The Netbook of Armour

version 1.1

Contents

Legal Notices

What's New in Version 1.1

Additions to Glossary of Terms
Armour Manufacture
New armour types added: Mongol, Nomadic and Nordic Hide; Jade Burial Armour; Gnomish Flying Armour; Gnomish Water-cooled Armour, Norman Leather, Lorica Segmenta
Revised armour types: Banded mail, Chain mail
New Proficiencies: Armour Design
Revised table of contents with summaries of the stats of new armour (saves you having to look through the whole netbook, y'see)

Credits

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Introduction

This netbook was written principally for use with TSR's Advanced Dungeons and Dragons game. It tries to describe in detail the armours that were briefly listed in the Player's Handbook. I felt these descriptions lacked a lot in terms of detail and explanations of use (and, evidently, so did TSR: witness the Arms and Equipment Guide), so I sat down to write this. I've been as comprehensive as I felt was needed. What was required was a fairly brief but all-encompassing description of the item, a little history (for those running historical campaigns, or for those obsessed with accuracy), and maybe a new weapon statistics listing or Armour Class to reflect an item's design. Armours from other locales and time periods I have largely ignored, for the simple reason that the AD&D rules do these items justice anyway. For all their sophistication and grandeur, an Aztec warrior's most sophisticated weapon was the club, and his most sophisticated armour the hide shield. It really doesn't matter how many different types of club you describe, they all act in the same way. The same is not true of different types of swords.

I have also included new armour types, which were unrepresented in the PHB or any TSR supplement. The rules for them are entirely my own creation (unless otherwise stated). Use them if you want to, change them if you don't like them.

Nothing here is set in stone. Although you probably know that already. If you don't like the new items then change them. If an item doesn't fit in your campaign, sling it out! Don't feel bound by my historical dates, either. If you're playing an otherwise faithful Ancient Greek campaign that just happens to have developed full steel plate armour before we did in real life, don't let me stop you. This is an aid to roleplaying and game enjoyment, not a strait-jacket. End of lecture. Now for the good stuff. Although that's subjective...

Glossary of Terms

B: where found, refers to the modifier for 'Bludgeoning' type weapons.
Barding: armour made for a mount, commonly a horse.
Besagew: circular plate protecting the lance-side shoulder.
Bevor: a plate for face and neck protection on a helmet.
Breath: holes or slits in the visor of a helmet to allow the wearer to breathe.
Brim: a flange around the edge of the skull-piece of a helmet.
Buffe: an open-fronted visor with vertical metal strips. It gave improved visibility.
Cannon: the upper cannon was the upper arm armour, the lower cannon (also known as a *vambrace*) was the armour of the forearm.
Cheek-guards: metal plating or mail designed to protect the cheeks. Sometimes removable or hinged.
Codpiece: a triangular-shaped piece of material worn over the groin.
Coif: a headpiece made like a balaclava, usually made of mail.
Comb: a decorative crest or ridge of varying height mounted on a helmet, running from front to back or from side to side.
Couter: bent plate protecting the inside of the elbow.
Crest: see 'Comb' above.
Cuisse: thigh-plate.
Cuirass: a breastplate.
Cuirassier: a cavalryman, especially one in the gunpowder era.
DP: Damage Points. This refers to rules for armour damage found in the Complete Fighter's Handbook.
Fauld: a codpiece made of plate or mail.
Gorget: a curved plate or plates of metal encircling and protecting the throat.
Grandguard: a metal plate resembling a shield built into the arm of a suit of armour and extending across the chest and shoulder.
Greaves: shin-plates.

Heaume: a great helm used for jousting and ceremony, often fitted with lavish decorations and headpiece.
Helm: a helmet, particularly a large, grandiose or heavy one (great helm or close-helmet, for example). Lighter helms (kettle hats and morions) were known as helmets.
Lames: laminated plates designed to protect as well as plate, while still conferring good mobility.
Mail: a form of armour made of interlocking rings of metal.
P: where found, refers to the modifier for 'Piercing' type weapons.
Pauldron: shoulder-plate, also known as *spaulder*.
Poleyn: kneecap-guards.
Rondel: a circular plate of metal designed to protect the straps on a wrapper.
Peak: an attachment to a helmet, taking the form of a plate over the eyes like the peak of a baseball cap.
S: where found, refers to the modifier for 'Slashing' type weapons.
Sabaton: metal-armoured footwear.
Sight: slit or holes in the visor of the helmet to allow the wearer to see.
Skull-Piece: the rounded top of a helmet, designed to protect the upper half of the skull.
Surcoat: a fabric garment worn over the top of armour, typically by European knights. It was sleeveless and hung down to the knees, and usually carried the wearer's coat-of-arms, or the design of his order (Knights Hospitalers or Templars, for example).
Tassets: leg-protection consisting of lames or plate worn over the thighs. Usually, it only protected the front.
Tonlet: a flared, laminated plate skirt for extra leg protection.
Wrapper: a metal plate designed to protect a buckle or join in armour, especially on the helmet.

Armour

Explanations of armour in the PHB

Banded Mail

Banded mail consisted of small, overlapping flat metal rings sewn on to leather, linen or velvet. One row would be overlapped on the right edge, the next on the left, the one after on the right again and so on. The material that they were sewn on was gathered into a roll or tuck in between the rows which separated them and made sure the rings stayed flat, it is these bands of material that give rise to the name. Despite the description given in the Player's Handbook, this armour was not backed by mail as it would have added too much to the weight for too little gain.

Barding

The mounted warrior would want to protect his expensive mount wherever possible. To this end, it seemed logical to armour the mount as well as it's rider. Chain barding took the form of a coat the horse would wear, fitting around the base of the neck and hanging down to the horse's hips. An extended coif-like garment protected the neck and head. Padding was usually worn underneath, as was the practice with the rider. Chain barding dates from the availability of chain mail. Most barding followed this pattern, the horse's legs were usually left exposed, although doubtless some horses wore a form of greave on their shins. Plate barding enclosed the horse's body in plates, and had an articulated extension for the neck. The horse's head would often be guarded, but protection did not extend to the jaw and underside of the head, these areas being hard to attack anyway. Scale barding was available in partial or full form, the partial form protecting the head, neck, chest, and front quarters of the beast; and the full version also covering the hindquarters and flanks. It is manufactured in the same way as the scale mail worn by men, and was available from the same time period. Brigandine armour was similar to scale, as was the soldier's version, but generally was available only in half versions. By the time full barding came to be introduced, most cavalry used chain or scale. It was available from the time of brigandine for soldiers. Padded and leather armours also were made in the same way as for men, and were available in half or full versions. The principle advantage of these armours was their low weight, making them more suitable for the lighter war-horse.

Brigandine

This armour is made from small metal plates sewn on to leather backing, much like fish scales. It is similar to scale mail, but this armour was worn from about AD 400, and generally took the form of a sleeveless overcoat. It was found to be superior to mail, especially against missiles, whose growing power it was designed to overcome. The plates were usually made of iron, or sometimes bronze (barbarian tribes did not always have the technology to smelt iron). The main difference between this type and scale mail is that this armour usually took the form of a surcoat, whereas scale mail often included sleeves and leggings as well (and, for ease of movement, the plates were often smaller on scale mail).

