

# Rafm Company, Inc.

1986 CATALOGUE

Dear Customer;

We wish to take a moment here to explain **RAFM** Company, Inc. to you. The company exists to provide you, the gamer and collector with top quality figures, games and publications. We are veteran gamers ourselves, with interests covering all aspects of the adventure gaming hobby. Our background and main interest is in historical miniatures and to gamers in this branch of the hobby we promise to make every effort to support your activities.

Whether you live in Canada, the United States, Australia, Great Britain, or Malaysia, we have something for you. Contained between these covers you will find product listings available in your country.

**RAFM** Company, Inc. currently manufactures, in Canada, under licensing agreements, the miniatures of the "Ral Partha", and "Citadel" companies. New figures and ranges are constantly being added.

**RAFM** publishes and imports a growing range of books and magazines intended especially for the gamer and collector.

**RAFM** will continue to support your gaming interests with quality figures, with competitive prices and with the better idea. Be part of the **Rafm** tradition for 1986 - **Rafm** can help make your adventure the best.

For customers to whom we cannot sell certain lines due to licensing agreements, we suggest contacting the following firms regarding their products.

**RAL PARTHA ENTERPRISES, INC.**  
5938 Carthage Court  
CINCINNATI, Ohio  
45212            1-513-631-7335

**CITADEL MINIATURES LTD.**  
Chewton Street, Hilltop,  
Eastwood, Nottingham  
NG16 3HY  
England

All Prices Subject to Change Without Notice.

Figures pictured in this catalogue are not necessarily shown actual size.

In 25 mm lines, except where otherwise stated, all packages of infantry contain six figures, and all packages of cavalry contain three riders and three horses.

*A number of the figures available may require some assembly.*

Your local **Rafm** dealer/distributor:





# Rafm Company, Inc.

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# 1986 CATALOGUE



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# Rafm Miniatures -25 mm

## SHADOWS & STEEL

The legend of Tandaloor comes to life for you with these characters. You will feel the excitement of the search or the exhilaration of Tandaloor's power.

Each kit contains a complete miniatures adventure party consisting of:

- Parts for figures pictured
- A game master's sheet with character descriptions, maps and a scenario
- A player's guide that includes painting instructions, character stats and a general description of that set.
- A two-sided floor plan

Any kit may be combined with one or more of the other kits for a complete adventure game scenario.

- 2001 Wizard's Adventure Party . . . . \$9.00
- 2002 Conquistador Dwarves . . . . . \$9.00
- 2003 The Iron Brotherhood . . . . . \$9.00
- 2004 Vampyres of Tandaloor . . . . . \$9.00



2004

# Rafm Miniatures -25 mm

## LEGIONS OF DARKNESS

The Legions of Darkness are ready to do their worst. The wild fire wrath of destruction will spread across our world and their world. There will be no haven left untouched.

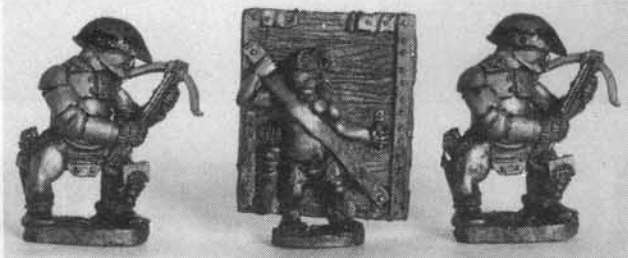
- 3201 Magloth, Giant Orc General . . . . . 3.50
- 3202 Orc Standard Bearer (1) with Goblin Drummers (1) . . . . . 3.50
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- 3210 Orc Heavy Infantry with pikes (3) . . . . . 3.50
- 3211 Goblin Light Infantry (4) Assorted . . . . . 3.50



3207



3201



3206



3202

Rafm Miniatures -25 mm

# THE CURSED ONES

The brutality of man is presented in "The Cursed Ones". These titans of evil will test the steel of any adventurer to his very quick.

Designed by James Johnson

Each package contains the story of "The Cursed Ones" and the stats necessary to use your figure in your game. Painting and some assembly is all that is required.

3601	Spider Lord .....	7.00
3602	Witch-Worm .....	3.50
3603	Queen Bee (Wasp Woman) .....	3.50
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3605	Werelings .....	3.50
3606	Amphiberons .....	3.50
3607	Dragonmen .....	3.50
3608	Fishface and The Claw .....	3.50
3609	The Eagle Warrior and Beetlebaum .....	3.50
3610	Forewardt and the Anteater .....	3.50

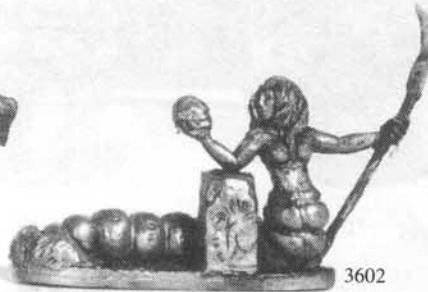


3610

3603



3604



3602



3601

Rafm Miniatures -25 mm

# THE MONSTER MASH

These are specialty uglies that you must have to liven up your adventure. We've left no stone unturned.

Designed by Carol Moyer.

Each package contains the stats necessary to use your monster in your game. Painting is all that is required.

3401	Mother Dragon with heating eggs .....	5.00
3402	Armoured Centipede .....	3.00
3403	Cobra Queen (1) .....	2.00
3404	Crystal Creatured (3) .....	3.00
3405	Gibbering Howlers (4) .....	2.00
3406	Flowering Death Spitters (4) .....	2.00
3407	Pit Dwellers (4) .....	2.00
3408	Fungus Men (2) .....	3.00
3409	Swamp Thing (1) .....	2.00
3410	Giant Clam (1) .....	3.00
3411	Schizoid Man and Were Moth .....	3.00
3412	Desert Stalker (1) .....	2.00
3413	Twisted Sister and Little Uglies .....	3.00

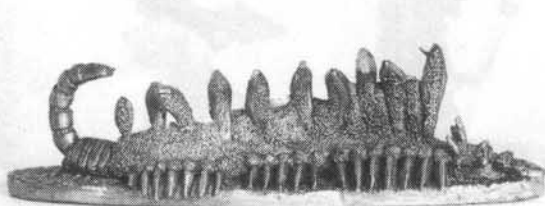


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3406

3407

3408



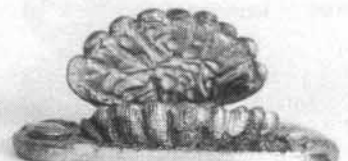
3402



3404



3409



3410

# REPTILIADS

Introducing the Reptiliads, a nation of lizard men, wandering the world in search of experience and riches to take back to their impoverished homeland to save it from domination by the orcs. Fiercely proud and independent, this ancient race has dwindled in recent years until rediscovered by the scholar Ossian.

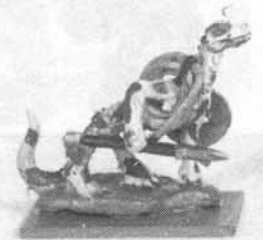
His book is now available describing this remarkable tribe. Our designer has prepared miniatures of their warriors and these may be added to your campaign.

*Designed by Bob Murch*

RE-1	Reptiliad General (Hatha)	1.25
RE-2	Reptiliad Standard Bearer and Musician with Gong	2.50
RE-3	Reptiliad Shaman (Priest)	1.25
RE-4	Reptiliad Unit Commander with Halberd	1.25
RE-5	Reptiliad with Bident (Battle Fork)	1.25
RE-6	Reptiliad with Halberd	1.25
RE-7	Reptiliad Front Rank Pikeman	1.00
RE-8	Reptiliad Middle Rank Pikeman	1.00
RE-9	Reptiliad Rear Rank Pikeman	1.00
RE-10	War Turtle	14.00
RE-11	Rogue War Turtle	10.00
RE-12	Gilla-worm Heavy Cavalry/Mtd Officer on War Newt (1)	2.50
RE-13	Gilla-worm Light Cavalry with Bow on War Newt (1)	2.50
RE-14	Gilla-worm Horn Blower and Standard Bearer (1)	2.00
RE-15	Gilla-worm Heavy Infantry with Halberd (1)	1.00
RE-16	Gilla-worm Foot Officer with Scimitar (1)	1.00
RE-17	Gilla-worm with Bow (1)	1.00
RE-18	Gilla-worm with Javelin or Light Spear (1)	1.00
RE-19	Reptiliad Assault Engineer	1.25
RE-20	Reptiliad Siege Crew	4.50
RE-21	Reptiliad Scout	1.25
RE-22	Reptiliad Adventurer	2.50
RE-23	Reptiliad Duelists	2.50
RE-100	Reptiliad Command Set (Unit Commander, Shaman, Musician, Standard Bearer)	4.50
RE-101	Reptiliad Flank Unit (with Halberd and Bident)	2.00
RE-102	Reptiliad Pike File (Front, Middle and Rear Flank)	2.50
RE-103	Gilla-worm Command Group (3) Officer, Standard, Musician	2.25
RE-104	Gilla-worm Heavy Infantry with Halberd (3)	2.25
RE-105	Gilla-worm Missile Infantry (2) with Bow and Javelin	1.50
RE-106	Gilla-worm Cavalry (2) on War Newt with Bow and Halberd	3.50
0008	Reptiliad History Book	3.95



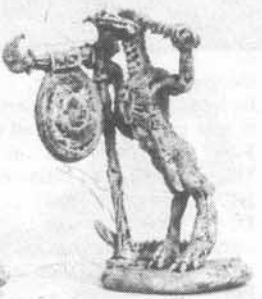
RE-10



RE-21



RE-1



RE-2



RE-19

RE-22



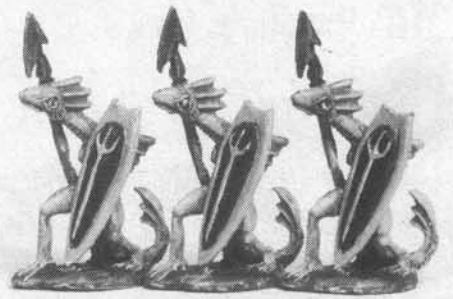
RE-3



RE-4



RE-5



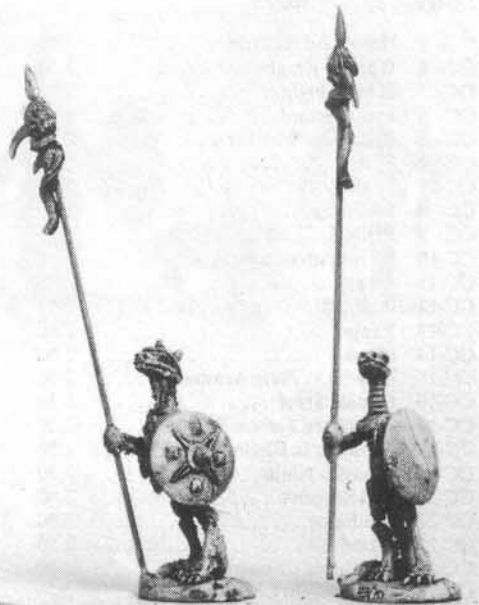
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RE-16

