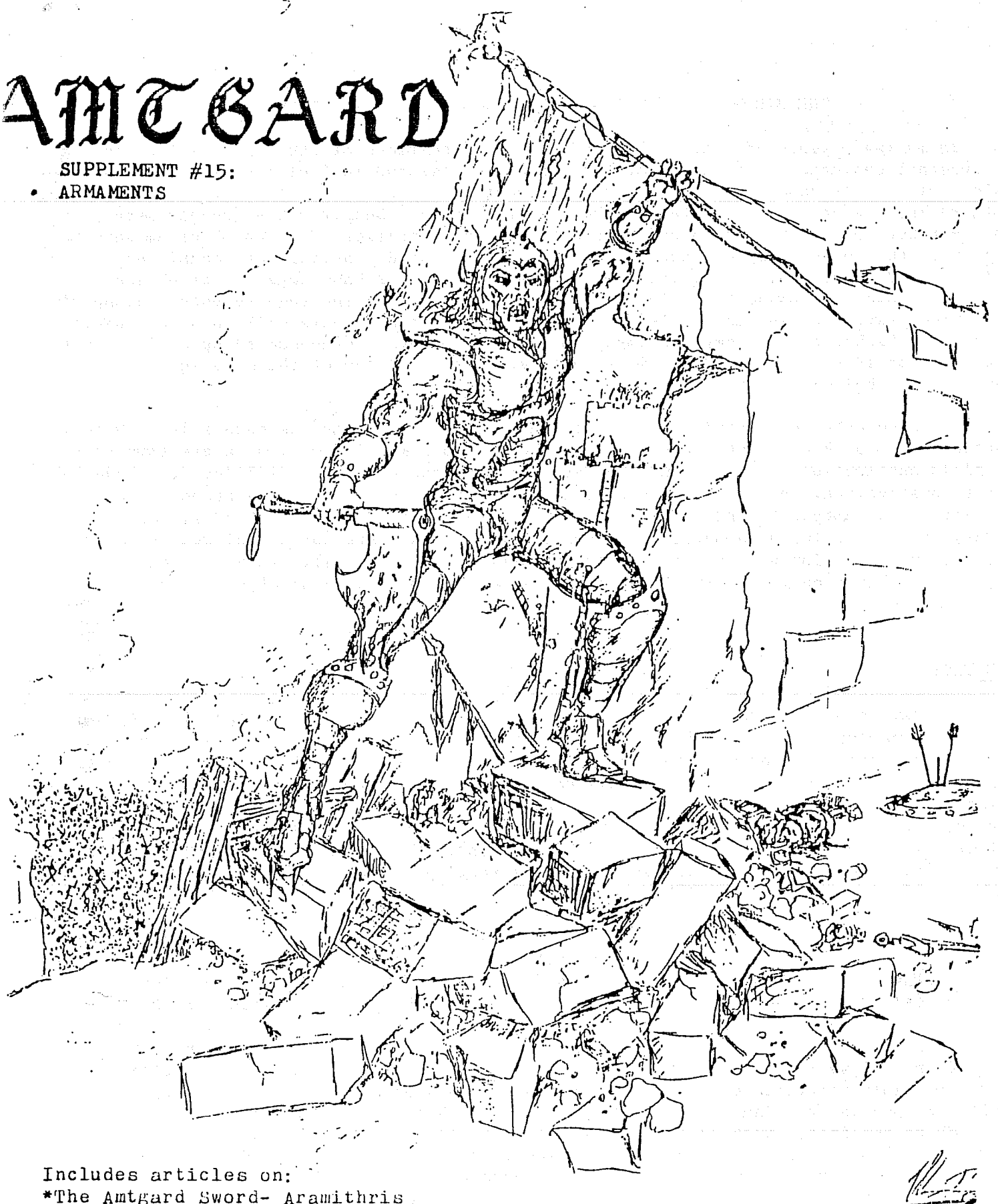
AMTGARD

SUPPLEMENT #15:
- ARMAMENTS



Includes articles on:
*The Amtgard Sword- Aramithris
*Shields- Tholden
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editor- Aramithris

THE BIRTHING, BATTLING, AND BABYING OF THE AMTGARD SWORD

In my seven years of Amtgard I've seen several editions of the rulebook come and go, a constant evolution of fighting styles, and the rise and fall of several weapon systems (along with their associated construction elements). Publications and articles showcasing Amtgard knowhow have proliferated in the last two years. Despite this "renaissance", not one serious piece has been undertaken to examine a critical "linchpin" of Amtgard battlegames, this being weapons, and more specifically, sword construction techniques. I've built over 300 weapons, accumulating some "small" store of knowledge and expertise in the process. However, owing to a divergence of fighting styles and requirements, along with the wide variance in materials available, no two individuals will turn out identical weapons. Rather than attempt to impart my (or any others') weaponsmithing style upon the Amtgard populace, this article is structured as an overview of the more interesting and useful sword building methods that I've encountered.

It is somewhat of a truism that a weapon is only as good as its materials; More important is to know what you want, and procure your materials with an eye towards battlefield application, cost , and the degree of maintenance you're willing to undertake after construction. Before you can choose materials, it's wise to understand the separate elements of an Amtgard sword. These are: the base (core), cylinder (blade), cap (point), cover, and hilt (with pommel). Two sub-categories that are not actual weapon parts but still require mention here are fixatives and accessories. I will examine each category with the emphasis on materials, with comments on the pros and cons of each material, and advice on construction where appropriate.

THE BASE

Popular vernacular refers to this as the core, a term that is slightly misleading. Two-foam weapons with a soft foam shell enclosing a tube of ensolite have an ensolite "core" and a pvc pipe (or accepted substitute) "base". It is a misnomer in the rulebook that refers to the pvc as a core. This has lead to an alarming trend of hard packed foam weapons, these engineered by weaponmakers fearful that their weapons will not pass because a reeve can feel the "core". Safety is the important factor, not a technicality in the rules. I will discuss this later under "cylinders". Most swords do (and should) utilize pvc. I've seen other materials used as a base ranging from an iron bar (alarming); to bamboo, aluminum pipes, and fiberglass; (all fragile and useless); to rattan (marginal). In other words, it is strongly suggested that you stick with pvc pipe.

Pvc comes in all forms and sizes. What will suit your needs depends on how you will apply your weapon. The harder you hit, and the larger the weapon, the heavier your pvc will have to be. All pvc has a psi rating, which is the pressure load it can safely handle. I've used psi ratings between 120 and 480 in my swords. Obviously there is a tradeoff, lighter pvc (lower ratings) makes for lighter, faster swords - they also break more often. I've had the most luck (best tradeoff) utilizing pvc with psi ratings around 300. For most practical usage I don't suggest ratings below 240. The other important quality of pvc is the diameter. For Amtgard swords this rating will usually range between 1/4 inch to one inch, with most swords either 3/8, 1/2 or 3/4 of an inch. I don't recommend 1/4 to 3/8 inch pvc, especially with lower psi ratings - this tends to form a whip-like sword that is both immoral (it curves around parries upon impact), and illegal (the additional torque created by the "ship" imparts more force to the target). Longer swords tend to require a larger diameter. When looking at pvc, choose diameter ratings with comfortability of grip in mind. Pvc should have the psi and diameter stamped on the side, and commonly sells from $1.00 to $2.00 a foot (shop carefully). You can find it at

hardware stores and warehouses or at any place that carries plumbing supplies. If you're willing to trade money for time, then the frequenting of construction sites and dumps can yield sizeable caches of Amtgard usable pvc.