Bronze plate mail

This was the first complete body armour suit anywhere, the oldest surviving example being found in 1400 BC. It was used in Ancient Greece. It is not the stylised breastplates associated with the period, these date from much later, but was made from smaller plates, much like plate mail (as the name suggests). It gave protection to the torso and shoulders, and often a helmet and greaves would be worn with it. It did suffer from the limitations of bronze (a soft metal), and was inferior to iron or steel armour. Although the PHB says that mail was worn as well, mail was not used until ironworking technology had become widespread, by which time bronze was no longer used. However, in a fictitious world (where iron may not exist) there is no reason why mail could not be combined with it, much in the same way as the transition from mail to plate in the Middle Ages of our own world.

Chain mail

This armour evolved through many stages, from the mail shirt with elbow-length sleeves worn by the typical Saxon warrior through to the full mail suit enclosing all of a knight bar the face that survived up until the eventual supremacy of plate. For those unsure as to the construction and nature of chain mail, it is made of interwoven metal rings. Each link was made by twisting metal wire around a dowel, and then it was cut using a chisel to form a series of open-ended rings. They were made to overlap and once they were interlinked, the ends were hammered closed and sealed with a punch. Each ring in a suit of mail generally is linked to four others. An undergarment is always worn as mail is chafing to wear, but it does not require a backing, unlike banded mail. Later on, the undergarment would be heavily padded to cushion bludgeoning blows.

Firstly, we have the chain mail armour used at about the time of the Norman Conquest. This, in the case of the Saxons, was a mail shirt, of about the same proportions as a modern T-shirt. It was worn over a heavy woollen shirt that reached down to the knees, and this would have been more to prevent chafing than to cushion blows. The Saxon warrior usually combined it with a round shield. The Norman soldiers wore a more advanced costume, consisting of a mail hauberk with short sleeves open to the elbow, reaching down to knee level at front and back. This hauberk would not be made of interlinked rings, but of separate rings sewn on to a linen or leather backing, a hybrid of banded and chain mail. At the centre of the front and back it was slit by vents reaching up to the waist, for ease of use while on horseback. It was combined with a helmet (at this point, basically an upturned metal bowl with a nasal protecting bar) and a kite shield. The helmet would often be worn over a chain coif.

This equipment went basically unchanged until the 12th Century AD. Until then, it merely expanded to cover other areas of the body. The sleeves were extended to the wrist, and mittens added. These were made like child's mittens, with a bag for the thumb and a larger one for the fingers. Obviously, manual dexterity was greatly hindered, but the ability to hold and use a sword remained unhindered. The palm would be made of cloth or leather rather than mail so that it would flex more easily, and the mittens were designed so that they could be detached and hung from the wrists when not in use. Leg protection would take the form of either mail hose or mail greaves strapped on round the calf. By this point, the hood, shirt and arm protection was integrated into one piece, and a surcoat would be worn over the whole.

Field Plate

Field plate is the battlefield version of full plate armour. It was used in the late middle ages, and by the time of it's adoption mail had become obsolescent, being used in this armour only for the mail fauld or codpiece. Some designs covered every inch of the wearer in metal plate, while others paid attention to the

the visor from accidentally opening. Many suits of this type did not enclose the entire torso with a breastplate, often using two or three plates to achieve the same purpose. From the 15th Century onwards, this often was not the case.

Armour of this type was made for it's wearer alone. It was not as hard to move in as many suspect, and a trained man could move quite normally.

Full Plate

This armour is the very impressive and ornate armour used after the 15th Century. Designers now often paid more attention to aesthetics than to efficient design, and this is when fluting and spiky, elongated detailing became popular. The rounded, fluted Maximilian design is particularly famous, perhaps less so than the even more ornate Italian armours of the 16th Century, covered as they were with embossed figures and designs.

Tournament armour is also included in this type. In the 15th and 16th Centuries, the wearing of armour was increasingly for ritual and the joust than for combat, and the designs reflect this. The shoulder plate of the left arm was extended to cover most of the chest, and the elbow was locked in position. The gauntlet included a mount for a shield. These extra pieces were often designed so they could be added to existing armour, thus adapting a "battlefield" suit for the joust. Also popular in tournament was foot combat, and new types of armour evolved for this as well. They often afforded more mobility than armour for mounted warriors, as in many tournaments grappling and wrestling were allowed (and often proved fatal to those who engaged in it, later tournaments erected barriers between opponents). The bascinet was made to be screwed on to the gorget as it was found that the conventional straps had a tendency to snap. A globular visor with heavy ribbing was popular. Some German designs incorporated a metal skirt, conical in shape, reaching almost to the knees.

In the 17th Century, this type of armour fell into decline and ceased to be used on the battlefield. Gunpowder weapons could penetrate more thickness of armour than a man could carry, and armour was used more and more for ceremony and parades. Armour of this period is even more baroque, but much less effective than it's predecessors**.**

Helmets

The Roman helmet was made of metal, and included a brim, cheek guards, and a neck guard. The earlier Greek design was an elongated bronze dome with a 'T' in the front, with two 'o' shapes replacing the bars of the 'T'. Saxons merely wore a leather cap, but the Normans wore an upturned metal bowl with nose guard. Viking warriors used a similar design, but with metal encircling the eye sockets and often with mail hanging from the front to enclose the mouth and nose. This latter cannot have been very effective, as it was not backed by the body but hung in space.

With the full mail suit came other helmets. The flat-topped great helm was a metal cylinder with a flat top (hence the name), with a slit for the eyes and strengthening bars to protect the nose and eye areas from caving in. The round-topped kettle hat, a hemisphere with a brim, was also used in this period, as was the round helmet or skull cap (simply an upturned metal bowl) and the flat-topped helm, looking like an inverted saucepan minus handle. These were available with and without nasal bar.

The classic great helm continued into the 14th Century before it's replacement. It was heavy and rested upon the shoulders. It did not change functionality from it's first days, merely adding features such as ventilation holes and different shapes. In the second half of the 14th Century a new type of helmet emerged, the bascinet (for that is how it is spelt). Initially, it was worn over a mail coif, but this soon evolved into mail attached to the rim of the helmet. It was at first similar to the Norman design, but extended over the ears and the back of the head. The only exposed area was the face, and this was remedied with the development of the visor. Initially, these were merely slightly rounded plates with eye slits, but the evolved into rounded shapes with ventilation holes, and pointed, beaked variants as well. At first, in the days of the visorless bascinet, the great helm would be worn over the top but when the bascinet developed it's own visor this practice was abandoned. Early visors were hinged at the top, but later designs hinged on both sides, complete with pivot and removable hinge pin so that the bascinet