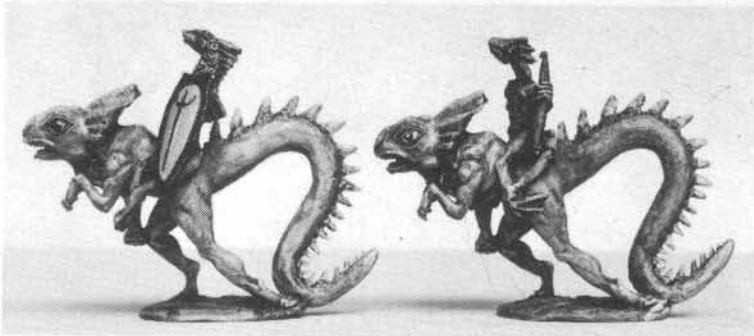


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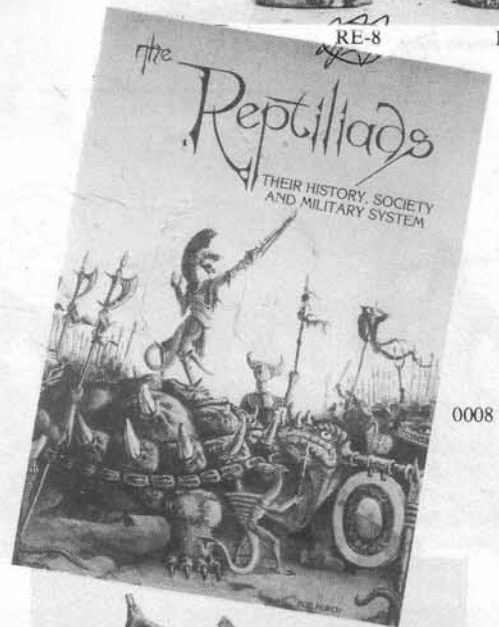


RE-8

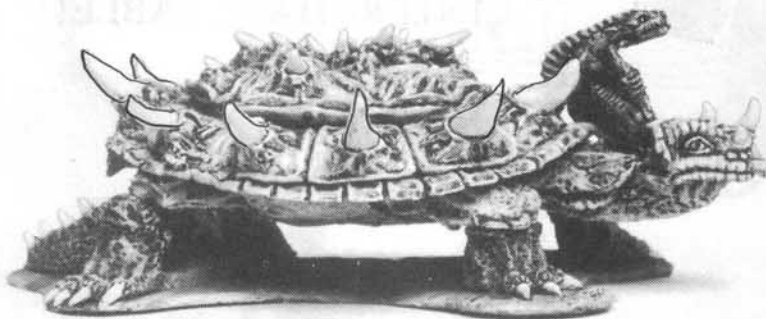
RE-9



RE-106



0008



RE-11



RE-103

# CUSTOM CHARACTERS

A new idea for your own personal character. It is a kit; you assemble it to your specifications; two figures per package.

*Your only limitation is your imagination!*

Designed by Bob Murch

CC- 1	Heroic Adventurer .....	2.50
CC- 2	Warrior Knight .....	2.50
CC- 3	Female Fighter .....	2.50
CC- 4	Evil Warlord .....	2.50
CC- 5	Barbarian Warrior .....	2.50
CC- 6	Thief .....	2.50
CC- 7	Wizard .....	2.50
CC- 8	Sorceress .....	2.50
CC- 9	Priest .....	2.50
CC-10	Elvish Adventurer .....	2.50
CC-11	Dwarf .....	2.50
CC-12	Half Orc .....	2.50
CC-13	Ranger .....	2.50
CC-14	Monk .....	2.50
CC-15	Paladin in Plate Armour .....	2.50
CC-16	Female Thief .....	2.50
CC-17	Armoured Female Fighter .....	2.50
CC-18	Crusader in Chainmail .....	2.50
CC-19	Assassin Ninja .....	2.50
CC-20	Evil Sorcerer .....	2.50
CC-21	Gladiator .....	2.50
CC-22	Wood Elf .....	2.50
CC-23	Goblinoid Champion .....	2.50
CC-24	Barbarian in Leather & Fur .....	2.50

Each pack contains pieces for two complete figures.



CC-18



CC-15



CC-4



CC-9



CC-3

**ALL PARTS FROM  
EACH PACK ARE  
INTERCHANGEABLE!**

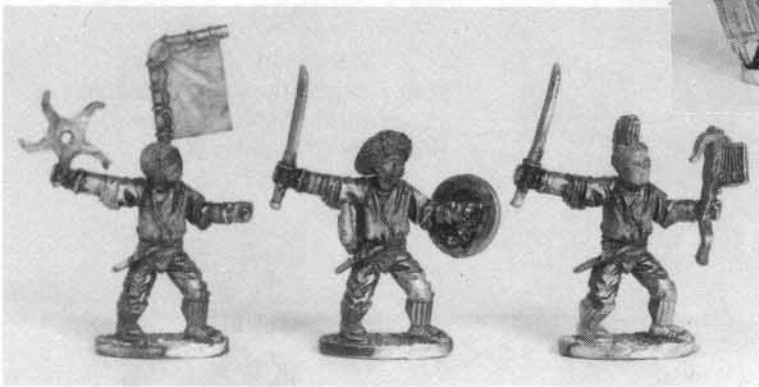




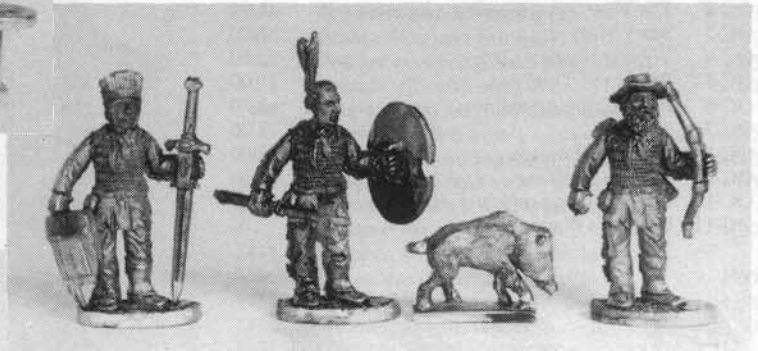
CC-14



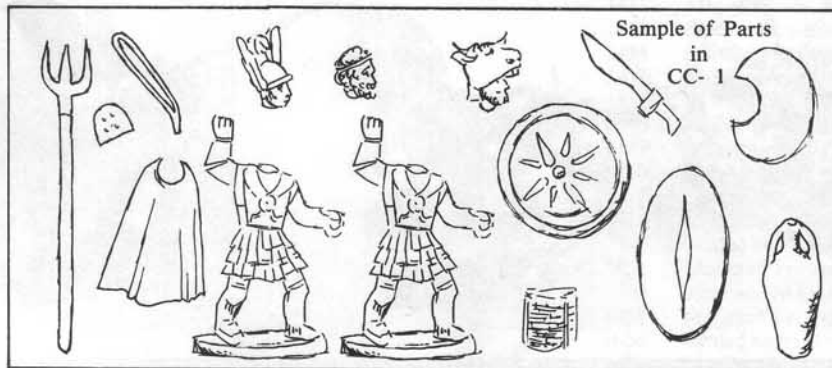
CC-16



CC-19



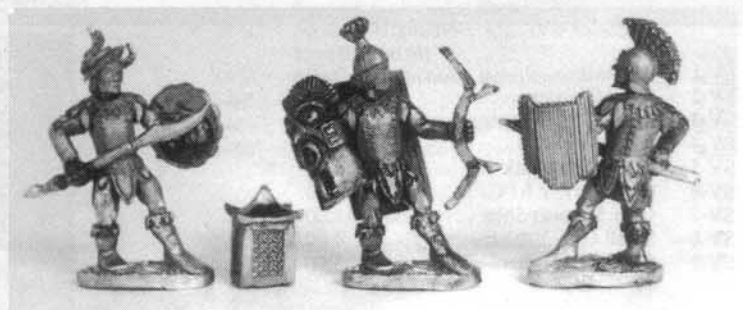
CC-13



# ROLE YOUR OWN!



CC-24



CC-22

# Rafm Miniatures -25 mm

## THE OUTCASTS

The warriors of the desert tracks. Lord Gort leads his ruthless horde on raids of plunder and destruction on peaceful trade caravans and desert travellers.

Designed by Bob Murch

OC-1	Lord Gort	1.00
OC-2	The Vicar	1.00
OC-3	Scary Mary	1.00
OC-4	Yob the Faceless One	1.00
OC-5	Digger the Thief	1.00
OC-6	Pinhead the Assassin	1.00
OC-7	Scags	1.00
OC-8	Pinky the Eunuch	1.00
OC-9	Majuba Sunshine	1.00
OC-10	Pongo Gutbag on Litter of Doom	6.00
OC-11	Outcast's Blade Chariot	7.00



OC-1

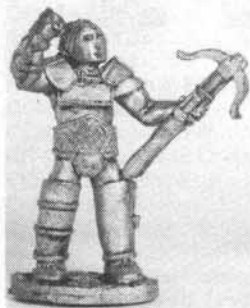


OC-2



OC-3

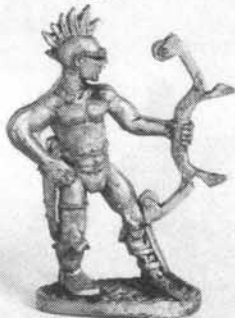
- Satisfy any adventure your imagination can conceive  
(*Aftermath, Dungeon Quest, Warriors of the Road*)



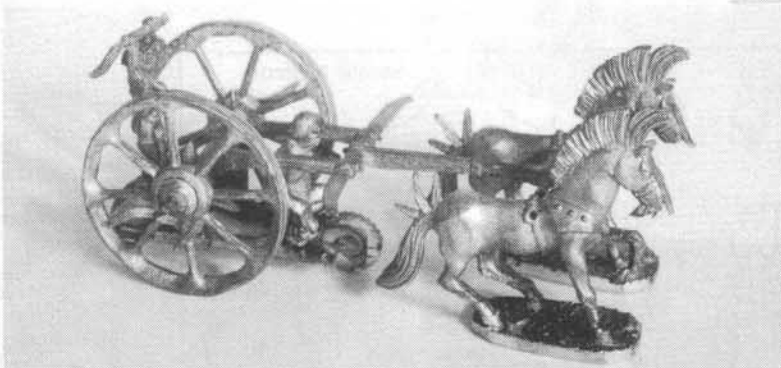
OC-4



OC-5



OC-6



OC-11



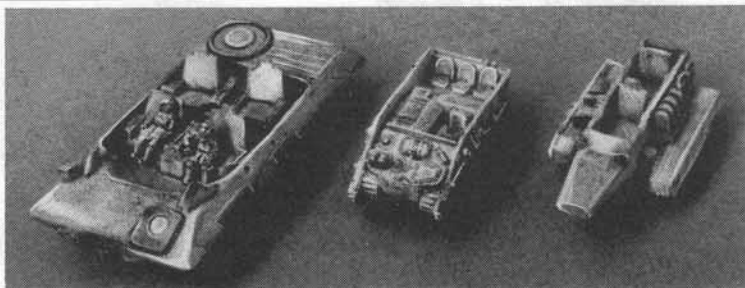
OC-10

# Rafm Miniatures -15 mm

## SCIENCE FICTION VEHICLES

These vehicles will be an excellent addition to any science fiction buff's arsenal.  
(Formerly manufactured by Martian Metals.)

SV-1	Air Raft	7.00
SV-2	Land Crawler	5.00
SV-3	Light Utility Tractor	5.00
SV-4	Heavy Air Raft	12.00
SV-5	Light Grav Tank	14.00
SV-6	Grav Carrier APC	14.00
SV-7	Grav Support Ship	14.00
SV-8	Small Grav Vehicles	4.00
SV-9	Rocket Launchers	3.00



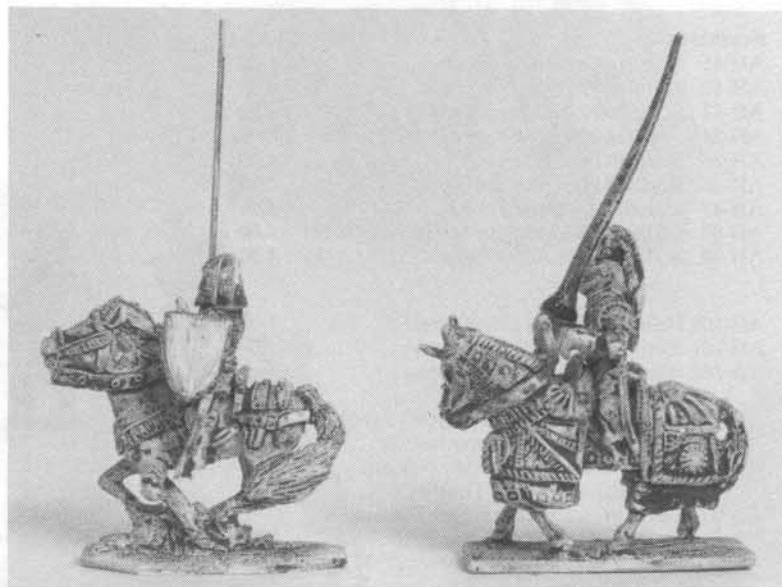
SV-1

SV-3

SV-2

# KNIGHTS IN PLATE

Create armies for the late medieval period. The change from lance to the musket — re-enact the plate vs. musket.



