craft, and the master masons were men of great expertise in stonework. While the master mason supervised the actual construction, a clerk would organize the building supplies, pay the workmen, and keep accounts.

Since the castle was a feudal institution, it was only natural that the lord would use his rights over his tenants to compel them to work on its construction. Actually, this type of public obligation existed in many places before the castle came about. Maintaining and constructing public works was a very ancient concept in many cultures. A common means of gathering labor for castle construction was the contract, generally between the master mason and the lord. Usually, the mason agreed to provide the labor while the lord provided materials and paid for the job.

The highly ordered structure of medieval society is well-demonstrated in the division of labor in building castles. Tasks involved were carefully differentiated. Normally, the peasants' role was confined to transporting materials. On the work site were ditch diggers, hammerers, levellers, foundation workers, stone breachers, carriers, mortar makers, smiths, carpenters, and turf cutters, to mention some of the specialty jobs. The largest labor force was needed during the initial stages of construction.

The foundations of castles had to be laid out with great care. Wherever possible, bedrock was used, but in many places, wooden piles driven into the ground made do. Stability could also be achieved by piling earth around the base of a tower or keep. Typically, the walls of a castle were composite in construction. They consist of inner and outer wall faces carefully built out of stone. The space between them would be filled with coarse rubble and mortar, forming a very strong wall. Early walls were often made of small square stones. Later large rectangular blocks were used. In the eleventh century herringbone stonework became common. In Germany, as well as in many Crusader castles, *en bosse,* or "rusticated," masonry was used. This technique leaves the center of a stone block rough, while its edges are cut square and smooth.

Scaffolding was needed to build high walls, and often it is possible to see by the holes left in the face of a wall how this was done. Sometimes the walls of a tower were built up around the wooden scaffold; in other instances, spiral ramps were built and served as scaffolding.

Although there are examples of great castles having been built in only a few years, the average completion rate would be about 5 to 10 years. A castle such as Harlech would take from seven to ten years to complete. Work on the walls had to stop during winter when the freezing temperatures prevented the mortar from setting properly. Also the shorter days meant less daylight hours to work. Normally winter work was restricted to the quarrying and dressing of the stone.

The Castle's Role

The castle served as the key to the surrounding countryside. It provided a base from which control and dominion could be exercised. Although a castle could not stop an invader at the frontier of a region, as long as it stood unconquered, the loss of control over *the land* to an enemy was only temporary.

The defense of the castle depended largely upon its size and capacity. Although large garrisons of 100 to 200 men occurred throughout history, there were many instances of castles being defended by only 10 or 20 men. Regardless of the size of a garrison, the warriors exercised a wide influence beyond the walls due to their mobile nature. From the castle base, mounted men could roam the surrounding countryside.

By using this system of patrolling the land, the castle's lord controlled the countryside unless a major force was led against him. Thus, if an aggressive bandit or rebel lord had a castle near an important trade route, he could cause great disruption to commerce by attacking or robbing those travelling through his zone of control and could then return to the safety of his castle. If this happened in a kingdom with other strong castle lords, eventually the offending stronghold would have to be taken to eliminate the threat to the safety of the subjects who look to the king for protection.

The castle also took on an important part in the conquest of new territory. In England and Syria, the Normans and Franks built castles to exert their control and domination over the land. When the invaders wanted to expand, they built a castle to serve as a base and then pacified the surrounding territory. Then another castle would be built further out and another area pacified. This basic concept was used in England, Wales, Spain, Germany and Syria, to name a few.

The use of a castle as a base from which control over the land could be exercised also had its applications in siege warfare. Often the besieging army would build a temporary "siege castle" to cover a gate or postern of the besieged castle. From these defenses, any sortie from the defenders could be checked. These also prevented the castles lord from collecting any rent or supplies

from the surrounding land and as such, the maintenance of the defense became very expensive.

Castles were also the locations of arsenals and supply depots for an army in the field. Even in defeat, an army could quickly regroup if a friendly castle was close enough for it to fall back on. Victory in a full scale battle on the field could prove worthless if it was not coupled with a campaign to conquer the enemy's castle.

CASTLE LIFE

The focal point of the domestic aspects of a castle was **the great hall.** This was the most spacious room in the complex. The hall was used for a variety of purposes; it was the main living room of the castle, the occupants met there to eat, conduct business, entertain themselves and sometimes, sleep.

Near the hall were the kitchens, the pantry, and the buttery. Until stone and brick became readily available, they were built of wood, and as such, burnt down regularly. This danger meant that they were often detached from the main hall. Often the more important diners in the hall sat furthest away from the kitchen, and elaborate ceremonies accompanying the serving of food developed. The smell of food detracted from the desirability of the great hall as the castle's center, so eventually the kitchen became detached from this area altogether.

The living quarters of the lord and his family were as far as possible from the kitchens. Often the wife had a separate room from the lord, especially if he had to travel about, visiting his other holdings.

There were also quarters for a small **household staff** which kept the castle in order when the lord and his wife were away. This staff varied in size, but usually included a *watchman, steward, porter, cook, chaplain, and a washer woman.* Rooms for the lord's advisors and other members of his *retinue* were provided as well.

In addition to all of the rooms mentioned, there were quarters for visitors and travelers. A great man was expected to show hospitality to the traveler, although more often than not, the poor pilgrim was denied entry.

Most castles also made provisions for religious observances and ceremonies. In Europe, the church and state laid the responsibility of setting a Christian example upon landholders. Often castle chapels became showpieces of the piety of the lord. Many castles incorporated shrines and reliquaries within the chapel to house important icons and religious artifacts.

FURNISHINGS

Although each room of a castle had a specific use, they were not restricted to only that use. Each room could be used for sleeping. Men often slept in the rooms they worked in. Where there weren't already mattresses or straw, bedding was brought in as needed.

Since most rooms in a castle were used for sleeping, beds and bedding could be found in nearly all of them. Beds, like most things in the medieval world, varied in opulence depending on the rank of the user. The beds of high ranking people were covered with furs and other costly adornments. Bed design changed throughout the period, with headboards, canopies, and other hangings coming about to enhance comfort.

Aside from the bed, there was often no other place to sit in a room. In some rooms with large windows, window seats of stone were made. Chairs tended to be only for people of high status and, as such, only one chair per room was the rule. These chairs were often accompanied by*footstools* in an effort to raise the sitter above draughts. The use of singular chairs helped distinguish between the sitter and others in a room, for they were left to stand or sit upon the floor. In rooms with additional seating, these generally took the form of benches and stools.

Wall lockers, chests, and trunks were the main method of storage during the Middle Ages. Some freestanding cupboards were used as well. The majority of the chests would be taken with the lord and his retinue when they left the castle. Later, buffets and dressers came into use not only for storage, but also as places to display artworks or serve drinks.

DECORATION

The decoration of the floors usually took the form of tiles or brick. Often elaborate designs, including heraldic devices, were incorporated into the tiling. Floors were normally covered with woven rush matting, which was replaced in the spring. The very wealthy sometimes put woven carpets over this matting. The walls of many rooms, especially the great hall, were covered by hanging tapestries to help reduce draughts. These tapestries could be very ornate, and often depicted scenes of nature, the Bible or folklore. Walls which were not covered by tapestries were painted.

LIGHTING AND HEATING

The primary source of light in a castle was sunlight, but with the primary purpose of the walls being to provide protection, it could not be utilized to its fullest extent. Where windows were made, they were fitted with metal grills and internal shutters. Artificial light was provided by torches, candles and lamps. These were held in special holders or stands which were either brought in or permanently attached to the walls or ceilings.

Early castles had fireplaces only in the kitchen and the great hall; other rooms were heated with braziers filled with hot coals. A central hearth, as well as wall fireplaces, were used. The normal method of conserving heat was to seal up a room and huddle close to the fire. To offset the stuffiness of these rooms, aromatic herbs and leaves were strewn on the floors.

SANITATION AND WATER SUPPLY

Generally, every occupied room in a castle had a chamber pot which was emptied daily. Chamber pots were supplied even if other facilities were available. Garderobes, which were small closets situated in the external castle walls, came into use with the development of stone-walled enclosures. Individual garderobes were provided in the lords' room and communal ones, with many cubicles, were placed for general use. Scented herbs were put in these rooms to freshen the air and wash water was thrown down the chutes to flush them out. As today, the restroom was also a convenient place to throw out unwanted litter or other refuse.

Although many castles drew upon lakes, streams, or ponds for their water, most also had an *internal well* to supply the complex. Many castles in Asia Minor and southern Europe had huge cisterns constructed to hold water for the dry summer season. Often these had aqueducts leading to them to keep them filled. Generally, the kitchen was the only place with running

water. Hot and cold water was taken in bowls or tubs to other parts of the castle as required.

DEFENSE

Every section and room of a castle was expected to be ready for attack at a moment's notice. The floors of rooms over gateways and entrance passageways were often fitted with *"murder holes,"* openings in the floors with wooden covers. These openings were used by the defenders to attack anyone below by spear, pike, or arrow. Rooms with outward facing windows had a supply of arrows and a bow stored in them. It was a normal practice to have the arms and armour of a castle spread throughout the entire complex. Since most castles were built with the idea of being able to seal off any section if overrun, it would be foolish to put all armaments in one location. In times of peace there would generally be no extra garrison at a castle, the normal staff and inhabitants being sufficient to hold off most attackers. Only in times of strife or unrest would extra men be stationed there.

CASTLE GARRISONS

The number of men garrisoned in a castle at any given time varied greatly. Not only did peace or war affect the numbers in a castle, but the status (and pocketbook) of the commander and the faithful performance of military obligations by vassals. For an average royal castle in Britain around 1300, the permanent garrison was as follows: the constable, fifteen crossbowmen, a smith, a carpenter, a mechanic, and twenty-five men-at-arms. In addition, there was usually some sort of domestic staff; servants, janitors, etc. In times of war, this garrison could be greatly augmented depending on the size and preparedness of the castle. Even in war, however, only the largest of castles would hold no more than 100-200 men at any time. The main troops would be in the field.

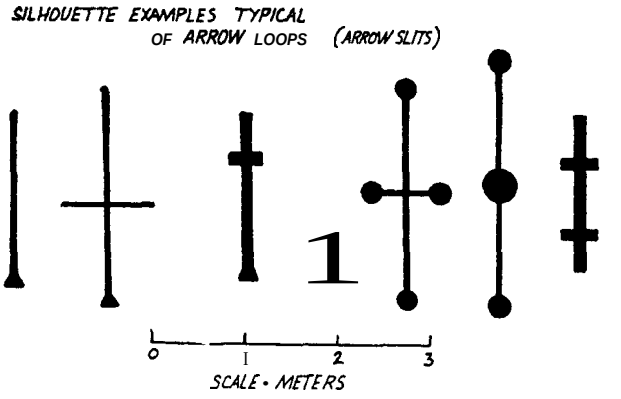
CASTLES

This book was designed to be used by fantasy gamers who wish to include detailed descriptions of castles in their campaigns. All of the buildings depicted in this book are, or were, actual castles. they can easily be used in any fantasy game as is or can be modified as the players see fit.

Nearly all castles were situated on sites of some earlier fortification. This was especially true if the castle was located at some strategic spot such as at the bend of a river, atop a lone hill, or at some other important place. Many castles made use of walls which were constructed at an earlier period, sometimes centuries earlier.

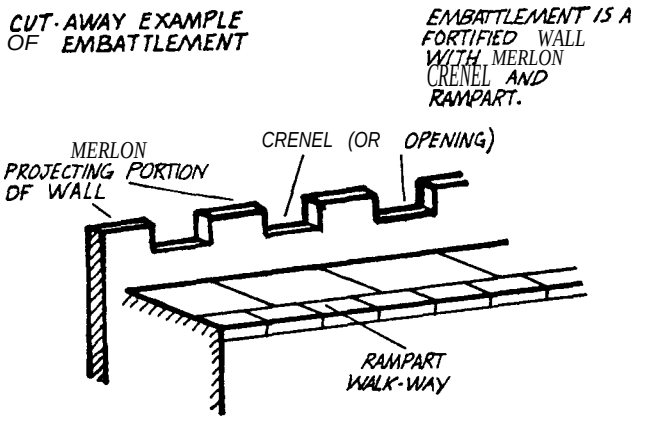
Included here is a glossary of terms commonly used when discussing castles and similar fortifications.

Abacus: Flat portion on top of a capital.
Aisle: Space between arcade and outer wall.
Ambulatory: Aisle round an apse.
Apse: Rounded end (usually of chancel or chapel).
Arcade: Row of arches, free-standing and supported on piers or columns; a blind arcade is a dummy.
Arch: Can be round-headed, pointed, two-centered or drop, that is an arch struck from centre on the springing-line. Ogee: pointed arch with double curved sides, upper arcs convex, lower concave. Lancet: pointed arch formed on an acute-angle triangle. Depressed: flattened or elliptical.
Ashlar: Worked stone with flat surface, usually of regular shape and square edges.
Aumbry: Recess to hold sacred vessels, often found in castle chapels.

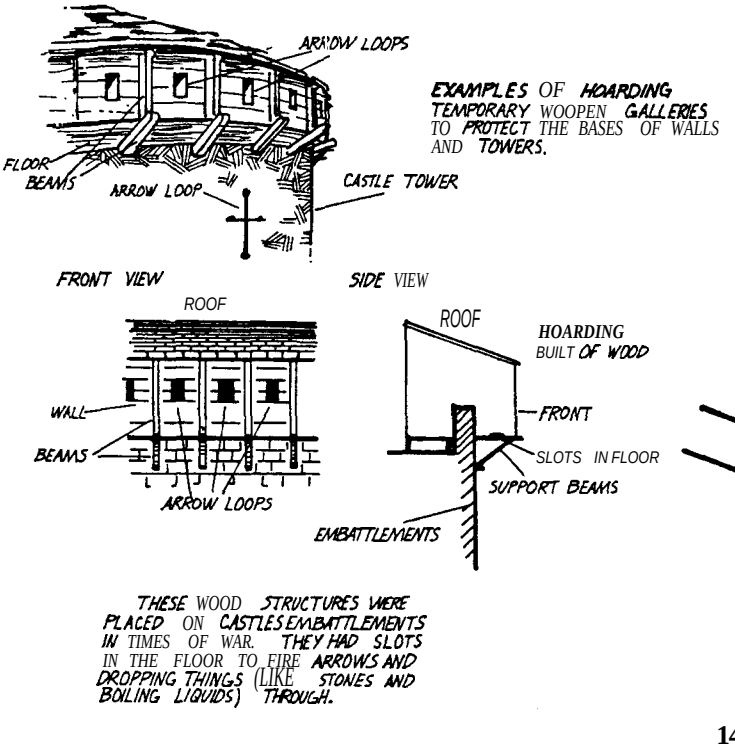


Bailey: Castle courtyard and surrounding buildings.
Barbican: **Outwork defending the gateway or entrance to the castle.**
Barrel Roof: Like a covered wagon, or inverted ship; **barrel vault** is a plain vault of uniform cross-section.
Bartizan: Overhanging battlemented corner turret, corbelled out; common in Scotland and France.
Bastion: Solid masonry projection.
Batter: Inclined face of wall; hence **battered.**
Battlements: Parapet with indentations or embrasures, with raised portions (merlons) between; also called crenellations.
Bays: Internal divisions of building, marked by roof principals or vaulting piers.
Berm: Level area separating ditch from bank.
Bivalate: A hillfort defended by two concentric ditches.
Bond: Arrangement of bricks in courses.
Bratice: Timber tower, or projecting wooden gallery.
Buttress: Projection from wall for additional support.
Castellan: officer in charge of a castle.
Chamfer: Surface made by smoothing off the angle between two stone faces.
Chevron: Zig-zag moulding (twelfth century).
Clunch: Hard chalk material.
Cob: Unburnt clay mixed with straw.
Constable: official in charge of castle in owner's absence.
Cornice: Decorative projection along top of wall.
Counterfort: Defense work of besieging force.
Counterscarp: Outer slope of ditch.
Course: Level layer of stones or bricks.
Crenel: Gap in battlemented parapet; **Crenellate:** to fortify.
Crosswall: Interior dividing wall of castle.
Curtain: Connecting wall 'hung' between towers of a castle.
Diaper Work: Decoration of squares or lozenges.
Dogtooth: Diagonal indented pyramid.
Donjon: Principal tower of castle; keep.
Dormer: Window placed vertically in sloping roof.
Drawbridge: Movable bridge; originally moved horizontally like a gangway.
Dressing: Carved stonework around openings.
Drum-tower: Large, circular tower, usually low and squat.

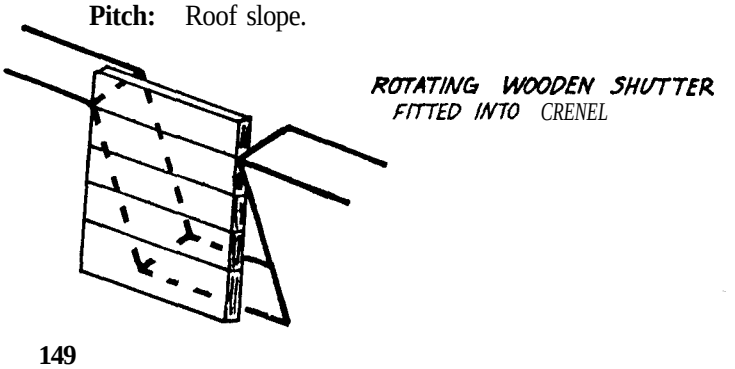
Drystone: Unmortared masonry.
Embattled: Battlemented.



Embrasure: Small opening in fortified parapet, usually splayed on inside.
Fillet: Narrow flat band.
Fluting: Concave mouldings in parallel.
Foliated: Carved with leaves.
Footings: Bottom part of wall.
Forebuilding: Block in front of keep, to form lobby or landing.
Fosse: Ditch.
Freestone: High-quality sandstone or limestone.
Fresco: Painting on wet plaster wall.
Gable: Wall covering end of roof-ridge.
Gallery: Long passage or room.
Garderobe: Latrine; privy.
Great Chamber: Lord's solar, or bed-sitting room.
Groined: Roof with sharp edges at intersection of cross-vaults.
Half-Shaft: Roll-moulding on either side of opening.
Hall: Principal room or building in complex.
Herringbone: Brick or stone laid diagonally.
Hillfort: Bronze or Iron Age earthwork of ditches and banks.
Hood: Arched covering; when used to throw off rainwater, called hood-mould.

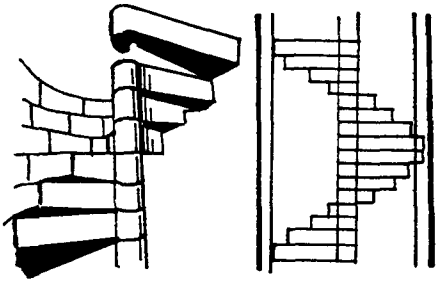


Impost: Wall bracket to support arch.
Jamb: Side or arch, door or window.
Joist: Timber stretched from wall-to-wall to support floor-boards.
Keep: Main tower.
Lancet: Long, narrow window with pointed head.
Light: Component part of window, divided by mullions and transoms.
Lintel: Horizontal stone or beam bridging openings.
Loop: Narrow opening.
Louvre: Opening in roof (often with lantern over) to allow smoke to escape from central hearth.
Machicolation: Projecting gallery on brackets, on outside of castle towers or walls, with holes in floor for dropping missiles, etc.
Mangonel: Siege engine whose projectile arms turn against fixed stop.
Merlon: Solid part of embattled parapet.
Meutrieres: Murder holes.
Mine Gallery: Siegework to cause wall-collapse.
Motte: Artificial earth-mound for keeps of eleventh and twelfth century castles.
Motte-and-Bailey: Earth-mound with wood or stone keep, surrounded by ditched and palisade enclosure (or courtyard).
Moulding: Masonry decoration.
Mullion: Vertical division of window.
Multivallate: Hillfort with three or more concentric lines of defense.
Mural: Wall (adjectival).
Nailhead: Pyramid moulding.
Newel: Centre-post of circular staircase.
Nookshaft: Shaft set in angle of jamb or pier.
Oolite: Granular Limestone.
Open Joint: Wide space between faces of stones.
Oratory: Private chapel in house.
Oriel: Projecting window in wall; originally a form of porch; often of wood.
Palisade: Timber defensive screen or fence.
Parados: Low wall on inner side of main wall.
Parapet: Low wall on outer side of main wall.
Pediment: Low-pitched gable over porticos, doors, windows, etc.
Perpendicular: English architectural style, c. 1330-1540.
Pier: Support for arch, usually square as opposed to pillar (round).
Pilaster: Shallow pier used to buttress wall.
Pinnacle: Ornament crowning spire, tower, etc.
Piscina: Handbasin, usually set in or against wall, with drain.
Pipe-Roll: Exchequer accounts, rolled on narrow wooden cylinders.
Pitch: Roof slope.



Pitching: Rough cobbling.
Plinth: Projecting base of wall.
Portcullis: Grating dropped vertically from grooves to block passage or gate in castle; of wood, metal or a combination of the two.
Postern: Back door of castle.
Quadrangle: Inner court.
Quoin: Dressed stone at angle of building.
Rampart: Defensive stone or earth wall surrounding castle or town.
Rath: Low, circular ringwork.
Ravelin: Outwork with two faces forming a salient angle.
Re-entrant: Recessed.
Refectory: Ccmmunal dining hall
Revetment: Retaining wall.
Rib: Raised moulding dividing vault.
Ring-Work: Circular earthwork of bank and ditch.
Romanesque: Prevailing archetectural style, eighth to twelfth century, with rounded arches.
Roofridge: Summit line of roof.
Rubble: Unsquared stone not laid in courses.
Rustication: Worked ashlar stone, with faces left deliverately rough.

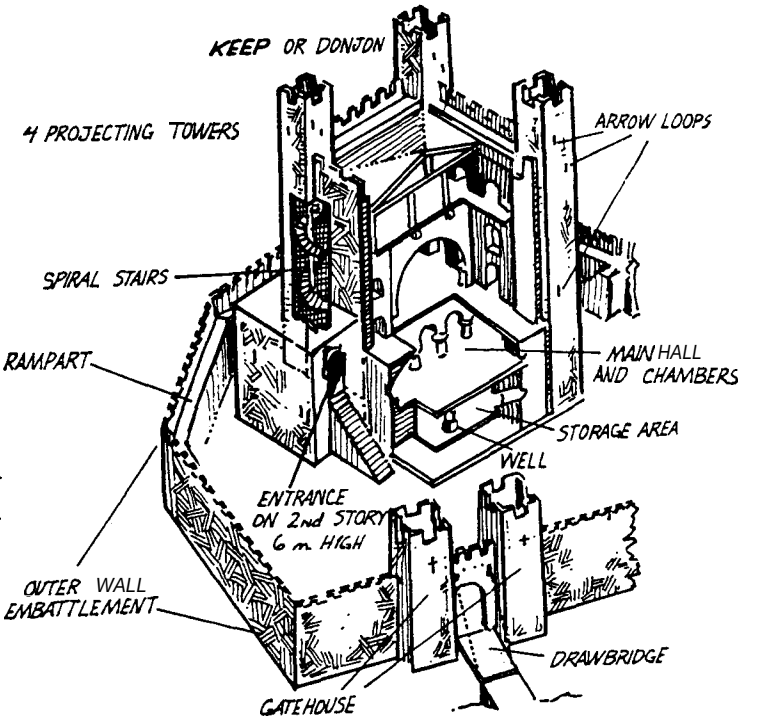
SPIRAL STAIRCASES



THESE WERE DESIGNED TO RUN IN A CLOCKWISE MANNER SO THAT ATTACKERS WOULD BE UNABLE TO USE THEIR SWORDS WHILE THE DEFENDER ABOVE COULD.

Saltire: Diagonal, equal-limbed cross.
Scarp: Slope on inner side of ditch.
Shaft: Narrow column.
Shell-Keep: Circular or oval wall surrounding inner portion of castle.
Soffit: Underside of arch or opening.
Solar: Upper living room of medieval house or castle; often over the hall.
Splay: Chamfer, or sloping face.
Squint: Observation hole in wall or room.
Stringcourse: Continuous horizontal mouldings on wallface.
Tracery: Intersecting ribwork in upper part of window.
Transom: Horizontal division of window.
Trebuchet: Siege-engine with unequal counter-poise arm.
Trefoil: Three-lobed.
Turret: Small tower, round or polygonal.
Vault: Stone roofing.
Vitrified: Material reduced to glass by combustion.
Voussoir: Wedge-shaped stone in arch.
Wall-Stair: Staircase built into thickness of wall.
Wall-Walk: Passage along castle wall.
Weathering: Sloping surface to throw off rainwater.
Wing-Wall: Wall down slope of motte to protect stairway.
Yett: Iron gate.

CUT-AWAY OF TRADITIONAL SQUARE KEEP
THESE DESIGN ELEMENTS ARE BASIC TO ALL CASTLES OF THIS TYPE.



AVERAGE WALL RATING 2 OR 3

WALL RATING

It is very difficult to evaluate fortifications in terms of damage resistance for use in fantasy type games. The table below gives a general idea of the strength of the wall, but it must be remembered that this rating can be affected by materials and workmanship.

Wall Rating	Thickness	Small Catapult *(Number of Hits 5kg stone)*	Heavy Catapult *(Number of Hits 20kg stone)*	Trebuchet *(Number of Hits 250kg stone)*
1	2m	21-40	11-20	1-4
2	5m	42-60	21-40	2-12
3	7m	62-80	41-60	3-18
4	10m	82-100	61-80	4-24
5	13m	102-140	81-100	5-30

The hit numbers indicate how many hits would be needed to wreck a given wall. The hits would have to be in the same area of the wall to have any effect. Hits on the tops of embattlements would soon knock the merlons over.

EUROPEAN CASTLES

Motte and Bailey

The earliest Medieval European castles, built during the eleventh century, bore a great resemblance to the wooden stockades which were built along frontier America. Called "Motte and Bailey" castles, these structures consisted of a large mound (the motte) topped by a wooden tower. The tower was surrounded by a palisade and a ditch. The whole motte was in turn surrounded by an area for living quarters, stables, storage bins, etc. (the bailey), which was again surrounded by another palisade and a ditch. Although these castles could be built quickly, they were subject to fire and could be knocked down easily.

A logical outgrowth of the motte and bailey type of castle is the same type of structure, only constructed of stone. At first, only the tower was built of stone and was now called the *donjon, or keep*; a palisade of wood still surrounded this structure.

These early keeps were usually square and the ground floor, used for storage, had no outside door. Entrance was gained by a staircase which led to a door on the second level. The walls were on the average 4-5 meters thick, and were up to 40 meters high. As the door was in plain view, you could not rush out and attack the besiegers. The windows were narrow as well, and could not adequately defend the corners of the structure from miners.

In the twelfth century, owing mainly to royal decrees, many of the smaller castles which had popped up everywhere were torn down. New castles were developed and built. The first great improvement was to replace the bailey palisade with a stone wall. Now sheds could be built inside the wall which helped free up some of the storage space of the keep. The entrance to the keep was moved to the ground floor as the main defense was not the outer walls. The base of the wall could still not be adequately defended, however, and it took the Crusades to introduce new improvements in castle building.

In the early thirteenth century, owing to new ideas brought back from the Crusades, many innovations were added onto existing castles and incorporated into new ones. Keeping besiegers away from the base of the walls, as well as strengthening the walls themselves, were the first improvements. Greater numbers of arrow slits were placed in the battlements to increase firepower. Covered wooden platforms, called hoardings, were placed on the front of the battlement walls. These allowed the defenders to drop stones and fire arrows through slots in the floor onto attackers. Later, these defenses were called machicolations when they were built of stone.

The greatest additions were flanking towers which projected out from the bailey walls. These towers not only provided support for each other, but also protected the base of the walls. The towers also divided the battlements into sections which would be sealed off if a portion of the wall was overrun.

With the increased use of mercenaries to garrison castles, the gatehouse of the castle began to increase in importance. Since the hired help were more likely to mutiny than loyal vassals, it was necessary for the lord to so strengthen the gate that it now took the place of the keep.

The keep-gatehouse eventually consisted of two towers joined together above the gateway. On each end of the passage was a portcullis and gate; arrow slits in the side walls and floor above the passage gave additional protection to the passage. The gatehouse itself could often only be entered on the first floor level from the ramparts.

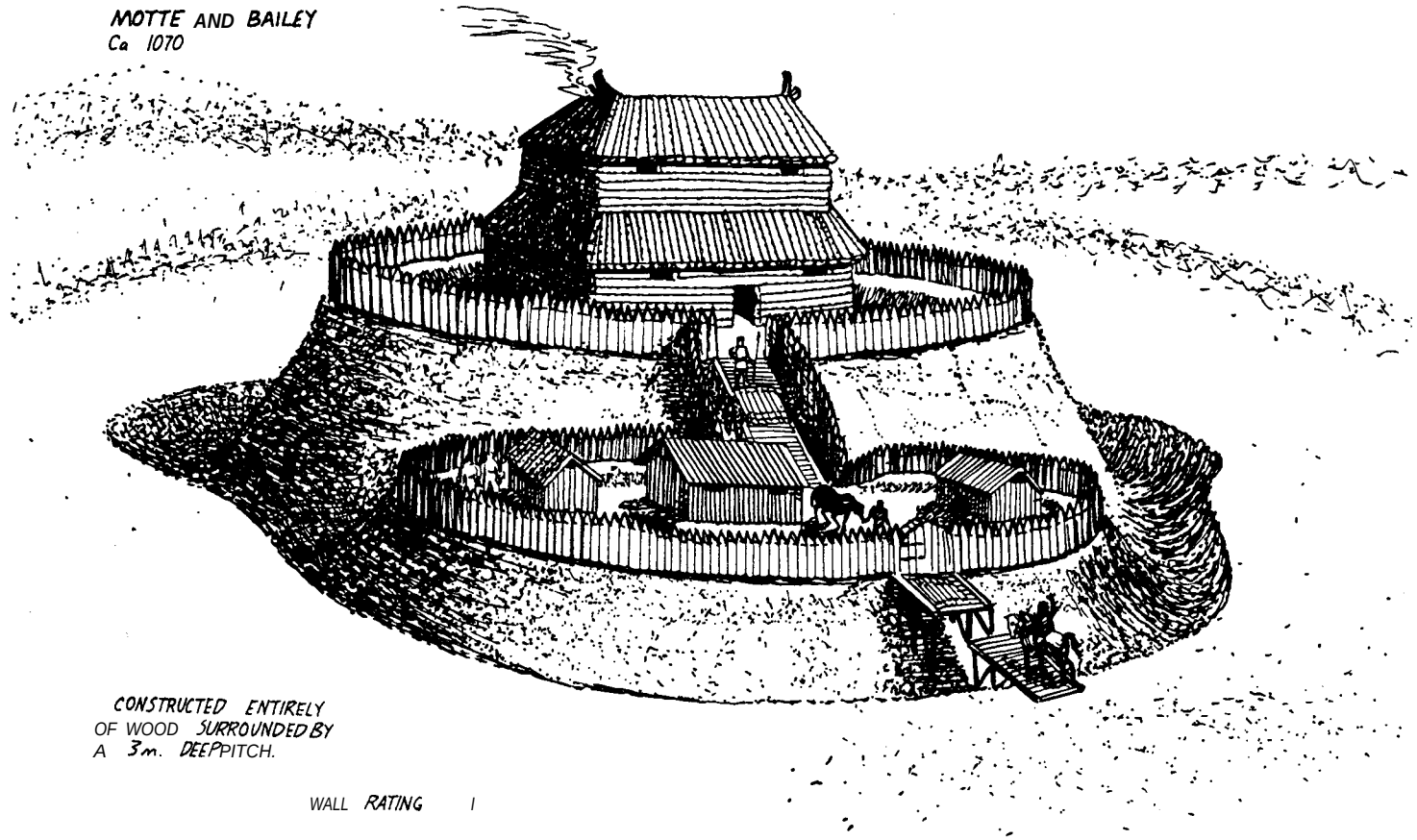
Because these gatehouses were so strong, many castles had two main gates and two or three postern gates. This enabled those inside the castle to rally forth more easily and attack the besiegers. Sometimes additional outer walls were built from the gatehouse to further strengthen it; called barbicans, these walls could also have their own towers, gates or moats.

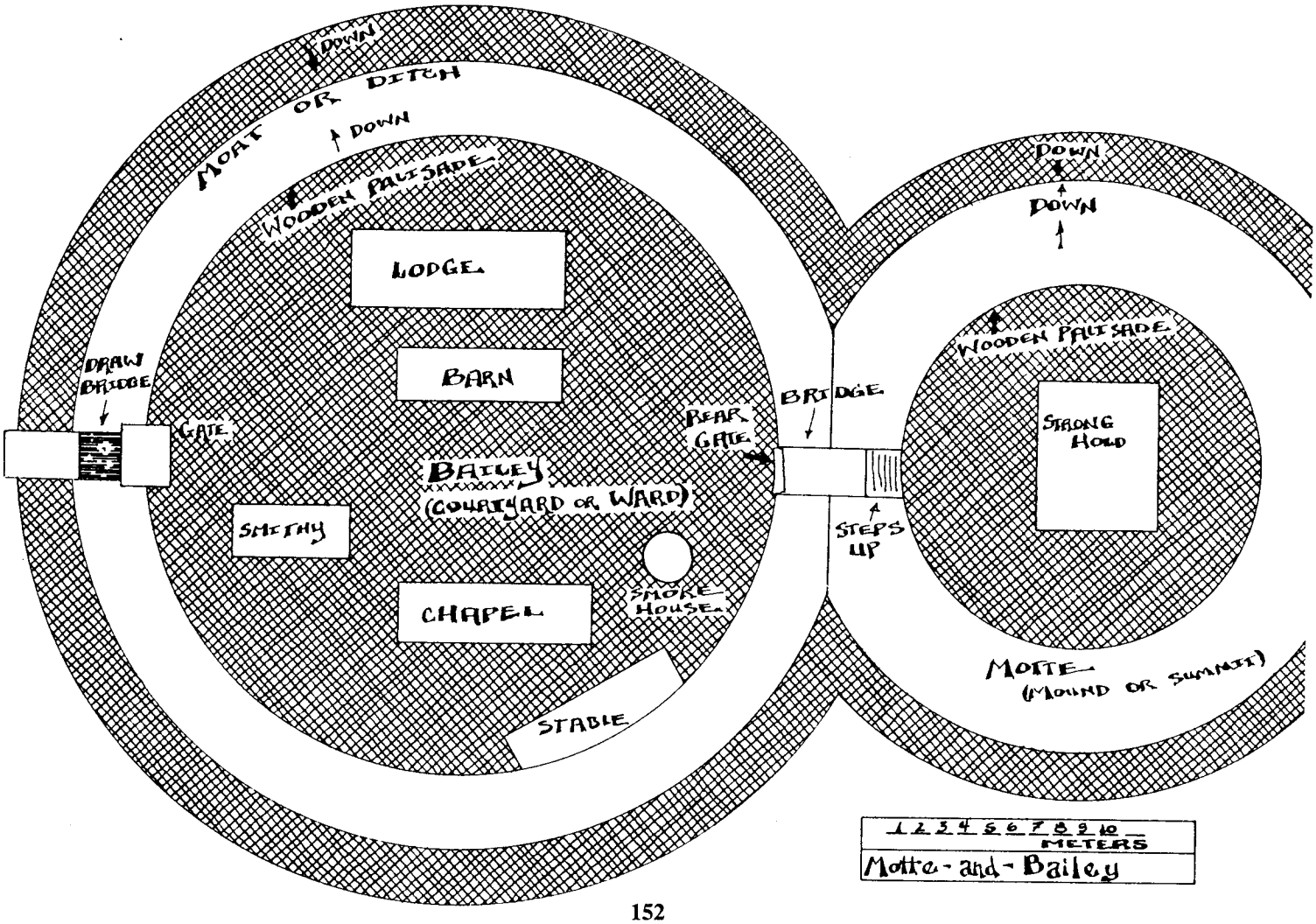
The last quarter of the thirteenth century was perhaps the greatest period for castle building. The concentric castle, similar to the ones developed in Syria by the crusaders, consisted usually of a quadrangular structure of walls and towers surrounded in turn by a lower wall with its own towers. The area between the two walls was divided by cross walls to contain enemies to one area if a part of a wall was overrun. For the most part, these castles were built upon the foundations and existing work of previous buildings.

Although the previous discussion provides a general outline for the development of all European castles, regional differences affected the architecture to some degree. The areas of Central Europa and Spain are where the main differences occur. Because of the near anarchy which prevailed in Central Europe, the numerous free towns and the many minor nobles built a lot of small castles to strengthen their holdings and trade routes. The mountainous terrain, as in South-Central Europe, tended to mean that castles hade to be made smaller than those of England and France.

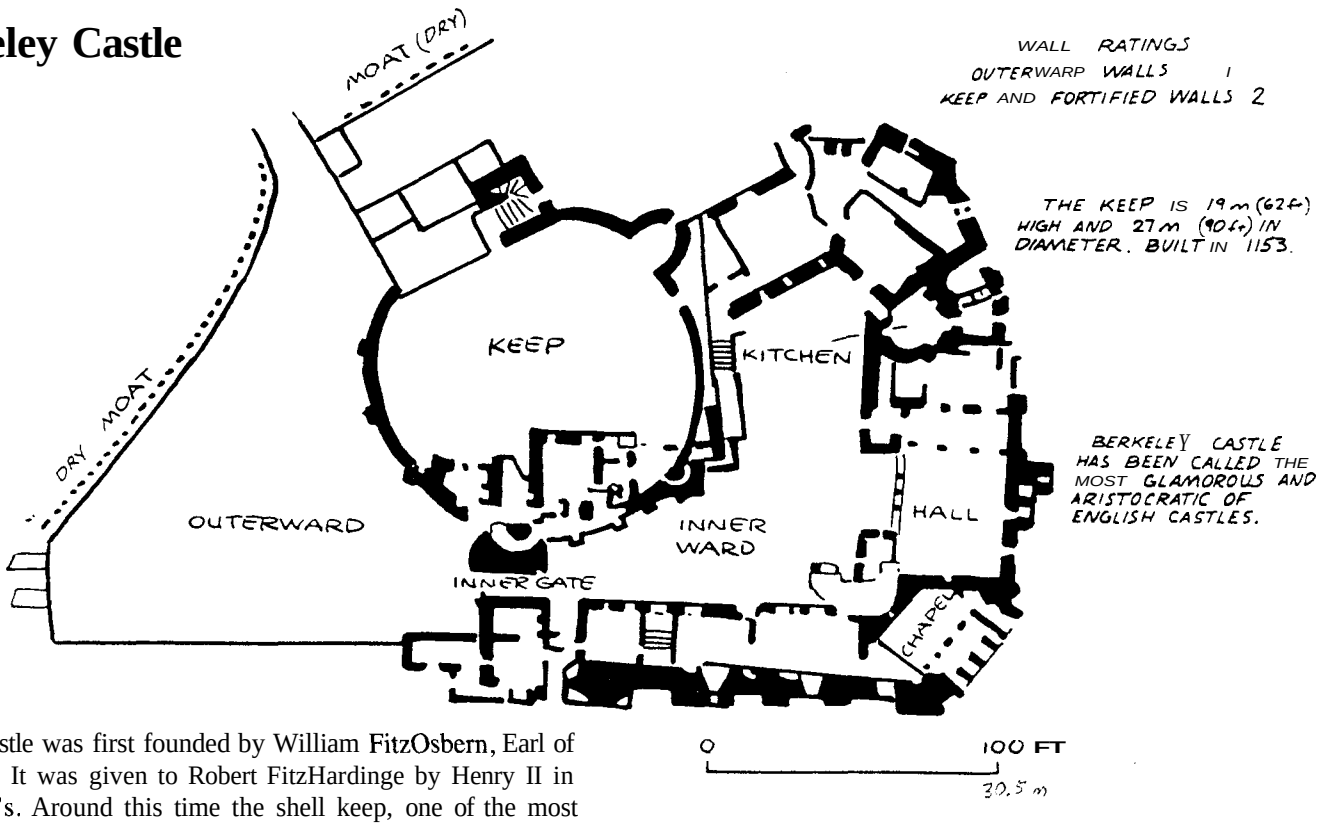
One popular technique was to build a wall around a mountain peak and then build all the other buildings within this; these structures were small, expensive, and very secure. Another technique was to build the castle on a small piece of land sticking into a lake or river; the building could then be isolated by a wide moat. Simple keeps were also popular.

In Spain the keep became very popular and remained so until much later than the rest of Europe. The concentric design was utilized much later than the rest of the continent as well. It should be remembered that these structures were more for garrisons of Moors than for nobles.


MOTTE AND BAILEY
Ca 1070
CONSTRUCTED ENTIRELY OF WOOD SURROUNDED BY A 3m. DEEP PITCH.
WALL RATING 1


DOWN
MOAT OR DITCH
DOWN
WOODEN PALISADE
LODGE
BARN
DRAW BRIDGE
GATE
REAR GATE
BRIDGE
BAILEY (COURTYARD OR WARD)
SMITHY
CHAPEL
SMOKE HOUSE
STABLE
STEPS UP
DOWN
DOWN
WOODEN PALISADE
STRONG HOLD
MOTTE (MOUND OR SUMMIT)
1 2 3 4 5 6 7 8 9 10
METERS
Motte-and-Bailey

Berkeley Castle



WALL RATINGS
OUTERWARP WALLS 1
KEEP AND FORTIFIED WALLS 2

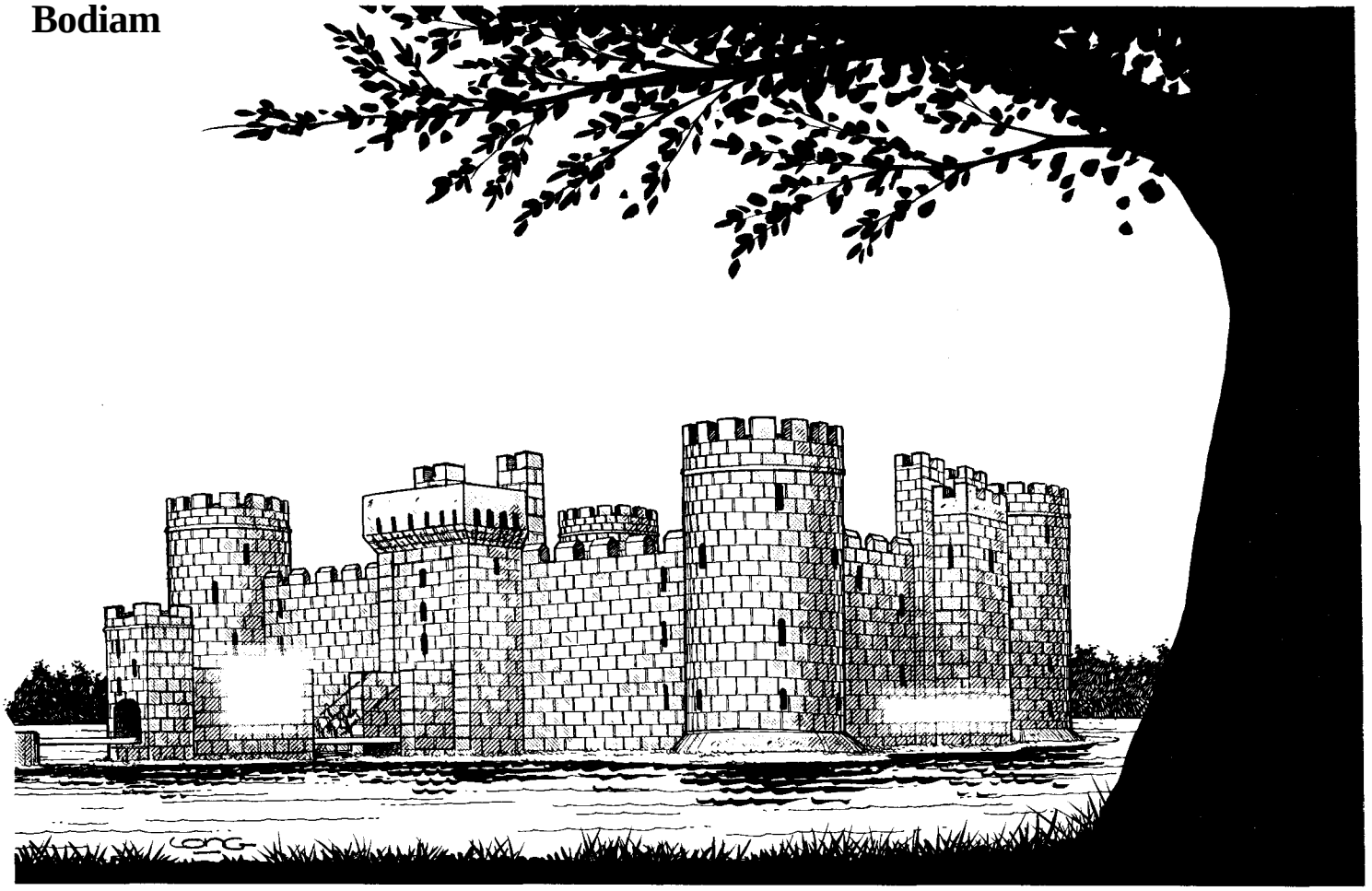
THE KEEP IS 19 m (62 ft) HIGH AND 27 m (90 ft) IN DIAMETER. BUILT IN 1153.

BERKELEY CASTLE HAS BEEN CALLED THE MOST GLAMOROUS AND ARISTOCRATIC OF ENGLISH CASTLES.

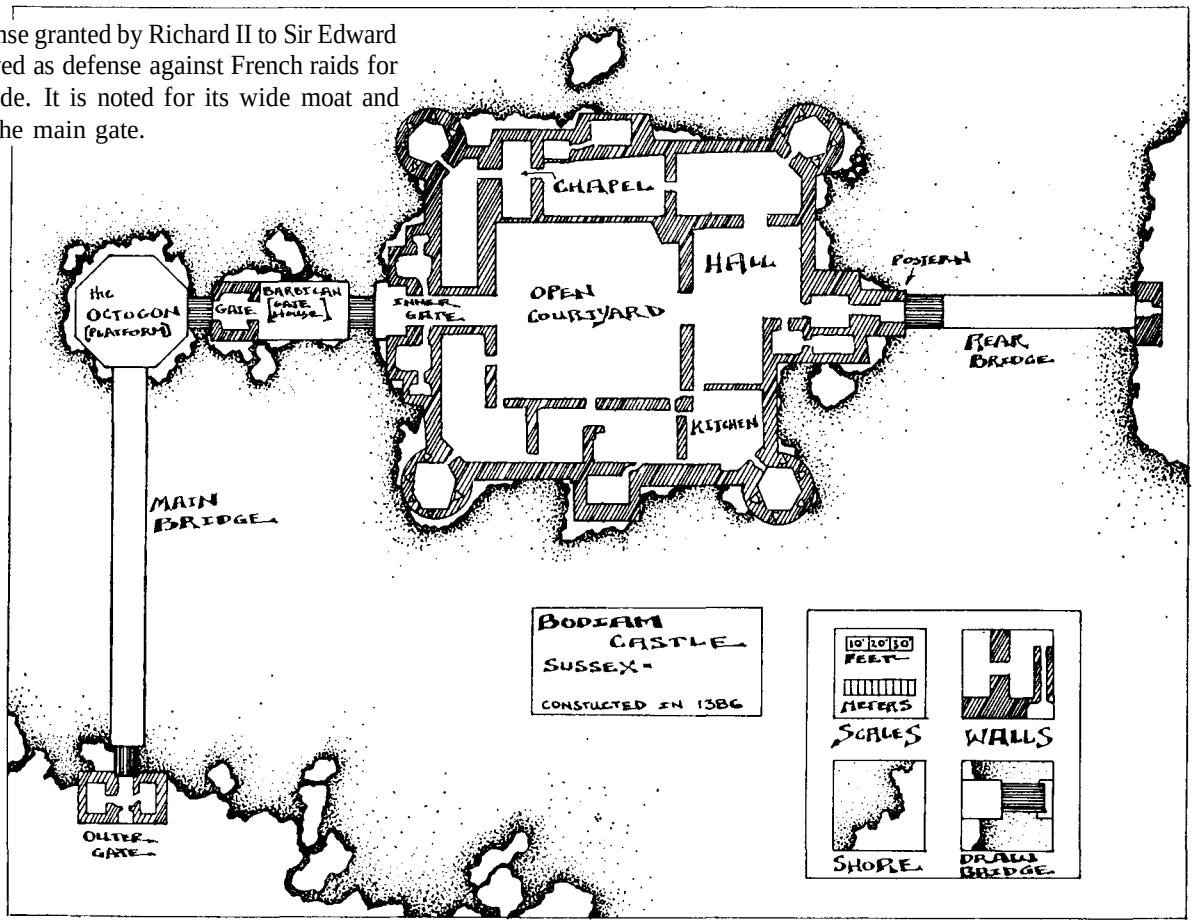
This castle was first founded by William FitzOsbern, Earl of Hereford. It was given to Robert FitzHardinge by Henry II in the 1150's. Around this time the shell keep, one of the most striking features of this castle, was built. The keep consists of a stone encased motte with tower, forming one solitary structure. This castle served as the prison and site of the murder of Edward II in 1327.

BERKELEY CASTLE - ENGLAND

Bodiam



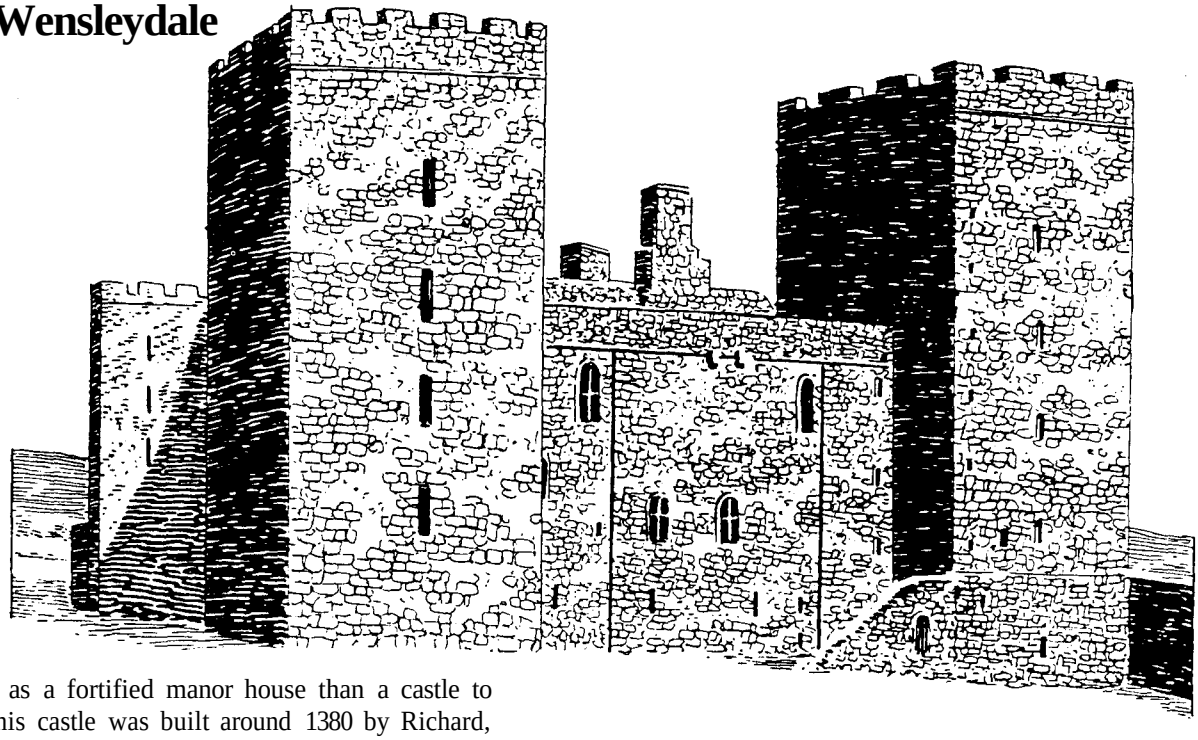
Built in 1385 under license granted by Richard II to Sir Edward Dalyngrigge, Bodiam served as defense against French raids for the surrounding countryside. It is noted for its wide moat and right-angled approach to the main gate.



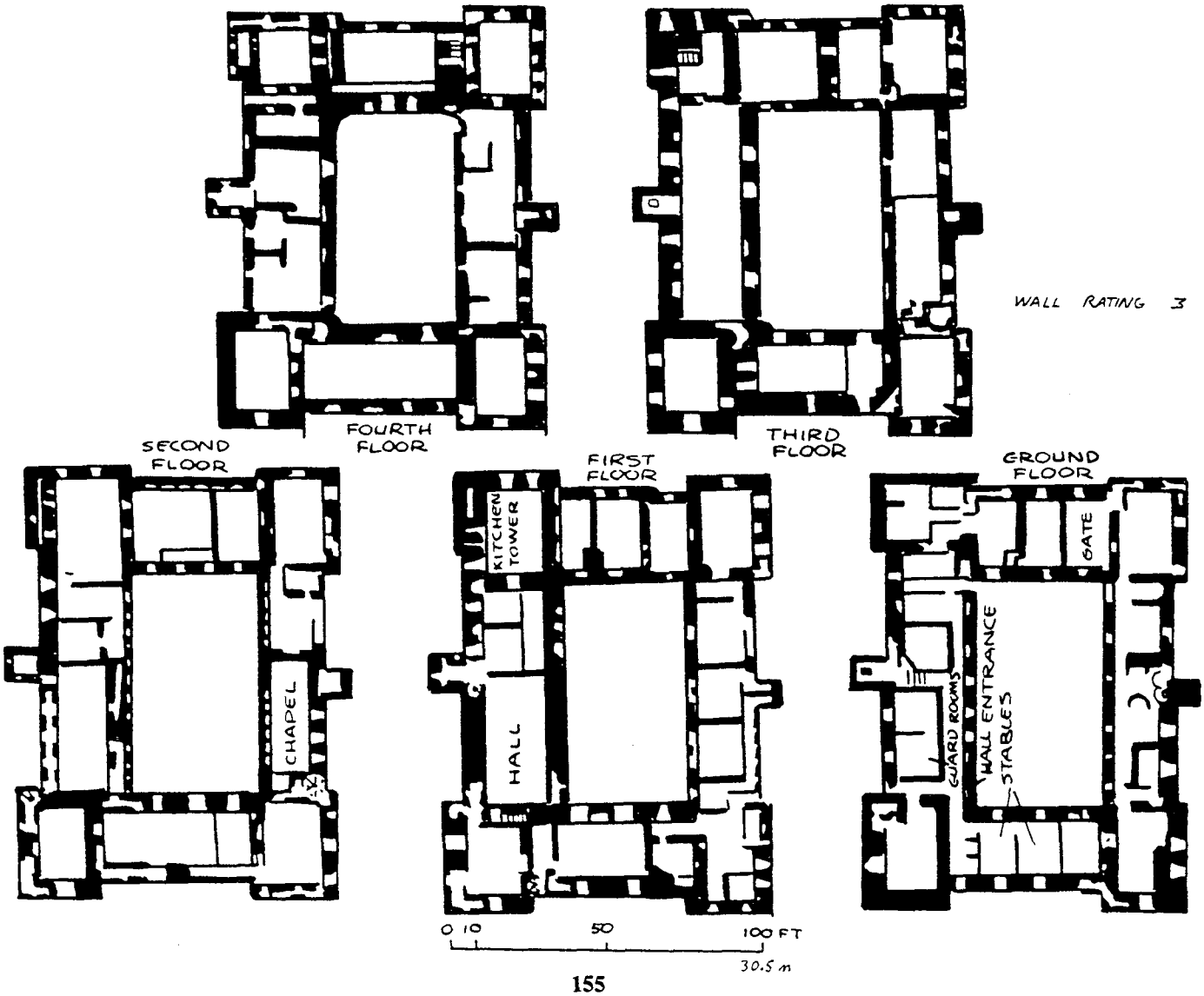
WALL RATING 3
WALL RATING OF TOWERS 2

WALLS STOOD ABOUT 9m TALL
TOWERS ABOUT 17m TALL

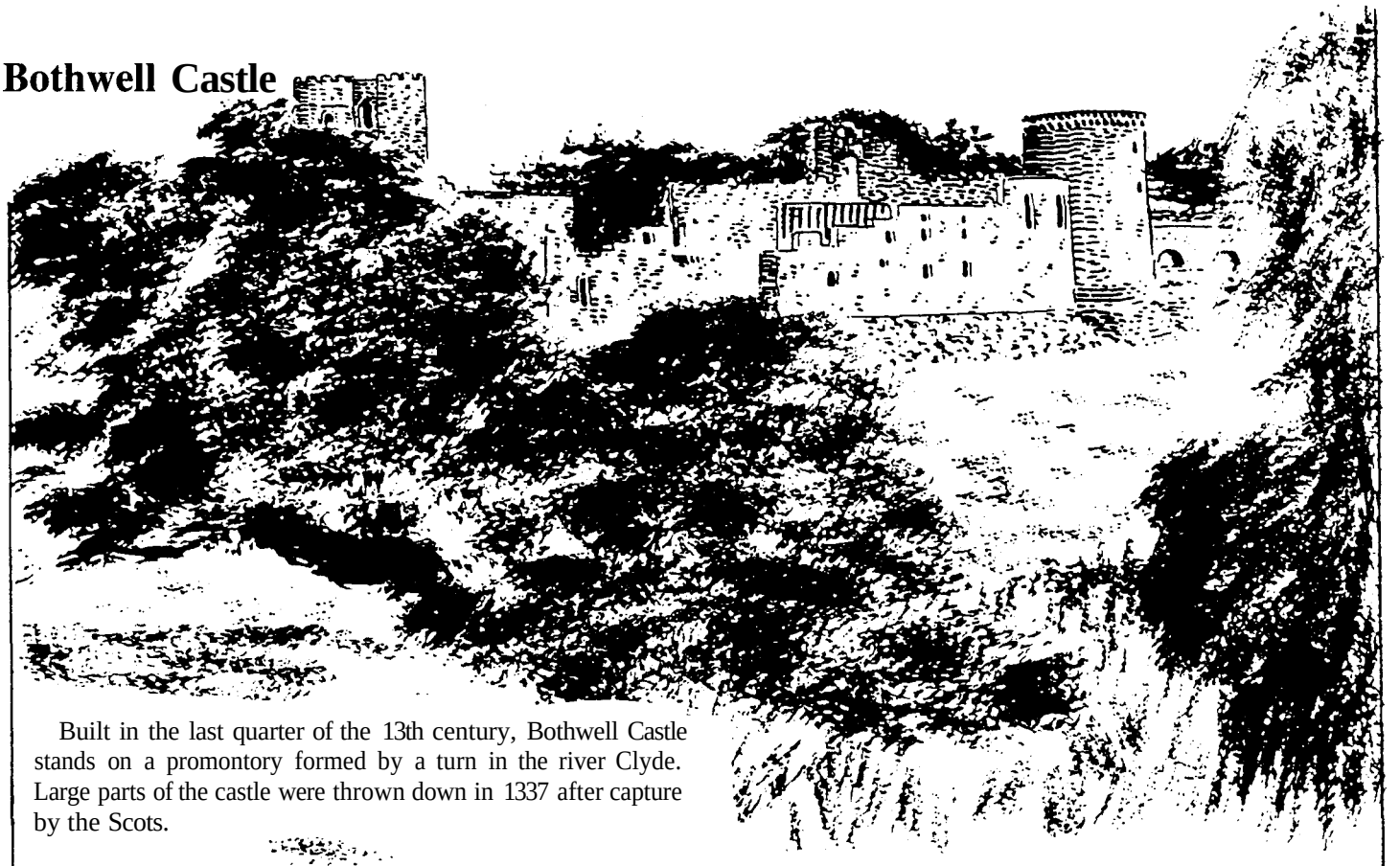
Bolton in Wensleydale



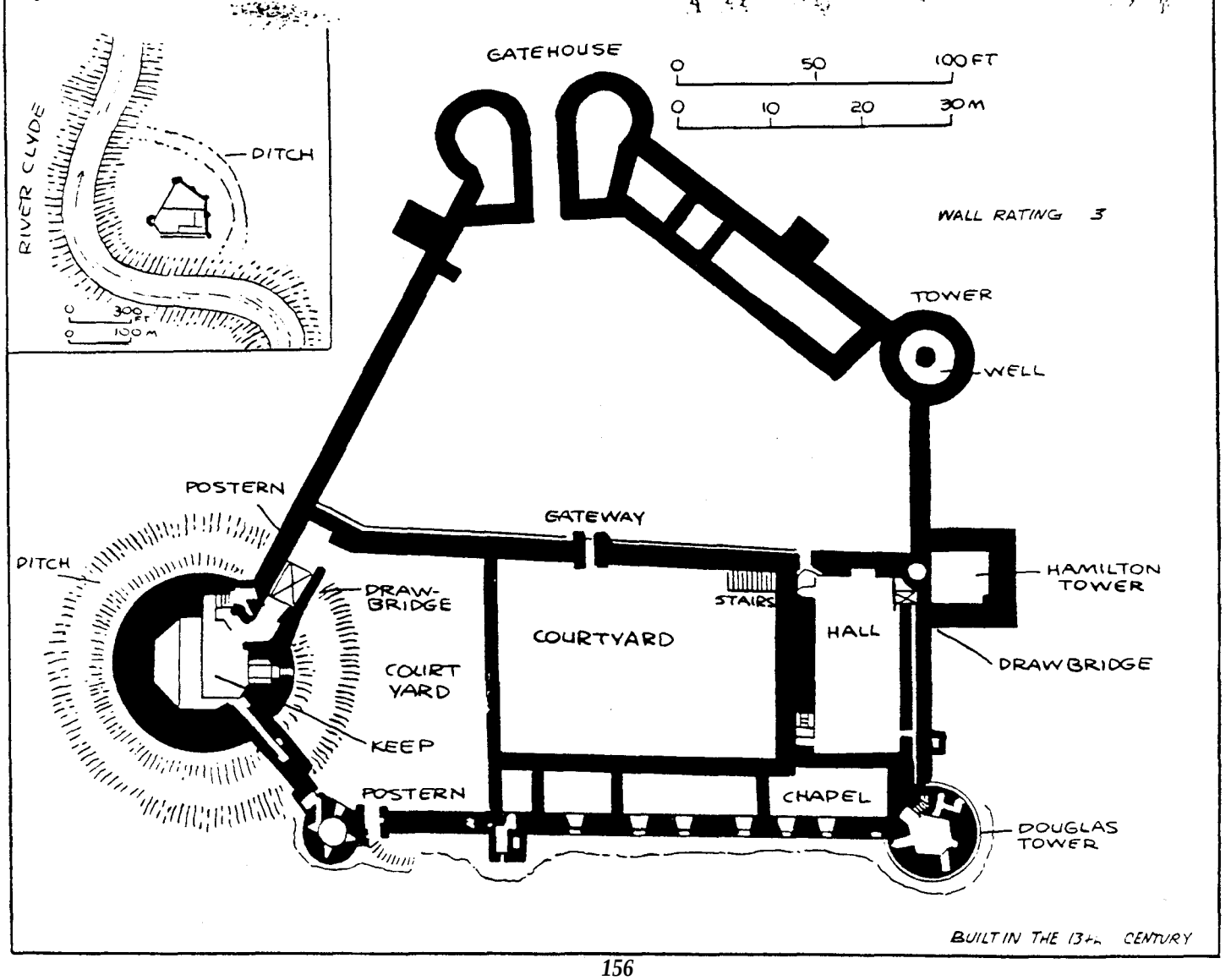
Designed more as a fortified manor house than a castle to resist an army, this castle was built around 1380 by Richard, Lord Scrope. It offered many suites of lavish accommodations for the lord and his guests. It served as a prison for Mary, Queen of Scots in 1568.