THE CYLINDER

Most differences in swords begin with the type and amount of foam used. The foam is usually wrapped around the base to form a cylinder and is then affixed to the pvc. That's right, I've seen other methods: stiff ensolite with no base, thick foam slabs pierced with a knife and forced over the pvc base, sectional pieces of foam fitted together like a sandwich stuffed with small pieces, etc. Two methods predominate, wrapping and piercing. Foam itself comes in a bewildering array of sizes, colors, and shapes. I will describe the various "standard" foam types and how they are employed in construction:

A. White 1/2" to 2" foam - the "normal" foam portrayed in the rulebook. It has fallen into disfavor recently, unfortunate since this foam is soft, cheap, and plentiful. It is wrapped around the base and taped (or glued) there. Best results are usually achieved when it is wrapped to a 1" to 1 1/2" thickness around ensolite tubing affixed to the pvc base. The 1/2" variety is more flexible in construction, but more apt to "slip" (the funnel effect) in combat. Prices vary widely, and it can be found in any foam and fabric store.

B. Ensolite tubing - not for sword construction on its own, it provides an excellent core for white foam (as mentioned above). It is also standard fare for padding the edges of shields, javelins, and axes. Color is usually a variation of grey. Look for it where you find pvc. Prices are comparable to those for pvc.

C. Blue (and white) ensolite - made popular by Ahira, it is the current "in" foam with many swordmakers. Found in most hardware stores, it offers the advantages of being firm and easy with which to work. Maintenance is simple since it doesn't give much (thus it doesn't tear). On the other hand, its very firmness tends to create a dense and hard weapon on the ledge of legality. Also, it is not suited for long weapons, it tending to display top-heavy tendencies not found in the other foams. It comes in 1/32 " to 1/8" thick sheets. Again the thicker sheets are recommended, loosely wrapped to a constant 1 1/2" to 2" of thickness around the pvc base. Many swords with this foam do not pass weapon safety checks because their makers either wrap the foam too tightly, don't use enough foam, or put on too tight a cover. Each successive layer of foam should be taped together at the top of the sword to prevent the "funnel effect", this caused by the separate layers starting to separate and move upward on the sword. Letting this go will elongate your blade and eventually tear the foam off at the top. A quick (and almost absolute) rule for any foam: Simplicity is best - use as few layers as possible, all firmly attached to the base. One warning, only tape this foam where you absolutely need it, ensolite and tape have a special affinity for each other (they won't let go).

D. Grey packing foam - my own first line weapons are made with this. Unfortunately you can't buy it; it's usually found as packing for computers and television sets. Another problem is quality control. Firmness ranges from very soft (light grey - tears easily with too much give) to very firm (dark grey - also tears easily because it has no give). You want to find something in the middle that's firm enough to protect your targets from the pvc base. Standard construction procedure is to punch a hole throughout its length, slide it over the base, and firmly affix it at its bottom end to the base. Care must be taken to

punch a clean hole; any tears or fissures will expand during use in combat and rip the cylinder. By the same token, the hole must extend throughout the entire cylinder lest the pvc base slide and tear through the top of the cylinder (especially a problem when stabbing). Packing foam is most useful for slashing only swords.

E. Other foams - Dimpled packing foam (usually yellow or blue) can be utilized much like white 1" foam - pack it lightly. It looks like egg cartons. The thick foam used in furniture can be pierced as in the case of grey packing foam, though it will yield a heavier weapon. Not recommended are the clear bubble foams (they're light and soft - until all the air pockets burst), and foam rubber (too hard, too heavy).

CAPS

All swords require a cap. Even weapons not stabbing legal require a separate foam cover over the pvc edge. As per the rulebook, a cap should start with the taping over the pvc edge of a section of stiff foam. I recommend 1/8" white or blue ensolite. Tape it down well. Great care should be taken to insure that this cap will not slip or tear. Further modifications to the cap generally take one of five forms:

A. Bulb: Much like the rulebook example, strips of soft white foam are taped over the ensolite to provide a safe stabbing point. The end result looks much like an Amtgard arrow. The cylinder rises flush with the bulb.

B. Foldover: Developed by Hellspawn and utilized with 1" white foam weapons. The white foam is extended a couple of inches over the cap, folded over, then taped in a radial pattern (much like an iris). This makes a light, safe stabbing point, although the large amount of tape tends to induce tearing.

C. Stuffed: Primarily for use with packing foam. A piece of soft foam is placed in the 2" or so of free space between the end of the pvc base and the top of the packing foam, and is then taped over. Such points are marginal at best for stabbing purposes.

D. Stiff top: For use with blue ensolite swords. The blue ensolite is extended over the base, with an extended cap taped to the edge of the pvc base. The ensolite cylinder supports it and holds it in place. Again, this yields a marginal stabbing point.

E. Hollow point: Stiffer foams can actually extend 1" to 2" above the cap, providing a cushion of air between the cap and the target. In this case care should be taken to reinforce the cap with more foam. The end result is a light tip, although a danger exists for ripping the top off in combat, especially if you tend to hit with the top 1/4 of your sword.

COVER

At one time this entailed surrounding the entire cylinder with duct tape. Clearly times have changed. It is not desirable to have weapons that are heavy and hard. Also, tape doesn't allow the foam to give, thusly inducing tearing wherever it is affixed. Modern swords need light, yet durable covers. Colored socks are not a bad bet. They instantly conform to the desired shape, don't tear easily, and are easy to mend. Image conscious weapons builders prefer cloth covers. Dark materials are popular, preferably something stretchy that can give a little in the strain of combat. Most cloth covers are made of non-stretchable materials such as broadcloth that either tear or gradually fray away,

leaving little or no hope for repair. I would recommend one of the synthetic cotton blends that have a little give. Another common mistake with cloth covers is "the sew a tube and pull it over the cylinder approach". This leaves the end of your sword looking like Micky Mouse on a stick, with those cute little ears poking out. A little more effort to sew in a round, flat "bottom", yields a more professional appearance and a longer lifespan. A drawstring on the bottom of the cover can serve to draw the cover tight over the base. A more common alternative is to tape the cover down over the length of the hilt. I don't suggest this if you intend on removing your cover for any reason whatsoever (maintenance, repair, etc.). I tend to tightly tie my covers down at the juncture of the hilt and end cylinder, bringing up the trailing edge to be hand sewn flush with the rest of the cover.

HILT (WITH POMMEL)

Pommels (at the back end of a sword) follow the same general rules as for caps. They have to be big enough around to render them incapable of entering an eye socket (a good rule, by the way, for any potential striking portion of anything brought onto the field). Many individuals make their weapon's pommels too small. Sword cover techniques apply to pommels, though the use of tape predominates. The hilt is obviously that part of the sword between the cylinder and the pommel. Grip is dependent on pvc diameter and weapon function. A two-hander might utilize a 12" hilt to facilitate power parries and control. A short infighting sword could have a hilt with a pommel as short as 4" so as not to interfere with the elbow and wrist action applied in the various derivations of the scorpion and rap-style attacks. An old Wandering Unicorn trick was to build swords with very slender and long hilts that could be released to slide out and then be caught at the pommel, thusly surprising an opponent with a sword suddenly 12" to 18" longer. Luckily this tactic died out, eliminating a class of weapons with an unsafe ratio of hilt to cylinder (blade) length. There are no hard and fast rules for this. Needless to say no weapon should be built or utilized in such a way that there is danger of exposed pvc forcefully striking a target. Shorter hilts will minimize those painful shots to your knuckles by encouraging you to parry more with the blade length.