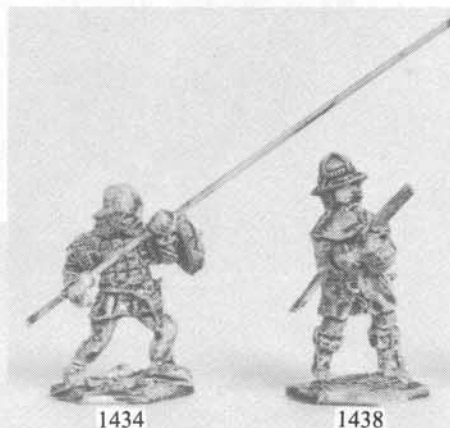
1415

1453



1407

1432



1434

1438



1428 Part



1408

Redesigned by Carol Moyer

1400	Billman advancing (6)	\$ 4.00
1401	Crossbowman advancing (6)	4.00
1402	Peasant bowman firing (6)	4.00
1403	Peasant advancing, ass't weapons (6)	4.00
1404	Peasant with pole sling	4.00
1406	Man-at-Arms with bassinet, plate armour & halberd (6)	4.00
1407	Spearman advancing (6)	4.00
1408	Longbowman with sword & buckler (6)	4.00
1410	Flemish Infantry with Gutendag Hammer (6)	4.00
1411	Pikemen with Chapel de fer in Brigandine (6)	4.00
1412	Mounted knight, lance, barded horse (3)	4.50
1413	Mounted knight, lance (3)	4.50
1414	Mounted knight, lance, caparisoned horse (3)	4.50
1415	Mounted man-at-arms with light lance (3)	4.50
1416	Crossbowman in cloth cap (2)	4.00
1417	Gunner with hand cannon (6)	4.00
1418	Crossbowman with shield & barbute (6)	4.00
1419	Handgunner in barbute & brigandine (6)	4.00
1425	English billman, felt hat, advancing (6)	4.00
1426	English Bowman, felt hat, firing (6)	4.00
1427	Man-at-Arms, salade, attacking with ass't pole weapons (6)	4.00
1428	Foot command group, 4 figures (2 officers, 2 standards) (4)	3.00
1430	Halbardier in full plate armour (6)	4.00
1431	Man-at-Arms, with partizan (6)	4.00
1432	Spearman, pothelm, advancing (6)	4.00
1434	Scottish pikeman, coat of plates (6)	4.00
1438	Hand gunner (6)	4.00
1439	Swiss pikeman advancing (6)	4.00
1440	Archer in Salade (6)	4.00
1449	Mounted knight, lance (3)	4.50
1450	Mounted knight, with heavy lance, caparisoned horse (3)	4.50
1451	Mounted knight, with heavy lance, barded horse (3)	4.50
1452	Mounted Fr. knight, with heavy lance, caparisoned horse (3)	4.50
1453	Mounted Fr. knight, with heavy lance, barded horse (3)	4.50
1454	Mounted Gendarme, with heavy lance on barded horse (3)	4.50
1455	Mounted command group, officer, herald, standard bearer (3)	4.50
1460	24 assorted peasant weapons	2.50
1461	24 assorted pole weapons	2.50
1462	24 pikes with heads	2.50
1463	24 halberds assorted	2.50
1464	24 partizans assorted	2.50
1465	24 Billhooks	2.50
1470	Scottish Highlander Bowman (6)	4.00
1471	Scottish Highlander with two handed broadsword (6)	4.00
1472	Scottish Highlander Bowman (6)	4.00
1483	Jan Ziska (1)	1.25
1484	Medieval Foot Officer (6)	2.50
1486	Hussite Pikeman (6)	4.00

## ARMIES OF THE HELLENISTIC PERIOD

The armies of the Greek Age, following the death of Alexander The Great. The generals who divided his Empire up among themselves, fought each other and their neighbours until the Romans defeated them. These figures have separate heads, shields and weapons. We are releasing a selection of these parts to provide maximum variety.

Designed by Bob Murch

AH-1	Imitation Legionary with Thracian Helmet with scutum, pilum (6) .....	4.00
AH-2	Pikeman in Chainmail with aspis (6) .....	4.00
AH-3	Front Rank Pikeman with aspis and thracian helmet (6) .....	4.00
AH-4	Hypaspist with macedonian helmet and large shield (6) .....	4.00
AH-5	Pikeman in quilted armour with aspis (6) .....	4.00
AH-6	Pikeman in Asian dress with pilas helmet and aspis (6) .....	4.00
AH-7	Kyrtii Slinger with light shield (6) .....	4.00
AH-8	Elite Guard Infantry, spear, large shield (6) .....	4.00
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AH-11	Thracian Thureophoros (6) .....	4.00
AH-12	Thracian peltast (6) .....	4.00
AH-13	Thorakites (6) .....	4.00
AH-14	Light equipped Javelinman (6) .....	4.00
AH-15	Extra Heavy companion cavalry (3) .....	4.00
AH-16	Agema cavalry (3) .....	4.00
AH-17	Light Cavalry (3) .....	4.00
AH-18	Illyrian Light Cavalry (3) .....	4.00
AH-19	Armoured War Elephant with Howdah, 2 crew and Mahout .....	9.00
AH-20	Indian Elephant with Mahout .....	6.00
AH-21	Command Group I officers, mtid (1) and dismounted (2) .....	4.00
AH-22	Command Group II - Foot Standards and Musicians (2ea) .....	4.00

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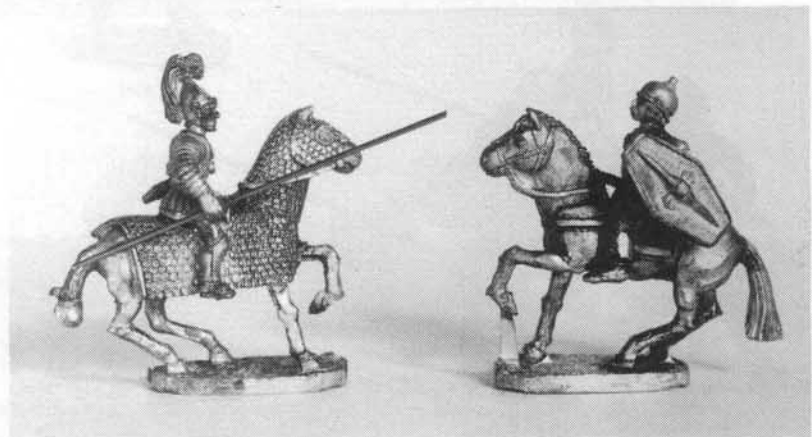
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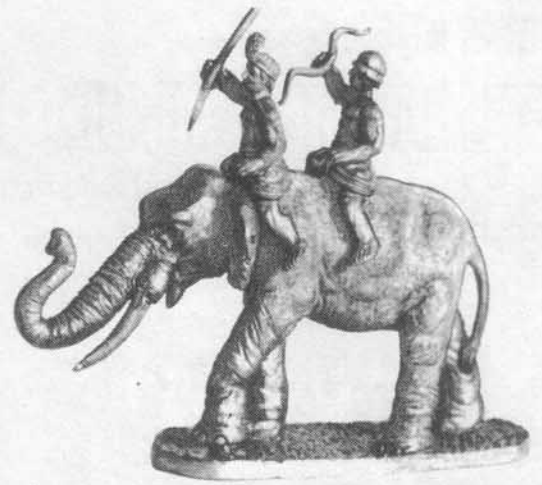
AH-66

AH-68

AH-69



AH-19



AH-20

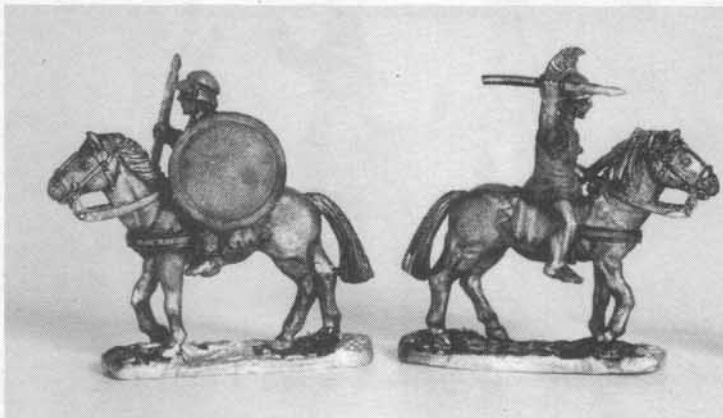


AH-61



AH-21

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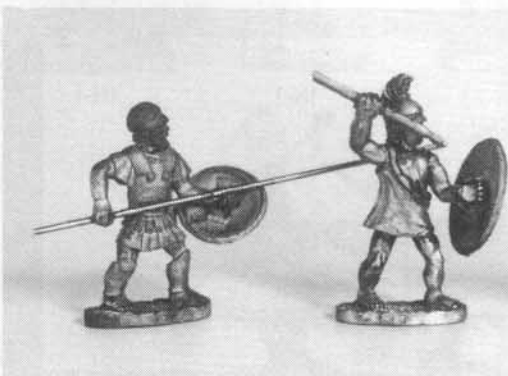


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AH-3

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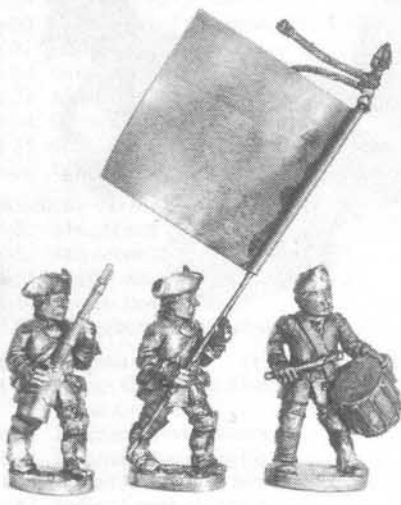
IN-34



IN-5



IN-30



IN-35



IN-1



IN-2



IN-3



IN-4



IN-27



IN-28



IN-29

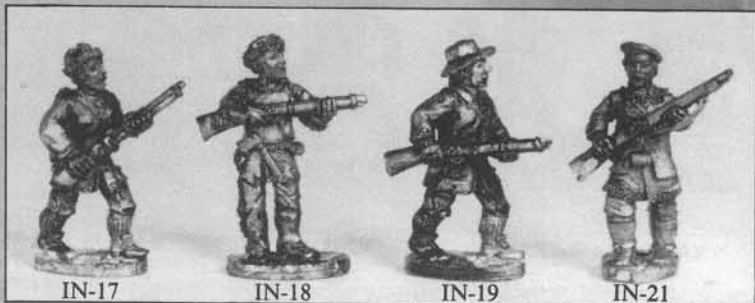


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\*Packs IN-27 to IN-36 include a painting guide and organization notes.