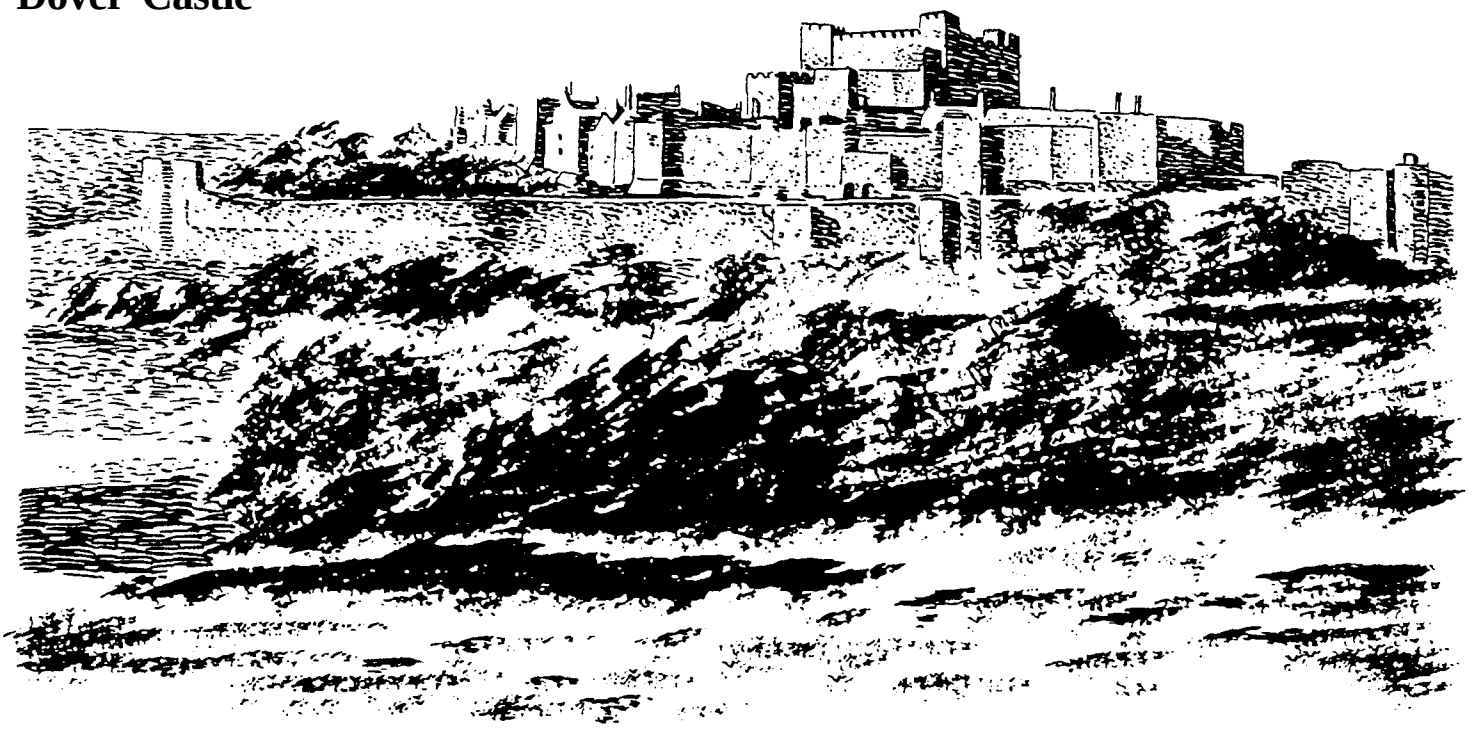
Bothwell Castle



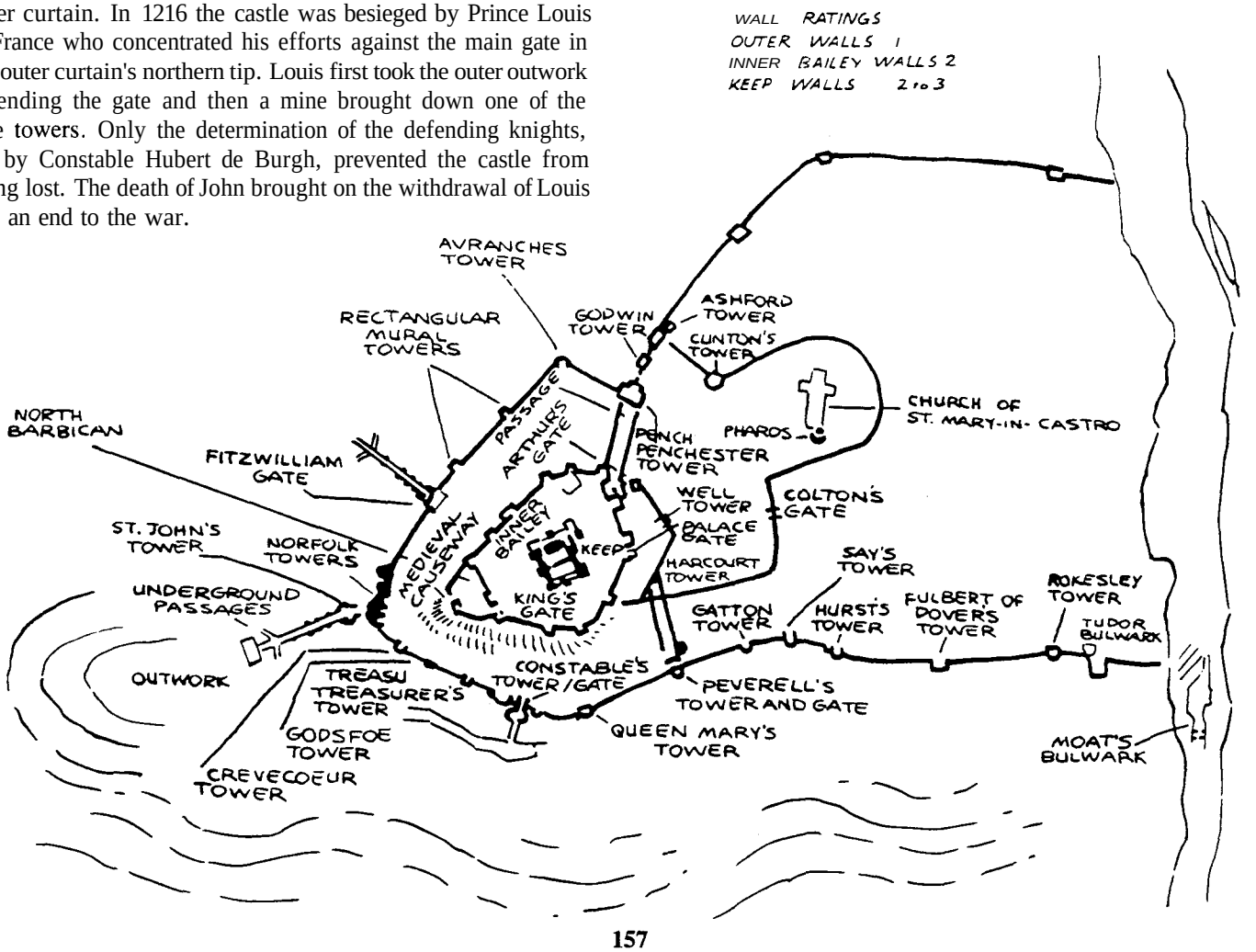
Built in the last quarter of the 13th century, Bothwell Castle stands on a promontory formed by a turn in the river Clyde. Large parts of the castle were thrown down in 1337 after capture by the Scots.

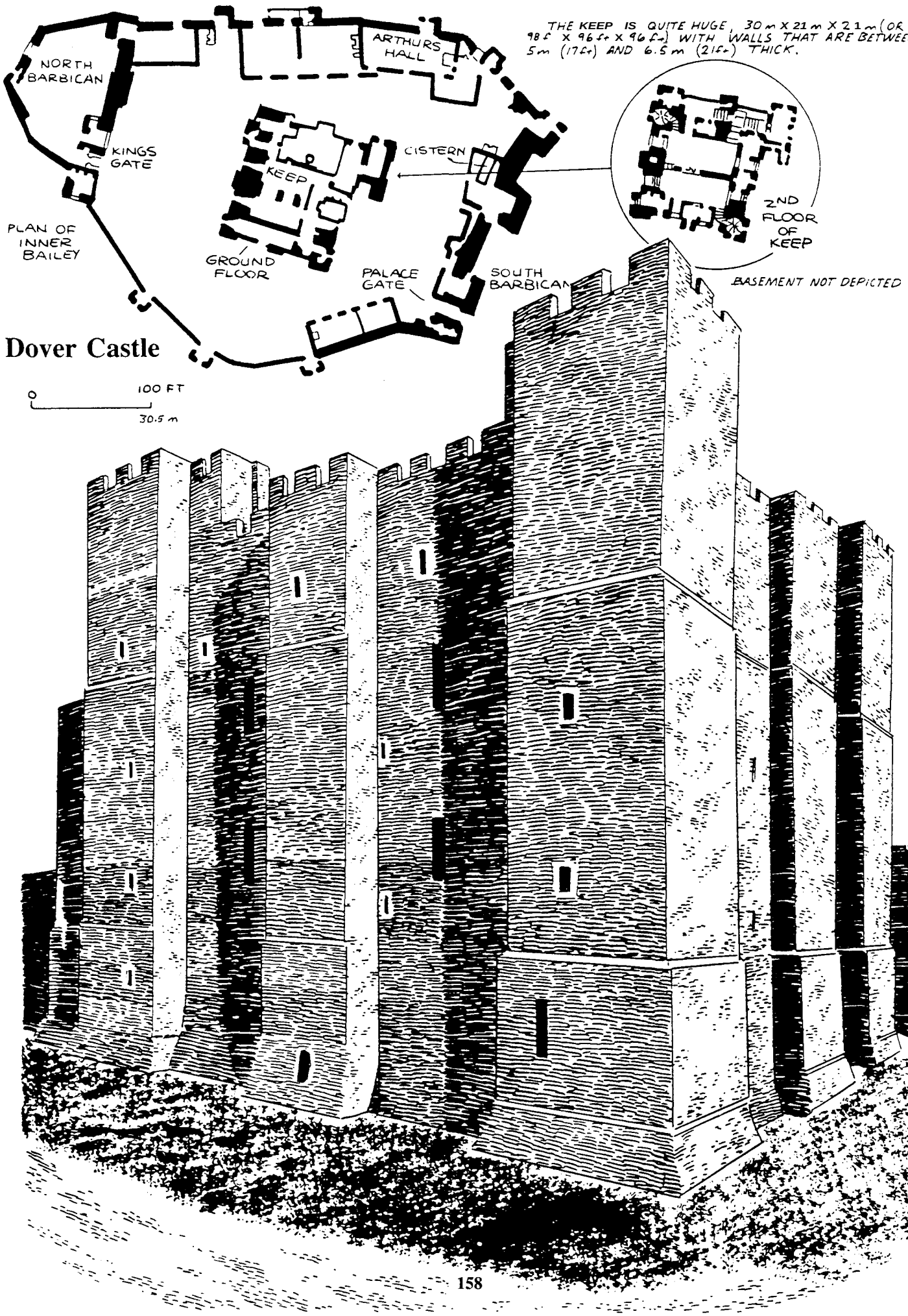


Dover Castle



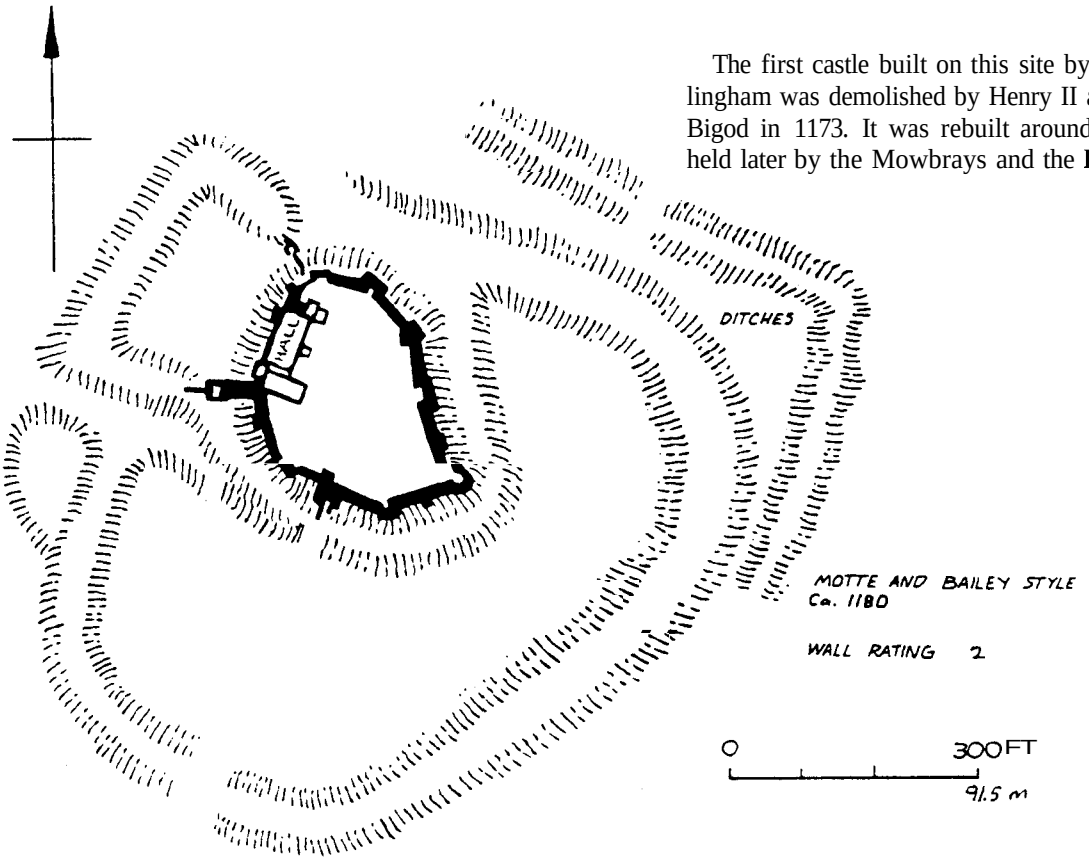
The first castle on this site was built by William the Conqueror immediately after the Battle of Hastings. The site was greatly expanded by Henry II and now included the keep, inner bailey and portions of the outer curtain wall. King John continued the outer curtain. In 1216 the castle was besieged by Prince Louis of France who concentrated his efforts against the main gate in the outer curtain's northern tip. Louis first took the outer outwork defending the gate and then a mine brought down one of the gate towers. Only the determination of the defending knights, led by Constable Hubert de Burgh, prevented the castle from being lost. The death of John brought on the withdrawal of Louis and an end to the war.



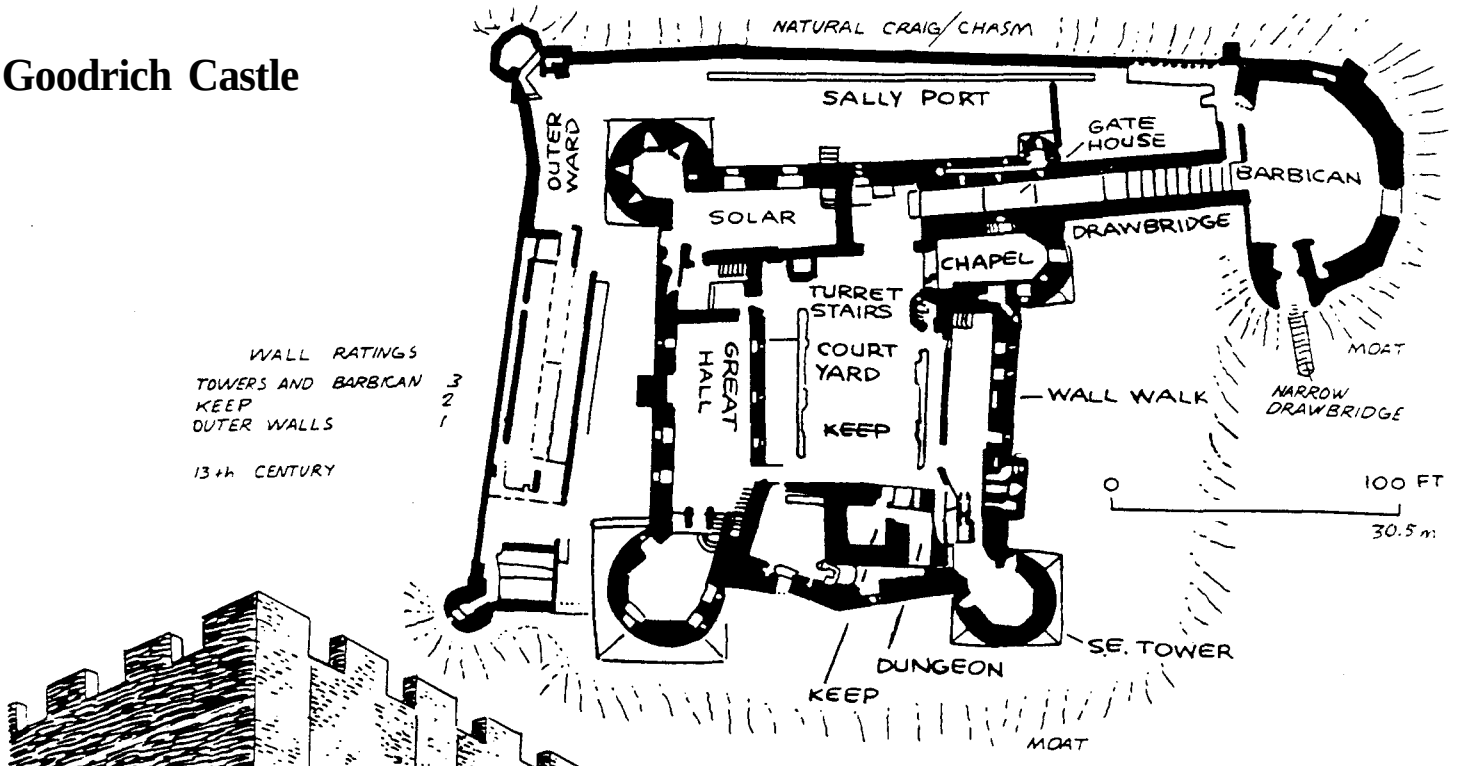

THE KEEP IS QUITE HUGE, 30m X 21m X 21m (OR 98ft X 96ft X 96ft) WITH WALLS THAT ARE BETWEEN 5m (17ft) AND 6.5m (21ft) THICK.
NORTH BARBICAN
ARTHURS HALL
KINGS GATE
KEEP
CISTERN
2ND FLOOR OF KEEP
PLAN OF INNER BAILEY
GROUND FLOOR
PALACE GATE
SOUTH BARBICAN
BASEMENT NOT DEPICTED
Dover Castle
0
100 FT
30.5 m

Framlingham Castle

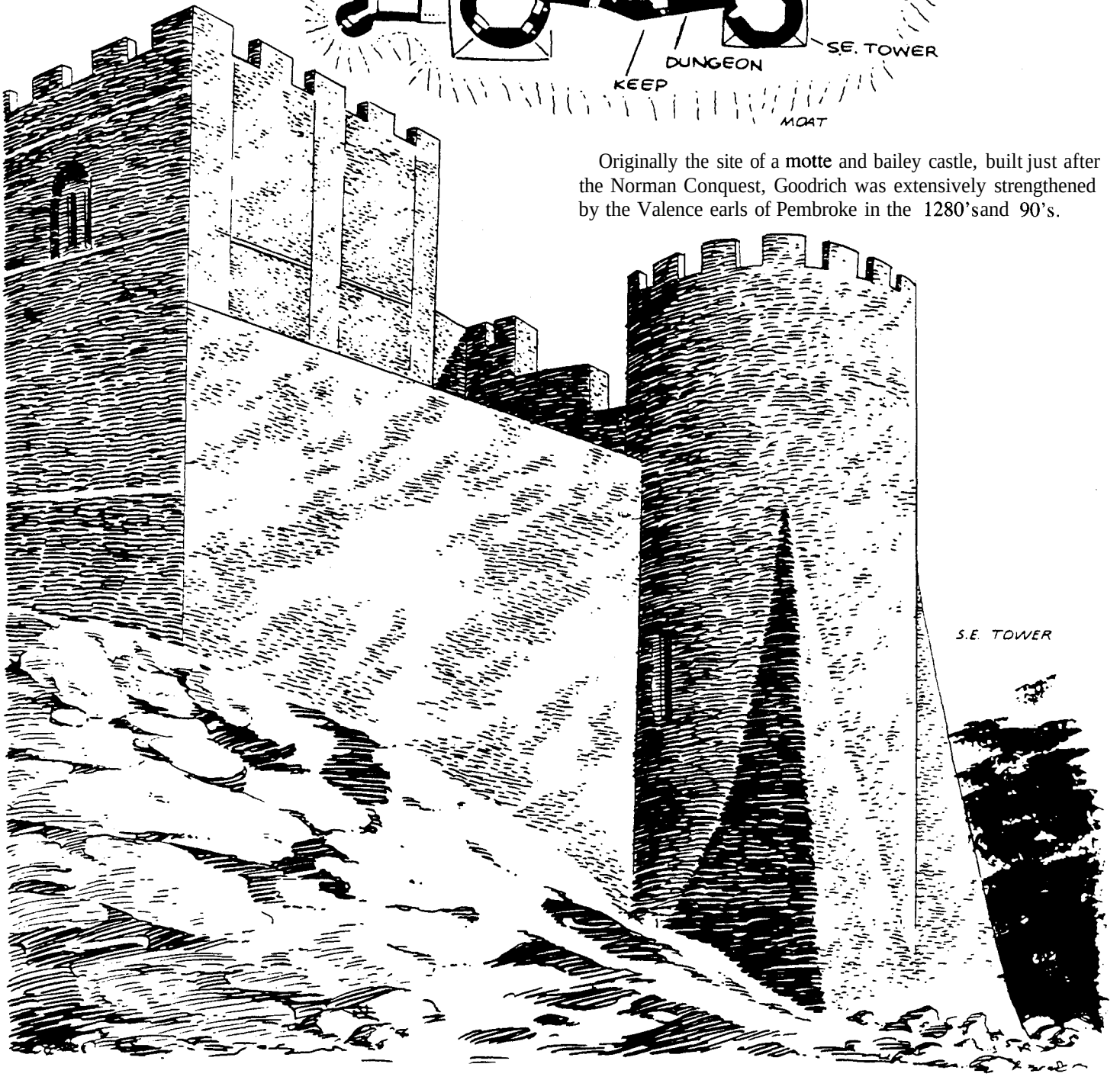
The first castle built on this site by the Bigod lords of Framlingham was demolished by Henry II after the rebellion of Hugh Bigod in 1173. It was rebuilt around 1190. Framlingham was held later by the Mowbrays and the Howards.



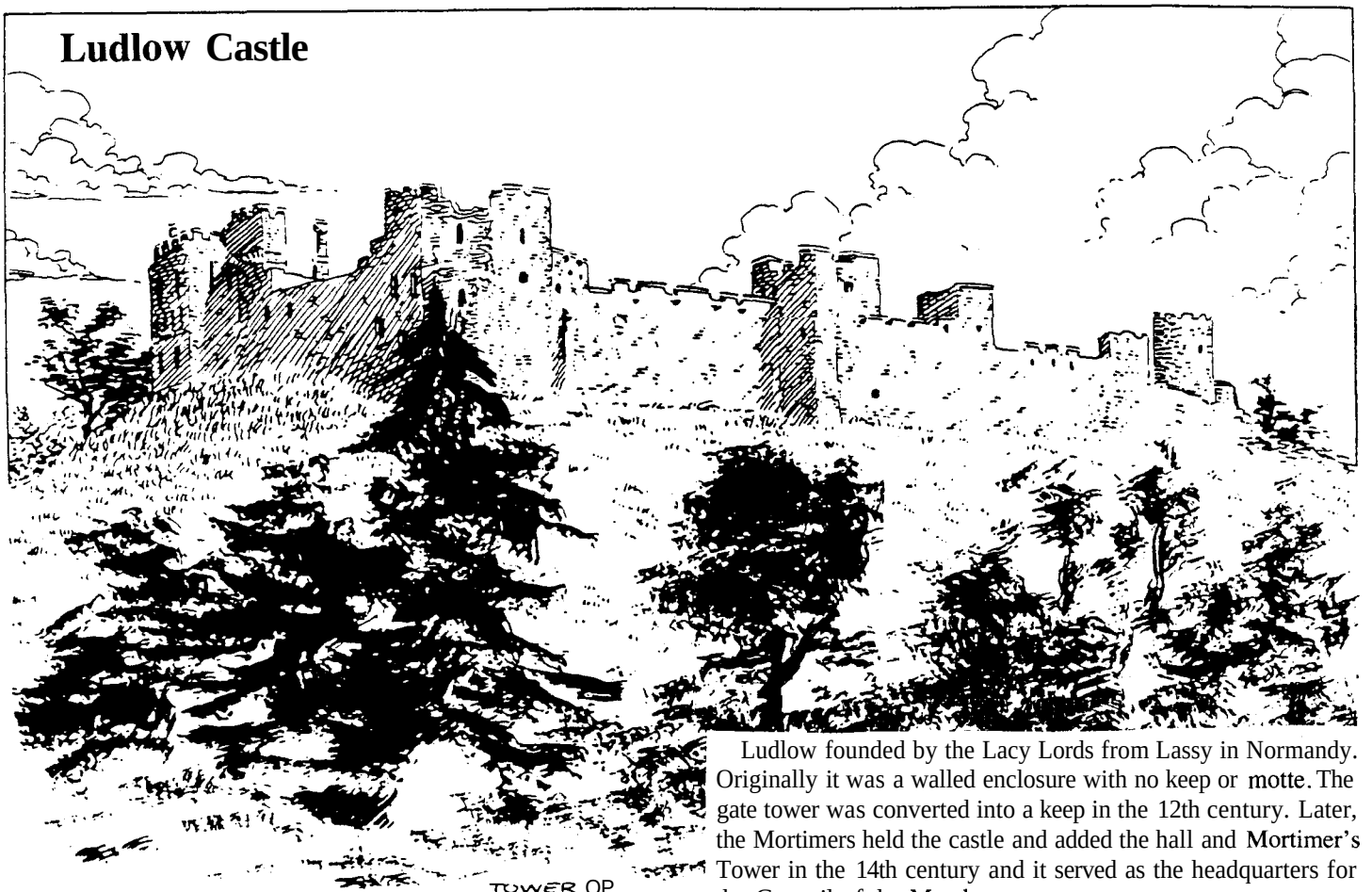
Goodrich Castle



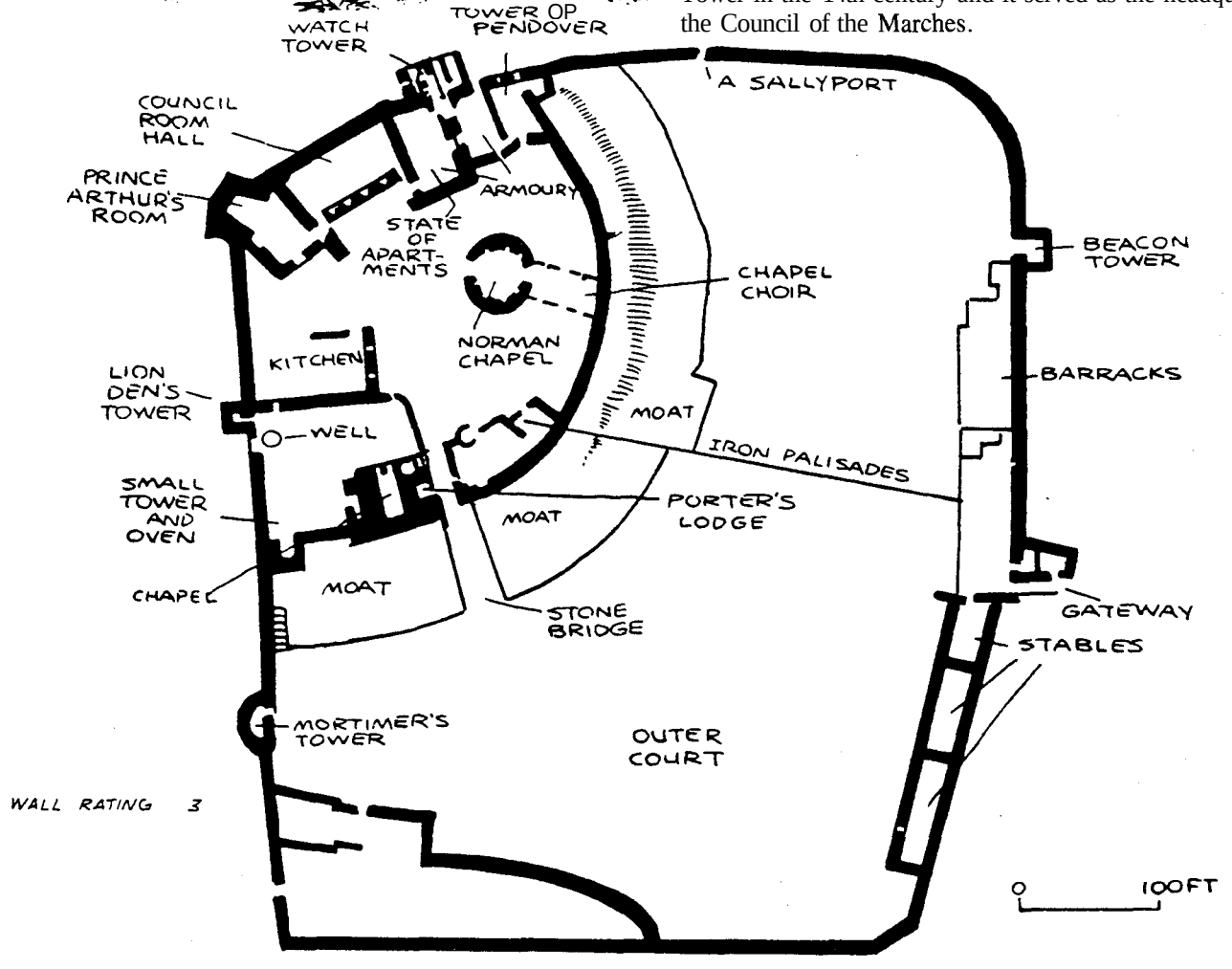
Originally the site of a motte and bailey castle, built just after the Norman Conquest, Goodrich was extensively strengthened by the Valence earls of Pembroke in the 1280's and 90's.



Ludlow Castle



Ludlow founded by the Lacy Lords from Lassy in Normandy. Originally it was a walled enclosure with no keep or motte. The gate tower was converted into a keep in the 12th century. Later, the Mortimers held the castle and added the hall and Mortimer's Tower in the 14th century and it served as the headquarters for the Council of the Marches.



Harlech Castle

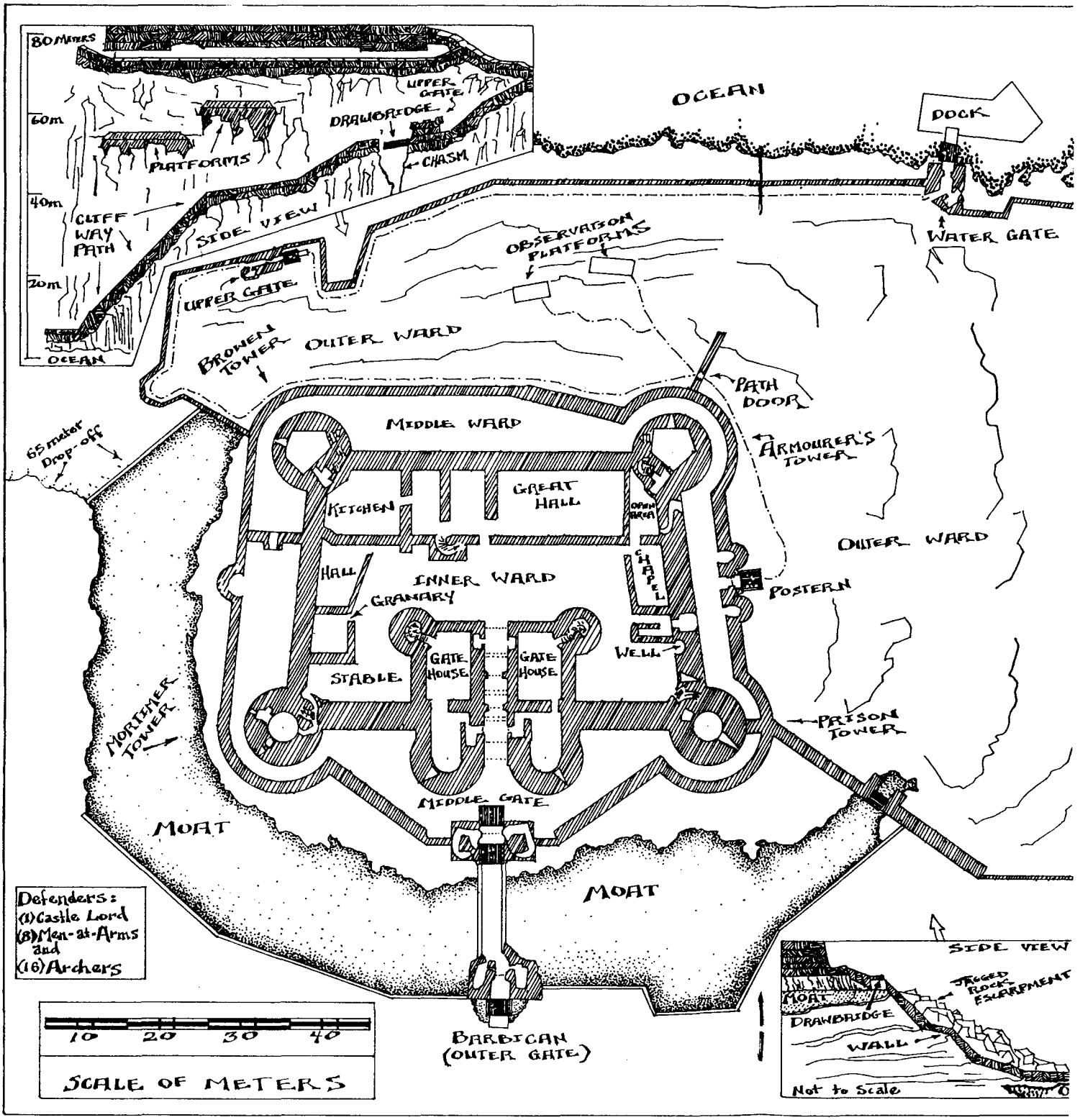
HISTORY:

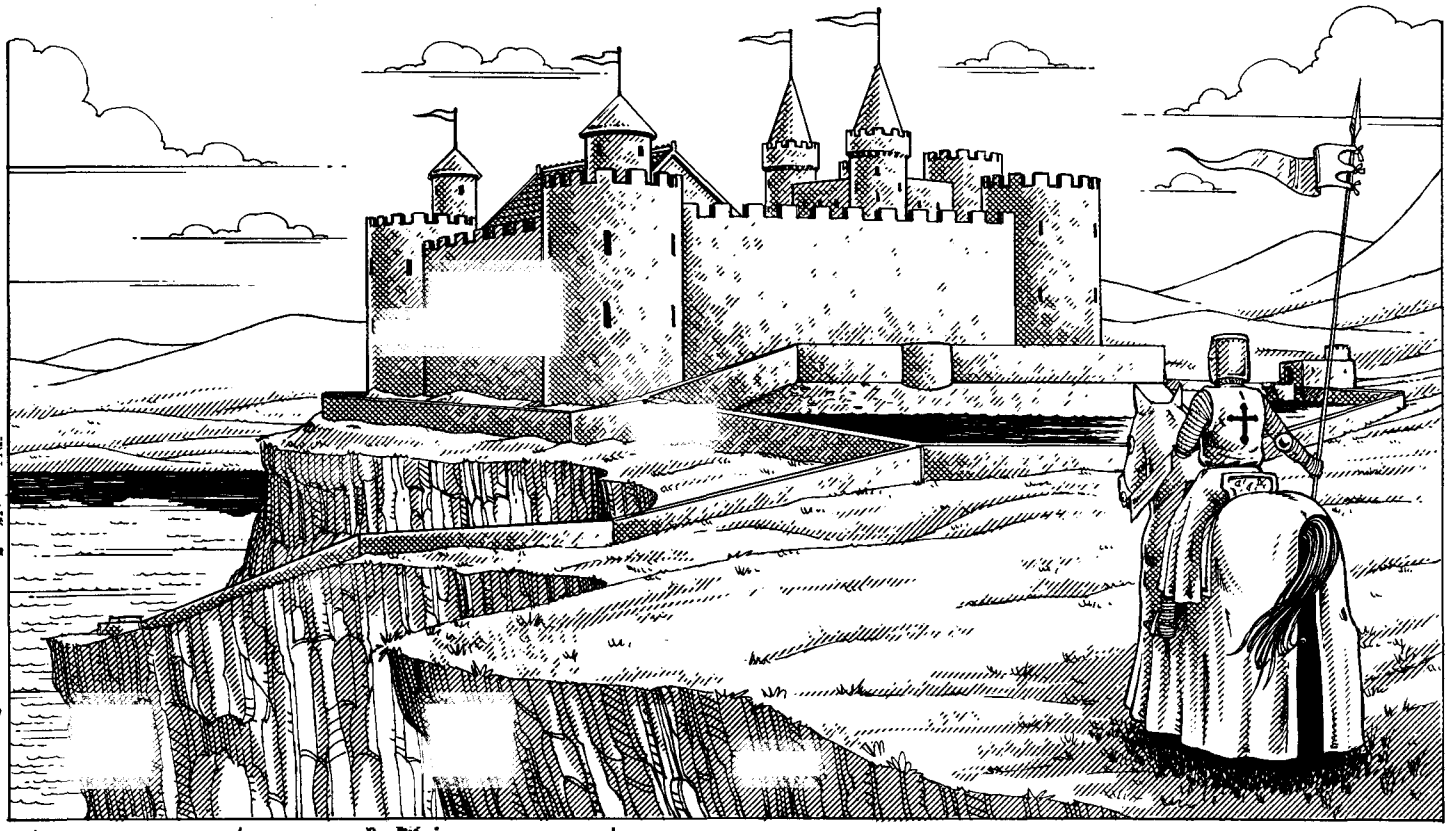
1283 — Construction begins at the command of King Edward I. Harlech is designed to be one of a number of castles built to hold conquered Wales. Harlech is built on a naturally defensible site with a sea port. The view enables the castle inhabitants a survey of coastline up to twenty miles away.

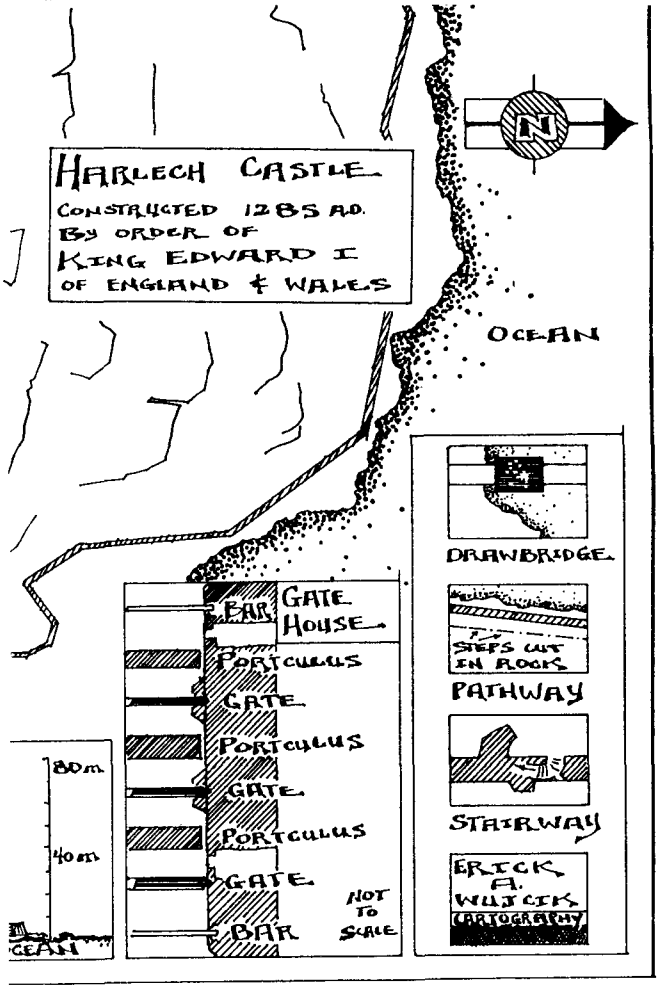
1404 — Harlech is surrendered after a lenghty siege to the Welsh Hero Owen Glendower. The final defenders consisted of 21 sick and starving men. Had needed supplies arrived, the castle might have stood indefinitely.

1409 — Eight months of siege are required before the Welsh surrender to the English Army. Supplies intended for the Water Gate were blockaded by two English ships.

1460 — Queen Margaret of the lancastrians takes refuge in Harlech on the death of her husband, Henry VI.







1468 — After *a* siege of seven years, Harlech is the last stronghold to surrender. At the end of the siege, only 50 able men remain, including the future King of England, twelve-year-old Henry the VII.

1647 — In the English Civil War, Harlech is the last Royalist castle to surrender to the parliamentary Armies.

DEFENSIVE FEATURES:

The Water Gate

In order to approach Harlech Castle from the ocean, one first had to take the Water Gate (which was equipped with both a gate and a drawbridge). Then there is a long climb on steps cut into the cliffside, all in range of the western towers of the castle. The Upper Gate was also fitted with gate and drawbridge (this time over a great chasm). Yet another steep climb in arrow range followed. Passage then curved around until ending in the wall that juts out from the northwest corner of the castle. The doorway must be passed and then the trip continues to the actual Postern, with a drawbridge and gate as defense. No serious attempt at attacking Harlech this way was ever made.

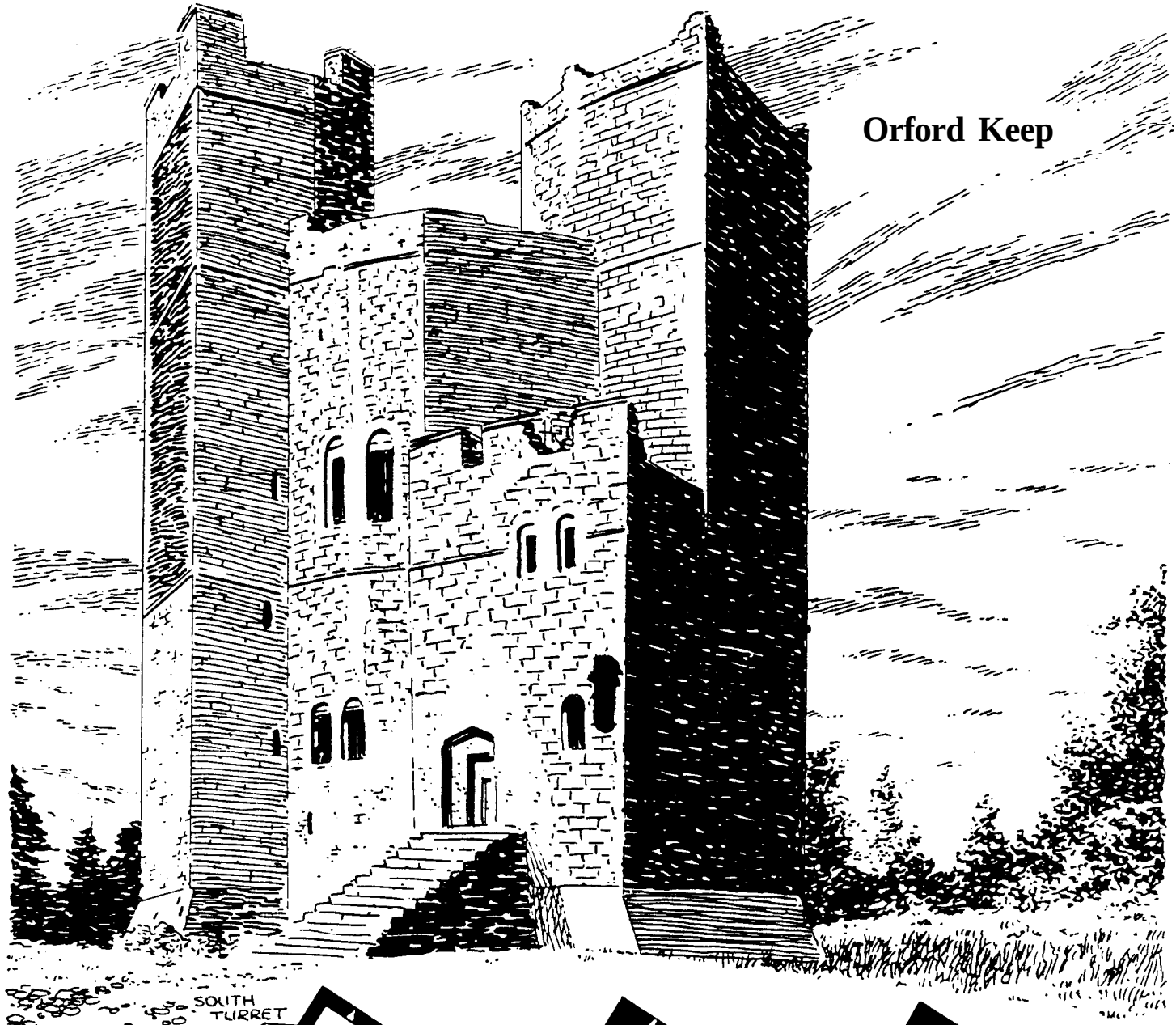
The Main Gate

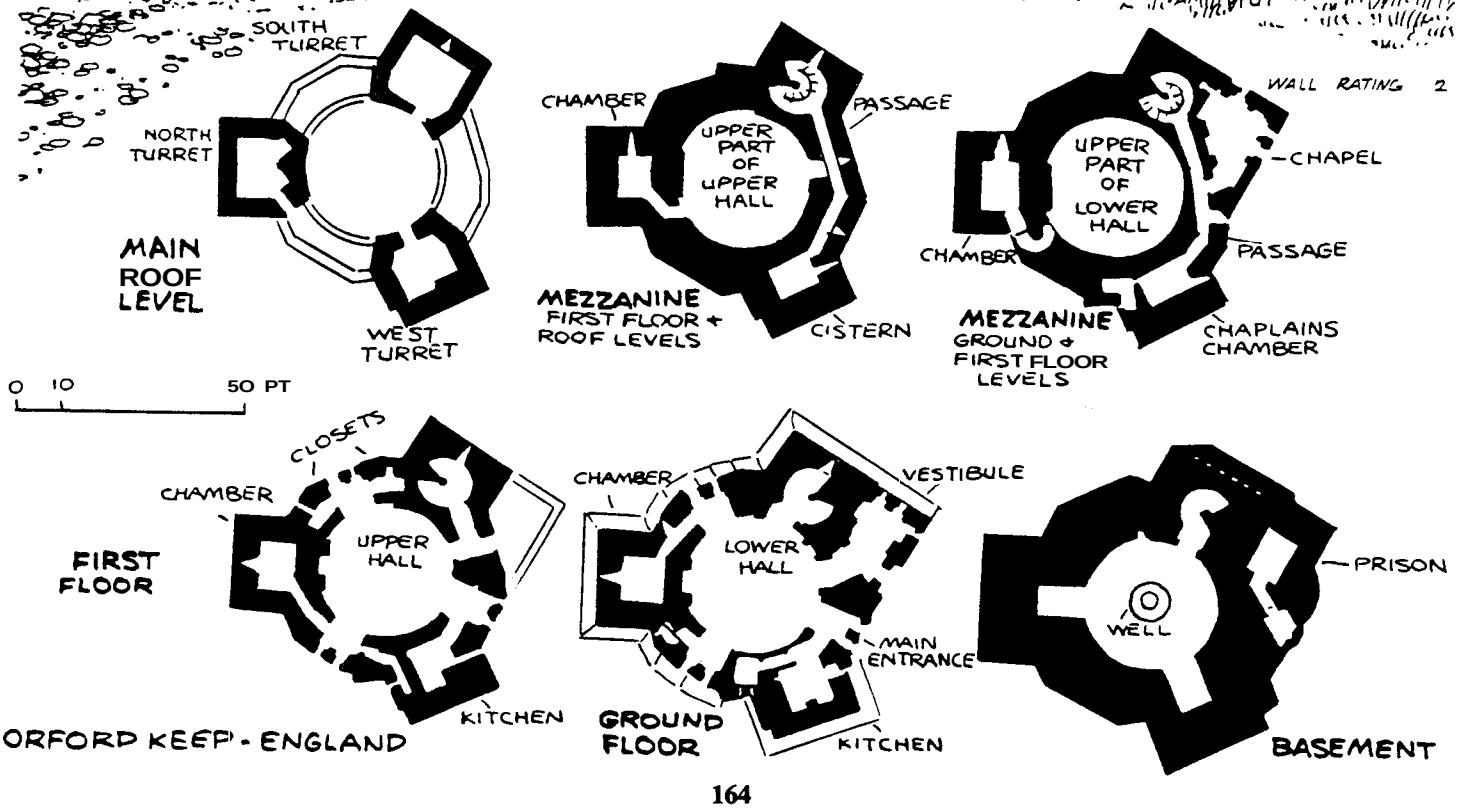
After defeating the two outer gates and getting over the three drawbridges, an enemy was faced with attacking the Gate House proper. The only passage through this building is blocked by two bars, three gates and three portcullises. All three stories of the Gate House are open to the Main Gate and fire can be concentrated from the above three floors.

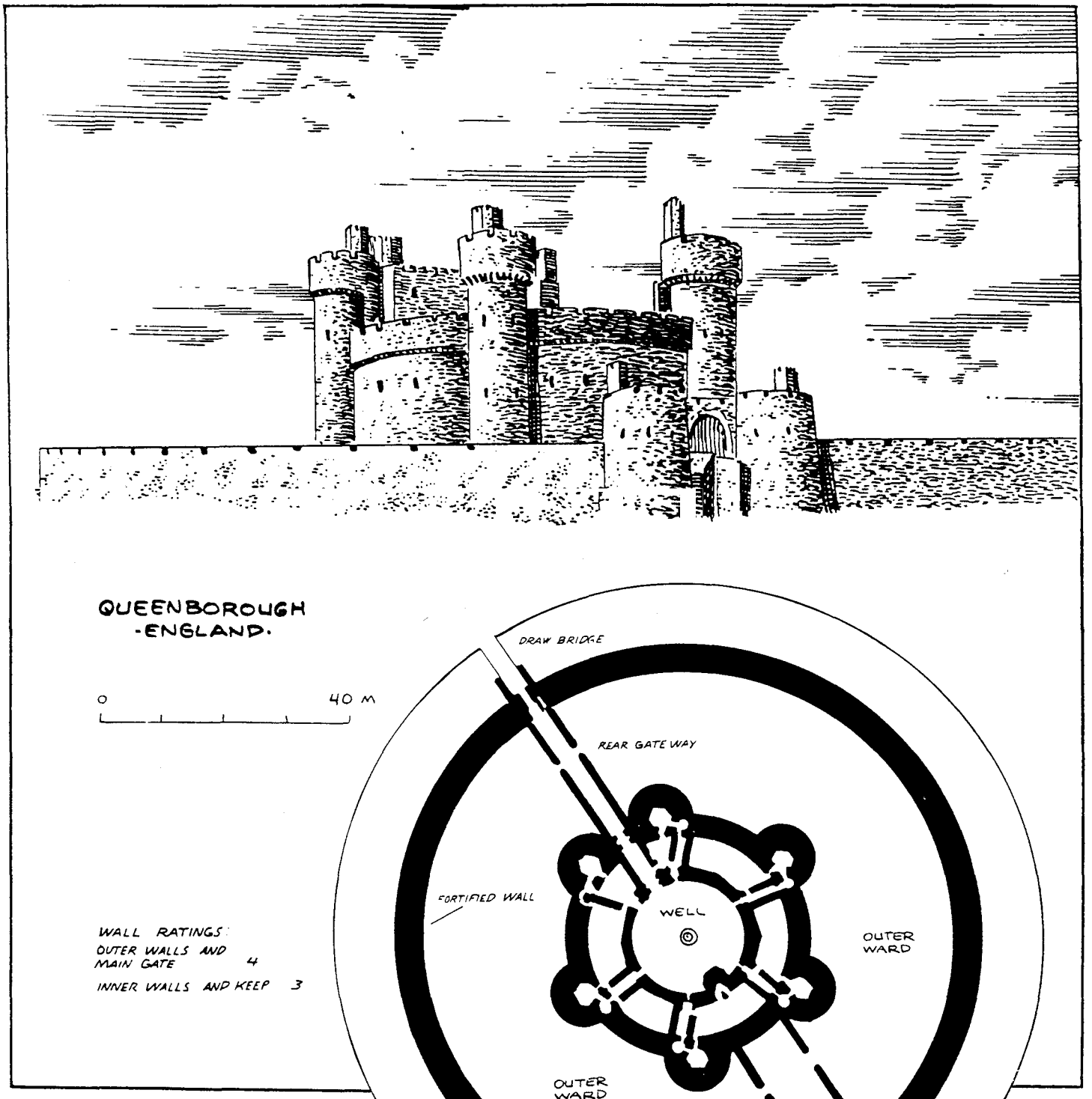
The North Ward

Jagged rock and clear bow fire would greet any foe attempting the North Wall of the castle. The only possible path was along the wall coming out from the northeast corner. This wall was equipped with a drawbridge to prevent attacks from that direction.

Orford Keep




SOUTH TURRET
NORTH TURRET
MAIN ROOF LEVEL
WEST TURRET
CHAMBER
PASSAGE
UPPER PART OF UPPER HALL
MEZZANINE FIRST FLOOR + ROOF LEVELS
CISTERN
WALL RATING 2
UPPER PART OF LOWER HALL
CHAPEL
CHAMBER
PASSAGE
MEZZANINE GROUND & FIRST FLOOR LEVELS
CHAPLAINS CHAMBER
0 10 50 PT
CLOSETS
CHAMBER
UPPER HALL
FIRST FLOOR
KITCHEN
CHAMBER
VESTIBULE
LOWER HALL
MAIN ENTRANCE
KITCHEN
GROUND FLOOR
PRISON
WELL
BASEMENT
ORFORD KEEP - ENGLAND

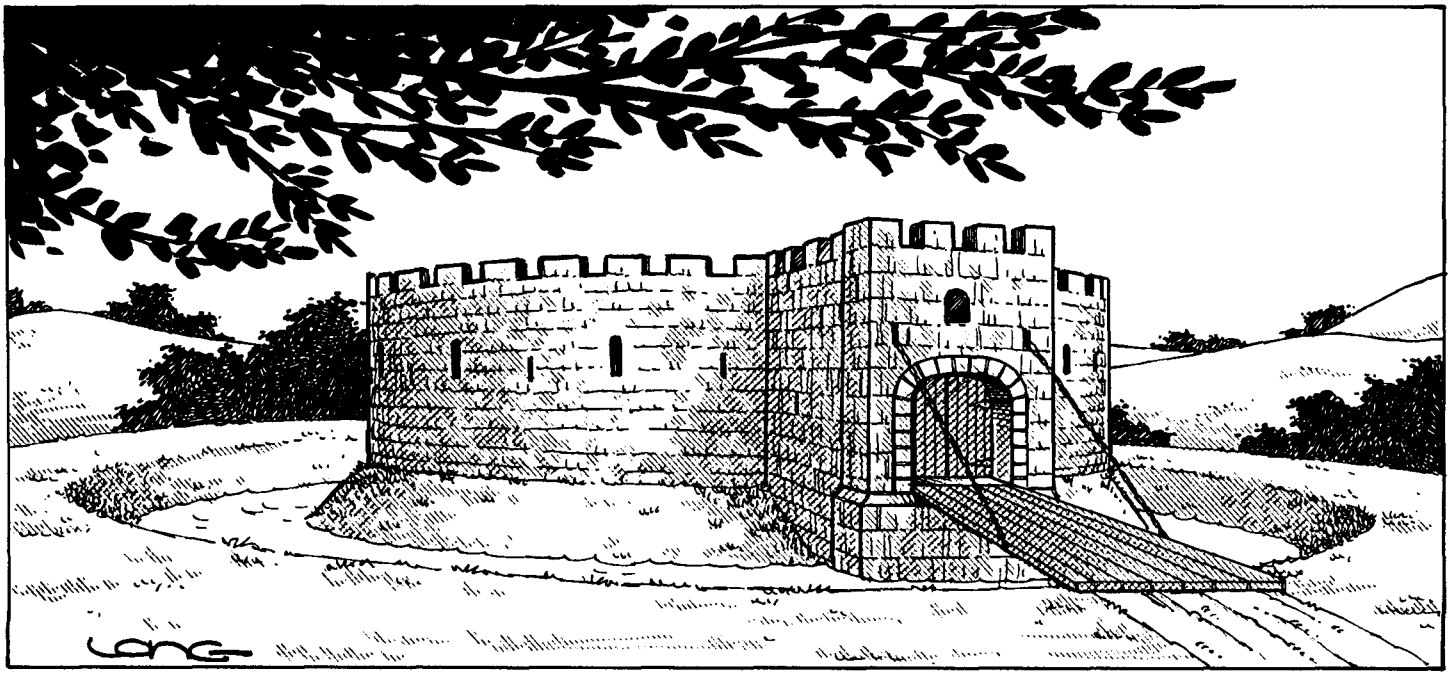


Orford Keep

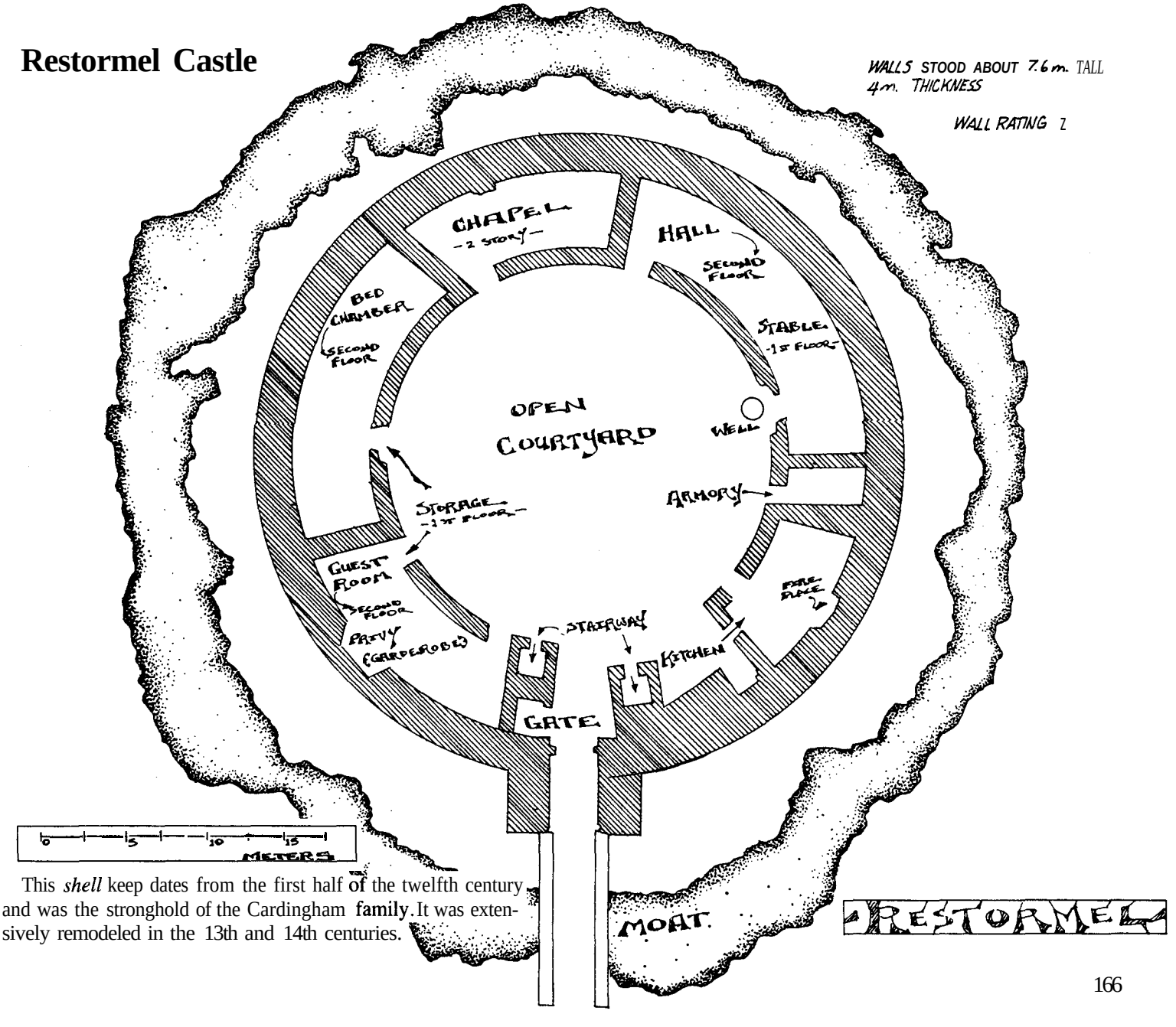
Built by Henry II between 1166 and 1173 to control a port, Orford keep is an unusual design; a polygonal tower with three butress towers. The outer works have not survived.