In the 15th Century, the popular bascinet came to lose the mail extensions and these were replaced with plate. At the back, the helmet now came down further and extended over the back armour, offering complete protection for the back of the neck. It was now attached to the breast and back plates by means of straps and buckles. The barbut was another type of helmet developed in this century, looking very much like early Greek designs. It covered the head, the back of the neck and the cheeks, leaving an opening for the face. As this style developed, the holes got smaller and smaller, and more fitted to the shape of the mouth and eyes they exposed. By 1500, this type was no longer in use, having been replaced by the sallet. Early models of this helmet were similar to the barbut but were more rounded and fitted much closer around the neck. Later sallets consisted of a rounded skull-piece, roughly hemispherical, that tapered towards the back to form a neck guard, which could be simple or laminated in construction. The sallet covered the face to just below the nose, and included an eye-slit. Some sallets were fitted with visors, failing that, a bevor was fitted to protect the lower face. German designs had more pointed neck guards, but Italian sallets were more similar to the barbut in design and appearance. In the last part of the 15th Century the armet appeared as well as these types. It had a skull-piece and a long vertical ridge at the rear to protect the neck. Hinged cheek pieces could be strapped together when the helmet was worn, much like the Roman helmet save that the Roman hinges were located between the tops of the ears and the eyes, and the hinges of the armet were placed below and behind the earlobes. A raiseable visor was fitted to protect the joins and straps at the front. For additional protection a metal wrapper was sometimes attached as well, and to protect the straps of the wrapper itself a circular plate, the rondel, was also fitted.

The 16th Century saw the emergence of the close-helmet, a design similar to the armet but lacking the hinged cheek-guards. A gorget plate at the base of the helmet was attached to the gorget of the breastplate. Initially this design had a low comb or crest, which grew in size until it reached the heights of the Italian combed morion in use about 1590. After this, the comb shrank again, along with the visor which became less exaggerated. Another design of helmet in this period was the burgonet, with an open face and a central comb. The face would be guarded by bars, but most of the face would be visible, as opposed to earlier designs in which there were only eye-slits. Developed from this design was the morion, the distinctive helmet of the Spanish Conquistador. Italian morions usually featured a comb, Spanish designs were plainer and had a simple domed top. This design would be continued until the 17th Century, with simple helmets covering only the top of the head and the back of the neck, sometimes incorporating cheek-guards.

As the standard PHB descriptions of helmets are too brief and inaccurate, I have made listings for all the types of helmet below, under *New Armour Types*. I suggest that the standard PHB descriptions and statistics be ignored. Helmets add nothing to armour class as it is assumed that they would be worn with armour where appropriate. Combining a helmet with padded armour would be pointless and thus adds nothing, similarly, field plate is designed with helmets in mind and so it is unnecessary to add anything for the helmet. DMs may wish to penalise the ACs of players who insist on wearing heavy armour without an appropriate helmet, especially where called shots to the head are involved.

Hide

This armour is prepared by stiffening the hide of a thick-skinned animal, such as an elephant. It was experimented with as an alternative to chain mail, but was much stiffer and thus was rarely used. It was made into plates, rather like plate mail, but with hide replacing the metal. These plates would be sewn together to make a whole or partial suit. Hide armour was invented in the Dark Ages and has been ever since.

Leather

This armour was invented in the Dark Ages also, by those looking to improved chain mail. It was boiled first to soften it for moulding, and when it cooled it set hard. It was commonly worn over chain mail to provide protection against the piercing weapons against which chain mail was inefficient. It is made of plates, like hide armour, but it is not hard enough to make sophisticated joints as are found in field plate, so it is sewn together. Mail often guards the joints.

Padded

This is a very simple type of armour, consisting simply of thick, quilted garments that were next to useless against an arrow but could deflect a glancing sword blow. It was said to have had most of the advantages of mail but little of it's weight. It was, however, the equivalent of wearing about ten thermal undergarments at once and it was stiflingly hot to wear. A thinner form evolved to become the backing for mail and plate suits, providing cushioning from the shock of blows. It was invented during the Dark Ages, but it is simple to make and there is no reason why a fantasy society with Ancient technology could not conceive of and manufacture it. Quilted armour was often used as leg and horse protection while a mail hauberk was worn.

Plate Mail

This is not the all-enclosing field or full plate armour, but rather the plate-mail hybrids that started to emerge in the early 14th Century. In the beginning, this armour merely consisted of plates on the knees, elbows and shoulders over a mail suit, then it evolved to consist of a full mail suit with additional plates to protect the shins (and later the thighs), arms and sometimes a breastplate in addition. A surcoat would be worn over the top. Overlapping plates would be fitted to the top of the chainmail socks. Generally, this armour only faced the front and the back of the knight's legs and body were trusted to mail, as were the insides of the arms. Plate came to cover more and more of the body, until the mail underneath began to disappear, eventually covering only the groin. After a while that too disappeared.

Ring mail

There is a lot of doubt as to whether this armour ever existed. It is basically chain mail, but with much bigger links. The links were too big to be used alone, unlike mail, and would be sewn on to a leather backing. It would have been virtually useless against piercing or bludgeoning weapons, but would have given some protection against slashing attacks. If it had existed, it would have been used before chain mail became widespread as it is merely a more primitive form. Historically accurate campaigns and DMs may wish to ban this armour from their games.

Scale Mail (metal)

This is brigandine armour (see above), extended down to the knees and worn with additional leggings. It thusly affords more protection. It was introduced in the Dark Ages, in fact, it was a favourite with the barbarian horsemen who attacked the Roman Empire in the 4th Century. The scales were small in size, and sewn on to a leather or padded backing. It was more efficient than chain mail, particularly at stopping missiles.

Shields

The buckler or daraq was a simple, small shield that was held in the hand (the reference to being strapped on to the forearm in the PHB is an error). It could only defend against one attack per round, and the hand could not hold a weapon. This design has, like most shields, been available since Ancient times, but was used mostly as a footman's shield. Archers and mounted warriors had other types available to them.

Small shields were often circular, made of metal or hide over wood. These too have been available since the Ancient period. Some designs backed the shield with padding, and suits of jousting armour in the later middle ages incorporated mounts for them into the left arm, some suits going so far as to actually build the shield into the arm itself. Other, later, designs merely expanded the shoulder plate until it covered most of the chest, forming a shield in it's own right.

An example of the medium shield was the kite-shaped shield used by Norman cavalry. This shield was the most typical type for cavalry of the Dark and Middle Ages, and could be circular, kite-shaped (popular with horsemen as it's tapered base meant that it could be held closer to the centreline of the body without snagging on the saddle), or lozenge-shaped. Padding was often incorporated into the backing of the shield to absorb the shock of blows and prevent fractures to the arm holding it. Oblong shields, curved in cross-section, were used by infantrymen (the most famous example being the Roman legionary), and gave more protection when used correctly in formation. Roman legionaries would form a "tortoise", with the soldiers forming a square and the men on the perimeter holding shields at the front

The body shield, also called a door shield (after it's similar proportions) or pavise, was generally not carried by the individual. It was carried instead by a shield-bearer, whose task it was to protect his companion archer from enemy fire. It would generally be made of thick wood, with metal strips and studs for reinforcement. The bulk of material required to make it entirely out of metal would be far too expensive and heavy, and the absorbent properties of wood meant that it could be used without padded backing. If the user crouched behind it, it would completely obscure him from view. The surface of the door shield was often tarred and/or pitched to protect the bearer from boiling oil, hot ashes and other such things thrown by a besieged enemy on to their besiegers below.