IN-14



IN-17

IN-18

IN-19

IN-21



IN-20

IN-23

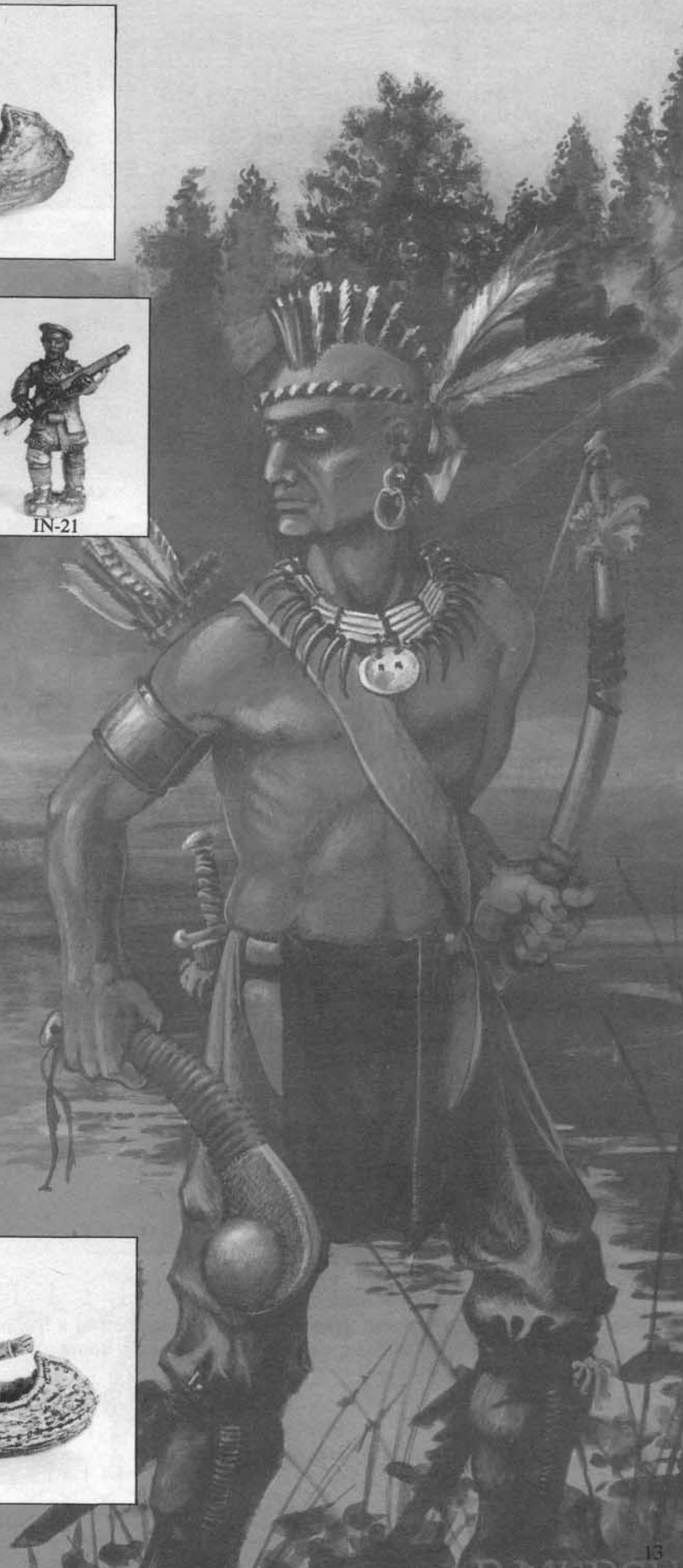


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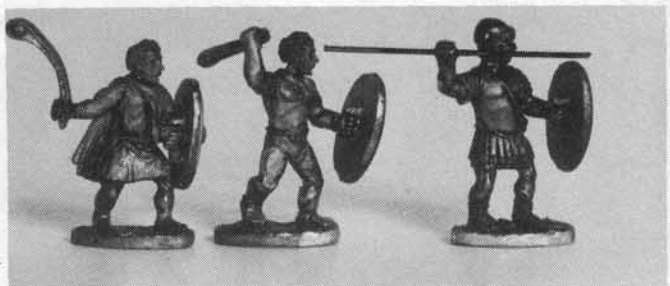
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RA-16 RA-17



RA-9



RA-10 RA-11 RA-12

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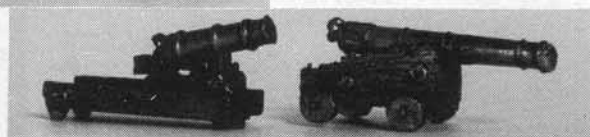
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JT-11



JT-09



JT-07



JT-04



JT-02

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6151

6152

6154

6155

6157

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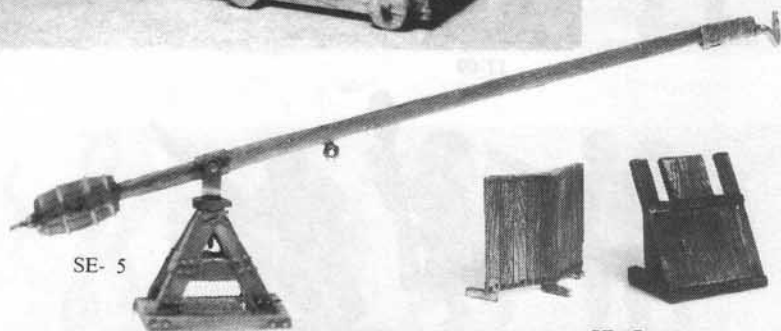
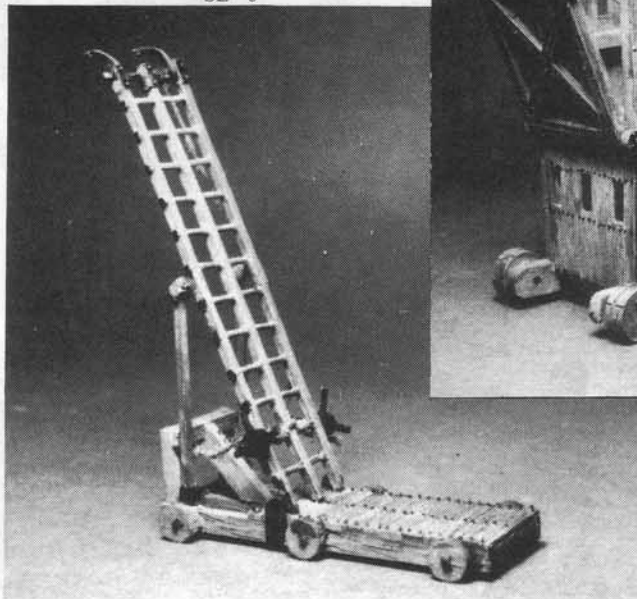
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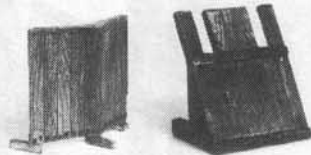


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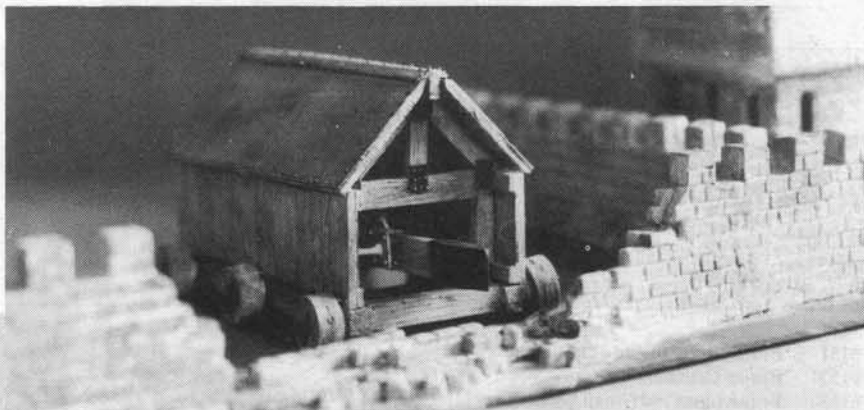


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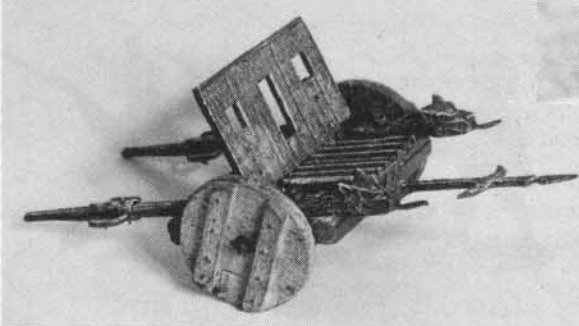
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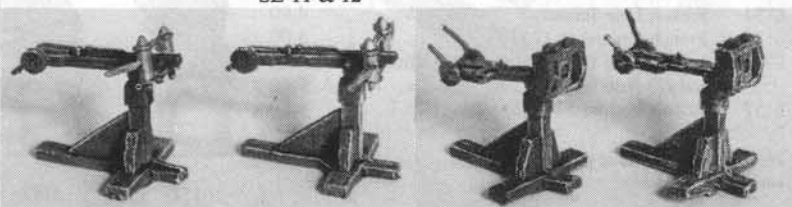
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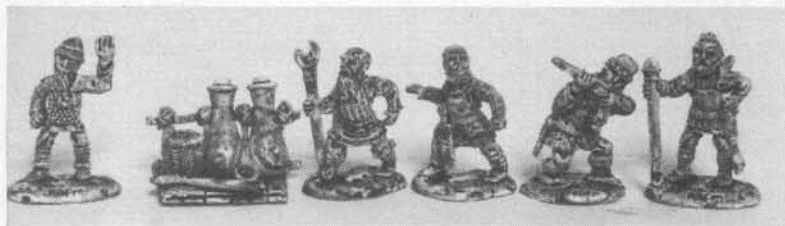


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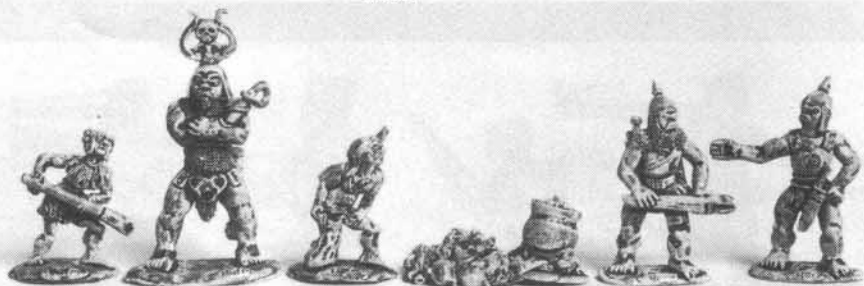


SE-33

SE-32



SE-21



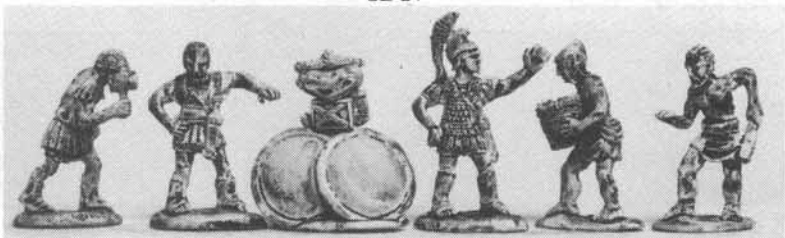
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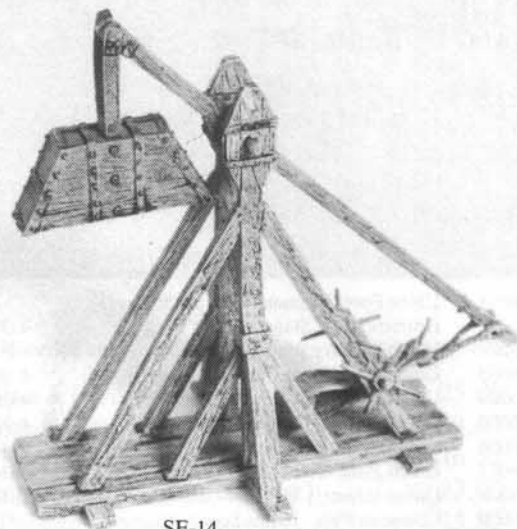
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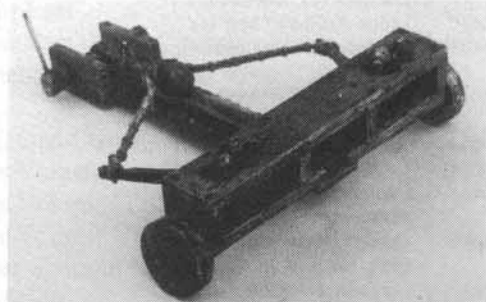
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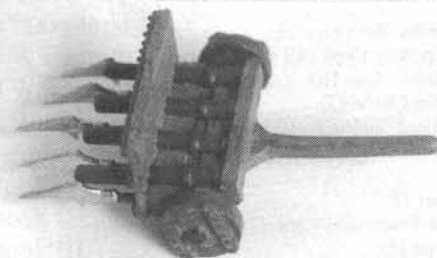
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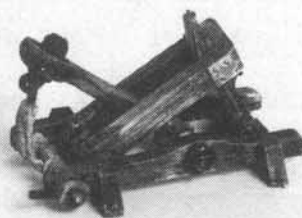
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SE-19



