

THE SCOUTER'S BOOKS – No.7

# HANDICRAFTS FOR ALL

BY  
MARTYN LAMB

*Illustrated by the Author*

*“Encourage him to believe in himself  
and take up hobbles and handicrafts”*

B.-P. in “Scouting for Boys”

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Editor's Note:

The reader is reminded that these texts have been written a long time ago. Consequently, they may use some terms or express sentiments which were current at the time, regardless of what we may think of them at the beginning of the 21<sup>st</sup> century. For reasons of historical accuracy they have been preserved in their original form.

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## INTRODUCTION

“What shall I do, Akela?” – “What shall I make. Skip?”

In presenting this little book there is no claim to originality, but it does bring together some ideas that have been well tried out by Cubs and Scouts (and Guides!) and put into production will bring hours of pleasure to those who use them. It also gives the answers to the above questions.

From the outset, it was my intention to devote one page to a craft, clearly illustrated, and to give as much information as space would allow, but how difficult it is to condense the script without losing any of its vital details. As you go through the pages you will discover that the handicrafts become more difficult, and where it is an established craft you will find a reference to a pamphlet or book which will give you more detailed information. For instance, there is no attempt to describe the art of weaving, but rather to overcome the first obstacle – to find a loom!

This endeavour then is an appetiser, and if it is the means of introducing the fun of handicrafts to only one boy in the Group, or help to discover some hidden ability in a handicapped boy – it has been worthwhile.

M.H.L.

### PORTABLE CLOTHES LINE

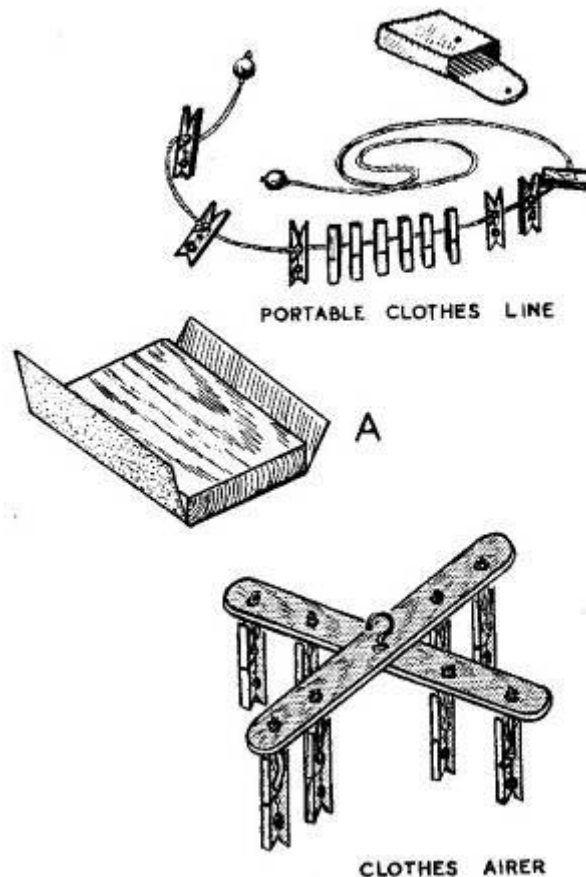
The only materials required for this simple gadget is a length of blind cord, four or five yards long, and twelve spring clothes pegs. Tie a large knot, or a wooden bead is better, at one end of the cord and thread the other end through the hole made by the spring of each peg and tie another wooden bead on the end used for threading. The line can be used indoors or out, and when not in use can be stored away in a little bag which can be made of American cloth, plastic or leather.

### SIMPLE CLOTHES AIRER

You will need a 3 ft. wooden lath, 5 ft. of blind cord, 8 spring pegs and a dresser-hook. Plane the lath smooth, (or you may be able to obtain one already prepared from the wood-yard or builders' merchant), or quite a smooth finish can be obtained by using two grades of sand or glass paper one after the other. Use first a paper marked "Strong 2" and follow with one marked "Medium 2" or No. 1. Divide the normal size sheet of glass-paper, 12" by 10", into four pieces 6" by 5" and place one piece around a wooden block about 4" by 5" for use (see sketch A).

Cut the lath in half and smooth the edges, then drill eight holes large enough to take two strands of the cord. Cut the blind cord into lengths of 7 to 8 inches and thread one end through the hole made by the spring in the peg. Push both ends through the hole in the wooden lath and tie a knot in the ends of the cord to prevent the cord pulling out. The sketch on the opposite page should help with the assembly.

A coat of paint or enamel will give the airer quite a professional touch!