Shields for the battlefield often had designs worked into them, or could be painted with their owner's coat-of-arms (if he had one). Parade-ground shields were much more ornate, covered with embossed figurines and carving. Such lavish decoration would not survive the rigours of the battlefield and so such shields were rarely used in combat.

Splint Mail

This is another armour that may well be merely another flight of fantasy. If it did exist, it was made of vertical metal strips riveted to a leather or padded undergarment. It is inflexible and alternative protection had to be found for the joints, apparently chain mail being the popular choice. I have been unable to find much information on this armour, as (strangely) it is absent from the history books I researched.

Studded Leather

This armour consisted of leather (not hardened as with plain leather armour), closely set with rivets. A decent amount of protection was thus gained, without the heat and weight premium of mail and the inflexibility of plate. In some cases, the armour developed until it was almost like scale or brigandine. Mail neck protection was generally worn as well. This armour has been used since the Middle Ages.

New armour types

These are new armours I have incorporated from my research. Their use is (obviously) optional, but I have included notes on when and where they were found so that a DM who wishes to use them accurately in a historical campaign is able to do so.

Armour Padding (3gp, 5lb., AC 9, 3dp, P-1 B-1)

This is the padding worn under heavier suits of armour. It confers no AC bonus when worn with these armours, it is assumed that the heavy armour includes this padding as well. The statistics given are for when the padding is worn by itself (for whatever reason). It consists of heavy, quilted garments to prevent chafing and sores and to absorb the impact of blows.

Augmented Mail (175gp, 44lb., AC 4, 28dp, S+2 P+1 B-2)

I'm not entirely sure what this is. I found references and statistics for it in some AD&D supplements and netbooks, but the closest historical description I can find or think of is mail backed by another material, probably hide, though I see no reason why it could not be backed by something similar to scale mail. If anyone can shed some light on this, let me know.

Bar Mail (200gp, 40lb., AC 4, 29dp, S+2 P+1 B-2)

Again, I do not think this is a historically accurate type of armour. I can find no reference to it in any history book, it is only included here because of it's inclusion in AD&D supplements and netbooks. I would guess that it is made out of interlinked small metal bars, instead of rings, to make a form of mail made out of bars. Presumably this was to prevent needle-sharp piercing weapons finding the centres of the links of the mail and penetrating.

Brigandine, Wood/Horn (80gp, 26lb., AC 7, 10dp, P+1)

This is the same armour as normal (metal) brigandine, but instead of having plates of metal it uses wood or animal horn to save weight and cost. It is not historically accurate. It would have been used in areas where metal was rare or the technology to work it was not available (this armour can be made by very primitive peoples).

Cuirassier Plate (1500gp, 45 lb., AC 3, 35dp, S+3 P+2)

This type of armour was introduced in the first quarter of the 17th Century, and evolved to meet the needs of a new type of cavalry. It was designed for protection and mobility combined, for the biggest threat to a mounted soldier was now the musket ball. It was a three-quarter length plate suit, protecting torso, arms, and thighs. It would be worn with a close-helmet. It comprised breast and back plates with gorget, and sometimes a neckguard as well. The hands were protected with articulated plate gauntlets. The knee-length leg armour would be made of 14 or more overlapping curved plates (lames) to give freedom of movement. They protected against the flanks, inner leg protection being unnecessary. They ended in a knee guard. Heavy riding boots protected the feet and shins.

Cuir-bouilli (20gp, 15 lb., AC 7, 14dp, P-1)

Cuir-bouilli is very similar to leather armour, being leather that is boiled to soften it, then moulded into plates which set rigid when dry and cold. It was first used by the Ancient Romans, several centuries before the birth of Christ.

Double mail (160gp, 45 lb., AC 4, 29dp, S+2 B-2)

This is another type of armour to which I can find no historical reference. I imagine that it consists of multiple layers of chain mail (perhaps not all over, but just on vulnerable or important locations) to give added protection. It does not give double the statistics since piling on extra layers of armour does not give any major bonus.

Foot-combat Jousting Plate (3,000-8,000gp, 60 lb., AC 1, 50dp, S+4 P+3)

In the 15th Century, combat on foot began to become an increasingly popular part of the tournament. It was found to be disturbingly lethal and one of the safety measures taken was the introduction of this type of armour. It first appeared in Germany in the beginning of the 16th Century, until that point foot combatants had fought in standard infantryman's armour, modified with cuisses that encased the thighs and a globular-visored bascinet. A flared, laminated skirt reaching to the knees, the tonlet, was added along with symmetrical pauldrons and cuisses that completely encased the legs. The great bascinet remained the most popular choice for companion helmet, although close-helmets were also used. Bascinets for this armour generally had either a hemispherical visor with piercings or a bellows form. After the end of the 16th Century, the tonlet was abandoned, being replaced by three-quarter field plate armour.

Gauntlets (Chain: 5gp, 2·5 lb., 10dp; Leather: 2gp, 2 lb., 5dp; Plate mail: 15gp, 3.5 lb., 13dp; Full Plate: 15gp, 2.5 lb., 15dp)

Gauntlets are long gloves that extend over the wrist and up to the lower third of the forearm. Chain mail gauntlets take the form of mittens, extending to the wrist and being made of a large bag for the fingers and a smaller one for the thumb. They are commonly hung by a leather thong to a mail shirt, so that the wearer can use his hands unencumbered without losing them. Leather gauntlets are similar to those worn by falconers, being made of thick leather (but not hardened as with the armour, as this would hamper dexterity). They may be made in mitten or glove form, and extend the full length of the normal gauntlet. Plate mail gauntlets cover the back of the hand and tops of the fingers with plates, leaving the undersides to conventional leather. Full plate gauntlets use laminated plating over the fingers, giving better protection to the joints, and chain or leather on the underside of the glove. Both types of plate gauntlet have a conical piece of metal to protect the wrist.

Gladiatorial, Gallic (32gp, 20 lb., AC 7, 15dp, S+1 B-1)

Named after the Roman province of Gaul, the Gallic gladiator wears a galea (helmet), a protective metal belt, a manica (leather sleeve) on his weapon arm and fasciae (leather bands on the legs). This was the 'middleweight' armour of the Roman gladiators. Traditionally, such a gladiator would also carry a scutum shield.

Gladiatorial, Samnite (80gp, 35 lb., AC 5, 25dp, S+2 P+1)

The Samnite was the best-armoured of the Roman gladiators, named for the Roman province of Samnos. He wore a cuirass (leather or metal breastplate), fasciae, a manica on the weapon arm and a galea. A scutum shield would also be carried.

Gladiatorial, Thracian (10 gp, 5 lb., AC 9, 5dp, B-1 P-2)

The lightest-armoured of the Roman gladiators was the Thracian, wearing only fasciae on the legs. Customarily, a parma shield would be carried also. It took its name from the province of Thrace.

Gnomish Flying Armour (not sold, 75 lb., AC 6, 25dp, S+1)

The gnomish flying armour is a product of the ingenious gnomish inventors. The wearer of this armour is able to achieve flight using a complex system of wings and a jet propulsion arrangement, which uses an arcane blend of volatile substances.