FIXATIVES

Affixing foam to foam and to pvc generally involves the use of two broad categories, glues and tapes. Glues include contact cements and spray adhesives. Such products produce semi-permanent effects not conducive to maintenance (pvc breaks, foam tears), and are not highly recommended. Rather than examine particular types of tape, I will briefly list what I consider to be the best options for each area of sword construction:

A. Affixing the cylinder to the base: To avoid the "funnel effect" when using multiple layers of foam, duct tape should be run vertically down the length of the pvc base, half taped to the pvc, half to the foam. This adds more weight, but you can't afford to let that foam slip. Ensolite cores, when utilized, and 1" or greater diameter foam, should be taped to the base only at the juncture of the cylinder and hilt. Several layers of tape cross-strapped at 45 degree angles to the hilt will prevent your cylinder from becoming a projectile in mid-swing. Such a taping approach (only at the bottom) allows more give to the sword at its upper striking edges, and this reduces the chances of tearing or ripping. Use strips of duct tape or strapping tape. Never use electrical tape for this purpose. It stretches, allowing the cylinder to creep up and ultimately off the base.

B. Affixing foam to foam and/or holding a rolled cylinder of foam together: As

stated before, the less tape adhering to foam, the less chance of tearing. electrical tape is good for this - it stretches with little chance of tearing, and can be carefully removed from the foam at need. An interesting variation is to use plastic tape, which will not stick to foam at all (it only adheres to itself). The problem here is that aging plastic tape will just fall off - you take your chances. I've had good luck with it. If you are careful, you can split electrical tape down the middle with a razor blade to provide strips with less surface area in contact with the foam. If you must use duct tape, use the vinyl or cloth varieties, and split it into thinner strips before application.

C. Other affixing methods: Some individuals elect to cover a "floating" cylinder and then affix the cylinder to the base hilt by taping the cover to the pvc base. It saves wear by negating tape tearing of the foam. However, inevitably the cylinder and cover will begin creeping up the base. This method is useless with layered foams. Nashomi applied a similar technique, using oversized bulb caps to keep his free-floating cylinders from sliding off his sword covers, these lightly taped to the hilt. A useful addition to any soft foam or pierced construction sword is to run a nylon over the cylinder then tape it to the hilt. This supports and reinforces the cylinder, providing extra support.

ACCESSORIES

In general these are additions to the hilt. Strips of leather glued or taped to the hilt look nice, provide a slip-free grip, and can be used to build up small diameter pvc to a more easily wielded size. Lanyards are best made by looping cord against the pommel. When not around a wrist, this cord can be used to tie a sword to a belt or baldric. Bells are an interesting variation. Take a circular or elliptical piece of stiff foam or thick leather and cut holes the diameter of your pvc at either end. Fit both ends over your hilt before adding the pommel, and bingo, you have a bell. For a small price in wrist flexibility, you have added protection for your aching knuckles, and less chance of drawing your fingernails across your opponents' aching faces. Crossguards have gone out of vogue, and good riddance. They're hard to make, harder to make safe, and interfere with your sword play, all the while offering little in defensive benefits.

UNUSUAL TECHNIQUES

Apart from the more successful standard construction methods, there have been a myriad of techniques employed, almost as many as there has been swordsmiths. While not standard practice, some of the more interesting of these methods are listed below:

A. Mace edges: A marginal cylinder is placed over the base. Four strips of 1/8" to 1/4" foam, each about 1" wide, are taped to the length of the cylinder, providing 4 built up striking edges. A loose cover is then fitted over the cylinder. This technique provides 4 safer striking edges while cutting down on weight.

B. Axe blade: Seen in many Ahira and M'Deth designs. The foam, usually a stiff ensolite, is stacked in layers on one (or two) side(s) of the pvc base. Unlike an axe, it is extended down the entire blade length in a uniform thickness. A specially sewn cover is required. Such weapons are especially thin, ideally suited to slot shots. They are also inappropriate to most wrist-torque blows, as they tend to strike flat with the unpadded portion.

C. Scimitars: I've seen people heat the pvc then bend it to produce a curve. This

weakens the pvc's structural integrity and produces an unwieldy weapon. More successful is the building of a curved edge by taping successive layers of packing foam or ensolite tubing. Such weapons look nice, but are hard to the degree of being illegal.

D. Convex folding: This works best with the stiffer packing foams. Two equal sized pieces of foam, each 2" to 3" thick are placed over the base and pushed together until their edges touch. They are then tightly taped together and affixed at the hilt to the base. An ensolite tubing core may be required. Both a nylon stocking and a tight cover are utilized to help hold the 2 taped halves together.

TYPES

Constructing any weapon requires tradeoffs. Such factors as weight and durability, safety, maintenance requirements, and flexibility and application in combat will enter into the formula. Below are what I perceive to be the typical Amtgard subtypes. Most swords will not solely fall into any one category.

A. Two-hander: Typically with a blade length of 3 to 4 feet. They border the definition of "red" weapons, being both heavy and durable. Many have stabbing points. Most successful versions are built with the thicker white foams. Historical examples would include claymores and bastard swords.

B. Long slashing: Shorter, thinner, and lighter than the 2-hander. Both types are seen in single sword tourneys. These are often made of blue ensolite, and for this reason seldom have legal stabbing points. Medieval broadswords and celtic leafswords fall into this category.

C. Short slashing: Total weapon length is usually less than 3 feet. The weapon can be single edged, with most blows thrown at an opponent's extremities. An out-of-line, looping style of attack is preferred. These are among the lightest of Amtgard weapons. Such weapons include scimitars and katanas.

D. Short hacking: Infighting weapons, usually wider than their slashing counterparts to provide a more viable parrying surface. Blows include an assortment of in-line (between the opponent's shoulders) chops and stabbing motions. The Roman gladius and the Aztec obsidian-edged warclubs were short-hacking weapons.