### INDICATOR BOARD

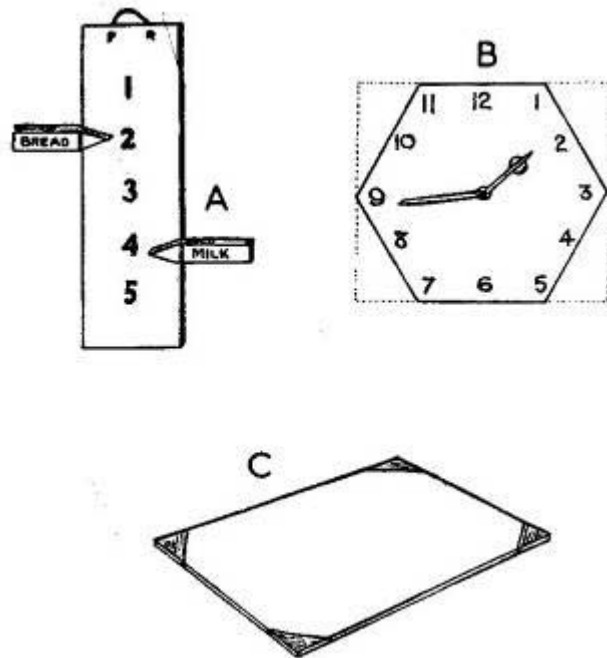
This is a very useful gadget and so easily made. It is an adjustable indicator to show the tradespeople how much bread and milk is required. Take a piece of cardboard 9" by 4", two spring clothes-pegs and some numbers 1-5 from a calendar. Trim the numbers and stick them in order down the centre of the cardboard (sketch A). Now shape one side of each peg to a point with a saw, and mark one peg "BREAD" and the other "MILK," remembering that they will face opposite ways! Thread a piece of string through two holes at the top of the cardboard for hanging. A much more permanent job for using outside can be made of plywood or hardboard and the numbers painted on. A coat of varnish will make it water-proof.

### CUB CLOCK

A piece of stiff cardboard 8" by 10", numbers 1-12 from an old calendar, and a paper fastener. A circular clock face is easier to make but the shape illustrated (sketch B) stands up much more firmly. The hands may be painted or covered with gummed coloured paper and are made from the waste cardboard cut away.

### BLOTTER

The usual size of blotting paper sold in the shops is 22½" by 17½" and as this is used folded, a piece of cardboard 17½" by 11¼" will be required, four pieces of book-binding linen (samples are sometimes available), and sufficient brown paper or wall paper to cover the back. Lay the linen across the corners of the cardboard and stick the under-side on to the back of the cardboard, allowing room for the blotting paper. A good adhesive to use is Samson Cement (Butterfly Brand). Finally paste on the backing to cover the ends of the linen, and if you choose your linen and blotting paper to match the finished result is quite attractive (sketch C).



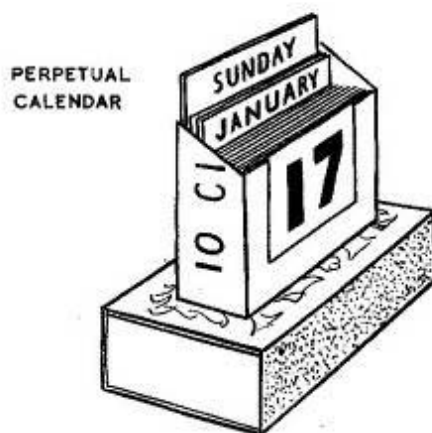
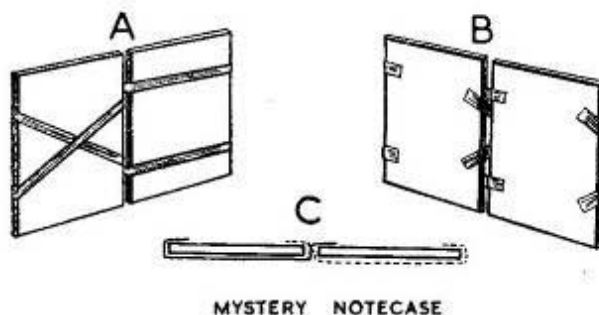
### THE MYSTERY NOTECASE

The two pieces of cardboard must be of equal size, but if it's £1 notes you have – then the cardboard must be not less than 6¼" by 3¼", and the only other material you need is 24 inches of narrow tape or ribbon. Cut the tape into two lengths of 5" and two of 7" long. The end of one piece of tape is stuck on the back of one of the cards. The tape is taken around the front of the card and the other end is stuck on the back of the opposite card. The illustrations will help you to sort this out. The front view should look like sketch A, and the back view like sketch B. Sketch C shows more clearly how the tapes are fixed. The backs of the cards should be covered, using coloured paper, wallpaper, plastic or leather.

### PERPETUAL CALENDAR

Collect together an empty match-box, the outside of a (10) cigarette packet, a sheet of numbers up to 31 from an old calendar, the printed months of the year and days of the week from an old desk diary, and a piece of stiffish cardboard approximately 7" by 8". The thickness of the cardboard is important for 21 thicknesses must not be much more than half-an-inch – you will see why later. The sketch on the opposite page shows you how to make this novel calendar, and if the cigarette packet and match-box are painted or covered with coloured paper the appearance is much improved.

Two cards 2" by 1½" are required for the days of the week, and three pieces of card 1¾" by 1½" for the months, for not only is the back and front of the card used but the top and bottom also. Sixteen cards 1¼" by 1½" are necessary for the numbers but check to see that 2 is behind 1, and 4 behind 3, and so on. See that the flap of the cigarette packet is stuck inside before attaching it to the match-box.