The armour is like a suit of field plate, but is very thin in order to keep the weight down. This is the reason for it's comparatively poor armour class and DP. On the back are a pair of wings which can be extended by means of a lever. When extended, each wing is approximately 5 feet long (the exact dimensions vary according to the individual suit). The back carries a complex arrangement of pipes, tanks and nozzles which burn a strange chemical mixture to provide the thrust for flight. The direction of the nozzles and attitude of the wings control the trajectory, and are operated by more levers.

Flying in this device is largely down to dumb luck, not skill. The flyer can only remain airborne for about three minutes (3 rounds) before the nozzles of the suit melt from the heat. If this happens, the suit is unmaneuverable and plummets to the ground. For each round spent flying, 3 rounds are required to cool the nozzles (unless they are immersed in water, or have cooling spells cast on them or some such).

To fly this suit with any degree of skill, the 'Pilot Gnomish Flying Armour' skill is required (General group, 2 slots, Dexterity, -1 penalty). Each time the character wishes to perform an action while in the air (accelerate, decelerate, maneuver, attack, land, take off etc), a check must be made. Success means the action can be performed as normal. A failure indicated that the attempt has been botched in some way (not difficult in this suit), usually meaning the character does not perform the action the way he would have liked. When trying to dive, he might find himself unable to do so, or he might drop a hundred feet further than he intended. At the DM's discretion, a really bad failure might have catastrophic consequences (the diving character might end up hitting the ground head-first at great speed). A failure on landing usually means the character hasn't landed where he wanted to (use a D12 to determine the direction of scatter, where 12 is 12 o'clock and so on, scattering 1d3 feet for every point that the roll was missed by). A failure on takeoff either means that the character was either unable to take off, period, or took off only to land again a few seconds later somewhere nearby.

The armour can fly with up to 250 lbs. of weight attached (including it's own weight and that of it's wearer). With this load, the suit is maneuverability class D and can travel at a movement rate of 36. When laden to between 251 and 350 lbs., it has maneuverability class E and may travel at a movement rate of 24. If the armour carries more than 351 lbs., it may not take off. If it is already airborne and the weight goes over this limit (perhaps by magic or weighted nets dropped from above), it will drop like a stone.

The tanks on the back of the armour contain the fuel. They contain enough fuel for 15 rounds of flying. This fuel, being made of highly volatile compounds, is highly flammable. The fuel tanks have 5 dp, and

10 to determine the percentage of remaining fuel that is lost (e.g. a roll of 3 translates into a loss of 70% of the remaining fuel. If 10 rounds worth remained, that would leave enough for 3 rounds of flight). Note that the suit may ascend at it's current movement rate, and may descend at twice this. If the character is at a great height, he may not be able to reach the ground before his fuel runs out. A suit without fuel drops like a stone, just as if the character had fallen from whatever height he was at. The wings are for maneuvering only, the character cannot glide with them.

In addition, there is the risk of explosion. If penetrated by normal means (arrows, swords etc) the chance of explosion is 1 in 6. The explosion will do 1d10 damage for every round of flight that the fuel was sufficient for (e.g. 5 rounds of fuel remaining will give a 5d10 explosion). Calculate this explosion damage before you calculate any fuel spillage (not that there'll be much fuel left to spill, mind). If penetrated by something hot (a flaming arrow, a fireball or whatever) then explosion is automatic. Any explosion will damage the armour before it damages it's wearer, and automatically hits. Also, the explosion has a radius of 15 feet, within which any other creature will also take half damage.

The gnomes jealously guard the secret of this armour (rather like the elves and their suits of elven chain), and only gnomish characters may have access to it. No price is given as a suit is never found for sale on the open market. If a captured suit of armour was made available the price would be astronomical. In addition, the armour is impossible to duplicate except by a very skilled team of armourers and metalworkers who have access to blueprints or an actual suit to copy from. Any suits found or given as payment for a great service are almost certain to be gnome-sized (see the Complete Fighter's Handbook for rules on armour sizing), suits for other races must be custom-made.

The jet and wing assembly makes it impossible to wear a backpack or to wear a shield slung on the back with this armour. Temporary removal of the jets and wings is not possible. Repair of this armour is extremely difficult and requires circumstances similar to those described above for it's manufacture. In addition, the fuel for the armour is extremely rare. It may be possible for an alchemist or chemist to attempt the duplicate the fuel from a sample, but this is left entirely up to the DM. Greek fire can be used as a substitute (if it exists in your campaign), however, it makes an inferior fuel. If using greek fire, reduce the amount of weight bearable by 100 lbs.

Gnomish Water-cooled Armour (not sold, 80lb., AC 2, 40dp, S+3 P+1)

This armour is made by the infinitely resourceful and inventive gnomes. Attempting to combat the problem of overheating while wearing heavy metal armour, they came up with the water-cooled suit of plate. It is basically a suit of field plate armour, whose inside is laced with a network of fine pipes. Between plates, the pipes are linked with leather joints to prevent leakage. Over the shoulder blades is mounted a great radiator, made of a series of about 20 metal flanges, about 8" high, which protude from the back. The walls of these flanges are tin, beaten to extreme thinness, and inside each is a mass of pipes, linked to those in the suit, forming a radiator. As the flanges are so thin and might be ruptured by a blow, the outer edges of the flanges are rimmed with a thick piece of iron, and the radiating surfaces are reinforced with iron strips to prevent the flange collapsing. Sometimes, to increase the refrigeration power of the suit, the gnomes will pack the spaces between the flanges with ice, holding it in with netting. In cold climates, this often proves unnecessary.

The effect of the refrigeration system is to halve penalties from wearing heavy armour in hot climates. The rule for wearing heavy armour in Al-Qadim is a penalty to attack rolls equal to every point of the AC of the armour below 7. Dark Sun uses a different system: the character's THAC0 goes up by 1 for every round in which he fights in the armour, and after a number of rounds equal to his Constitution he will pass out from heat exhaustion. Wearing Gnomish cooled armour, the penalties to attack rolls would be halved, the THAC0 would go up by 1 for every other round spent fighting, and the character would pass out after a number of rounds equal to twice his Constitution.

The gnomes jealously guard the secret of this armour (rather like the elves and their suits of elven chain), and only gnomish characters may have access to it. No price is given as a suit is never found for sale on the open market. If a captured suit of armour was made available the price would be astronomical. In addition, the armour is impossible to duplicate except by a very skilled team of armourers and metalworkers who have access to blueprints or an actual suit to copy from. Any suits found or given as payment for a great service are almost certain to be gnome-sized (see the Complete Fighter's Handbook

The radiator assembly makes it impossible to wear a backpack or to wear a shield slung on the back with this armour. Temporary removal of the radiator is not possible. Repair of this armour is extremely difficult and requires circumstances similar to those described above for it's manufacture.

Helmet, Armet (20gp, 7 lb., 25dp)

This helmet design was introduced in the latter years of the 15th Century. It comprised a skull-piece and a long, thin vertical ridge at the rear to help protect the neck. At either side hinged pieces were strapped closed at the front to protect the cheeks, and to protect this join a visor, hinged at either side, and metal wrapper were strapped on as well, buckling at the back. To protect this buckle a metal rondel was fitted.

