Modeler's Notebook

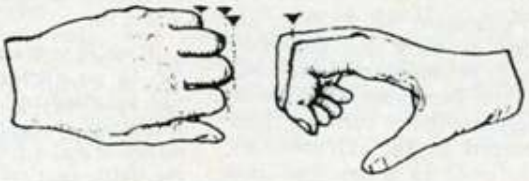
BY BRYAN FOSTEN

Many good figures have been weakened by badly proportioned hands. These tips should help overcome the problem.

The middle finger is half the length of complete hand

Thickness of palm is half that of the wrist

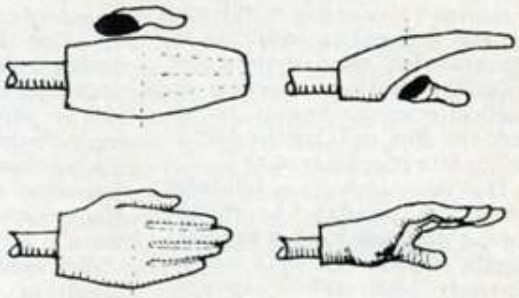
Closed fist shows different joint lengths of each finger



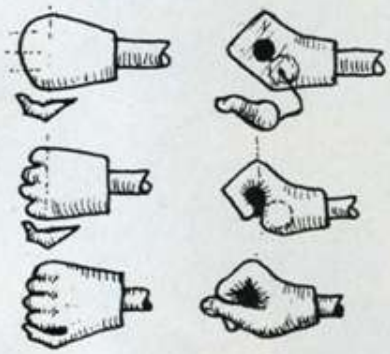
Proportion of hand to figure:

The length of hand is from chin to hairline

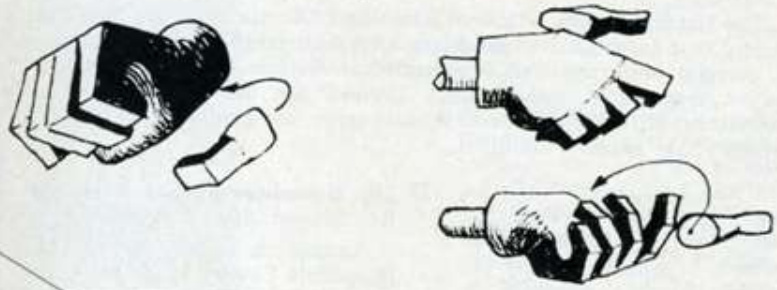
Model open hand from this basic shape



Model closed hand from this basic shape



Fashion fingers in square section with needle files or engraving tools – round off edges afterwards. Always model thumb separately and add to hand after fixing weapon, etc.



Hold hand in pin vice by peg at wrist for ease of working

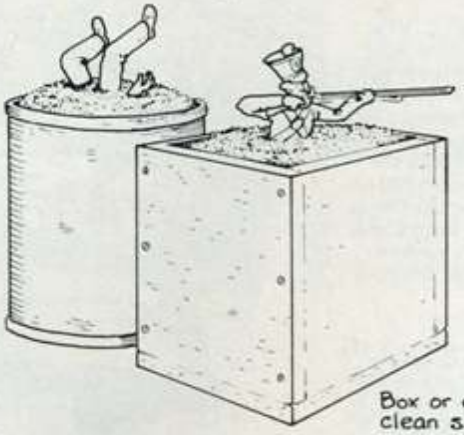
When arm is hanging down, sleeve covers more of wrist than when arm is bent.

Modeler's Notebook

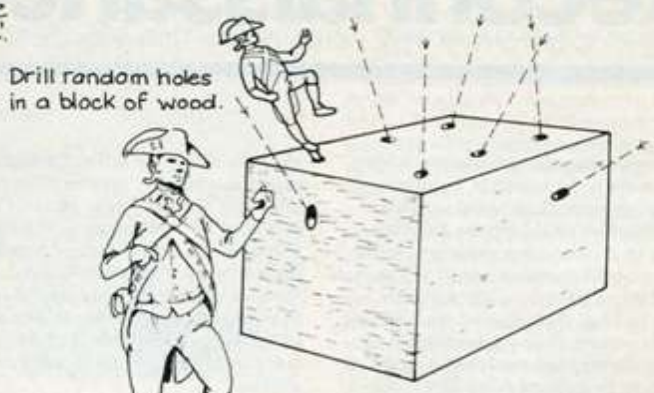
BY BRYAN FOSTEN

Third handed or aids for the 'fumble-fisted'.

Simple ideas to help you convert or paint.

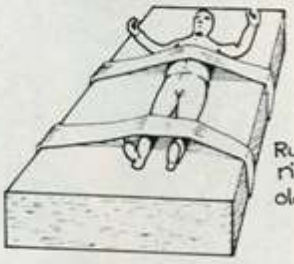


Box or can of clean sand

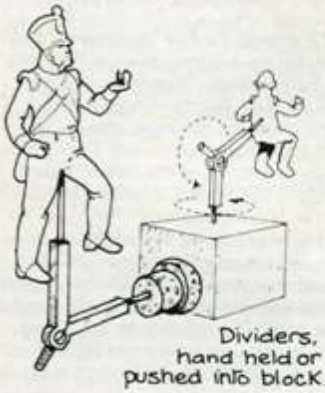


Drill random holes in a block of wood.

Cement on a temporary peg.



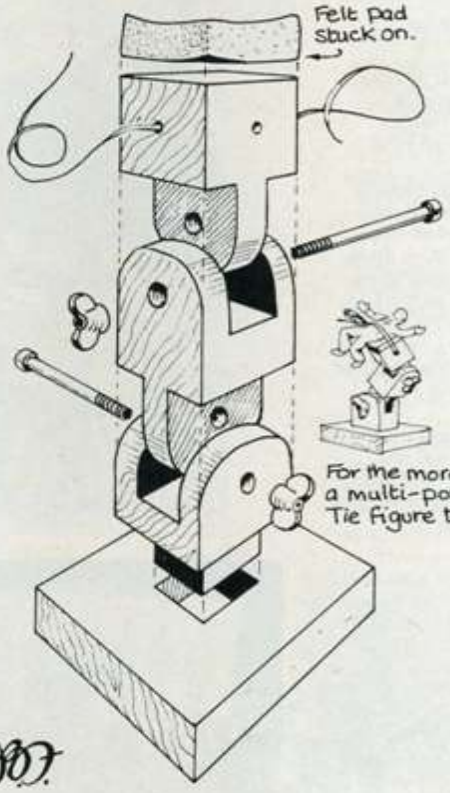
Rubber bands or rings cut from old inner tyre.



Dividers, hand held or pushed into block.

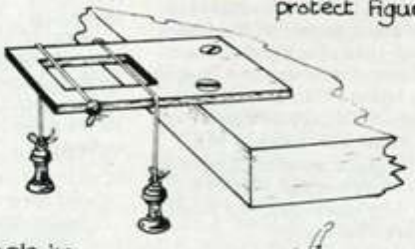
Thumb tacks

Bulldog clip – use chamois leather to protect figure.

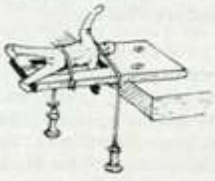


Felt pad stuck on.

For the more adept – a multi-pose clamp. Tie figure to top.



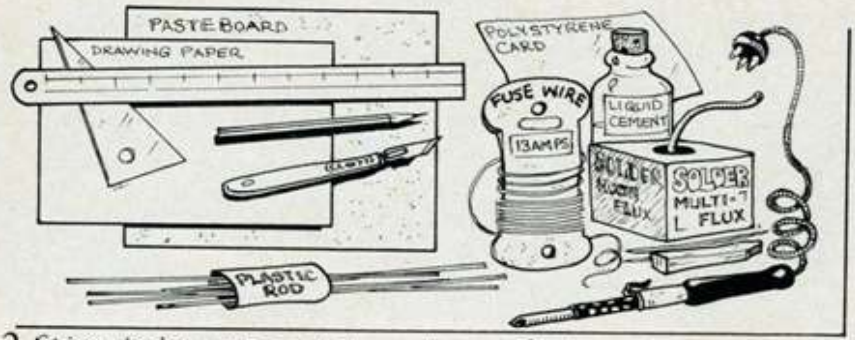
Simple jig using weights to hold figure in place.

