



Making The Rocking Horse

*A simple but
traditional carved
'swinger' on a stand
from a design
by Anthony*

Dew

THIS rocking horse has been designed by Anthony Dew to combine tradition with straightforward construction without complicated joints. No large machinery is required, and the carving can be completed with a small selection of gouges, a Surform or rasp, and a few other basic tools. Timber packs containing partly-prepared material including components bandsawn to shape are available as are high quality accessory packs.

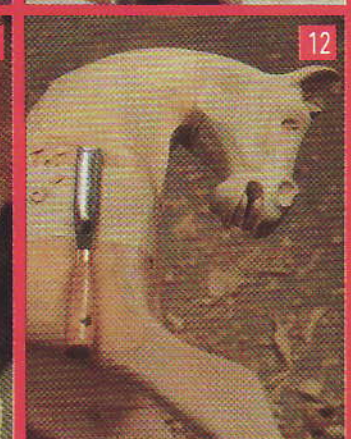
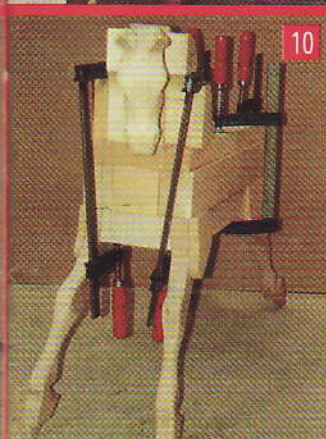
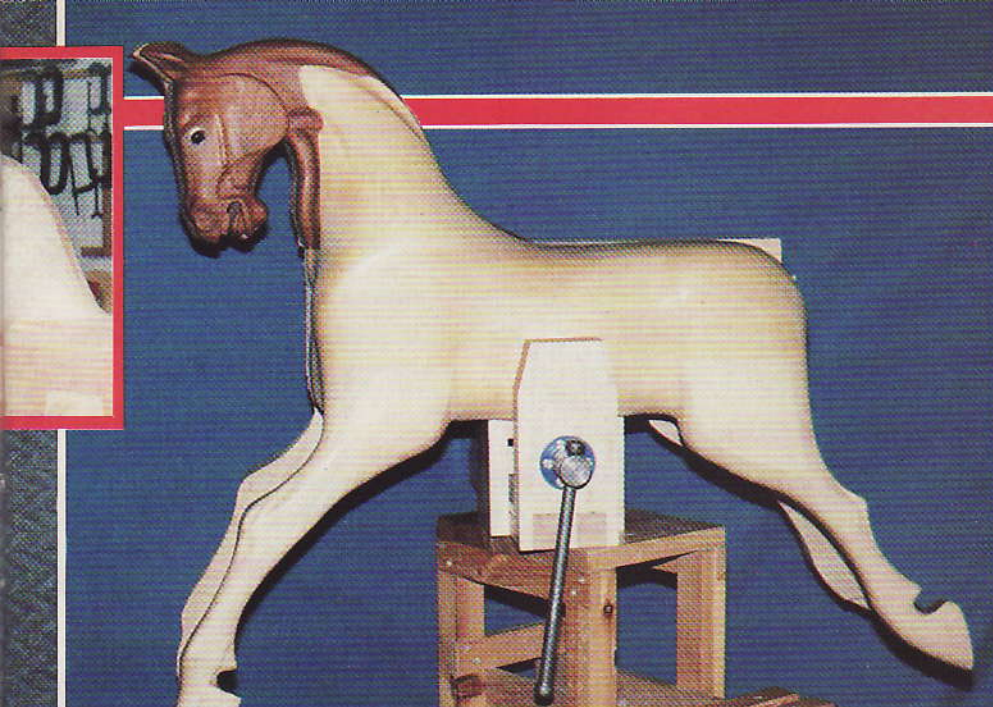
Timber

Use well-seasoned materials, fault-free as far as possible. Jelutong, lime or yellow pine are excellent carving woods for the head and body. Beech, maple or sycamore are all suitable for the legs. Choose a recognised furniture-timber for the stand or good quality redwood.

The horse

Make patterns out of card or thin ply for all the shaped components, and use carbon paper to transfer the outlines. Prepare templates, and from these mark out the timber, checking that direction of grain corresponds with the drawings. Note that no shaping is carried out to the main body





components prior to assembly, and remember to leave on the cramping noggins.

The carving is easier than you may think! Ensure that chisels and gouges are sharp – really sharp. Use a paring action rather than a chipping one. Carve a little from each side in turn to maintain symmetry. View the progress from all angles; often standing well back gives a more balanced overall impression. It takes time to carve a horse, and no two are the same. Remember that what looks right and totally acceptable as a rocking horse may not be an exact replica of the real thing. Your rocking horse is your own interpretation of what nature creates so easily, and no two carvers produce identical creatures.