SE-26



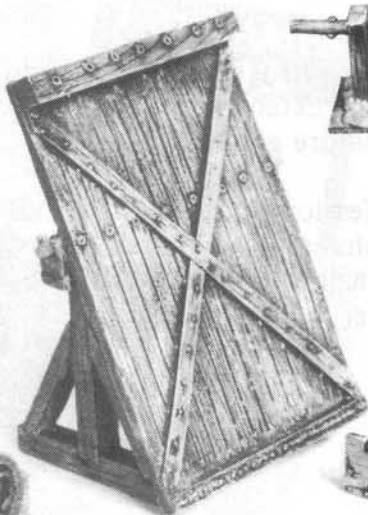
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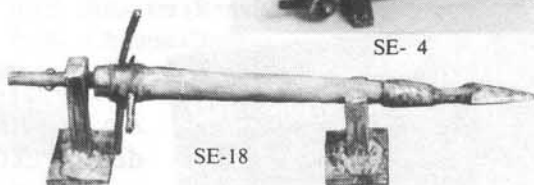
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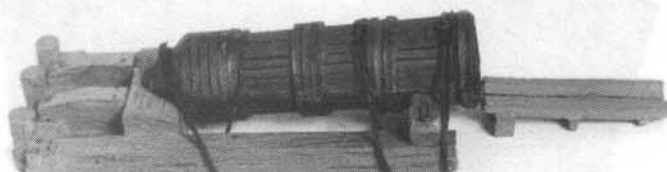
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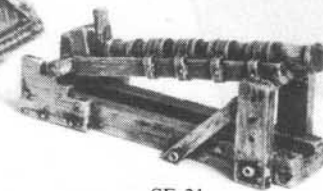
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SE-18



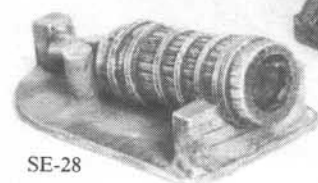
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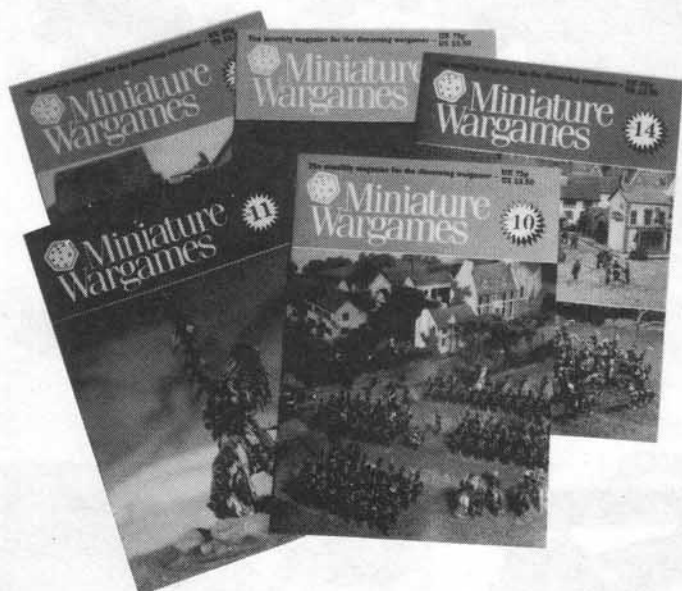


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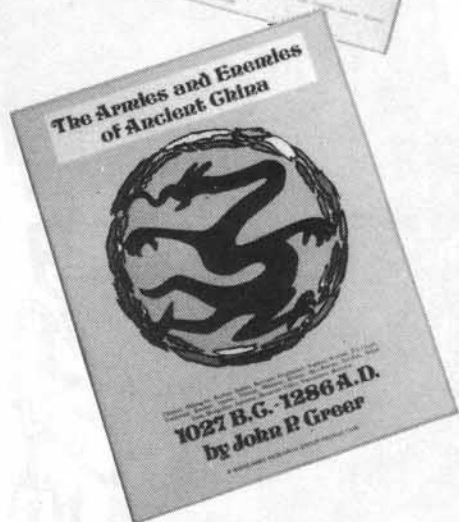
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0305	Rullettes (Renaissance Naval) .....	1.50
0306	Chinese Chess .....	7.00

## THE BRITISH MILITARY 1803 - 1815

- by S.J. Park and G.F. Nafziger

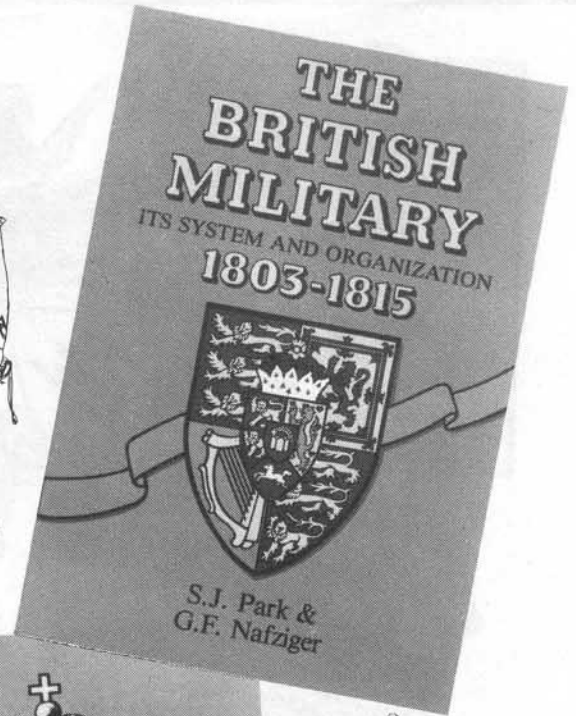
This book is a complete study of the British Military establishment as it existed in 1803-1815. It covers the internal structure of the British Army from the most junior drummer to the Duke of York, Commander in Chief of Army.

Not only does it cover the various military formations, but it also examines the operations of the cabinet posts and military bureaus that controlled the growth, evolution and daily functions of the British Military.

In addition to the purely British forces, it also addresses those foreign forces that fought with the British in Spain; The King's German Legion, The Brunswick Oels and other foreign contingents.

The book includes complete information on Battalion organization, tactics and formations.

It has the additional feature of providing a complete listing of the services of every cavalry and infantry regiment, plus all the artillery companies from 1803 to 1815. 0007...\$14.00



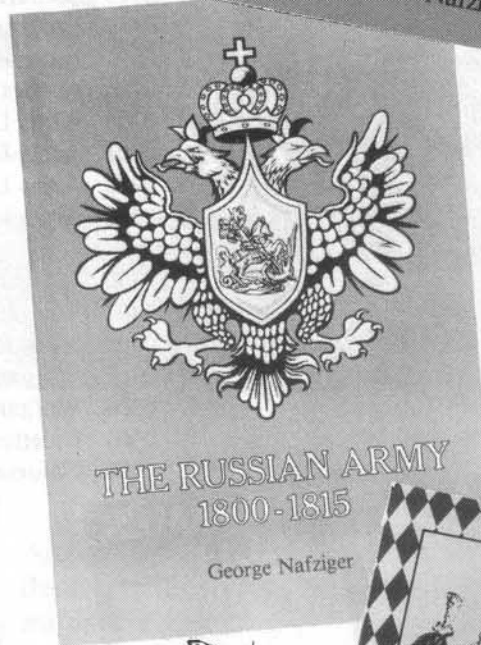
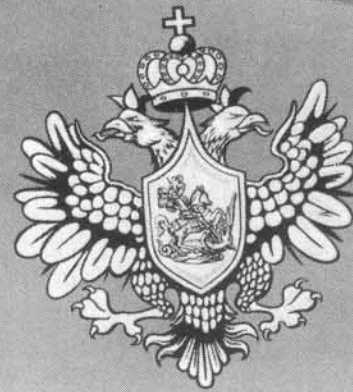
## THE RUSSIAN ARMY 1800-1815

- by George Nafziger

George Nafziger has made a tremendous effort in researching, in detail, the material for this book on the Russian Army.

Detailed information is provided on all levels of organizations in the Russian Army - Company, Battalion, Regimental and Divisional - for the 1800-1815 period.

This book has a great wealth of information for the Napoleonic enthusiast. 0006...\$10.00



## THE BAVARIAN AND WESTPHALIAN ARMIES 1799-1815

Translated from German sources, this book, organized by George Nafziger, describes the military organization of Bavaria and Westphalia during the Napoleonic era.

The book covers in detail: infantry, cavalry, artillery and ancillary units with information on organization, uniforms, drill and formations. 0005...\$6.95



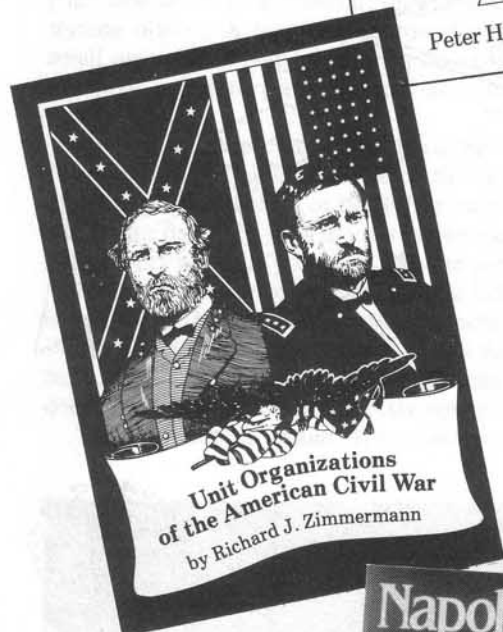
# PRUSSIAN LANDWEHR AND LANDSTURM 1813-1815

by Peter Hofschröder

On March 16, 1813 Prussia declared war on France. On the 17th, the decree regarding the formation of the Landwehr was brought into effect. This edict called the whole of the Prussian population to arms in areas directly affected by the French.

This book describes the organization of the Landwehr for each campaign season for each province. The strengths of Landwehr formations are given for August and December 1813 and June 1815. The Landwehr played a major role alongside the regulars of the Prussian Army, a contribution that is often underestimated.

The book is complete with illustrations and descriptions of uniforms and maps. 96 Pages. 0009 . . . . . \$12.00

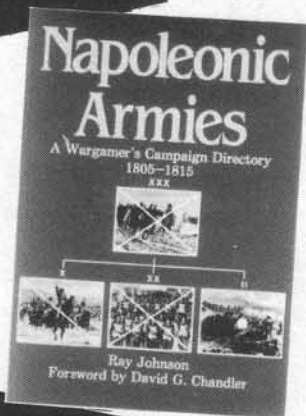


# UNIT ORGANIZATIONS OF THE AMERICAN CIVIL WAR

- by Richard J. Zimmermann

The official organizations for the Union Regular, Union Volunteer Armies and the Confederate Army that fought each other during the American Civil War. The organizations of fifteen historical units with strengths and organizational peculiarities, plus six selected orders of battle are included.