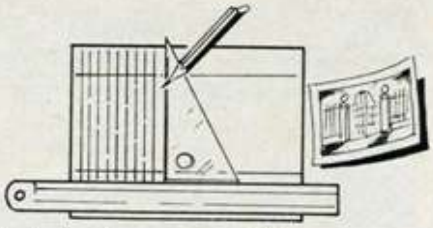


Modeler's Notebook

BY BRYAN FOSTEN

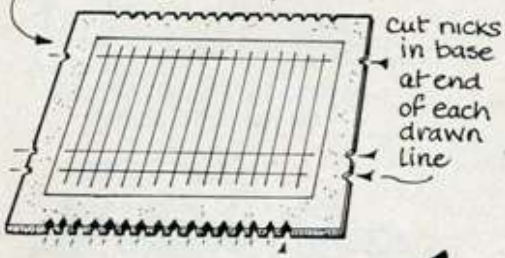
MAKING RAILINGS AND GATES IN WIRE AND PLASTIC ROD



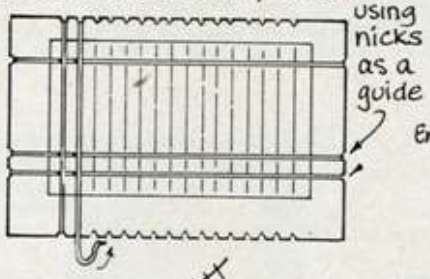


1 first design your railings, use photographs. for reference.

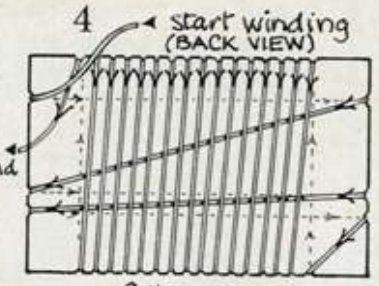
2 Stick design on to pasteboard

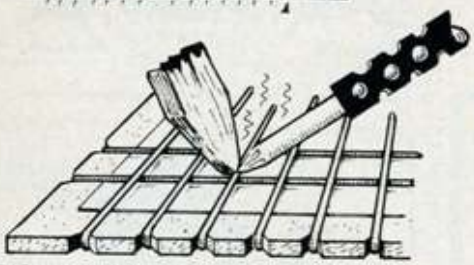


3 Wind wire around pasteboard

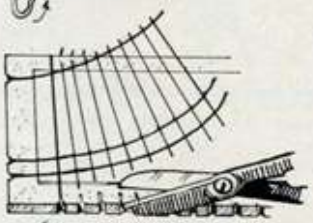


4 start winding (BACK VIEW)

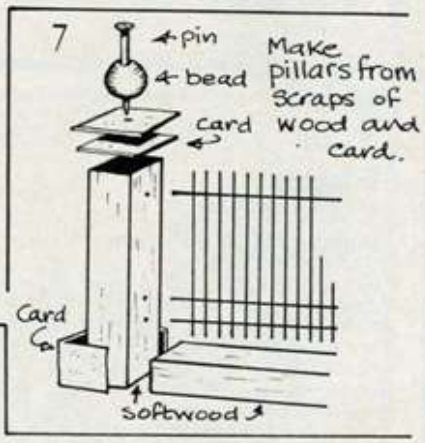


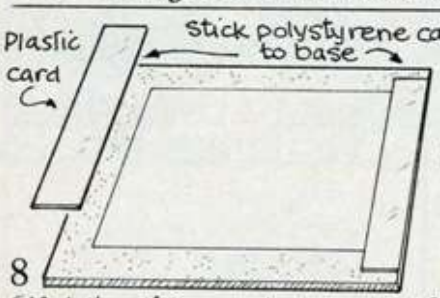


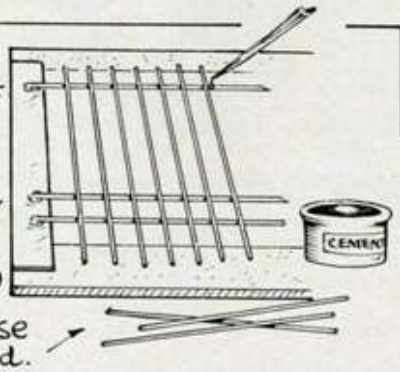
5 Gently press wires together with wooden stick and touch each junction with soldering iron



6 Snip completed railing free and trim square.



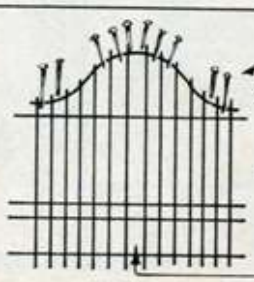




Slightly different treatment if you use plastic rod.

Work from the left and cement each down rail with a touch of cement at each junction. Use very little cement. Trim to length with sharp scalpel.

10 Gates and ornamental ironwork may be created using same technique as above. Always work flat and use pins or drafting tape to hold pieces until joined.

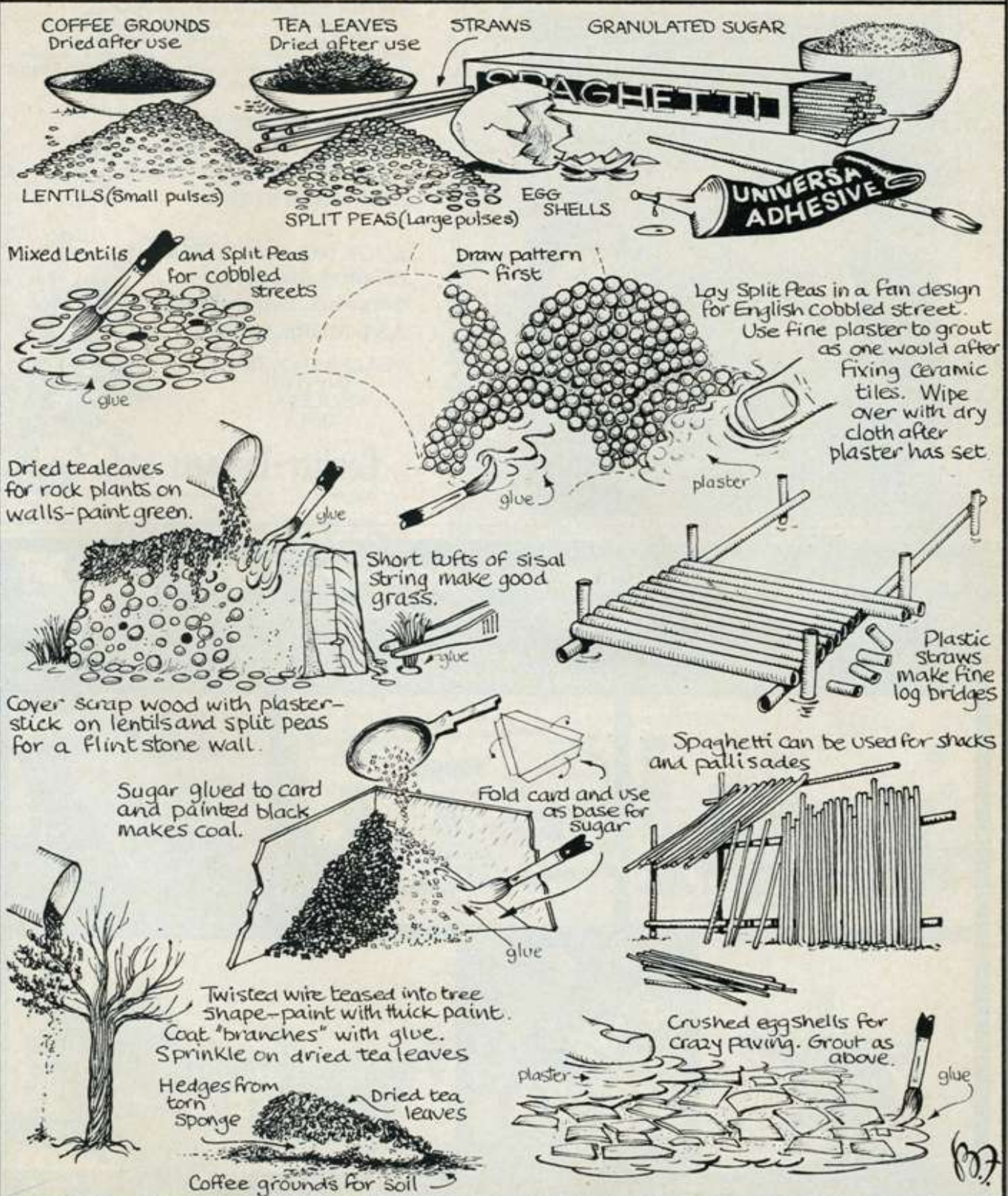


11 Escutcheons and other appendages may be made from plastic card, soft lead or copper foil.

Modeler's Notebook

BY BRYAN FOSTEN

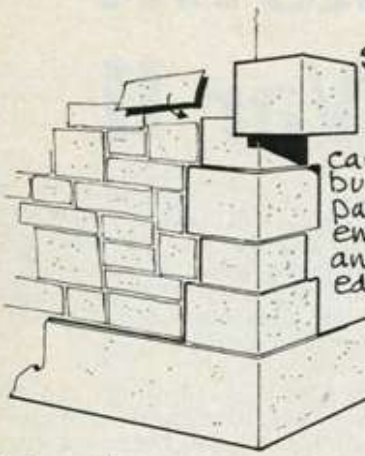
THE KITCHEN CUPBOARD CAN YIELD MANY USEFUL ITEMS FOR SCENIC DECORATION.
ALWAYS USE OIL-BASED PAINT ON DRIED FOOD.