Queenborough

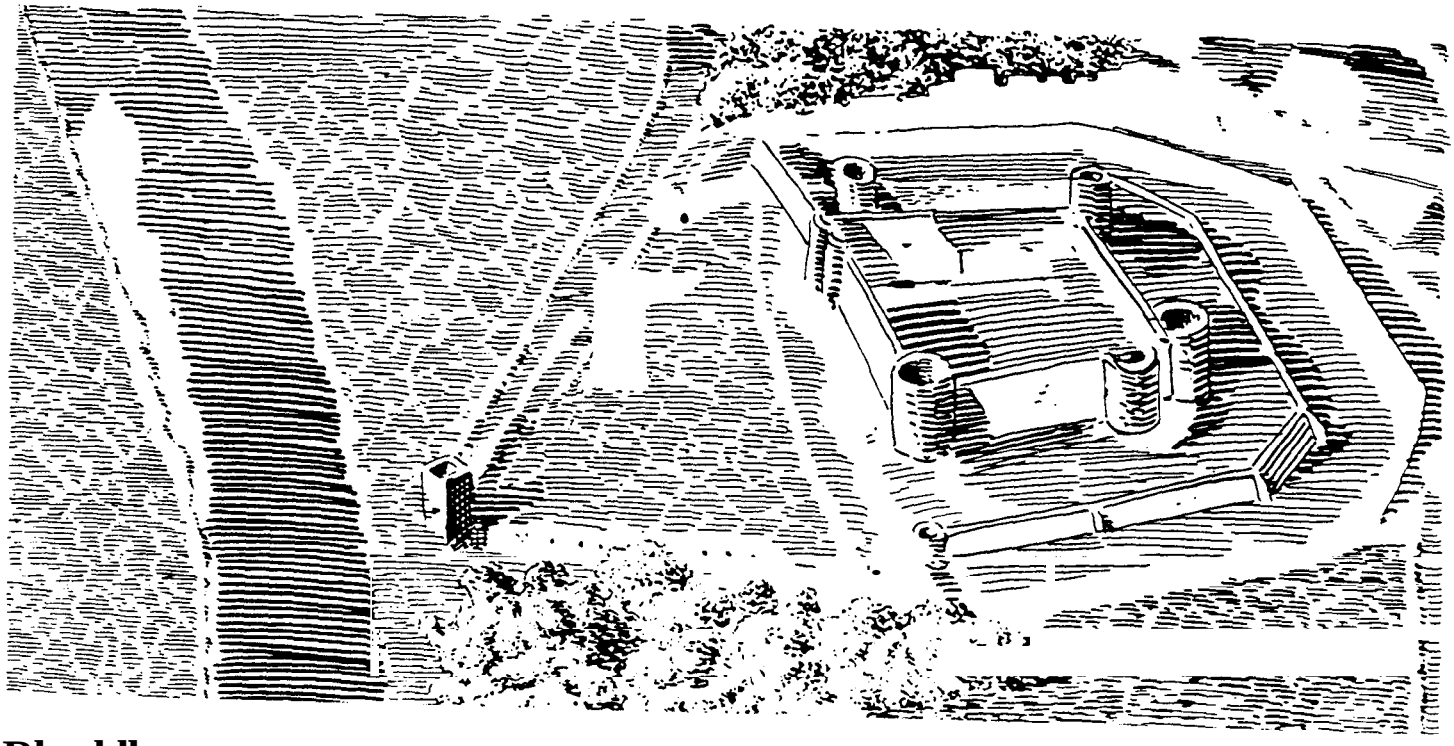
Built by Edward III as part of the Channel and Thames estuary defenses against French aggression, Queensborough was begun in 1361 and finished in 1365. The castle, a unique design in England, was destroyed in the mid-seventeenth century.



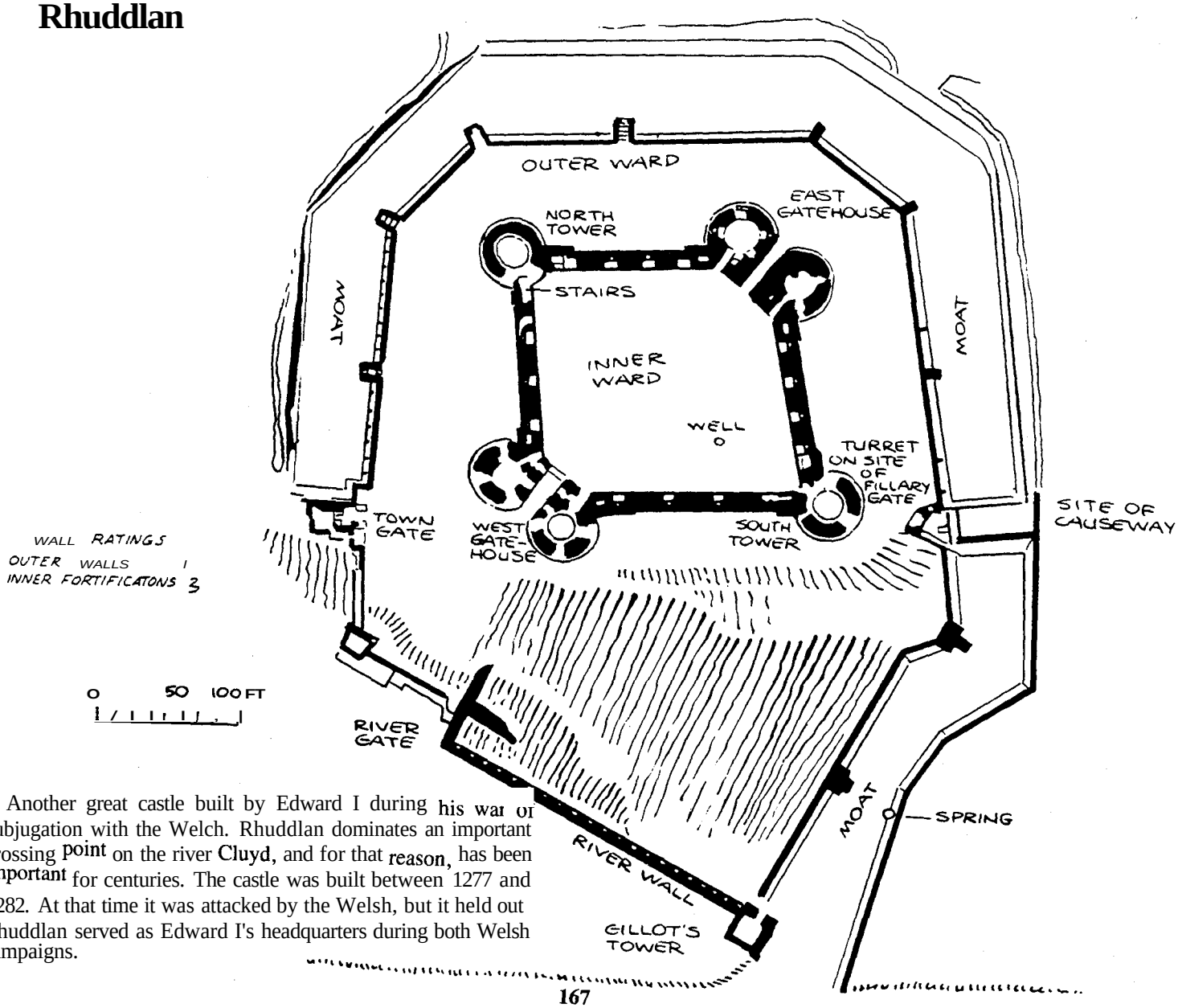
Restormel Castle



This *shell* keep dates from the first half of the twelfth century and was the stronghold of the Cardingham family. It was extensively remodeled in the 13th and 14th centuries.

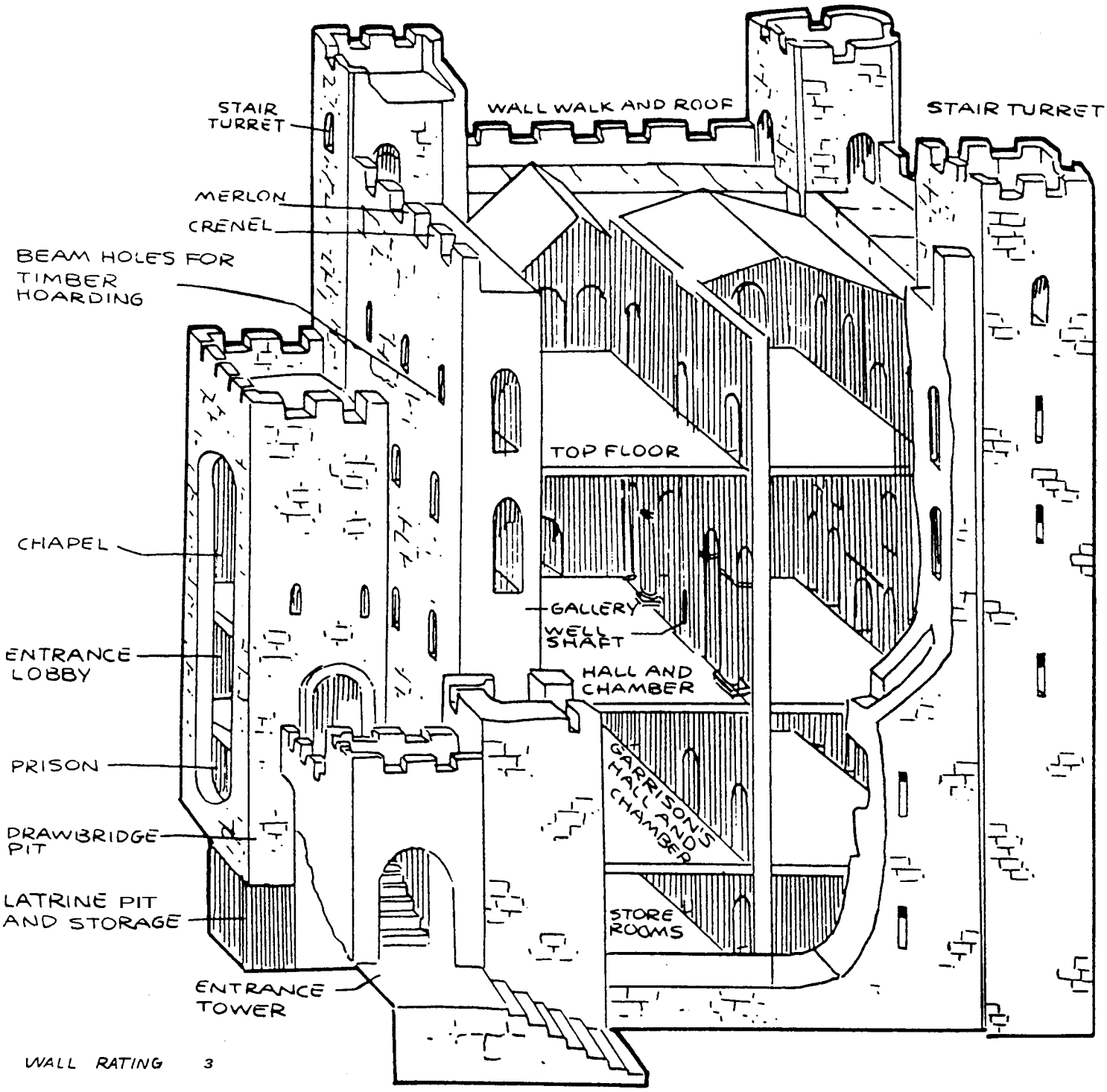


Rhuddlan



Another great castle built by Edward I during his war of subjugation with the Welch. Rhuddlan dominates an important crossing point on the river Cluyd, and for that reason, has been important for centuries. The castle was built between 1277 and 1282. At that time it was attacked by the Welsh, but it held out Rhuddlan served as Edward I's headquarters during both Welsh campaigns.

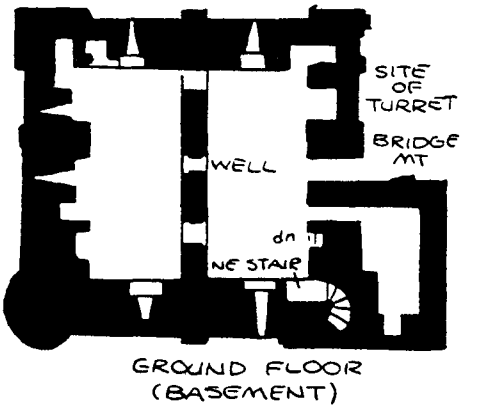
Rochester Castle



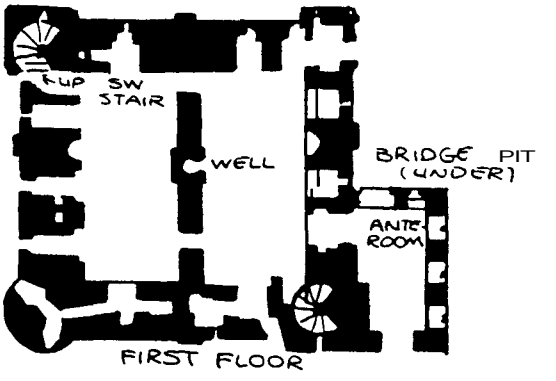
Rochester Castle

This great keep was built by Archbishop William de Corbeil around 1127; it added greatly to the defense of an earlier stone enclosure built by Gundulf, Bishop of Rochester, for William Rufus. It measured 70 feet square and rises 125 feet to the tops of its corner towers. The walls themselves measured 3.5 meters thick at the base.

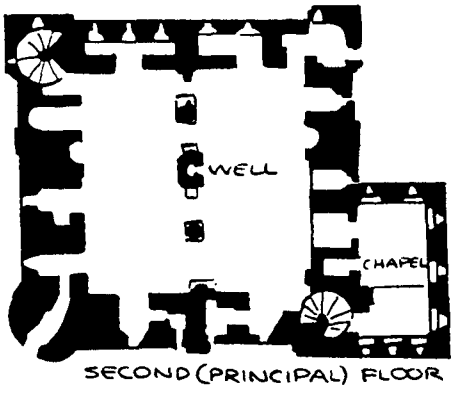
The strength of the Rochester defenses were tested by three sieges, in 1088, 1215 and 1264. In 1215, King John besieged it for two months before capturing it. When the king arrived he set up siege engines to batter the castle; this barrage was kept up night and day. The outer bailey was breached by mine and taken. In textbook fashion, the defenders withdrew into the keep, which proved impervious to the ram and siege engine. John once again called upon his miners, who then tunneled beneath the southeast section of the keep. In due course, the whole southeast section of the keep came down. However, not even this brought on the defender's surrender as they withdrew behind a central cross wall in the keep and continued the defense. Soon, provisions ran out, and the garrison gave up.



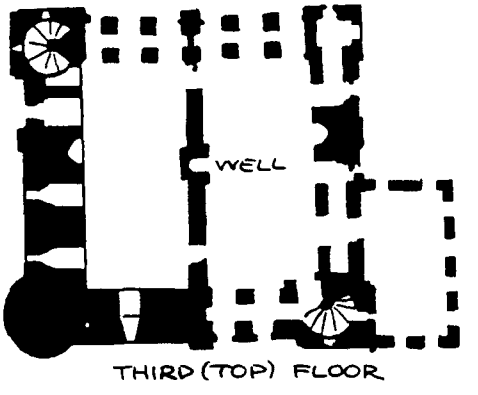
GROUND FLOOR (BASEMENT)



FIRST FLOOR



SECOND (PRINCIPAL) FLOOR



THIRD (TOP) FLOOR

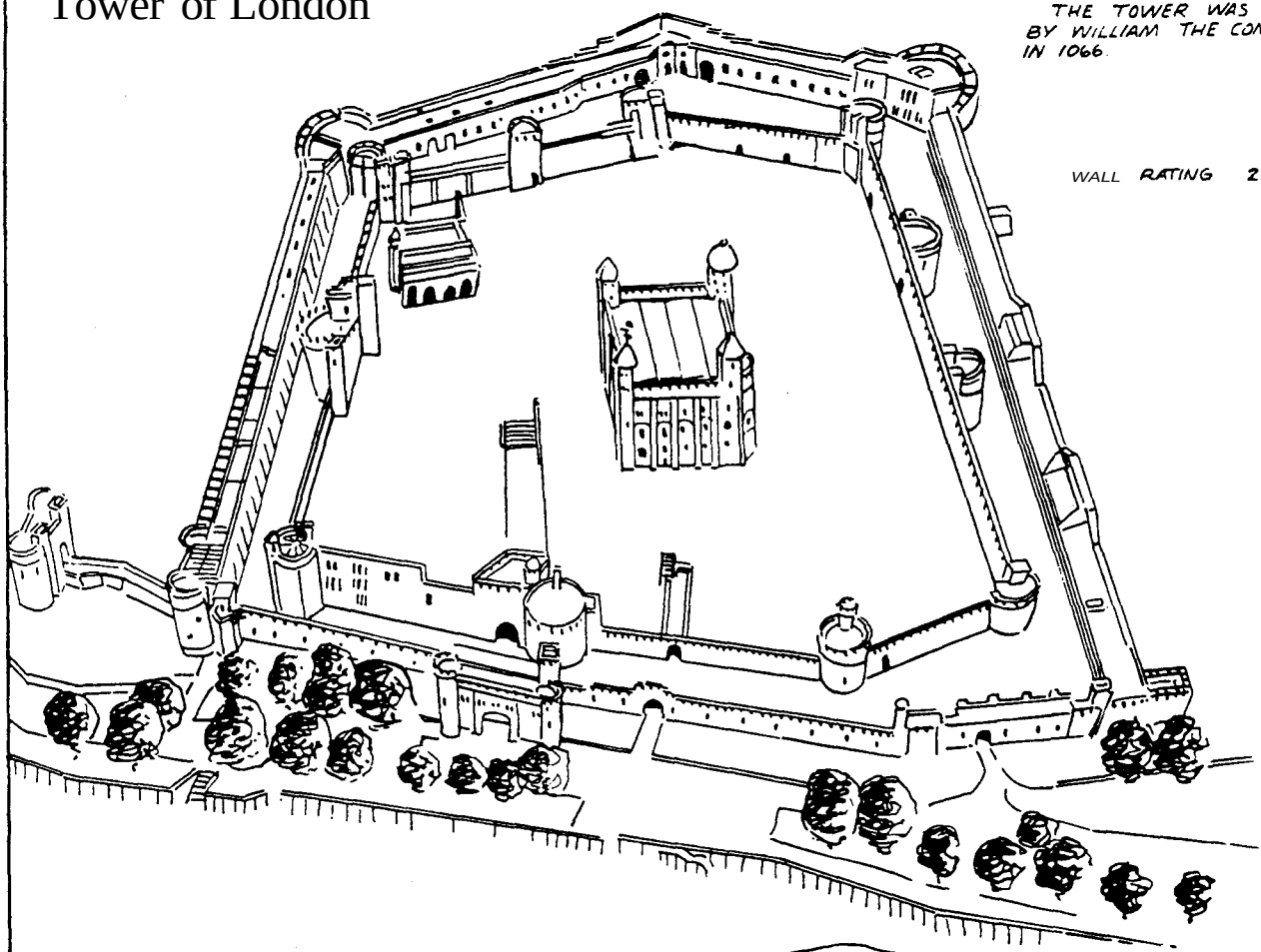
Tower of London

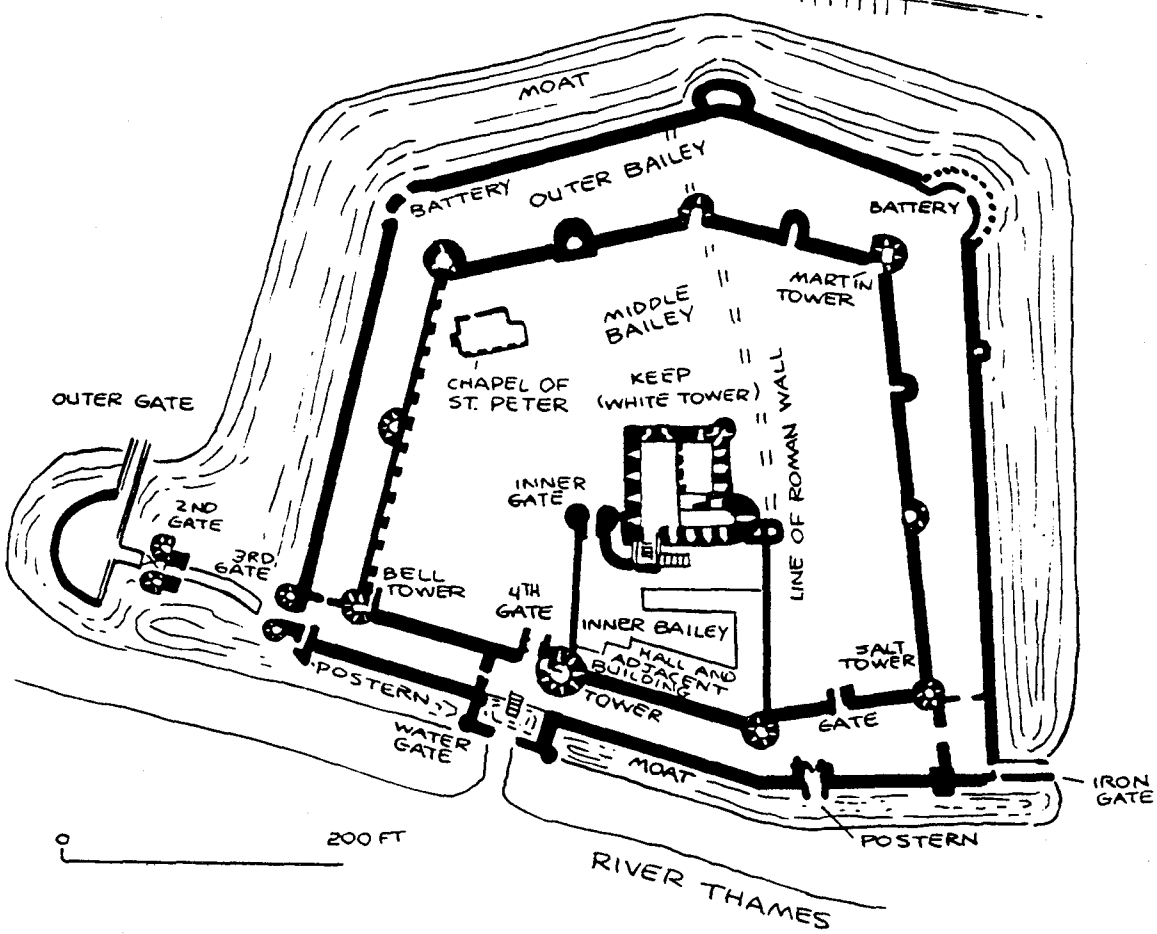
The first castle on this site was built by William the Conqueror in 1066, adjacent to an ancient Roman wall. Later, William built the White Tower. Richard I built outwards to the Bell Tower. Henry III built and developed the inner bailey. Edward I completed the site with an outer ward, moat, water gate and several other gates. Henry VIII began the tradition of using the tower as a prison.

Tower of London

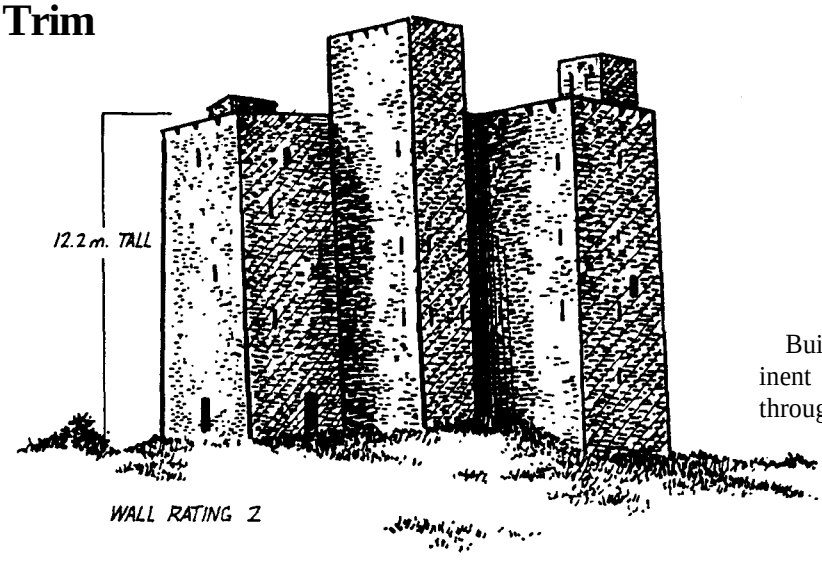
THE TOWER WAS FOUNDED BY WILLIAM THE CONQUEROR IN 1066.

WALL RATING 2

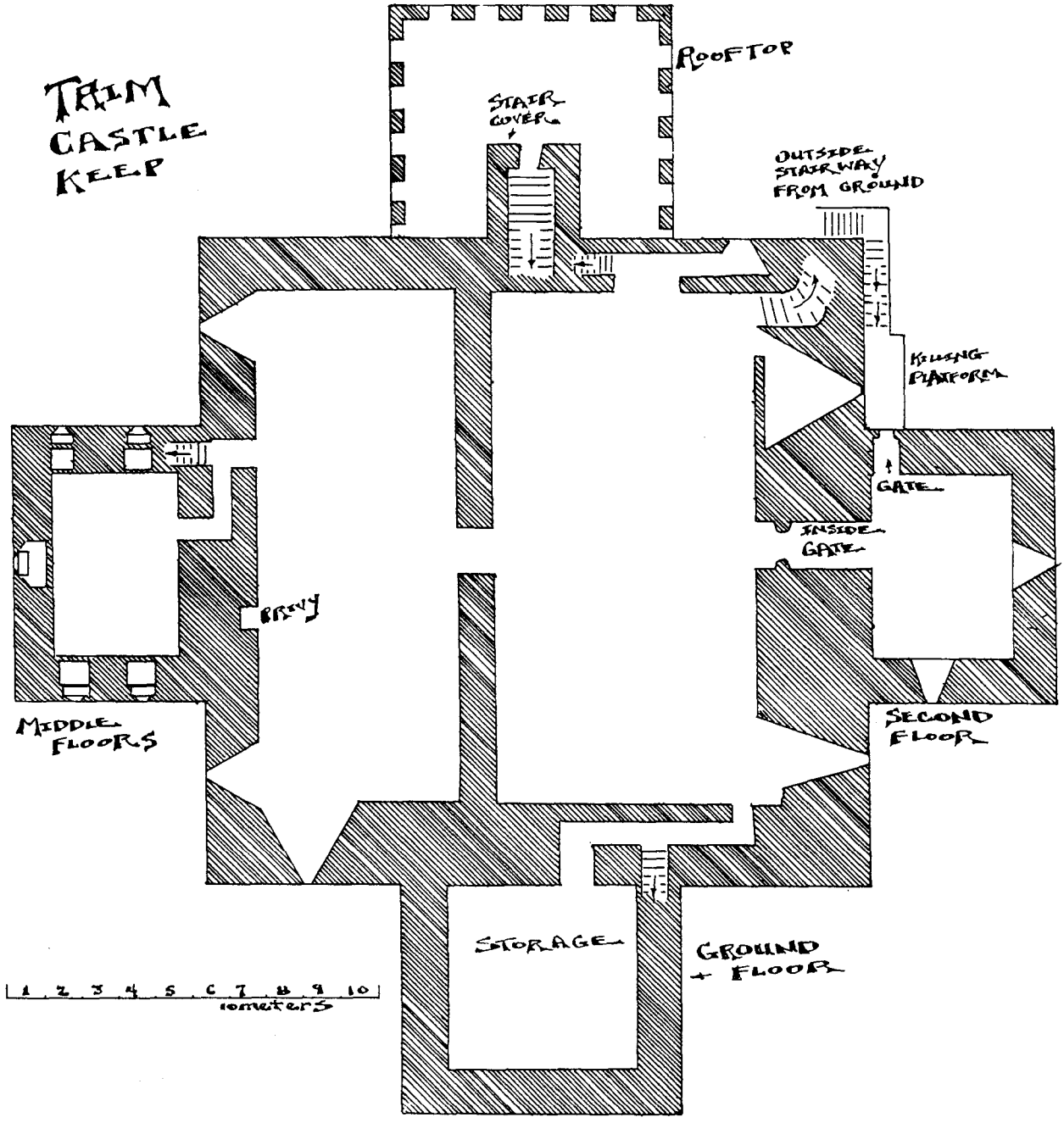




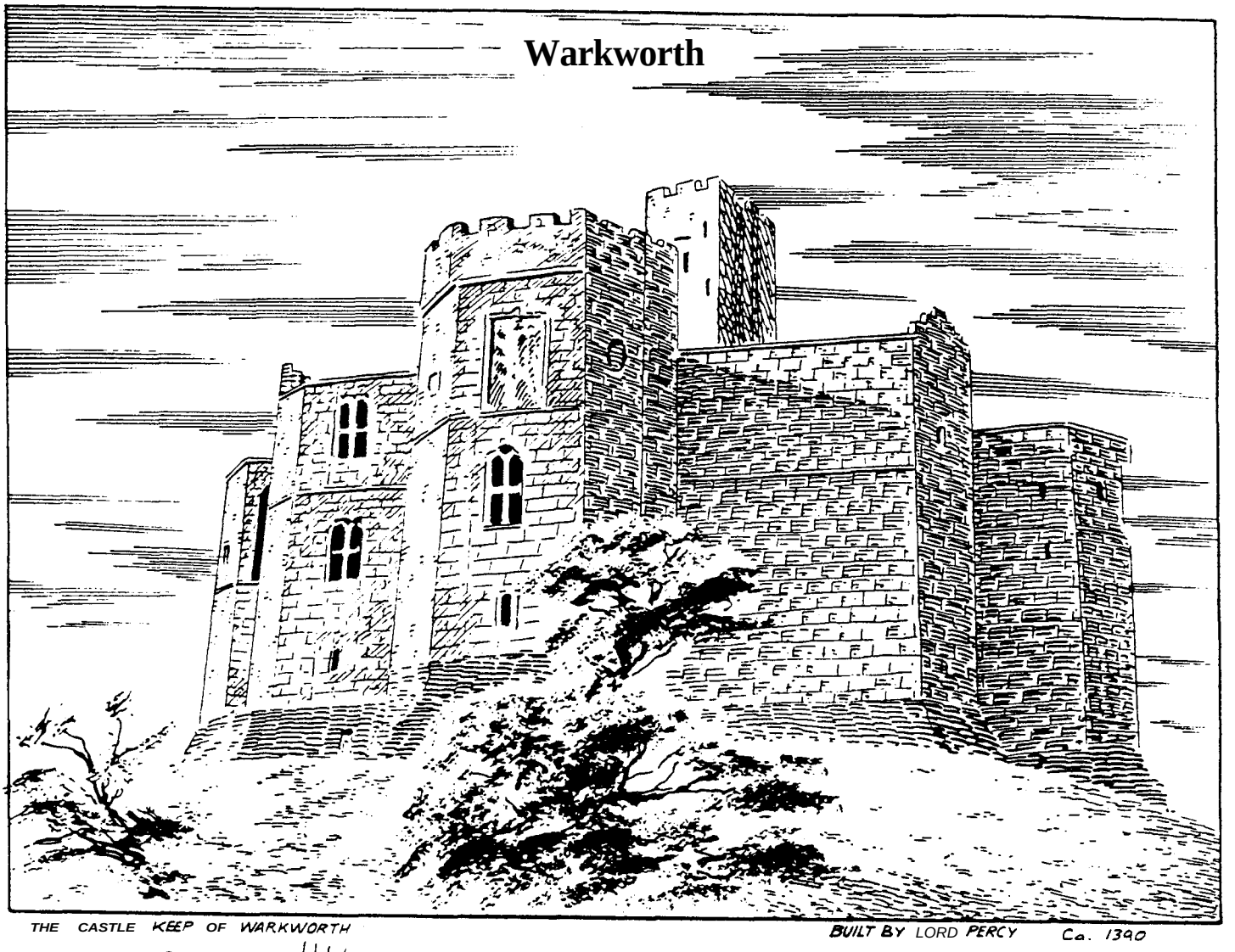
Trim



Built in 1173 by the first Hugh de Lacy, Trim played a prominent part in the numerous Irish uprisings and pacifications throughout the Middle Ages.

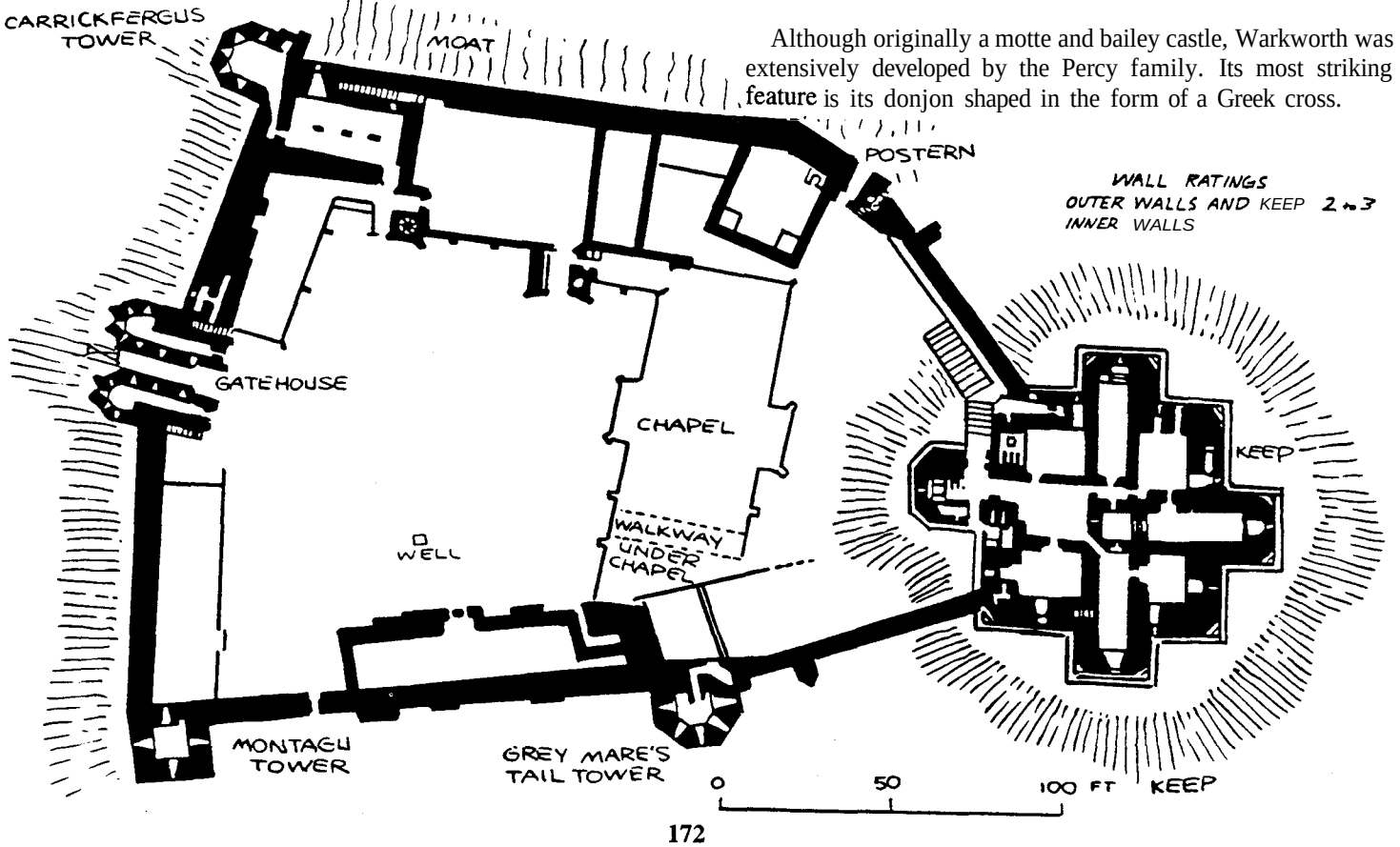


Warkworth



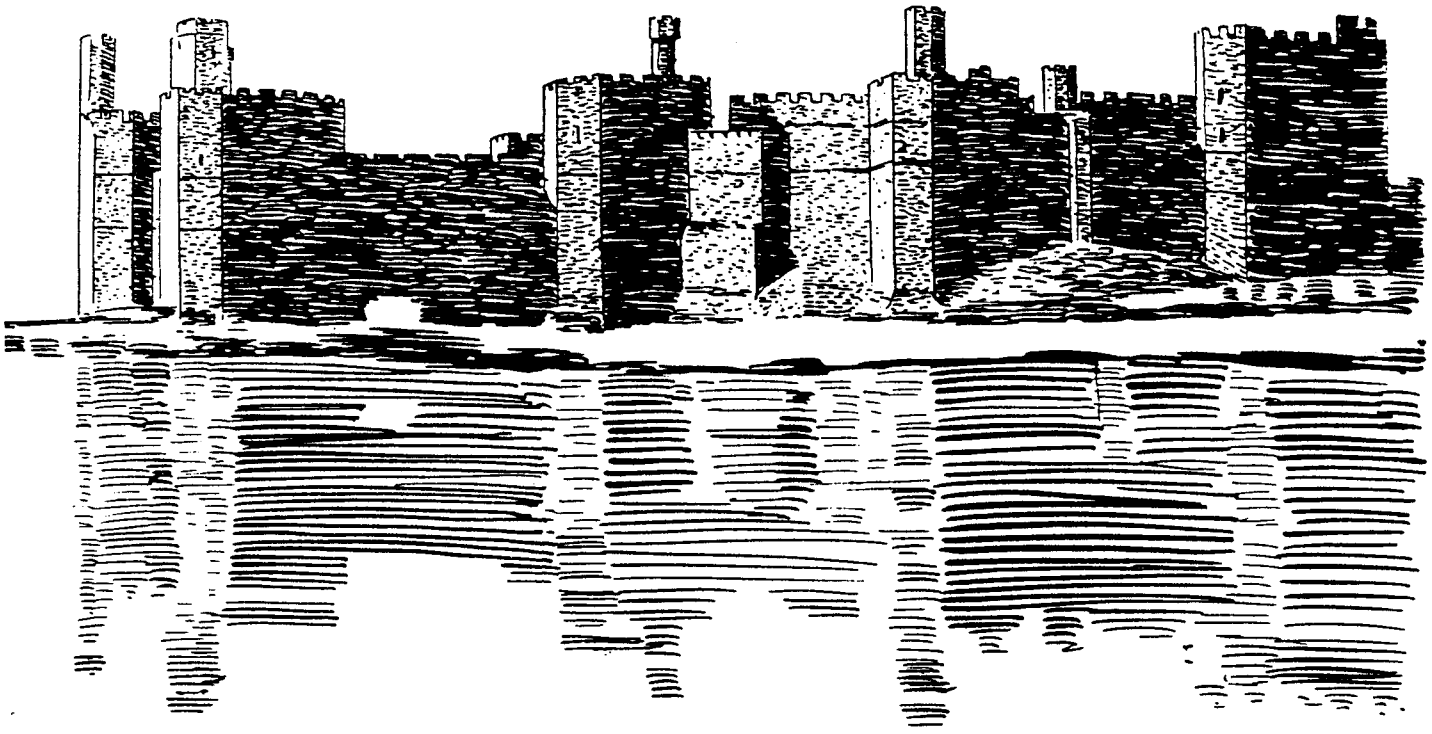
THE CASTLE KEEP OF WARKWORTH

BUILT BY LORD PERCY Ca. 1390



Although originally a motte and bailey castle, Warkworth was extensively developed by the Percy family. Its most striking feature is its donjon shaped in the form of a Greek cross.

Caernarvon Castle



Built by Edward I to enforce his conquest of the Welsh, Caernarvon Castle was begun in 1283. By 1287, most of the major structural work was completed, but finished detail work was done quite some time afterwards. In 1294, the Welsh prince Madoc, managed to take the castle and burn most of the timberwork before being driven out. This initiated a renewal of construction and defensive improvement which lasted until 1327.

The castle was besieged in 1401 when the Welsh revolted, but the attackers were thrown off and suffered heavy casualties. The castle was attacked again in 1403 and 1404, but the defenses were so strong that only a garrison of *28 men* was able to repel the assault.

During the English Civil War, the castle changed hands several times.

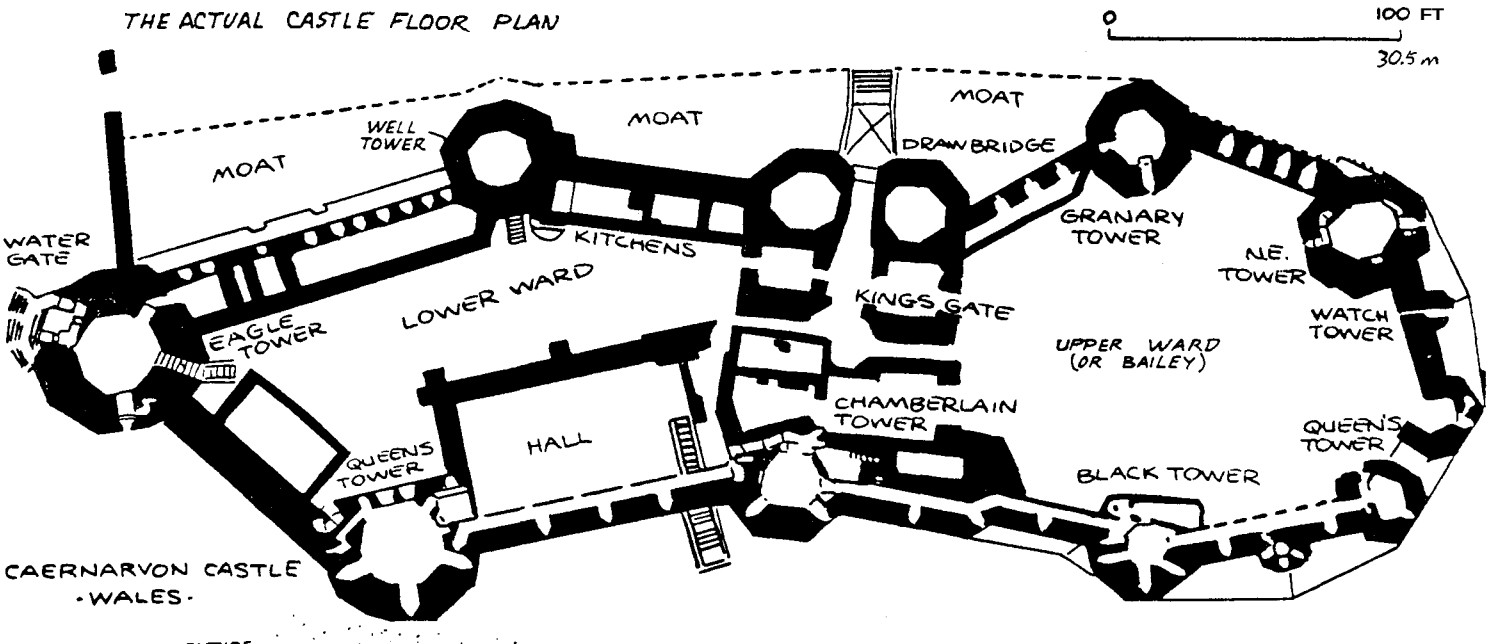
The main gate, called the King's Gate, is heavily defended by two flanking towers, a drawbridge, fivedoors and six portcullises. The smaller Queen's Gate was approached by a high drawbridge and lofty ramp, dictated by the level of the upper ward.

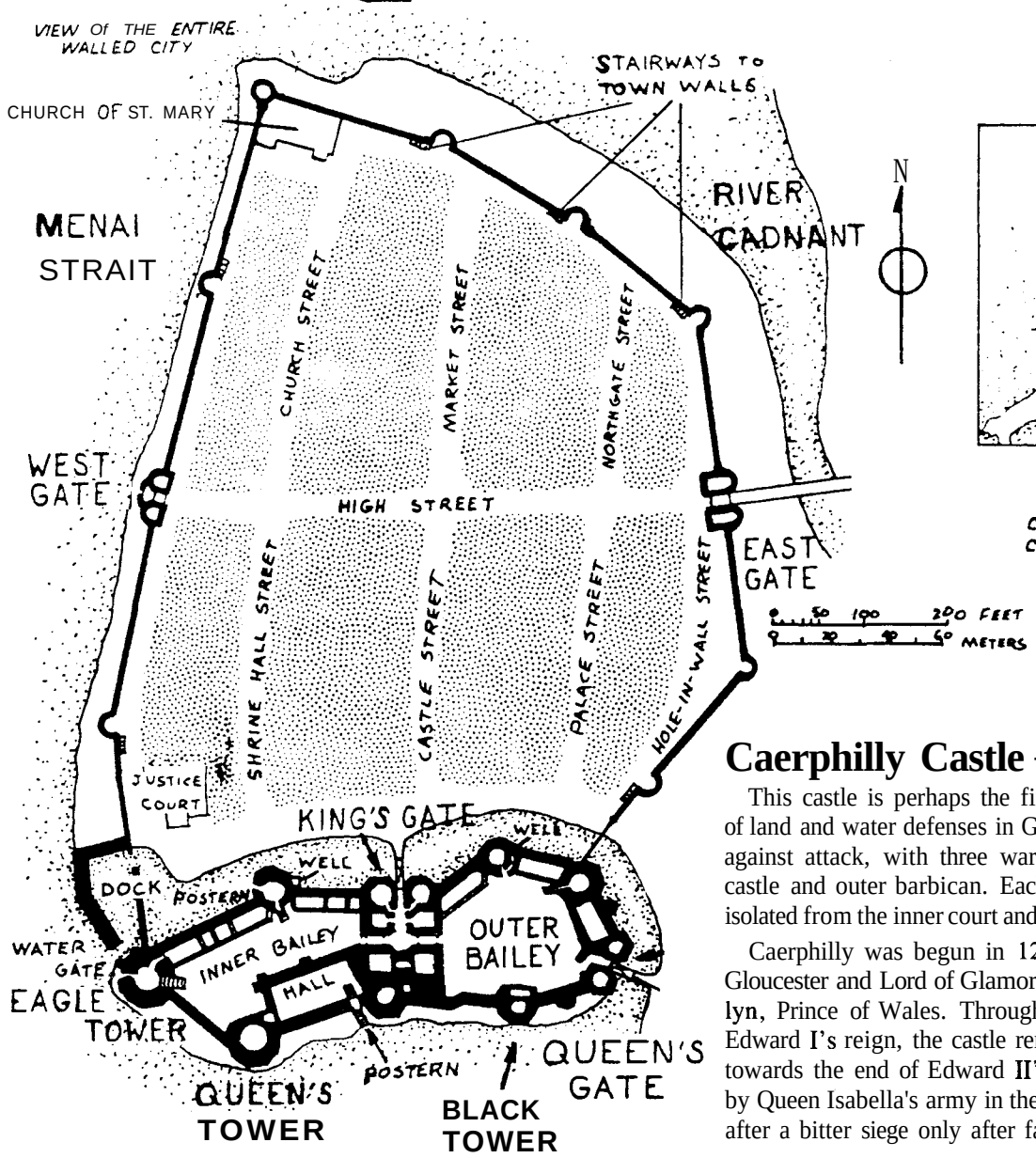
The fortifications at Caernarvon consisted of a castle and a fortified town. The construction of Caernarvon Castle was ordered by King Edward I in 1293 and, like Harlech, was another in a series of strong points designed to act as a base of operations in his subjugation of the Welsh. As with many of the other Welsh castles built by Edward I, Caernarvon is linked directly with the sea, which enabled it to be resupplied easily in times of crisis.

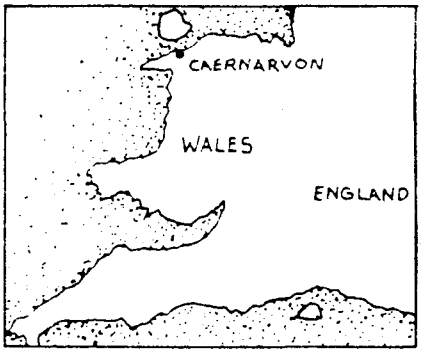
The town itself was protected by a wall about 12 feet (4m) in thickness. At various points along the wall were simple open-backed towers. The walkway along the walls was reached by a flight of stone steps located at each of these open towers. Once on the walkway, the whole length of the town's walls could be traveled. Because the area enclosed by the walls was relatively crowded by the buildings of the town, it was extremely important to lay everything out carefully so as to not restrict the movements of the defensive troops. Because of the possibility that the town could be taken or become hostile towards the lord, the castle itself was separated from the town by a moat and very massive walls, up to eight meters in thickness. These defenses enabled the inhabitants of the castle to hold out even if the town itself had fallen.

Notes on the map: Both the King's and Queen's Gates were equipped with a drawbridge which crossed the moat. The stairway from the hall to the postern runs downward from the castle to the water's edge. The stairways which lead to the various towers of the castle from the baileys run from the bailey down to the tower.

Caernarvon Castle







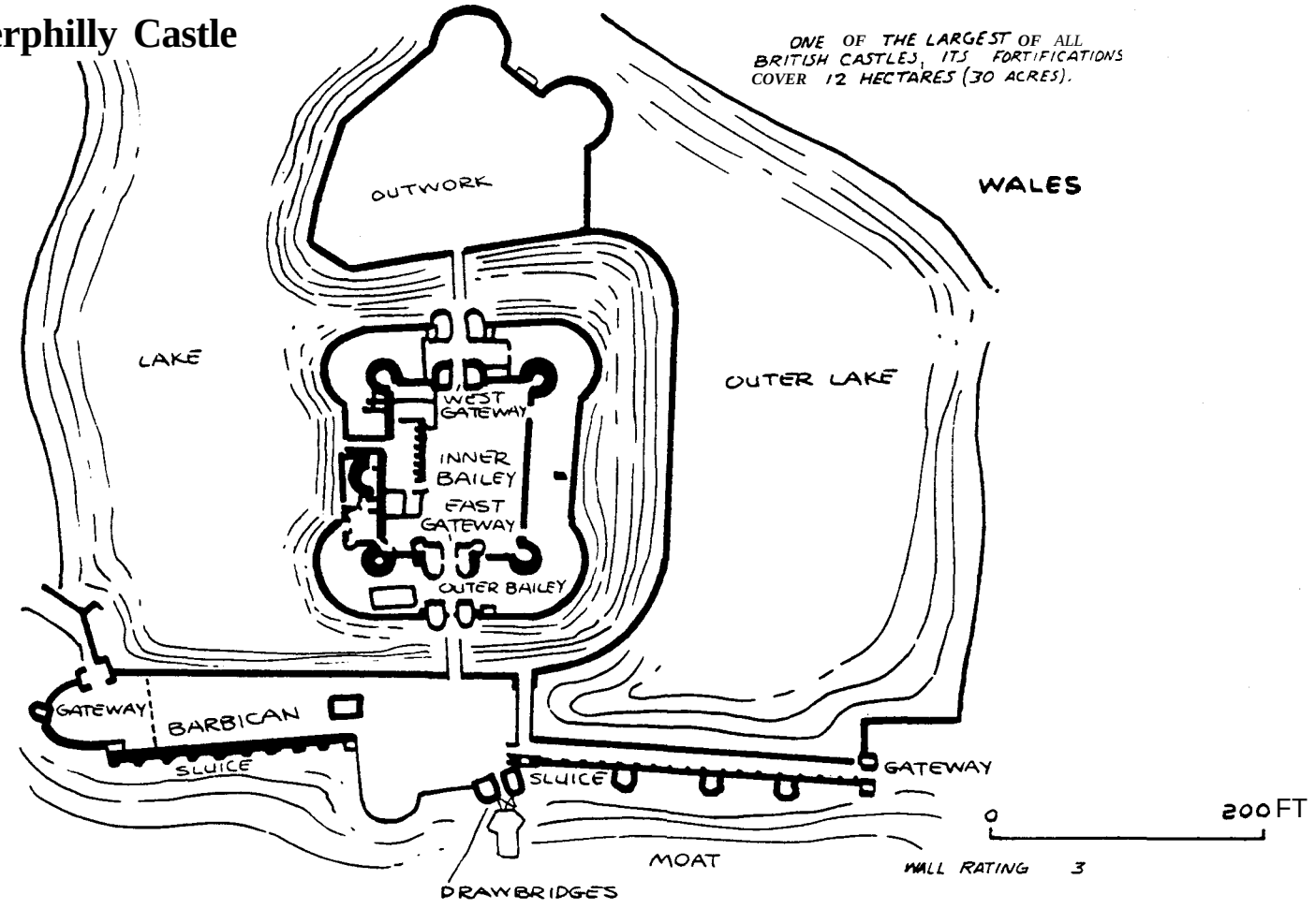
WALL RATINGS
CITY WALLS 1
CASTLE WALLS 2

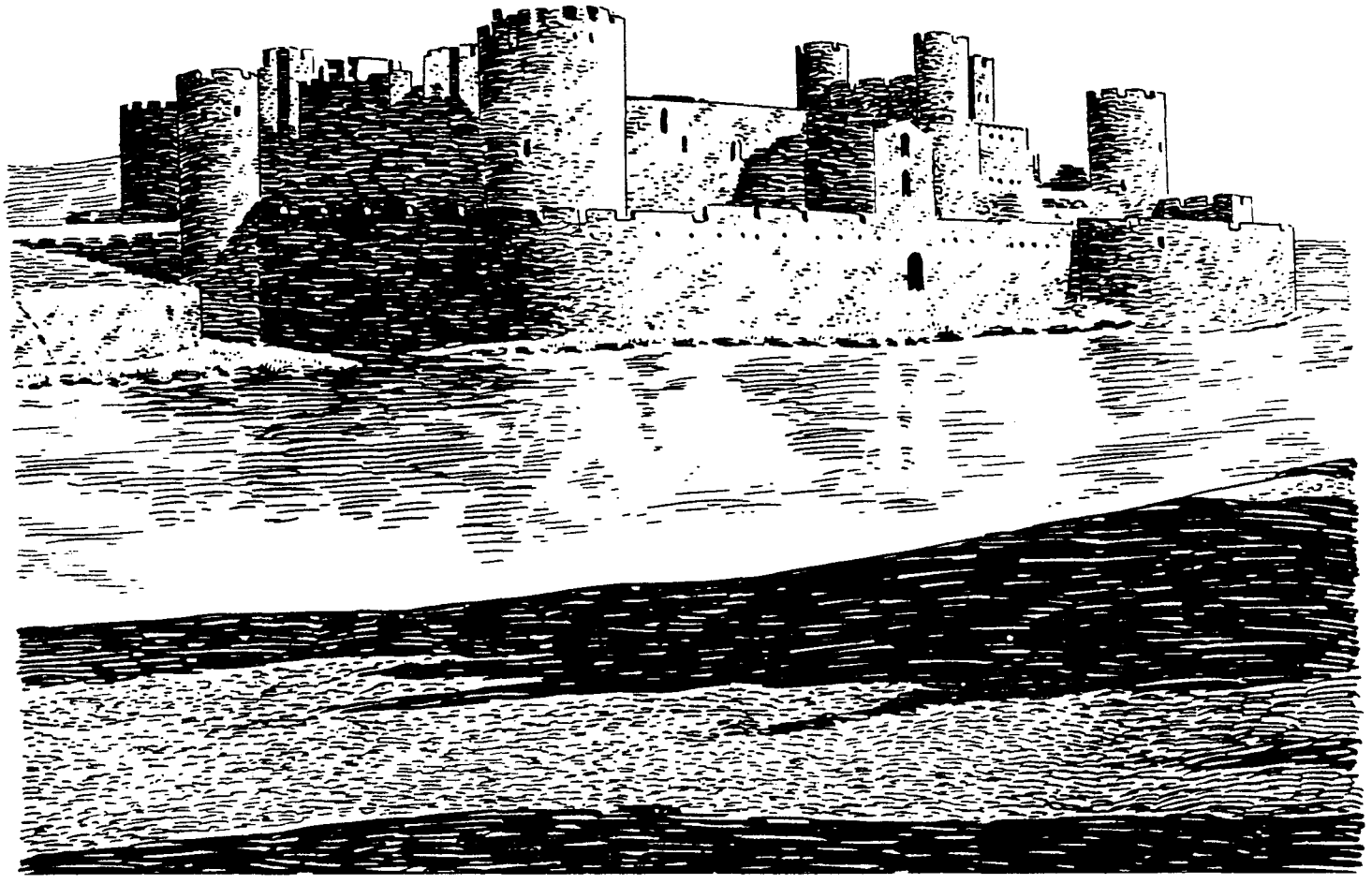
Caerphilly Castle

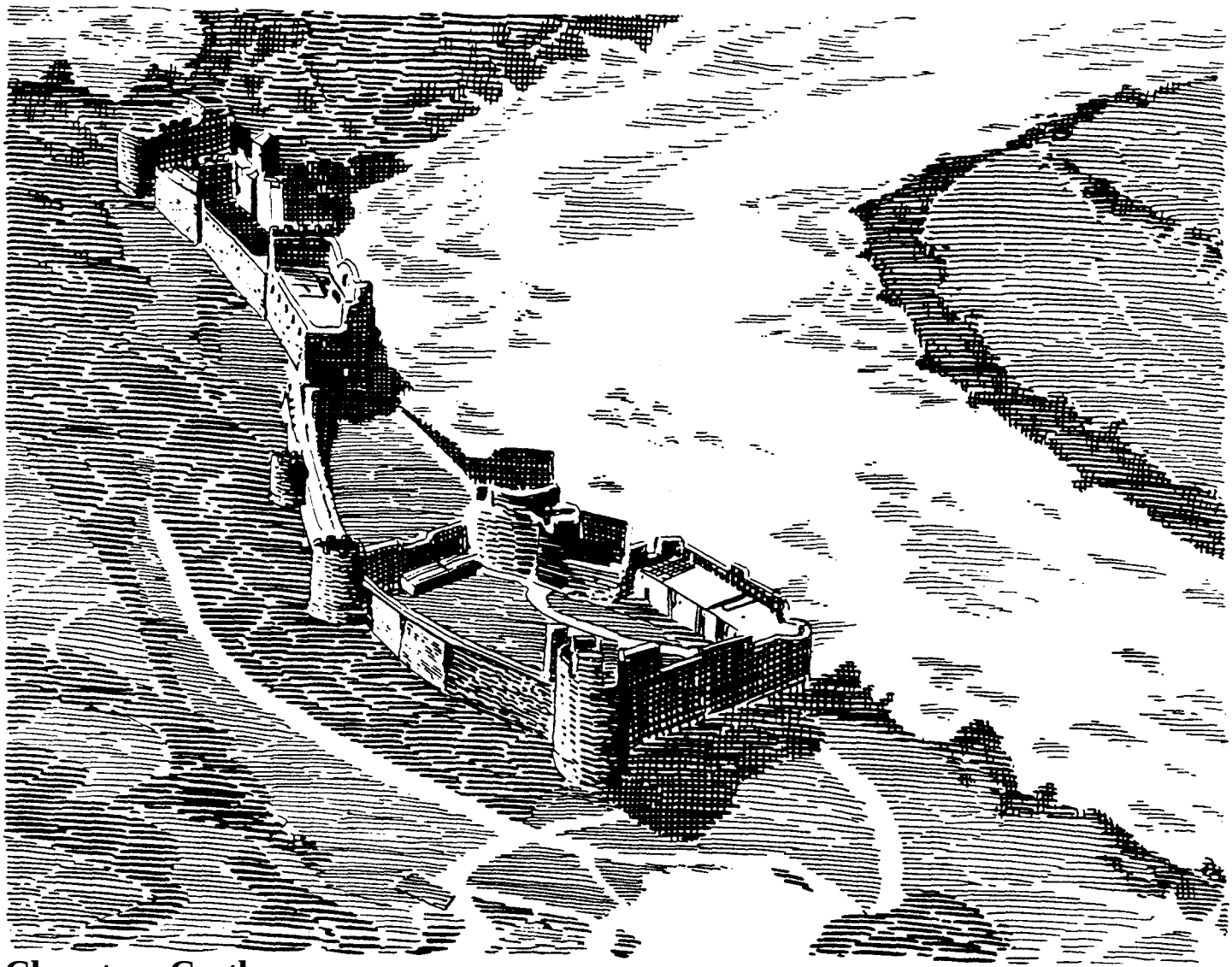
This castle is perhaps the finest example of the combination of land and water defenses in Great Britain. It was well guarded against attack, with three wards and seven gatehouses in the castle and outer barbican. Each tower and gatehouse could be isolated from the inner court and walls by portcullised doorways.