Carving the head

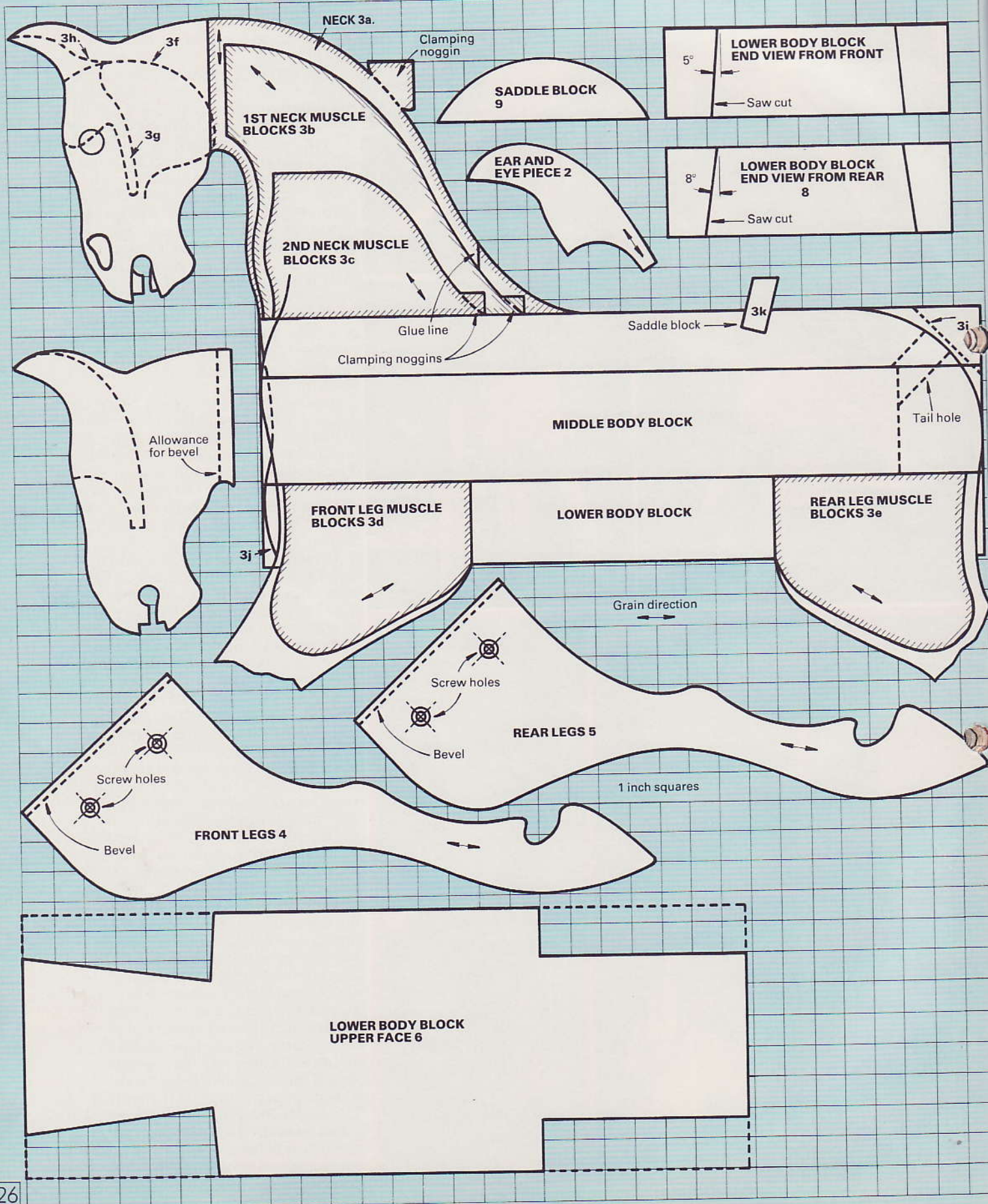
Rocking horses look their best if the heads are facing slightly to the left or right; this is achieved by bevelling the head where it joins the neck (Fig. 1). Use two dowels and glue to secure, then cramp up using the noggin left on the neck and waste on the front of the head. Glue on ear and eye pieces as shown. (Photo 1).

Pencil the centre line all round the head and neck, and the shape of the ears from the front. Pencil in the line on each side to indicate base of ears, and curves to mark the edge and bottom of the cheeks (Fig. 3f). Remove bulk waste from ears with a coping saw (Photo 2). Carve the ears to angle back slightly and curve in on either side to meet the glue line (Fig. 3h). Round off the 'corners' above the eyes to meet the ears. Cut away for the nostrils which angle back. Mark the shape of the nostrils and carve away all round. Pare away the 'corner' from nostrils to the eyes, and below curve to the mouth (Photo 3). The front of the head tapers from eyebrows to mouth with just the nostrils protruding (Photo 4).

Turn head on side and pare away the wood along the line of the cheek on the neck side to leave the cheek standing proud. Pare back the cheekbone (Fig. 3g) until it stands up about 3mm ($\frac{1}{8}$ in.) and carve to narrow and round it so that it flows neatly into adjoining areas. Below the cheek, carve away to taper towards the mouth and lower jaw. The mouth should finish about 57mm ($2\frac{1}{4}$ in.) wide or even slightly less. Round off 'corners' below cheeks and lower jaw.

Cut away around the mouth to form teeth. Just below the eyebrows form a circular recess about 5mm ($\frac{3}{16}$ in.) deep for the glass eyes, but don't fit