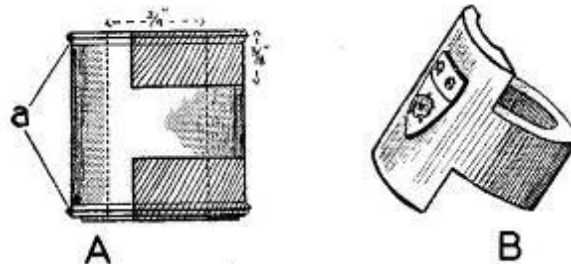


### COTTON REEL WOGGLES

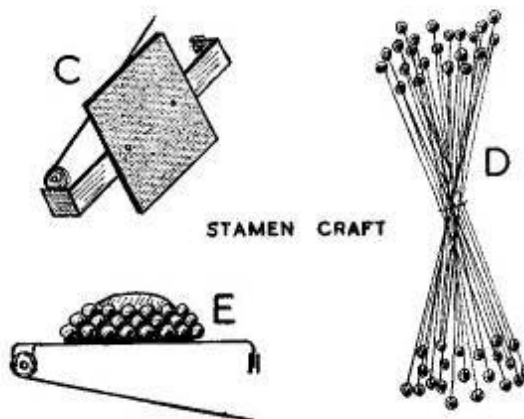
Have you ever tried making a woggle out of a "Sylko" cotton-reel? The first thing to do is to make the hole bigger,  $\frac{3}{4}$ " is a good size, and a  $\frac{3}{4}$ " twist drill is the best tool to use, but it can be done with a woodworker's bit quite satisfactorily if the existing hole is first plugged with wood. Then with a fine-toothed saw, cut into the reel four times, removing those areas shown shaded in the sketch A, and with a chisel remove the remaining rim (a). Smooth with glass paper what is left of the reel and carve into the front of the woggle the design of your choice. The design shown in the sketch B is a county badge and the background has been filed away to bring out the shield in relief. Colour can be applied by using poster paints, and when quite dry a coat of varnish makes the job complete.

### STAMEN CRAFT

This is not considered a craft by some, but it is good fun and very remunerative when it comes to finding something to sell at the Church Bazaar! For making a brooch, you will need a brooch back, or mount (sketch C) which can be purchased in various shapes and sizes for a few coppers from most Handicraft shops, a small tin of Barbola Paste (Winsor & Newton), a tube of Samson cement (butterfly Brand) or "Newstick" Liquid glue and a bundle or two of "Stamens" which are usually sold in bundles of 6 dozen of different colours, shapes and sizes with a stamen at each end as shown in sketch D. Roll some Barbola paste into a small ball and cement onto the brooch mount. Cut off a supply of stamens leaving a little less than  $\frac{1}{4}$ " of "stalk" on each. 50-60 of the smaller ones are required for a brooch on a  $\frac{3}{4}$ " circular mount. Insert the stamens into the Barbola paste after putting a little cement or glue on to each stalk, starting from the bottom as shown in the unfinished brooch in sketch E. Leave the brooch aside for a day or two until the paste has set hard.



COTTON REEL WOGGLE



STAMEN CRAFT

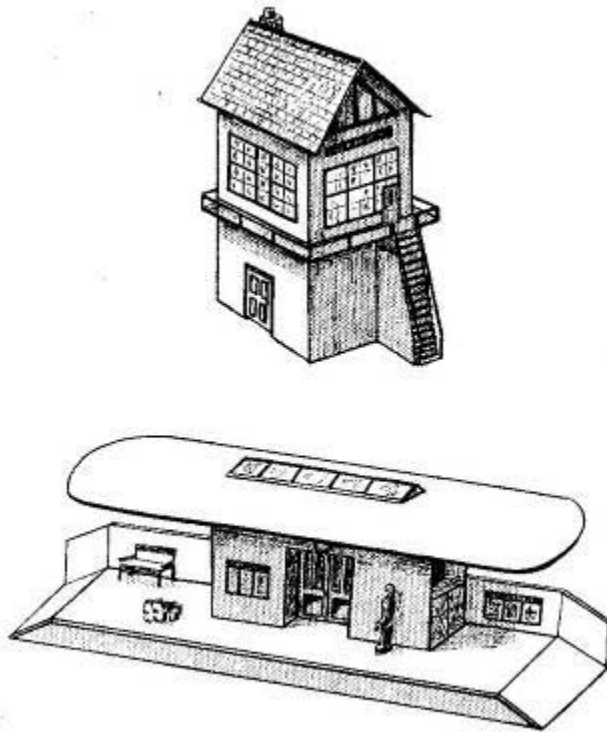
### THE SIGNAL BOX

The signal box and the station below were constructed for the small scale railway and the sizes quoted are for the 00 trains.

For the signal box you need a piece of wood 4" long of 2" by 2" planed, or prepared. Cut the shape of the roof using a mitre-box and cover the sloping end grain with cardboard or very thin plywood, allowing a little overlap, fastening it into place with cement or glue. Cut the shapes for the windows from cardboard or thin plywood and stick these into place. Next make a shallow saw cut across two or three sides of the wood just below the windows, and cut a piece of cardboard about  $\frac{1}{2}$ " wide and glue this into the saw-cuts to make the balcony or platform. Cut a wedge-shaped piece of  $\frac{3}{8}$ " wood for the stairway and with a flat file, cut the steps. The handrails and posts can be made of match sticks and the chimney is a piece of dowel-rod. Colour the model with poster paints and, when quite dry, give a coat of clear varnish. Use a pale blue for the "glass" and make white streaks across each "pane." Or you can purchase sheets of printed "Dolls House" paper of brick walls and tiled roofs, and if you remember that an average modern house is about 50 or 60 bricks, or courses, high, it will help you to buy the correct size.