Richard Zimmermann has researched the Civil War in great detail to give us a precise and comprehensive study on the period. 72 Pages. 0004 . . . . . \$8.50



# NAPOLEONIC ARMIES (reprint)

The organizational details of the armies of Europe that fought for and against Napoleon Bonaparte between the years 1805 and 1815.

Detailed information is provided on company, battalion and regimental structure and strength. The composition of divisions, corps and armies is discussed as well.

Ray Johnson has been researching this subject for over ten years in both North America and Europe. His sources written in English, German and French include some books now out of print.

This reprint is a complete unabridged version of Ray Johnson's "Napoleonic Armies Volume I and II", into One volume. The text has been updated by Ray, with more current information which he has acquired since the original printing.

Napoleonic Armies - 0002 Hard Cover . . . \$20.00  
0003 Soft Cover . . . \$14.00

# THE UNIVERSAL SOLDIER

Wargame rules for Ancient, Medieval and Pike & Shot with 25 mm or 15 mm figurines.

The Universal Soldier Miniatures Rules are comprehensive yet very playable. The game system spans history by allowing each fighting unit to be uniquely assigned its fighting ability, weapons, formation and morale. This information is summarized for many armies in the Appendix.

0001 . . . . . \$7.95

Universal Soldier Unit Sheets AS-4 . . . . . \$3.00



# MAKE A MINIATURES GAMING TABLE!

by John Laing

Many gamers have accumulated numbers of gorgeously painted miniatures. They are now feeling a desire to present these in a game setting that befits the colour and action inherent in miniatures. Yet many of us lack the space and talent necessary to produce a good looking tabletop. What follows is a suggestion for overcoming some of these problems on a reasonable budget.

The heart of this system lies in obtaining a sheet of felt. You want to find a fabric store (one that sells cloth by the yard (metre) rather than made up as clothing. Try the local yellow pages under "Fabric" or "Yard Goods", and ask for felt. They should show you large rolls (bolts) of felt in a variety of colours. You must have decided what colour you would prefer. We suggest a medium green, but it will depend on your ideas and what games you expect to play.

You will also want to know how much of this material to buy. It is sold by the yard (metre in Canada) and the sheets are about 5½ feet (1.6 metres) wide if double width or 3 feet wide if single. You must know the approximate size of the most common playing area you will be using and base your felt requirements around this. Your felt should cost about \$8.00 per yard/metre of double width.

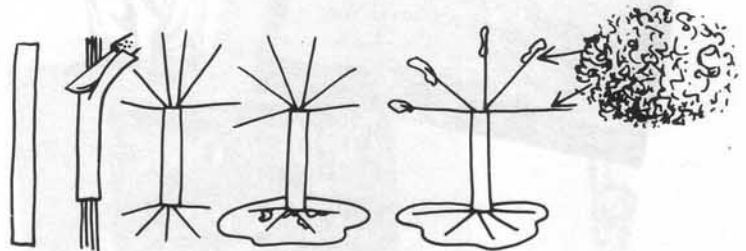
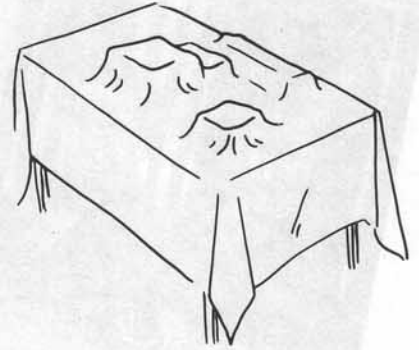
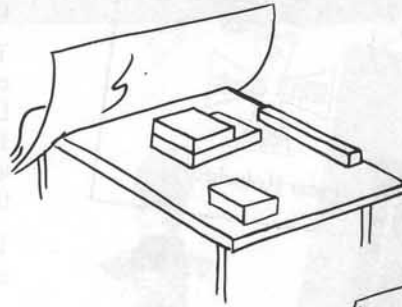
You don't want to buy more than you will need, but a sheet that is too small will not be very satisfactory either. We caution you against buying an over large sheet because you will "someday" have a large table. We suggest 12' (4 metres) as a good basic length. The store will sell you this material in full or half yards (metres), so 2½ yards (metres) (15 feet) is just fine.

Now you have a playing surface that looks better than a bare table or paper map. While you're at the fabric store, buy some felt "squares". These are swatches of this same felt in small sheets usually 9" to 16" square. Get a few in various browns, greys and light blues.

The beauty of this system is that it is colourful, sets off your models while enhancing your imagined gaming area and it is portable. What you just bought weighs about five pounds or less and folds away. You can convert a ping-pong table or the dining room table into your miniature empire easily. You can pack it up when the game is over or when the grumbling from wives or mothers becomes too oppressive to be ignored.

So there is your dining room table covered in your new green sheet. It looks good but a bit bare. Needs hills, right? Okay, lift the sheet for a moment and go get some books (or flat boxes, magazines, small pillows, newspapers etc.) and place these on the table under the cloth. By judicious arrangement of these items you can create hills, valleys and crevases to suit your needs. Place the felt over this skeleton land. After a few minutes the felt will settle very nicely into the gaps between the books making a nice rolling terrain. If your budget will stretch, or you are a good scrounger you might wish to obtain permanent shapes to place under your sheet. Blocks and sheets of wood, or cork tiles are excellent. The cork tiles usually are about ½" thick and 12" x 12" (30 cm. x 30 cm.) square. They are light, strong and cheap. Styrofoam insulation sheets, cut and shaped are also good.

Now, that's the hills. Take the felt squares you bought earlier. The greys and/or browns can be cut into strips to



represent roads. Similarly the blue squares can be cut in strips for rivers or into patches for lakes/ponds. You will have to decide how wide you need your strips to be. Whatever game you are using may specify widths for roads and streams. Felt squares of other colours can be used to represent wooded areas, fields, built up areas, swamps or anything else you might require.

Some trees and hedges would be nice too, but those model railroad ones at the hobby shop are pricey and you'd need so many of them, right? Well here is a cheap, easy method for quickly producing lots of respectable looking trees.

For this you will need the following: 1. A good fairly heavy pair of wire clippers. 2. A supply of modellers' lichen from your local hobby shop. 3. Bases about the size of poker chips. 4. Some putty that sets in a few hours (epoxy, woodfiller, car body etc). 5. A length of stranded wire rope with a plastic coating (jacket). Allow 3" (75 mm.) for each tree you intend to make. An excellent type is plastic coated clothes-line wire. This has about 5 strands of soft wire which is ideal for our purpose, along with an easily removable jacket. 6. A sharp modeling knife or the kind of tool designed to strip the insulation from coated wire. 7. Glue of just about any kind. White, rubber, model airplane cement, or contact cement are all acceptable.



First, take your clippers and cut the stranded wire into 3'' (75 mm.) lengths. Next, cut away the plastic jacket from each end of the length, baring the wire strands at each end. The best type of wire rope has about 5 strands of fairly soft wire within the jacket. Spread the wires out at both ends. The longer ends should be spread irregularly and out at odd angles. The shorter ends should be spread and bent back as flat (90°) from the axis of the wire as possible.

Now imbed the short flat end in the putty and affix this end on your basing material. Make sure your putty does not react with your base material or your base might warp giving you wobbly trees. This happens when the solvent in the putty attacks the base material, for example wood putty and styrene plastic. A way to get around this is by applying small amounts of putty at a time. Two-part epoxy putty is excellent as it is very adhesive and does not shrink. Let the putty harden.

Once your "tree trunks" are set on the bases you should paint them. The quickest way to do this is by buying a can of spray paint in brown or black. Be careful of fumes and make sure that only your models get sprayed. You can use your model paints if you wish. Let the paint dry.

Now take your glue, and tufts of the lichen and glue the lichen along the spreading "upper branches" of your tree. When the glue dries you should have a forest of passable trees, stable, light and durable. You can now use those deep, dark, and mysterious forests you've dreamed about.

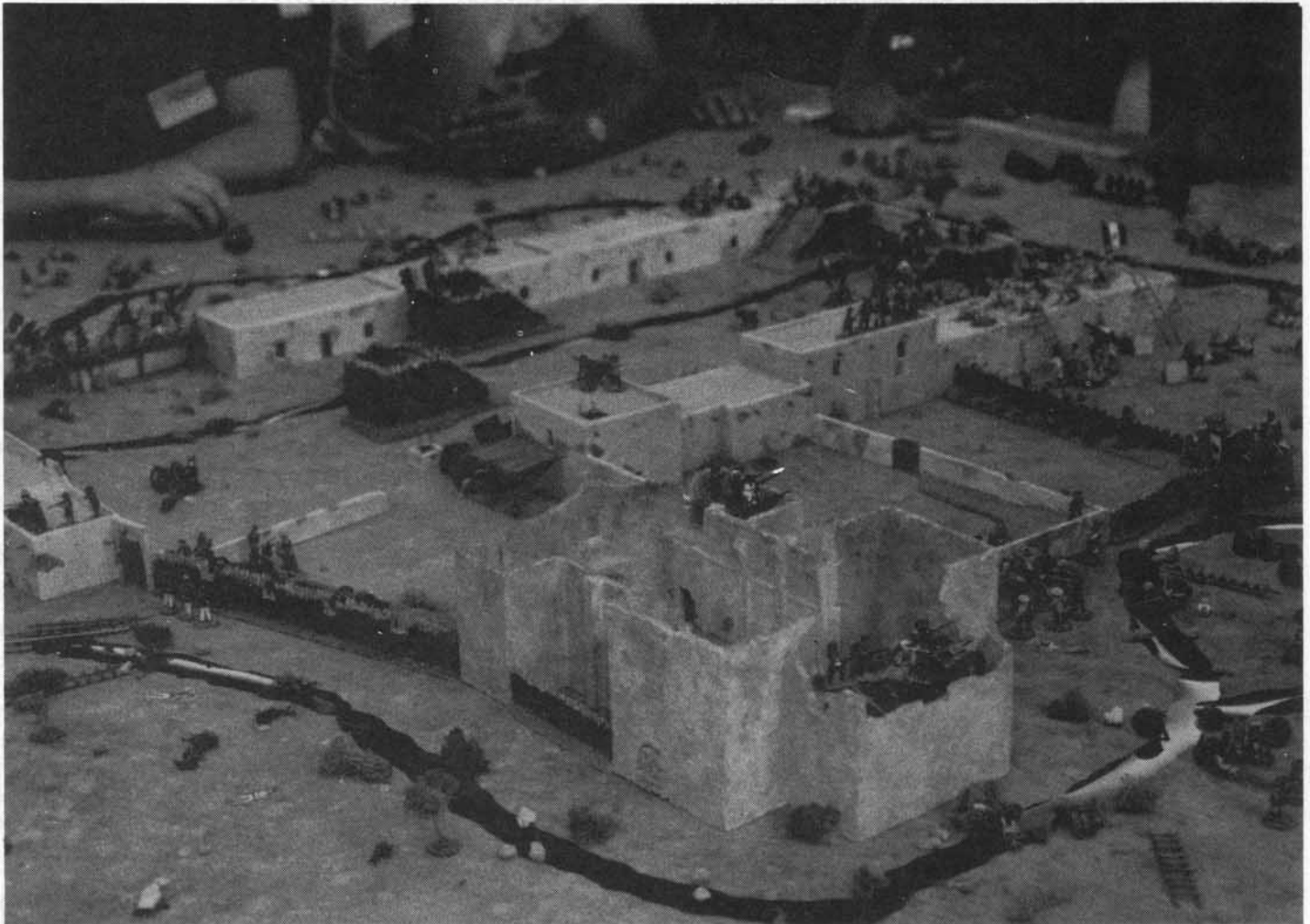
The above article should set you on the way to a present-

able gaming table for miniatures. The advantages of this system lie in its cheapness, and portability.