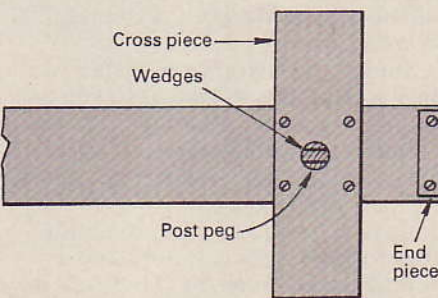
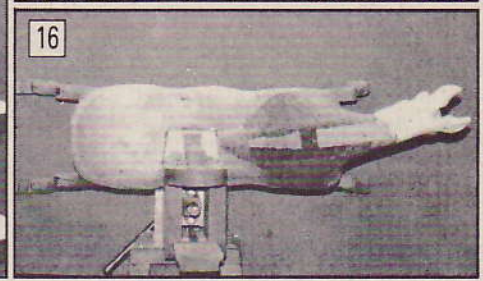
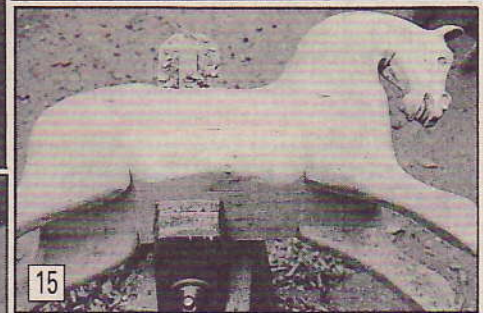
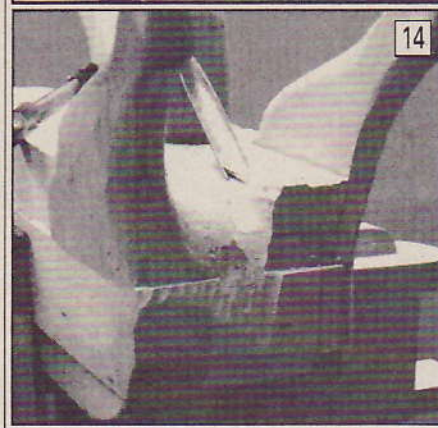
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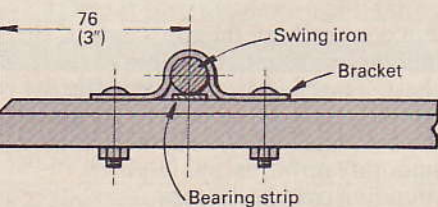
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yet. Hollow nostrils and ears slightly. Sand smooth to remove all toolmarks (Photos 5 and 6). The head is the hardest part, the rest is easy by comparison!

Bore for two dowels, glue and clamp the neck to the upper body block, again using the neck clamping noggin (Photo 7). The angling of the head, mentioned above, can be enhanced by fitting the neck at a slight angle to the upper body block – 15 degrees maximum. Glue and cramp in position the first neck muscle blocks, then the second muscle blocks. Determine positions from Fig. 3.



UNDERSIDE OF STAND 12



The head is carved before adding to the body for ease of working. Similarly with the legs, the lower parts are now shaped by rounding them and thinning a little in the area below the 'knee'. Do not round over the bottoms of the hooves.

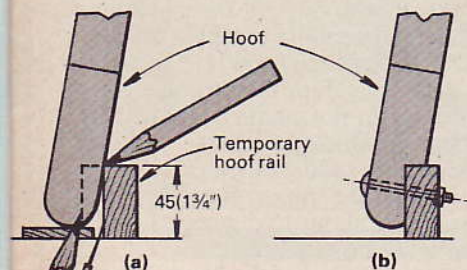
Prepare a card pattern for the upper face of the lower body block, and mark lines at each corner onto the timber. Note the angles of 5 degrees and 8 degrees for these corner notches to receive the front and back legs respectively. This gives the legs the correct splay and allows for ample room for the horse to straddle the stand and swing irons.

Note that the front legs are longer than the rear so that when mounted the horse has a prancing appearance. After fixing the legs to the lower body block, the hooves should be the same distance apart front and rear or closely so. If the hooves do not stand four square on a flat floor, this will be corrected later.

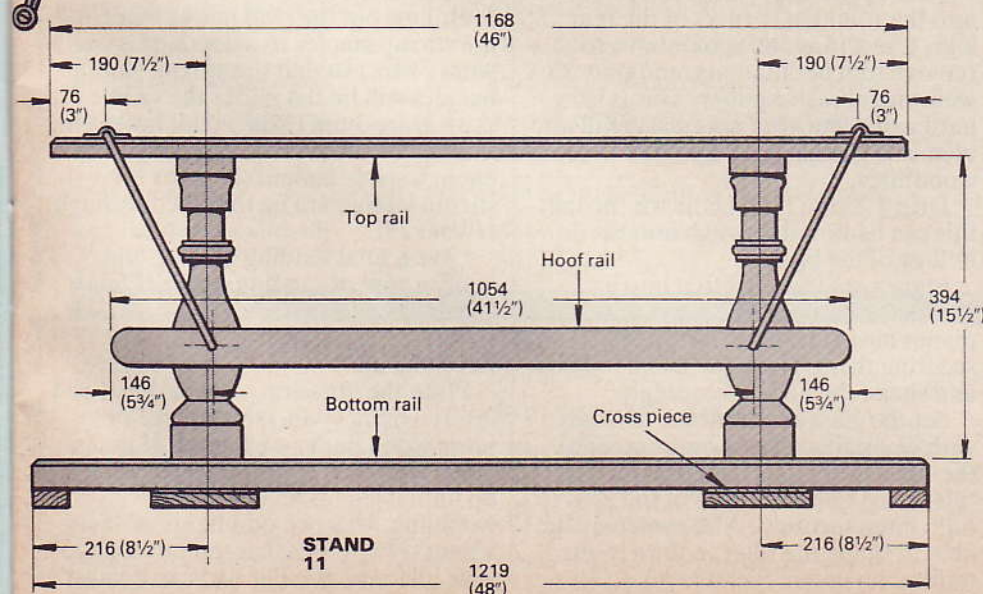
The legs are fixed to the lower body block with 2 1/2 in. by No. 12 (63 by 5mm) screws, two to each leg and these must be well counterbored. Use glue when fixing (Photo 8). These are critical joints, so ensure each is a good fit. Glue and cramp on the leg muscle blocks. Because of the angling of the legs to the body block, the legs and the muscle blocks are fitted so that they project slightly above the upper face of the lower body block. These projections are planed level when the glue has set ready for the middle body blocks. A small allowance has been made for this bevelling.