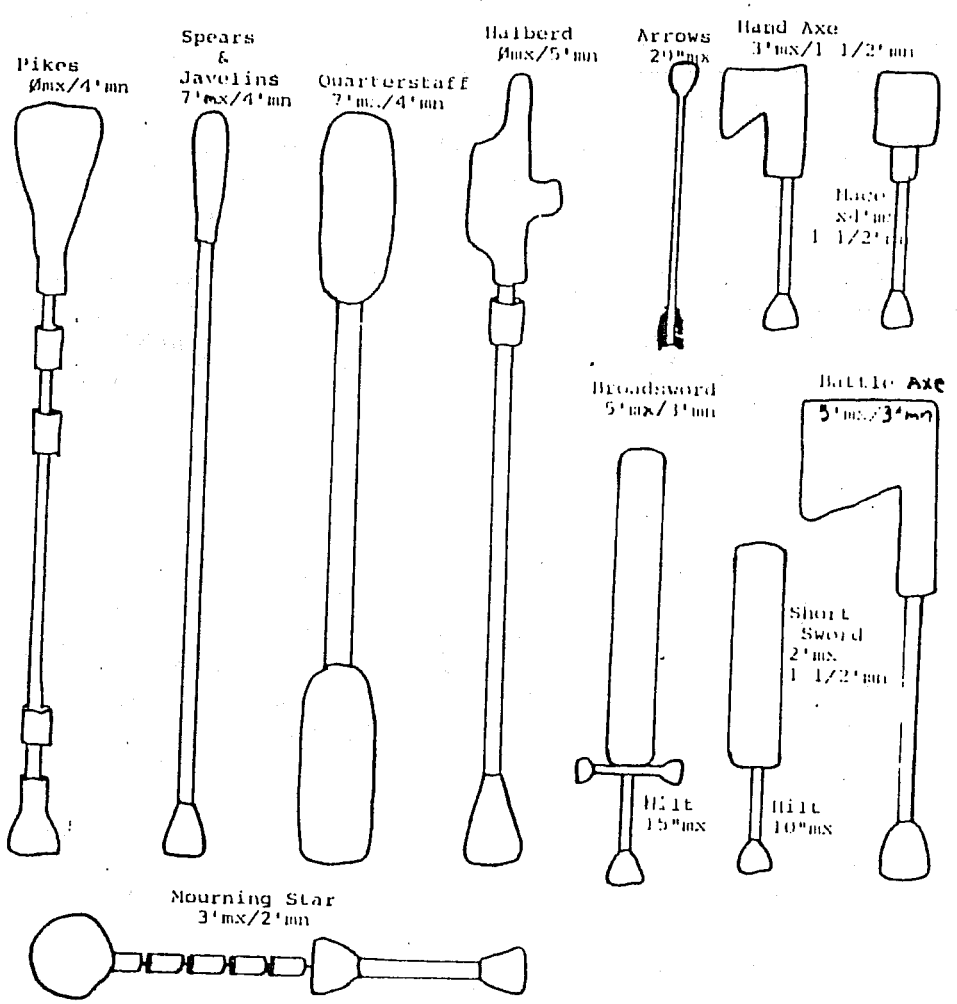
MAINTENANCE

Building your own mystical "Sword of Omens" is a fruitless endeavor if you don't take care of the equipment (even vorpal blades will rust). Most maintenance for Amtgard weapons is preventive and largely a matter of common sense. You don't expose your weapons to heat, thusly causing the tape to peel off (I'm appalled at how many Amtgarders store their equipment in the trunks of their cars). The other weather extreme to avoid is water. Wet foam will sag and tear. If you must fight in the rain, either scotchguard your swords or cover them in plastic wrap. Unless you plan on being responsible for the depredations of others, I don't advise loaning out your weapons. Sell them, or make them on commission, then explain the weapon's idiosyncrasies and construction techniques to the new owner. Better yet, teach them how to make their own. People using their own personal, homemade weapons are more prone to be conscious of and conscientious in the employment of said equipment.

Note that foam tends to break down as it ages. Taped foam has a signifigantly shortened lifespan. When using your weapons, feel the cylinder through the cover, especially at the cap. Fissures indicate tearing. By grasping the cylinder at the hilt and lightly twisting you can tell if the sword is working loose. Continuing to use a sword showing any signs of wear, be it tearing, looseness, or whatever, is an open invitation to disaster. You may or may not injure someone, but you will surely speed your weapon to its demise. Prepared fighters always have a second sword on hand. Every couple of months I subject my weapons to a "yard period", totally stripping them down, and replacing or repairing any aging or damaged parts.

CONCLUSIONS

As of late there has been resistance and resentment engendered in some quarters toward those individuals, reeves and otherwise, who strive to keep the Amtgard environment a safe place. Some folks think that you are "less of a man" if you don't stifle your complaints at the harsh treatment they deal out with their marginal weapons. I would add that these "he-men" seldom provide their own equipment, and will take what they can from Amtgard while contributing little or nothing. Amtgard is, among other things, a game. We owe it to ourselves to keep things as fair and fun as possible. I question the motives of an individual who won't spend $5.00 and 2 hours of his time to construct a safe and viable weapon. I take a sense of pride in my work - I see it as an extension of my persona on the battlefield. What we make of ourselves in Amtgard, our feelings of personal worth, can readily be seen in the arms, armor, and garb that we bear onto the field. Our status as citizens, whether first, second, or third class, is a matter of personal choice.



THE BUILDING, CARE AND MAINTAINCE OF YOUR FRIEND THE SHIELD

AFTER HAVING BUILT SEVERAL SHIELDS, SIONNACH ASKED IF I WOULD PEN A "HOW-TO" ARTICLE. I AGREED (IF I HADN'T, YOU WOULD NOT BE READING THIS NOW).

THE CONSTRUCTION OF THE "GARBAGE CAN LID SHIELD" IS RATHER SIMPLE; HOWEVER, IT IS TIME-CONSUMING AND WILL COST SOME MONEY OUT OF THE COFFERS.

MATERIALS:

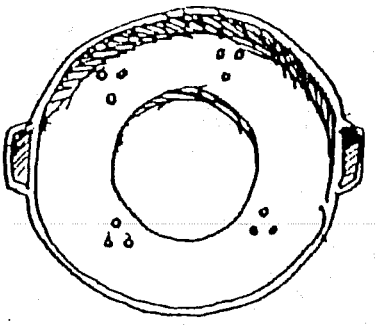
1 TRASH CAN LID ($1.99 TO $2.50)
3/4" PIPE INSULATION ($1.25) ENOUGH TO COVER THE CIRCUMFERENCE OF THE SHIELD
1 LARGE ROLL OF DUCT TAPE ($5.50)
12 BOLTS
12 NUTS
2"-4" THICK OPEN-CELL FOAM-ENOUGH TO COVER THE FACE OF THE SHIELD.
MATERIAL TO MAKE 2 ARM STRAPS-I SUGGEST AN OLD MARTIAL ART BELT
A LONG LENGTH OF ROPE
COLORED MATERIAL TO MAKE THE COVER-ENOUGH TO OVERLAP THE SHIELD SIDES TO ABOUT 3" OVER THE INSIDE.

TOOLS:

HOLE PUNCH OF SOME KIND-AS BIG AS THE BOLTS USED
HAMMER
SCREWDRIVER
SEWING MACHINE
A SOLID SURFACE
A LOT OF PATIENCE

HOW-TO:

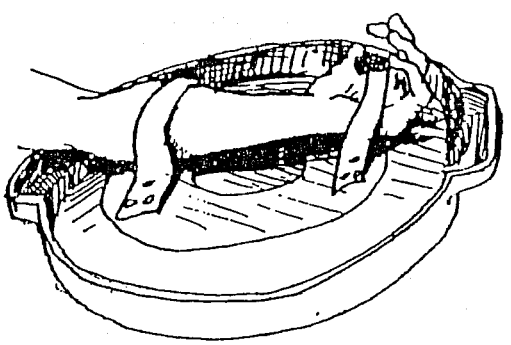
TAKE THE LID AND LAY IT UP-SIDE-DOWN. PLACE YOUR ARM ON THE SHIELD WHERE YOU WANT THE STRAPS TO BE PLACED. MARK THE PLACE ON THE SHIELD WHERE THE HOLES WILL BE PUNCHED. THE BEST WAY IS TO MARK THE HOLES IN A TRIANGLE SHAPE, THREE HOLES IN TOP AND THREE IN THE BOTTOM; 12 TOTAL. (SEE FIGURE)



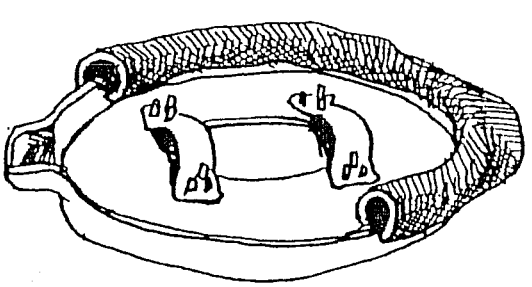
PLACE THE SHIELD ON A SURFACE THAT YOU'RE NOT AFRAID OF PUTTING HOLES IN. USING THE HAMMER AND THE PUNCH, PUT HOLES IN THE SHIELD.