You will likely want bridges and buildings for this table. Several games are now on the market which include cardboard cut out buildings, and others are available as sets from various companies. Companies such as Greenfield Garrisons, The Dwarven Stone Cutter, Gallia and MGB are now producing buildings for the hobby, ask at your local hobby shop for these products. Check the model railroad department of the shop for suitable kits or scratch building supplies. Many hobby magazines occasionally publish plans and suggestions for scratch built buildings. Other companies such as Linka and Dungeon Tiles make parts that are of use to scratch builders.

Does your game require a hex-gridded playing surface? RAFM sells iron-on hex transfers (like on your T-shirt) for application on cloth surfaces. These are in 1'', 2'' and 3'' hexes, in black or white ink. See the RAFM catalogue for price details.

There are many other systems used in producing a gaming table top. Mostly, these require a permanent table devoted only to gaming. We have presented the above as a guide for the first time gamer or the gamer in need of a portable games layout. Remember, a club that has an unstable meeting location could find that this system has advantages in storage and transport. This system is also the most flexible system available for use. Try it, we've used it ourselves for years.



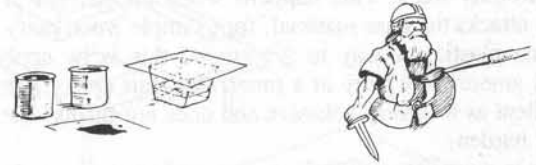
*The Alamo Revisited - Origins '85, Baltimore, Maryland.*

FOR THOSE OF YOU, WHO HAVE YET TO MAKE A START AT THE ART OF BURYING FINE CAST METAL MINIATURES UNDER LAYERS OF PAINT, HERE IS:

# The Absolute Beginner's Guide to Painting Miniatures

by Tony Ackland

## THINGS YOU WILL NEED.



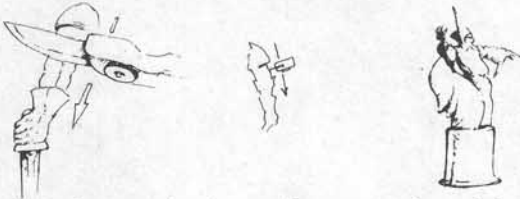
**Paint** - of the wide variety of types that may be used I would recommend the humble tin of enamel, if only because of its availability. Be sure to purchase the matt type (although some gloss black will prove useful). Also, a spray can of matt white will be required.

**Thinners** - the above paint may be diluted with white spirit or turps substitute.

**Brushes** - rather than take out a mortgage on the best quality sable, a relatively inexpensive synthetic-sable mix will do to start with. Buy a brush with the longest bristles you feel you can cope with. The less steady your hands, the shorter the bristles should be.

**Modelling knife** - a modelling knife and some spare blades will be essential.

## PREPARING THE MODEL



Remember that an inadequately prepared model will always result in an inferior finish.

Carefully cut and scrape away any excess metal on the model.

Attach the model to some object that you can hold comfortably when you are painting it. One method is to use blu-tac, or similar, to attach it to the bottom of a paint tin.

Lightly undercoat the figure using the spray matt white. Do not try to achieve a brilliant white finish, you will only succeed in obliterating most of the detail on the model. A pale grey colour is all that is required.

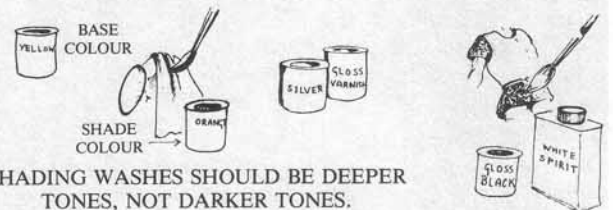
## PAINTING THE MODEL

Do not use the paint directly from the tin. Mix the paint thoroughly (a match stick or cocktail stick is useful for this), and place a small amount on an old dish or similar. Dip your brush in thinners, then dip it into the paint. A bottle cap makes an excellent container for thinner and a bit of plastic is a good palette for mixing. Grip the brush lightly and, using only the tip of the bristles, apply the

paint to the model. Let the bristles follow the direction of any folds on the figure. Try to ensure that all your brush strokes are made in the same direction. It is far better to apply several thin coats of paint rather than one thick one, but leave sufficient time for each coat to dry thoroughly, as instead of applying a new layer of paint you will be merely lifting the previous coat off. If you wish to apply a light colour of paint over an area you have previously painted with a dark colour then undercoat that area with white paint first.

## WASHES AND SHADING

Shading does not have to be difficult, and always improves the appearance of a model. First make a wash. All this consists of is a little paint mixed with some thinners. You will have to practice a while to get the correct proportion of paint to thinners. Washes are lightly brushed over the entire area to be shaded; the colour will run into any folds/creases and leave the raised areas clear. Even if you do not shade all of a figure it is well worth applying a brown wash over any flesh areas on a model, particularly the face. Leave the model to dry at least a full day before applying any washes.



SHADING WASHES SHOULD BE DEEPER TONES, NOT DARKER TONES.

## IRON AND STEEL

To get a realistic look to areas that are meant to represent the above two metals, first mix some silver paint with some clear gloss varnish, and then paint on as per normal. When this is dry (leave it for at least a day) apply a wash of gloss black. You should have an effect similar to dull steel.

## LAST WORDS

When painting fantasy models the actual choice of colours is very important. Try to get a look at some of the books of fantasy artwork that are available. Also, a good idea is to look through natural history books. A good many ideas can be obtained by observing the natural colours of living things. Above all try to avoid merely copying other figures you have seen.

# The Advanced Guide To Painting Your Miniatures

by Peter Armstrong

## FOREWORD:

The techniques described in this article have been evolved over five or six years of painting figures. This article will be biased toward using these techniques. Feel free to experiment and find your own methods instead of those used here.

## EQUIPMENT

Brush  
Paint: Acrylic or Enamel  
Colours: Red, Yellow, Blue, Green, Coffee Brown, White, Black  
Thinners  
Craft Knife

## OPTIONAL EQUIPMENT

Primer Spray  
Varnish

## BRUSHES

Contrary to popular belief, you do not want a double or triple "O" brush for painting 25mm or even 15mm figures. A best quality sable brush, either a '2' or '3' will be sufficient for most painting needs. Be sure you buy a good brush, though. Anything else will not give the consistent good results that are required. The brush I use is a Windsor & Newton series 3A. These brushes, at the cheaper end of the good brush ranges, are about \$3.50 from a good art shop. Don't be led into buying more than 1 good brush, but do buy a couple of cheap brushes; one for dry brushing and one for black washing. If you're going to use a brush primer, get a cheap brush for that too. Label the brushes for the purpose they are to be used, and be sure not to confuse the two. The good brush should, when wetted and shaped, have as good a point on it as any triple 'O' brush you'll ever find, and it will be able to hold a lot more paint into the bargain. If you're sure to clean the brush after every painting session, the brush should easily last a year.

## PAINTS

The first rule of painting is never use gloss.

The chart below shows the relative strengths and weaknesses of the two paints most widely used for figure painting. Average costs of the two paints are: Enamels -70¢ and Acrylics \$3.00. The most expensive paints are usually the metallic and other 'special' colours. Acrylic paints, which are cheap and effective, are the ranges, available from most Hobby Stores. These retail for about \$1.25 a jar. I generally find that acrylics are the

better paint because: a) they work out cheaper in the long run, b) they dry faster than enamels, c) because brushes are cleaned with water, they tend to keep their point longer, and d) they are a lot brighter than enamels. Do not mix enamels and acrylics if you have both, as the bases for these paints, oil and water respectively, do not mix. It is possible to put coats of the two different paints on top of each other, but be sure to wait the maximum drying time (as shown on the chart) before attempting to do this. Also, be sure if using both paints that you do not use the same brush for both.

## KNIVES

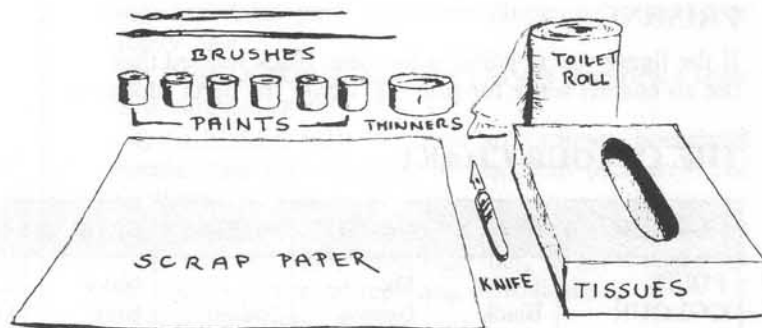
Use a sharp cutting instrument such as the X-acto no. 1 knife. Be sure to have a collection of spare blades.

## THINNERS

As mentioned in the Paints section, acrylics only need water, so that's fairly simple to get hold of. For enamels, use turpentine or white spirit (varsol).

## WORK AREA

This is quite important. To achieve your best painting results, find somewhere out of the way of little hands or paws, where things can be left to dry and not be disturbed. Make sure you are comfortable. Switch on the radio or tape deck (not the record deck unless you want coloured vinyl records) and relax. The area need not be tidy but it should be well lit, you should have enough room to work and you should have all the things you're going to need within arm's reach. Lay several sheets of scrap paper (I use an old newspaper) on the area where you are going to paint. This serves three purposes: a) it stops your work surface from getting dirty, b) when you are cutting flash from your figures it saves your work surface from knife marks, and c) it can be used as your palette.



TYPE OF PAINT	COST	PERIOD OF USE	DRYING TIME	THINNING AGENT
Enamel	\$ .70 - \$1.20	2 - 3 months	1 - 6 hours	Thinners
Acrylic	\$1.20 - \$4.00	1 - 2 years	5 min. - 1 hour	Water

## CLEANING YOUR FIGURES

When you purchase your miniatures, they may have a little extra metal on them around the figure in a line. This is called flash, and is caused by metal seeping out of the sides of the mould. Once a mould has been used a few times, this is impossible to prevent. Use a sharp knife to remove the flash, making sure not to obliterate or cut off anything that belongs there. Always make sure the base is flat before painting the figure. Some castings may be darker than others. This doesn't mean there's anything wrong with figures, it's just the temperature of the metal when it is poured into the mould. If the temperature is a few degrees too high, the metal will come out darker. This will not affect the painting of your figure in the slightest. Once primed, all the figures are white anyway.

## STARTING TO PAINT YOUR FIGURE

### BLACK WASHING

If the figure you are painting is wearing a lot of armour, it is usually best to "black wash" the figure before going on to the next stage of priming. This involves using varsol, enamel black and one of your cheaper brushes. If you've decided to use acrylics, and you don't want to go to the expense of buying the paint and the thinners and the extra cheap brush, then you can get a reasonable substitute with liquid boot polish. Wipe the boot polish onto the figure with a duster or tissue and wipe off the excess. If you're using the paint use the lid of the tin or an old bottle cap to get a thinned (half thinners, half paint) black spirit. Spread the paint liberally on the area to be black washed. Leave the figure for five minutes, then wrap it in a tissue and wipe off all the excess wash through the tissue. The resultant effect is of metal armour fading into black at the deepest points, and any detail the armour may have is clearly depicted. If you've used the boot polish method then you should have the same effect. If you don't have faith in your own ability to paint the other areas without splashing this area, varnish it now (see VARNISHING), as it's a lot easier to clean paint off a varnished surface than it is to clean a painted one. If you want the armour to have an extra shine, scrape the top layer of metal in the areas you require to be shiny.

### PRIMING

If the figure you're painting has been black washed then use an enamel white for priming. Cover the parts which

you don't want to show through as metal in white paint and leave it to dry. If you did not black wash the figure, either use the above method or use a spray white. This is necessary because unprimed figures give duller colours, and sometimes it can discolour the paint. Be sure no detail is obscured when you prime the figure. Leave the primer to dry for about a day.

### BLOCKING

Blocking is the basic painting technique that everyone uses to paint figures. Dip your brush in the paint, going no more than halfway up the bristles of the brush, and pull your brush in light strokes across the surface of the figure. Never push your brush as this results in bent bristles. Again, make sure you don't obscure any surface detail. If you're painting anything organic, let the edges fade. If it's non organic, then keep the edges crisp and conform strictly to the detail of the figure. When blocking, use a darker shade than you require for the final effect. If you are unsure about what colours to use, consult the colour chart below.