The middle body block sides are positioned so as to overlap the lower

CONTINUED



HOOF NOTCHES 10 a & b



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CONTINUED body block by about 3mm ($\frac{1}{8}$ in.) at either side, and the middle body block ends fit in tightly at each end to form a box (Photo 9). These parts are dowelled in place, keeping the dowels nearer to the inside edges. Glue and clamp together.

Level off upper edges of the body box, and add the upper body block complete with head and neck (Photo 10). Dowel in place as before. Before gluing together, why not place a note inside giving the name of the maker, where and when made – a time capsule which may be discovered in years to come, just as is the case when rebuilding old horses!

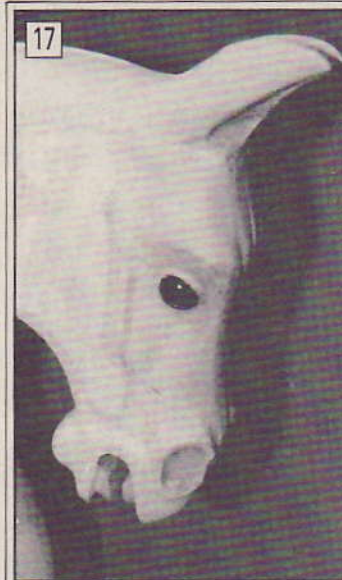
Pencil a centre line along the top of the body, down the rear end and the chest; this helps to keep the horse symmetrical. Note that the bottom of the neck, where it joins the body, finishes up almost a pointed egg shape. Even though the neck may be angled, it should still finish up symmetrical about the centre line of the body.

Shaping up the body

Place horse on its side, and pencil in the curve of the rump. Saw off this waste as shown in Fig. 3i. Saw off the cramping noggin.

Use a large gouge (or even a drawknife) to cut away the waste at all the corners. Cut leg muscle blocks back to remove projecting parts, and taper down to merge with the legs. Rough shape the neck to taper towards the top (Photos 11 to 13).

At this stage, turn the horse upside down and round off the insides of the tops of the legs so that they run smoothly into lower body block. The front of the lower body block is shaped to leave a bulge in the middle (Fig. 3j); at the rear a 'valley' between the legs curves up towards the tail (Photo 14). Turn the horse on its side again, and pencil a cross near the centre of the middle body block at each side to indicate the maximum swell of the belly. Forward of these points, from the back of the front legs to the base of the neck, and back of these points from the front of the rear legs round to



just in front of where the saddle block will be placed, the body is thinner (Photo 15).

Study the illustrations, so that you have a clear idea of the shape you are aiming to achieve. A common fault is to remove insufficient wood, leaving the horse looking too box-like. There is plenty of thickness of wood in the body to achieve adequate rounding. Aim for gentle curves, not steep depressions (Photo 16). There are no flat surfaces on a horse.

Round the shoulders, but leave proud the area above near the neck, and below where the top 'corners' of the legs are rounded in towards the chest. The chest is concave in the middle, but bulges out in the centre at the bottom (Fig. 3j). The neck tapers smoothly upwards and requires rounding over at the top.

At the rear, curve the rump to flow into the rounded corners of the rear legs. Use a rasp and spokeshave to remove tool undulations, and smooth well with abrasive paper. This is slow, hard work, but very necessary. Fill any blemishes with a good quality woodfiller.

Drill a 25mm (1in.) hole for the tail; this can be bored through into the hollow of the body.

Manes are usually fitted into a groove cut into the neck, but different manes have alternative ways of securing them. Have the mane to hand and shape the neck accordingly.

Set the glass eyes into the recesses with wood filler. Press home so that the filler exudes and smooth off. The filler must grip the edges of the eyes to hold them securely. Also, you may be able to shape the filler, before it sets, to form an upper eyelid (Photo 17).

If a traditional style of saddle, which is secured with brass dome headed nails, is to be fitted, it is best to have the saddle to hand at this stage to help determine the position of the saddle block and stirrup staples. Place the saddle in position so that the front runs slightly up the slope of the neck, mark back end for saddle block. While so positioned, pencil round the oval holes on the saddle flaps to mark the positions for the giant staples which anchor the stirrup leathers.

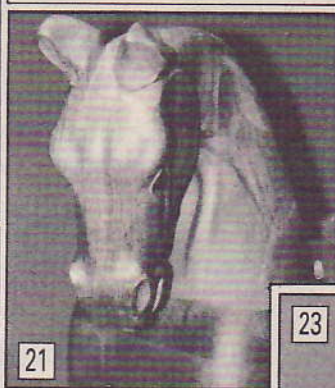
Make the saddle block (Fig. 9) noting that the upper, curved edge is bevelled at about 15 degrees. Form a groove for this square across the horse's back so that the block is set in approximately 16mm ($\frac{5}{8}$ in.) in the centre, angled back also at 15 degree (Fig. 3i) and with the ends running smoothly into the horse's back at both sides (Photo 18).

Hollow out the oval marks made for the stirrup staples to a depth of about 9mm ($\frac{3}{8}$ in.) so that the stirrup leather buckles will lie flat under the saddle skirt. Bore 3mm ($\frac{1}{8}$ in.) pilot holes for the staples, then drive in leaving enough space behind them for the stirrup leathers to be threaded through (Photo 19).