TURN THE SHIELD UPSIDE-DOWN. PLACE YOUR ARM BACK ON THE SHIELD AND MEASURE THE STRAP FOR BOTH THE FRONT AND BACK STRAPS, ALLOWING FOR THE PADDING THAT WILL BE PLACED UNDER THE ARM.

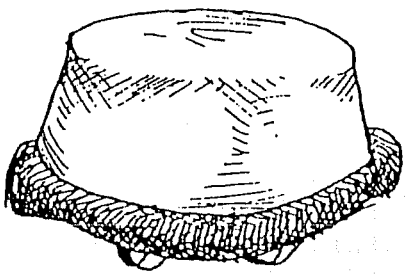
MARK THE STRAPS WHERE THE HOLES IN THE SHIELD ARE. PUNCH THE HOLES IN THE STRAPS. LINE UP THE HOLES IN THE STRAPS AND THE HOLES IN THE SHIELD. BOLT DOWN THE STRAPS WITH THE HEAD OF THE BOLTS ON THE FRONT OF THE SHIELD.

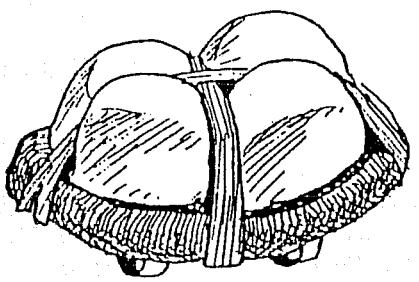


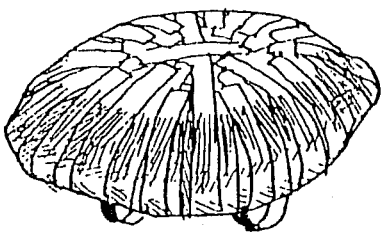
PLACE THE 3/4" PIPE INSULATION AROUND THE OUTSIDE OF THE SHIELD, MAKING SURE THAT THE INSULATION COVERS ALL THE HARD EDGES OF THE LID. TAPE THE INSULATION DOWN WITH A FEW STRIPS OF TAPE, ESPECIALLY AROUND THE CONNECTING ENDS OF THE INSULATION.



MEASURE THE OPEN CELL FOAM TO COVER THE FRONT OF THE SHIELD SO THAT IT OVERLAPS THE PIPE INSULATION. IF 2" FOAM IS USED, THEN TWO LAYERS NEED TO BE USED. TAPE DOWN THE FOAM WITH A CRISS-CROSS PATTERN FROM THE FRONT OF THE SHIELD ALL AROUND TO THE BACK. CONTINUE THIS PATTERN UNTIL THE ENTIRE SHIELD FRONT IS COVERED AND MOST OF THE BACK.

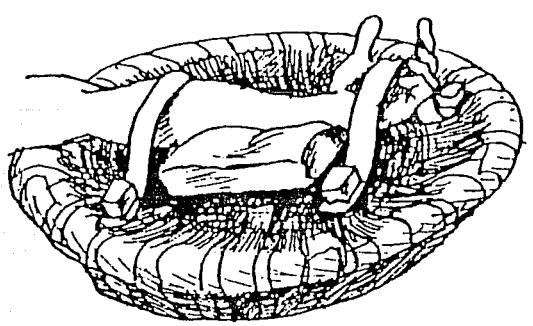






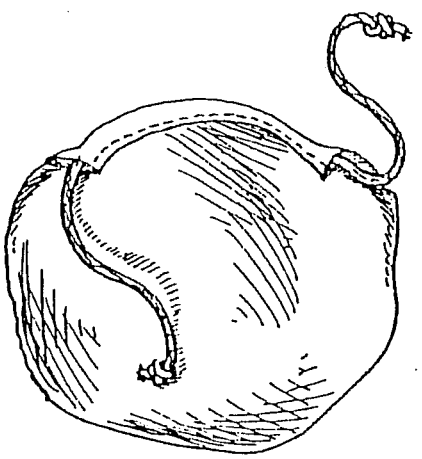
TAKE SOME OF THE FOAM AND TAPE AND COVER THE EXPOSED BOLTS ON THE BACK OF THE SHIELD.

PLACE YOUR ARM THROUGH THE STRAPS AND MEASURE THE AMOUNT OF FOAM NEEDED TO BE PLACED UNDER THE ARM SO THAT THE FOREARM WILL BE SAFELY PADDED AND CUSHIONED AGAINST ANY BLOW THAT MIGHT HIT THE SHIELD. CUT THE FOAM AND TAPE IT DOWN. MAKE SURE THAT THE TAPE ALSO OVERLAPS THE FOAM ON THE BOLTS. THIS ADDS EXTRA STRENGTH TO THE TAPE THAT COVERS THE FOAM ON THE BOLTS.



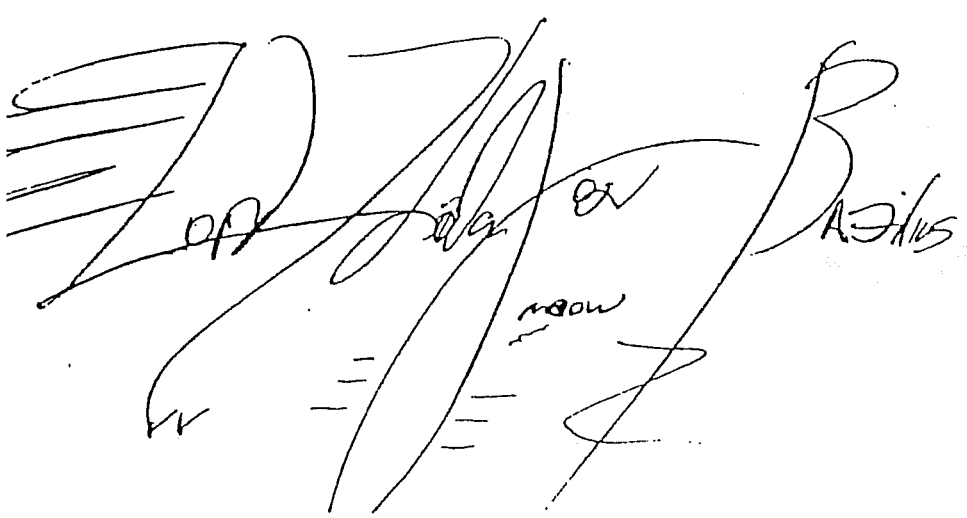
TAKE THE TAPE AND COVER UP ANY EXPOSED AREAS ON THE SHIELD.

TURN THE SHIELD RIGHT-SIDE-UP AND MEASURE THE MATERIAL FOR THE COVER. THE COVER NEEDS TO OVERLAP THE BACK OF THE SHIELD BY ABOUT 3". CUT THE MATERIAL OUT IN A CIRCULAR PATTERN. PLACE THE MATERIAL ON THE SEWING MACHINE. SEW A LOOP IN THE OUTER EDGE OF THE MATERIAL SO THAT A ROPE CAN BE PASSED THROUGH THE LOOP. REMEMBER TO LEAVE AN OPENING IN THE EDGE OF THE MATERIAL SO THAT THE ROPE CAN BE PASSED THROUGH AND THEN TIED OFF ONCE THE COVER IS PUT ON THE SHIELD.