Caerphilly was begun in 1271 by Gilbert de Clare, Earl of Gloucester and Lord of Glamorgan, as a defense against Llywelyn, Prince of Wales. Throughout the unrest in Wales during Edward I's reign, the castle remained in English hands. Later, towards the end of Edward II's reign, the castle was attacked by Queen Isabella's army in the winter of 1326-27, surrendering after a bitter siege only after favorable terms were given.

Caerphilly Castle





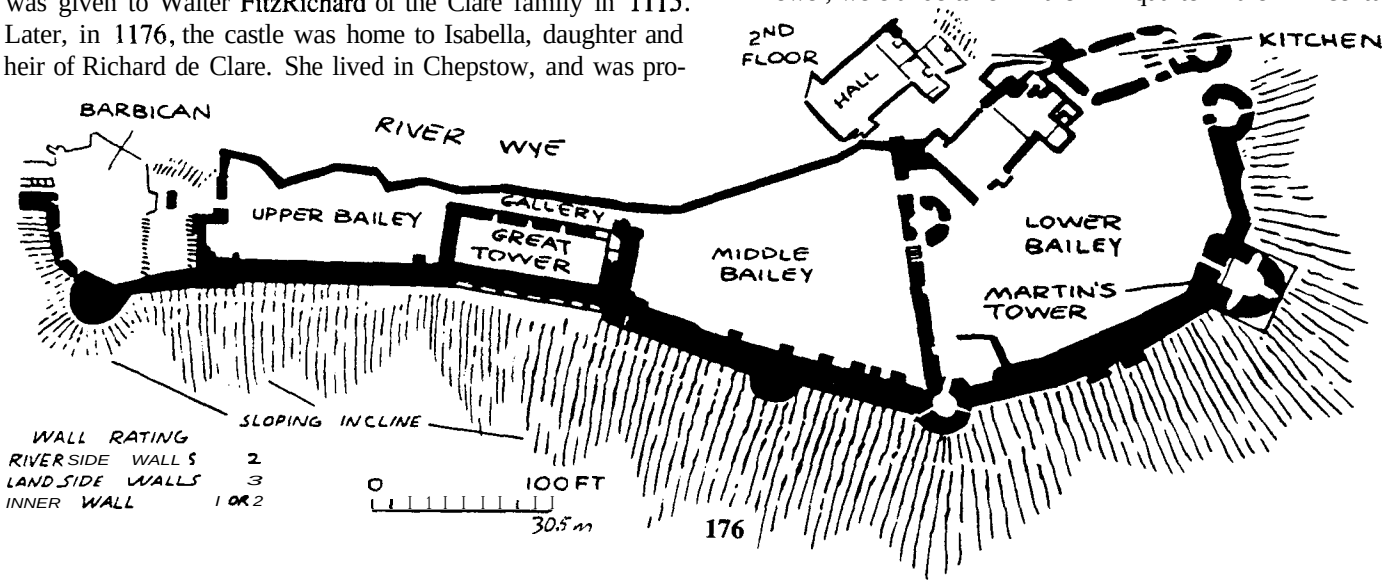


Chepstow Castle

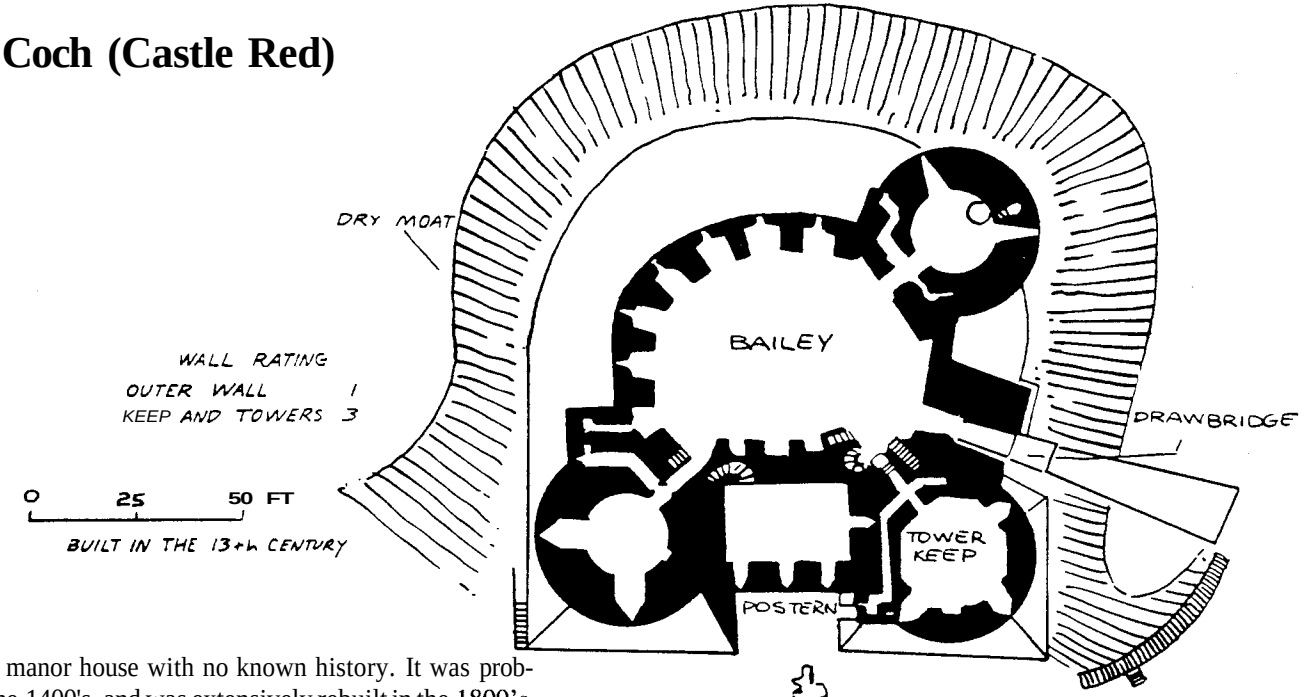
Although this castle had few dramatic episodes in its history, it is, nonetheless, interesting in that it went through several periods of building and expansion and was constantly in use for some 600 years (starting from the Norman Conquest).

Chepstow was founded by William FitzOsbern, Earl of Hereford, in 1067, to act as a base for his campaigns into Wales. The FitzOsbern family later lost the castle and their title, which was given to Walter FitzRichard of the Clare family in 1115. Later, in 1176, the castle was home to Isabella, daughter and heir of Richard de Clare. She lived in Chepstow, and was protected by a royal constable, a chaplain and his clerk, three watchmen, twenty five men-of-arms and ten archers, a fairly large force.

The Great Tower is the oldest part of the castle, having been built by FitzOsbern. The middle bailey was added between 1189 and 1219 by William Marshall and building went on for another 26 years, with additions to the great tower, the upper bailey and the western barbican. Further additions, including the Marten's Tower, were undertaken in the final quarter of the 13th century.

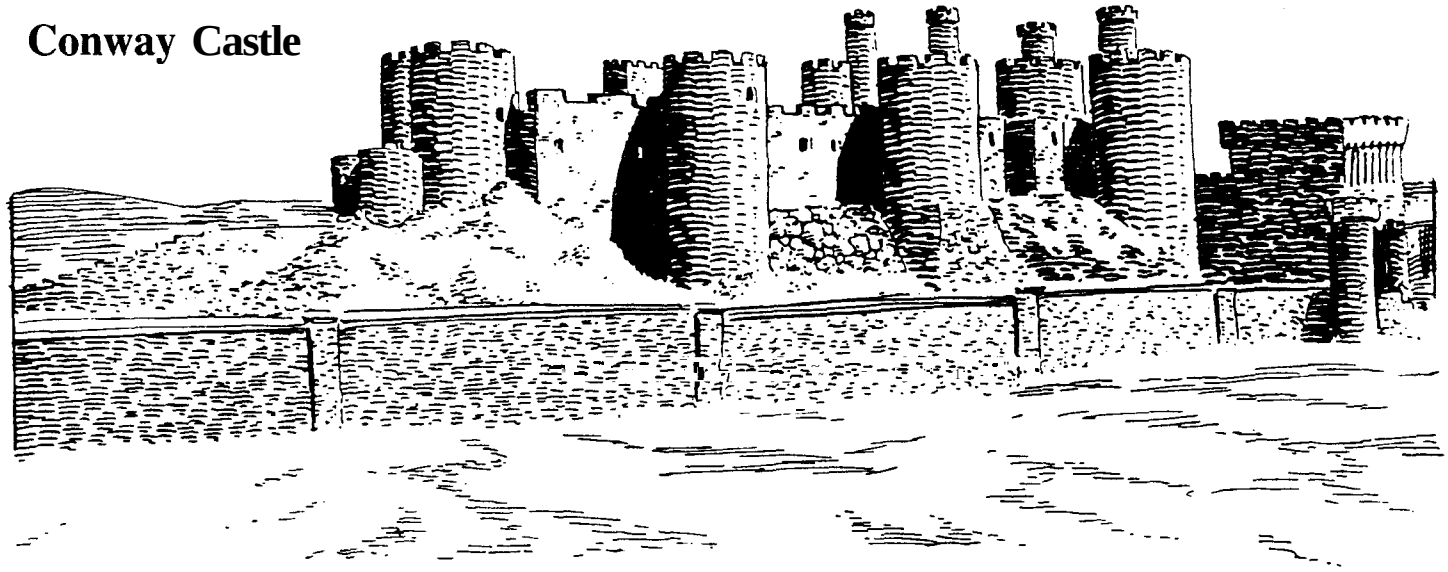


Castle Coch (Castle Red)



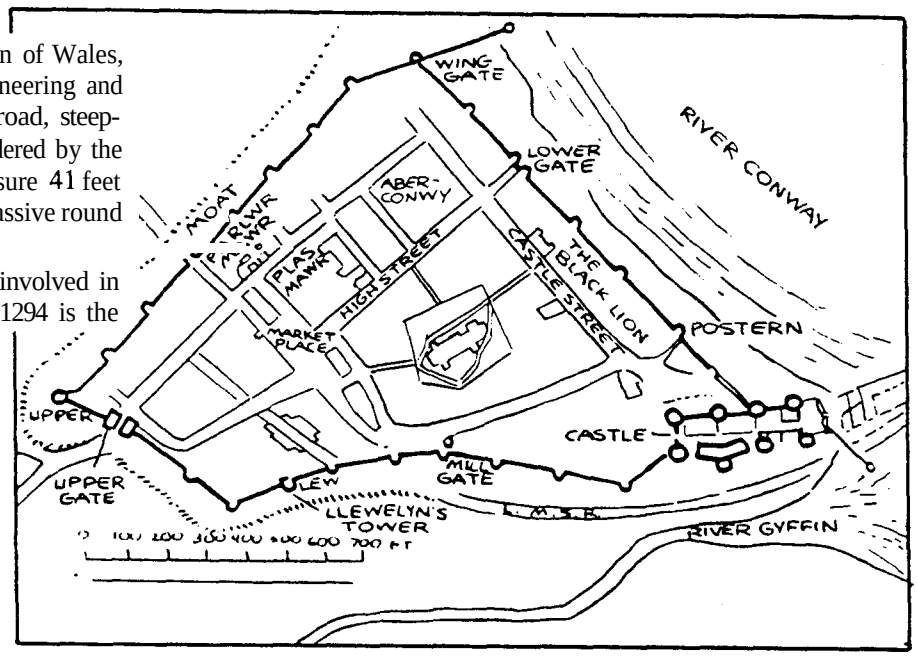
A fortified manor house with no known history. It was probably built in the 1400's, and was extensively rebuilt in the 1800's.

Conway Castle



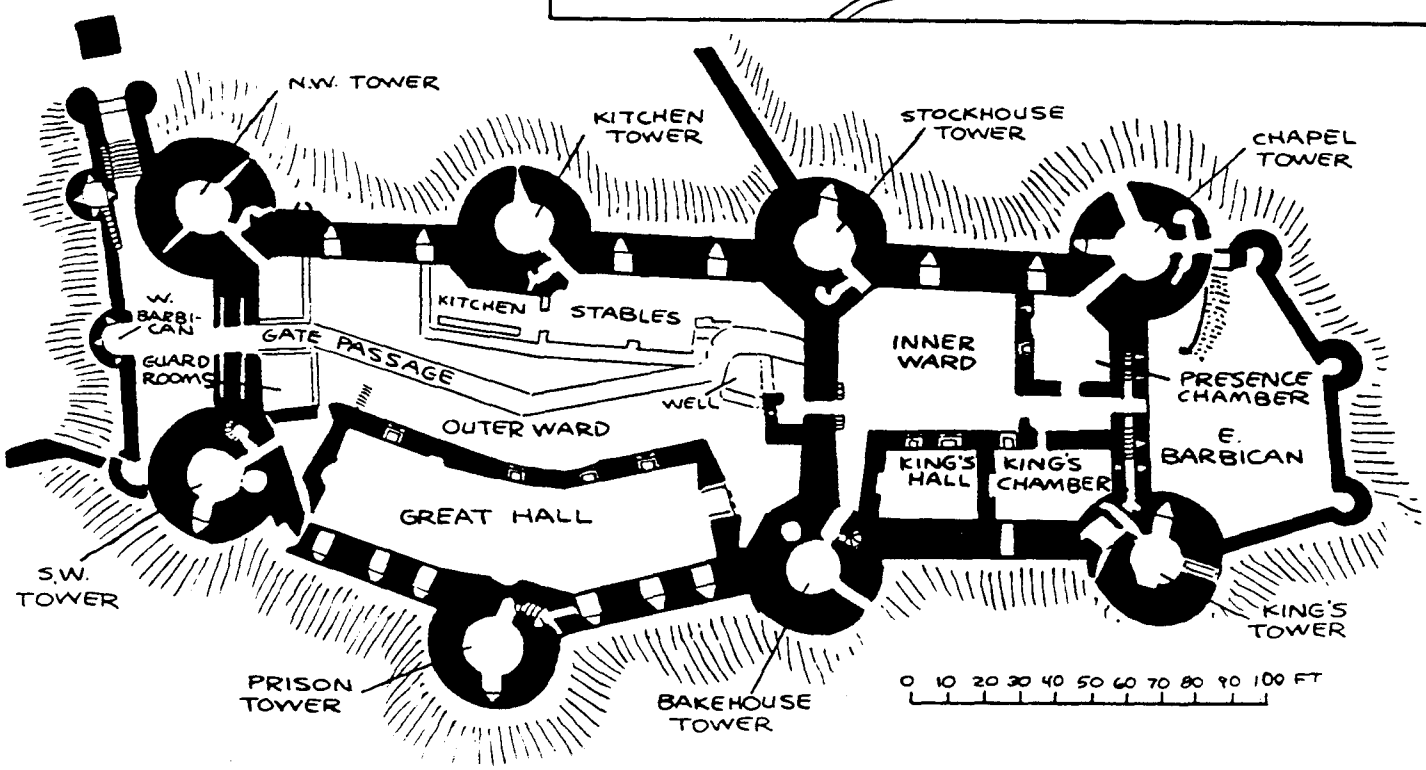
Begun in 1283 as part of Edward I's subjugation of Wales, Conway is one of the masterpieces of military engineering and design. Completed in 1292, Conway stands on a broad, steep-sided rock to the southwest of the town and is bordered by the river Conway, and the Gyffin brook. The walls measure 41 feet (12.5m) thick in some locations, and connect right massive round towers.

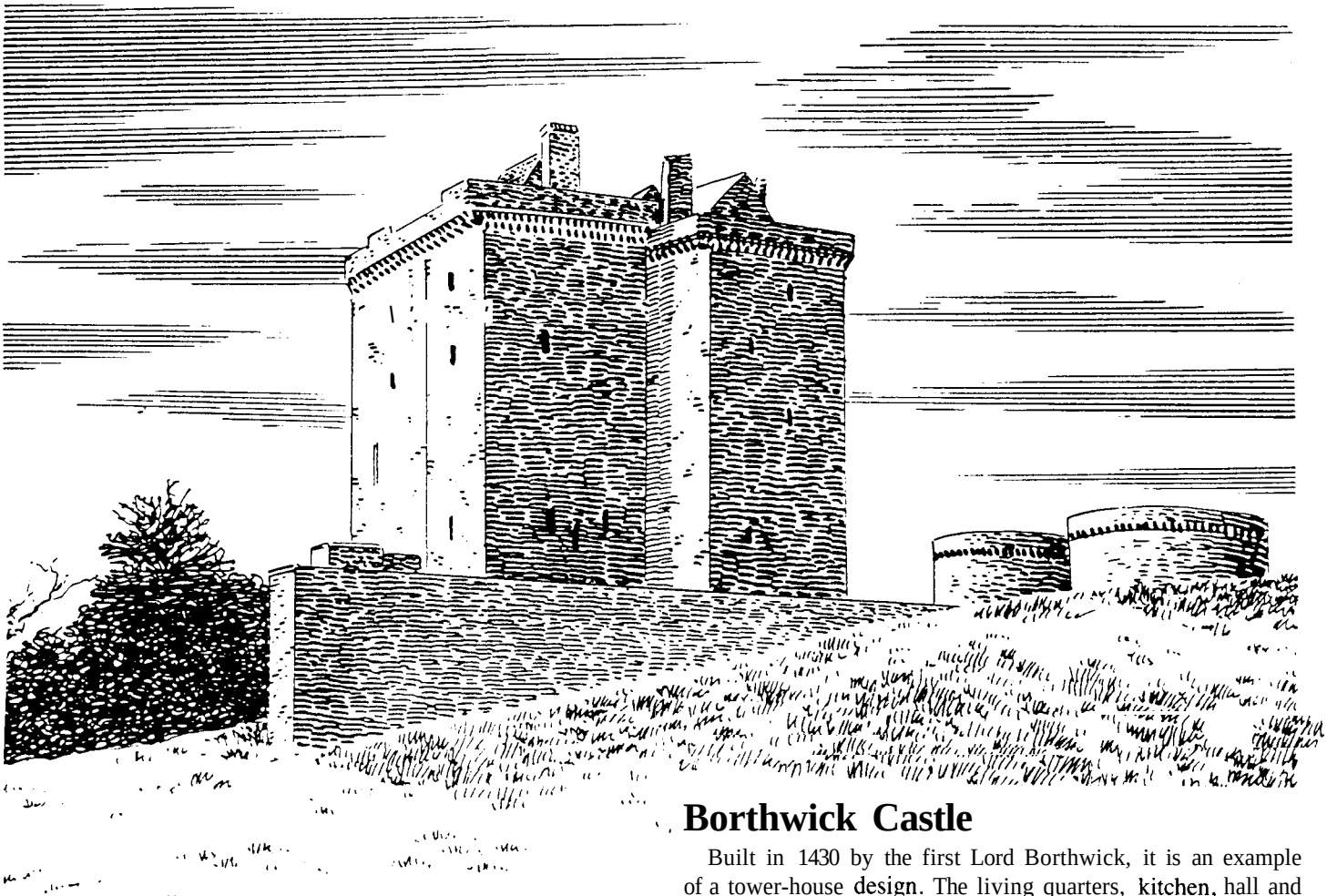
As with most large castles, Conway was never involved in serious combat. A short siege by Welsh rebels in 1294 is the only notable military event in the castle's history.



WALL RATINGS
OUTER CITY WALLS 1
CASTLE WALLS 3

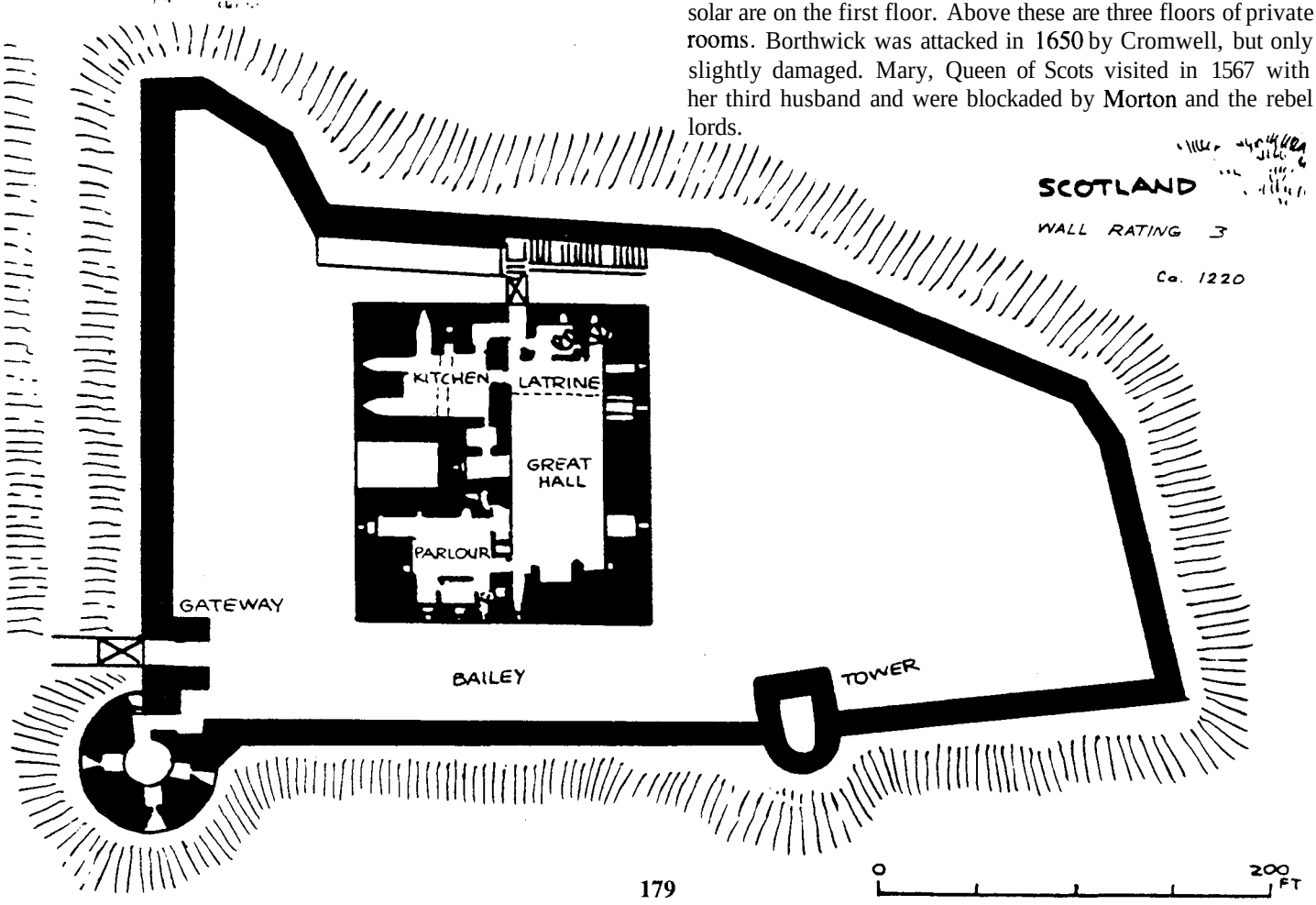
WALES





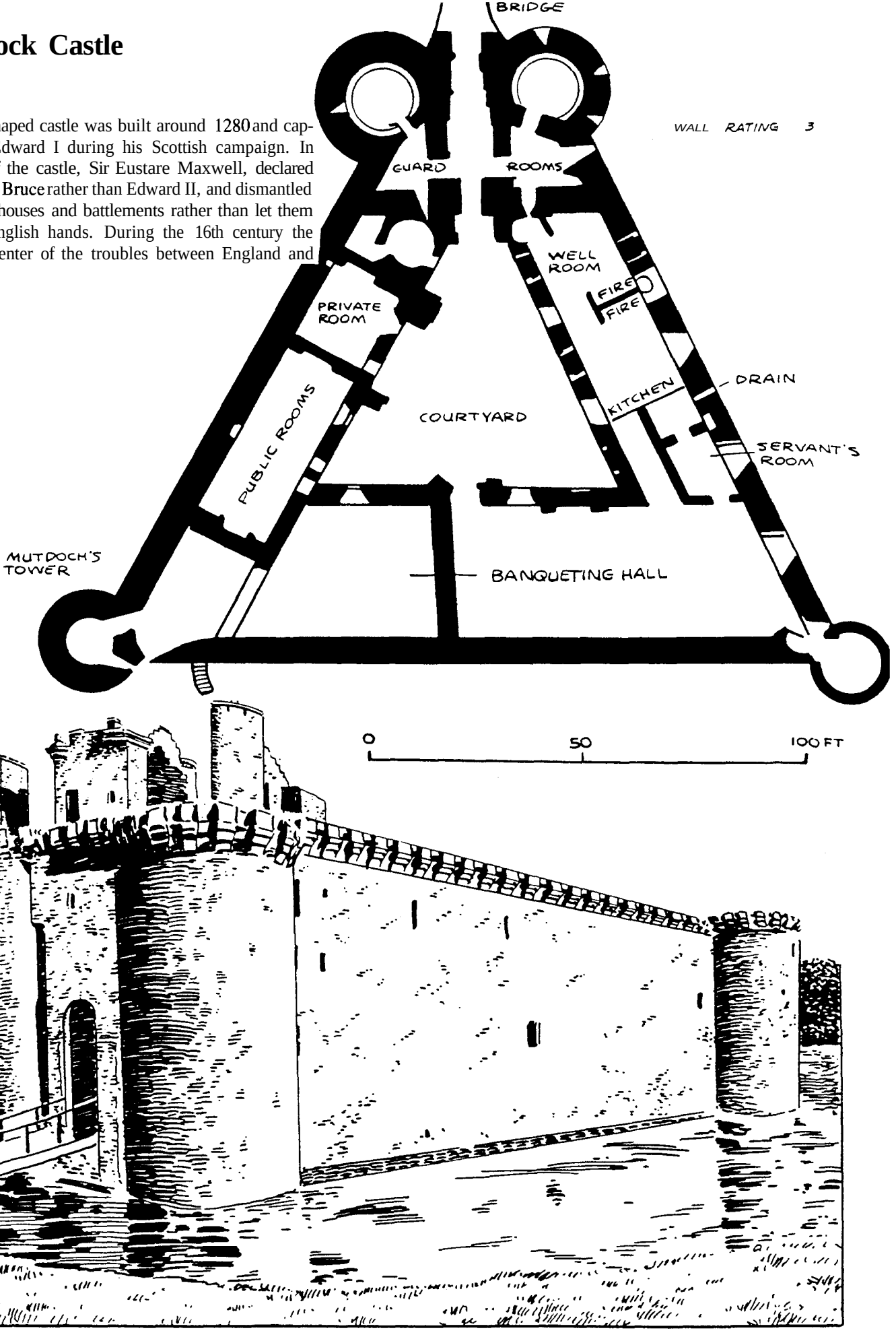
Borthwick Castle

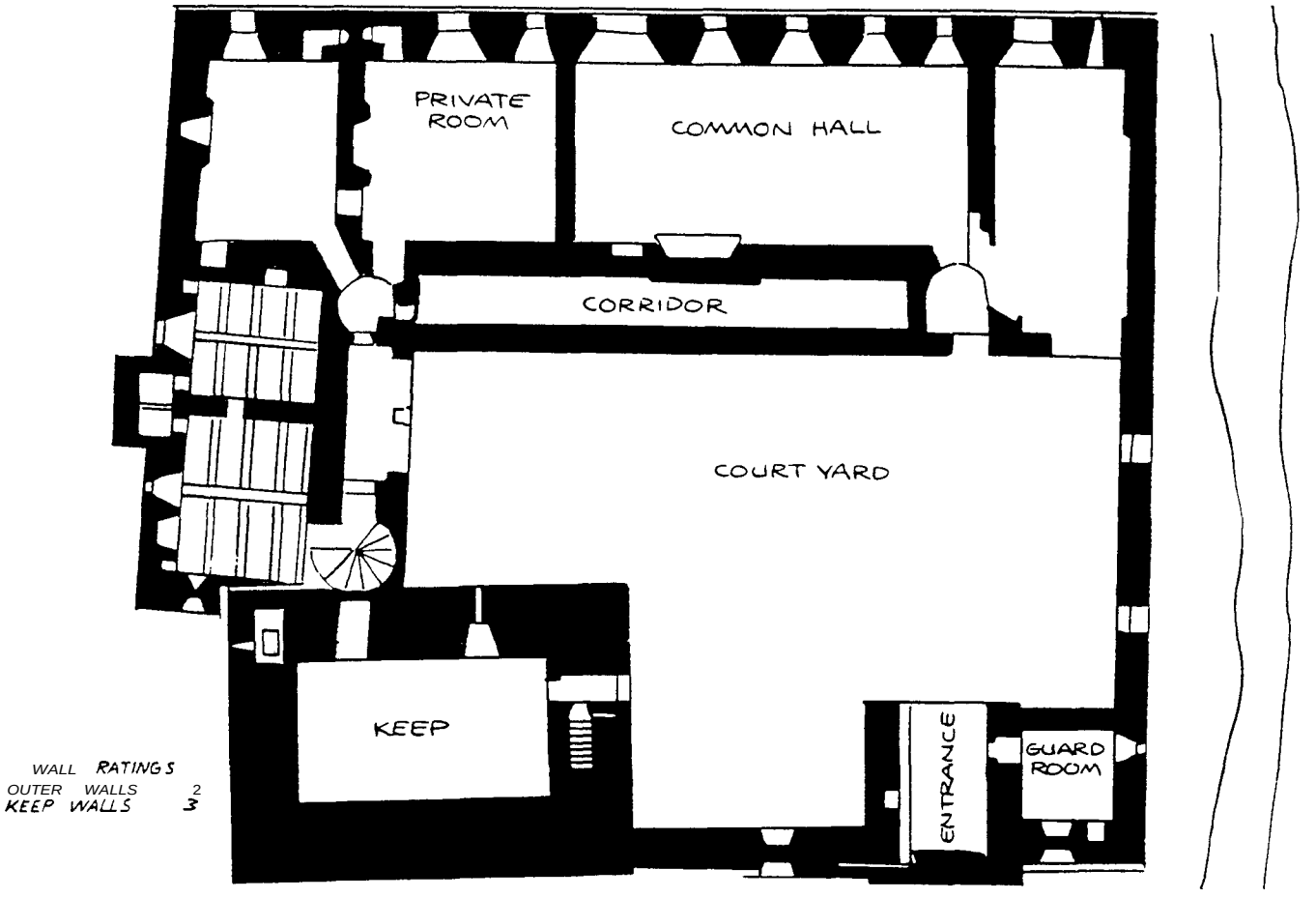
Built in 1430 by the first Lord Borthwick, it is an example of a tower-house design. The living quarters, kitchen, hall and solar are on the first floor. Above these are three floors of private rooms. Borthwick was attacked in 1650 by Cromwell, but only slightly damaged. Mary, Queen of Scots visited in 1567 with her third husband and were blockaded by Morton and the rebel lords.



Caerlaverock Castle

This triangular shaped castle was built around 1280 and captured in 1300 by Edward I during his Scottish campaign. In 1313, the holder of the castle, Sir Eustare Maxwell, declared allegiance to Robert Bruce rather than Edward II, and dismantled portions of the gatehouses and battlements rather than let them fall, intact, into English hands. During the 16th century the castle was at the center of the troubles between England and Scotland.



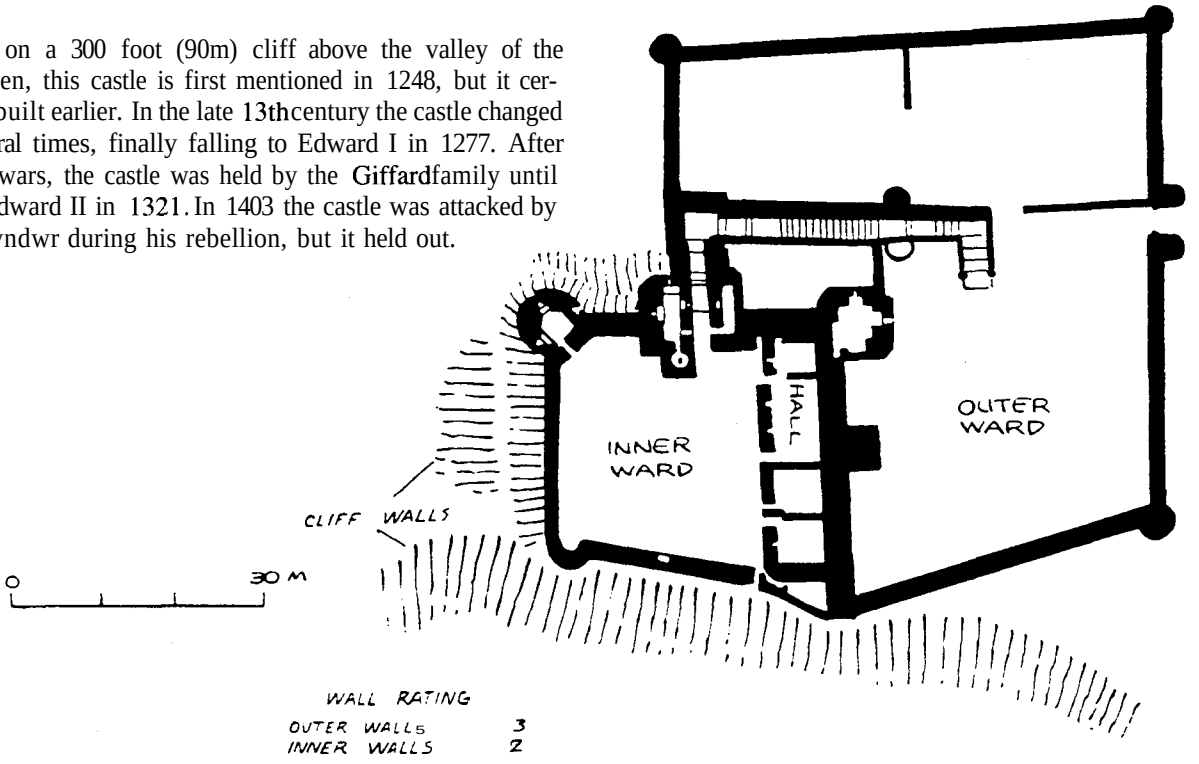


Campbell

Originally the stronghold of the Stewarts of Lome and Innerweath, this castle came to the Campbells through marriage. In 1457, Cohn, Earl of Argyll built the castle.

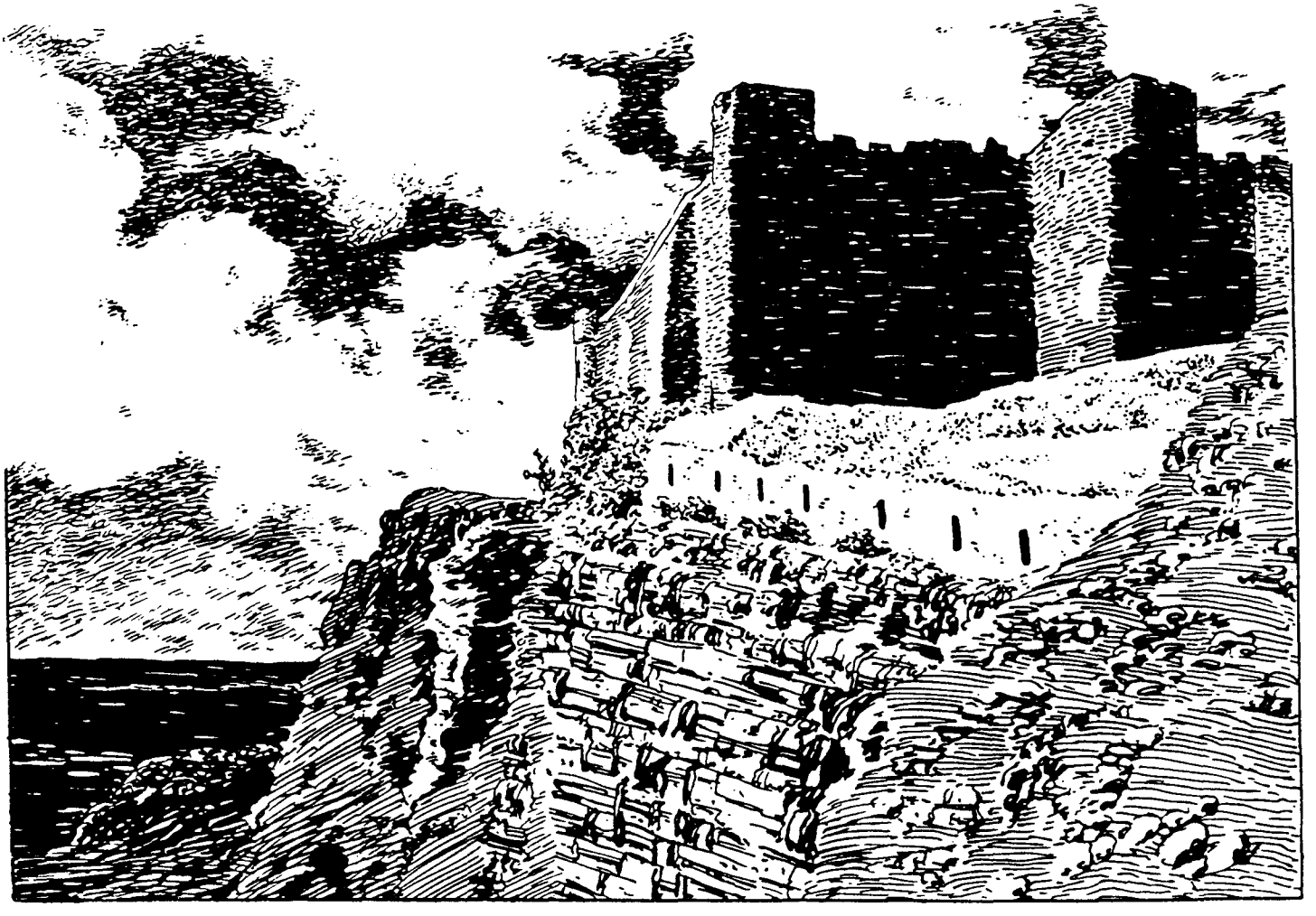
Carreg Cennen

Situated on a 300 foot (90m) cliff above the valley of the Afon Cennen, this castle is first mentioned in 1248, but it certainly was built earlier. In the late 13th century the castle changed hands several times, finally falling to Edward I in 1277. After the Welsh wars, the castle was held by the Giffard family until taken by Edward II in 1321. In 1403 the castle was attacked by Orvain Glyndwr during his rebellion, but it held out.

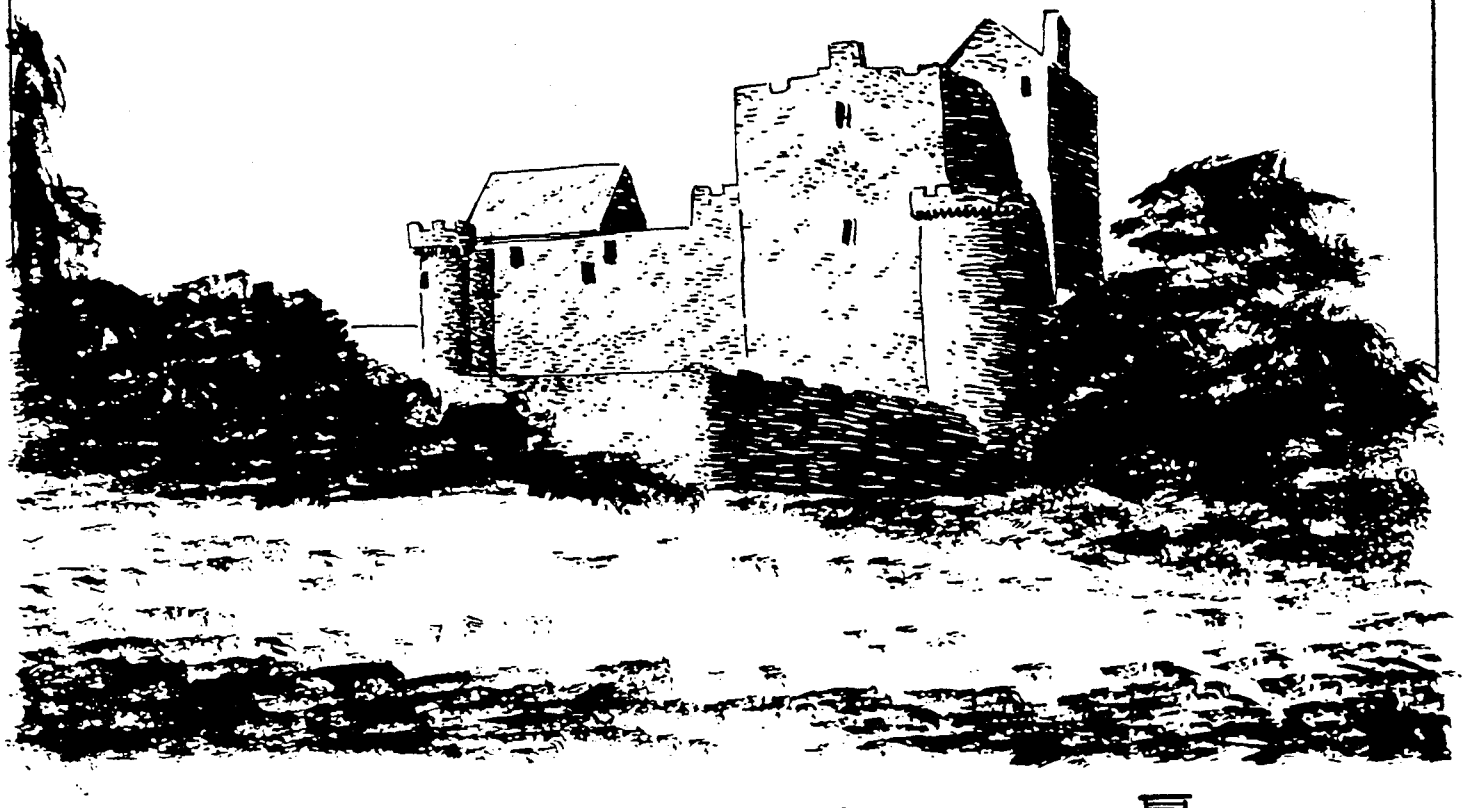


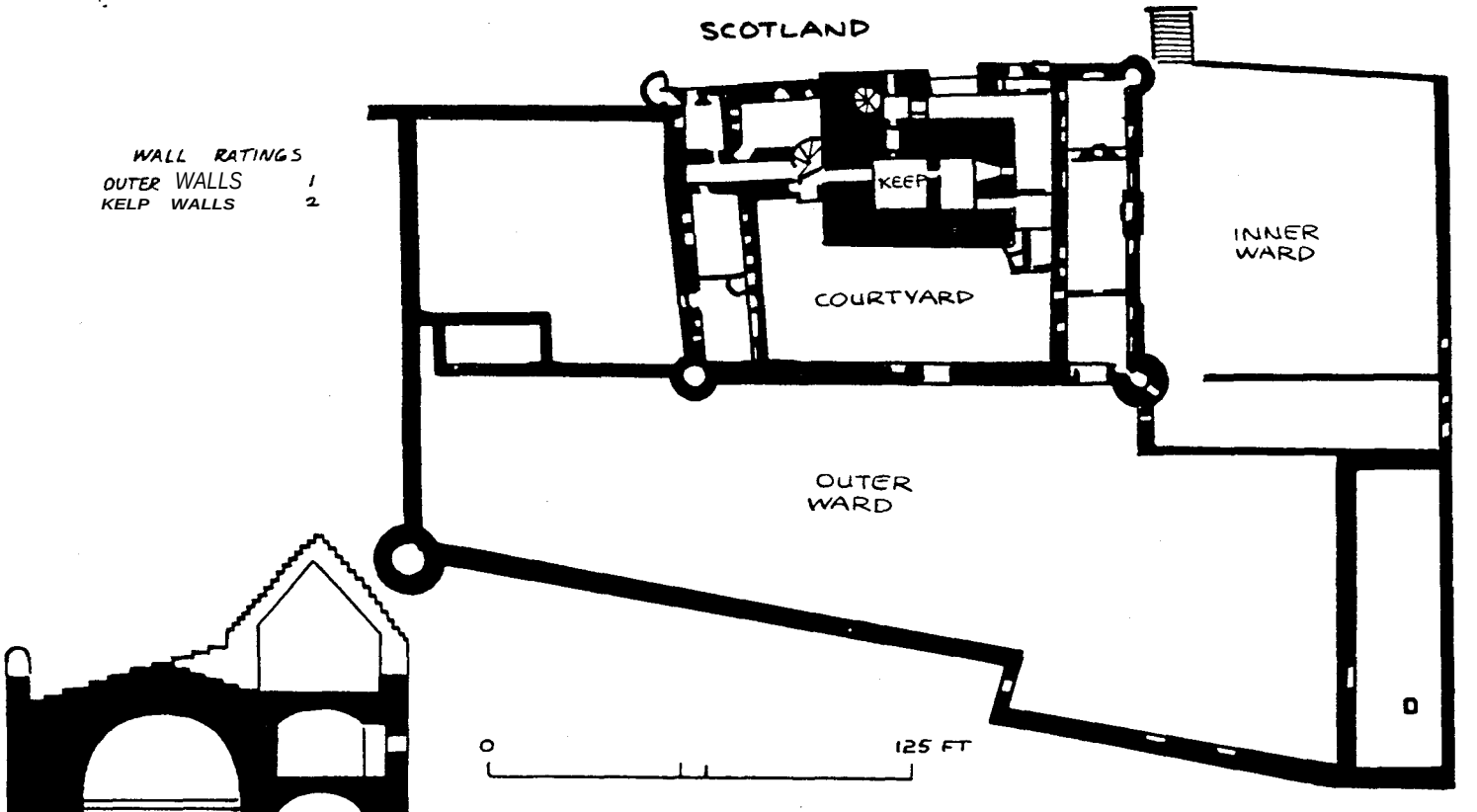
WALL RATING

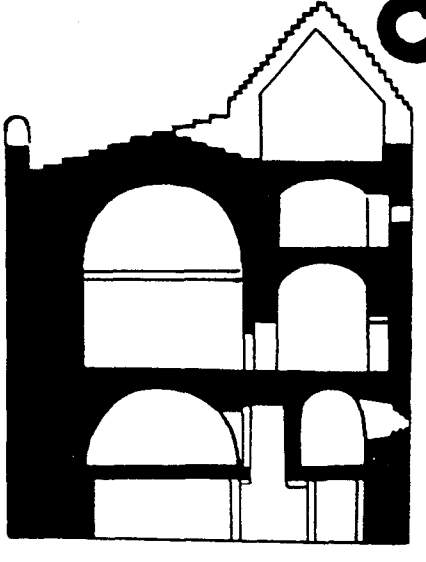
OUTER WALLS	3
INNER WALLS	2



Craigmillar Castle

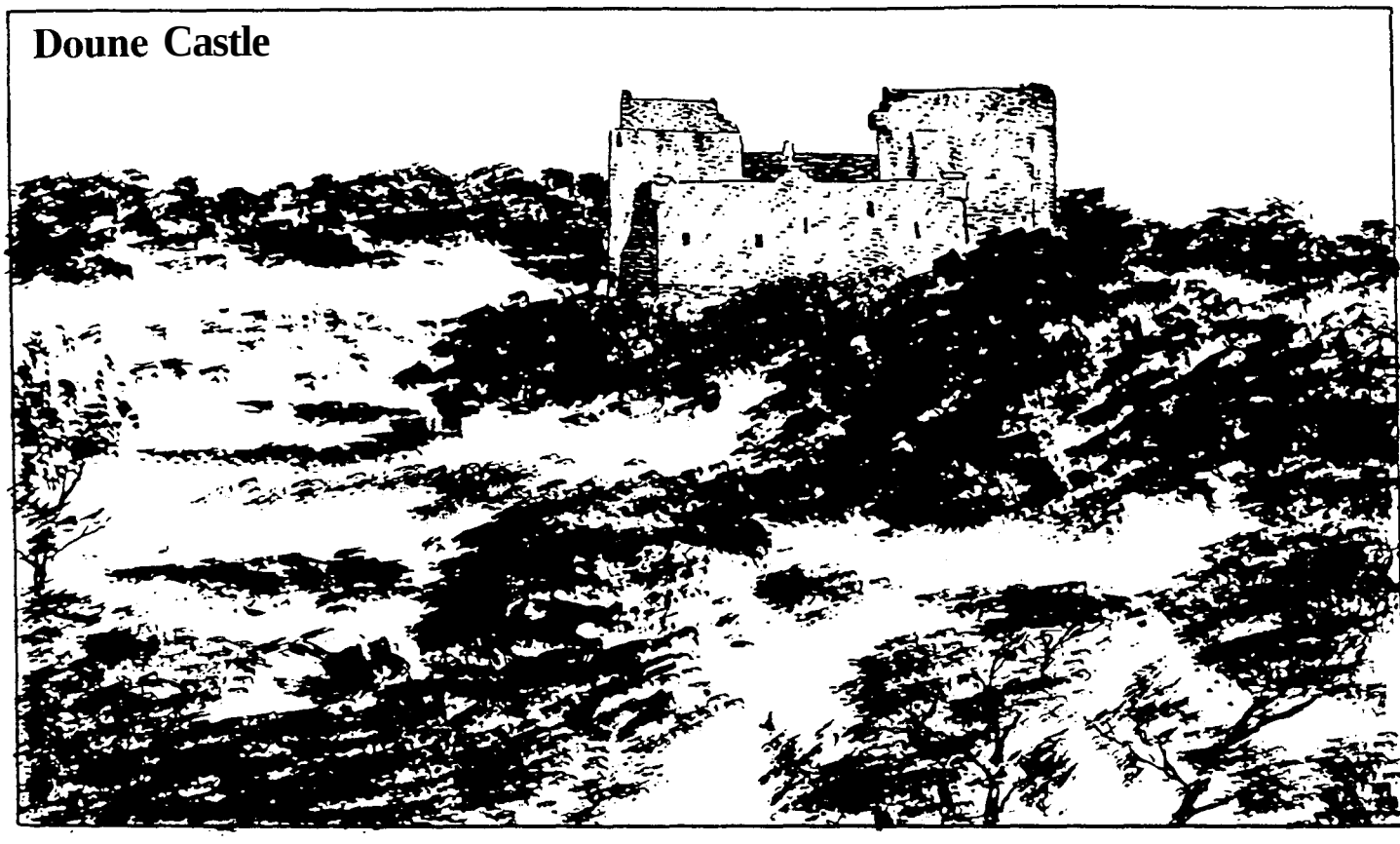




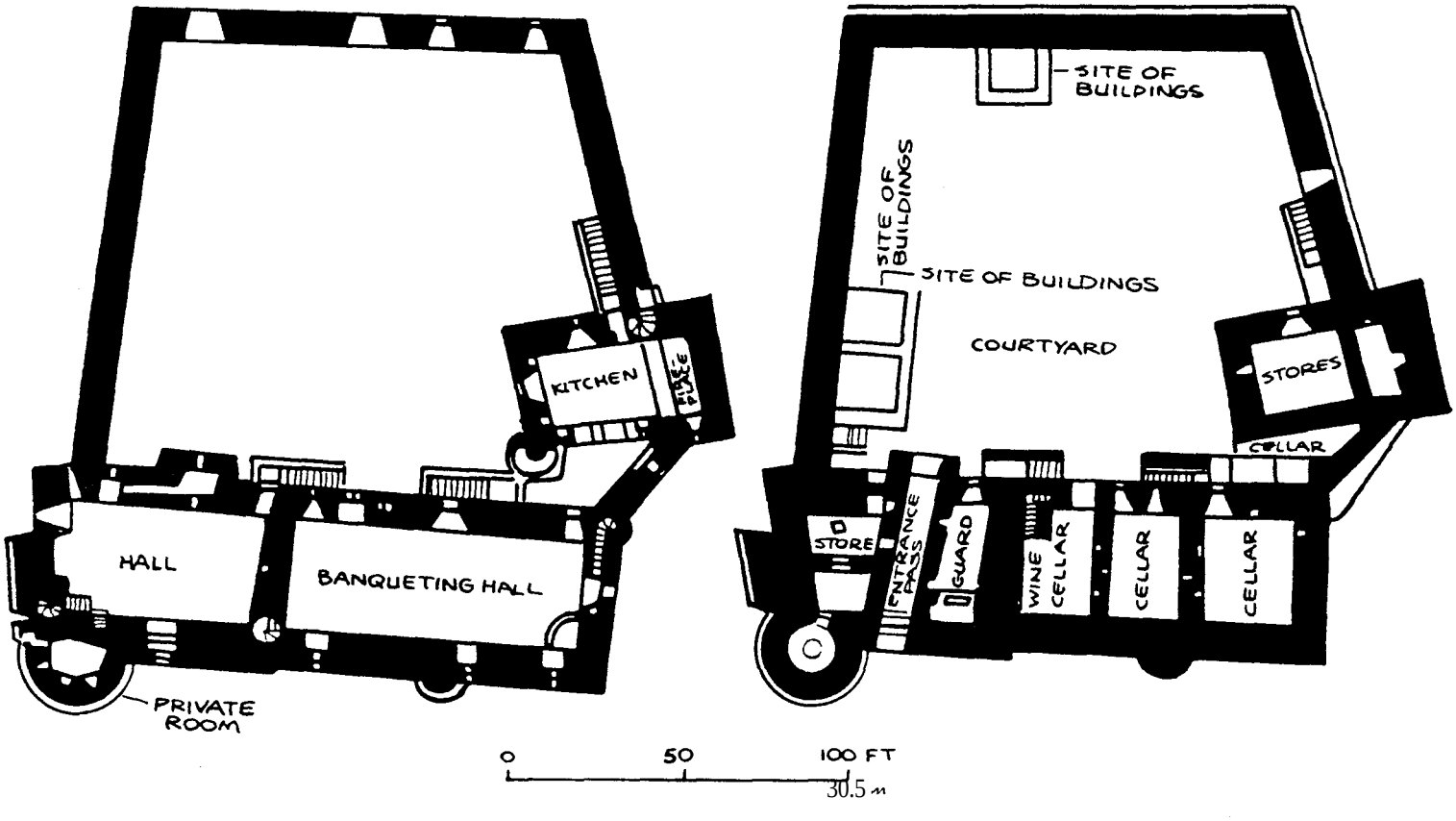


Built around 1347 by the Preston family, this castle was a popular place for the Stuart kings due to its proximity to Edinburgh and its strength. It was burnt in 1544 by English forces under Hertford, but remained occupied. In 1566, young Queen Mary resided here while seeking peace from her turbulent times.