Modeler's Notebook

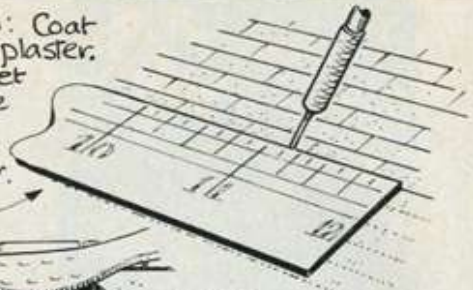
BY BRYAN FOSTEN

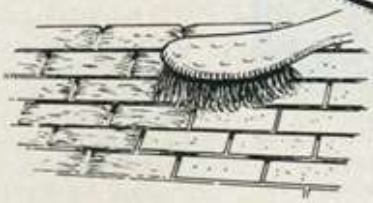
TREATMENTS FOR WALLS AND ROOFS ON MODEL BUILDINGS



Stone wall: Cut thick paper in random sizes and apply like mosaic. Use thicker card for corners of buildings. When set, paint with plastic emulsion to seal and round off sharp edges.

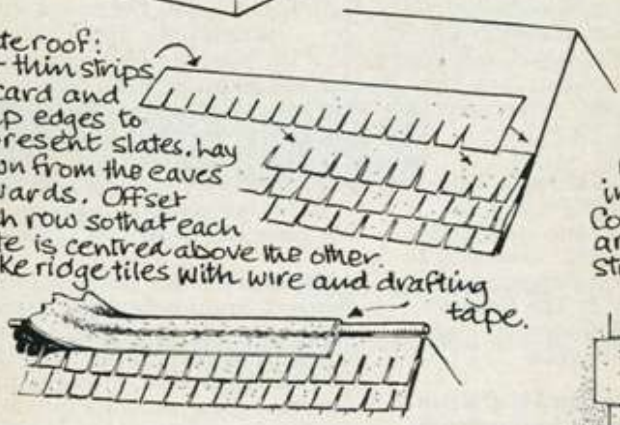
Brick wall: Coat with thin plaster. Allow to set then score with scriber and ruler.



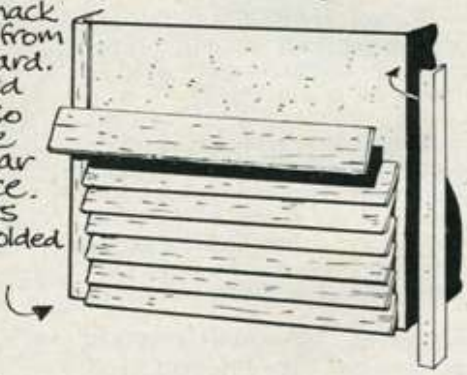


Brush surface with old toothbrush to roughen and breakdown the hard edges.

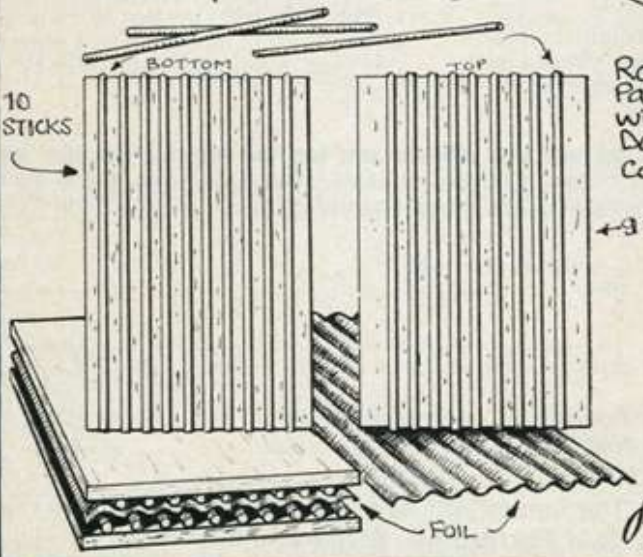
Slate roof: Cut thin strips of card and snip edges to represent slates. Lay down from the eaves upwards. Offset each row so that each slate is centred above the other. Make ridge tiles with wire and drafting tape.

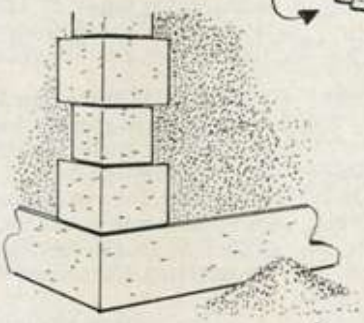


Wooden shack make walls from strips of card. Cut the card freehand so that they are not too regular in appearance. Corner uprights are cut from folded strip of card.



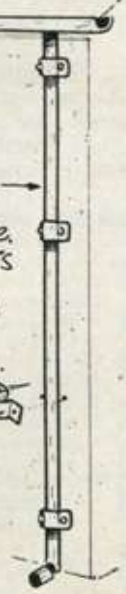
Corrugated iron sheet: Stick cocktail sticks or toothpicks to two similar sized boards so that they fall between each other when placed together. Cut aluminium or tin foil to size and press between boards.





Rough coated wall: Paint the wall area with adhesive. Dash on fine and coarse sand mixed.

Gutters and Rainpipes: Split straws make fine gutters. Rainpipes from straws or thick wire. Wall brackets from stiff paper held on with short pins.



Polystyrene sheet can be used in all these applications instead of card and paper.

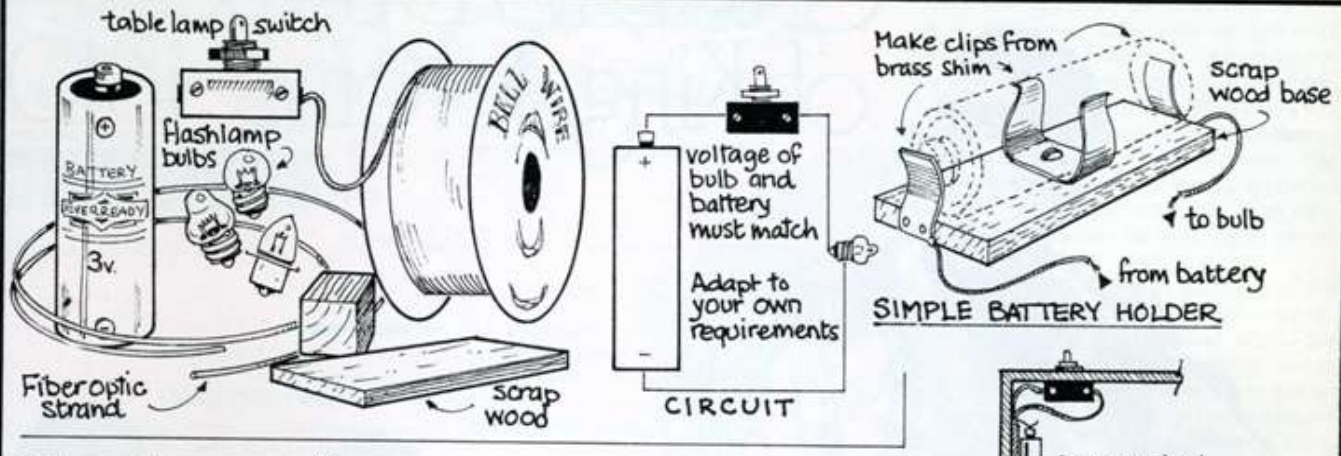
Water hopper from folded paper.