Helmet, Barbut (10gp, 6 lb., 18dp)

This design of helmet was first used by the ancient Greeks, who cast it in bronze. It was pointed and covered the entire head with one piece, leaving a vertical slit for the nose and mouth and a horizontal one for the eyes, forming a 'T'. The Greeks developed the horizontal bars of this 'T' into circular cut-outs. In the early 15th Century, this design underwent something of a renaissance, and until the end of that century saw widespread use in Europe. As the style developed, the eye holes grew smaller and more shaped to the eyes themselves. (For those who have played the computer game "Warcraft II", this is the design worn by the Knights and Paladins).

Helmet, Burgonet (25gp, 7 lb., 20dp)

This was an open-faced helmet, introduced in the first half of the 16th Century. They were similar in design to the close-helmet, sharing the comb with this design. They often featured a peak. The otherwise exposed face was protected by metal bars. A falling buffe could be fitted in order to convert it to a closed type.

Helmet, Close-helmet (22gp, 7 lb., 30dp)

The close helmet was similar to the armet. It was widely used in the 16th Century. It was an all-enclosing metal helmet, without the hinged cheek-pieces of the armet, but with a hinged falling visor. A gorget-plate attached to the rim overlapped on to the gorget of the breastplate, giving excellent neck protection. Initially, this type had a very low, conservative comb, but as the century went on it became larger. After a while, this trend was reversed and the comb became smaller again, along with the visor which became less prominent.

Helmet, Galea (10gp, 5 lb., 25dp)

This helmet was worn by Roman gladiators, specifically the Samnite and Thracian types. It was a metal helmet with a narrow brim all the way round, and a face plate whose bottom half was simple plate and whose upper half was perforated with holes for vision and ventilation.

Helmet, Great Helm (30gp, 10 lb., 30dp)

This was a cumbersome, heavy helmet, and it's design dates back to the early Middle Ages. It preceded the bascinet, and was the ultimate development of the small helmets of the Dark Ages. It did, however, give considerable protection and so lasted in tournaments and jousts long after it's successors began to dominate on the battlefield. It rested on the shoulders, and was basically a heavy metal cylinder, closed at the top, with eye-slits. Later models introduced ventilation holes, reinforcing bars to protect nose and eyes, and tapered the top somewhat, but the basic design went unchanged.

Helmet, Morion (12gp, 4 lb., 10dp)

This helmet emerged in the middle of the 16th Century. By the second half of that century, it had become the usual headwear of a foot soldier. It was the helmet worn by the Spanish conquistadors who landed in

Italian designs had large combs on top. Another variation (also used by the Italians) was the peaked morion in which the brim was swept up into peaks at front and back.

Helmet, Myrrmillo (10gp, 5 lb., 5dp)

This stylised Roman gladiatorial helmet was a simple skull-piece with cheek-flaps, closely resembling the legionary's helmet. It had a customised comb made to resemble a fish.

Helmet, Pikeman's Pot (8gp, 4 lb., 12dp)

The Pikeman's Pot was worn by pikemen (surprise, surprise), accompanying their plate outfits. It was a rounded skull-piece, cast in two halves and joined at a central comb. A wide brim was tilted up at front and back, and drooped down at each side to offer some ear protection, but this was provided by ear protectors, simple plates that strapped together under the chin. It looks for all the world like a downmarket Spanish morion, and came into use along with the pikeman, i.e. in the early 17th Century.

Helmet, Sallet (15gp, 5 lb., 20dp)

The sallet was the replacement for the barbut, introduced in the second half of the 15th Century. Early models fitted closer to the neck and were more rounded than the barbut, but were otherwise similar. Later sallets varied a great deal, but the basic design featured a rounded skull-piece with a tapered rear that formed a neck-guard. This guard could be solid or made of laminated plates. Simple sallets had their rear sections riveted to the skull-piece; it was pointed at the back and formed a flange around the sides and front of the helmet, covering the wearer's face to the upper lip. An eye-slit was included. Other versions had hinged rear sections, but hinged visors were more common. Visorless models had a bevor or mail sheet to protect the lower face. The Germans favoured the more rounded rear neck model, but the Italians designed their sallets on lines closer to the original barbut.

Helmet, Visored Bascinet (20gp, 7 lb., 25dp)

This type of helmet replaced the visorless bascinet (below), adding a hinged visor to protect the face. Early models were merely a curved piece of metal, with a single hinge at the top and eye slits. Later, globular or pointed designs were used and ventilation holes added. This helmet could realistically be combined with plate mail or field plate armour. The base price is for a basic helmet, but more elaborate designs were also available with decorative carving and so on, and obviously these would have fetched a higher price.

Helmet, Visorless Bascinet (8gp, 5 lb., 20dp)

This type of helmet was popular around the time when mail was first being replaced by plate, and so would typically be worn with plate mail. It superseded the great helm. Early versions were worn over a chain coif, later, the chain was attached to the rim of the helmet and hung vertically instead. It was a dome shaped piece of metal, extended over the back of the head and over the ears. It left the face exposed.

Hide, Mongol (20gp, 25 lb., AC 7, 25dp)

This armour was worn by the Mongols on various campaigns underneath their chain mail. It consists of hide armour, hardened by boiling, cut into strips and interwoven to make a mesh. If worn underneath chain mail, it will confer an AC bonus of 2 (i.e. a reduction of the AC by 2). It was easier to move in than standard hide but gave similar protection, which suited the highly mobile Mongol style of warfare.

(Thanks to StarWolf <misterc@bc1.com> for submitting the idea for this armour)

Hide, Nomadic (10gp, 15 lb., AC 8, 15dp)

This form of armour was simply the cured hides of tough-skinned animals, such as elephants, rhinoceroses or bears (depending on the creatures that lived in the area). As the name implies, it was

sophisticated armour. It could also be manufactured from multiple layers of the hides of less tough-skinned animals (such as deer or cows).

(Thanks to StarWolf <misterc@bc1.com> for submitting the idea for this armour)

Hide, Nordic (20gp, 25lb., AC 6, 20dp)

The Nordic form of hide armour was tanned and lacquered (not boiled) to give a hard outer shell with a softer inner layer. This made it easier to move in than normal hide (albeit not as easy as with nomadic hide).

(Thanks to StarWolf <misterc@bc1.com> for submitting the idea for this armour)

Jade Burial Armour (50,000gp or more, 50 lb., AC 7, 40dp, S+2 P+1)

This armour, historically, has been encountered only once. An ancient Chinese prince and his consort were buried in suits of this armour, which was made of 1-inch-square pieces of jade held together with gold thread. As jade and gold do not decay, the Chinese believed such a suit of armour would give immortality to it's wearer. As the jade was quite thin, the armour confers little AC bonus, and is hard to move in at all, never mind when in combat. However, the armour has more novel uses than as mere protection...