### THE RAILWAY STATION

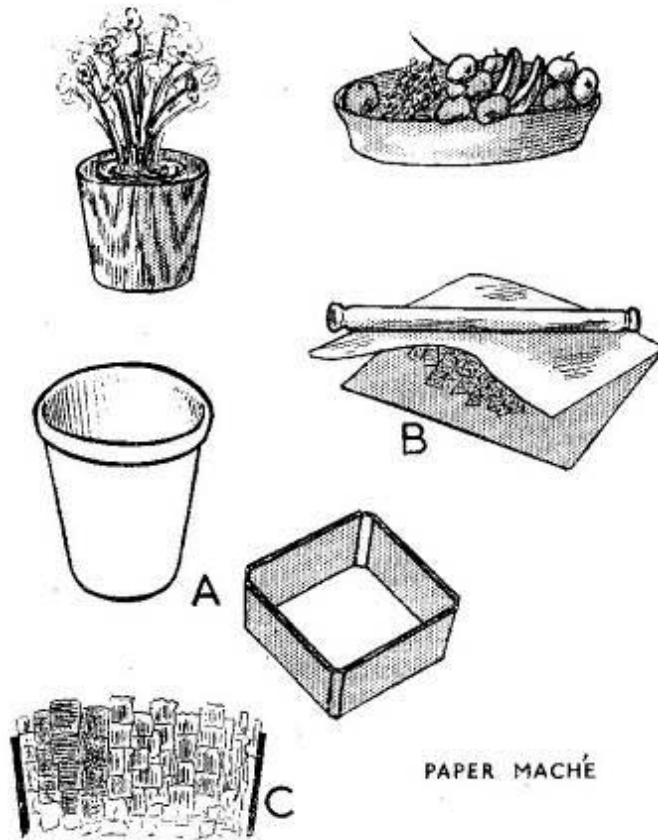
For this you will need a piece of wood 2" by  $\frac{3}{4}$ " about 12" long for the platform itself. The whole station should not be more than 3" high. The roof was the bottom of a date box and the fanlight a short length of corner moulding. The booking office can be made of strong cardboard, or a piece of wood with the doors and windows painted on. The clock face and the notice boards are cut from card and coloured. Some luggage, a porter's trolley, automatic machines and seats can be bought from the Model shop but it is much more fun to make your own.



PAPIER-MACHE

Speaking generally, there are two ways of working with papier-mache, the first is to stick together layer upon layer of small pieces of water-soaked paper, and the second is to pulp the paper and mould it into shape (see page 18).

For the first method, *tear* up (not cut) pieces of newspaper into about 2" squares and soak them in water for at least an hour, keeping them flat. During this time the paste can be made from flour or one of the cold-water kinds now available. For the mould you will need something that is larger at the top than the bottom (A); a flower-pot is a good shape for the beginner. Remove the paper from the water and squeeze out the surplus water by placing it between some blotting paper and applying pressure (sketch B). Grease the mould inside with vaseline, and completely cover the inside of the mould with pieces of damp paper. Do not let them overlap too much. Brush some paste over this layer of paper and put on another layer. Go on repeating this until about eight layers have been put into place. To give your work an even thickness, it is quite a good idea to see that the lines of print run vertically and horizontally alternately (sketch C). It will take days for the work to dry at room temperature, but if you place it in a slow oven, it will only take hours. When you see that the work is beginning to dry, trim the edges with a pair of scissors and remove it gently from the mould. Stick down any pieces of paper on the outside that may be lifting, and give the whole a coat of paste and put it back in the oven. When quite dry, glass-paper the surface and give it an undercoat of flat paint and finally a coat of enamel, or Matsine.

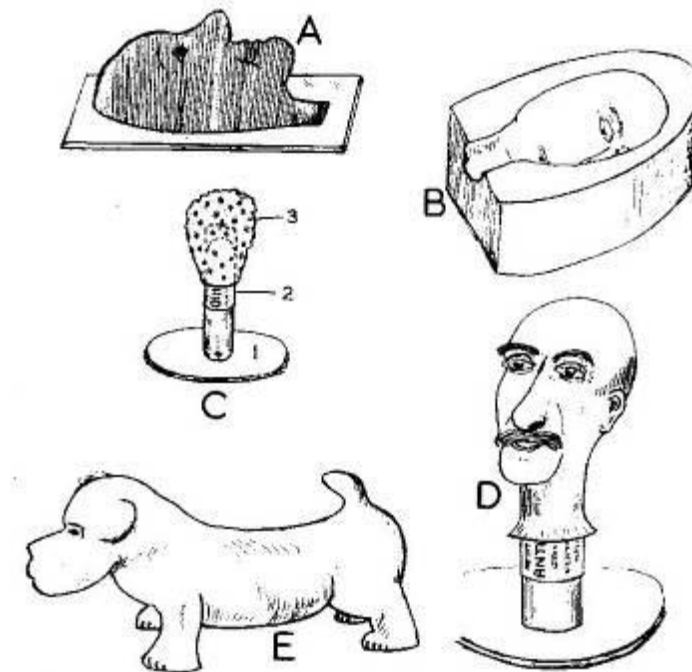


### PUPPET HEADS FROM PAPIER-MACHE

First make a model of the front of the head in plasticine or modelling clay, place it upon a sheet of glass (sketch A) and make a plaster cast of it, seeing that the cardboard surround is deep enough to well cover the nose. When the cast is quite dry (sketch B), use this as the mould and proceed as described on page 8, using pieces of paper a little bigger than a postage stamp. The back of the head can then be made by the same method and the two halves joined together. This gives you a light-weight head very suitable for a glove-puppet.