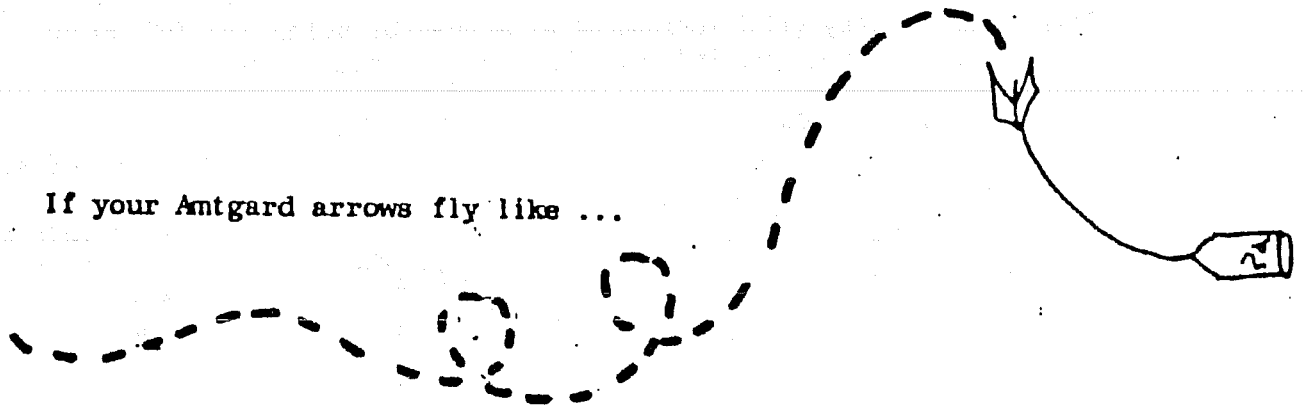
AS AN ADDED TOUCH A DEVICE OR SYMBOL CAN BE PAINTED ON THE COVER OR EVEN CUT OUT OF MATERIAL AND SEWN ON THE COVER.

HAVE FUN AND KEEP COVERED!

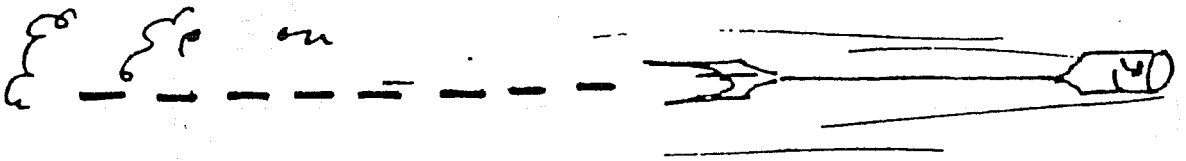


.....FROM THE ARCHERS GUILD.....

If your Amtgard arrows fly like ...



instead of like...



the problem may not necessarily be in your eye, your wrist, or your current good standing (or lack thereof) with the high god of archers..... Take a look at your arrows and check for the following:

1). Bent, warped, or cracked arrow shafts.
2). "Dowel" shafts of pine or oak (No bueno por caca and besides that they're dangerous and illegal)
3). Insufficient, loose, or deteriorated padding on the arrow head.

ALSO CHECK FOR...

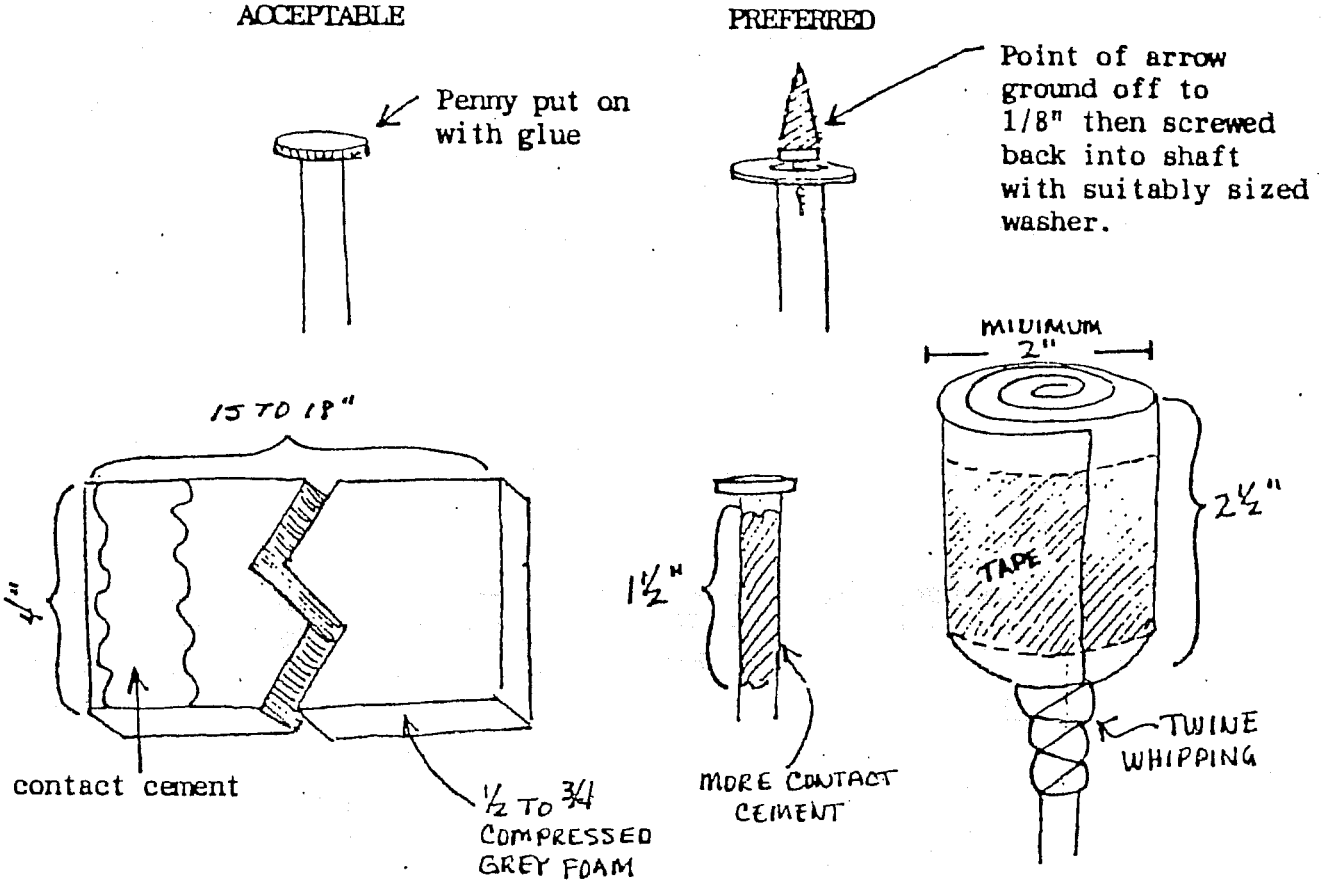
4). Worn or frayed bowstring. This condition not only puts a real warp in the arrow flight it can also put a real warp in your eye if the thing breaks with your bow at full draw - as in PUT YOUR EYE OUT.
5). Cracked bow - this will not put out your eye (necessarily) but is almost guaranteed to make dog food out of your arm or hand.

PLEASE REMEMBER...

6). Compound bows are not allowed on the field.
7). Recurve bows or long bows with a "pull" of more than 35 pounds at 28" are not allowed.

If you have thoroughly checked out your equipment, found it in good condition, and your arrows still fly like drunken buzzards maybe, just maybe you need to review your method of making an Amtgard arrow.