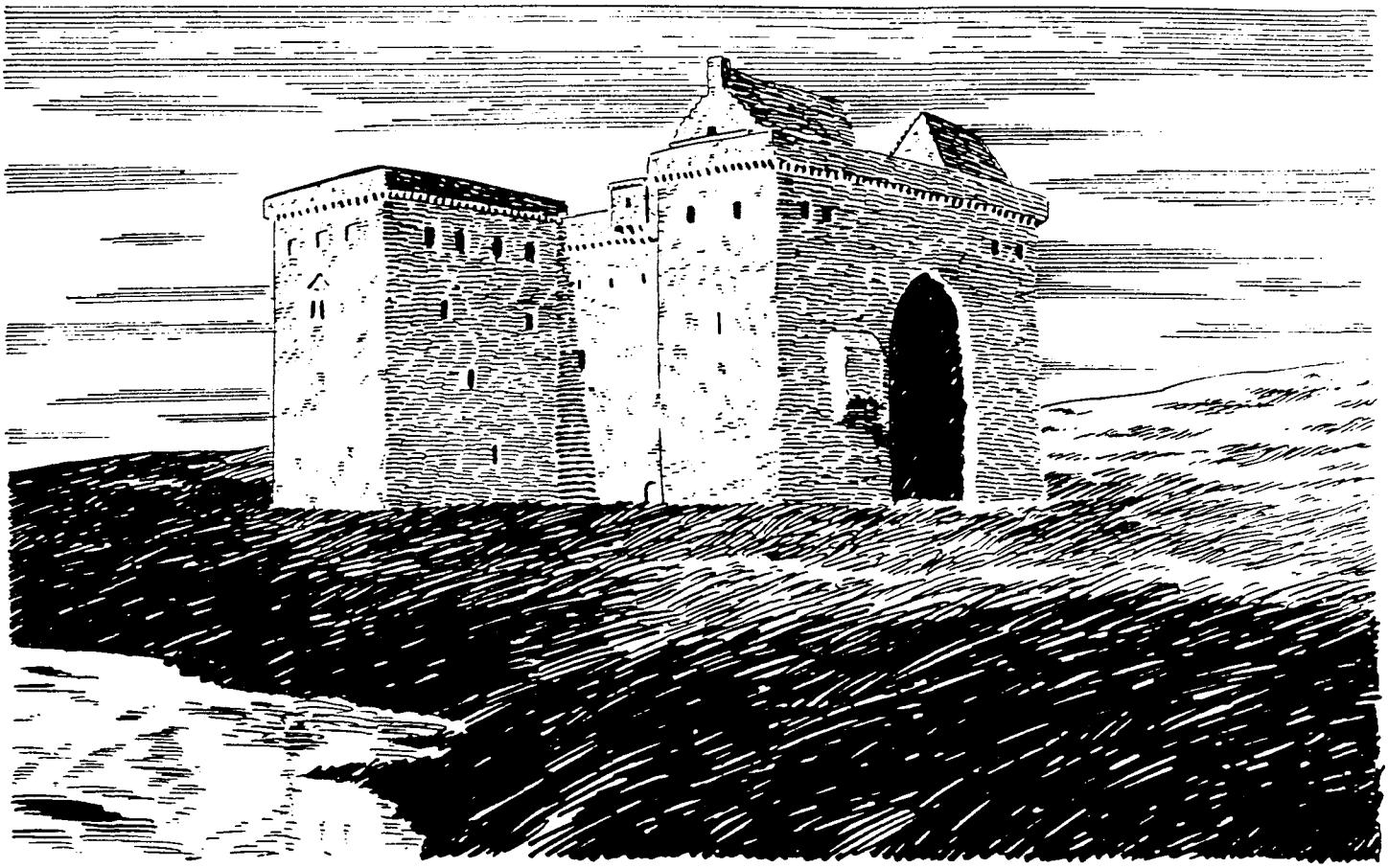
Doune Castle

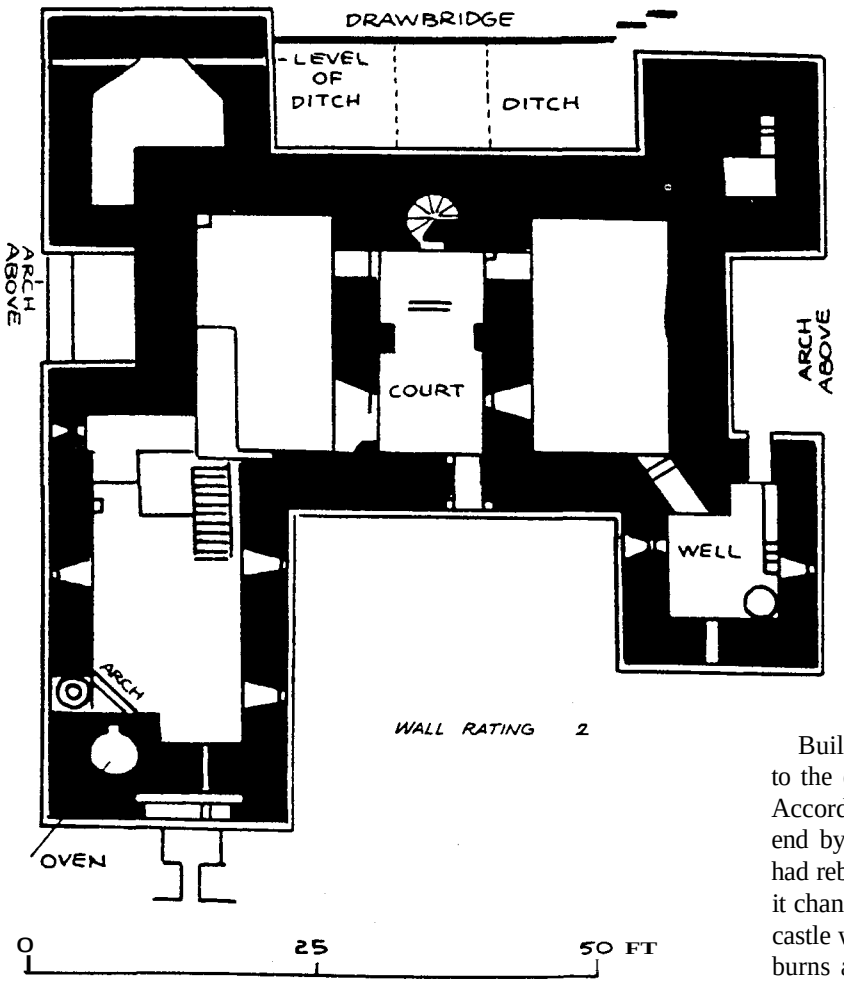


WALL RATING 3



Built in the late 14th century by Robert Stewart, Duke of Albany and Regent of Scotland, Doune Castle was meant to serve as the chief base of the Earldom of Menteith. In 1420 the property passed to Murdoch Stewart. In 1425 Murdoch, his son Alexander, and father-in-law were beheaded on a hill within the sight of Doune for "unconstitutional violence." The castle was confiscated by the king and used as a royal residence and later, a state prison. In 1570 the castle was besieged and taken by Regent Lennox. The castle later became property of the Earls of Moray.

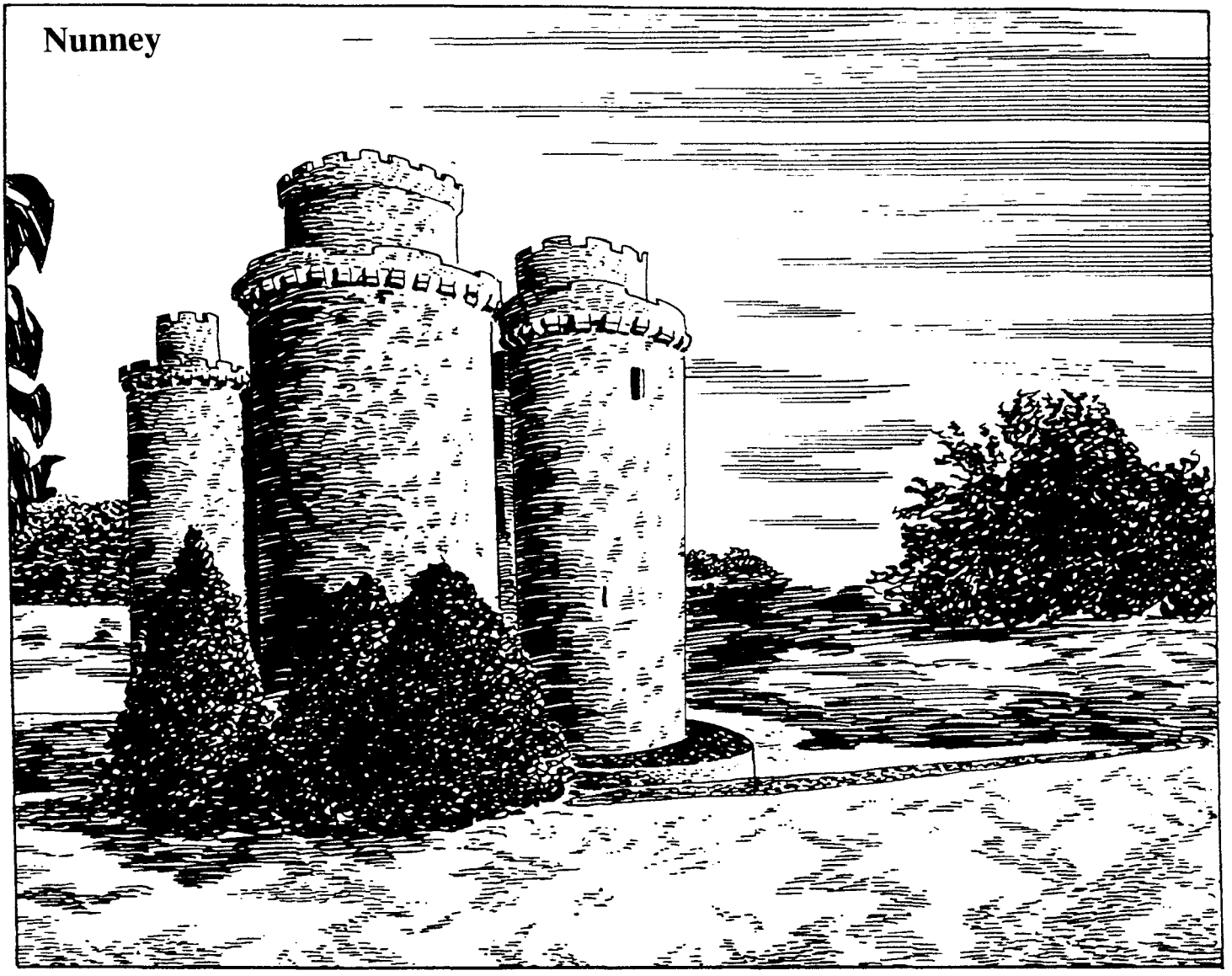




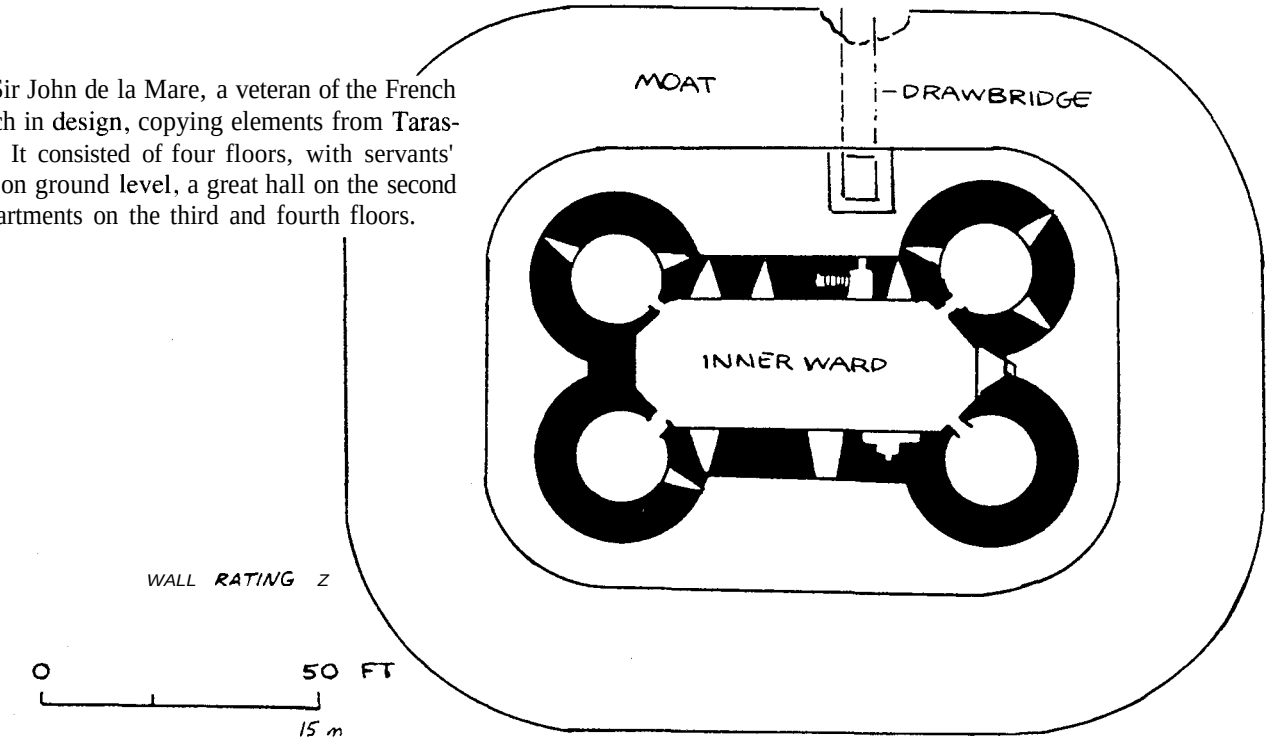
Hermitage Castle

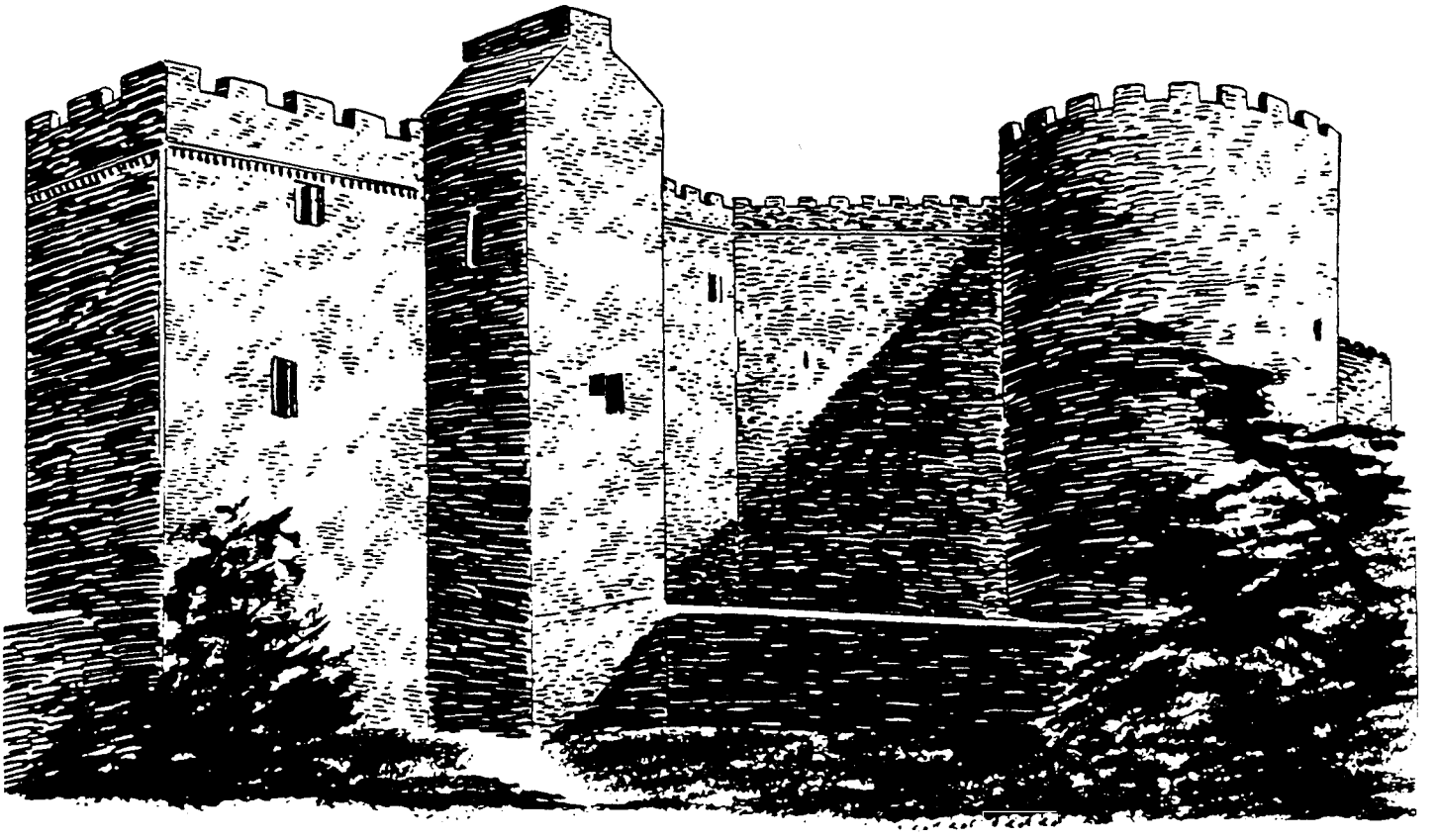
Built in the 13th century, Hermitage Castle originally belonged to the de Sonlis family, hereditary Kings' Butlers of Scotland. According to legend, the original owner, Lord Sonlis, met his end by being boiled in a cauldron by the local populace who had rebelled against his excessive rule. During the 14th century it changed hands several times between English and Scots. The castle was held at various times by the Douglases, Dacres, Hepburns and the Dukes of Buccleugh.

Nunney

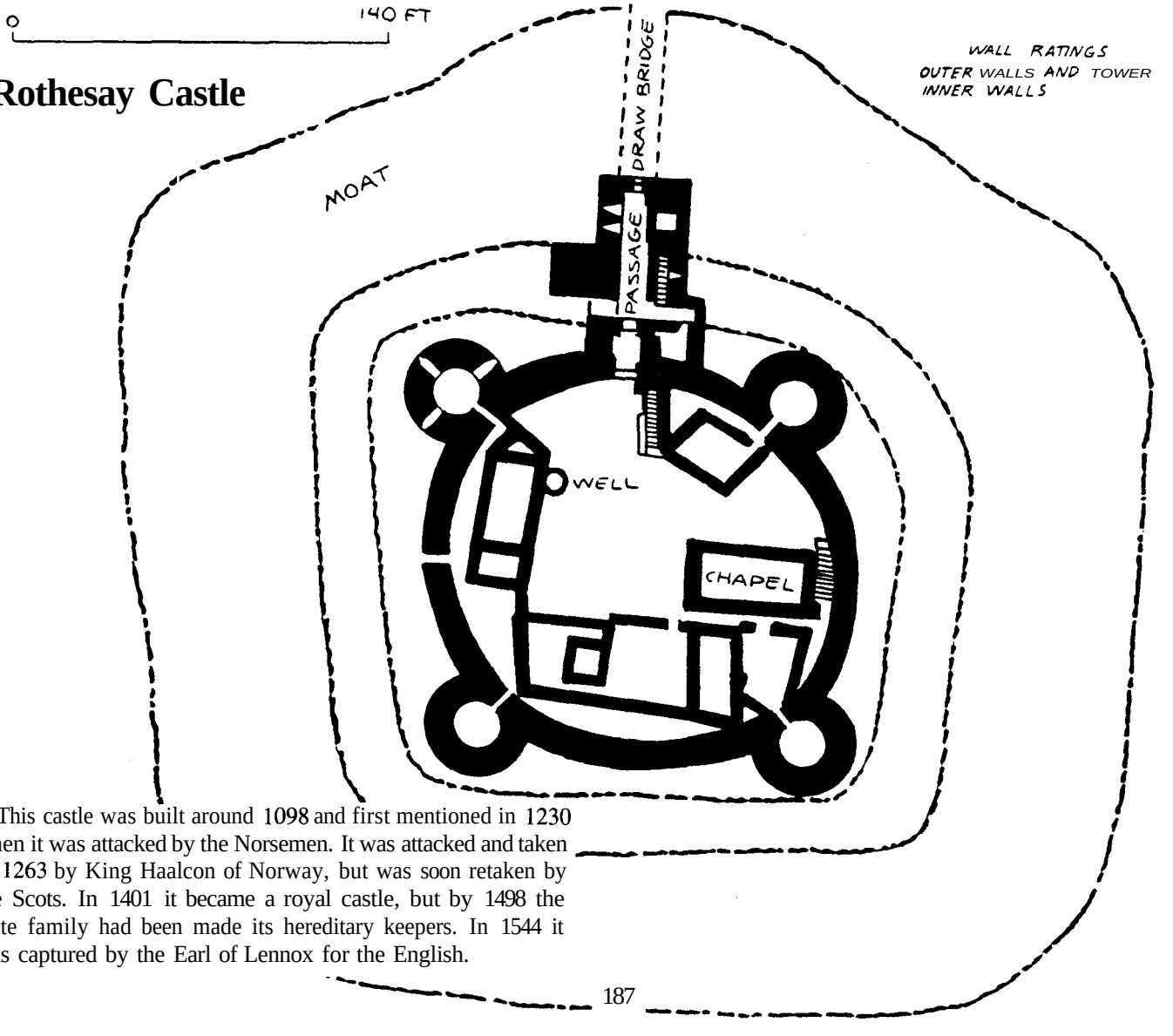


Built in 1373 by Sir John de la Mare, a veteran of the French wars. It is very French in design, copying elements from Tarascon and Pierrefonds. It consisted of four floors, with servants' quarters and kitchen on ground level, a great hall on the second level, and family apartments on the third and fourth floors.





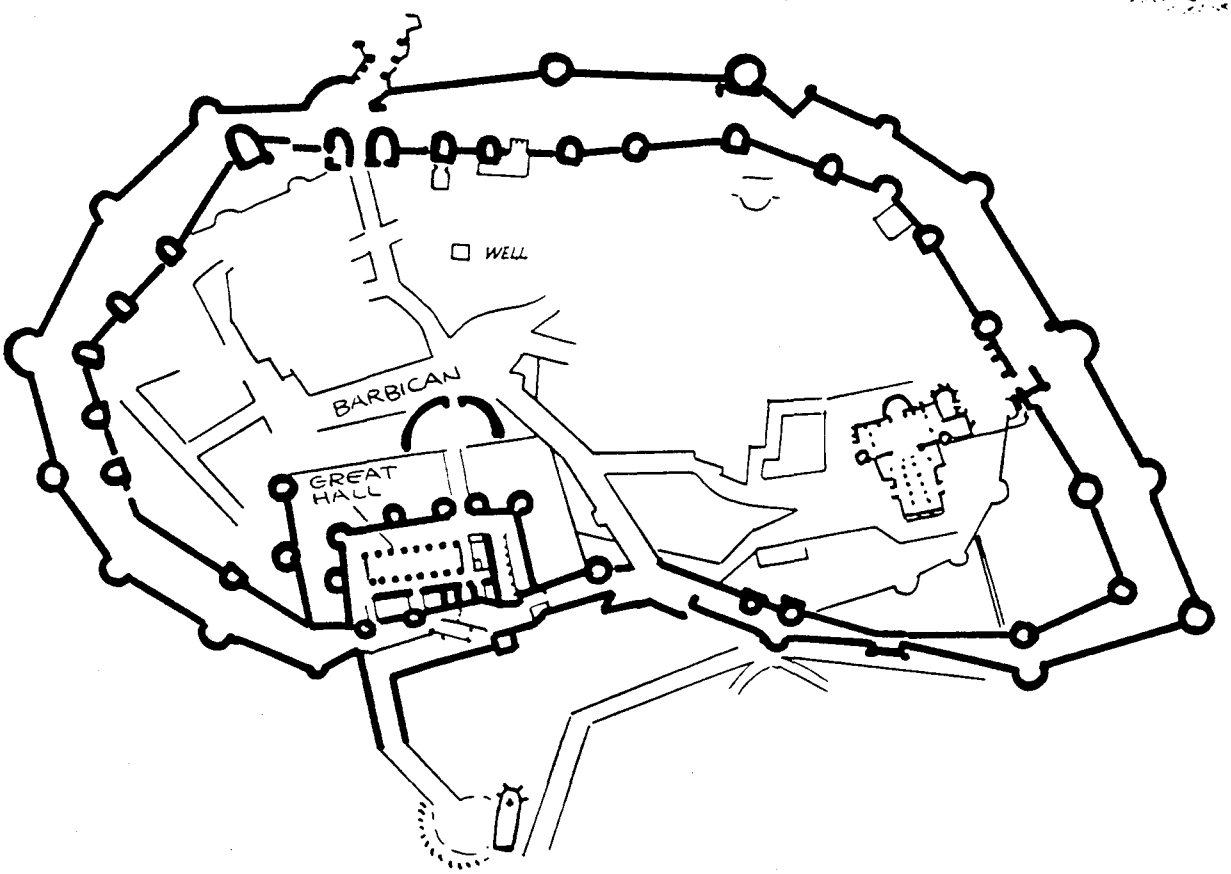
Rothesay Castle



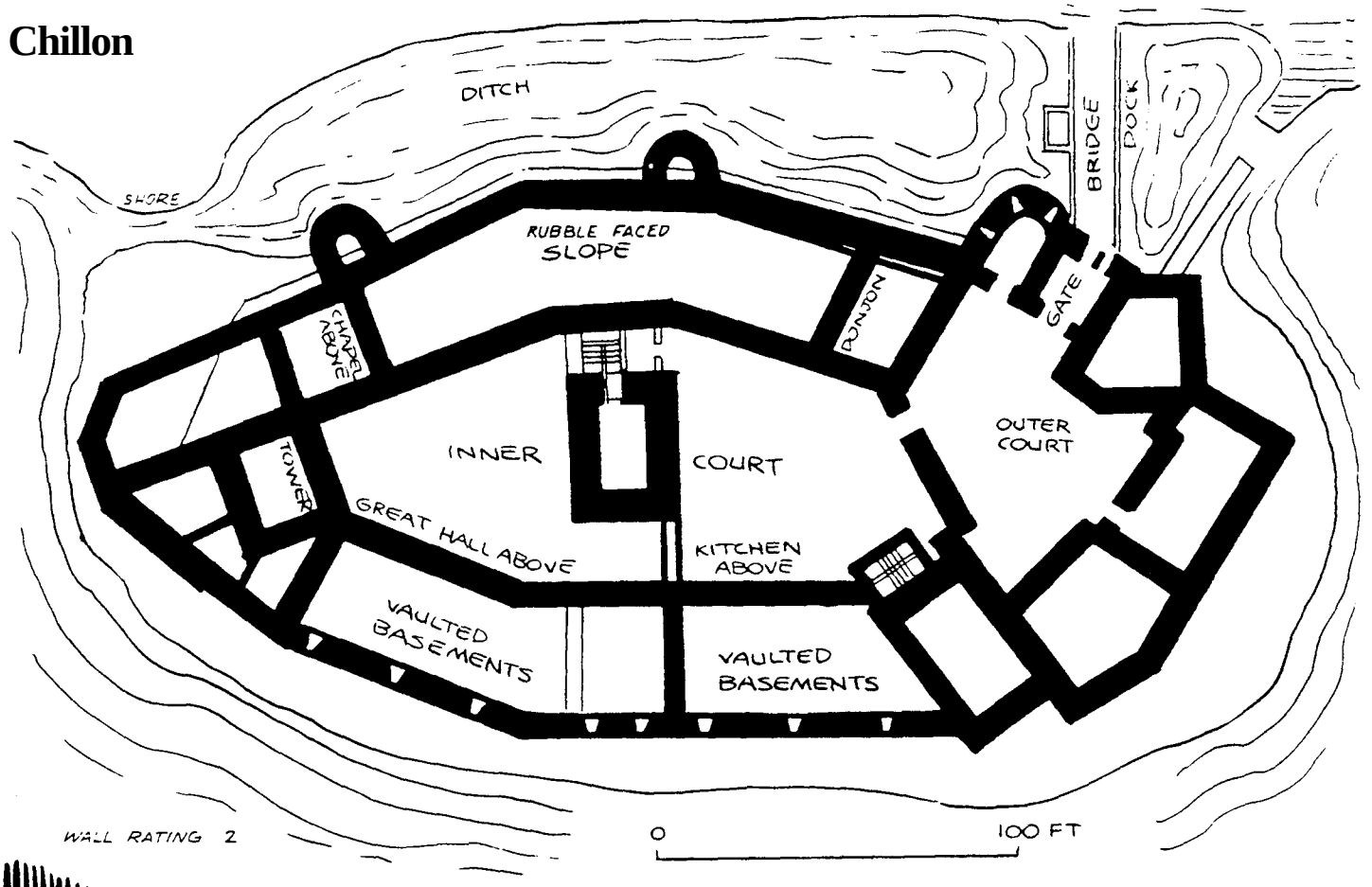
This castle was built around 1098 and first mentioned in 1230 when it was attacked by the Norsemen. It was attacked and taken in 1263 by King Haalcon of Norway, but was soon retaken by the Scots. In 1401 it became a royal castle, but by 1498 the Bute family had been made its hereditary keepers. In 1544 it was captured by the Earl of Lennox for the English.

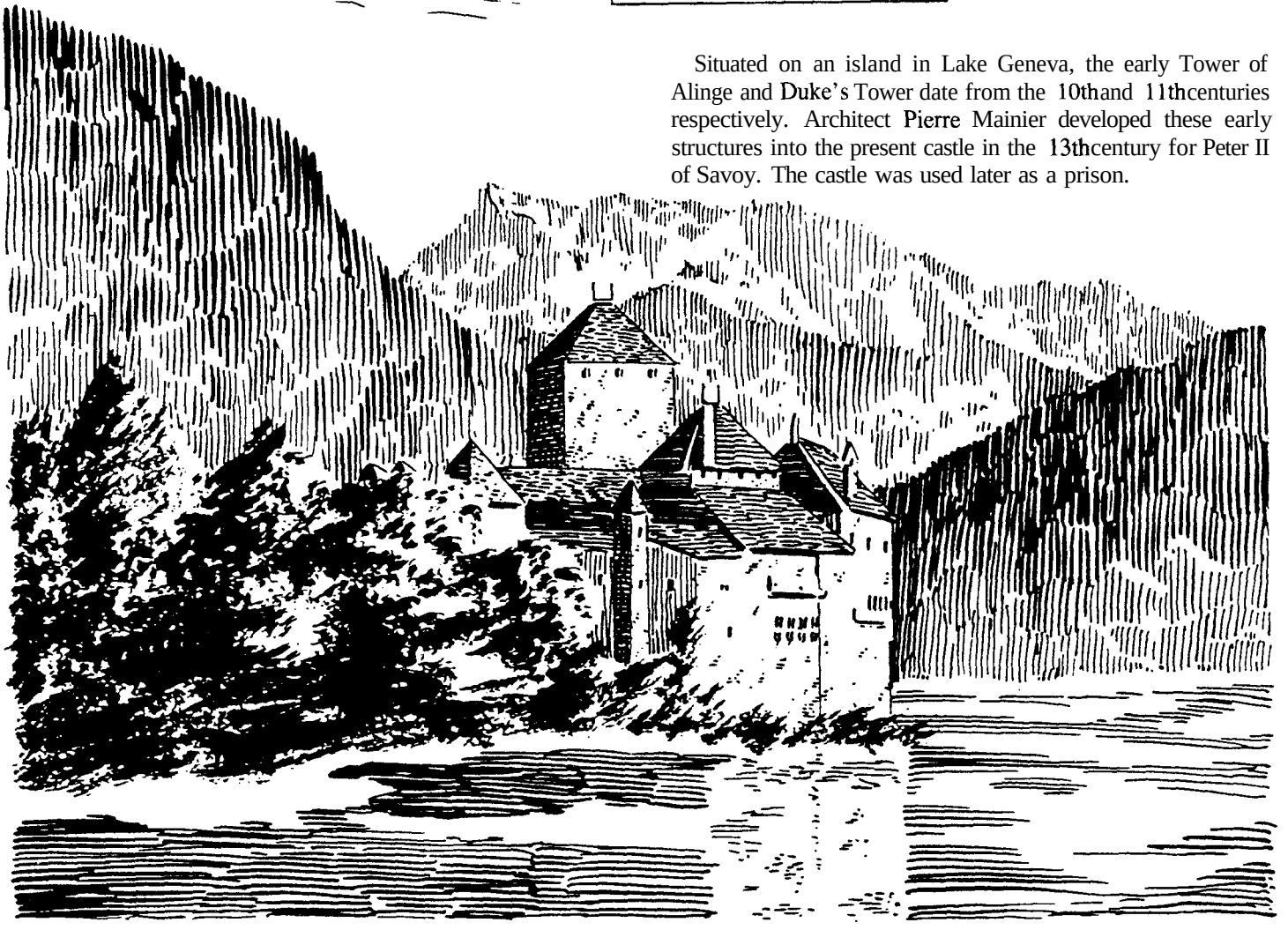
Carcassonne - France -

This fortified city, together with its attendant castle, was a check against the Moors north of the Pyrenees. Originally a single wall with towers dating from Roman times, extensive strengthening was undertaken after the siege of 1240, lasting 40 years. The existing wall was strengthened and its towers rebuilt. A second wall was built, leaving a narrow space, called the lists, between them. This helped make taking the city a very difficult task.



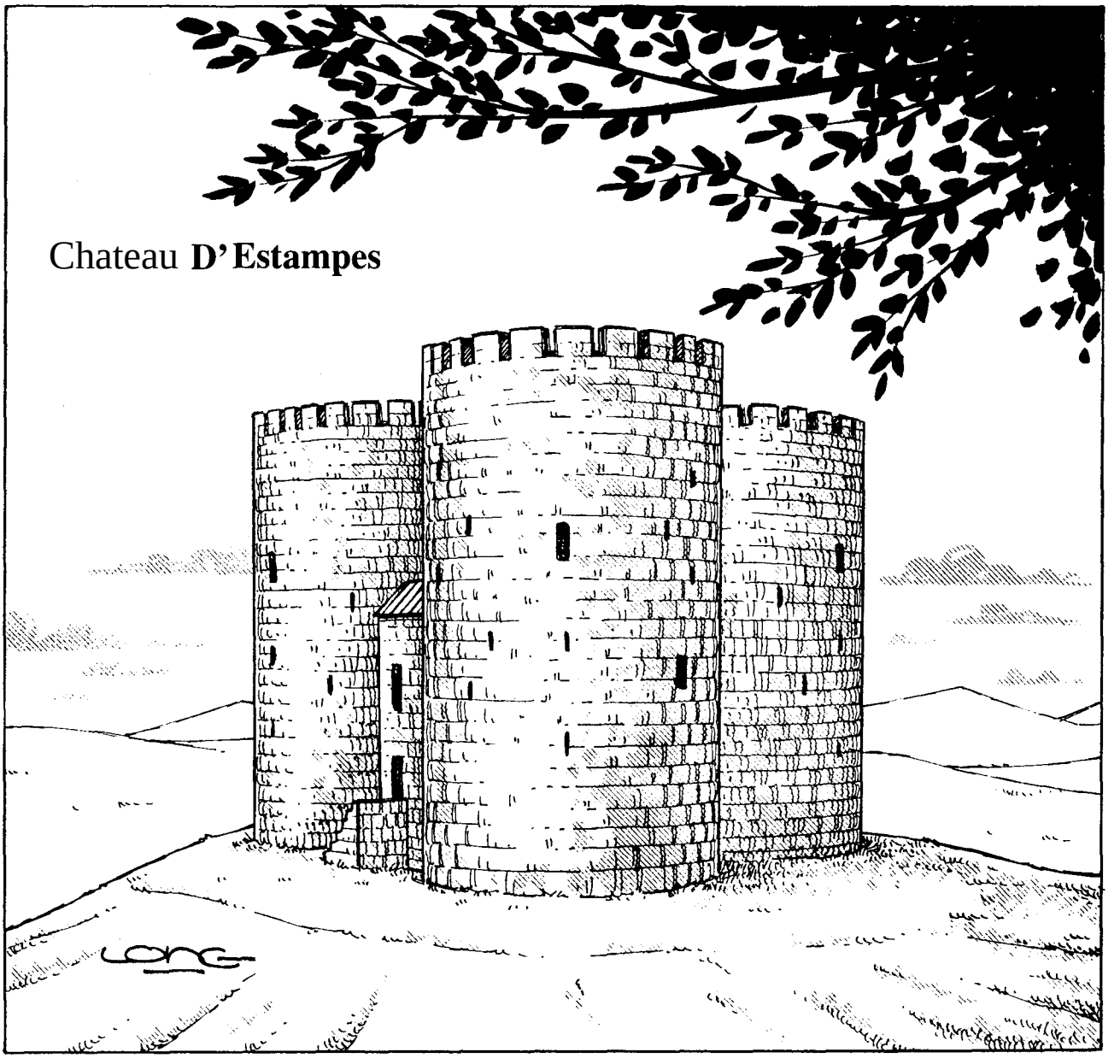
Chillon

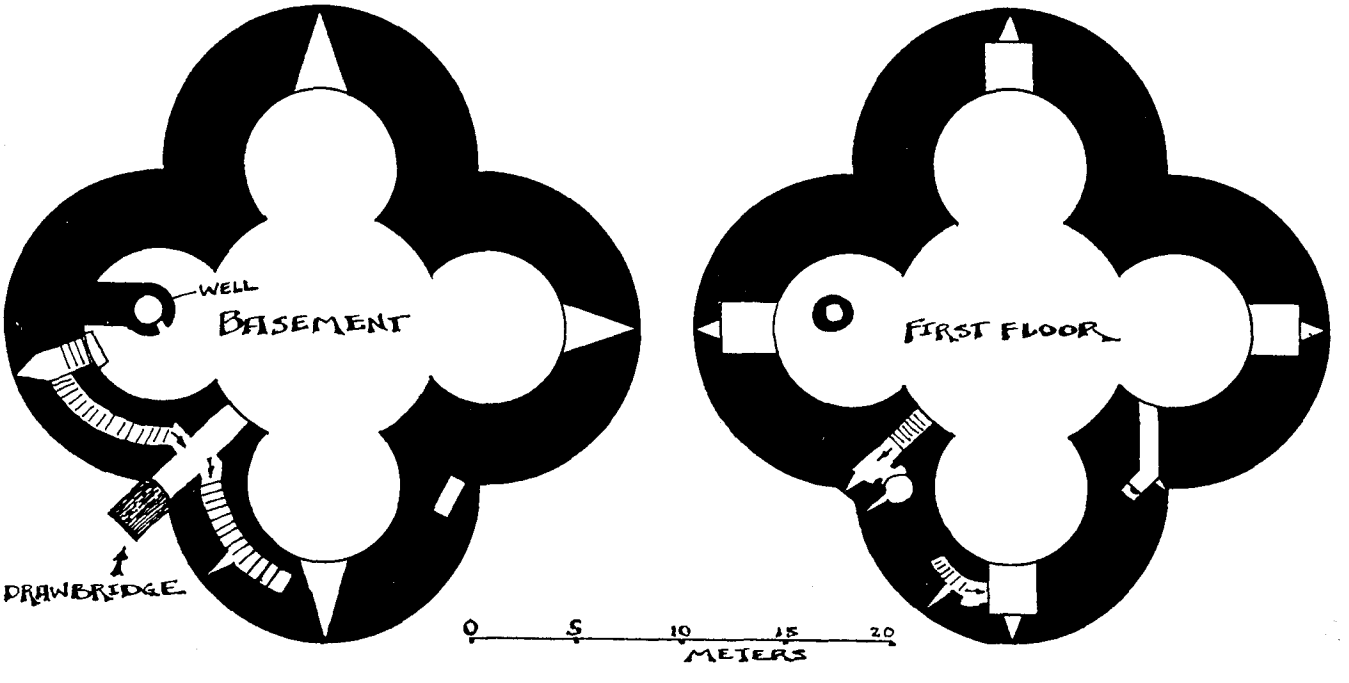




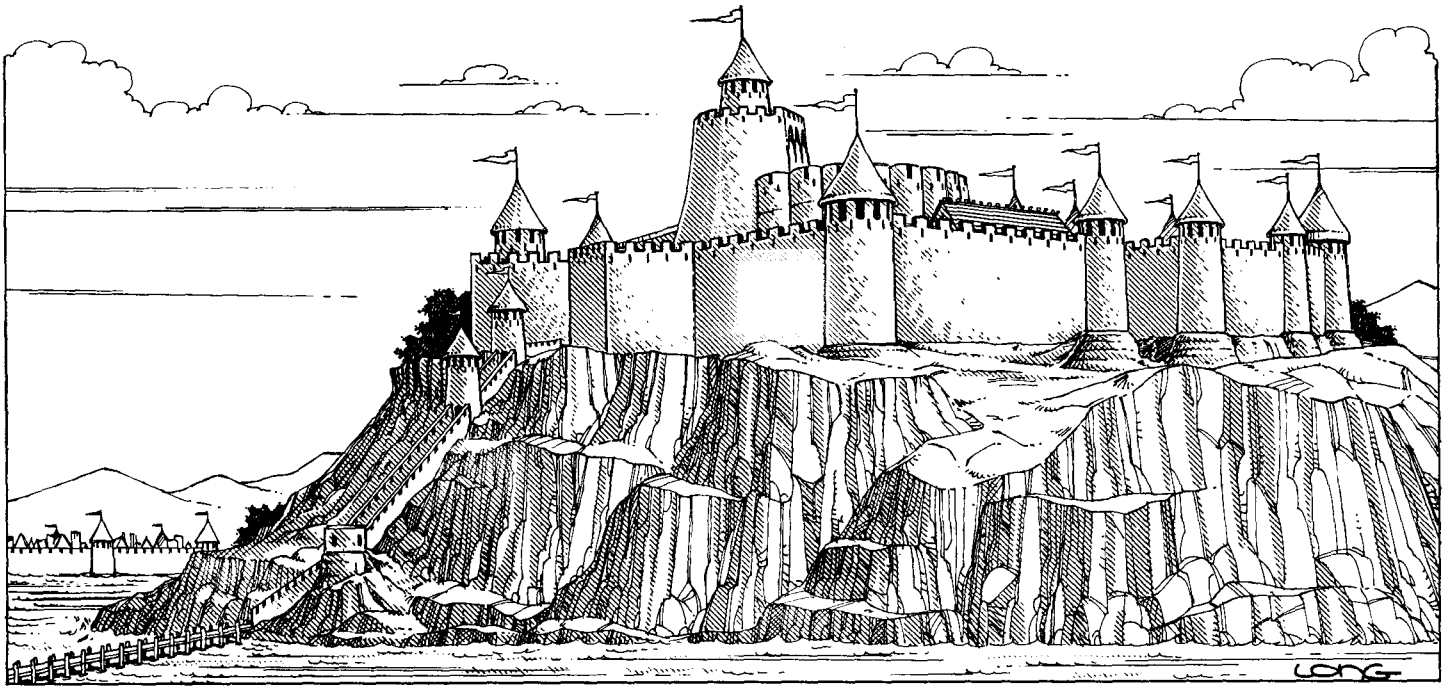
Situated on an island in Lake Geneva, the early Tower of Alinge and Duke's Tower date from the 10th and 11th centuries respectively. Architect Pierre Mainier developed these early structures into the present castle in the 13th century for Peter II of Savoy. The castle was used later as a prison.

Chateau **D'Estampes**



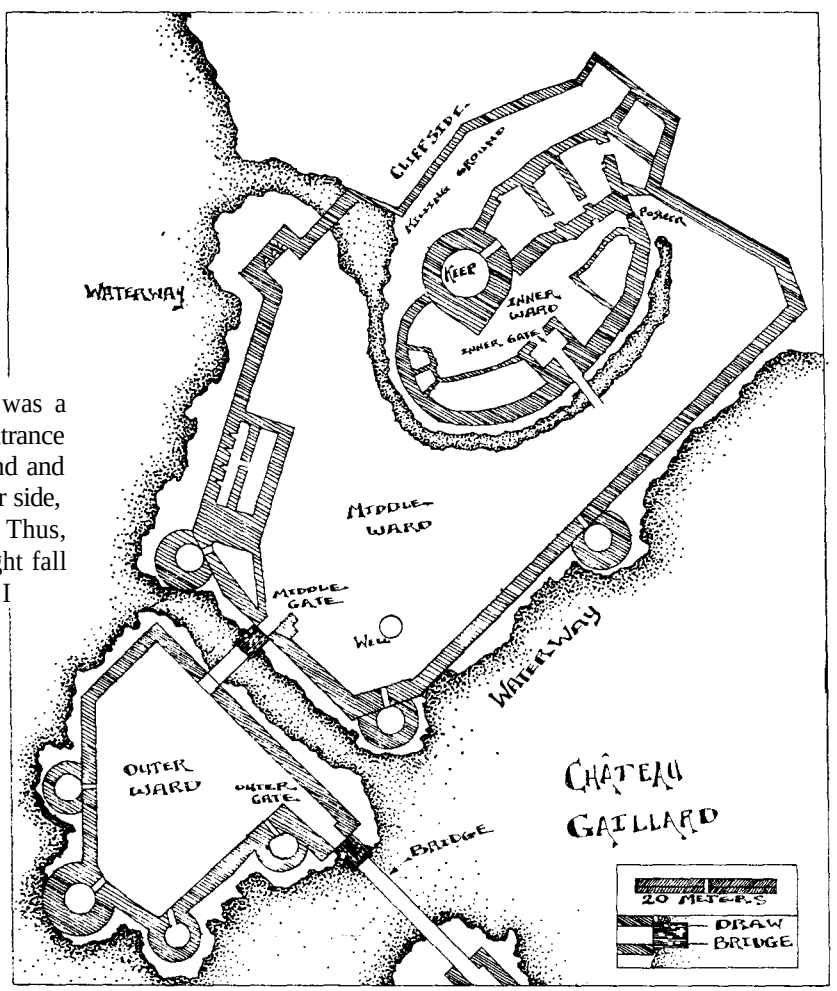


Chateau Gaillard



Built by Richard the Lionheart between 1196 and 1198 to defend Normandy and the Seine, Chateau Gaillard is situated on a plateau and cut off by ditches.

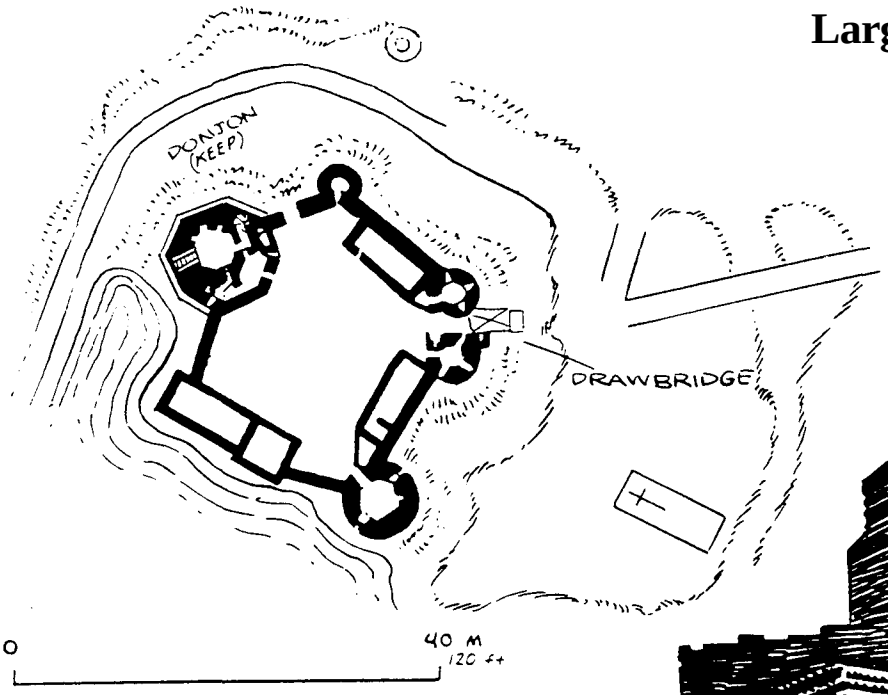
WALL RATINGS
OUTER WALLS/TOWERS 2
KEEPWALLS AND TOWERS 3



Chateau D'Estampes

Built around 1160, this three story quatrefoil donjon was a transition from the square keeps of earlier periods. The entrance doorway is placed midway between the level of the ground and second floors. Stairways leading up and down are to either side, and the entrance passage goes straight through the wall. Thus, an attacker who had just rushed through the doorway might fall to the floor below; a 12 foot drop (3.6m).

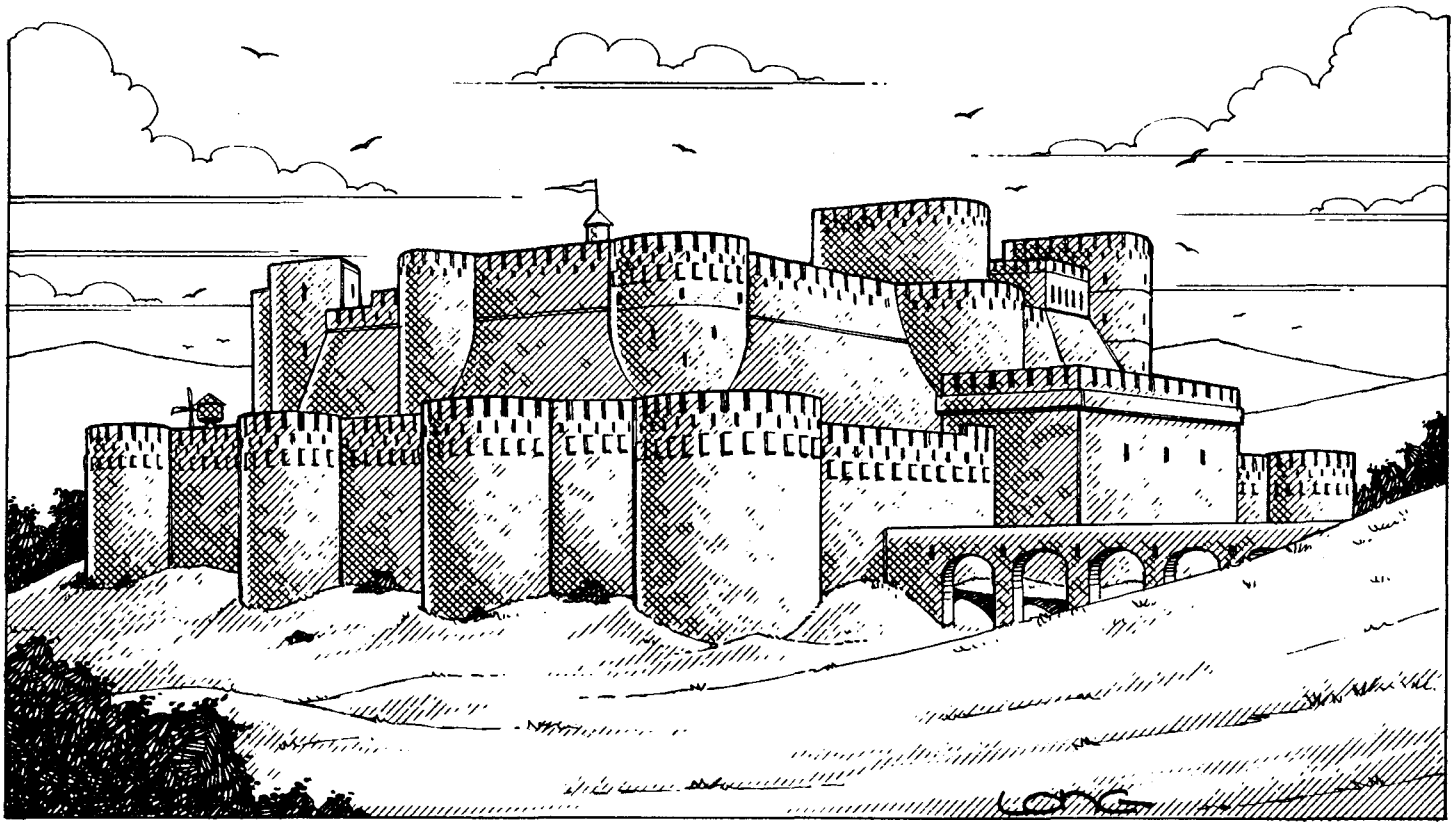
Largoel-En-Elven



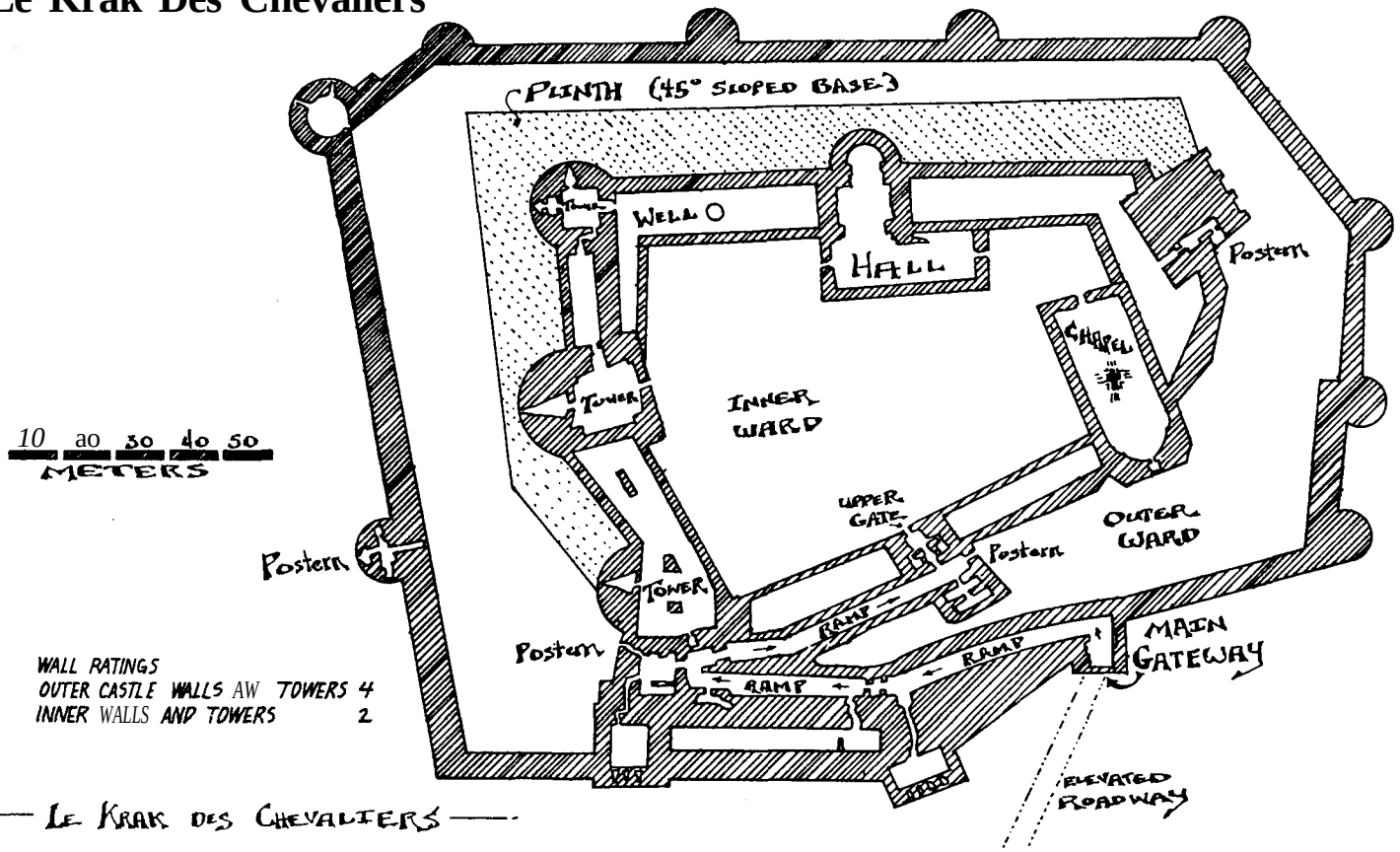
WALL RATING 2

13th CENTURY

·FRANCE·



Le Krak Des Chevaliers

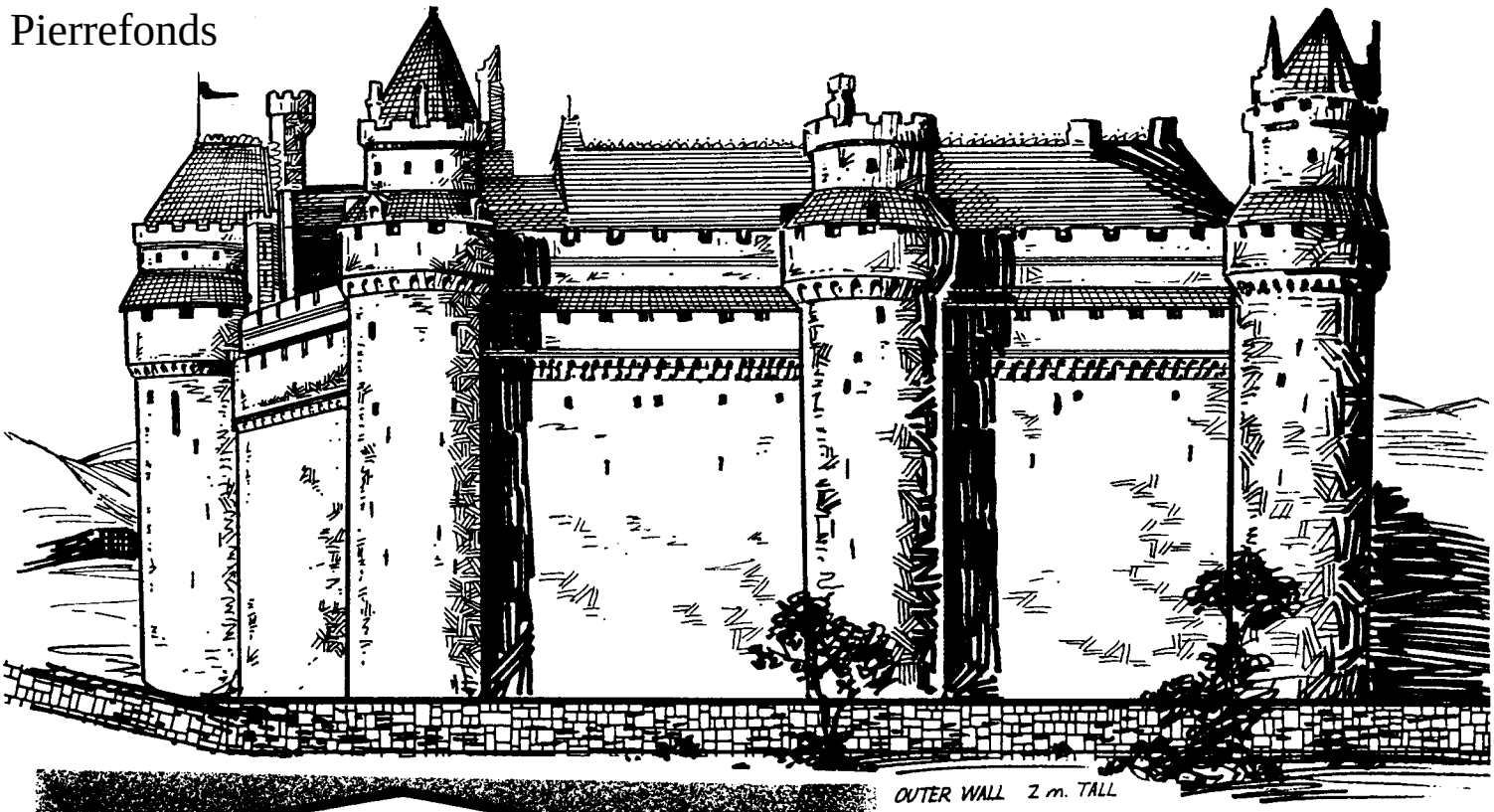


LE KRAK DES CHEVALIERS

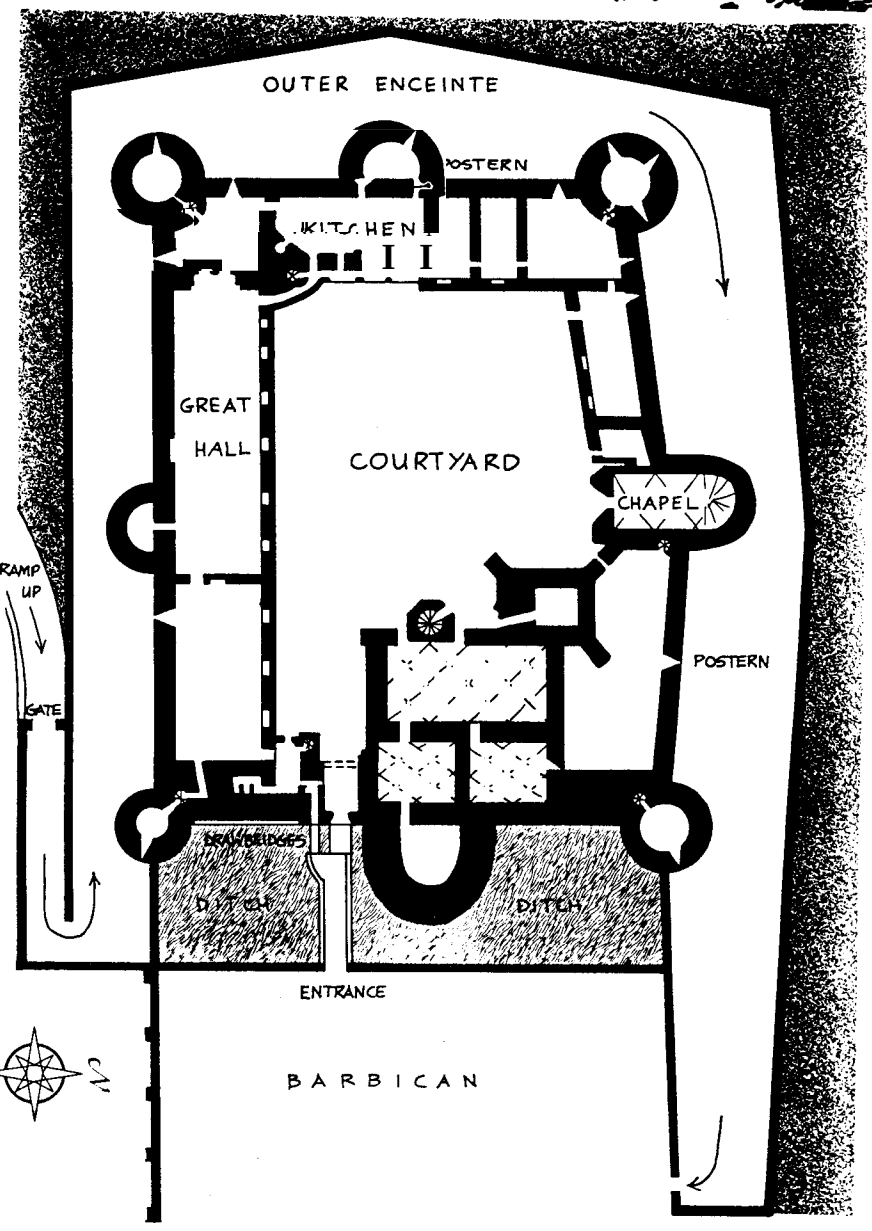
This powerful Crusader castle is situated in a mountainous region of Syria. It was given to the Knights Hospitallers in 1142 and held by them until taken by the Mamelukes in 1271. The buildings in the inner ward include a banqueting hall, a chapel, and the donjon consisting of three strong towers.