*Another method* is to mould the head from pulped paper which is prepared in this way: Take four large sheets of newspaper and tear into as many small pieces as possible and leave to soak in water for two or three days. Beat up and pound the paper with a thick stick until a pulp is produced. Squeeze out the water and place the grey mass on to a washable surface and for every 10 parts of pulp add 1 part of Whiting or dry distemper; work this well in and then add the made-up paste until the mass is sticky for modelling. Lanchester in his book\* uses a natty stand which can be made of 4" of broom handle nailed to an old tin lid (sketch C1), on which is placed a roll of pasted newspaper 24" by 3", previously prepared and dried (sketch C2). After one end of this tube is folded down and brushed over with size, a lump of the prepared pulp is moulded on it to look like a large match head. Holes are made with the point of a pencil and these foundations are allowed to dry in a slow oven (sketch C3). When moulding the head, put on small pieces at a time working the pulp into the holes or "key" with suitable tools which are dipped into liquid size from time to time. When the head is finished (sketch D), dry in a slow oven. Smooth with glasspaper and paint with several coats of flat white undercoat before attempting to colour it. Attractive models (sketch E) may also be made by building up on a wire frame.

*\*Hand Puppets and String Puppets (Dryad Press).*

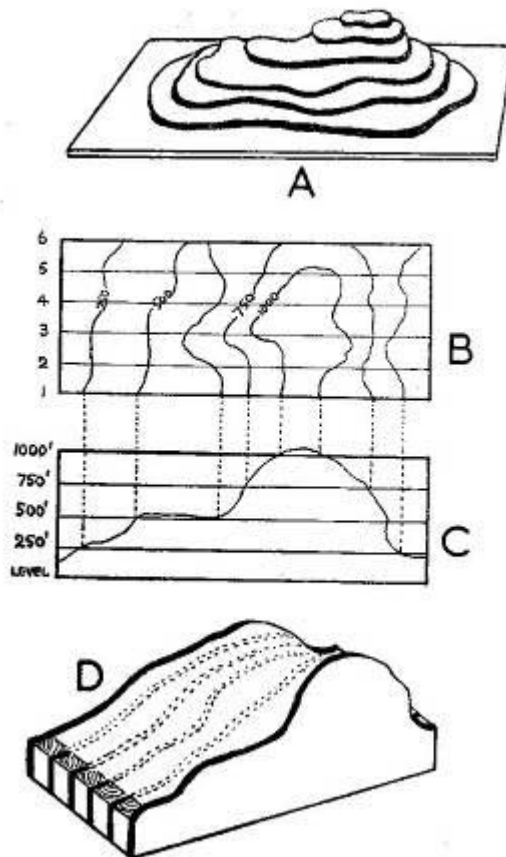


### MODELS FROM MAPS

You will need a large-scale map with the contours clearly marked, some tracing paper and oddments of thick cardboard or plywood and some papier-mache pulp as described on page 9.

For a start use only the 250' contours, the heavier lines on the Ordnance Survey maps, and beginning with the *lowest* trace two contours at a time. Transfer this on to the cardboard or plywood and cut round the larger of the two tracings. (The smaller tracing will show you where the next piece of plywood is to be fastened.) Glue and pin this to a baseboard and continue building up with each contour (sketch A). This is the foundation for the paper pulp which is moulded over this to give the model a natural appearance. Plaster of Paris may be used but it makes the model so heavy and it is inclined to crack when the model is moved. Once the pulp is dry it will take water colours quite well. It is possible to make a plaster cast of this model and using this as a mould, as described on page 9, very light and durable models can be made.

*Another method* is to cut pieces of plywood which are really cross-sections of the contours. Make a tracing of the contours and draw horizontal lines across it an equal distance apart (sketch B). Each line represents one section of cut plywood in the finished model. Underneath the tracing draw a series of parallel horizontal lines to represent the heights of the contours, and with this it is possible to draw the shape of each cross section (sketch C). Blocks of wood for spacing should be prepared corresponding in thickness to the intervals between the lines on your tracing. The blocks are then glued into position between the sections 1-6 making the foundation of the model complete (sketch D). With strips of previously prepared newspaper, described on page 8, stick into place five or six layers. After several days it can be coloured with paints.



### PEN AND INK CRAFT

You will need a suitable photograph on a matt surface paper, a mapping pen, waterproof Indian ink, a bottle of bleach (made with 30 grains of Pot. Iodide, 10 ozs. of water and 3 grains of Iodine), and some fling solution (made with 2 ozs. of hypo in 10 ounces of warm water). Ink in the drawing and when dry, immerse the "work of art" in the bleaching solution until the photograph has disappeared. Rinse in water and allow the print to remain in the fixing bath for 10 minutes, then wash thoroughly in running water, and it should be something like sketch A.