This armour would make a very suitable protection for powerful undead, such as zombies or lichs, especially in an Oriental setting (bearing in mind it's origins). It is also an excellent candidate for some sort of magical enchantment, especially magic that would confer youthfulness or longevity. The armour could have the ability to affect it's wearer as if casting one or more of the following suggested spells: Restore Youth, Resurrection or similar; once a day or whatever. Bearing in mind it's rarity and mystique, it could even be turned into a powerful artefact or relic...

Jousting Full Plate (8,000-15,000gp, 90 lb., AC 1/0, 50dp, S+4 P+5)

This armour was a specially adapted suit of full plate evolved especially for the joust. It is almost totally unsuitable for combat: the bevor of the helmet is often bolted to the breastplate, the left arm is rigidly locked into position and cannot be moved and the right gauntlet features a locking catch making it impossible for the knight to release his grip upon the lance without help. This armour began to evolve early in the 16th Century, by the middle of this period it had developed into a very sophisticated form. It was a full suit of plate mail, with chain mail and padding underneath. A great helm was worn, usually a specially adapted one with it's bevor bolted to the breastplate (this prevented the wearer's head from turning). A metal grandguard extended across the chest (and even the lower part of the helmet) from the upper left arm, this was in addition to the breastplate and amounted to a great thickness of metal over the chest. The left arm was locked into position, and on to the left forearm was bolted a shield mount or an actual shield itself. The thighs were protected with an additional skirt and tassets. This armour is so rigid that any Dexterity bonus to AC is negated while wearing it. For ordinary attacks, use it's AC of 1 (the same as full plate), but for frontal attacks it's AC drops to 0. With a shield this can be reduced to -1 (or, with a bouched shield, even lower).

Lamellar (metal: 210gp, 36 lb., AC 4, 26dp, P+1; wood/horn: 120gp, 20 lb., AC 5, 10dp, P+1)

This armour type was originally covered in the Al-Qadim campaign sourcebook, but despite this Arabian setting the armour was used in Europe as well, during the early Middle Ages. It consists of overlapping metal plates (lamellas), sewn together with wire; but the armour could also be made from wood or horn plates and sewn with catgut where metal was rare or unworkable. In this respect it is quite similar to scale, save that the plates are smaller and are worn under a leather hauberk. Alternatively, the plates could be riveted inside a leather jerkin. This second type would have looked something like studded leather to the casual observer, the studs holding in plates to give more effective protection. It was generally only worn as a jerkin, and this armour was not available in sleeves or leggings.

Leather, Norman (15gp, 25lb., AC 7, 25dp, S+1 P-2)

Norman men-at-arms wore an untreated leather hauberk, covered with bands of leather at right-angles (forming a chequered pattern) with metal studs protecting the junctions of the leather bands. Sometimes a linen hauberk would be worn instead of a leather one. It was generally worn by norman soldiers who could not afford metal armour.

Lorica Segmenta (see banded mail)

This was invented by the ancient Romans, and is the distinctive jacket of metal strips worn by the Roman legionary. Mostly it would be made of iron, but bronze outfits were not unknown. Chain mail was unknown in these times, and the armour would be worn over a tunic to prevent chafing. The plates were riveted together on the torso in such a way as to allow limited movement, and were held together with straps at the shoulders where great freedom of movement was needed. It was, however, quite cumbersome and harder to move freely in than mail. It was of superb design and craftsmanship, and afforded protection to the torso down to the waist (legionaries would wear a skirt of vertically-hanging studded leather strips as well) and over the shoulders. The secrets of it's manufacture did not survive the fall of the Roman Empire, however. In the Dark Ages chainmail became the preferred form of armour, and banded mail was not seen again.

Parade Plate Horse Barding (30,000-80,000gp, 120lb., AC 5, 35dp, S+2 B-1)

This is the horse's counterpart to parade full plate, below. Horse armour was made to match that of it's rider, and the greater area of the horse's body gave the designers leave to run rampant with embossing and designs. The armour covers the same areas as full plate barding, but is as richly decorated and adorned as parade full plate. Italy was renowned for it's embossed armours during the 16th Century when this armour was first used, but Germany led the world in etched designs.

Parade Full Plate (20,000-50,000gp, 60-85 lb., AC 5, 25dp, S+2 B-1)

This armour was used extensively during the 16th Century, when field armour was plain and unadorned, and jousting armour had taken it's own course. Parade (or Pageant) armour showed the bearer's wealth, so the more ornate and richly decorated (to the point of grotesqueness), the better. Entire suits of armour would be lavishly embossed with figurines, designs and symbols. Renaissance artists and armourers collaborated to produce truly outlandish, baroque designs. It would be richly decorated with blueing, gilding, precious metals, enamels and even gemstones. Some designs copied Roman patterns, particularly those of Italy. Use of parade armour continued into the 17th Century, with designs growing more and more ornate, and less and less effective. This armour was unsuited to either combat or jousting, the decorations being unable to retain their finery after many blows, and anyway, the armour was often tactically worthless, being hotter, clumsier and less effective than purpose-designed battlefield suits. This armour is more likely than any other to be made out of unusual metals, as described in the DM's Guide. The sovereign of the most powerful empire in your campaign world might want no less than a 24ct gold suit of parade full plate, setting him back over 200,000gp (plus the bill for his horse barding). And weighing in at up to 170 lb., he might not be wearing it all that often. And as it confers an AC of 9, that might be wise.

Pikeman's Field Plate (600gp, 40 lb., AC 4, 30dp, S+2 P+1)

The pikeman, mainstay of the early 17th Century Renaissance army, needed armour that enabled them to remain mobile yet protect them from their opponent's arms. Pikemen were tasked with protecting musketeers from roving cavalry, to which they were well suited (a mounted warrior charging into a hedgehog of pike staves is tantamount to suicide), and occasionally advancing. The pikeman's pot was the favoured helmet. The body armour consisted of five parts, being the collar, the breast and back plates, and the two tassets. The collar hinged open and was worn beneath the cuirass or breastplate. A gorget would have been worn by officers. The breastplate was cut away under the armpits, it offered no arm protection at all. A vertical ridge in the centre of the breastplate formed a peak at the wearer's stomach. The backplate dipped between the shoulder blades and had a belt riveted on, this was fastened around the breastplate and, together with metal-plated shoulder straps, held the whole together. A pair of square-shaped tassets were either strapped, hinged or riveted to the flange at the front of the breastplate's base. Straps, where used, would have been plated with metal laminate. The tassets would have been single

Scale mail (wood or horn; 80gp, 20 lb., AC 5, 10dp, P+1)

This is simply scale mail made out of wooden or animal horn scales rather than metal. It would have been used in areas where metal was very rare or the technology was not possessed to mine or work it, and so would have predated metal versions (had it actually been used extensively).

Shield, Bouched (10gp, 7 lb., 25dp)

This specialised jousting shield was mounted on the left wrist of a suit of jousting armour. It covered the entire chest, with a gap for the lance. It was generally made of metal and covered with leather, usually moulded in three parts and contoured to the rider and his mount. It was introduced in the 15th Century. It confers a benefit of AC 2 (i.e. an AC lower than the armour alone by 2) against frontal attacks only while mounted. When dismounted it functions as a medium shield.