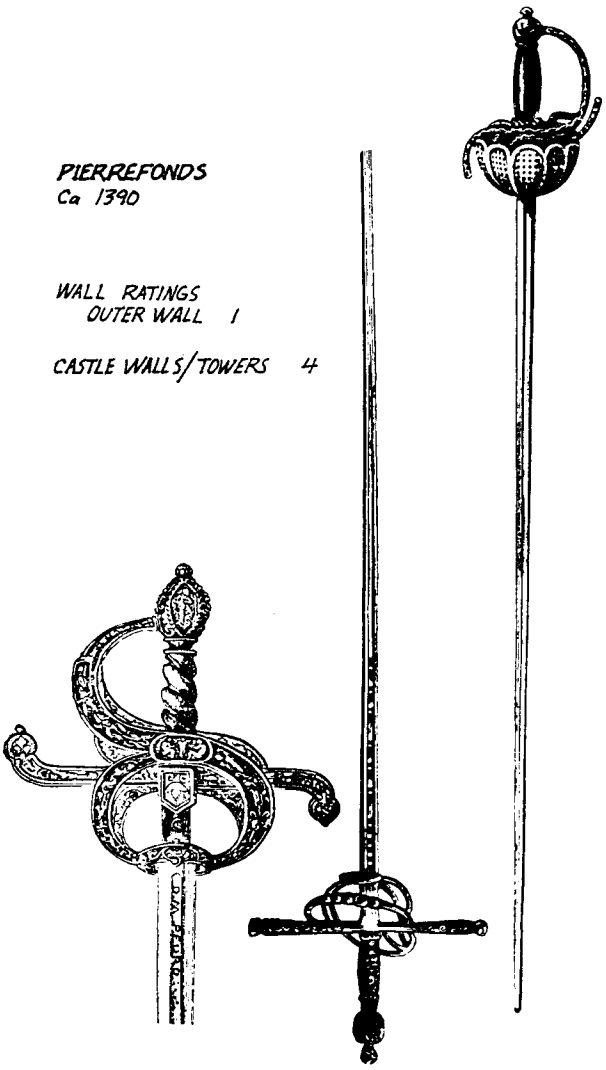
The strength of the inner ward was shown in the Mameluke siege in 1271. After a month long operation to breach the outer ward the Mamelukes could advance no further against the stout defense and resistance of the knights. The castle was surrendered only after a forged letter, telling of the fall of Tripoli, deceived the defenders.

Pierrefonds



OUTER WALL 2 m. TALL



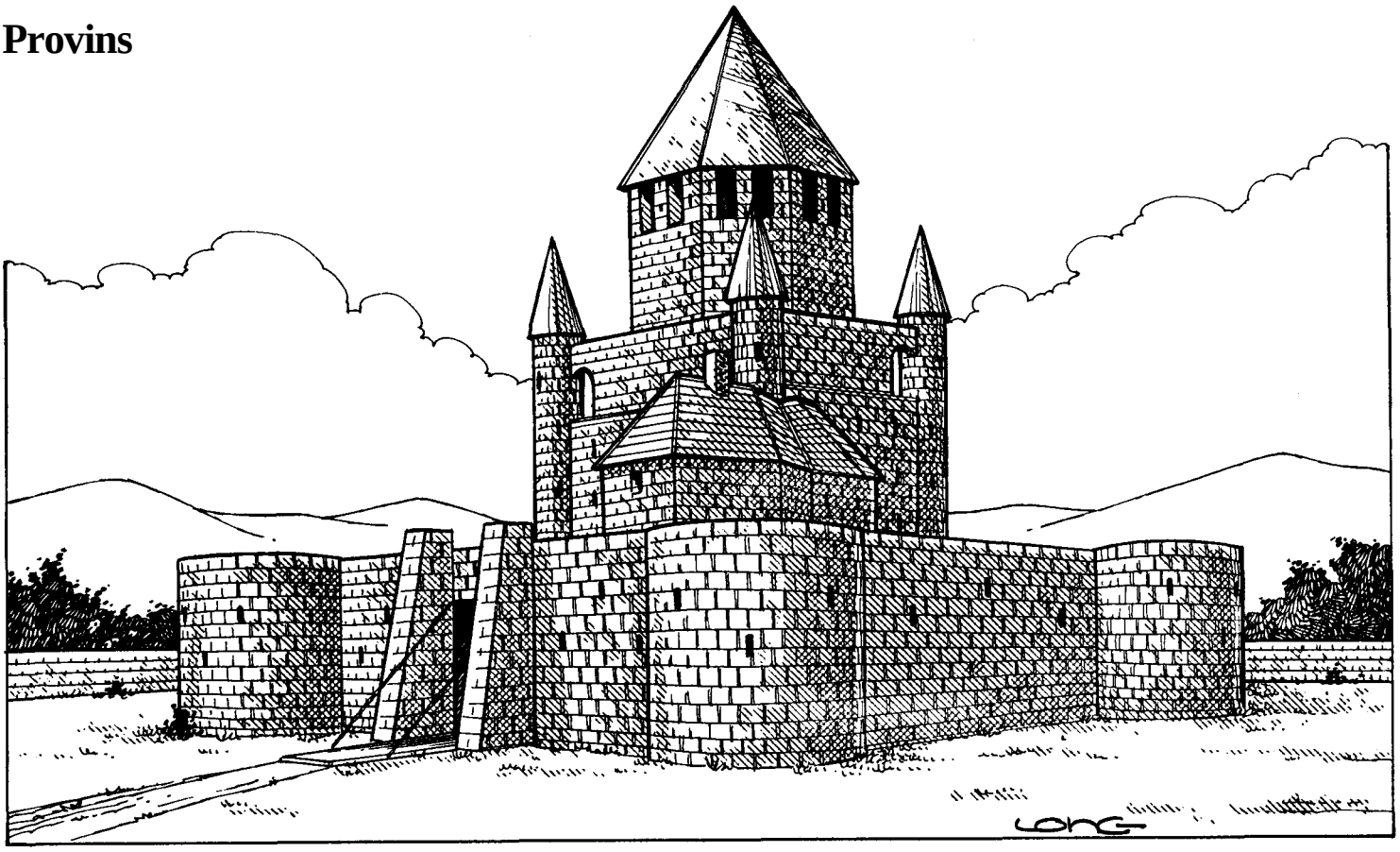


PIERREFONDS
Ca 1390

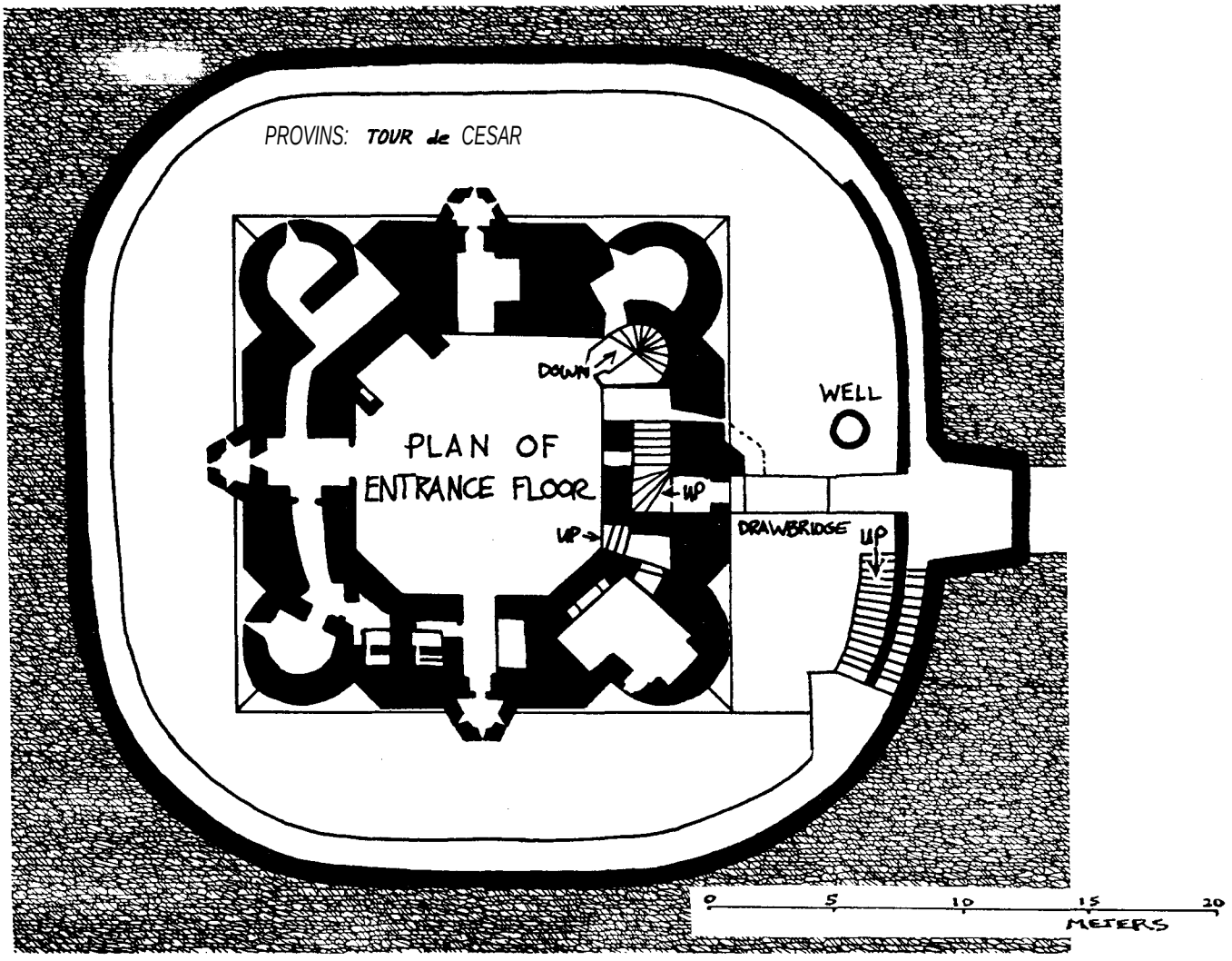
WALL RATINGS
OUTER WALL 1

CASTLE WALLS/TOWERS 4

Provins

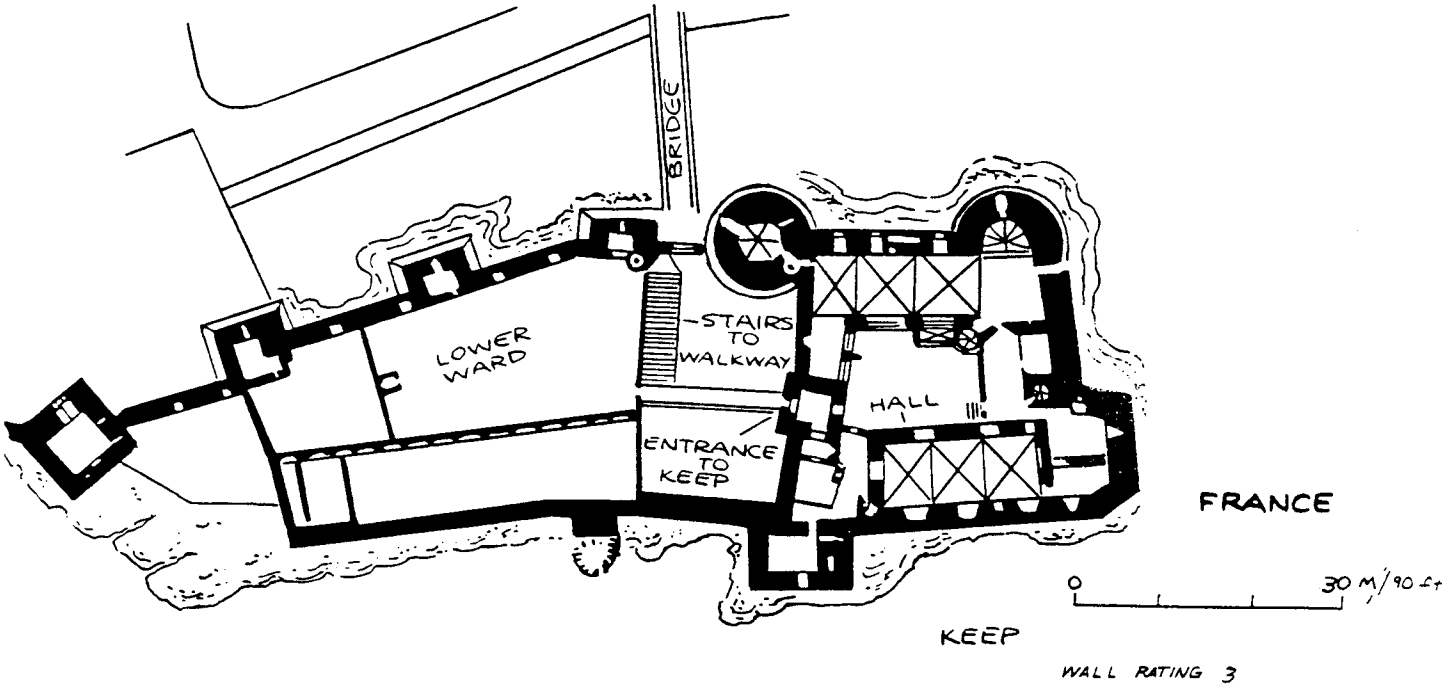


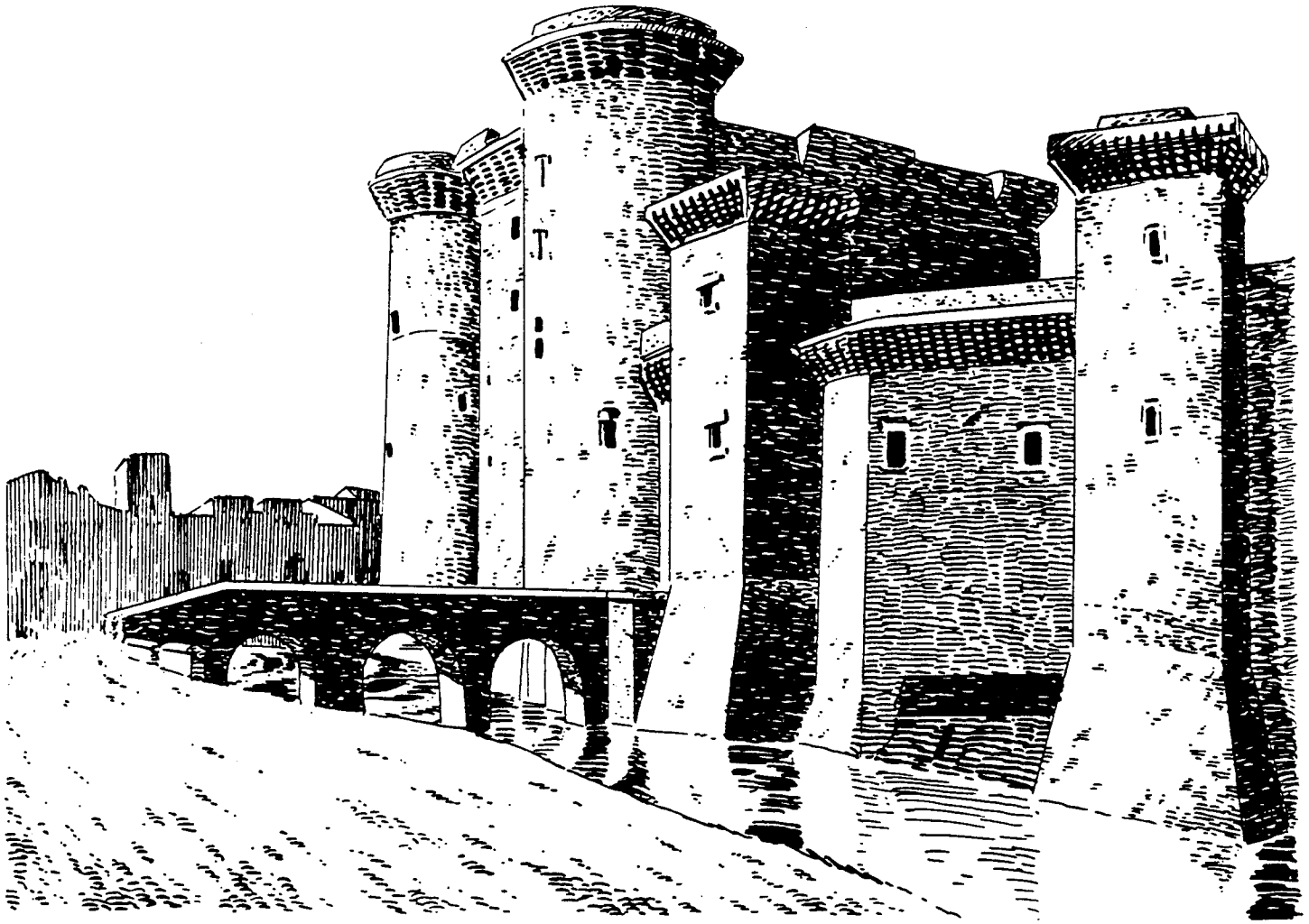
OUTER WALL RATING 1 CASTLE WALL RATING 4



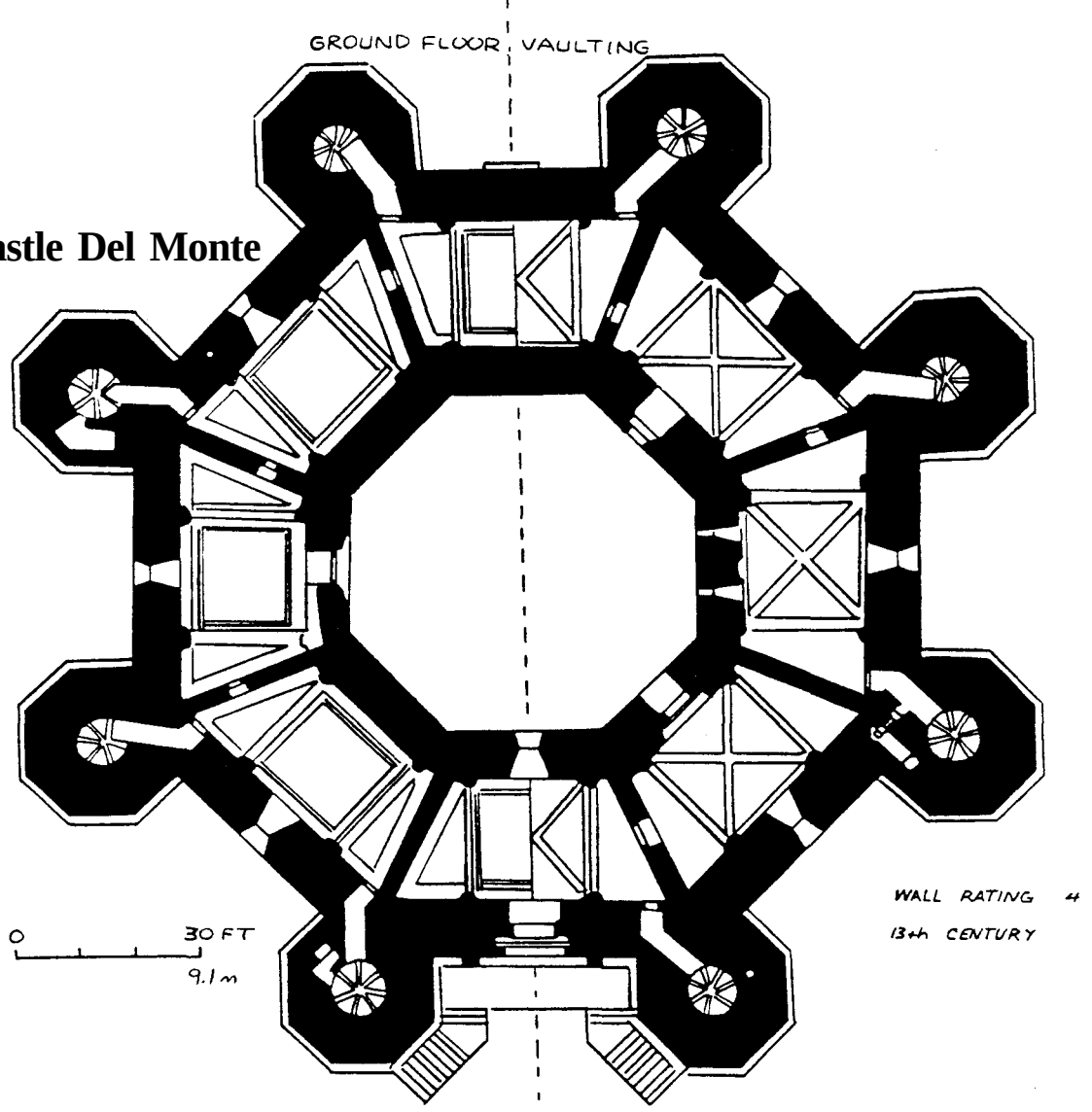
Tarascon

Begun by Louis II of Anjon, Count of Provence, in the late 14th century, Tarascon rises straight from the rocks in the Rhone River. It passed to King Rene in 1481 and additions were made. It was later used as a prison until 1726.

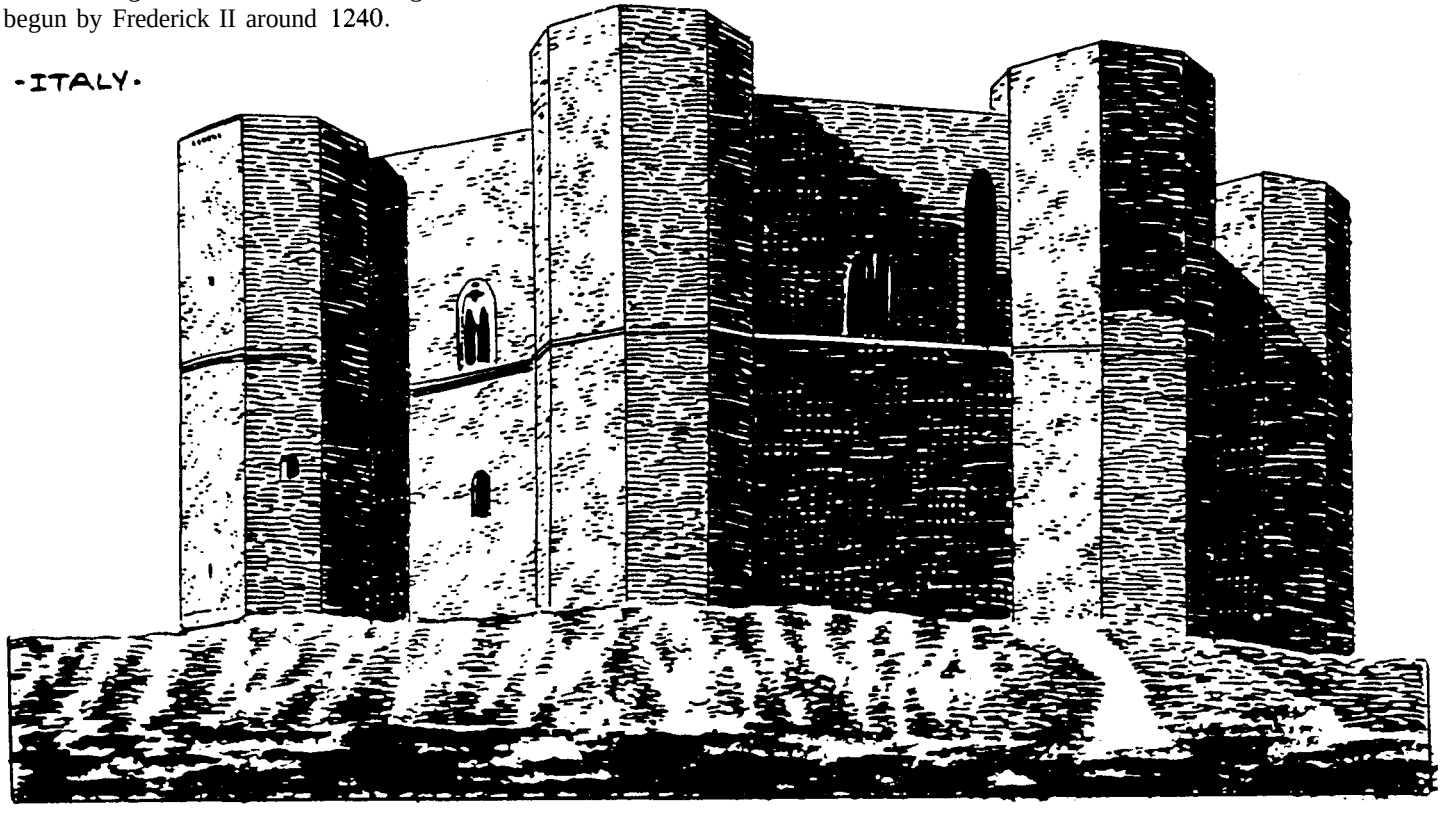


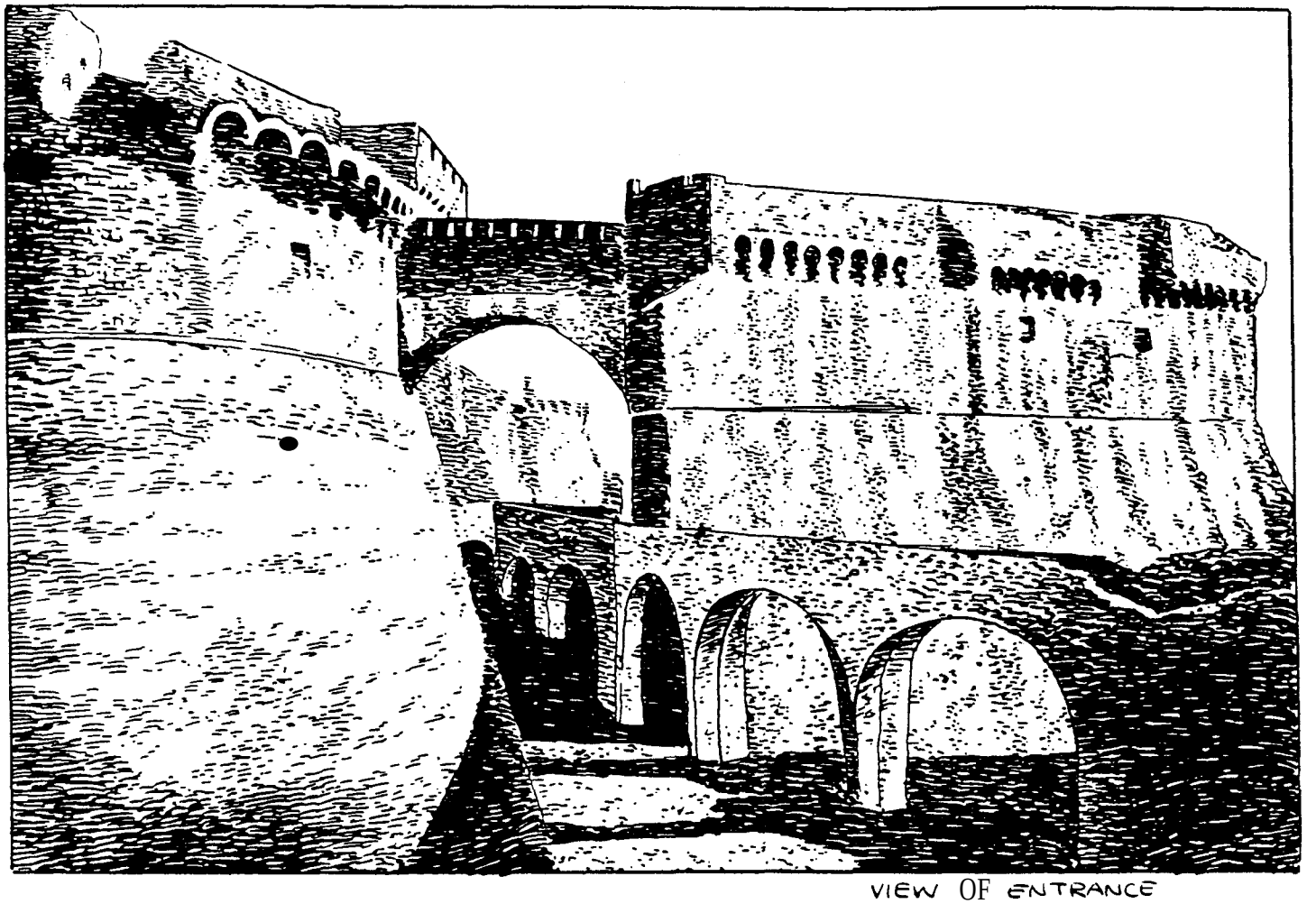


Castle Del Monte



This octagonal castle with its octagonal corner towers was begun by Frederick II around 1240.

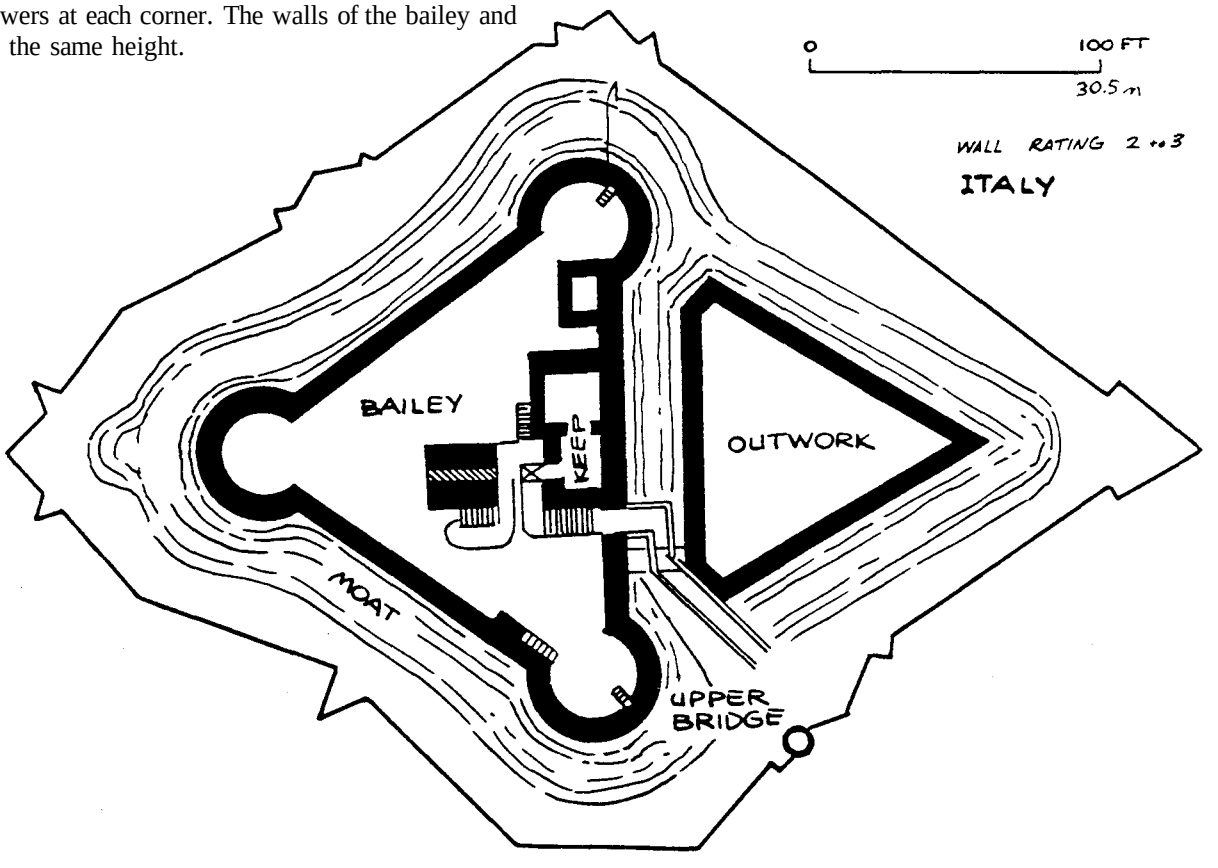




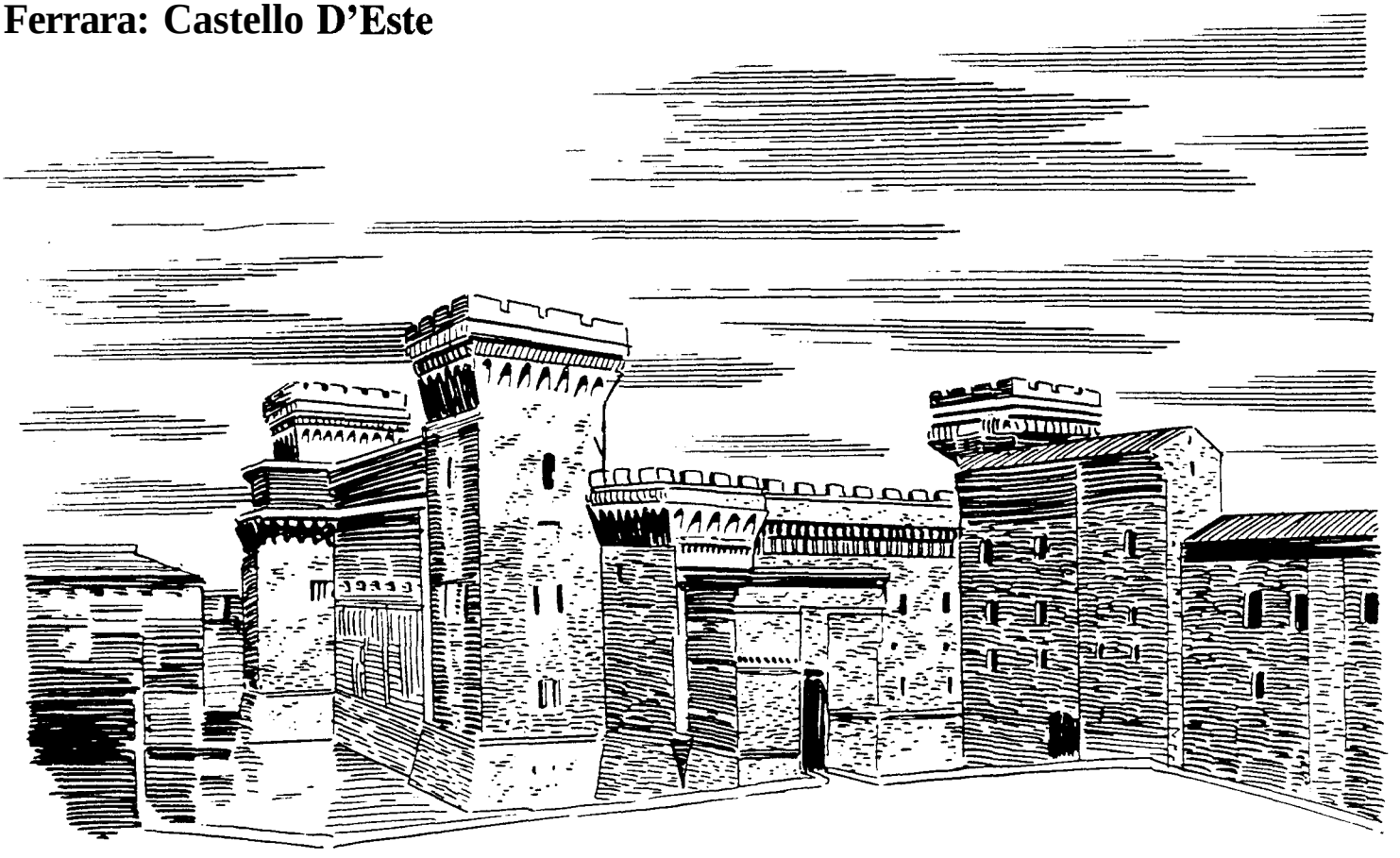
VIEW OF ENTRANCE

Castle Di Sarzanello

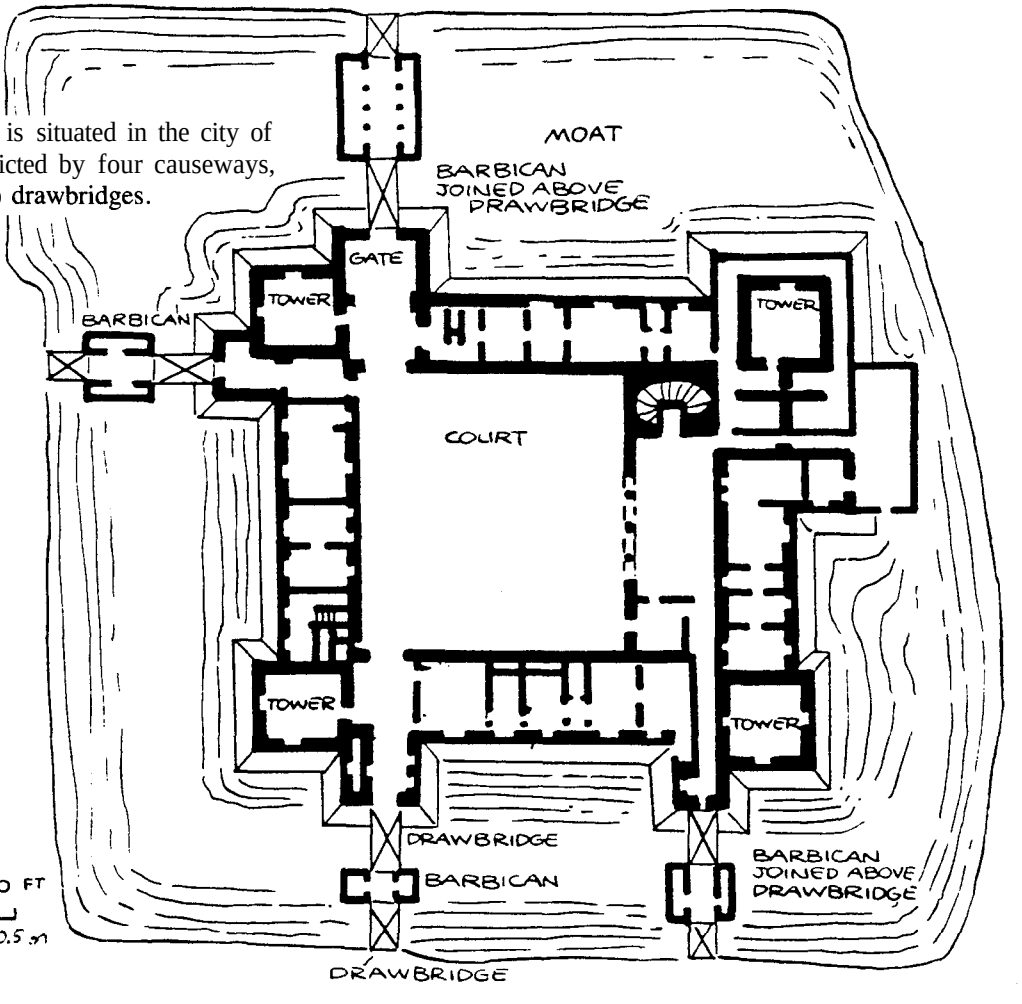
Built around 1325, this castle features a triangular bailey with open-backed towers at each corner. The walls of the bailey and outwork rise to the same height.



Ferrara: Castello D'Este



This castle was built in 1385 and is situated in the city of Ferrara. Access to the castle is restricted by four causeways, each protected by a barbican and two drawbridges.

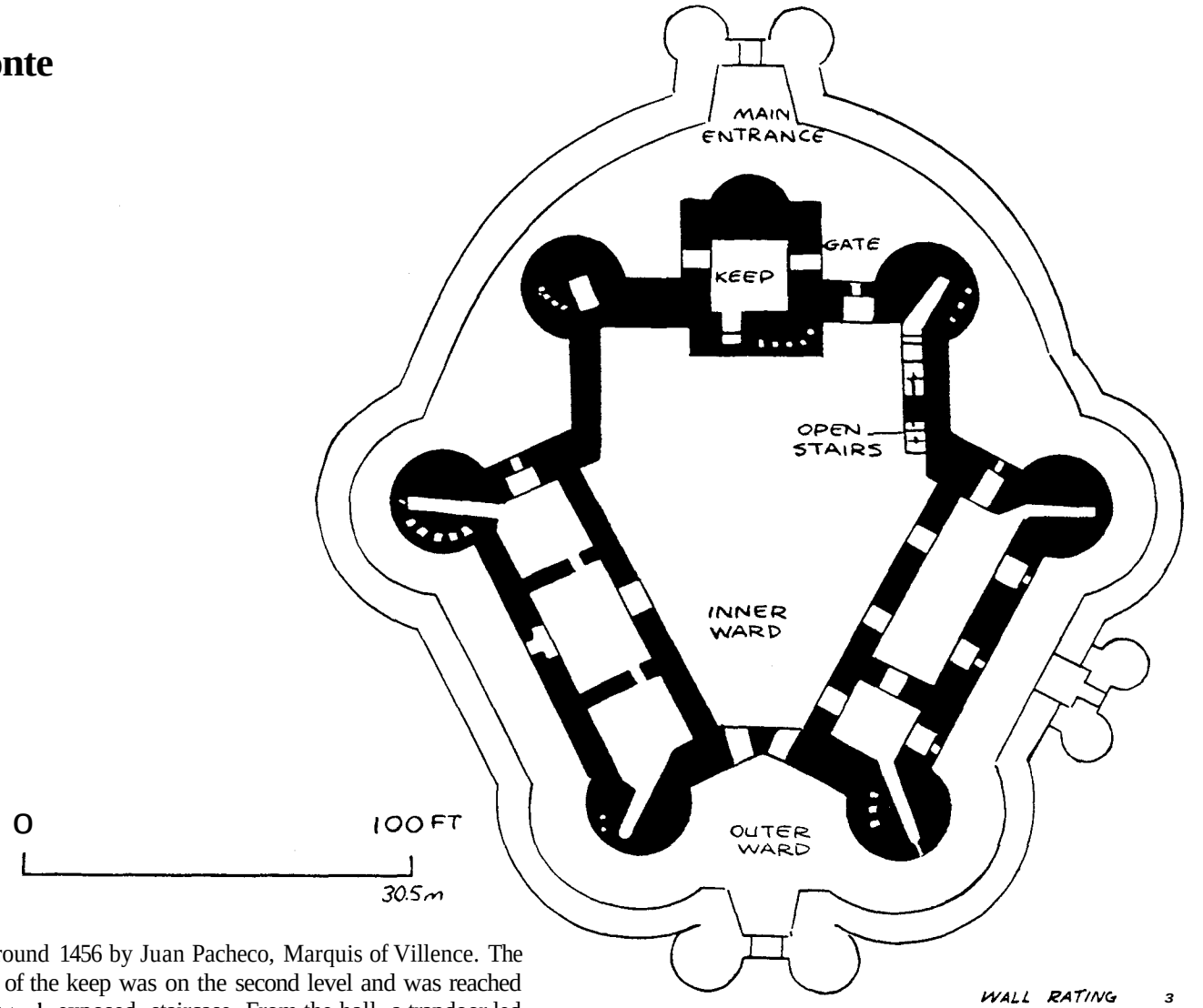


WALL RATING 2 to 3

·ITALY·

0 100 FT
30.5 m

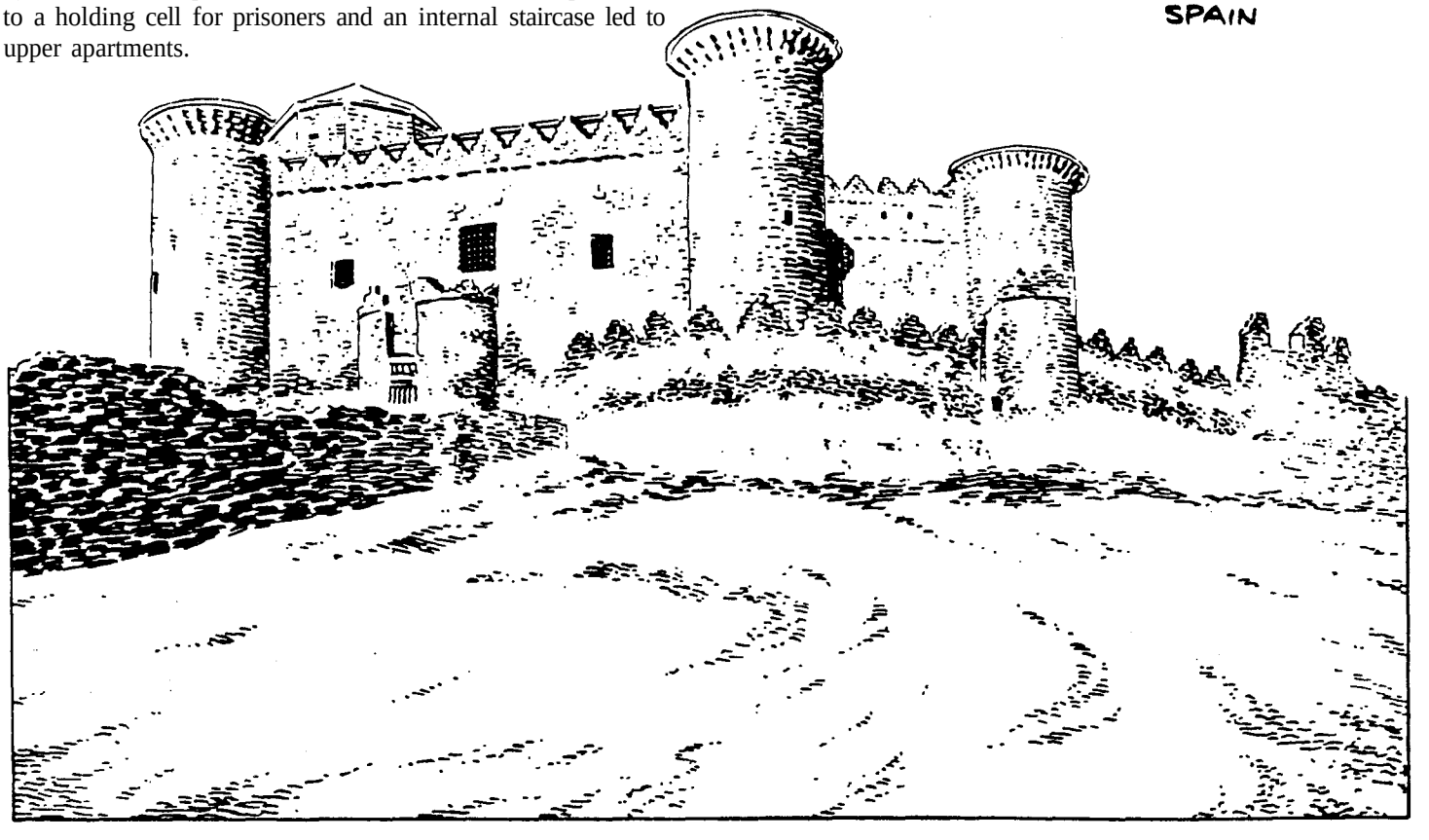
Belmonte

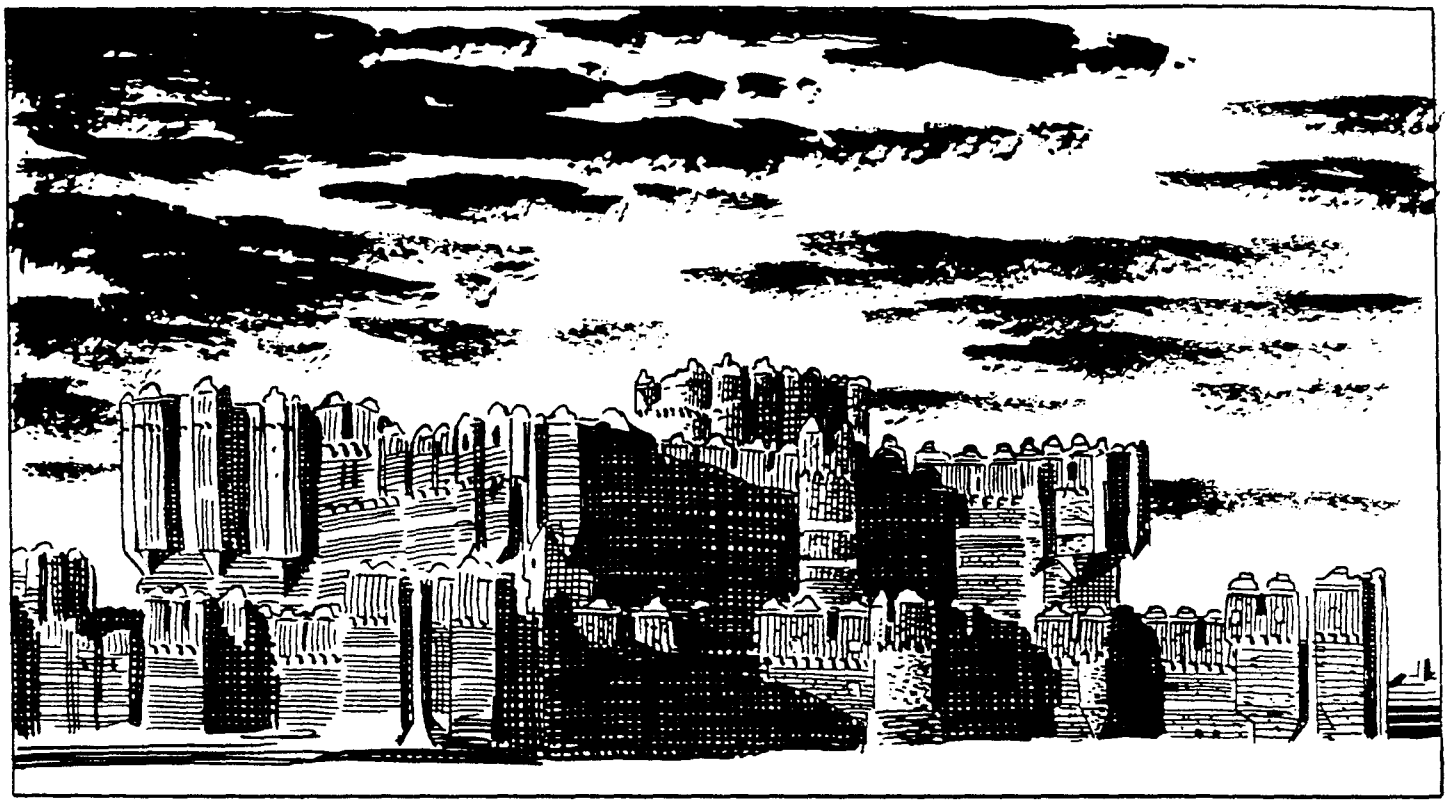


WALL RATING 3

SPAIN

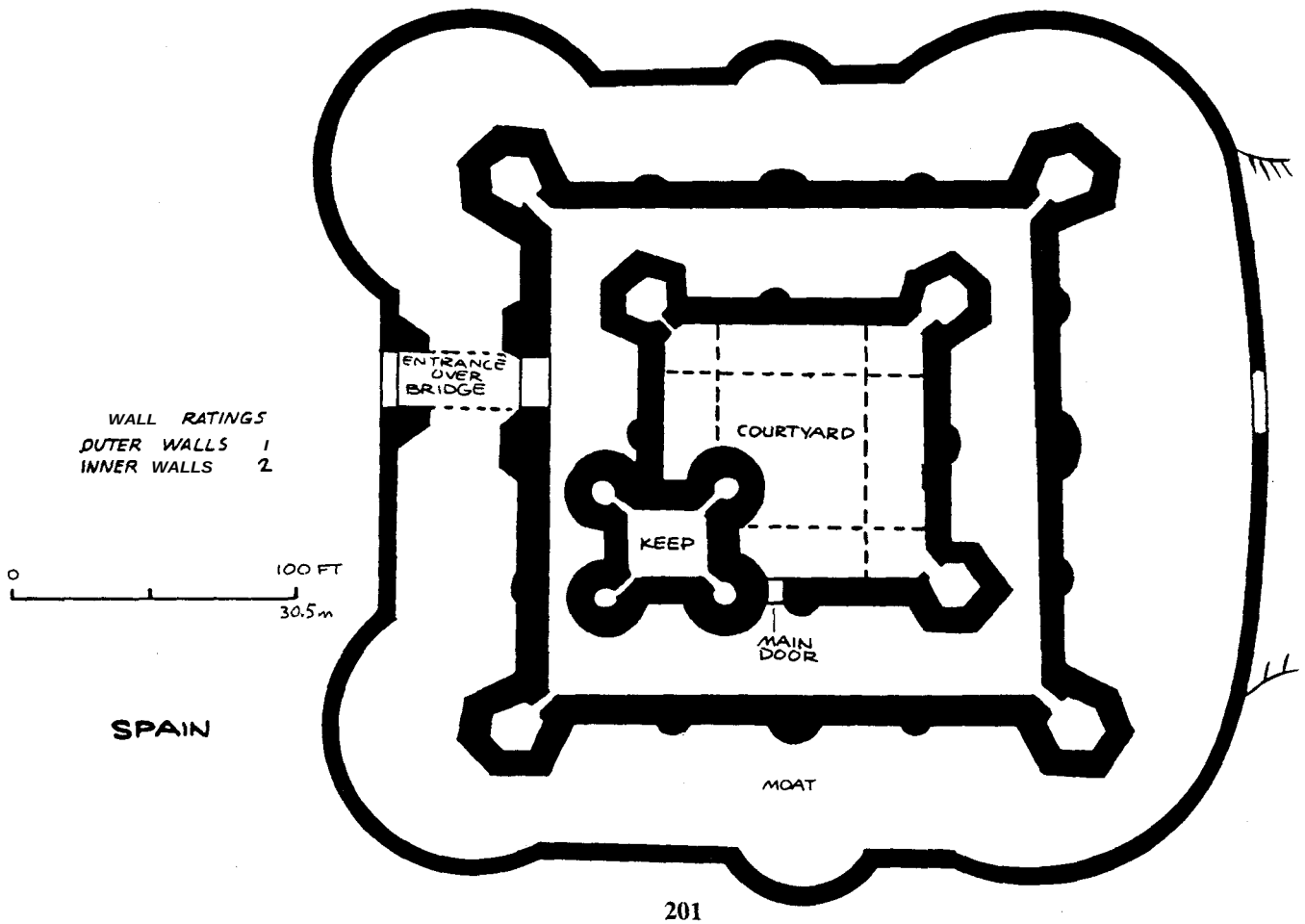
Built around 1456 by Juan Pacheco, Marquis of Villence. The main hall of the keep was on the second level and was reached by an external, exposed, staircase. From the hall, a trapdoor led to a holding cell for prisoners and an internal staircase led to upper apartments.



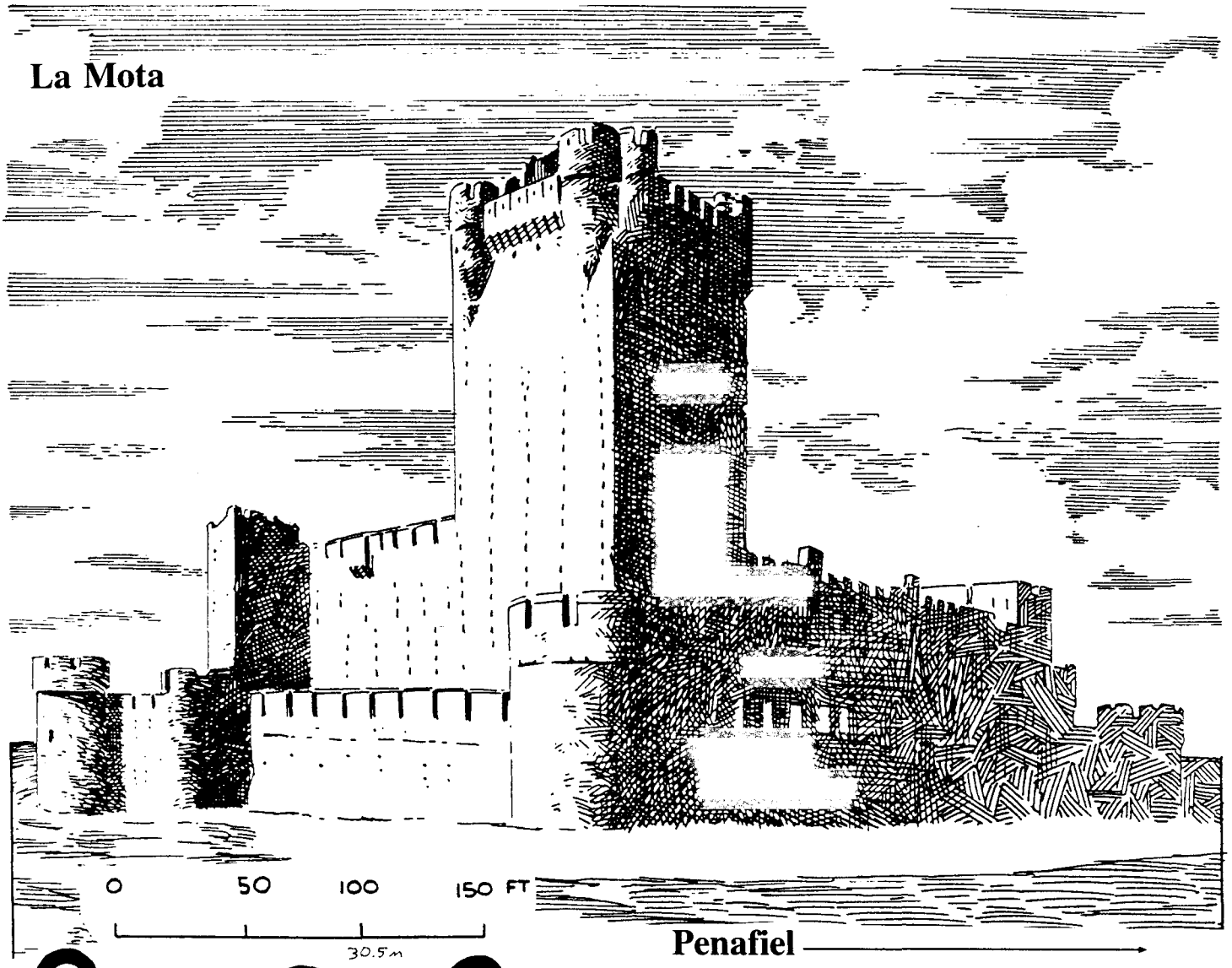


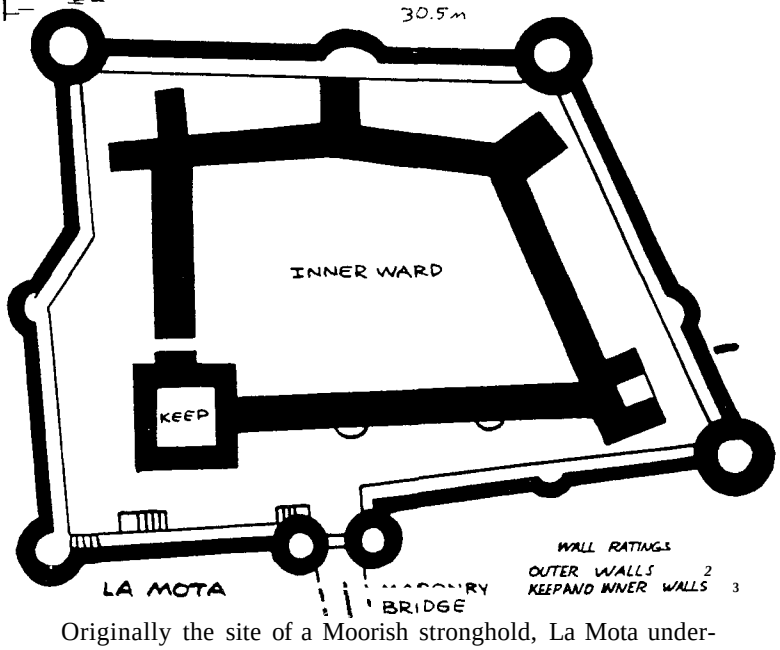
Coca

Built in the mid 1400's by the Archbishop of Seville, Alfonso de Fonseca, this castle is considered to be the best example of the Arab influenced style of architecture called *mudejar*. Constructed mostly of the reddish brick Coca, it also had a brick lined dry moat which aided in its defense.