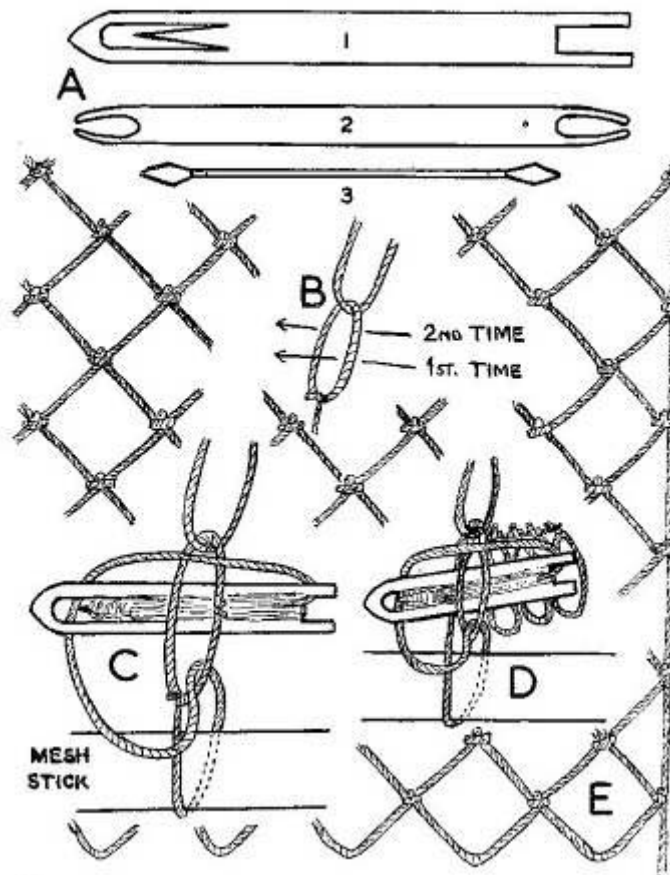
### FABRIC PRINTING

The patterns on the opposite page look very attractive in colour and it is all done with the ends of shaped sticks or lino blocks and fabric painting oil colour (Winsor & Newton). A box of assorted sticks (sketch B) can be purchased (Dryads) but they are not difficult to make from cotton reels. The fabric must be washed before printing to remove the "loading." Mix with the oil colour *a drop or two* of paraffin and spread it on a felt pad until the pad is saturated. The end of the stick is pressed on to this and transferred to the fabric which should be stretched over a piece of thick felt. Lino blocks (sketch C) can also be used for fabric printing provided they are mounted on wood. The single oak leaf pattern is a simple one to do, but the all-over-pattern needs quite a bit of skill to see that each print coincides with the one before. The oil colour is mixed on a sheet of glass and rolled out thinly with a rubber roller large enough to cover the pattern, and the block is then "inked" with the roller. Press the block face downwards upon the fabric and apply pressure, particularly at the corners. It will take several days for the fabric to dry, but after two weeks, and given reasonable treatment, fabric printed with Wintex Colours will stand up well to washing.



## NETTING

You need a special shuttle 9" by 1/4", which you can make with plywood, a ball of macrame string, and a mesh stick, but a wooden ruler will do. The size of shuttle you use depends on the size of mesh you intend to make (sketch A). Once you have mastered the movements required you can make shopping bags, ball nets, table tennis nets, fruit nets and even a hammock! To make a net, this is what you do. Load the shuttle with string, and if you are using one like that shown at A1, wind the string up round the tongue and down the same side, then up the other side and down again, keeping it tight. With a length of string about 18" long make a loop and hang it over a hook. Now make another loop with about 12", but before joining the ends, pass one end through the first bigger loop. The illustration B, with the string very much enlarged, makes this clear. Tie the end of the string on the shuttle to this second loop and make your first row of loops like this: hold the mesh stick, or ruler, horizontally with the finger and thumb of the left hand just underneath the knot you have just made. With the right hand bring the loaded shuttle down over the ruler, underneath the ruler and up through the smaller of the two loops, pull tight and hold the string against the ruler with the left thumb. Make a loop of string to the left of the work and take the shuttle over and *behind* the smaller loop and in front of the loop you have just made (sketch C); pull tight releasing the string under the thumb carefully and your first knot is tied. Repeat all this until seven or eight stitches are on the ruler. Pull the stitches off the mesh stick, or ruler, turn the work over and start again working from left to right. Work into this row of loops in the same way in which you cast on, doing one knot into each loop (sketch D). Turn the work over at the end of each row and after six or seven rows it should be something like E.

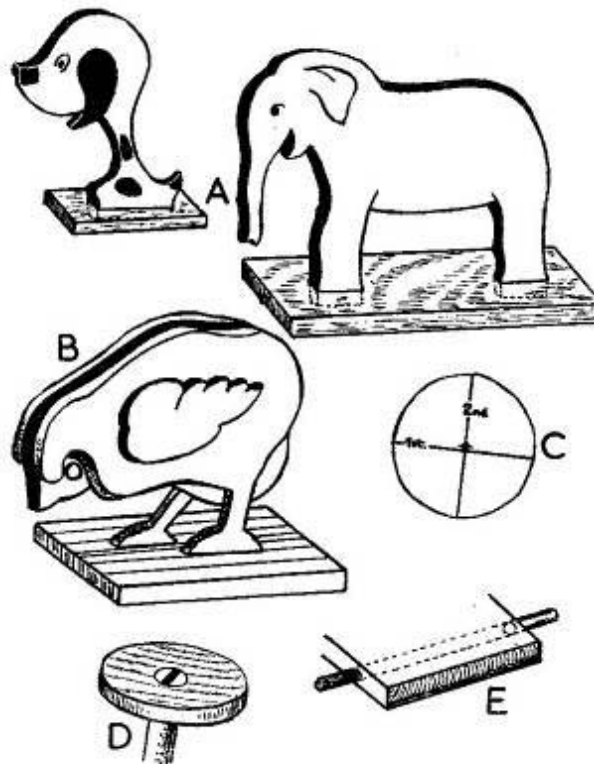


### TOYS AND WHEELS

The toys you see illustrated on the opposite page will stand up to a good deal of knocking about. The animals (sketch A) are cut from  $\frac{3}{8}$ " plywood with a fret-saw, or a coping-saw, and the legs are left longer so that they can be glued into the base which is  $\frac{1}{2}$ " thick hard wood.