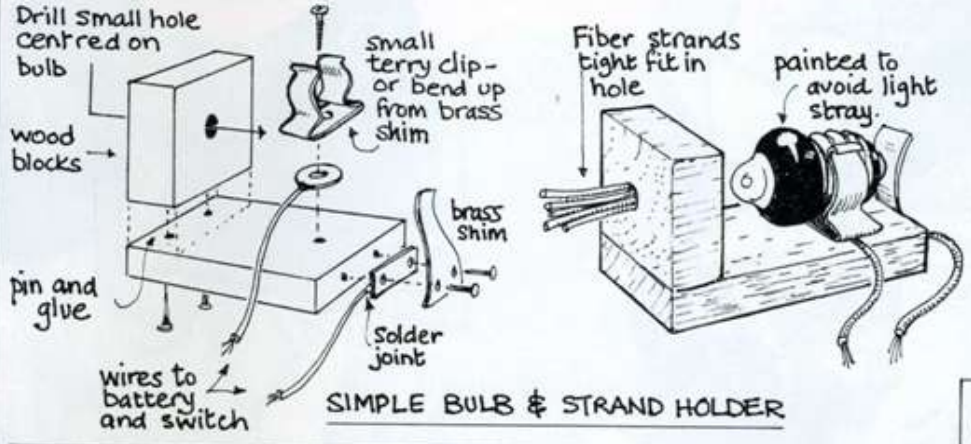
B.F.

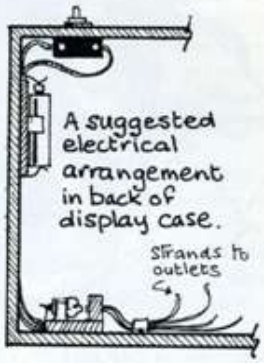
Modeler's Notebook

BY BRYAN FOSTEN

FIBEROPTIC STRANDS HAVE BEEN USED IN SURGICAL ENDOSCOPY FOR SOME TIME. HERE WE DEMONSTRATE THE PRACTICABILITY OF THEIR USE IN MILITARY MODELING.







1·5mm strand is not very flexible but gives good light emission. OK for street lamps.

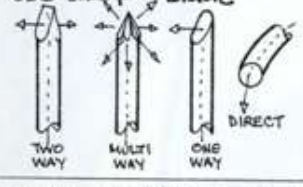
1·0-0·5mm strand has good flexibility-light emission good but small. OK for oil lamps, candles, etc.

Never bend strands at right angles.

Immerse in hot water to aid bending round small radii.

Bulb end of strand must be cut square to ensure good transmission of light

Emission end should be faceted for best results. use sharp blade



Another way. Heat until strand melts. Squeeze with nippers Shape with sharp blade.

A few practical applications for fiberoptic strands. The light transmitted is not enough to light a scene but it adds a touch of realism to good effect in cased displays.

Paint the strands with silver paint to prevent diffusion of light through walls of strands.

Modeler's Notebook

BY BRYAN FOSTEN

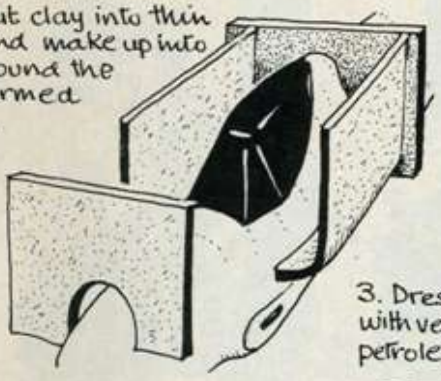
A SIMPLE CASTING TECHNIQUE FOR CONVERSIONS AND ADDITIONS TO AIRCRAFT, AFV, AND SHIP MODELS, AS WELL AS ACCESSORIES FOR FIGURES.

1. Build up a new shaped canopy in position on the model. Use 'Plasticine' or modelling clay.

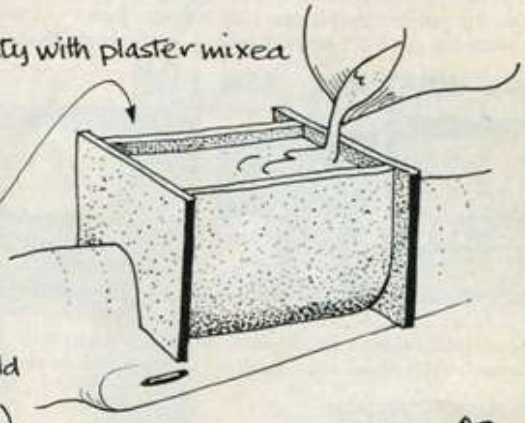
The same principle may be applied to any awkward conversions requiring accurate shaping or critical fitting.

Care in sculpting the precise form is essential.

2. Roll out clay into thin sheets and make up into walls around the newly formed section.



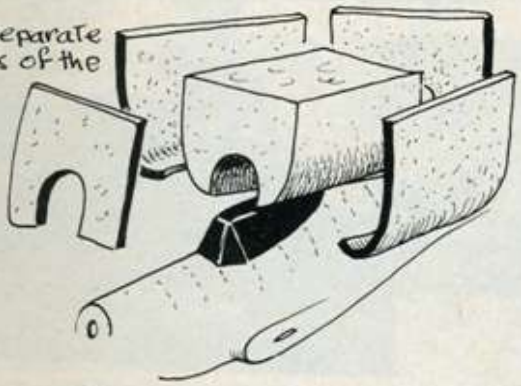
4. Fill the cavity with plaster mixed to a creamy consistency.



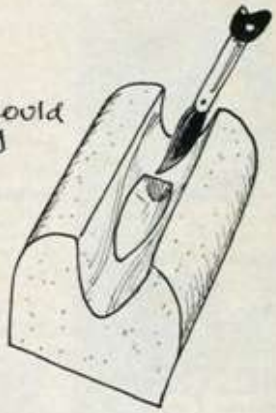
3. Dress the inside of mould with very thin coat of petroleum jelly ('Vaseline').

5. Carefully separate the elements of the mould.

Clean up the model by removing clay and washing in liquid detergent.



6. Coat inside the mould cavity with a parting agent such as domestic wax polish. (Do not use siliconised polish). Buff gently with a soft brush.



7. Prepare a small amount of clear casting resin and paint a 'gel' coat into mould. Allow to set. Repeat twice more. Allow to cure over night

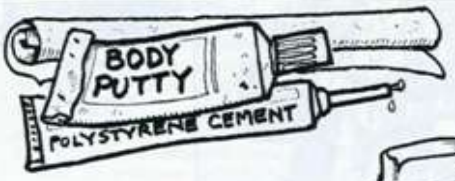
8. Trim off surplus 'flash'.

9. Burnish with metal polish.

10. Cement in position.

Modeler's Notebook

BY BRYAN FOSTEN



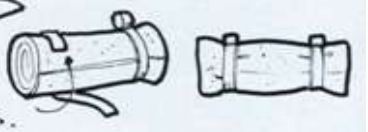
Fill sink holes and mould marks with body putty and cut or file away flash.

Paper or thin plastic card for collars revers, shoulder straps and pockets.

Balsa wood block, paper and card for pouches, haversacs and valises.

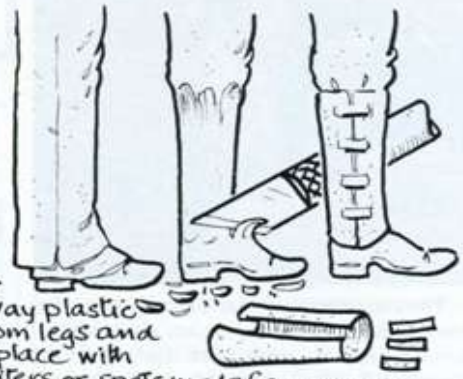
Soft blotting paper is best.

Use paper and paper strip for bedrolls and greatcoats.

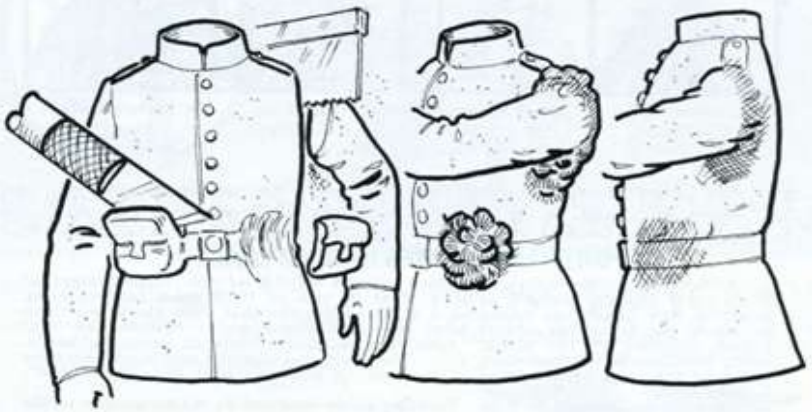


Dowel rod or cut sprue with paper straps for waterbottles.

Paper and thin plastic card can be used for straps and webbing.