Shield, Kote (5gp, 3 lb., 10dp)

This Oriental form of armour consists of a pair of armoured sleeves worn on the forearms, and thus can be concealed below clothing. It functions much like a buckler, with the bonuses that the kote-wielder cannot be Disarmed, and may use weapons in the hands that bear kotes. Despite the fact that a pair is worn, the AC bonus is merely +1.

Shield, Parma (7gp, 5 lb., 10dp)

The parma shield is identical to the small shield, merely bearing a different name. This shield was used by the Thracian gladiator in the Roman arena.

Shield, Scutum (10gp, 10 lb., 25dp)

The scutum shield is to the medium shield what the parma is to the small. It is merely a medium shield under a different name, and was used by Gallic and Samnite gladiators in the Roman arena.

Shield, Small Wooden (1 gp, 3 lb., 8dp)

This shield is exactly the same as a small shield, save that it is made from wood. As such, it is lighter, cheaper, and can take less damage before being rendered useless.

Shield, Target (2gp, 4 lb., 10dp)

Similar to the buckler, this shield's major difference with it was that it was worn on the forearm (as opposed to the buckler which is held in the hand). This is probably what TSR were thinking of when they made their description of a buckler. It was made of wood covered in *cuir bouilli* or metal, and the wearer's shield hand could be used to hold an item or even a weapon while it was in use. Like the buckler, it may improve the wearer's AC by one against one specific attack per round. It dates from the same period as the buckler, but was made obsolete by firearms. In Scotland, where it was known as the targ, it survived until the 18th Century, forming the highlander's typical wargear when combined with a broadsword.

Armour Manufacture

While the PHB gives rules for the manufacture of armour as it relates to nonweapon proficiencies, and the Complete Fighter's Handbook expands on this, neither goes into much detail on the processes. This detail is not necessary to the game, but adds flavour to the neo-medieval campaign.

The manufacture of armour required skill, and was an extension of the art of the blacksmith. Armour was made to be lightweight and flexible, stories of knights being lowered into the saddle by crane and being

when knights wore heavy full plate, a trained man could vault into the saddle fully armoured and could move on foot almost as easily as the footman in his chain hauberk.

Leather, padded and hide armours were more the province of the leatherworker or tailor than the armourer. For details of the manufacture of these armours, see the descriptions of the armours themselves. To manufacture such armours, tailoring and/or tanning facilities were needed.

Mail links were made by wrapping a metal wire around a dowel to form a coil spring. This coil would be severed in places with a chisel to form a series of open rings. The rings would be interwoven and then hammered shut and sealed with a punch.

Metal plate armour was the most difficult to make. The preparatory stage involved detailed measurements of the intended wearer and trying on the raw parts to ensure a perfect fit. This is why it is so difficult to find plate armour that fits your character, especially as metal, unlike cloth, doesn't stretch! A towering 6'5 warrior would never find armour to fit him (bearing in mind the average height of the medieval man, about 5'8) and would have to have it tailor-made.

Having done this, the smith would take iron ingots (known as 'pigs', hence 'pig iron') and hammer them into roughly-shaped thick plates. These plates would then be finely shaped. The armourer had a bewildering array of anvils (known as 'stakes', small anvils set in wood or on trestles) and shaped hammers to do this. The anvils and hammers would be complete with ridges and depressions to form any decorative parts. For a customised suit of armour, special anvils would have to be made, which goes some way to explaining the cost of parade armours. To prevent cracking at this stage, the iron would be annealed (heated to soften it). While doing this, the armourer also had to ensure that the armour was of the right thickness, especially in the often-targeted areas of the face, chest and left side (when swinging at an opponent with your right arm, you tend to hit his left side... which is also where his shield is, annoyingly enough).

After the sheets were finished, the edges were cropped with shears and often rolled over a wire to prevent an opponent's weapon glancing into a vital area. The armour was now almost serviceable, although black from the forge and covered in the marks of hammer blows. In the late middle ages and the renaissance, the common foot-soldier's armour would be shipped out in this condition, but the gentry deserved and got better. Any gilding to be done on the armour was added at this point. Straps and buckles would be attached, and then the armour would be lined with quilting in the breast and backplates, cuisses, tassets and helm. Any decoration, such as etching or engraving, was added last.

New Proficiencies

Armour Design (2 slots, Warrior group, Intelligence -4)

This proficiency allows the character to design (not manufacture) armour, particularly baroque and ornate armour. A certain amount of time is needed to use this proficiency. The design of the armour will take:

AC	Time
9	1 day
8	1 day
7	2 days
6	3 days
5	4 days
4	1 week
3	10 days
2	2 weeks
1	3 weeks
0	1 month

For ornate armour, the design time is doubled. For parade armour, it is tripled. In order for baroque

The proficiency check is made after 1/3 of the total design time has elapsed. Until then, the designer does not know whether he will be successful. If he fails, he realises that the design is unsuitable and must start all over again. If he fails very badly (DM's discretion here), he may not know until he has finished, and the flaw may be found at that point or it may not, leaving it up to the armourer (who may or may not notice the flaw, the armour counting as Flawed under the Armourer proficiency if he does not). Having designed the armour, the design must be given to someone with Armourer proficiency for manufacture. An armourer making armour from a design can add a +2 bonus to his check. If that armour was designed by him he may add +4. Clearly, it is better to have armour designed and made by the same person. The armour decoration must be done by someone with the appropriate Artistic Ability (see above). The designer must also possess this proficiency, as he has to know what is possible and what looks good when designing it. It is possible for one man to design and decorate the armour (once finished), and for a second to actually make the basic suit.

Epilogue

Anyone interested in adding new types of armour or new rules for armour use should seriously consider buying The Arms & Armour Guide and/or The Complete Fighter's Handbook by TSR. Anyone wishing to submit new types of armour for inclusion in the next revision of this netbook should e-mail me at 'hugo@chesshire.abel.co.uk'. If you submit anything to this netbook you will have to waive your copyright to it (if you wrote it). I will, of course, give credit to anyone who submits any item of armour to this netbook (you'll get a little tag saying 'submitted by <whoever>). If you invented that item as well, then you'll get full credit for that too (the tag will say 'submitted and invented by <whoever>). I don't guarantee to include it, of course. If you just wish to give me some feedback, e-mail me at the same address. All encouraging comments will be gratefully received, and all criticisms will be given due consideration. I will try to reply personally.

Before anyone asks, I am none of these:
a) over 40. Or even 30.
b) afraid of the opposite sex.
c) someone who enjoys dressing up in period gear and going around re-enacting events that took place a long time ago.
d) a teacher of either Latin or History.
e) one who lives in a library and has no friends.

No offence was intended to anyone just then, honest!

References

Allston. Aaron (1989) *The Complete Fighter's Handbook.* TSR Inc.
David Cook, Steve Winter, Jon Pickens et al (1989) *Player's Handbook.* TSR Inc.
Keegan. John (1993) *A History of Warfare.* Hutchinson
Wilkinson-Latham. Robert (1981) *Phaidon Guide to Antique Weapons and Armour.* Phaidon Press Ltd.
Quennell. C.H.B. & M. (1918) *A History of Everyday Things in England, Vol. 1.* B.T. Batsford Ltd.

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