I've had pretty good luck with my arrows by using the following method of creating the infamous Amtgard dum-dum arrow:



For a standard arrow wrap the foam as illustrated above 1 1/2 inch below the penny/washer and a good 2 inches above to achieve a generous 2" diameter "head diameter". Whip the bottom 1 1/2 to the shaft. Don't use tape for this it just adds weight. Now tape the top around the head (not over the top) with about 2 wraps of the *proper color of duct or duct-type tape. I guarantee you will have a lighter, safer, and more consistent arrow.

BY THE HAMMER

Somewhere in history someone discovered that he was not very good with weapons. To remedy the bumps and bruises and the humiliation that Ook, the tribal bad ass, had just given him, he discovered that if he could find something that would take this punishment besides his body, he might live longer. At this point armor and probably attire were born.

In Amtgard it is sad to see but it is still true; armor and attire are often only different in name. I dare anybody in their studded vinyl "armor" to take on Ook with his club. O.K. enough about my personal gripes and down to the real business of armor making.

To begin with you must determine what the function of your armor will be. If you are a fighter who has a proclivity for getting your right arm cut off a lot your protection will cover a small area (limited to just your right arm). This does bring to the forefront the reason for armor, that being to cover up a weakness. I'm not saying that those people who wear armor are not good fighters, I'm merely suggesting it. If your purpose is to deal out damage while receiving as little damage to yourself as possible, your armor will cover a greater area. But, more area means more hindrance of your movements. Many older members of the club might recall Karl Schrimsher body surfing across the pavement after his metal leg armor locked up on him. To get on with it , hindrance of your movement is a part of wearing armor. To lesson the encumbering effect the armorer should take into account the shape of the armor in harmony with the fighting movements. To do this a *prototype* of the envisioned armor should be made out of expendable material, such as cardboard or sack-paper. Then careful trimming should be done to the areas which encumber free movement.

Now that you have the shape down it's time to decide what to make the armor out of and how to attach it to your body. The material used takes into account encumbrance vs. protection. My definition of encumbrance includes weight as well as the armor itself preventing full body movement. For example, leather armor even after being contoured to the right shape will flex when stressed. This will give you a freer range of movement than a more rigid material. If instead you use 16 gauge steel, it will not flex noticeably after being contoured, but the protection that you gain from the steel is more than noticeable. This is where you make your decision: protection vs. encumbrance.

Now that you have made your protection vs. encumbrance decision and designed your armor, attaching it to your body is the next step. There are many different areas of your armor which will have to be suspended in a way unique to the movement and location of that area. For example leg armor, if not suspended from a belt around the waist, must be fit with straps which will need to be form fitted. Aside from how Morluck attaches his leg armor, I think duct tape has better uses. Leather or strong belt straps are the materials most often used for this purpose. Arm armor is also in the same class as leg armor i.e. when you swing your arms any armor will tend to migrate towards your wrist likewise when you run, leg armor has the tendency to migrate towards the earth and give the tops of your feet no little discomfort. Suspension is the answer to preventing this. Use a belt around the waist for leg armor and a shoulder harness for arm armor.

Torso protection is the easiest to attach while being the greatest inhibitor of movement such as bending over. In one way or another it will end up being suspended from the shoulders. Partial armor prevents hindrance but provides only minimal protection area. *Jointed* armor can give full protection and still allow somewhat free movement but it is more complex to make.

To end, making armor is a personal thing. It must fit your purposes as well as your body. Only you can decide what materials are best what style fits and how much armor you want. Experiment with it until (or even after) you get it right. Half the fun of armor (or maybe more) is making it. If all else fails try fighter practice. Maybe when you get to be a better fighter you will decide you don't need armor.

Good luck,
Arch Duke Aredhel Kemenval

THE WEAPONS AND ARMOR OF AMTGARD

Despite the many protestations to the contrary, the Amtgard rulebook does cover most situations and eventualities that will occur on the battlefield. The fact is that the rules are complex. This is not unusual (see the Dungeons and Dragons or Champions rulebooks, or even the S.C.A. Fighter's handbook). Roleplaying is by its very nature an intricate and involved endeavor. I will agree that steps can be taken to better educate participants on the Amtgard rules of play. This article is one effort to do just that. Concerning weapons and armor, I have compiled and charted their relevant applications to the game. It should now be possible to cross index the equipment and magic you either have or want to use, and then match that to the appropriate class(es). A second benefit is the ease in which classes can be compared with these charts. This article is divided into 6 sections:

A. Armor and shield eligibility:

	Shield	Armor
Antipaladin	any	4 pt.
Archer	small at 5th lvl.	3 pt.
Assassin	small at 5th lvl.	2 pt. at 4th lvl.
Barbarian, nomadic	up to medium	2 pt.
Barbarian, tribal	up to large	1 pt.
Bard	small	none
Druid	small	none
Healer	medium	none
Monk	none	none
Paladin	any	4 pt.
Scout	small	3 pt.
Warrior	any	4 pt., 6 at 2nd level
Wizard	none	none

B. Armor and Shield parameters:

point value--typical armor types

1 pt.	cloth, soft leather
2 pt.	studded or hard leather
3 pt.	ring or scale mail
4 pt.	chainmail
5 pt.	platemail
6 pt.	plate armor

shield parameters

small	up to 3 sq. feet surface
medium	up to 5 sq. feet surface
large	up to 8 sq. feet surface

standard armor pt. value modifiers

-1 pt.	if thinner than 1/4 inch
-1 pt.	if non-period materials
-1 pt.	if too light for value
-1 pt.	if mixed or stacked armor
-1 pt.	for only partial coverage
-1 pt.	if does not look period
-2 pt.	for garb: boots, vests, etc.
-1 pt.	for metal less than 14 gauge
+1 pt.	for 6th level warriors
+1 pt.	for superb craftsmanship

C. Effects of Magic:

*Bless- may not be stacked or combined with armor
*armor type enchantments (barkskin, stoneskin, protect, protection)- may be stacked up to 4 pts.; may not be combined with armor

*Heal- repair up to 1 pt. of berserk barbarian armor on any one location
*Mend- a. repair any one destroyed (i.e.- not "useless") weapon or shield
b. repair one point of one piece of armor
c. repair one point on one location of any armor type enchantment

*Enchant shield, Harden (item)- enchanted shield or weapon cannot be destroyed unless specifically specified (i.e.- sphere of annihilation)

*Bladesharp, Bludgeon, Shillelagh- red (two-handed) weapons do double listed damage; blue weapons act as normal red weapons, green and black weapons cannot be so enchanted.
*Flameblade- as per bladesharp plus weapon is immune to flame attacks and the weapon bearer is immune to iceballs.
*Enchant(ed) weapon- wounds inflicted instead kill the target
*Stun weapon, stun arrow- treat hits as subdual style blows

*Magic arrow- arrow becomes a "red" weapon, add +1 pt. damage to armor per "level" attached (stacked) of this enchantment

*Heat weapon, Curse weapon- makes the affected weapon "useless" for a 300 count
*Warp wood- destroys wooden weapons, may be mended
*Pyrotechniques- will destroy a weapon or shield
*Shatter- will destroy a weapon, a shield, or a piece of armor

*NOTES ON ENCHANTMENTS:
1. an enchantment carried is considered to be an enchantment worn
2. armor is considered to be garb for purposes of wearing enchantments

D. Replacing items:
1. Relics are treated as normal equipment unless otherwise specified under the relic description. Note that a relic cannot be replaced.
2. The use of the "Mend" spell has already been listed.
3. All destroyed items are considered repaired when the dead come back to life.
4. Destroyed and useless weapons and shields may be replaced by taking a 100 count at your home base or nirvana.
5. Armor may never be replaced.
6. Warrior sharpen blade, harden shield, and repair are non-magical variations of the listed magic useable only on their own equipment.