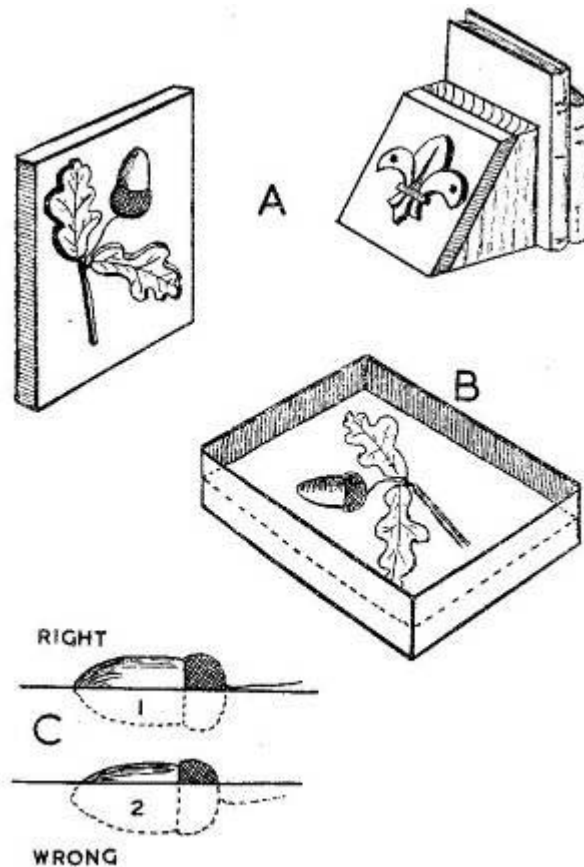
Glasspaper off the edges and give two coats of flat paint. Paint in the details with black paint and varnish when dry. Another method of making animals or birds is to build up the thickness with layers of plywood. Sketch B shows a chick made of five layers, the middle one being the thickest. Layers 2 and 4 carry the legs. Smooth the edges with a cabinet-maker's rasp, files and glasspaper and the result is most effective. The base is made up of strips of plywood glued together.

It is important when making nursery toys that the wheels be strong and firmly fixed. So many of the small wheels you buy have such small holes in them that it is a great temptation to use thin nails for the axles. Draughtsmen make very good wheels for small toys, but it is so important to drill the hole in the centre; to find the centre, draw a line across the greatest width of the wheel, divide in half, and draw a second line at right-angles through this point. Halve this *second* line for the centre (sketch C). The wider the wheel, the better the toy will keep upright, and cotton reels are excellent. It is sometimes possible to buy some wooden insulators from the Surplus Store: these cut in half make wonderful wheels. The holes are a bit big for screws, and the best way is to make an axle from hardwood dowel rod, fixing it to the wheels in the same way as a haft is fixed to an axe head (see sketch D). The axle can be fixed to the underside of the base with staples, pipe-clips, or two screw-eyes, but the firmest way is to drill a hole right through the base (sketch E). A washer between the wheel and the side of the base reduces wear.



### PLASTER PLAQUES

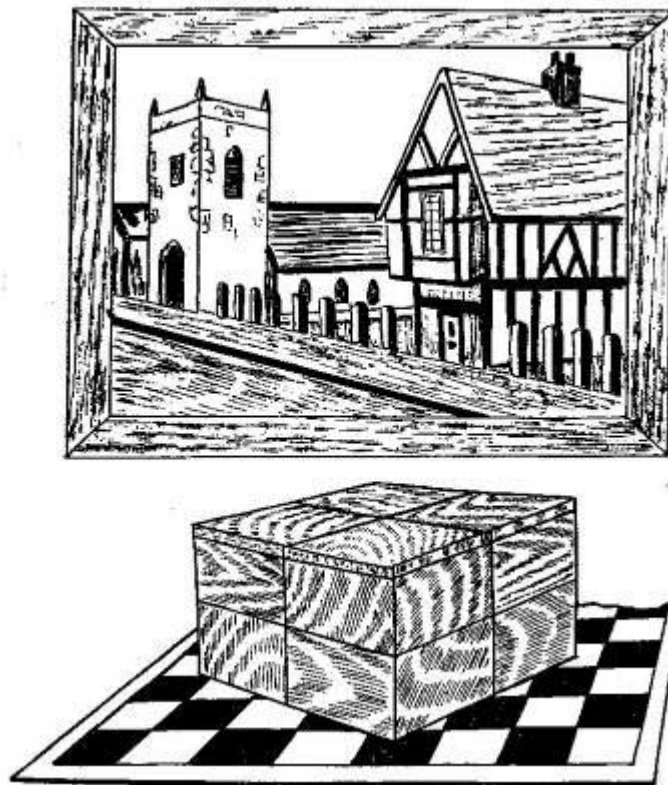
This is a change from the usual kind of plaster cast and if well done, make delightful wall plaques or book-ends (sketch A). The dental plaster of Paris, obtainable from the chemist, is the best and gives a very smooth surface for painting. Make a creamy mixture of plaster with water and pour into the lid of a child's shoe box until about half-full. Whilst the plaster is still fluid push into it – to the half-way mark (see sketch C1) – an acorn, or what have you, which has been lightly greased with vaseline, and then by each side of the acorn make impressions of a small oak leaf. When the plaster is set and dry, remove the acorn etc., from the plaster (although there is no need to leave them in the plaster once the impressions are made). You should have something like sketch B. Smear the first cast with warm vaseline or grease and also the cardboard, and pour into the lid some more plaster until the lid is full, inserting a loop of wire which will serve as a hook for hanging. Leave for about 15-20 minutes when you should be able to separate the two casts. With an old knife cut away some of the background of the second cast leaving the acorn and leaves in relief – you will be surprised how easy this is to do. When quite dry, paint with water colours and finish off with a coat of clear varnish. Rose hips, haws, elderberries and catkins and nuts can be done in this way, and even small fish among an imaginary background of water plants. The black and white illustrations opposite do not do the finished plaques justice, for they are really most colourful. You can delay the setting of plaster of Paris by mixing with size-water, and plaster casts can be polished if they are immersed in a strong solution of Borax which is gradually heated. When using plaster watch out for “undercuts” (sketch C2) which will prevent the second cast parting from the first.