Give a final sending all over and apply a coat of sanding sealer (Photos 20 to 24).

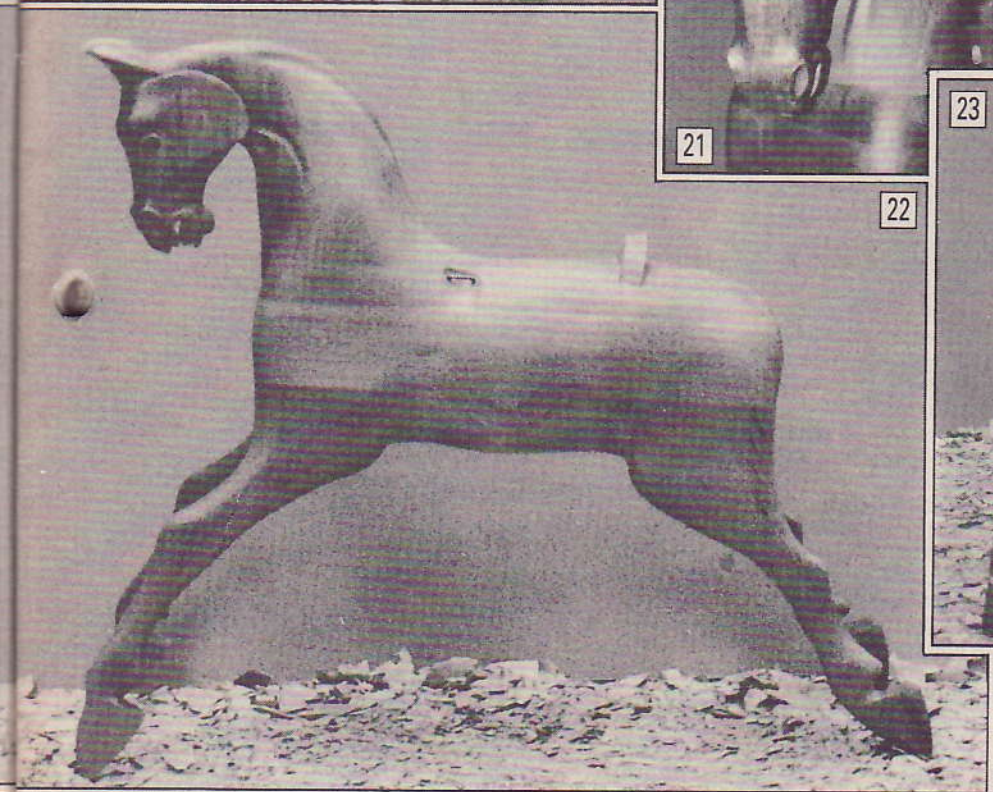
Levelling up

Place the horse on a flat surface, and insert a 6mm ($\frac{1}{4}$ in.) thick piece of scrap wood under each hoof. If the horse wobbles, as it surely will, pack up until it stands level without wobbling. Use two oddments of 45 by 19mm (1 $\frac{3}{4}$ by $\frac{3}{4}$ in.) as temporary hoo rails, place on the flat surfaces against

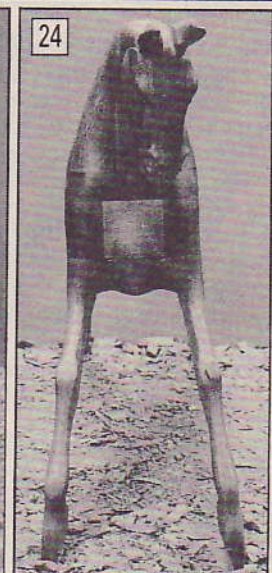


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the inside of the hooves and use a pencil and pair of compasses open to around 12mm (1/2in.) to mark out for the hoof notches (Fig. 10a). Saw out hoof notches. Screw onto the temporary hoof rails to prevent possible damage. Final fixing is then by coach bolts.

Traditionally, rocking horses are covered in gesso. This is a mixture of

rabbit skin glue and whiting, brushed on hot, to give a hard but slightly flexible base for painting. Allow several days for the gesso to dry, and then sand smooth. Some makers paint directly onto the wood.

Rocking horses can be finished in a variety of colours, but the favourite is dapple grey. Apply several base coats of pale grey paint. Sand down each coat, filling any blemishes which show up. Paint over the eyes, then when the final base coat is dry, run the tip of a craft knife around the eye and peel off the paint. Use a fine brush to paint in around the eyes and the eyelashes and the hooves in black.

The dappling is achieved with a dappling pad and black paint. Working downwards, make circular patterns leaving areas of grey. Aim for varying shades to leave a 'hairy' effect. Experiment first on scrap material.

Touch in around the eyes, ears, nostrils and mouth with red paint. When dry, coat all over with a clear matt varnish to soften the dappling effect. Ensure all paints are compatible and child-safe.

Fix the saddle cloths and saddle. Leather strapping is taken right round the neck to meet in the centre of the chest, and a further piece taken from here under the body to form a simple breastplate. Secure with 25mm (1in.)