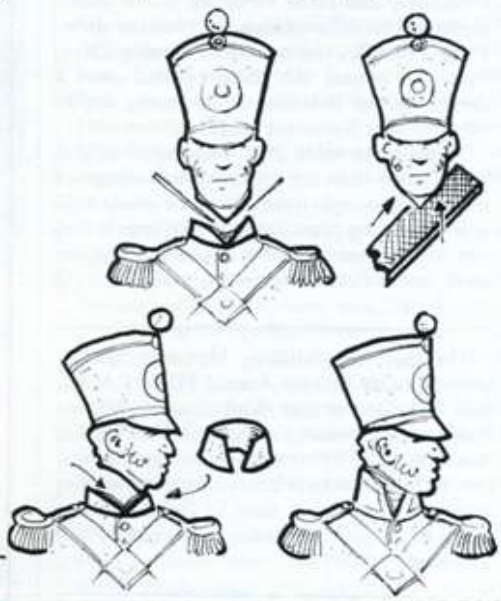


Cut away plastic from legs and replace with gaiters or spats made from paper.



Simple animations are possible with plastic figures. Use styrene cement and body putty.

B.F.



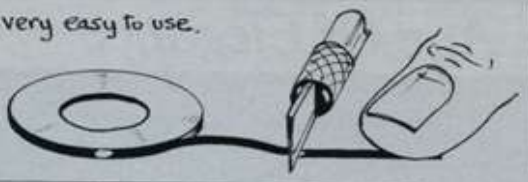
Head change using cement and body putty with new paper collar.

Modeler's Notebook

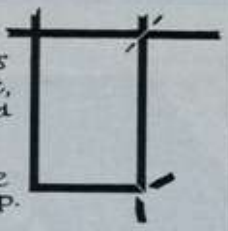
BY BRYAN FOSTEN

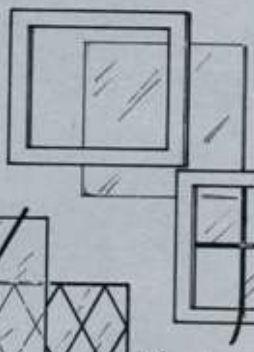
CHARTING AND GRAPHIC SELF-ADHESIVE ART TAPES ARE AVAILABLE FROM ART SHOPS BOTH IN THE USA AND THE UK. THEY HAVE MANY MODELLING APPLICATIONS, A FEW OF WHICH ARE SHOWN HERE.

Graphic tape is very easy to use. Release from spool. Attach to model. Cut to length.

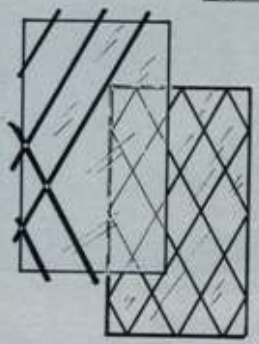


Squared up panels for doors, AFV's etc, should be applied with overlapping corners. Cut the joins into a mitre and remove scrap.

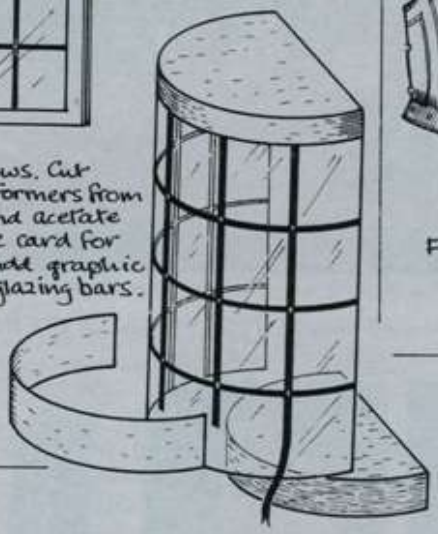




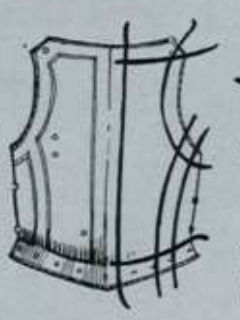
Sash windows are cut from card with acetate panes. Apply tape for glazing bars.



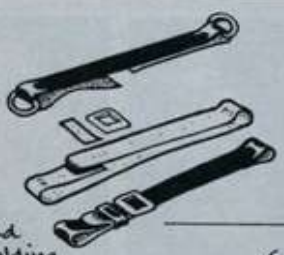
Bay windows. Cut identical formers from wood. Bend acetate to fit. Use card for facias. Add graphic tape for glazing bars.



For leaded windows apply tape direct on to acetate. Trim all round with thicker grade.

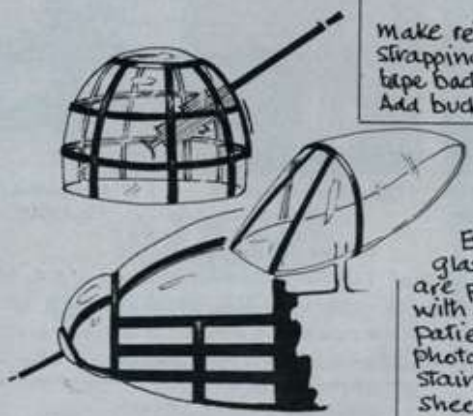


Fine ribbing and raised edges on armour are well simulated with the finer widths of tape.



Make reins and strapping by folding tape back on itself. Add buckles from card.

Laced buttonholes and piping, even chinstraps, are applied direct to the figure.



Cockpit covers, turrets and blisters. Curveable FLEXILINE* tape is ideal for this application as it forms to awkward shapes easily.

Even stained glass windows are possible with a little patience. Use photo tints to stain acetate sheet after applying tape.

*Flexiline® Series 500 Matte Flexible tape spools are available in 27 widths from 0·38 mm to 12·70 mm and are infinitely curveable to any shape from: GRAPHIC PRODUCTS CORP. ILLINOIS or from your local stockiste.

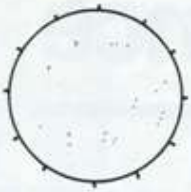
Modeler's Notebook

BY BRYAN FOSTEN

GABIONS WERE USED AS A MILITARY DEFENSE SYSTEM FOR HUNDREDS OF YEARS, BEING EASILY AND CHEAPLY MADE FROM AVAILABLE MATERIALS. THEY MAKE INTERESTING PROPS FOR PERIOD SCENES.

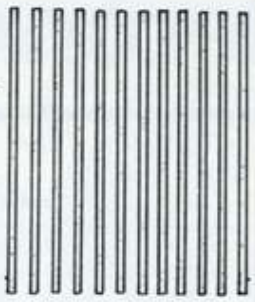
Gabions were made 'in the field' by the soldiers, later by the regimental pioneers. Consequently they varied greatly in size but they all looked very similar.

The sizes indicated here are for 1:32 scale. Almost any modelling material may be used. I have indicated raffia and styrene card and rod.

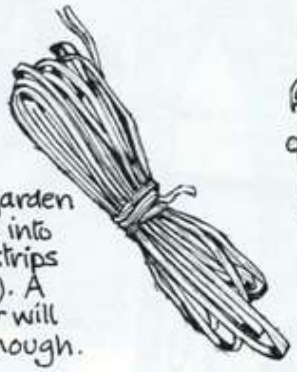


Cut a circle in plastic card 24mm in diameter. Mark off 12 equal points around the edge.

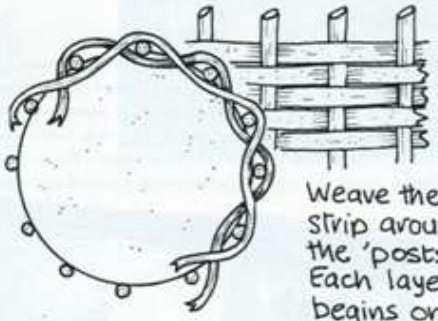
Cut 12 rods 40mm long by 1mm thick.



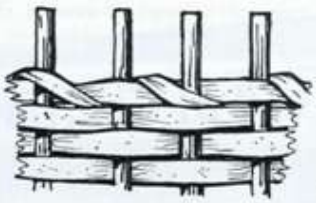
Cement rods or "posts" to disc, approx. 3mm from the base.

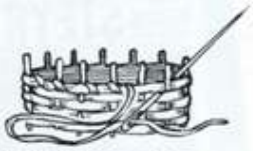


Split garden raffia into thin strips (1/2mm). A meter will be enough.



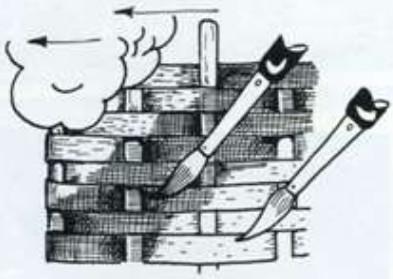
Weave the strip around the 'posts'. Each layer begins on alternate posts.





Finish the top row by oversewing. Thread the strip of raffia onto a needle to make it easier.