### DRY BRUSHING

This is where your second cheap brush comes into use. Dip it into the paint and then wipe most of it off again on your newspaper. Wipe it gently until the paint leaves no mark on the paper. Then wipe the brush across the area you wish to dry brush. This will deposit the lighter shade only on the raised areas of the figure. The edges of these areas, you will also find, have blended with the underlying colour. For this process to work, the coat below, that you wish to drybrush must be fully dry.

### HIGHLIGHTING

Pick out the areas you wish to stand out. Usually these will be in the middle of the areas you have just dry-brushed. Mix your paint to a shade lighter than the one you have on the figure, and highlight that area, blending it at the edges with the colour below. This takes a bit of practice, but with time you should get the effect you require.

### BLENDING

If you haven't obtained the effect you require using the above techniques, you can try to blend the paint while it's still wet. Put new coats of paint in the areas you require and blend them using your brush until you cannot see where one colour ends and the other begins.

## THE COLOUR CHART

COLOUR	BLACK	BROWN	PURPLE	BLUE	GREEN	YELLOW	ORANGE	RED	WHITE
FIRST COLOUR	Black	Dk Brown	Indigo	Navy Blue	Dk Green	Coffee	Brown	Crimson	Grey
DRY BRUSH	Grey	Brown	Purple	Blue	Green	Yellow	Orange	Red	White
HIGH LIGHT	White	Yellow White	White	White	White Yellow	White	White	Yellow	White

For highlighting, it is the base colour and the colour mentioned.

## BLACK LINING

If the creases and joins on the figure don't look dark enough, use your brush to finely line the creases and joins. This gives the effect of deepening the crease.

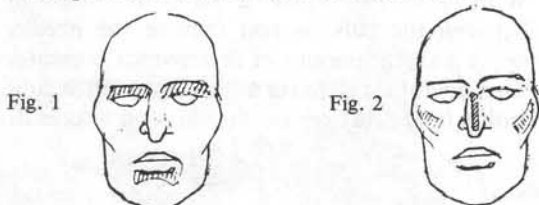
## SPECIAL TECHNIQUES FOR SPECIFIC AREAS

### FLESH

Flesh is a special case. The colour to use is buff or tan, and lighten it using white. Cover the flesh areas with this colour and, while still wet, add darker areas of pure buff and blend them in. Get a fully blended effect if possible.

### THE FACE

Paint your face in basic flesh colour as described above. Then paint the rest of the head as follows:



Paint in the buff areas first. Then paint in the eye ovals in a very light grey (not white). Paint in the eyes in a dark blue or grey for humans, any colour for non-humans. Paint in the iris and spot the eye with white to show its reflective nature. If the monster is very magical, you may wish to paint it a pure white with black outlines. Highlight the cheeks and nose as shown and then put in the eyelids in light flesh, and underline the eyes in buff. Paint in the hair on the beard, moustache and eyebrows the same colour as the hair on the head. Don't forget to do any hair the figure may have on its arms and chest. Paint in the hair and drybrush it with a lighter colour as shown on the colour chart.

## FINISHING OFF

### VARNISHING

When the figure is completely dry, I would recommend a couple of coats of varnish if you intend to use the figure for gaming. If the figure is for display only, this is not required. The best finish is a matt finish, and for this you can use a spray, such as Testor's Dullcoat, which is very hardwearing and costs about \$3.00 a can. If you do use the brush-on varnish, be sure to wash your brush very thoroughly.

### CLEANING

This is the single most important stage in the whole process. To ensure that your brushes last for a long time, you must wash your brushes thoroughly every time you change colour. Use a jar with a deep lid for your thinners, and empty a small amount of thinners into the lid. Use this rather than messing up your whole jar. Drown your brush, and then wipe it on the tissue until it is dry.

### EPILOGUE

Just remember, the painter's watchword is EXPERIMENTATION.

# Basic Figure Conversions

by Tony Ackland

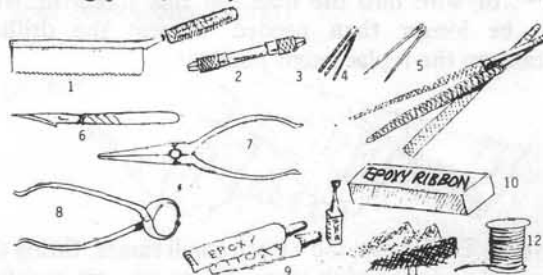
No matter how vast the range of commercially available figures grows, there will always be gaps that the figure manufacturing industry will never be able to fill. The reasons for this vary from lack of commercial viability to the limitations inherent in the production process. If you are one of those people that require a specific figure that seems forever unobtainable, or a currently available figure in a different pose, then there are three options open to you:

- Build a figure from scratch
- Convert from existing figures
- Get someone else to do either a) or b)

What follows is an introduction into option b).

## ESSENTIAL TOOLS AND MATERIALS

Before you can do any converting, there are certain basic items which you will require. All of those that you will need are relatively inexpensive and quite easy to obtain. If your local model or hardware shop does not stock any of those given in the following list, look through the advertisements (including the classified columns) in the modelling press, and you will find a mail order supplier.



1) RAZOR SAW - this is the best instrument for performing drastic surgery on white metal figures.

2) PIN VISE - this tool is vital to the process of joining together those parts you have dismembered with the Razor Saw.

3) DRILLS FOR 2 - the sizes you will require are 1mm and .8mm diameter.

4) NEEDLES FOR 2 - these are ordinary household needles that you can steal or beg from Mother/Wife/Girlfriend.

5) A CHEAP SET OF NEEDLES FILES - white metal clogs and eventually ruins fine files, so get a cheap set that you won't mind replacing periodically.

6) MODELLING KNIFE

7) NEEDLE NOSE PLIERS

8) WIRE CUTTERS

9) ADHESIVES - the type of glue that you will require most is the Five Minute Two Part Epoxy Adhesive. You may also use Cyanoacrylate Adhesive (Superglue) but this is only effective when you have relatively large areas with good surface to surface contact to stick together.

10) FILLER - the best filler is a two part epoxy putty. Such as Loctite Epoxy ribbon. It is also an excellent modelling compound.

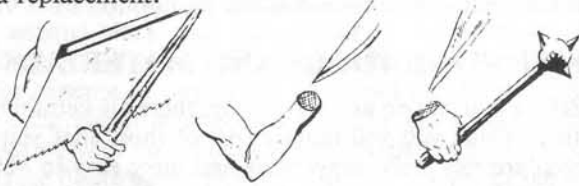
11) SANDPAPER OR EMERY CLOTH - a pack of mixed grades such as is available in most chain stores is quite adequate.

12) SOFT WIRE - such as florists wire, brass pins, soft iron or brass wire is also good.

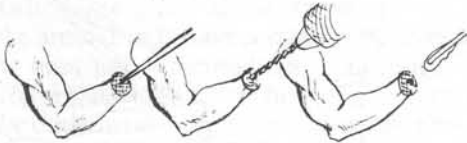
## CHOP AND SWAP

The removal of a part from one figure and its replacement by a part from another figure is what forms the basis for the vast majority of figure conversions. The techniques involved in changing over bits of different figures are essentially the same, whether you are swapping over a hand or a complete upper torso. The same techniques can also be used to drastically change the pose that figures are in. The simplest things to swap are heads and hands, and it is the latter that I shall use as an example in technique.

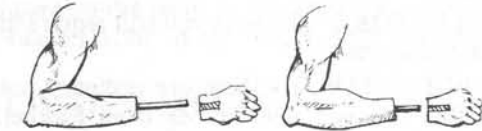
**STAGE 1** - Remove the hand that you wish to replace and score the surface of the cut with a modelling knife. Repeat the same operation on the hand that you are using as a replacement.



**STAGE 2** - Drill a hole in the stub of the arm. If you make a small hole with a needle first this will make the drilling much easier. Using Five Minute Epoxy Glue affix a length of wire into the hole. At this stage the wire should be longer than needed. Repeat the drilling operation on the replacement hand.



**STAGE 3** - Trim down the wire in small stages, fitting the hand on the wire at each stage. When you are satisfied that the hand is in correct relationship to the wrist, glue it into position. Remember that when you removed the hands, excess material may have been lost, and that the correct place for the parts may not necessarily be where they are touching each other.



**STAGE 4** - If you have been incredibly fortunate, everything will have fitted together perfectly and no more work will be required, but it's more likely that some filing and filling will be necessary. File the area around the joint and then score it as you did the cuts in Stage 1. Mix some Epoxy putty and apply it around the area of the joint. While the putty is still fresh, remove any excess



with a damp cloth. The setting time of the putty can be shortened by putting it in a warm place e.g. in front of a fire, or on top of a radiator. **DO NOT LET WHITE METAL FIGURES BECOME HOT AS THEY MELT AT QUITE LOW TEMPERATURES.**

**STAGE 5** - It is best when swapping figure parts to make your cuts where surface detail is minimal, but the destruction of detail is sometimes unavoidable. The types of detail which are most often wiped out by converting are chain mail, hair and fur. These are quite simple to model using the putty you have used in Stage 4. The notes below are the best way of showing you how to achieve these textures on your figures.

**MAIL** -- Wait till putty has cured to a stiff consistency  
Smooth the surface of the putty  
Make a series of diagonal cuts  
Make another series of cuts crossing the first series at 90 degrees  
With a needle, make a series of holes in between the cuts; as you remove the needle, apply a slight amount of downwards pressure. This operation requires a very light touch, but with a little practice you should soon master it.



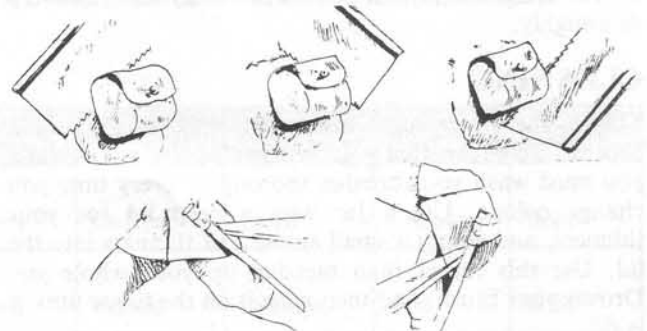
**HAIR** -- Simply make a series of long unbroken cuts in the direction the hair grows.

**FUR** -- As for hair, but shorten the cuts and pull upwards at the end of each cut.



## ACCESSORIES

Such items as packs and weapons can usually be removed from one figure and applied to another without too much trouble. For larger items, a razor saw is the best implement to use. Do not try to remove the item with a cut from one direction, but rather make a series of cuts from different angles that will meet in the middle. Smaller items, such as sword scabbards, should be removed by a series of gentle cuts. Before affixing to another figure, clean up the edges of the cuts with a file or fine sandpaper. The adhesive to use for these purposes is the superglue type or Five Minute Epoxy.



**WARNING:** Take care when using razor saws and scalpels as particularly nasty cuts can result (these items are very sharp) if you should slip.

**REMEMBER:** Make all cuts away from yourself.

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MAP SHOWING EBELSBERG AND ITS SURROUNDINGS

Let us now glance at the position which Hiller had decided to take up.

From Wels downwards the Traun flowed close under the heights on its right bank, whilst on the left bank was a level valley about three miles broad, through which it reached the Danube in several branches. It was 15 feet deep in the main stream, with a very rapid current flowing on a stony bed. It was nowhere fordable, unless the heights on the right fell

and the level plain covered with ditches, and small woods. A little above Krems flowed through a steep-sided valley Traun. The only approach, with the river swollen was by rain and melting snow, was over an embanked road and a wooden bridge of some 550 yards in length, and only 15 or 16 feet broad. This defile was easily commanded by artillery on the heights above. The bridge was closed by a tower with a gate only wide enough for one vehicle to pass at a time. Above the bridge on the north was the castle, which commanded a



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