La Mota





Originally the site of a Moorish stronghold, La Mota underwent successive phases of reconstruction and addition beginning in the twelfth century and continuing until the fifteenth and sixteenth centuries. La Mota is believed to have withstood a ten month siege in the middle of the fifteenth century. In 1475 it was given as a wedding present to the Catholic kings. Later, it served as a prison for Cesare Borgia, who escaped from it.

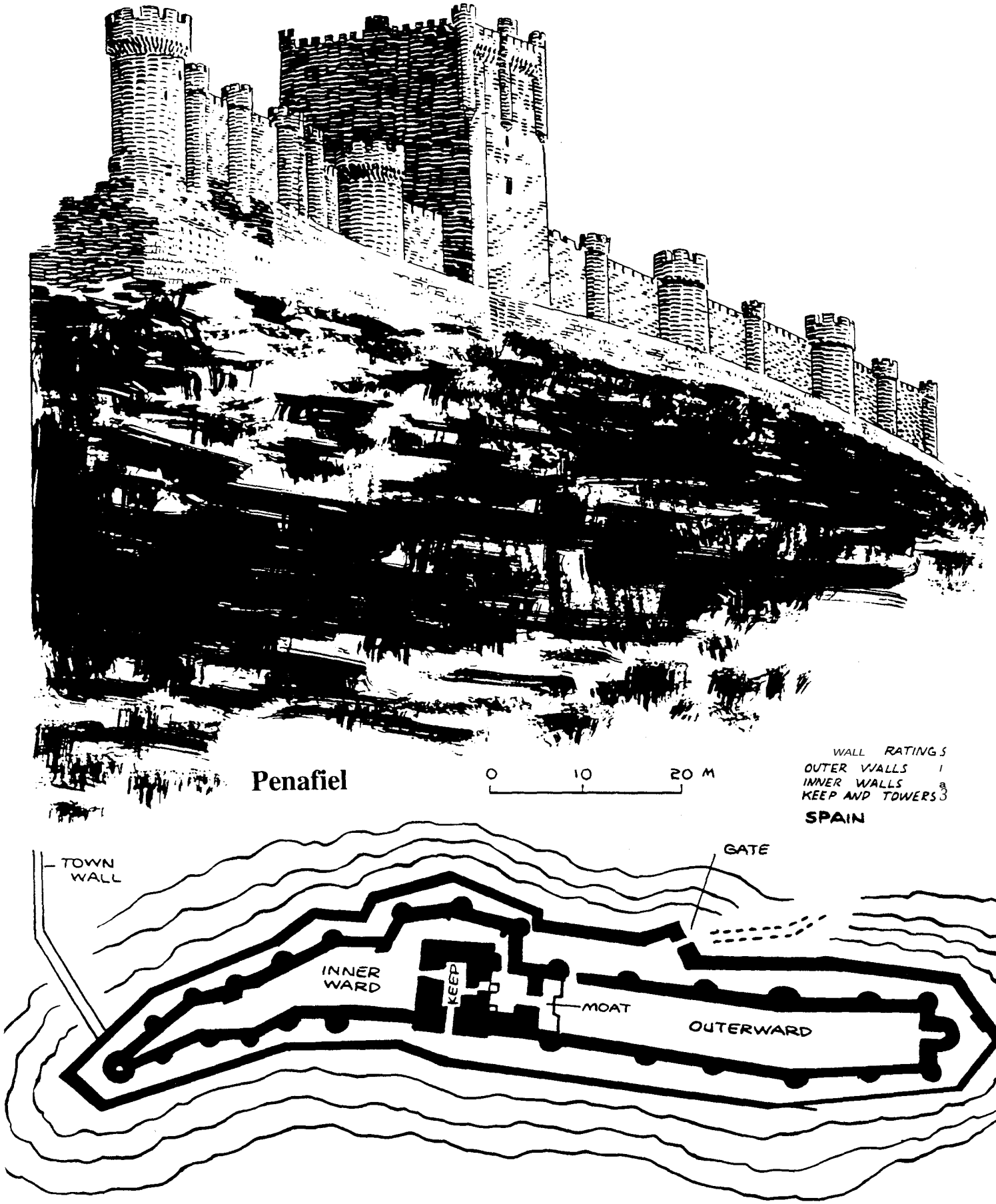
Penafiel

Like many other castles in Spain, Penafiel (the "Faithful Rock," located about 80 miles north of Madrid) has a long history of warfare. The area was part of the county of Castile in the tenth century when Fernan Gonzales (Count of Castile 930-970) settled and fortified this area in 947 after a victory over the Arabs at Osma (at which time Penafiel was a frontier outpost). After numerous confrontations, the area was captured by Al-Mansur (War Minister for the Umayyad Caliphate of Cordova 978-1102) in 995.

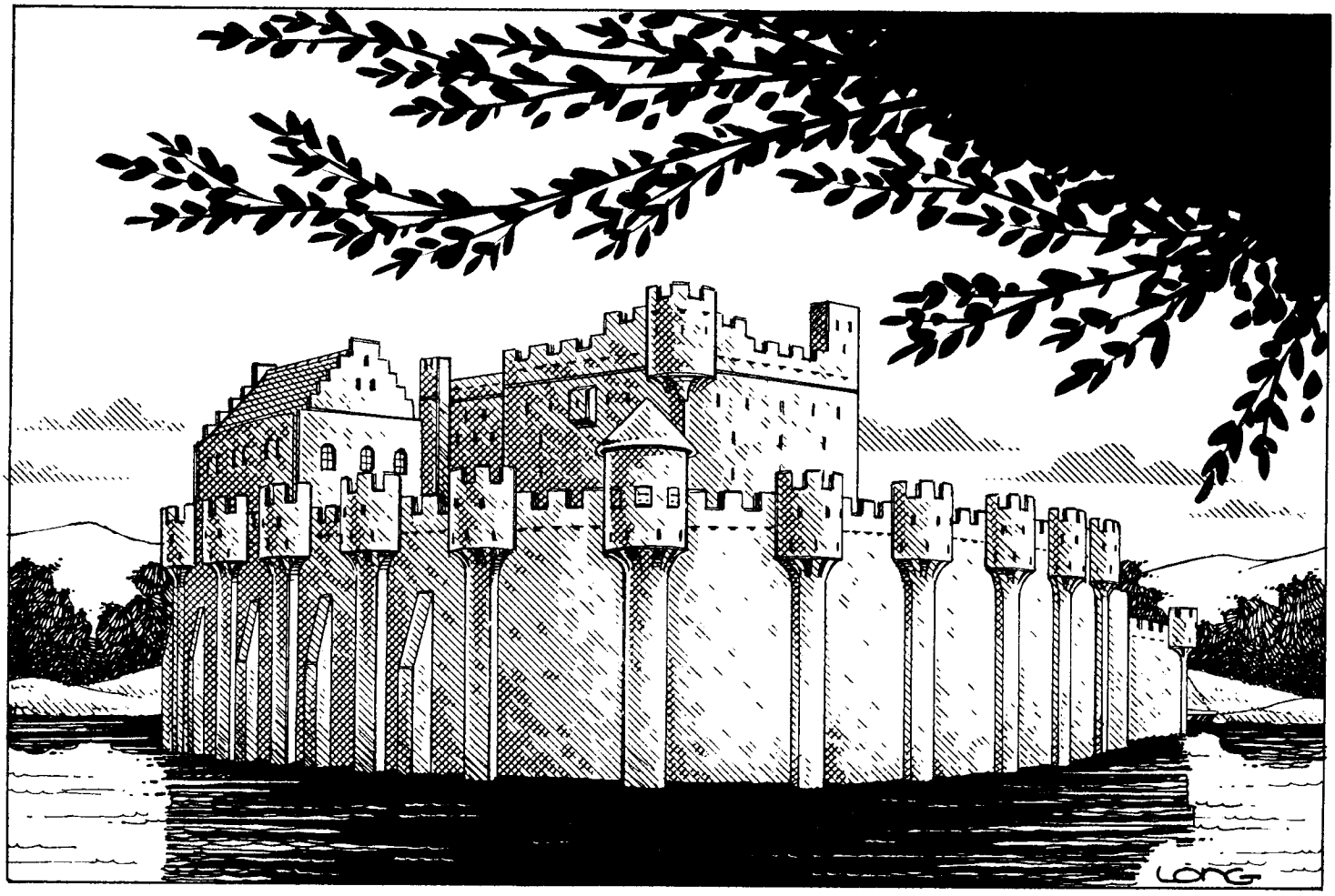
In 1013, the position was recaptured by Sancho Garcia (Count of Castile, 995-1021), who is said to have proclaimed: "From now on, this will be the faithful rock of Castile." Garcia built a castle and walls to protect the strategic town.

The fief of Penafiel was eventually given to the Infante Don Manuel, brother of King Alfonso X (King of Leon and Castile, 1252-1284), by the future King Sancho IV (ruled 1284-1295)of Navarre as a present for his newborn son. Around 1307, Don Juan Manuel began what is considered to be the origins of the present castle of Penafiel. In 1408, the region around Penafiel was made a dukedom, but the castle was dismantled in 1431 by order of King John II (of Aragon, 1458-1479).

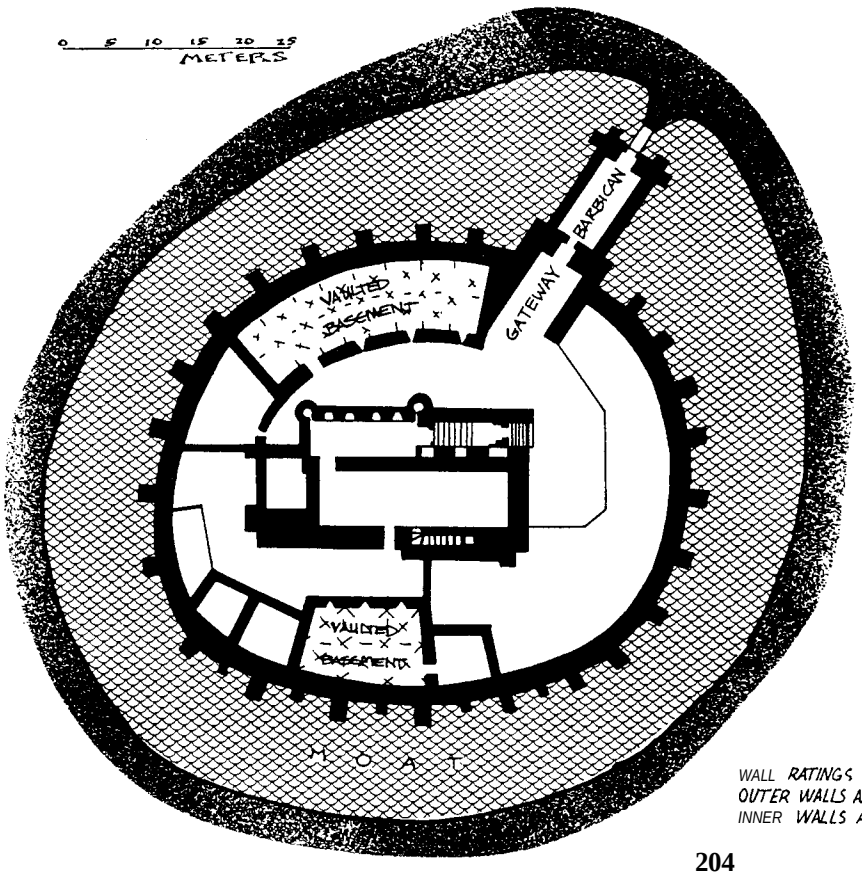
Later, the site belonged to Don Pedro Giron, Master of the Order of Calatrava. Giron rebuilt the castle in the middle of the fifteenth century. These fortifications constitute the current castle of Penafiel.

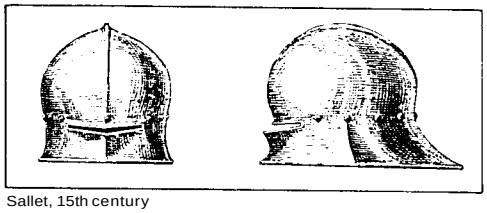


The castle resembles a large ship riding waves of rock. In general, the castle consists of a low outer wall surrounding the larger inner walls. The central keep rises to a height of 35 meters. Entrance to the keep was gained first by crossing a three meter wide moat and then up a set of stairs. From the stairs one would then have to cross two sets of removable planks before the actual door was reached. The entrance to the keep's hall then proceeded on a right angle course covered by a large gun port.

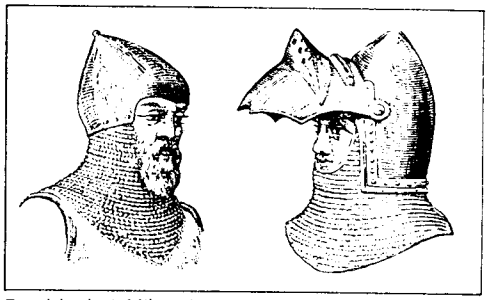


Ghent (Belgium)





Sallet, 15th century

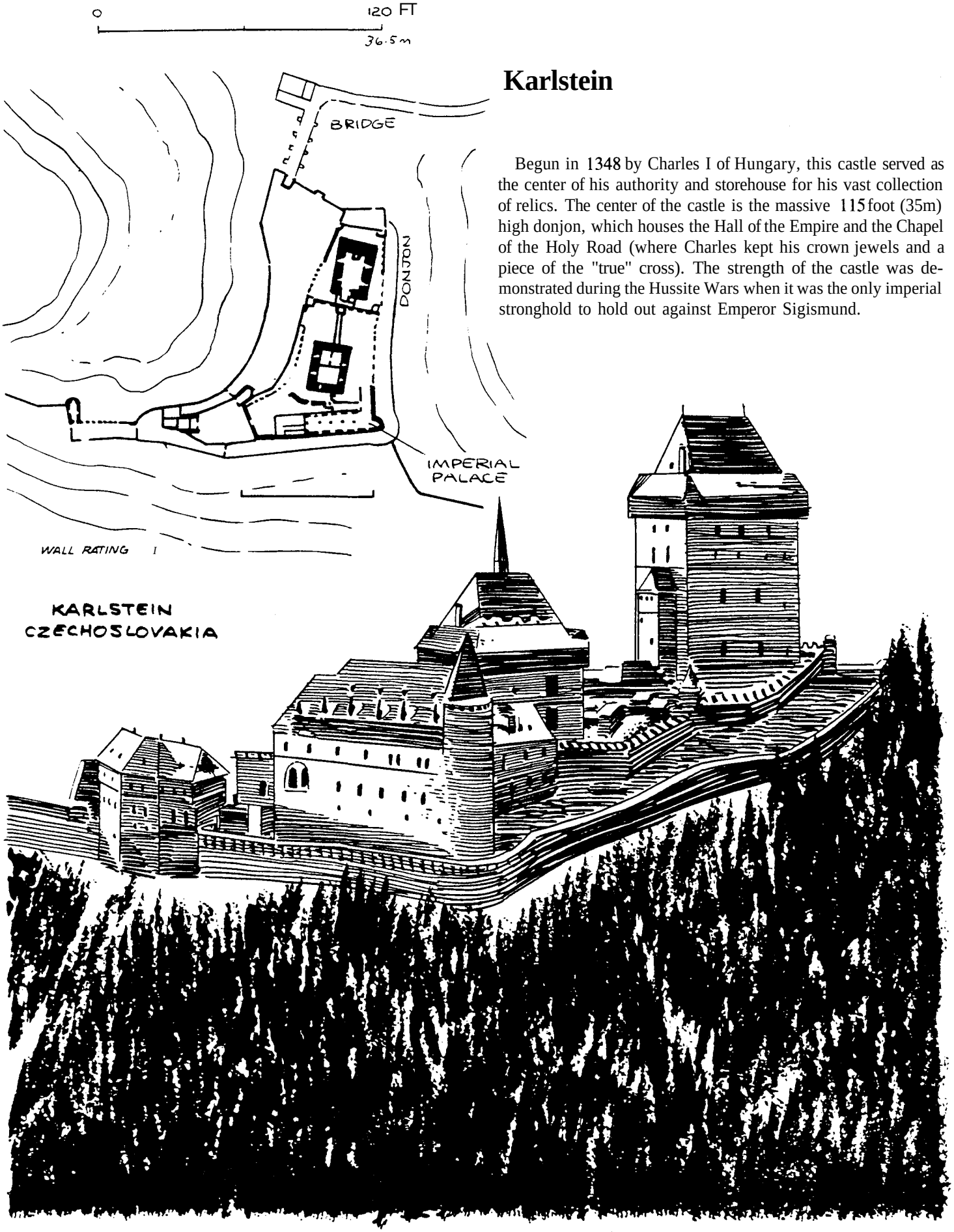


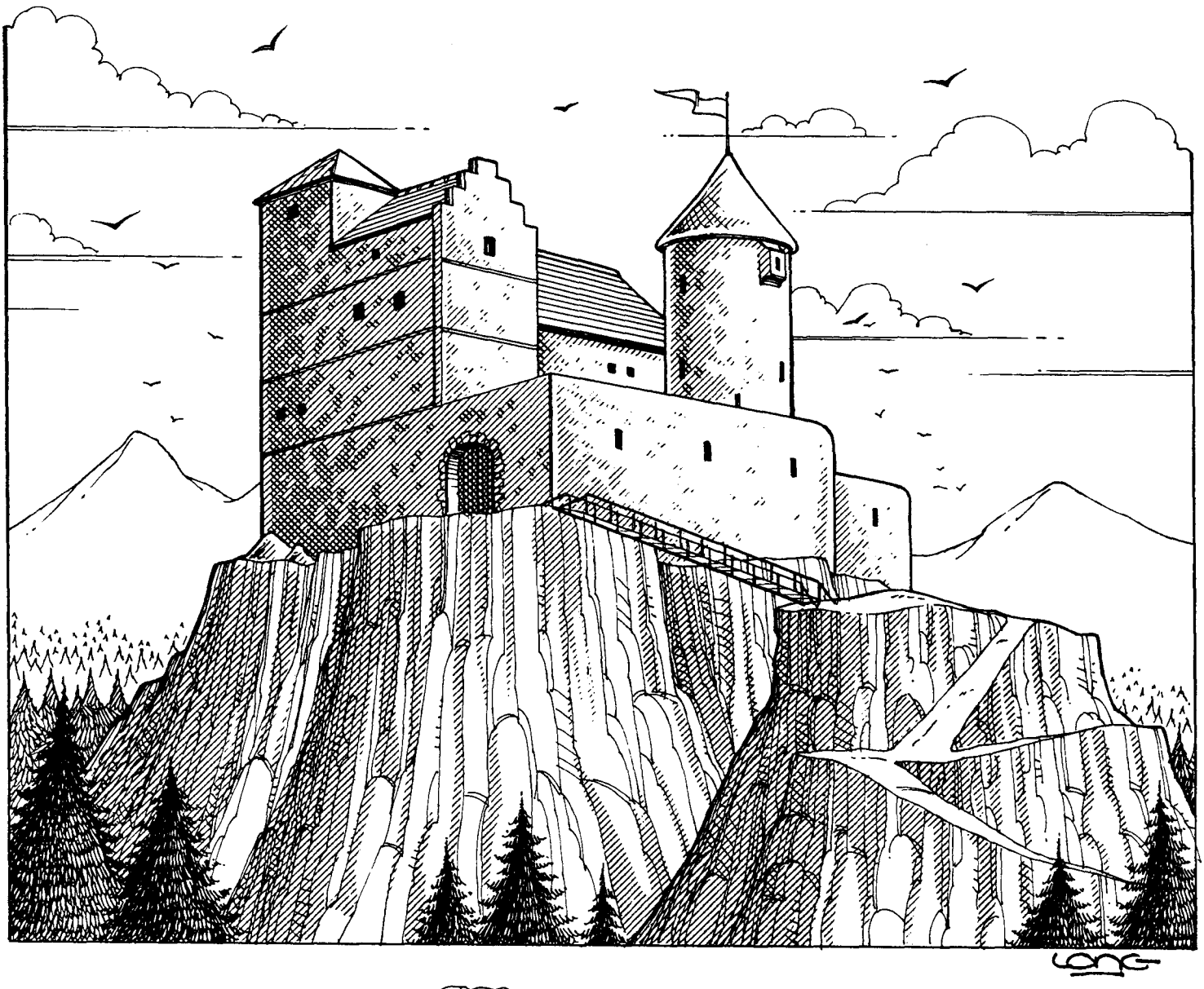
French basinet. 14th century

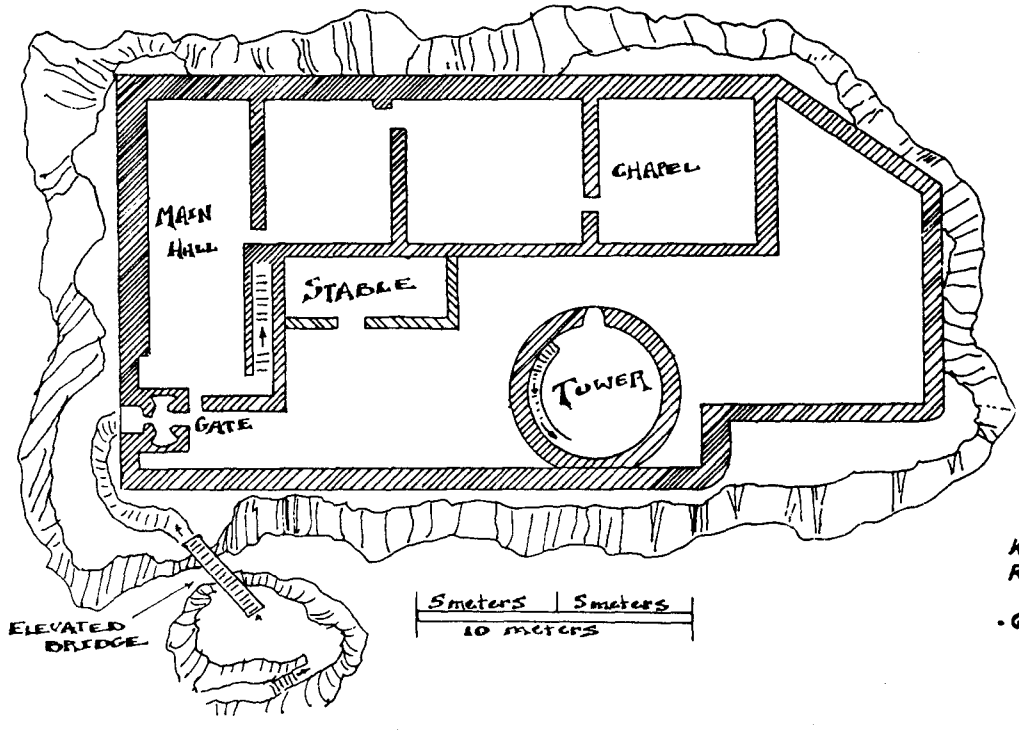
WALL RATINGS
OUTER WALLS AND TOWERS 4
INNER WALLS AND KEEP 3

Karlstein

Begun in 1348 by Charles I of Hungary, this castle served as the center of his authority and storehouse for his vast collection of relics. The center of the castle is the massive 115 foot (35m) high donjon, which houses the Hall of the Empire and the Chapel of the Holy Road (where Charles kept his crown jewels and a piece of the "true" cross). The strength of the castle was demonstrated during the Hussite Wars when it was the only imperial stronghold to hold out against Emperor Sigismund.







Karlstein

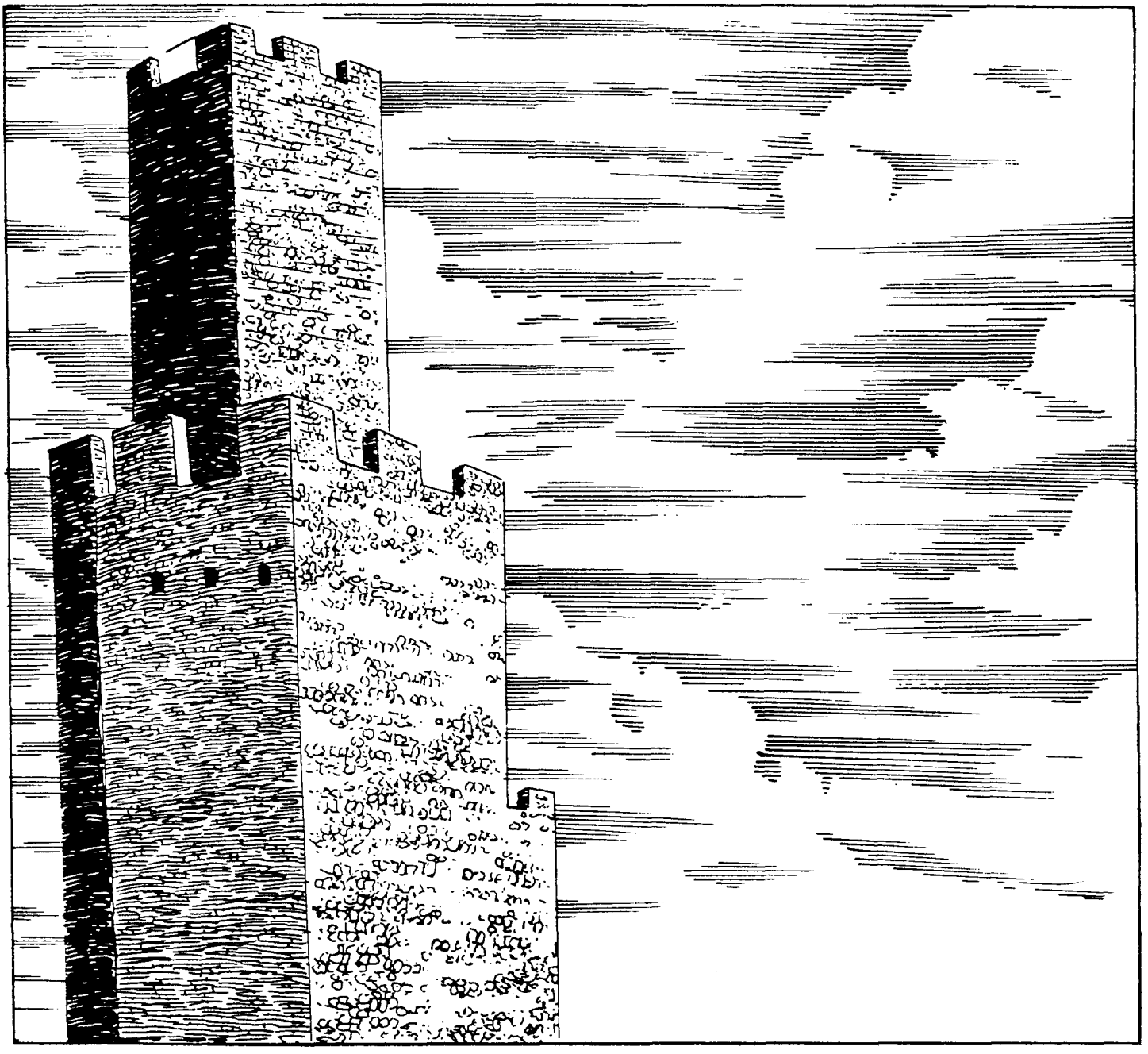
THE NATURAL MOUNTAIN TERRAIN MADE THE USE Or SIEGE MACHINES IMPOSSIBLE AGAINST THIS CASTLE,

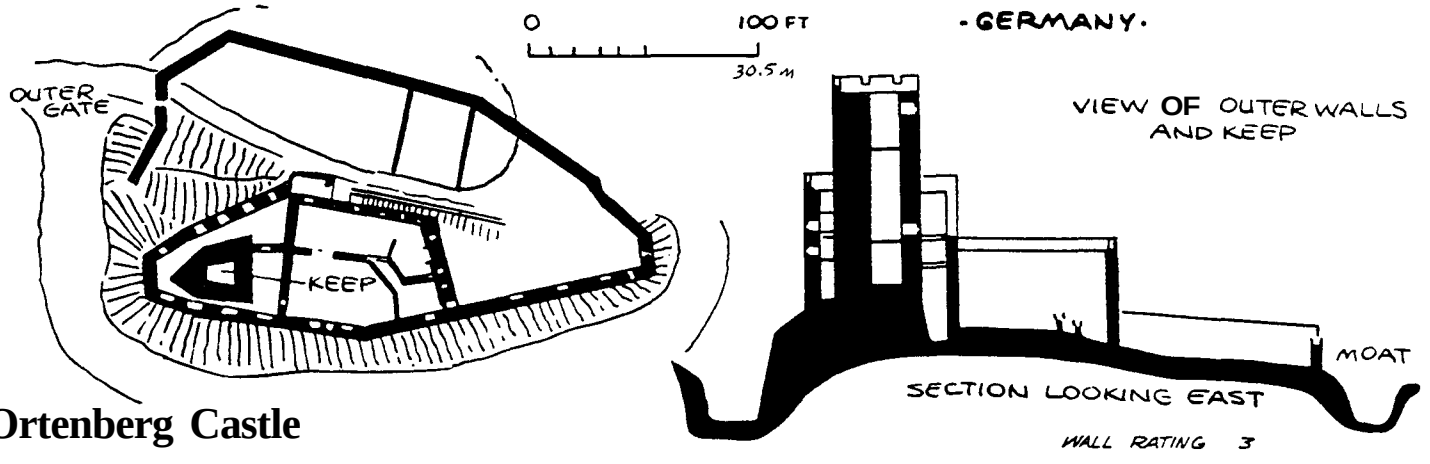
CONSEQUENTLY. THE WALLS AND TOWER DID NOT HAVE TO BE AS HEAVILY FORTIFIED AS THE AVERAGE CASTLE.

· WALL RATING · I

KARLSTEIN bei REICHENHALL

· GERMANY.

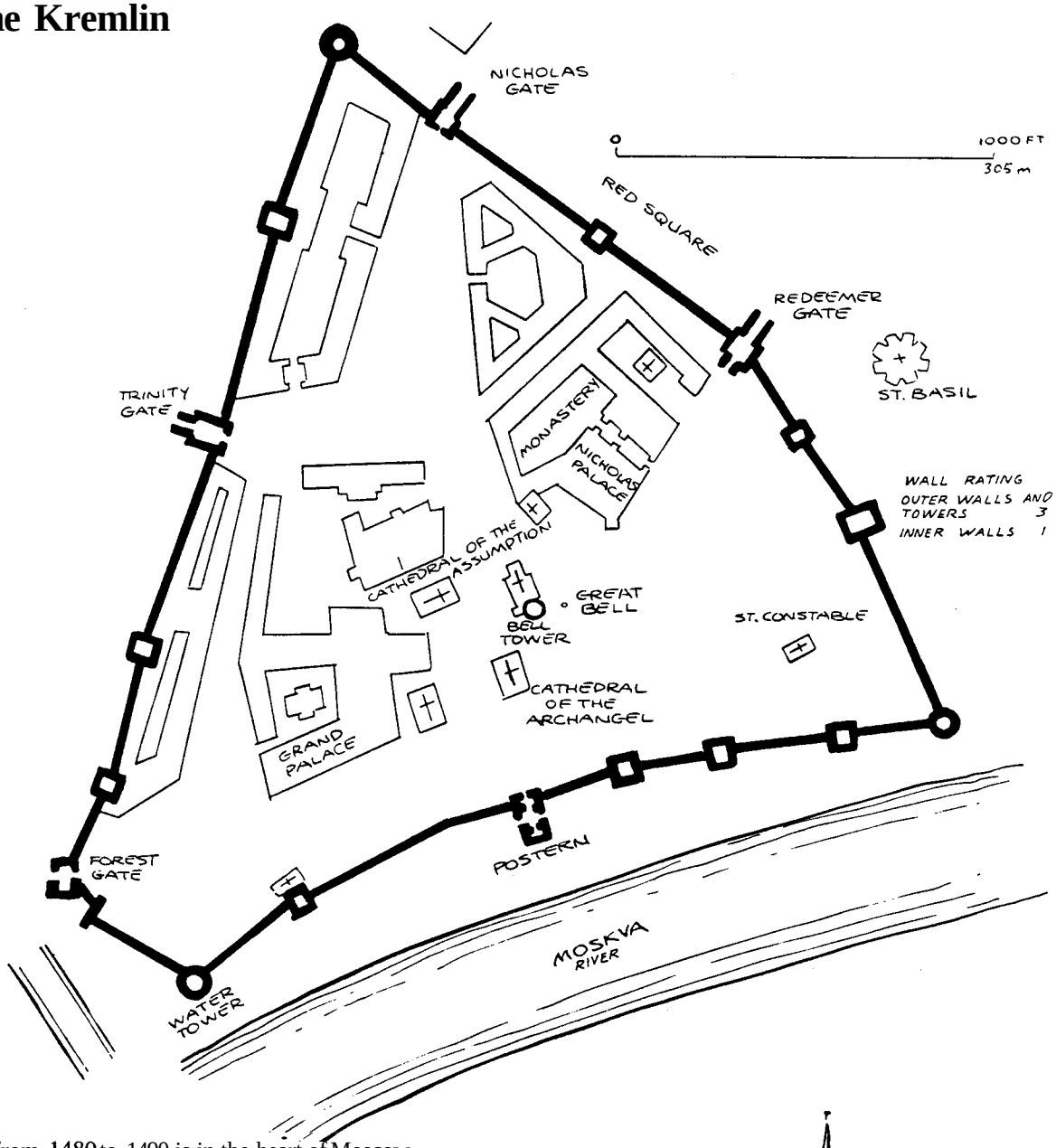




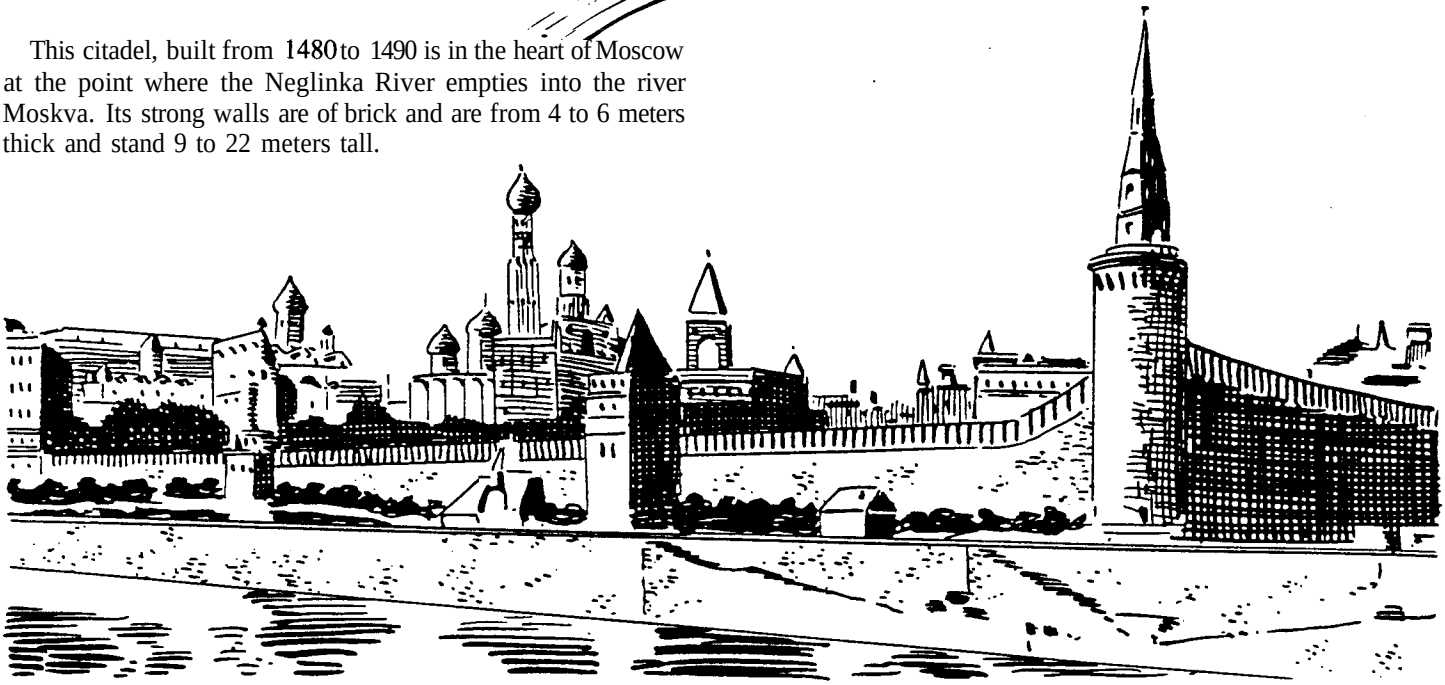
Ortenberg Castle

This Bavarian castle dates from the first half of the thirteenth century and consists of three baileys. The gateway and approaches through the outer and middle baileys are dominated by the keep and the inner bailey. A long set of stairs, a barbican and three gateways guard access to the keep. This defense ensures maximum exposure of attackers to defensive fire.

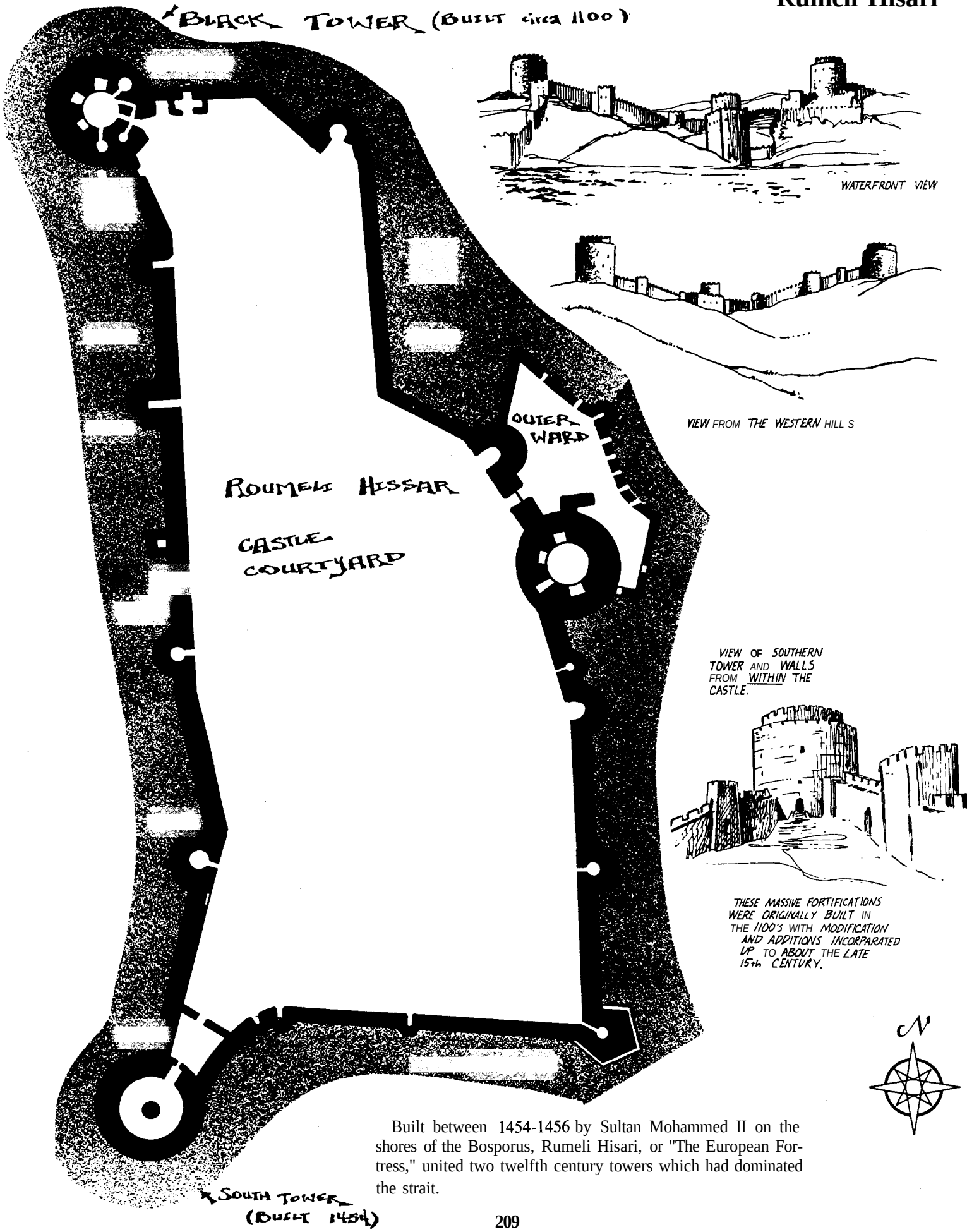
Moscow: The Kremlin



This citadel, built from 1480 to 1490 is in the heart of Moscow at the point where the Neglinka River empties into the river Moskva. Its strong walls are of brick and are from 4 to 6 meters thick and stand 9 to 22 meters tall.



Rumeli Hisari



WATERFRONT VIEW

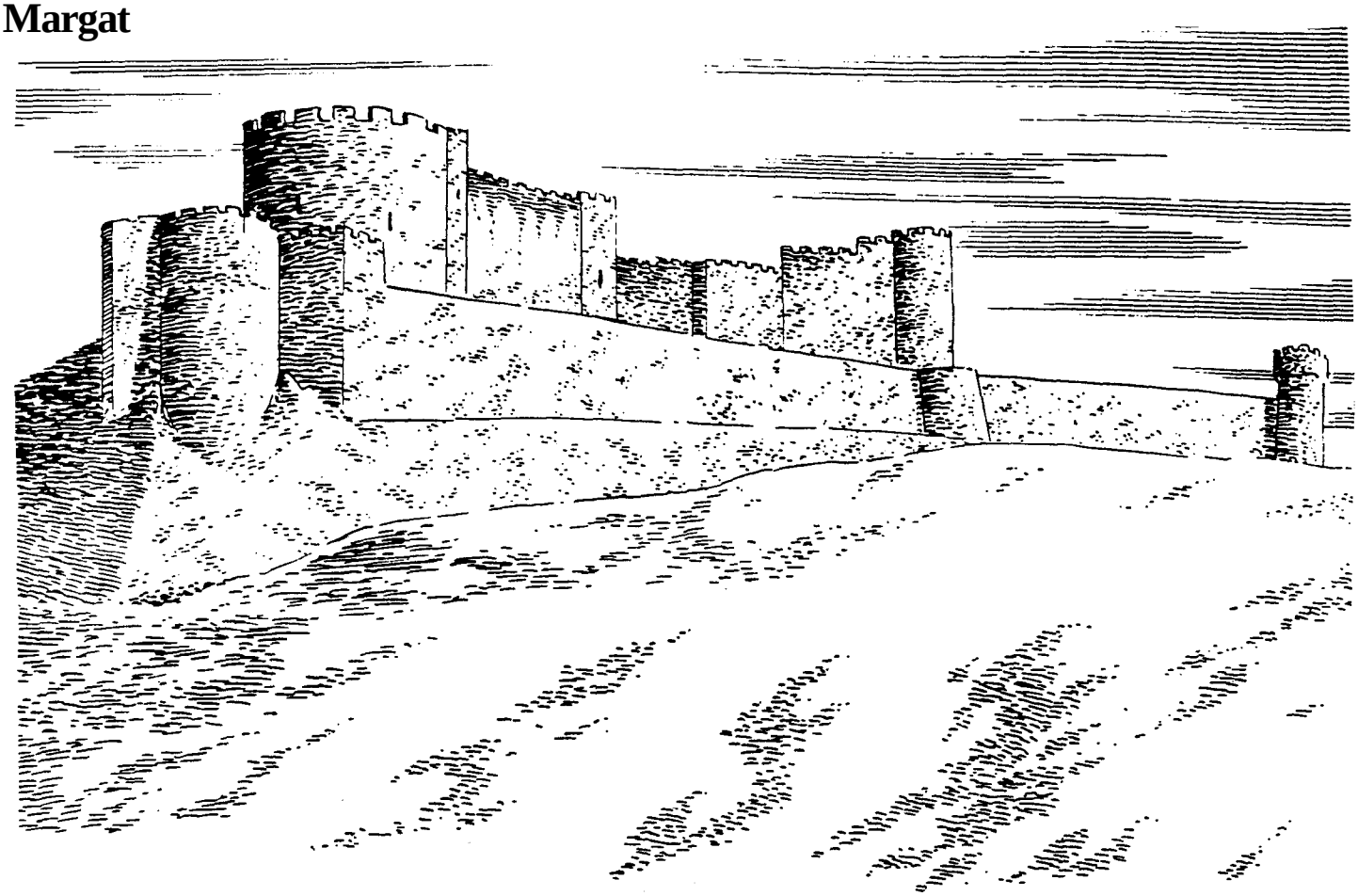
VIEW FROM THE WESTERN HILL S

VIEW OF SOUTHERN TOWER AND WALLS FROM WITHIN THE CASTLE.

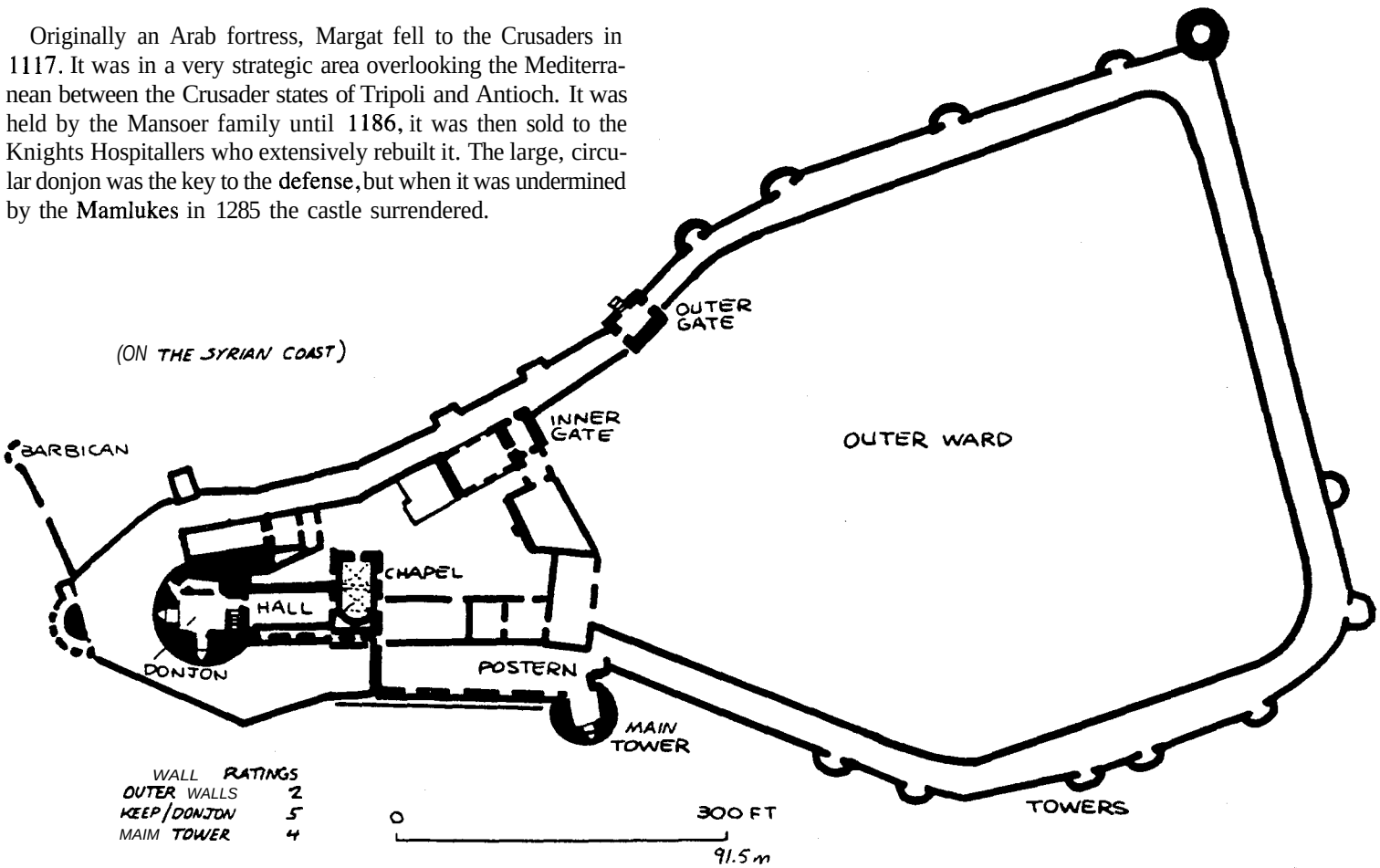
THESE MASSIVE FORTIFICATIONS WERE ORIGINALLY BUILT IN THE 1100'S WITH MODIFICATION AND ADDITIONS INCORPARATED UP TO ABOUT THE LATE 15th CENTURY.

Built between 1454-1456 by Sultan Mohammed II on the shores of the Bosporus, Rumeli Hisari, or "The European Fortress," united two twelfth century towers which had dominated the strait.

Margat



Originally an Arab fortress, Margat fell to the Crusaders in 1117. It was in a very strategic area overlooking the Mediterranean between the Crusader states of Tripoli and Antioch. It was held by the Mansoer family until 1186, it was then sold to the Knights Hospitallers who extensively rebuilt it. The large, circular donjon was the key to the defense, but when it was undermined by the Mamlukes in 1285 the castle surrendered.



SIEGE WEAPONS

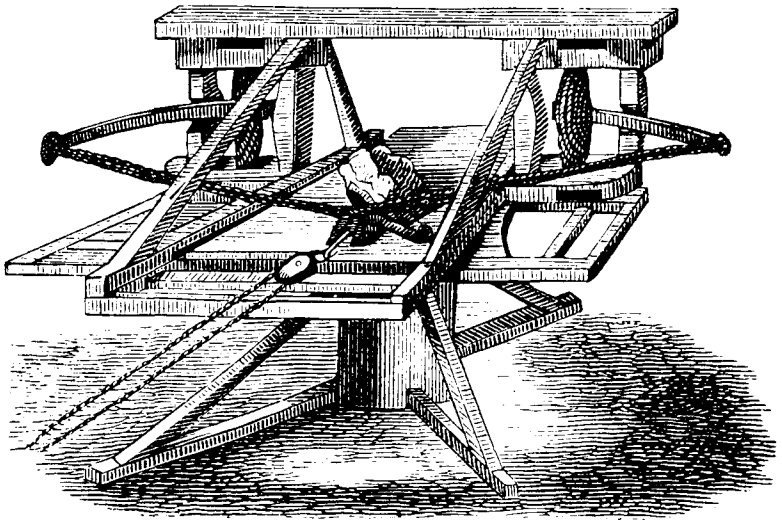
The basic concepts and designs behind siege weapons remained essentially the same from their first use in ancient times through the Middle Ages. Torsion was the most basic type of force used in these weapons. The only type of siege weapon not used in ancient times was the Trebuchet, which came into being during the twelfth century.

The five basic types of siege artillery are the catapult, onager, balista, springal, and the trebuchet. The catapult consists of a frame and a heavy crossbeam mounted and braced perpendicular to it. Directly behind the cross beam is a large system of cords, called a skein, which holds the arm of the machine. These cords consisted of neck sinews of animals or sometimes, human hair. Where the skein was attached to the frame, a series of gears or ratchets were located which allowed the skein to be tightened. The skein was tightened such that the arm of the catapult rested against the crossbeam. In larger catapults, the force required to bend back the arm into a cocked position was considerable and often took many men operating a winch-like apparatus. The release was usually a metal bar, with a lanyard attached, which went into a metal ring mounted on the arm. An average size catapult, with a frame of 3.5 by 1.5 meters, could cast a four kilogram stone about 325 meters. Rate of fire is about one stone per 5 minutes. Larger ones, about twice the size, could cast a 20-30 kilogram stone 325-375 meters.

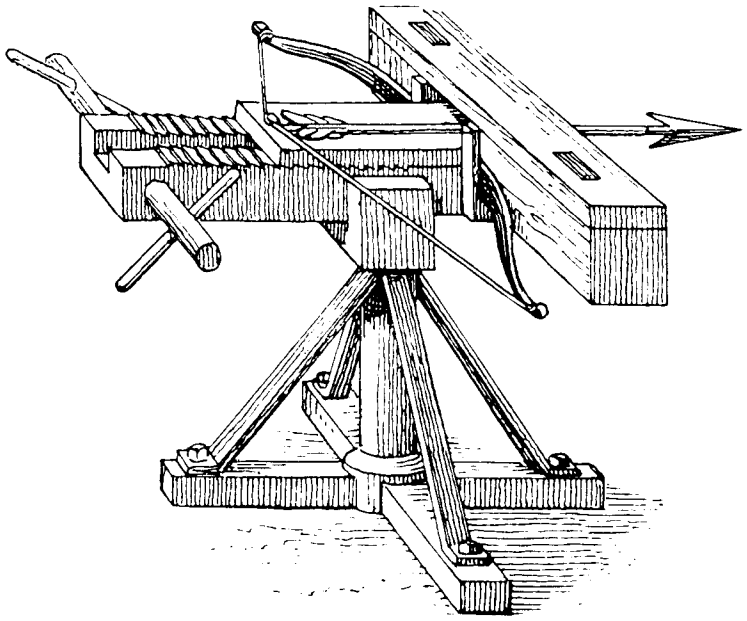
The onager is very similar to the catapult except that a sling-like structure was used to hold the stones. The properties of the sling enabled missiles to be hurled farther than catapults of similar tensions. These engines could not hurl flaming projectiles, however. The onager as pictured could hurl a four kilogram stone about 375-400 meters. Rate of fire is about one stone per 5 minutes.

The balista shot heavy arrows and with proper modifications, stones as well. The balista resembled a cross bow to some extent, although the arms were not connected. Each arm had a skein of twisted cords, similar to those of a catapult, attached to it. It is theorized that the balista inspired the invention of the crossbow or arbalest. The arrows which were shot from a typical balista were about 4 kilograms in mass, and 1.2-1.7 meters in length. The range of these weapons was about 360-400 meters. As opposed to the other siege weapons, the balista was more of a direct-fire weapon owing to the flat trajectory of the javelin. These weapons were much lighter than catapults and could therefore be transported by an army easier. A balista used for throwing stones had a maximum range of 275-300 meters. These weapons also had a rate of fire of one shot per 5 minutes.

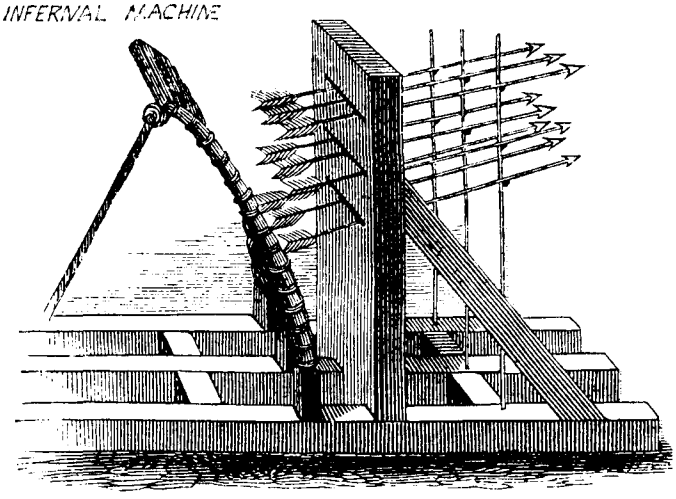
All of the siege weapons which relied on twisted cords to provide power had one major drawback: dampness. Rain or very humid conditions would cause the skeins to slacken and render the machines useless.



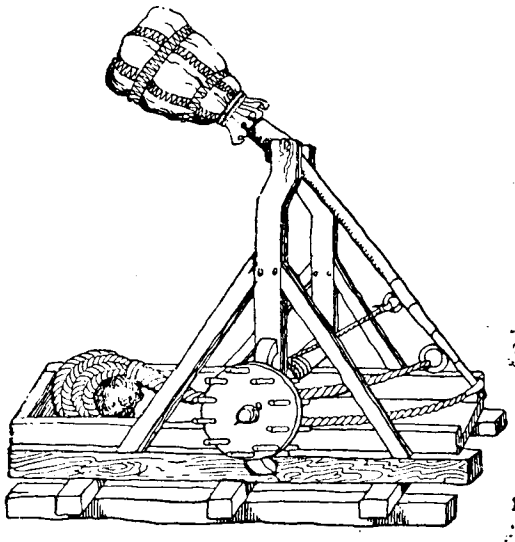
BALISTA TYPE WEAPONS

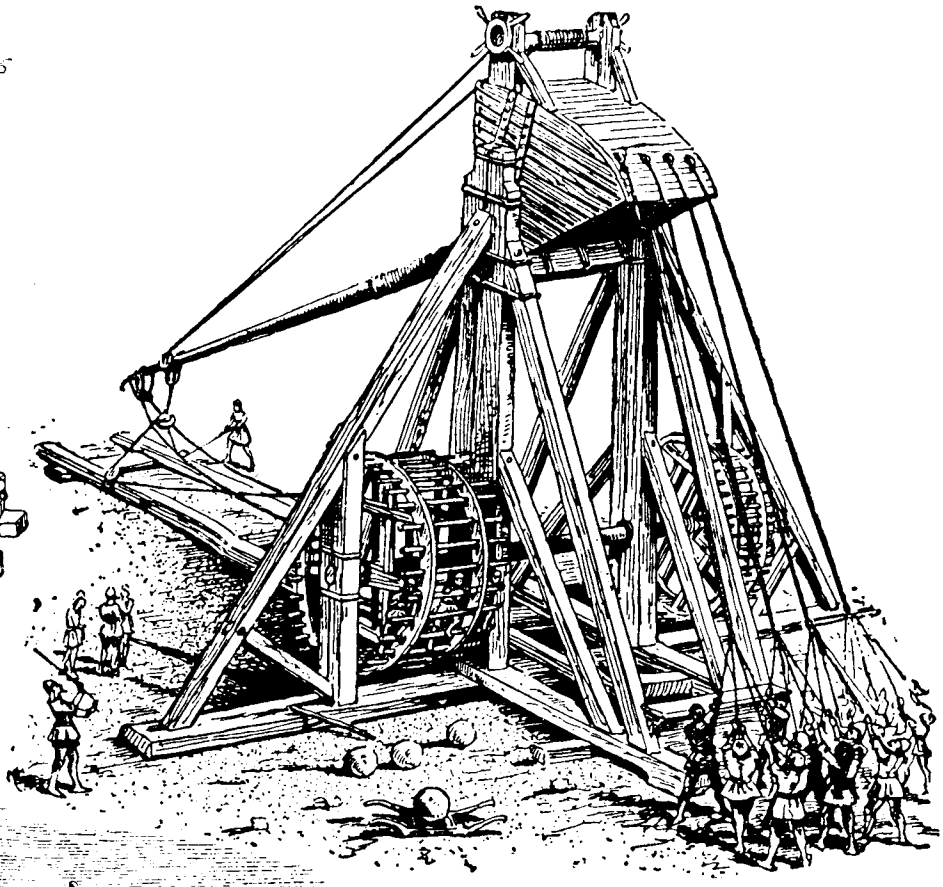


INFERNAL MACHINE

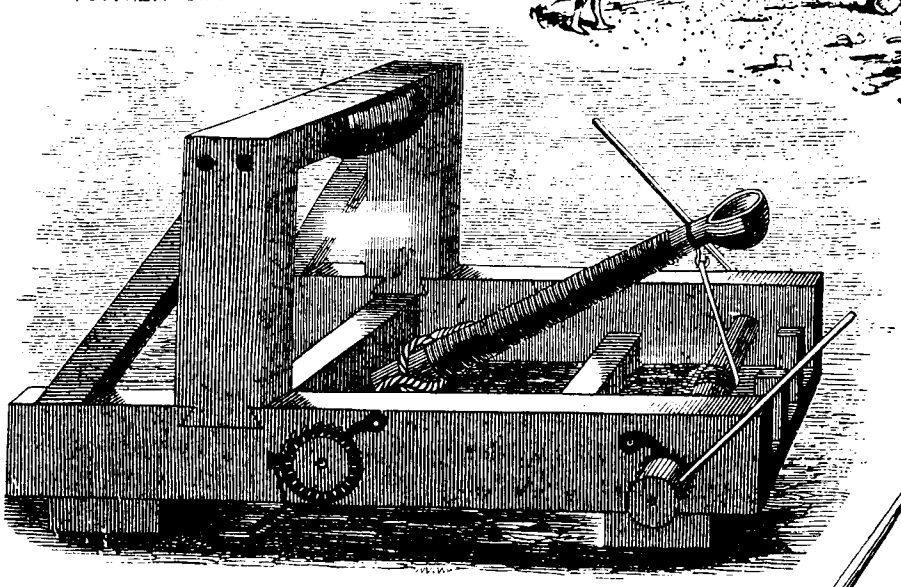


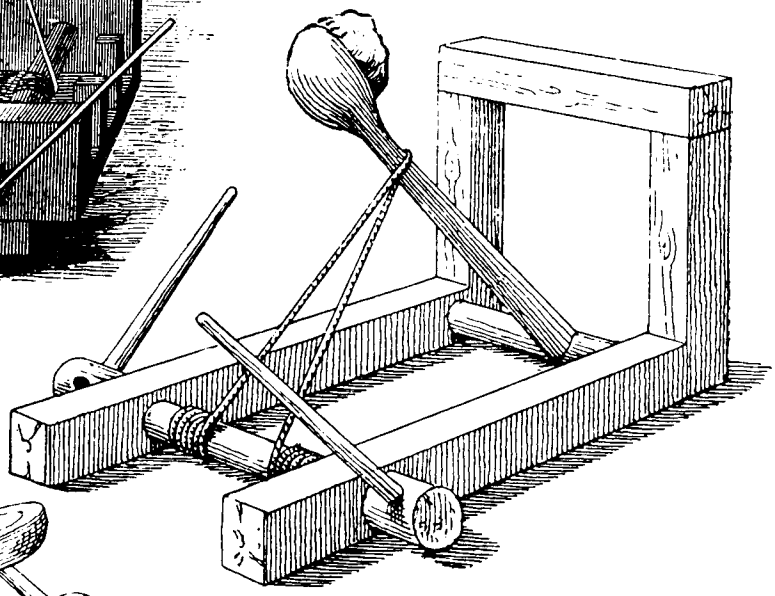
CATAPULT TYPE DEVICES

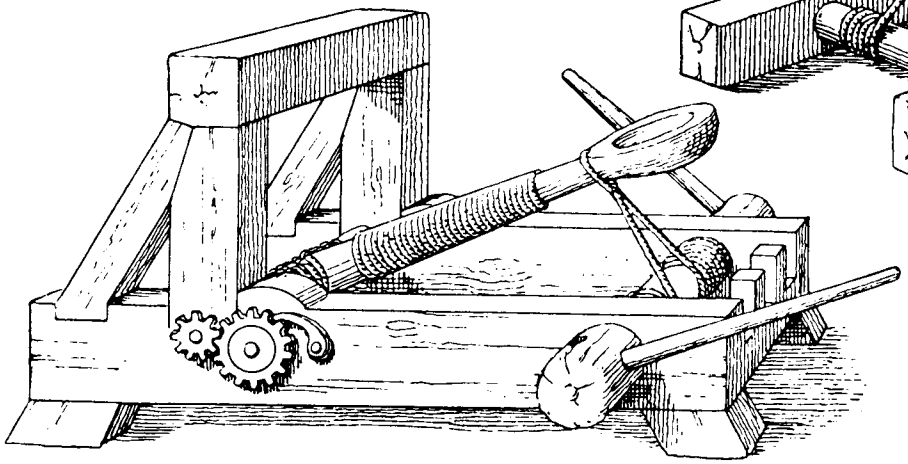




TORMENTUM







The proper maintenance of these weapons was also important if one wanted predictable results. Tightening the skeins, particularly those of the balista, was a delicate job requiring skills similar to those of a piano tuner. Correcting and aiming shots was also a job which required much skill and experience.