Fill with the modeling clay of your choice tinted to earth color. Allow the shape to distort for added realism.



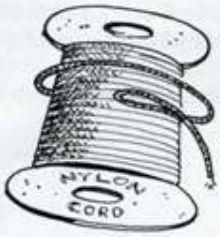
Paint with Yellow Ochre first. Allow to dry completely then paint with Burnt Umber. Quickly wipe off from raised areas leaving the darker color in the depressions.

Bundles of 'faggots' (bristles from a yard broom) were used to fill the gaps in the early period. Sacks of earth were used in the 19th century.

Modeler's Notebook

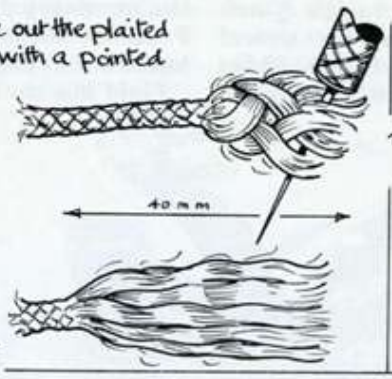
BY BRYAN FOSTEN

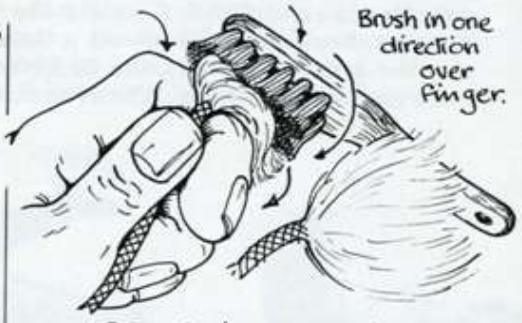
A REALISTIC WAY TO FABRICATE TAILS AND MANES FOR YOUR EQUESTRIAN MODELS. FROM A SUGGESTION BY ALAN HASELOP.



Use nylon cord 4mm diameter.

1 Tease out the plaited cord with a pointed tool.

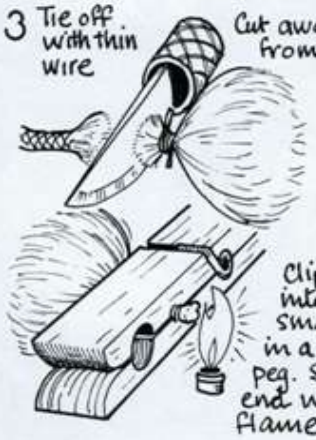




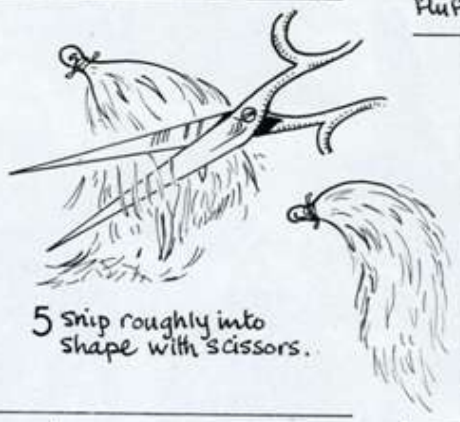
2 Brush vigorously with a small wire brush until the strands fluff up and lose wave.

3 Tie off with thin wire

Cut away from cord.



4 Clip cord into the small hole in a clothes peg. Seal the end with a flame.



5 Snip roughly into shape with scissors.

Stroke one way

6 Dampen the strands and form into shape with the fingers.

Remove wire binding

7 Cement tail into prepared hole in the model. Adjust to shape with the fingers whilst still damp.

8 Paint the tail with usual undercoat. Allow paint to seep into the fibres but do not use an excess of colour. Brush in one direction.

MAKING A MANE

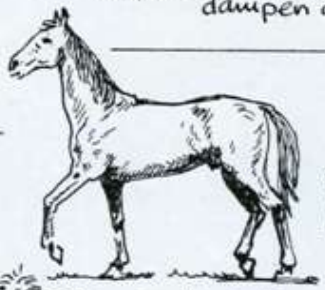
Affix fibres in a ladies hair grip. Seal the edge with a flame. Trim and dampen as figs 5 & 6.

Cut a slot in the neck of the model

10 Cement the mane into the slot in the neck of the model.

11 Brush one way only.

Adjust the mane on the neck of model whilst still damp. Paint as fig. 8.



12 Finish painting the model in the usual way. Don't use too much colour on the tail or mane.

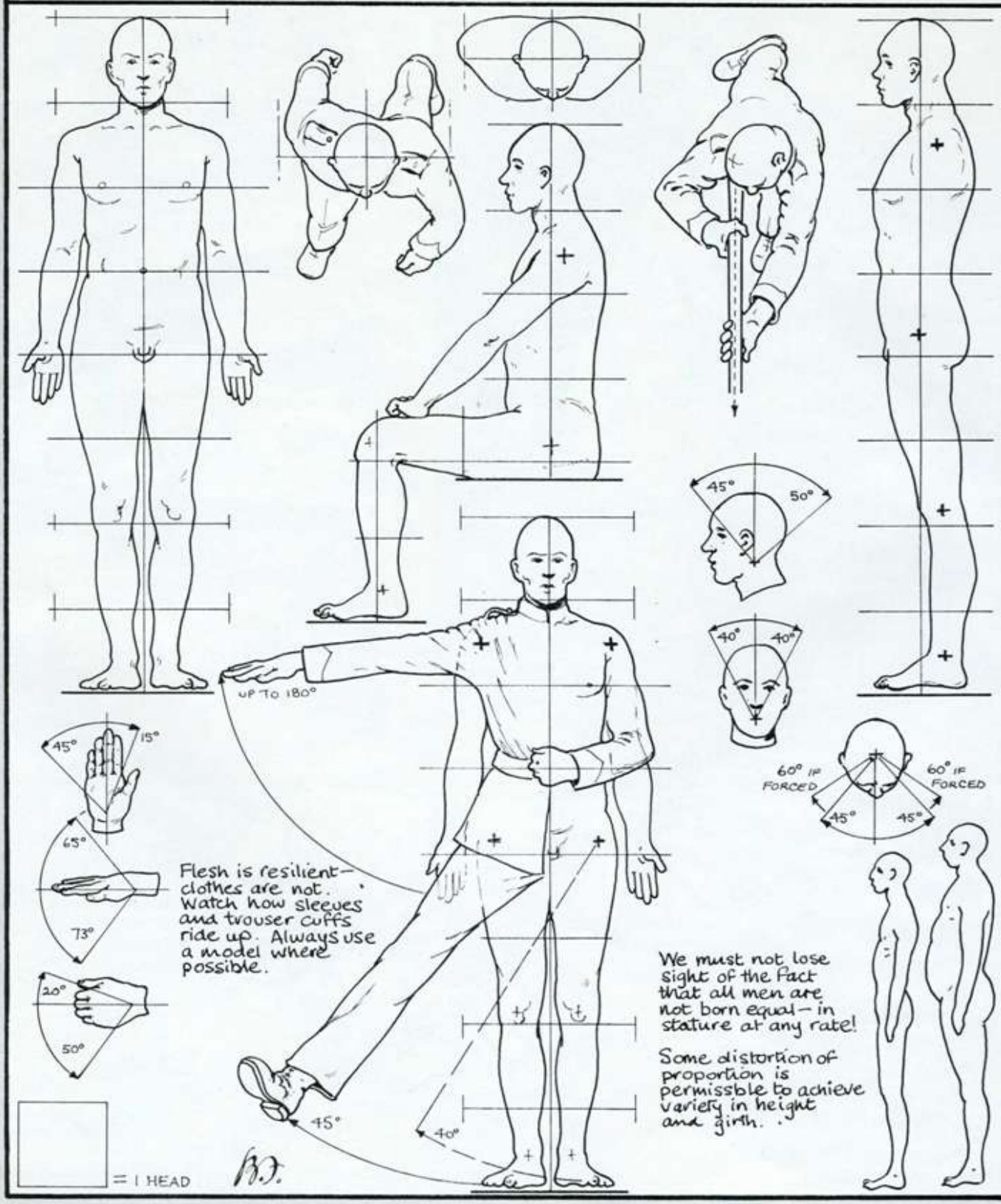
This method may be used for hair tails and crests on helmets etc.

B.F.