THE HORSE

Head	1 off	267 by 178 by 70mm (10½ by 7 by 2¾in.)
Neck	1 off	279 by 222 by 70mm (11 by 8¾ by 2¾in.)
Ear and eye pieces (both)	1 off	356 by 95 by 13mm (14 by 3¾ by ½in.)
1st neck muscle blocks (both)	1 off	660 by 222 by 45mm (26 by 8¾ by 1¾in.)
2nd neck muscle blocks (both)	1 off	406 by 222 by 32mm (16 by 8¾ by 1¼in.)
Lower body block	1 off	610 by 222 by 70mm (24 by 8¾ by 2¾in.)
Middle body blocks (sides)	2 off	610 by 95 by 70mm (24 by 3¾ by 2¾in.)
Middle body blocks (ends)	2 off	90 by 95 by 70mm (3½ by 3¾ by 2¾in.)
Upper body block	1 off	610 by 222 by 45mm (24 by 8¾ by 1¾in.)
Legs (for all four)	1 off	1574 by 197 by 32mm (62 by 7¾ by 1¼in.)
Leg muscle blocks (for all)	1 off	737 by 197 by 13mm (29 by 7¾ by ½in.)
Saddle block	1 off	178 by 50 by 21mm (7 by 2 by ¾in.)

THE STAND

Top rail	1 off	1168 by 95 by 21mm (46 by 3¾ by ¾in.)
Bottom rail	1 off	1219 by 146 by 32mm (48 by 5¾ by 1¼in.)
Cross members	2 off	457 by 146 by 32mm (18 by 5¾ by 1¼in.)
End blocks	2 off	140 by 45 by 32mm (5½ by 1¾ by 1¼in.)
Posts (sawn for turning)	2 off	508 by 75 by 75mm (20 by 3 by 3in.)
Hoof rails	2 off	1054 by 45 by 21mm (41½ by 1¾ by ¾in.)

Widths and thicknesses are net. Allowance added to lengths for shaped parts. In other cases (body blocks and stand) the lengths given are net.

CONTINUED

CONTINUED round wire nails as well as dome and fancy nails. A coloured ribbon rosette is often fixed with a brass nail at the centre of the chest.

Add the mane, forelock and tail. Fix a length of strap from the rear centre of the saddle block around the base of the tail, fixing with dome and fancy nails. This is the crupper strap, and helps to give 'lift' to the tail. Buckle on the bridle complete with rein.

The stand and finishing

Prepare the stand parts and hoof rails as indicated. Chamfer the stand top and bottom rails, and the cross pieces on their top edges. The hoof rails can be chamfered all round or left square.

Round the ends of hoof rails. Prepare holes for the lower ends of the swing irons, holes in stand for vertical components, and for fixing screws in cross-members.

Turn the stand posts, as shown, checking shoulder length and with spigots top and bottom for fixing. Make two saw cuts in spigots to be at rightangles to the grain of adjoining

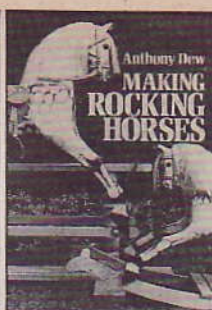
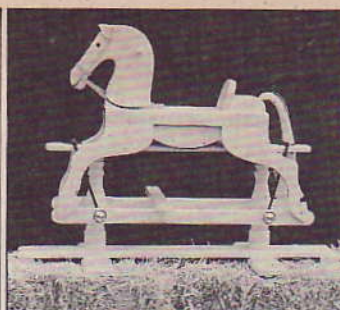


timber, and prepare wedges. Glue and screw the stand components together, then drive in the wedges (Photo 25). Level off when dry, sand smooth all over and varnish the stand and hoof rails.

If the hooves are not the same distance apart front and back, adjust the lower ends of the swing irons to suit by pushing in or out. Prime and paint black these irons.

Screw on the bearing strips into positions shown. Add a dab of grease, locate swing irons, and secure in place with brackets. Position the hoof rails onto the lower ends of the swing irons, secure with washers and split pins, and add the 'bowler hats' to conceal them.

Lift the horse into position on the hoof rails. Bore 6mm (1/4in.) hole through each hoof and rail, and secure with a carriage bolt. This completes the horse, so it's now a question of enrolling a recruit for the first canter.



Rocking Horse Offers

FOR readers who like to work from full-size plans and to have a ready source of supply for the rocking horse accessories, we have, in conjunction with The Rocking Horse Shop, arranged special offers on two of their horse designs (including the one featured in the article) as well as for the book written by Anthony Dew.

HORSE 1

Traditional carved rocking horse (medium size as featured).

Plan No. DEW 109

Actual size drawings; 8-page instruction leaflet; 34 colour pictures showing progressive sequence of carving and construction.

Standard accessory set:

Pair of glass eyes; leather saddle (style A) with saddlecloths and stirrup leathers; buckle-on bridle; nickel plated stirrup irons; leather chest and tail strap; cream/white simulated horsehair mane and tail; rosette; dapping pads; pack of dome and fancy nails; giant staples; steel swing irons; steel swing iron brackets and bearing strips; all fixing bolts, washers and split pins; four brass 'bowler hats' and brass screws.

Deluxe accessory kit

As above but with traditional saddle (style B as shown in the picture); real horsehair tail and mane; brass swing iron brackets and brass stirrups.

OFFER A Plan 109 plus standard accessory set £96 plus £3 p&p.

OFFER B Plan 109 plus de luxe accessory set £121 plus £3 p&p.

HORSE 2

The ' Swinger ' rocking horse (no carving involved and suitable for children up to age six).

Plan No. DEW 116

Actual size drawings; 4-page instruction leaflet; colour picture.

Accessory set:

Steel swing irons and bearing strips; brass swing iron brackets; all fixing bolts, screws, washers and split pins; four brass 'bowler hats' and brass screws; cream/white simulated hair tail; leather strapping and brass screws for bridle and reins; glass eyes.