E. Weapons costs for magic using classes (per 10 magic points):
n- non edged weapon e- edged weapon na- not allowed

	WIZARD	HEALER	DRUID
short (3 ft.)	2	4e/3n	2
long (4 ft.)	4	5e/4n	4
spear	3	na	4
staff	2	3	2
dagger (1½ ft.)	0	0	0
shield	na	3	4
short bow	na	na	8

F. The weapons (explanation of format):

Code:

Weapon name: accepted Amtgard (not necessarily the historical) name of that weapon
Color : Blue- cutting, smashing, or bashing weapon C:
Green- thrusting or jabbing weapon
Red- two handed, double damage weapon
Black- throwing weapons
Parameters: typical accepted size of the weapon P:
Description: outline of the weapon and its usage D:
Tournament usage: listing of tournament events for that weapon T:
Guild (classes): which classes may use the weapon. If the level for the weapon is available is above first, it will be after the class name. G:

1. Axe, battle
C: blue, and possibly red
P: 3' to 5'
D: single headed weapon with one or two cutting edges, usually used with both hands
T: berserker
G: antipaladin, barbarian (nomadic), paladin, scout, warrior

2. Axe, hand
C: blue
P: 1½' to 3'
D: a one handed axe (not legal for throwing)
T: usually in short weapon
G: antipaladin, archer, assassin, barbarian, druid, healer, paladin, scout, warrior, wizard

3. Bow, long
   C: arrows- green (never allowed in melee), bow- not applicable
   P: arrows- up to 29", bow- longer than 5½' when strung
   D: a non-compound bow of less than 35 lbs. draw. These do 4 pts of damage to armor. Crossbows fall into this category.
   T: archery
   G: archer, scout (6th)

4. Bow, short
   C: as per long bow
   P: bow- shorter than 5½' when strung
   D: as per long bow, but only do 2 pts. damage
   T: archery
   G: archer, assassin (2nd), barbarian (tribal), druid, scout

5. Club
   C: blue
   P: 2' to 3'
   D: a sword like weapon without a stabbing point and/or hand protection
   T: sword, sword and parry
   G: all but barbarian (nomadic), bard, and monk

6. Dagger
   C: green, and possibly blue (if has a firm base)
   P: ½' to 1½'
   D: this is the non-throwing variety; slashing daggers must be long enough so that the user does not punch the target
   T: short weapon
   G: all

7. Flail, long
   C: blue
   P: longer than 3'
   D: a non-standard hinged weapon that must be specially approved for use on the field. The chain must be specially padded.
   T: none
   G: antipaladin, paladin, warrior

8. Foil
   C: green
   P: up to 3'
   D: a stabbing only sword
   T: fencing, sword
   G: all those that may use a longsword

9. Halberd
   C: red
   P: 5' minimum
   D: single or double bladed weapon that can be used to cut or bash. It differs from a quarterstaff in that it usually only has one striking head. The lirpa and poleaxe fall into this category.
   T: berserker
   G: antipaladin, monk, paladin, warrior

10. Hammer, war
   C: blue
   P: 1½' to 3'
   D: single headed weapon similar to a mace but with one or two smashing edges
   T: sword, sword and parry
   G: all but barbarian (tribal), bard, and monk

11. Javelin
    C: green, may be thrown
    P: 3' to 5'
    D: a short stabbing and/or throwing "spear"
    T: spear
    G: antipaladin, barbarian (tribal), paladin, scout, warrior (3rd)

12. Mace
    C: blue
    P: 1½' to 3'
    D: single headed bashing weapon
    T: sword, sword and parry
    G: same as war hammer

13. Mattock
    C: blue, red if 4'+
    P: 3'+
    D: a large club with an oversized head; included are mauls and war clubs
    T: berserker
    G: antipaladin, barbarian (nomadic), paladin, warrior

14. Morningstar
    C: blue
    P: usually less than 3', the chain length must be less than 1½'
    D: a regulation length hinged weapon with a single smashing head; chain hits do not count. This category includes saps. T: obviously morningstar
    G: antipaladin, assassin (nunchuks only), barbarian (nomadic), healer, monk (nunchuks only), paladin, warrior

15. Naginata
    C: blue and green
    P: 5' minimum, striking head must be 1'+
    D: a long slashing polearm, it cannot be thrown
    T: spear
    G: antipaladin, druid, monk, paladin, warrior

16. Net
    C: none
    P: 2' to 3' long
    D: a hinged weapon not attached to any base. They do no damage, and may never be used to trip or otherwise impede a person's body. Their only function is to parry and entangle other weapons.
    T: none
    G: antipaladin, assassin, healer, monk, paladin, warrior

17. Quarterstaff
    C: blue and also usually green
    P: 5'+ , striking heads must be 1'+
    D: a double headed, bashing weapon used with both hands at once
    T: quarterstaff
    G: antipaladin, bard, druid, healer, monk, paladin, warrior, wizard

18. Spear
    C: green
    P: 5'+
    D: a thrusting only weapon that may not be thrown. Includes tridents.
    T: spear, jousting
    G: antipaladin, druid, monk, paladin, warrior, wizard

19. Sword, broad
    C: blue, and possibly green
    P: about 4', hilt less than 1¼' suggested
    D: sword used with one or two hands, includes hand & a ½, bastard swords
    T: none
    G: antipaladin, barbarian (nomadic), druid, paladin, warrior

20. Sword, long
    C: blue, and usually green
    P: 3' to 4', hilt less than 1' suggested
    D: a cutting and thrusting weapon used one handed; includes scimitars
    T: sword, sword and parry
    G: antipaladin, barbarian (nomadic), bard, druid, healer, monk (1 only), paladin, warrior, wizard, note- scouts without bow may use longsword

21. Sword, short
    C: blue and green
    P: 1½' to 3'
    D: short slashing and stabbing weapon, includes sais
    T: sword, sword and parry
    G: all but barbarian (tribal)

22. Sword, two handed
    C: red
    P: 4' to 6' , hilt less than 1½' suggested
    D: two-handed cutting weapon
    T: berserker
    G: antipaladin, barbarian (nomadic), paladin, warrior

23. Throwing weapons
    C: black
    P: 4" to 1'
    D: missile weapons with no stiff base or which are firmly padded along their entire length. Examples include shuriken, throwing knives, throwing axes (francesca), sha-ken, darts, and rocks. As with all weapons, no part of the weapon can be small enough to enter a human eye socket. T: again obvious- throwing weapons
    G: assassin, barbarian, monk (2nd), note- suggested maximum of 7 throwing weapons for assassins, barbarians can carry only 1 missile weapon (including throwing weapons), only barbarians can throw rocks.

24. White weapons
    C: white
    P: variable
    D: examples include seige weapons and poison. A seige weapon shot will instantly kill a target, even a shot to the shield or armor. A poisoned victim will die within a 100 count unless cure poison is cast.
    T: none
    G: poison only to assassin (2nd, 1 weapon only), and antipaladin (5th, 1 poisoned edged weapon for one life per game). Seige weapons require 3 people to operate.

There you have it. Careful perusal should help define and refine your choices. I would not say that this article is the final word, but it does boil down the basics accrued from our seven years of experience with the Amtgard system. I hope the reader found it to be of some use.