Modeler's Notebook

BY BRYAN FOSTEN

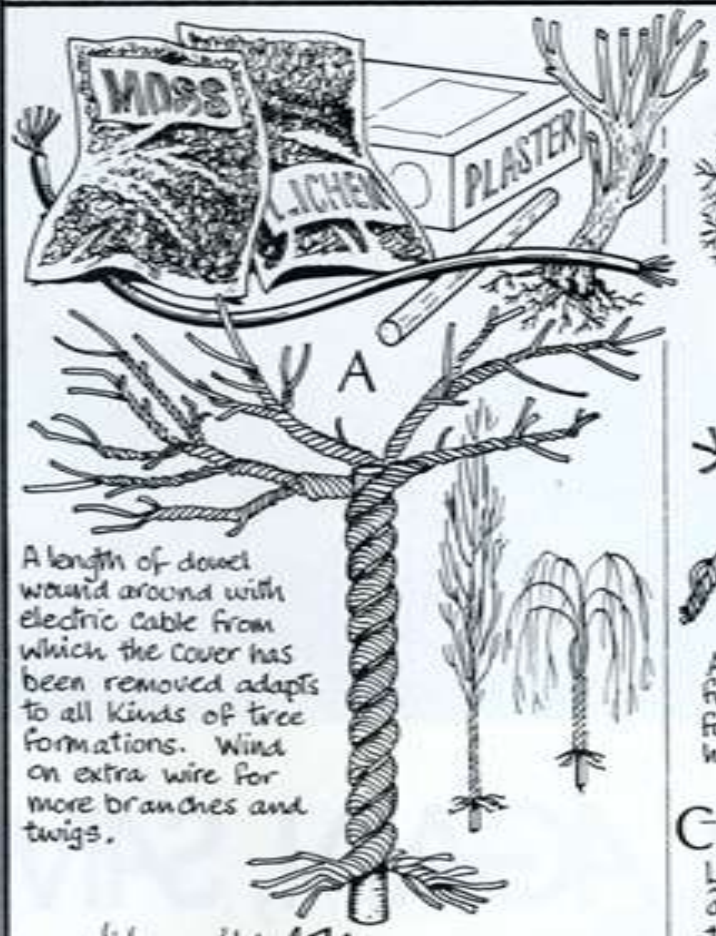
PROPORTIONS FOR SCRATCH-BUILDING MINIATURES; DEGREES OF MOVEMENT OF THE HEAD AND LIMBS.



Modeler's Notebook

BY BRYAN FOSTEN

THE MAKING OF TREES HAS ALWAYS POSED A CHALLENGE TO MODELERS. HERE ARE SOME METHODS THAT PRODUCE QUITE REALISTIC RESULTS.



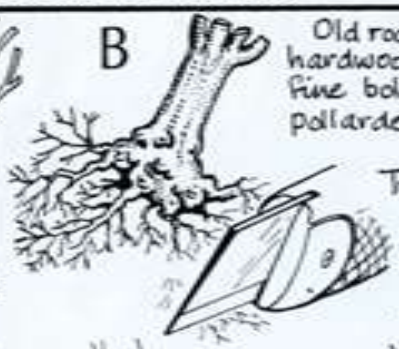
A length of dowel wound around with electric cable from which the cover has been removed adapts to all kinds of tree formations. Wind on extra wire for more branches and twigs.

Add plaster mixed to a creamy consistency.

When plaster is nearly set use an old comb to scratch in bark detail.

Add more detail with suitable tools after plaster has set.

Paint bole with matt colours. Browns, greys and greens.



Old root stock from hardwood shrubs make fine boles representing pollarded trees.

Trim off all fibrous and thin roots.

Add further branches from twisted wire to form an attractive head.

Spray with Repro-Set or Hair Lacquer to preserve the wood.

C

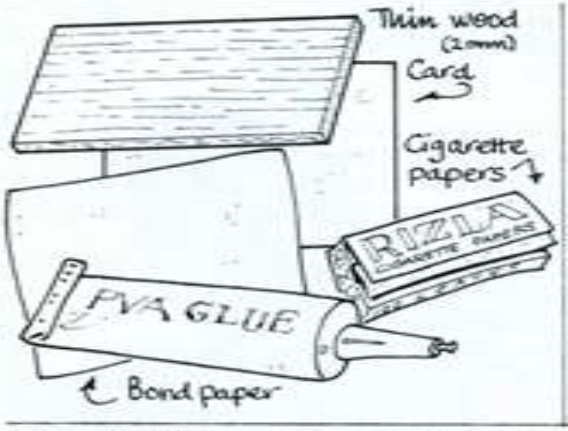
Leaves and Foliage. Use moss and lichen cemented firmly to branches. Epoxy or universal adhesive should be used. After the cement has dried spray with matt varnish to preserve the vegetation and colour.

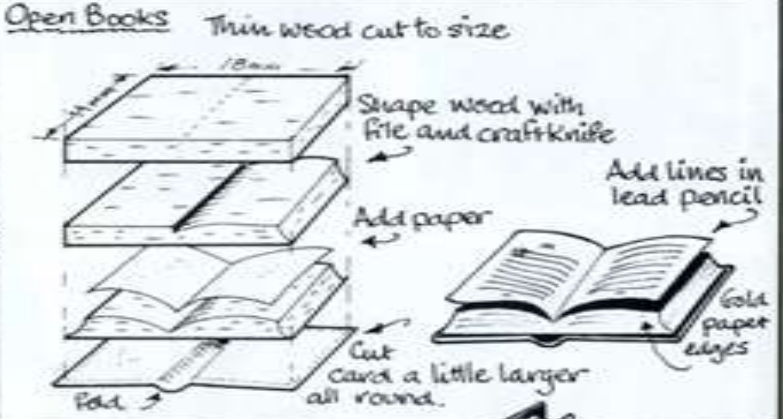
If the colour has faded, touch up with paint and spray again.

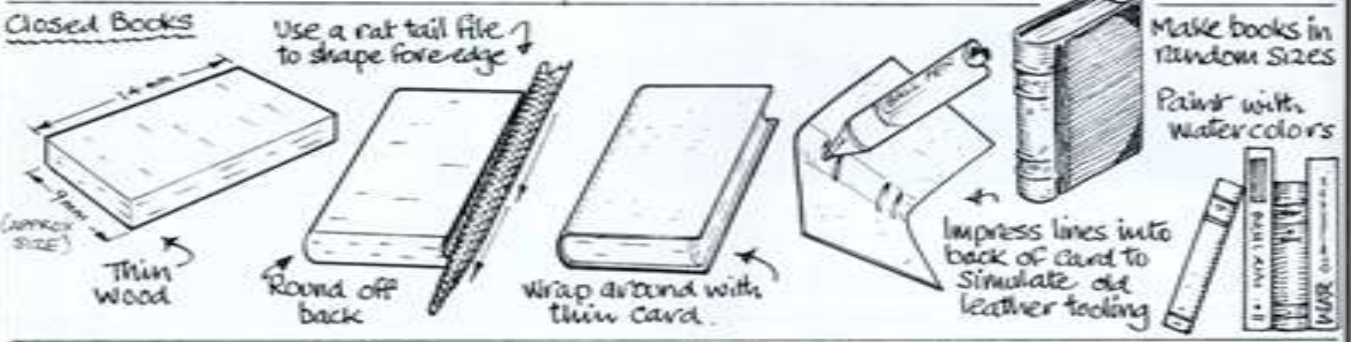
Dye some coarse sawdust brown, green and russett. Dab the moss or lichen with glue and sprinkle sawdust over. Blow away surplus.