OFFER C Plan 116 plus accessory set £29.95 plus £1.50 p&p.

BOOK

Making Rocking Horses

The specialist book by Anthony Dew containing detailed instructions for projects ranging from a hobby horse to bow rockers and swingers. 128 pages with black and white illustrations.

OFFER D Making Rocking Horses £10.95 p&p free.

How to order

To obtain your rocking horse plan and accessories or book, simply complete the order form in BLOCK CAPITALS or use a plain sheet of paper containing all the order information. Send it to us together with a postal order or cheque (name and address on the back please) made payable to: The Rocking Horse Shop.

Catalogues detailing all items supplied by The Rocking Horse Shop are available from: The Rocking Horse Shop, Holme upon Spalding Moor, York. (Please send a stamped and addressed envelope). Details of overseas posting charges are also available on request.



SEND TO: Practical Woodworking/Rocking Horse Offer, King's Reach Tower, Stamford Street, London SE1 9LS

Orders are normally despatched within 28 days. Closing date of the offer is 8th March, 1991. Please note that the offer applies to the UK only

Practical Woodworking ROCKING HORSE OFFER

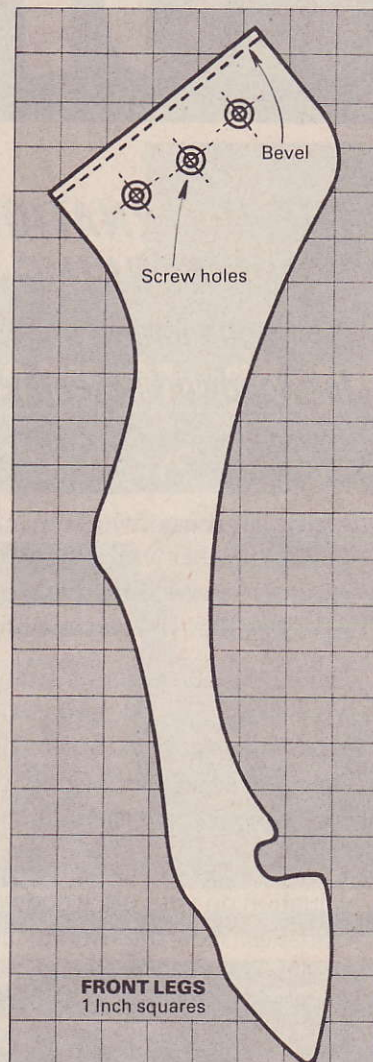
	Price	Quantity	Cost
Offer A	£99.00		
Offer B	£124.00		
Offer C	£31.45		
Offer D	£10.95		
Total			

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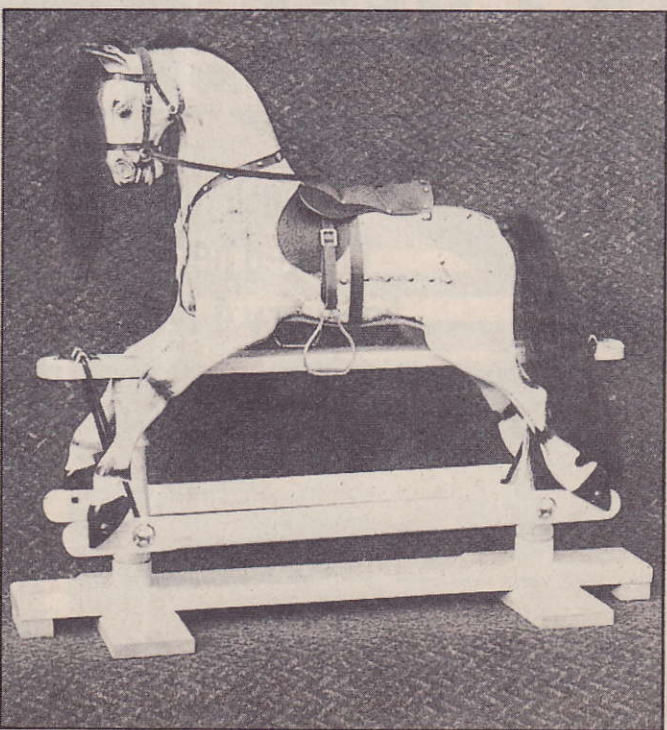
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Making The Rocking Horse



Rocking horse error

WE apologize to any readers who may have been slightly puzzled by the anatomy of the rocking horse which was featured in last month's issue (January 1991). Due to an unfortunate error, the plans showed the rocking horse to have four rear legs – the wrong shape being given for the front legs. The correct shape for the front leg is given here on a background of squares representing 1in. so that you can scale up the shape to give the full-size component.



Kity K704 combination circular saw, planer thicknesser, spindle moulder, morticer and sanders, plus all tooling and new cutters, hardly used, buyer collects £700 ono. Orteilguil bench-mounted mitre guillotine, plus spare blades, £150 ono. Buyer collects. Ms S. Morris, Oxford House, Derbyshire Street, Bethnal Green, London E2. Tel: 071 739 9001 (office hours).

Kity grinder, plane sharpener to fit machine table, mint condition, £75. Also Kity single drive 1½ Hp, motor plus switch, £50. Mr. Bellhouse, 2 Scotland Close, Horsforth LS18 5SG. Tel: 0532 583942.

Clarke 10in. saw table, rise and fall, as new, £130. Black and Decker chop saw, £85. Mr. Hunt, 8 Codenham Green, Basildon, Essex SS16 5DT. Tel: 0268 531839.