The spring engine, or springal, was another form of javelin projecting weapon. This machine was basically a frame upon which the missiles were placed and a wooden arm, or springer, which was drawn back and released. The spring then struck the butt end of the javelin and shot it forth. Contemporary drawings of these weapons are very crude and provide little help in determining the exact nature of the machine. The spring was made of several layers of wood which were glued together, similar to a composite bow.

A machine of this type with a spring 4 meters long could project a 2 kilogram, 1.4 meter javelin about 250-300 meters. These weapons could be modified to shoot more than one missile at once and could be used with flaming missiles. This weapon would require 4 men to operate, and could shoot once per 5 minutes.

The trebuchet differed from other siege weapons in that it did not rely on torsion to provide the force required to throw projectiles. Instead the arm is attached to a counter weight, similar to a child's seesaw. When the weight rotates downward due to gravity, the opposite end of the arm moves upward. The missile is held in a sling similar to that of the onager.

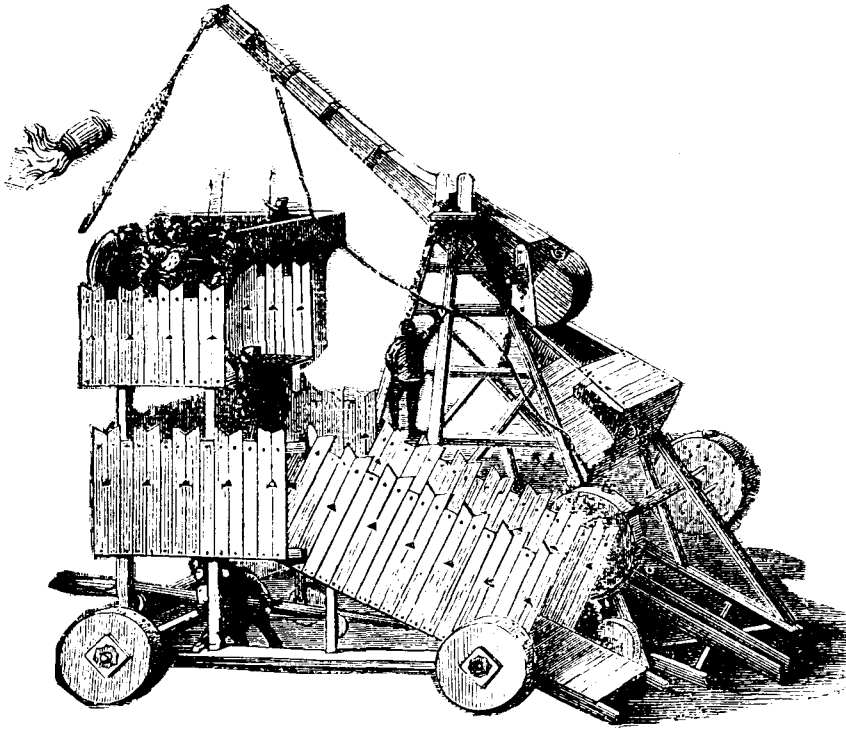
From the middle of the thirteenth century onward, the trebuchet was the favored weapon for use in sieges mainly due to the massive stones, 250kg and up, they could throw. The constant bombardment from the smaller stones of a catapult would eventually wreck a wall, but one huge stone from a trebuchet would shake even the heaviest stonework. These machines were not portable, however, and had to be constructed on their intended sites of use.

The largest machines, those with arms of about 15 meters in length and counterweights of 10,000 kilograms, could throw a 250 kilogram stone 275-300 meters. These weapons required upwards of a dozen men to operate them and had a rate of fire of one shot per 15 minutes.

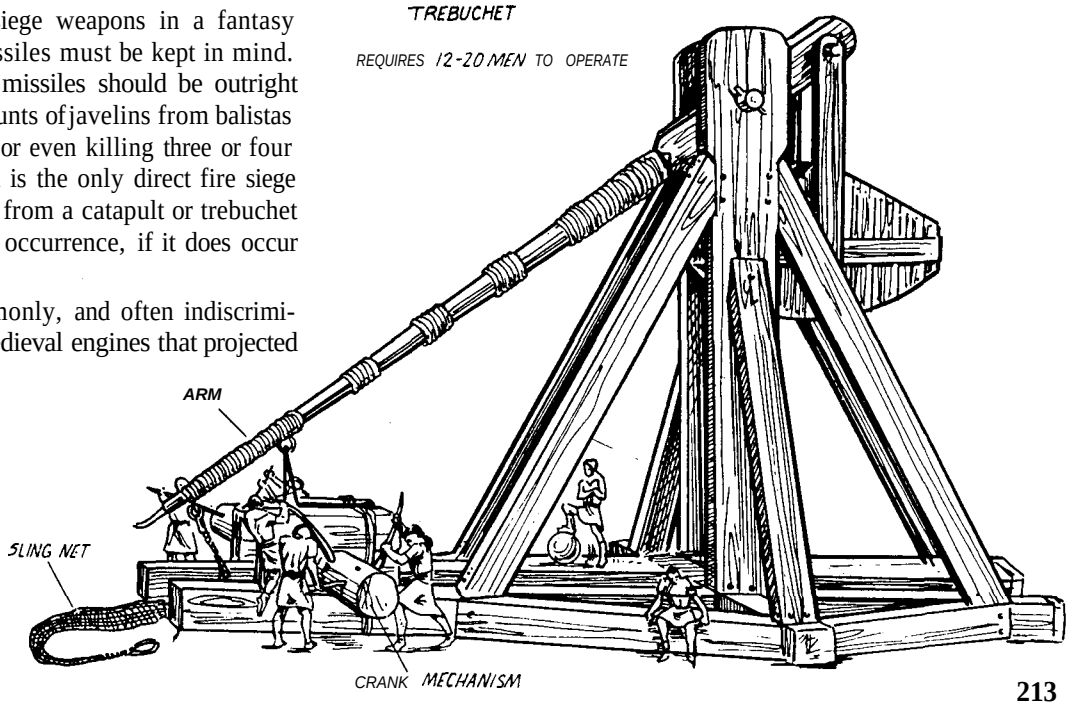
When using any of the above siege weapons in a fantasy game, the destructiveness of the missiles must be kept in mind. Any character hit by one of these missiles should be outright killed. There are contemporary accounts of javelins from balistas pinning men in full armour to trees or even killing three or four with one shot. Although the balista is the only direct fire siege weapon and being struck by a stone from a catapult or trebuchet would only be an unhappy chance occurrence, if it does occur the character should die.

The following names were commonly, and often indiscriminately applied to the ancient and medieval engines that projected stones and arrows of large size:

Balista
Beugle
Blida
Bricola
Calabra
Catapulta
Engin
Engin & Verge
Espringale
Fronda
Fundibulum
Manganum
Martinet
Matafunda
Mategrifon
Petrary
Robinet
Scorpion
Springald
Tormentum
Trebuchet
Tripantum



HURLS LARGE STONES
CAN HURL UP TO 250 kg STONES
RAKE 275 - 300 METERS



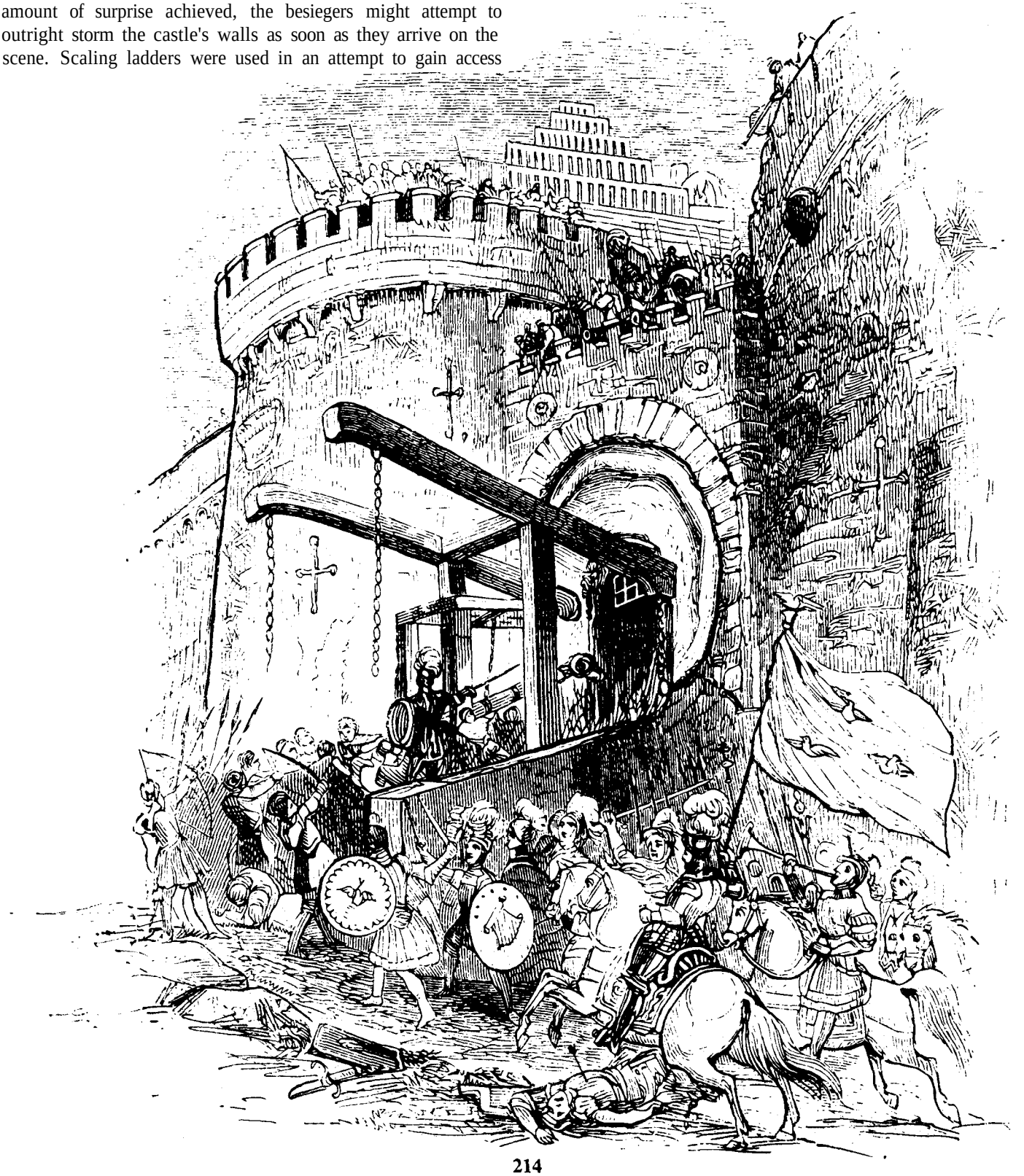
LAYING SIEGE

Laying siege to a castle or fortified town was the most complex and dangerous job a Medieval army could undertake. Maintaining a suitable army in one place for a long time required tremendous efforts just in keeping it supplied. In addition, areas with large concentrations of people were subject to epidemics from a number of sources. Last but not least, was the danger of the besiegers being cut off by a relieving army.

Depending on the preparedness of the attacking army and the amount of surprise achieved, the besiegers might attempt to outright storm the castle's walls as soon as they arrive on the scene. Scaling ladders were used in an attempt to gain access to the walls of the castle while the defenders attempted to push the ladders away.

This type of attack was very risky and would not be used unless the attacking force was not concerned with taking too many losses.

If this type of attack was repulsed, the attacking forces would usually step back and begin the more complex and grim waiting game which a siege entails.



The earlier castles usually had only one entrance and, as a result, the besiegers could concentrate all of their forces at this point to prevent escape. With the development of castles with numerous exits, the attackers had to spread out and encircle the entire structure. An armed camp was set up by the attackers which usually consisted of a ditch and a wooden palisade. The palisade was further strengthened by piling the dirt from the ditch against it. In areas which were subject to cavalry attack, sharpened wooden stakes were placed in the ground to strengthen the defense.

Siege castles would normally be built to check the defender's main gates. Built just out of bow range, these took on the appearance of early motte and bailey fortifications and served as strongpoints of the besieging force's defensive works.

During this time of waiting the attackers would be busy themselves with the construction of siege weapons, siege towers, battering rams, and mantelets. If the area was suitable, mining operations would soon begin and proceed towards the walls.

Often before the main attacks began, the attackers would offer terms to the defenders. These would range from unconditional surrender to a relatively small tribute, depending on the animosity between the two sides. These talks often continued after the attacks had begun. Talks with spies and dissatisfied members of the defense would also occur in an attempt to gain an advantage or secure a guarantee of betrayal.

It was also perfectly acceptable for the two sides to come to a truce agreement. Sometimes this would even result in the besieging army being "allowed" by the defenders to go on to another siege while they still agreed to be considered under siege! The defenders might agree to surrender at the end of the truce unless relief arrived or the truce could be renewed.

By blockading the castle while conducting all of these activities, the attackers were hoping that the defenders' food or water would run out or that some sort of disease would break out amongst them. Water supplies were often poisoned in an attempt to weaken the defense as well.

Regardless of the strength of the garrison, a castle could only hold out as long as food and water were available. If a castle's garrison knew of an impending attack they would lay in extra provisions, not only to increase their ability to hold out, but also to deny them from the attackers. In the long run a castle was bound to surrender if a close blockade preventing any resupply was maintained, but this was a costly endeavor for the attacker.

Breaching the walls by aboveground assault was normally done by attacking either the wall itself or the gates. Against the wall, the attackers used hard tools like picks and crowbars; protection for the workers was provided by moveable sheds. A more effective method was to use a bore, which was a machine designed to pick away at the mortar between stones. Battering rams were directed against doors to break them down.

Bombardment by siege engines was carried out to harass the defenders, as well as to weaken the walls. Defenders used siege engines too, in attempts to destroy the enemy's weapons and to weaken attacks. If the castle was surrounded by a moat or ditch, minor attacks were made and bundles of wood were thrown in to fill them up. This allowed access to the walls for the attackers' towers and rams. If the moat was filled up, the defenders usually attempted to sally forth and clear away the debris.

If the defenders suspected that a tunnel was being dug they would employ a number of tricks to find it. People with exceptional hearing would be instructed to listen, especially around foundations, for sounds of tunneling. Pans of water would be set out as well in an attempt to detect vibrations. When the tunnel was detected a countermine was started to intercept it. When the tunnel was broken into by the defenders, a fierce battle would usually develop as the attackers had much time invested in the work and the defenders would be giving up a free passage into the defenses if they lost. If the attackers were successful in tunneling under the foundation of a wall, pitch and other inflammable materials would be packed into the mine and then set on fire. When the flames ate through the support beams of the chamber and weakened the foundation of the wall, the structure would collapse and create a breach.

Once a breach was made in a wall, either by mining, bombardment, or battering, a general assault would be called in an attempt to secure a foothold in the castle. If the defenders were strong enough to repulse the attack, they would concentrate on filling in the breach. This was done by using rubble, debris, and beams with long, sharpened spikes drove into them called *cheval-de-frise.* Often the breach could be made just as defensible as the original wall was.

As you can see, a successful siege was a very complicated affair which required a lot of time and expense. Coordinated efforts utilizing bombardment, mining and close assaults were usually effective. The least costly, in terms of lives, was to wait until the defenders' food gave out, but that could take months. All in all, sieges were not to be taken lightly.

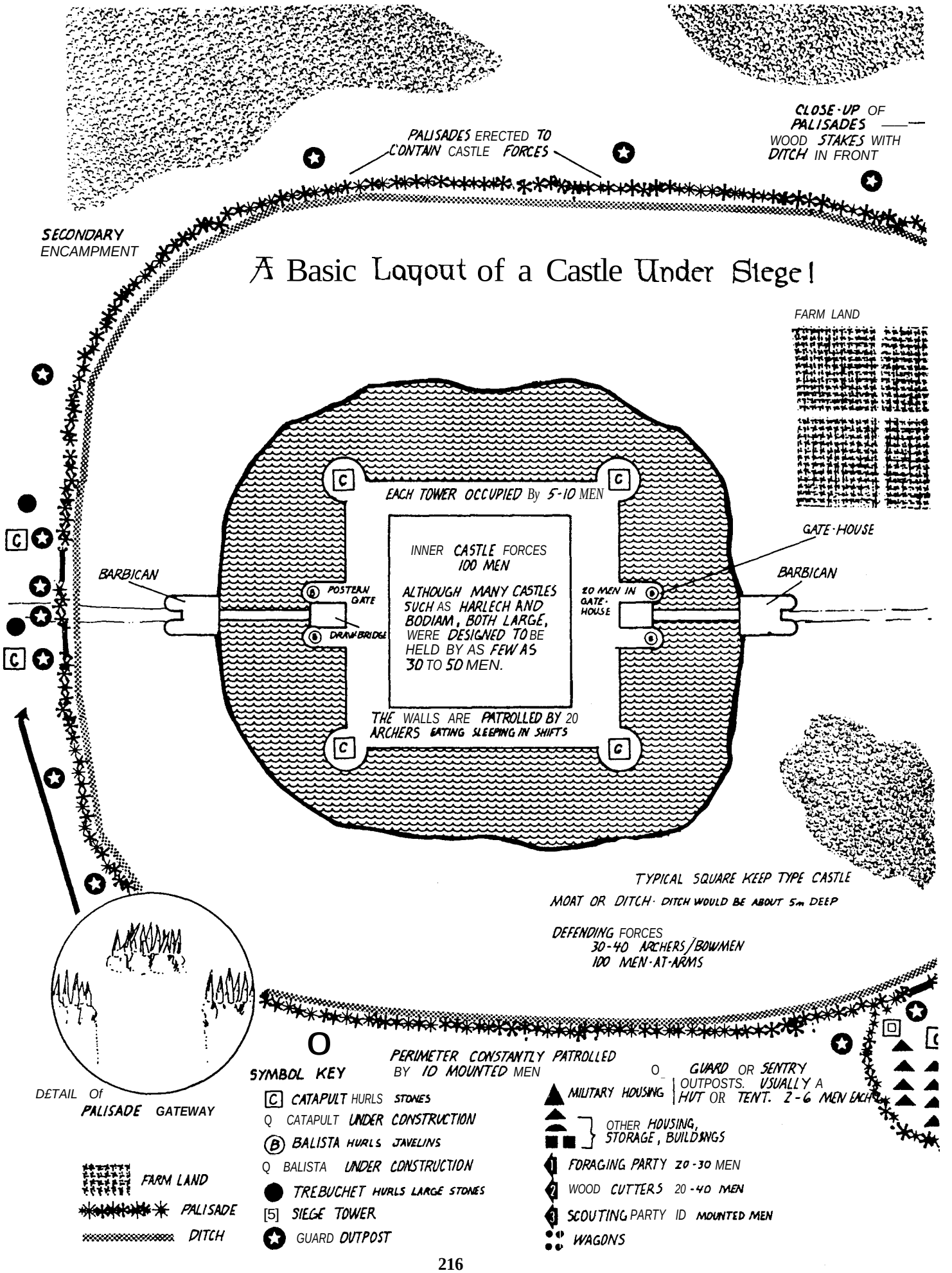
The most effective weapon against a castle was the mine. Unless the castle was built upon solid rock or had very wide water defenses, there was very little which could be done to counter this type of attack. Mining was often undetected by the defenders since the entrance was often carefully hidden.

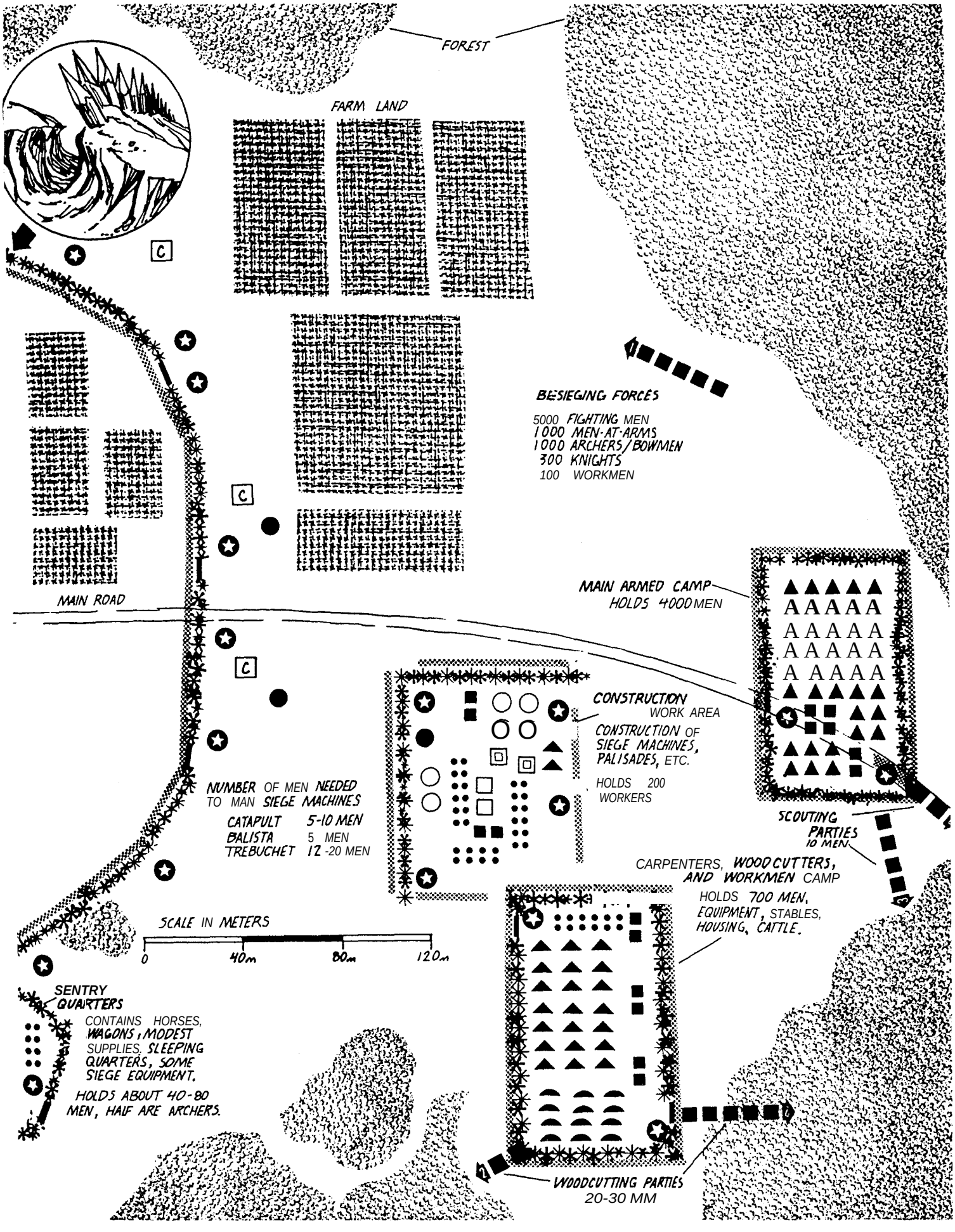
Kenilworth Feb.-Dec. 1266

One of the most heavily defended castles in the British Isles, Kenilworth was the base of power for the followers of the rebel Earl of Leicester, Simon de Montfort. At the time of the siege the castle boasted some 1200 men; an incredibly large garrison. King Henry set up his army in four divisions about the castle. Nine catapults were set up to bombard the walls and towers. During the bombardment process, the king obtained two siege towers. These towers, one described as being capable of holding 200 archers, never were used because the defenders were able to destroy them with their own catapults. The defenders were also successful in knocking out some of the king's siege engines. Henry, however, got new machines and continued to hurl stones against the walls and defenses until all of the defenders' engines were destroyed.

After the destruction of the siege towers, there were no serious efforts to storm the walls. The extensive water defenses ruled out any attempt at mining. The castle was blockaded, but this didn't prevent the garrison from conducting frequent sortie's (raids) to play havoc among the enemy and their horses.

Soon the King realized that reducing Kenilworth was taking too much time and money. He was also being faced with a number of other concerns, such as the Welsh, a depleted treasury, and other rebels. He decided to negotiate in July through the


A Basic Layout of a Castle Under Siege!
CLOSE-UP OF PALISADES
WOOD STAKES WITH DITCH IN FRONT
PALISADES ERECTED TO CONTAIN CASTLE FORCES
SECONDARY ENCAMPMENT
FARM LAND
EACH TOWER OCCUPIED By 5-10 MEN
INNER CASTLE FORCES 100 MEN
ALTHOUGH MANY CASTLES SUCH AS HARLECH AND BODIAM, BOTH LARGE, WERE DESIGNED TO BE HELD BY AS FEW AS 30 TO 50 MEN.
THE WALLS ARE PATROLLED BY 20 ARCHERS EATING SLEEPING IN SHIFTS
GATE-HOUSE
BARBICAN
BARBICAN
POSTERN GATE
DRAWBRIDGE
20 MEN IN GATE-HOUSE
TYPICAL SQUARE KEEP TYPE CASTLE
MOAT OR DITCH · DITCH WOULD BE ABOUT 5m DEEP
DEFENDING FORCES
30-40 ARCHERS/BOWMEN
100 MEN-AT-ARMS
PERIMETER CONSTANTLY PATROLLED BY 10 MOUNTED MEN
DETAIL Of PALISADE GATEWAY
SYMBOL KEY
C CATAPULT HURLS STONES
Q CATAPULT UNDER CONSTRUCTION
B BALISTA HURLS JAVELINS
Q BALISTA UNDER CONSTRUCTION
TREBUCHET HURLS LARGE STONES
[5] SIEGE TOWER
GUARD OUTPOST
GUARD OR SENTRY OUTPOSTS. USUALLY A HUT OR TENT. 2-6 MEN EACH
MILITARY HOUSING
OTHER HOUSING, STORAGE, BUILDINGS
1 FORAGING PARTY 20-30 MEN
2 WOOD CUTTERS 20-40 MEN
3 SCOUTING PARTY 10 MOUNTED MEN
WAGONS
FARM LAND
PALISADE
DITCH


FOREST
FARM LAND
C
C
C
BESIEGING FORCES
5000 FIGHTING MEN
1000 MEN-AT-ARMS
1000 ARCHERS/BOWMEN
300 KNIGHTS
100 WORKMEN
MAIN ROAD
MAIN ARMED CAMP
HOLDS 4000 MEN
CONSTRUCTION
WORK AREA
CONSTRUCTION OF SIEGE MACHINES, PALISADES, ETC.
HOLDS 200 WORKERS
NUMBER OF MEN NEEDED TO MAN SIEGE MACHINES
CATAPULT 5-10 MEN
BALISTA 5 MEN
TREBUCHET 12-20 MEN
SCOUTING PARTIES 10 MEN
CARPENTERS, WOODCUTTERS, AND WORKMEN CAMP
HOLDS 700 MEN, EQUIPMENT, STABLES, HOUSING, CATTLE.
SCALE IN METERS
0
40m
80m
120m
SENTRY QUARTERS
CONTAINS HORSES, WAGONS, MODEST SUPPLIES, SLEEPING QUARTERS, SOME SIEGE EQUIPMENT.
HOLDS ABOUT 40-80 MEN, HALF ARE ARCHERS.
WOODCUTTING PARTIES
20-30 MM

Archbishop of Canterbury and later, a papal legate. After refusing the king's terms the defenders were excommunicated. The defenders promptly returned the favor by dressing their surgeon up to imitate the legate, where "He stood like the legate upon the castle wall, and excommunicated the king and legate and their men all."

Further attempts at negotiation occurred in October, but these proved fruitless as well. The besieging forces maintained the blockade, no doubt realizing that the defenders' supplies were running low. Inside the castle, the defenders were reduced to eating their horses, and with the worst of winter approaching, they found firewood nonexistent. In early November, a forty day truce was arranged and three knights were allowed to leave to see if they could get help, providing that they surrendered at the end of the allotted time if help was not forthcoming. None came and the garrison duly surrendered on terms, 14December.

This example shows the many ways in which a castle could be taken or reduced during a siege. Henry attempted bombardment, direct assault, blockade, psychological warfare, and diplomacy. Clearly in this instance, and in general, the defense had the upper hand in the siege, surrendering only after favorable terms are offered. The cost of this action to Henry was enormous, to the point where it nearly bankrupted the crown. He could not, however, afford not to take the castle as it served as an inspiration to other rebels and by their rejection of his lordship over them, spread the seeds of rebellion, which could not be allowed to sprout.

Equipment and devices which were used in siege warfare included siege towers, battering rams, the mouse, mantelets, Greek fire, grappling hooks, quicklime, ladders, boiling water, and hot sand, to name a few.

Siege towers were large structures built of wood which not only allowed the attackers access to the walls, but also gave them higher positions than the defenders from which to fire missiles. The towers were constructed on the site of the siege and then rolled up to the wall over which the attackers could move. The entire structure was covered with fresh animal hides to protect it from fire and the people inside it from arrows. Often if the defenders knew where the tower was to be placed, they would build wooden towers of their own on that spot on the wall.

In its simplest form, a battering ram consists of a stout log attached to a frame so that it can be swung back and forth. To protect the workers of the ram, however, the structure was usually covered by a roof or fresh hides. A large metal head, often in the shape of a ram, facilitated the breaking down of doors. Sometimes rams were built into siege towers.

Those with suspended rams were the more primitive design and the impact force was somewhat limited. A more elaborate and efficient ram involved setting up a series of rollers upon which the ram itself rested. With this sort of arrangement, very large rams could be built to batter down all but the thickest walls.

The mouse was the name for a weapon similar to the ram except that the head of the machine was pointed and it was used to pick and bore away at the masonry of a solid wall. Corners of square towers were especially vulnerable if the attackers provided good covering fire in support of the operation. As with the ram, this weapon could be housed in its own structure or incorporated into a siege tower.

Manetlets were basically large wooden shields mounted on wheels to provide cover for archers, engineers, or other attackers.

If the defenders had enough forewarning of an impending attack, they would often build hoarding on the walls and towers of their castles. These structures, built of wood, extended out over the ramparts. From these the defenders could either fire arrows or drop stones and other things onto attackers at the base of the walls. Often the base of the walls were slightly bulged out so that stones would bounce off them and then along the ground. This enabled the rocks to be directed against covered weapons; i.e. rams, towers, etc.

One technique used by defenders when confronted by rams or towers was to grapple the machine in an attempt to disrupt its actions or destroy it. Grappling the actual ram of a battering ram would divert it from its path and cause it to be much harder to use. If a large enough winch was available the defense could even tip the attackers machines over. Naturally, the attackers would try their utmost to cut any lines which were successfully attached to their weapons.

Any number of objects were dropped from the walls during the defense of a castle. Some of the more interesting ones included hot sand, boiling water, and Greek fire. Sand and water was especially good in penetrating the chinks in armour. Oil and molten lead were never used due to their expense. Greek fire was originally developed in ancient times and was used throughout Europe and the Middle East. Using petroleum as a base, this liquid could be put in containers and thrown like a molatov cocktail. Some cultures built machines to squirt this fire like modern flamethrowers.

Greek Fire

As described by Villehardouin

"One night when we were keeping guard over the towers that protected the covered ways, the Saracens brought forward a machine called a petrary, which they had not done before, and put Greek fire into its sling. When the good knight, Gautier d'Ecurey, who was with me, saw this he said to us: 'My friends, we're in the greatest peril we've ever been in, for if they set fire to our towers and we remain here we'll all be burnt alive. On the other hand, if we leave the posts we've been set to guard, we are dishonoured. Therefore no one can defend us in this peril but God alone. What I advise is for all of us to fling ourselves on our elbows and knees each time they hurl their fire at us, and pray to our Saviour to preserve us in this hour of peril.'

"As soon as they launched their first missile we threw ourselves on our elbows and knees as the good knight had directed. That first mass of flame passed between our two towers and fell on the ground in front of us, just where our troops had been making the dam. The men sent to put out the fire were getting ready to extinguish it, when the Saracens, seeing they could not aim straight at them because of the two pavilion wings which the king had had put up, began to shoot their darts right up into the clouds, so that they fell on the firemen's heads.

"This Greek fire was such that seen from the front as it darted towards us it appeared as large as a barrel of verjuice, and the tail of fire that streamed behind it was as long as the shaft of a great lance. The noise it made in coming was like that of a thunderbolt falling from the skies; it seemed like a dragon flying through the air. The light this huge, flaming mass shed all around

it was so bright that you could see right through the camp as clearly as it it were day. Three times that night the enemy slung Greek fire at us from their petraries, and three times they shot it from their swivel crossbows.

"Each time our saintly king heard the Saracens hurling Greek fire at us he sat up in his bed, raised his hands in prayer, and said, weeping: 'Gracious Lord, guard my people for me!' I truly believe his prayers did us good service in our need. All that night, every time the fire had fallen he sent one of his chamberlains to ask us how we were faring, and whether the flaming missiles had done us any harm.

"Once when they hurled Greek fire at us it fell near the tower which Pierre de Courtenay's men were guarding and struck the bank of the stream. Thereupon a knight called l'Aubigoiz came up to me and said: 'My lord, unless you come and help us we shall all be burnt; for the Saracens have shot so many of their fire-tipped bolts at us that it seems like a great hedge of flame advancing towards our tower.' We rushed to the place and found that he had spoken truly. We put out the fire, but before we had completely extinguished it, the Saracens had struck every one of us with the arrows they shot from across the stream."

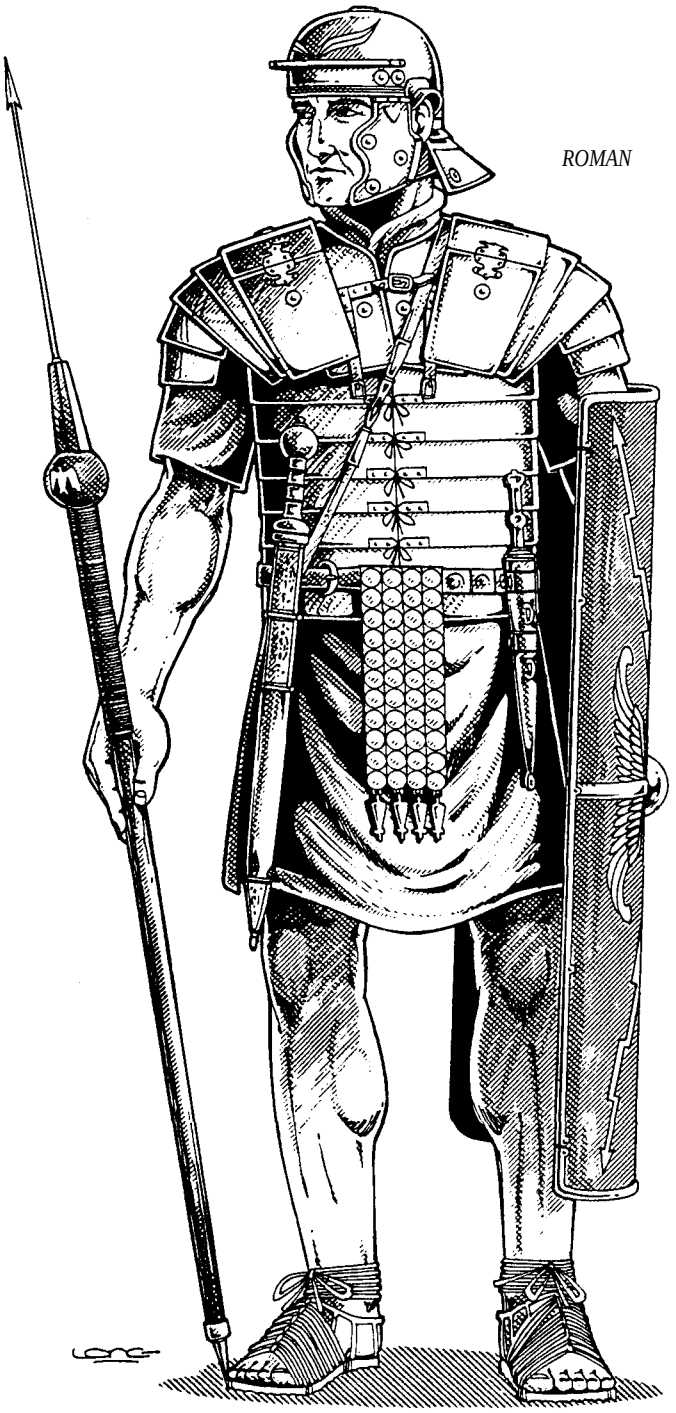
Early Siege Tactics

The earliest siege weapon was the battering ram. Assyrian reliefs show rather complex machines, sort of a combined ram/siege tower, in the first half of the 9th century B.C. This shows that by this time the science of siege warfare had become very advanced. Earlier civilizations generally depicted sieges by showing the attackers storming the walls. The Assyrians made numerous advances in methods of siege warfare, including the use of mines, rams and bores to attack the defenders' walls.

It is not surprising that among the Greeks, Sparta is first mentioned when it comes to siege tactics. The descriptions given by Thucydides of the Spartan siege of Plataea in 429 B.C. are of particular note. First the Spartans built a wooden palisade surrounding the city to prevent the defenders' escape. They then proceeded to raise an earthen ramp against the wall. The ramp itself was reinforced with a latticework of logs. This construction took the Spartans over two months to complete.

The defending Plataeans countered this by heightening the wall at the point the ramp met it. Building materials, stone, and bricks were gotten from the nearest houses. The Plataeans also tried to undermine the Spartan ramp by knocking a hole in the wall at the base of the ramp and then drawing the earth into the town. As an additional precaution the Plataeans also constructed a crescent shaped interior wall to seal off the threatened portion of the town wall.

After episodes in which the Spartans battered down portions of the wall and then attempted to burn down the town, they settled down to the more standard and manpower efficient means of starvation to reduce the city. The Spartans constructed an elaborate siege fort/wall around the city, beginning with two trenches about eight meters apart. Upon the inner platform between the ditches two walls were built of brick. By putting a rod over the walls, not only was a rampart walkway provided, but an area for storage and housing of the soldiers as well. The rampart was strengthened by battlement on each side and two story towers every fifteen meters or so.



ROMAN

Although most of the town's inhabitants had escaped prior to the siege, a garrison of 480 men and 110 women had remained; they held out for two years. In the later months, about half of the garrison escaped over the Spartan wall, but in the end, facing starvation, the remaining ones surrendered. The Spartans then executed or sold as slaves those who had surrendered.

The Greeks greatly improved their siege warfare techniques in the 4th century B.C. largely through the efforts of Dionysius I, the Syracusan *strategos*. It now became a common tactic to build large siege towers which stood higher than the defending walls. From these towers, archers could rain down arrows upon the defenders and drive them from the walls. Dionysins improved this greatly through the invention of the crossbow like *gastraphetes* which shot heavy bolts. With this new technology Dionysius was able to reduce the Carthaginian town of Motya.

The Macedonians made use of this new technology to their great success. During Alexander's siege of Halicarnassus in 334 B.C., torsion stone-throwing siege engines are first mentioned. With this new development, more powerful weapons began to appear, both for attack as well as defense. During Alexander's siege of Tyre a number of other innovations were made. Ships mounted with battering rams were used against this island fortress to great success, as were catapult armed ships.

Perhaps the most dynamic and interesting individual in the history of Greek siege warfare was Demetrius Poliorcetes, the Besieger. Descriptions of his sieges of Salamis and Rhodes by Diodorus give a detailed account of Demetrius' achievements.

The following has been taken from Peter Connolly's *Greece and Rome at War.*

Demetrius' attempt to take Rhodes in 305-04. He now constructed another *Helepolis* even larger than the one he had used at Salamis. Its base was almost 50 cubits (c. 22m) square. The frame was constructed of squared timbers and bound with iron. Bars were placed across the centre at one cubit intervals to allow space for the men who were to push the tower forward. It was mounted on eight solid wheels, each nearly a metre thick, which were covered with iron plates. The wheels were on pivots so that the machine could move in any direction. The framework of the tower was made of four upright timbers nearly 100 cubits (c. 45m) long placed at each corner of the base and sloping inwards so that the tower tapered to about 20 cubits (9m) square at the top. It was divided into nine storeys. The front and sides were covered with iron plates nailed on to protect the tower from fire missiles. There were ports at the front at each level covered by shutters which were raised mechanically. These shutters were made from hides stitched together and stuffed with wool to provide excellent protection against stone missiles. Each storey had two wide stairways — one up and one down. The tower was moved by 3,400 men, some inside and others pushing at the back. Allowing 15cm each for the thickness of the bars across the base, which were one cubit apart, it would be possible to squeeze a little over 30 rows of men inside the base of the tower, and at 60cm per man one would similarly get just over 30 men to a row. Therefore the total number of men pushing inside the machine could hardly exceed 1,000. Either Diodorus' figures are wrong or this represents three shifts.

According to the Roman engineer Vitruvius this tower was designed by Epimachus, an Athenian architect. Unfortunately he gives a different description of the tower, saying that it was 125ft tall and 60ft wide, weighing about 120 tonnes. He adds that it was covered with goatskin and undressed hide so that it could withstand the blows of catapult stones up to 360lbs (118kg). Vitruvius has obviously got hold of the wrong description. This would far better fit the Salamis *Helepolis.* Perhaps the Roman engineer did not realise that there were two different machines.

Demetrius also prepared penthouses to protect the men while they filled the ditches, and to cover the rams. Covered passages were constructed in movable sections ready for the assault on the walls. Vegetius, writing in the 4th century AD, says that these covered galleries were built in sections 5m long, 2.5m high and just over 2m wide.

Vitruvius also includes a description of a massive tortoise ram built by Hagetor of Byzantium. It was 18m long, 4m wide, 11m high and 1m thick. The ram, which operated like a pendulum, was suspended from a frame 12.5m high and operated by ropes. It was over 31m long and made from a squared timber 30cm wide and 22.5cm deep at the front, increasing to 37.5 by 30cm at the butt. The head was covered by a beak of hardened iron and the 4.5m behind the beak were sheathed with iron plates. Three ropes 15cm thick bound the ram from head to butt and these were bound to the ram by other ropes. The whole ram was then wrapped in rawhide.

Diades' siege engines also included borers which were used to knock holes through the walls as opposed to rams which shook the walls down. Diades' borer was housed in a tortoise about 22m long. The borer itself, which was a long beam presumably with an iron point, moved on rollers along a wooden trough and was operated by a windlass and pulleys.

In later times less grand and elaborate schemes were used to reduce fortifications. Philip V perfected and elaborated upon the use of mines to bring down the defending walls. His normal method of operation was to undermine a 60 meter stretch of wall and then bring it down more or less simultaneously. He is credited with undermining the 60 meter stretch of walls at Thebes in only 3 days and nights! Later he even exploited his reputation by raising great piles of earth at night during the siege of Prinassus. Although no actual mining had been done, Phillip informed the citizens of the town that the customary stretch of wall had been undermined and they promptly surrendered. Countermine technology was also highly developed by the Greeks. Often bronze plates were placed on the ground or on the walls of ditches in an attempt to locate the mine in a fashion equal to that of tapping on a wall to find a hollow passage. Once discovered a countermine could be dug and the miners attacked by force of arms, fire and smoke, or simply water.

Roman siege warfare almost always consisted of securing the area around the stronghold by means of a wall and ditch series of fortifications which encircled it. This series of fortifications consisted of both an inner wall facing the stronghold and an outer wall facing the outside for protection against outside attacks. Once this was accomplished the Romans could either sit back and wait out the defenders or plan and implement attacks against the walls of the stronghold. Caesar's siege of Alesia is the most famous and detailed description of Roman tactics.

In addition to the tactic of encirclement the Romans made great use of ramps and rams to breach and gain entrance to an enemy stronghold. In their execution of this attack they differed little from the earlier Greeks. The fort at Masada has left the clearest evidence of this type of siege warfare.

GUNPOWDER WEAPONS

Guns first appeared near the beginning of the 14th century, although gunpowder had been known for centuries. One of the earliest cannons was the *pot-de-fer* which consisted of an iron bottle-shaped vessel with a small hole near the base. Powder was poured into the bottle and an iron arrow, wrapped with leather for a tight fit, was inserted into the end. Through the touchhole near the base a red-hot wire would be inserted, igniting the powder. The range of these dangerous items was no more than 50 meters. No real provisions were made for aiming other than pointing in the general direction desired.

True cannons were developed from this crude beginning. These were simply pipes closed at one end and reinforced with metal straps. These tubes were normally made by a blacksmith who took strips of iron and wound them around a beam of wood. The cracks between the strips would then be closed through hammering. Heated iron rings would then be slipped over the strips which upon cooling, would contract and hold them more tightly together. By heating the whole thing in the furnace the wood would be burned away leaving the tube. These tubes were called barrels due to their resemblance to a wooden barrel banded with iron. These early cannons were simply laid on the ground in a small trench to support the barrel and absorb the recoil. Cannons of this type were used by the English at Crecy.

These small cannons were not very powerful and the stones they shot were propelled with no more power than one thrown by hand. Since there was no apparent way to propel the small projectiles with more power the idea was to increase the size of the cannonball. In the 15th century huge cannons called bombards were built. King James II of Scotland had one made in 1463 called "Mons Meg." The barrel was 4 meters long and weighed 5 tons; it was made in 2 parts so it could be moved. This monster fired a 500kg ball over 2km, using over 45kg of gunpowder to do so.

Bombards fired stone cannonballs just like their predecessors, however, many used stones with iron bands places around them to prevent the shot from shattering. Experiments with heated

shot proved to be a grave error on the part of the cannoneers as the powder would go off before the loaders could get out of the way.

The operation of these large cannons was left to highly skilled professionals. Since they were paid mercenary- types they often offered their services to the highest bidder. It was not unusual for them to change sides during a siege.

Because of their large and cumbersome nature as well as their complete lack of accuracy, early cannons were used exclusively in sieges. In fact, by the 15th century they were considered invaluable for that purpose. Cannons, however, were very expensive to operate and had a much slower rate of fire than trebuchets or catapults, maybe three or four shots per day for the larger bombards, so the ancient weapons were still used extensively for many years.

Late in the 15th century the technique of casting iron cannonballs was perfected which allowed the balls to fit the bore of a cannon more tightly than any stone. This allowed more of the powder's explosive force to push the ball, rather than allowing it to escape through the gaps between the bore and the projectile. However, this development, coupled with the development of stronger gunpowder, proved to be too much for the bombards and many of them blew up.

Soon, the trend was toward smaller cannons with thicker barrels. The smaller shots, propelled with a higher velocity, produced the same effect as a large one with a slower velocity. These smaller cannons had fairly small bores, only 5 to 10 centimeters, and a long barrel. Most early cannons were breechloaders with the breechlock being wedged against the barrel by means of a wooden wedge. Normally, a system of timbers held these cannons in place, and the frame could be adjusted to change the angle of fire.

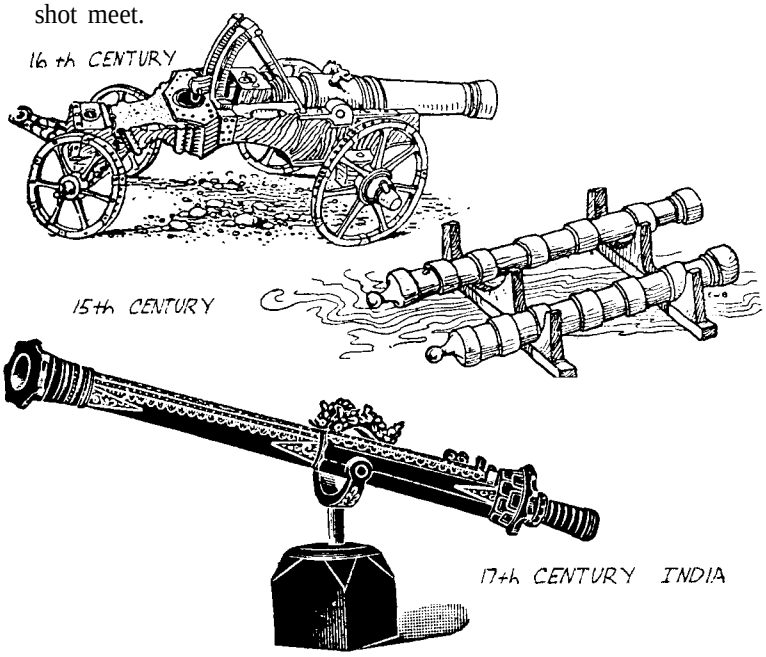
The techniques of casting a cannon barrel were first developed by bell-makers who worked in bronze. Casting resulted in the decline of breechloaders and the increase in the use of muzzle-loading cannons. There was no way to lock the breech tightly enough. With the addition of side lugs or trunnions, the barrels of cannons could be mounted on wheels for easy transport and improved aiming. A later improvement in the manufacture of gunpowder resulted in more instantaneous burnings and a more powerful explosion. Again, cannon barrels were thickened to contain the better powder.

A number of countries began to standardize their artillery with the development of cast cannons. King Henry II of France reduced his cannons to six standard sizes, the Spanish used twelve, and the English sixteen. Although many names were used to classify these sizes, the system of identifying a weapon based on the weight of the shot it fired came into use as well.

Transporting these weapons was often no easy task, even when mounted on a gun carriage. The small swivel guns could weigh up to 125kg while the 60lb cannon tipped the scales at up to 3000kg. Not only was the mass of the cannon itself to be considered, but the transport of the powder and shot as well. The moderate sized cannons were used by many as campaign weapons, with varying degrees of success.

As gunnery skills were developed and cannons became accurate enough to be able to be aimed at specific objects, a system was created to measure the angle of the barrel to determine the range of the shot. This measuring was done by means of a gunner's quadrant which was stuck into the bore of the cannon. A plumb line hung from the quadrant, and the angle of elevation was measured on a scale which resembled a protractor. In theory, a gun at an angle of 45 degrees would shoot 10 times farther than one at zero degrees (point blank fire). Generally, gunners tried to underestimate their first shots so as to have a general idea of range.

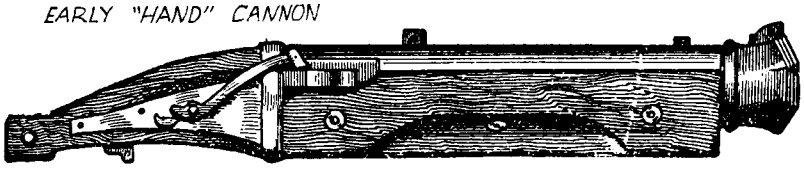
Listed below are some common 16th century cannon names, their shot weight, and their point-blank ranges. These figures are taken from **Capobiancos' Tretise on artillery** published in 1598. Point blank range is defined as the point where the natural line of sight along the top of the barrel and the trajectory of the shot meet.



CANNONS

Name	Paces	Meters
Swivel gun musket — pounder (1lb)	120	208
Falconet — 3 pounder	150	260
Falcon — 6 pounder	220	382
Passevolant — 9 pounder	260	452
Saker — 12 pounder	250	435
Aspic — 12 pounder	180	313
Culverin — 14 pounder	290	505
Culverin — 40 pounder	330	573
Culverin — 60 pounder	370	643
Culverin — 120 pounder	450	782
Cannon — 16 pounder	200	347
Cannon — 40 pounder	270	470
Cannon — 60 pounder	300	521
Cannon — 120 pounder	380	660
Stone-throwing cannon (pedrero) — 200 pounder	180	312
Breechloading pedrero — 12 pounder	80	140
Breechloading swivel gun (musket) — pounder (1lb)	60	105

EARLY "HAND" CANNON



HANDGUNS

The early hand-held cannons or "gonnes" bore a great resemblance to their larger brothers of the time (14th century). These little cannons were no more than metal barrels lashed onto a wooden stock, or sometimes the barrel and stock were one piece of metal. Often they were hooked over a wall by the firer (small hooks on the stock were designed for this) to help reduce the recoil. Usually, lead balls were used in these guns.

Hand-held culverins were used and improved upon in the 14th and 15th centuries. Barrels were lengthened, improving accuracy, and the wooden stock was broadened and lengthened so it could rest against the gunner's chest. Two-man culverins gained respect toward the end of the 15th century, although they still were no match for a skilled longbowman. The muzzle of these weapons rested in the crook of a forked stick; they could penetrate all but the best armour at up to 125 meters.

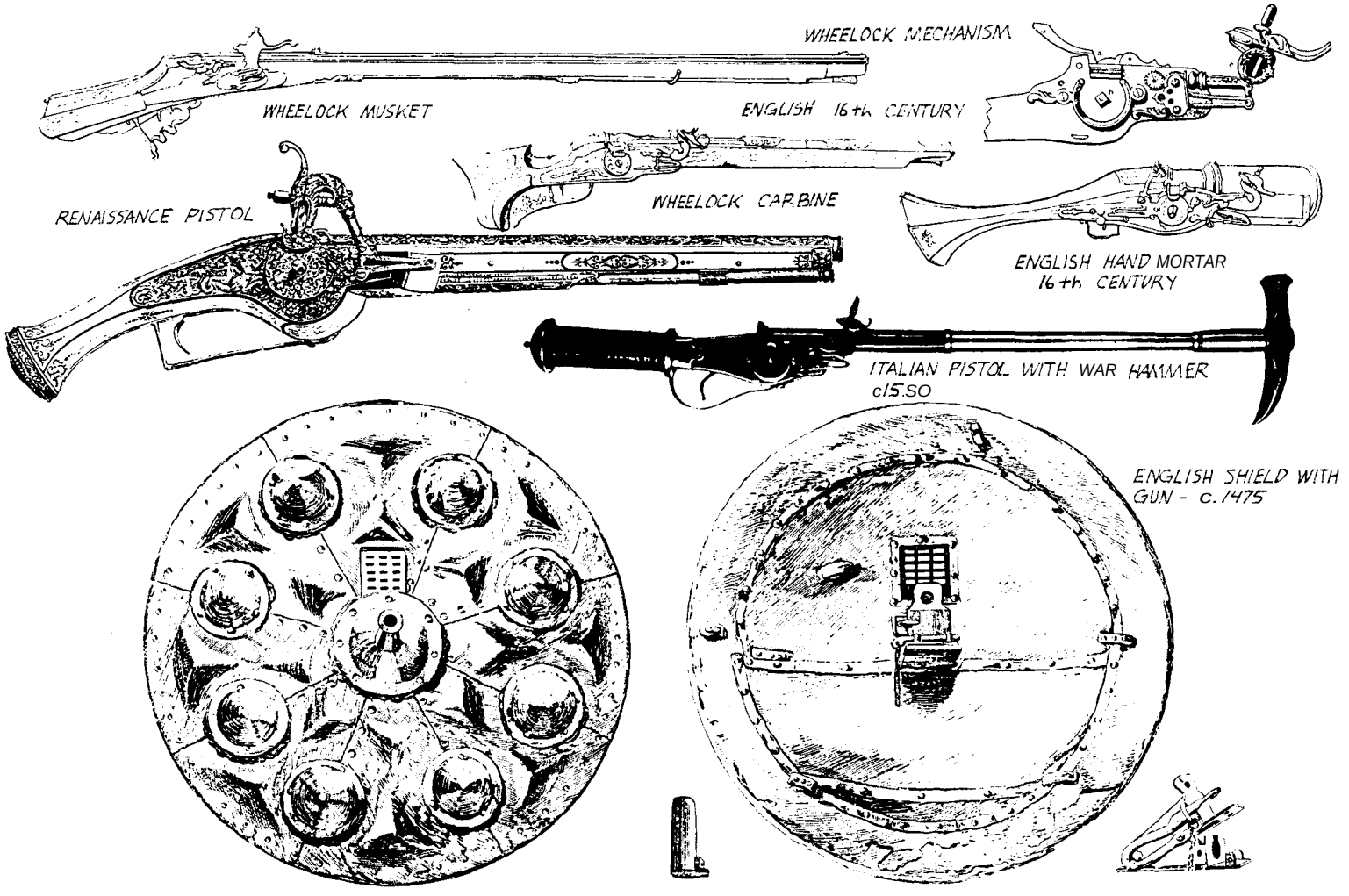
These guns were now fitted with small pans next to the touch hole on the side of the barrel. This enabled the gunner to igniting the powder on the pan while in turn, ignited the powder in the barrel. The impure powder of this time resulted in the need for frequent cleaning of these weapons, often after each shot. Eventually grooves were put in the barrel to allow the grime to accumulate out of the path of the bullet.

In the 15th century the Spanish improved on the culverin by allowing it to be fired like an arbalest; i.e., with a trigger. They invented the arquebus which had a trigger mechanism which held a slow match to ignite the charge. This allowed the gunner to aim and shoot without taking his eyes off the target to look for the touchhole or pan. Even this did little to improve the rate of fire which was still only one shot per one or two minutes. Often the arquebusier (the person shooting the arquebus) had a helper who aided in the casting of bullets, measuring of powder, and cleaning of the gun.

The musket also came from Spain and was designed to penetrate armour at long range. These weapons were very heavy and were propped on a hand-held rest when firing. They used up to two ounces of powder so they had a heavy kick.

In the beginning of the 16th century the wheellock was invented. This was a complicated weapon which used friction between steel and pyrite stone to produce sparks to ignite the powder. This enabled these weapons to be held at a moments' notice since there was no slow match to worry about. Wheellocks used spring tension to produce the sparks, and "spanners" were used to wind up the spring, much like a clock. The complicated nature of these firing devices meant these were expensive weapons and as such, the matchlock weapons were still used for a long time after the wheellock's invention.

The chance of a gun misfiring during these early days was very high. As such, many of these weapons, especially the pistol-sized ones were combined into more archaic arms. The most common being the mace, although daggers and swords are known as well. These helped give the gunner a second chance at an enemy if the shot misfired or missed its target.



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