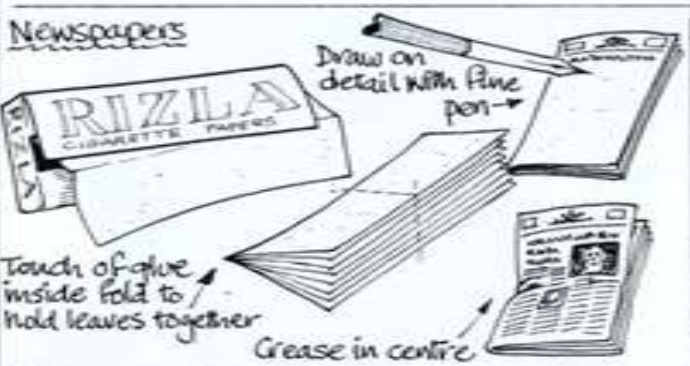
Modelers' Notebook

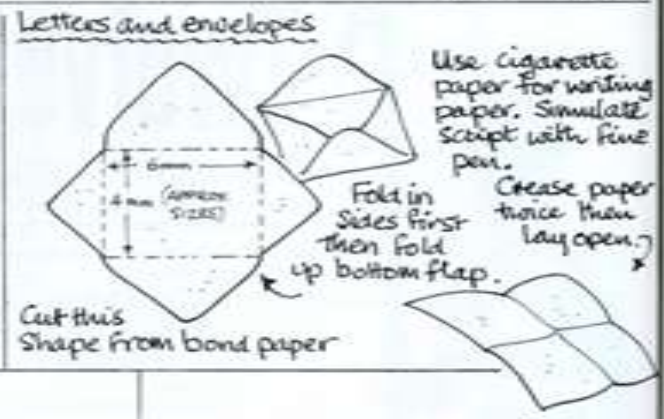
BY BRYAN FOSTEN

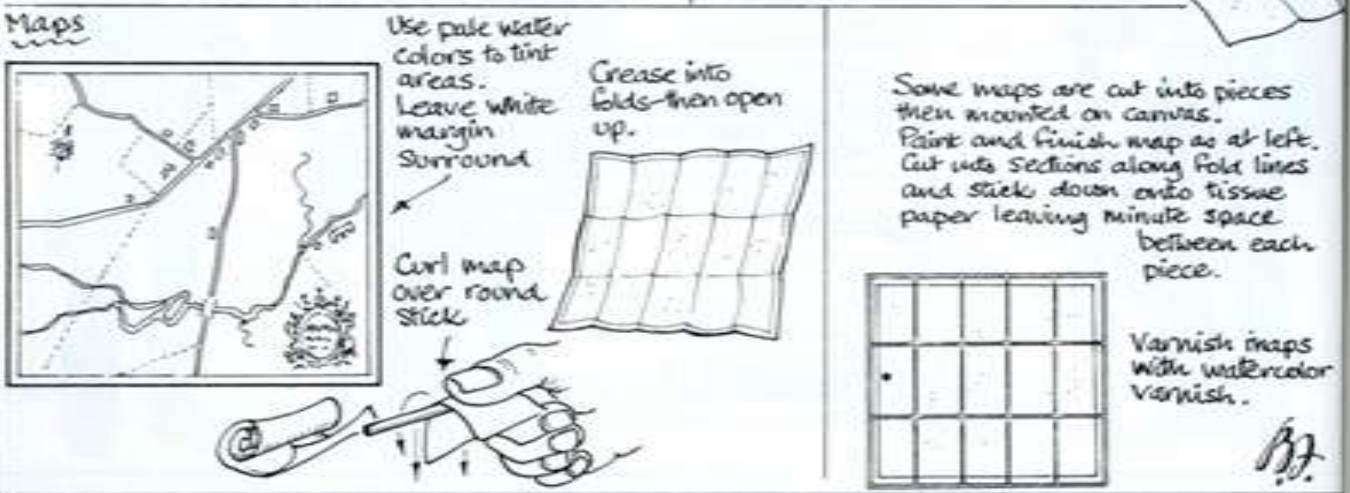










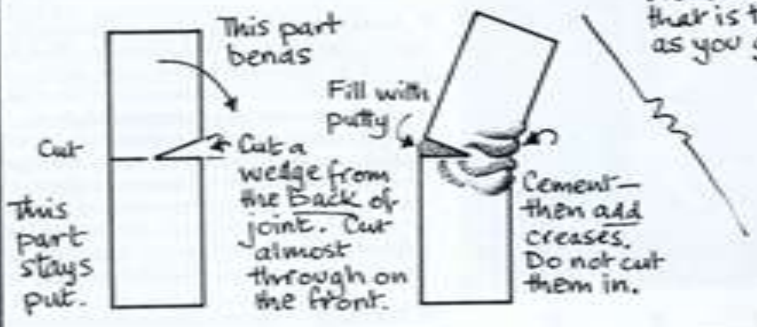


Modeler's Notebook

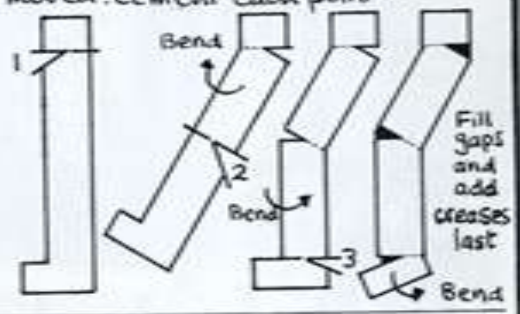
BY BRYAN FOSTEN

WHEN RE-ANIMATING A MINIATURE, ATTENTION MUST BE GIVEN TO THE EFFECTS OF MOTION AND BODY POSITION ON CLOTHING.

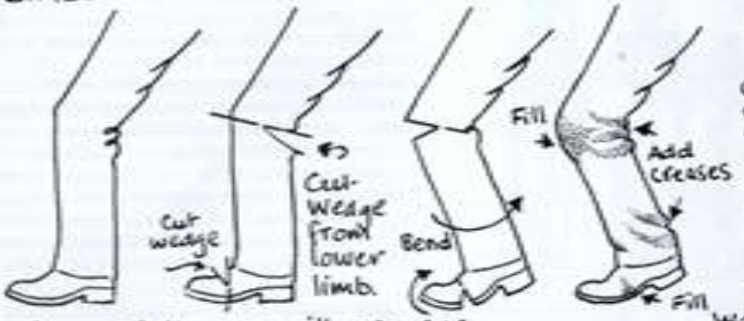
GENERAL PRINCIPLE



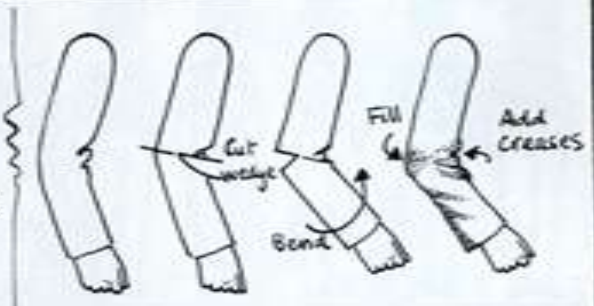
Treat each joint separately. Cut the wedge from the back of the joint on the piece that is to be moved. Cement each point as you go.



LIMBS

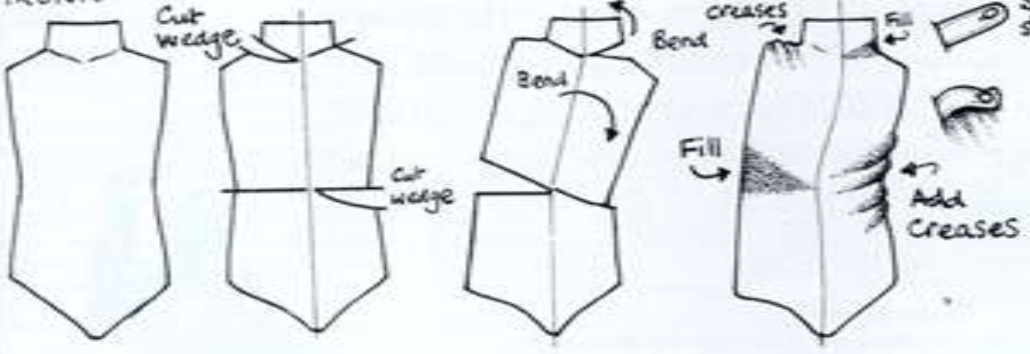


Always take care with creases. Use a model or a mirror as an aid.



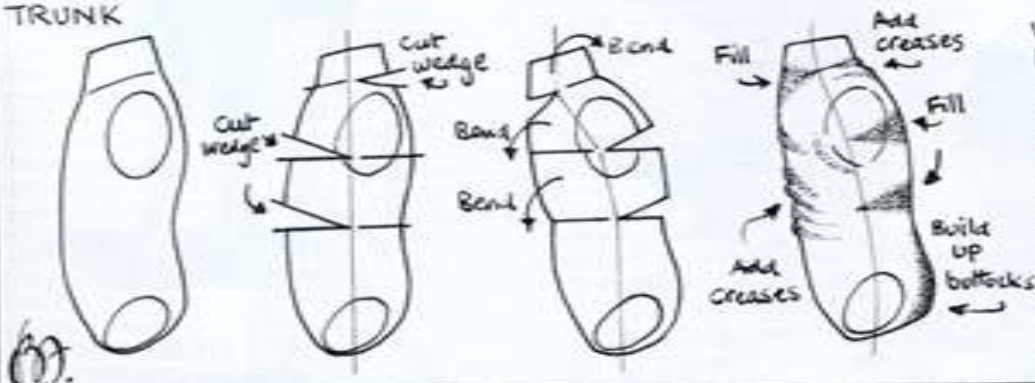
These two exercises show the practical way to cut and bend limbs. Remember, always, to cut the wedge from inside the bend

TRUNK



Always look for reactions in the creases of clothing. Equipment and straps distort as the body bends.

TRUNK



When bending the body the point of balance changes. Other parts of the body have to counteract to compensate. Bottom sticks out or the arms rise and swing as a counterweight