Kity Bestcombi five function, unused, extension tables, TCT blade, adjustable groovers, spindle block, knives, bobbin sander, four mortise cutters tenoning table, planer knives £200. P. Richmond, 1 Cwst Ty Yydd, Maes Yr Awez, Radyr, Cardiff CF4 8BD. Tel. Cardiff 842727.

Coronet Major CMB 600 lathe very good condition, many accessories and turning tools £550. Mr. K. Ratib, 38 Wollaton Hall Drive, Nottingham NG8 1AF. Tel: 0602 786417.

WANTED

Set of woodcarving chisels. Mr. Whitehouse, Robin Hill, Atch Lench, Evesham WR11 5SP. Tel: Evesham 870734.

Small bench type of metal working lathe, about 4in. swing, 2ft bed. Mr. E. Lee, No. 12 Garth Road, Didcot, Oxon OX11 7JG. Tel: 0235 812434 between 12 noon and 2pm.

Desperately needed Sears router lathe for college project, any reasonable price paid. Also Elu dovetail kit. Mr. A. Murphy, 19 Greystone Road, Liverpool. L14 6UD. Tel: 051 489 1394.

Sears Router Crafter. Mr. R.T. Postlewhite, 10 Morningside Road, Lytham, Lytham-St-Annes, Lancs. FY8 5BA. Tel: 0253 734357.

Sears Router Crafter. Mr. A.D. Roman, 241 Malden Road, New Malden, Surrey KT3 6AR. Tel: 081 942 2805.

Floor stand for Hegner Multicut fret saw. Mrs. Mary Frampton, Maes yr Haf, Dwyran, Llanfair P.G. Gwynedd LL61 6YB. Tel: 0248 430636.

Thicknesser for Coronet 4in. planer. Mr. B. Parkin, 5 Mackender Court, Ashby, Scunthorpe DN16 2JW. Tel: 0724 845098.

Sears Router Crafter. Mr. B. Powell, Aqua Star, Crossway, Chesham, Bucks. HP5 3LW. Tel: 049478 4547.

DeWalt radial arm saw, DW1251/ DW1501 must be in good condition. Mr. M.O. Chown, Hazden, Shepherds Close, Odstock, Salisbury, Wilts. SP5 4JG. Tel: 0722 28852.

K5 slot mortiser, ring fence, sliding carriage, any extra tooling, cutters, etc. Mr. B. Beresford, 2 Bowler Drive, Kilburn, Derbyshire DE50JR. Tel: Derby 881793.

Bandsaw minimum 6in. cut, DeWalt 3401 or similar. Also sawbench, minimum 12in. blade, Elecktra Scheppach, Lutz, etc, must be good condition. Mr. P. Ward, 74 Mellish Road, Langold, Worksop, Notts. S81 9PH. Tel: 0909 732681.

Items of tooling and attachments, also handbook for Coronet Major (red model). Mr. H. Naylor, 1 Hyde Gardens, Langtoft, Peterborough PE6 9LT. Tel: 0778 342875.

Woodworker annuals of 1983 and 1984. Mr. B.J. Dick, 38 Covert Mead, Handcross, West Sussex. RH17 6DP. Tel: 0444 400436.

7in. planer for Coronet Major, also belt sander, auxiliary table, any other bits and pieces. Mr. M. Gardiner, Carters Cottage, Wellington, Nr Hereford HR4 8A. Tel: 0432 71415.

Wanted *Practical Woodworking* magazine issue September 1970. Mr. D.S.J. Butcher, Greenways, Logan Road, Pukekohe RD2. New Zealand.

Wadkin or similar cast iron frame bandsaw 9in. to 12in. depth of cut. Mr. S. Shone, 93 Langwirth Road, Hillstown, Chesterfield, Derbyshire S44 6LY. Tel: 0246 822688.

Triton workbench with circular saw and router table, also DeWalt radial arm saw. Mr. F. Newman, 64 Portsmouth Road, Lee on Solent, Hants. PO13 9AG. Tel: 0705 550821.

SWAP

New boxed Black and Decker HD1250 router with 17 HSS bits, straight and circular guide, also Flexitool spring clamp unit and fittings. Guitar body design. Wanted, 7in. rise and fall saw bench. Mr. V. Bond, 7 Wrexham Road, Romford, Essex. RM3 7YX. Tel: 04023 47775.

Belle Mk 3 electric concrete mixer, little used, value £90, for chuck to fit Myford ML8, cash adjustment. Mr. E.W. Hunt, 66 Townhead Road, Dore, Sheffield, S17 3GA. Tel: 0742 361322.

Kity 636 planer thicknesser 10 by 6in., spare blades, immaculate condition, used once, for Coronet Consort or Minor or Minorette saw, planer thicknesser, etc. Mr. R. Stephenson, 53 Glynfellis, Leam Lang Estate, Gateshead, Tyne & Wear NE10 8RH. Tel: 438 3077.

Rules of entry

1. When filling in the coupon please print clearly in block letters.
2. There is a maximum of 24 words allowed per announcement plus your name and address which must be included in the section of the box provided.
3. Announcements without a name and address or telephone number will not be published.
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- between readers as a result of such published announcements.
6. Advertisements will be placed in the next available issue, and our printing schedule means that there is normally a delay of 2 to 3 months. However, we cannot guarantee insertion in any particular issue.
7. All trade, business and other advertisements which fall outside this category or where a specific issue is required must be directed to our Classified Advertisement Department (Tel: 01-261 5115). Rates are given in the Classified Advertisement section of the magazine.
8. We reserve the right to refuse advertisements at any time for good reason.