### MARQUETRY

The supporters of the recent revival of this craft, an adaption of the old veneer and inlay work, however, seem to specialise in making pictures with the very many varieties of veneers available. To make a picture, you will need a good sharp knife (the Manchester craft knife supplied by "Atlas Handicrafts," or the Trix X-acto knife set. are excellent), a mounting board –  $\frac{1}{4}$  to  $\frac{1}{2}$  inch plywood is suitable, some cement or glue, and a selection of veneers. It is possible to purchase a Marquetry Set, but the most economical way is to buy a packet of veneers and experiment with these. Choose a simple design, one made up mainly of straight lines, and a mounting board large enough for your picture and a border. Transfer your design on to the mounting board with the aid of carbon paper, and when you have selected the piece of veneer you wish to use in a particular place, trace the shape on it and cut out on a sheet of glass or zinc. The experts recommend that all the pieces should be cut out first, kept together with gummed paper strip, and the whole picture glued into place when completed, but the following method produces quite good results. When you are satisfied that the newly cut piece fits well, run a thin line of Balsa wood cement around the edges and over the area on the mounting board, and place the veneer carefully into place pressing well down until fixed. Before sticking the adjoining piece into position clear away any surplus cement. Begin your picture at one edge and work away from that edge all the time. When the picture is complete trim up the edges, and border the picture with a suitable veneer mitring the corners. Rub down the whole work with glass paper to make the surface perfectly smooth and polish with a good wax polish.

Deal or white wood boxes can be covered with these veneers and a chess board made with sycamore and mahogany squares looks splendid.



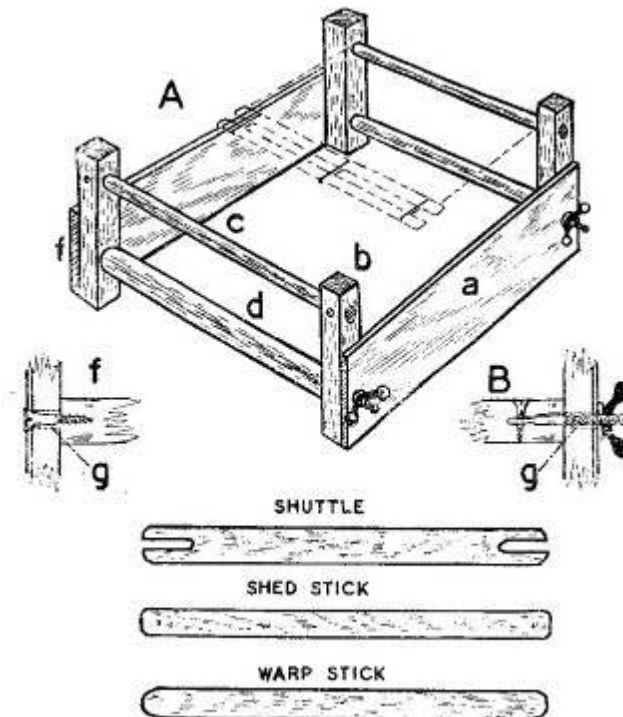
### MAKING A SIMPLE ROLLER HANDLOOM

The one described here was made from part of an old trousers press, a broom handle, a disused tent pole, some short lengths of hardwood and two pieces of unbleached calico 18" by 15".

Sketch A will show you how the loom is assembled, but the calico on one end is indicated as dotted lines in order not to complicate the illustration. The two side pieces (a) are 18" by about 5", the four uprights (b) are 1½" square oak 7" or 8" long, two 19" lengths of broom handle (c), and two 16" lengths of tent pole, at least 1½" diameter for the rollers (d) – (or pastry rolling-pins will do). Some device must be used to prevent the rollers moving during manipulation and the method used here was to utilise the screw and wing nuts from the trousers press. A hole was drilled into the end of each roller into which the butt end of the screw was pushed and held into place by a wood-screw (sketch B). All four wing nuts may be used in this way, but it is sufficient for the other end to be fixed with a 3" screw (f) – not screwed right home.

Now for the assembly; first screw the sides on to the uprights and drill holes to take the broom handle and the roller fixtures. (For the rollers, see that the holes are large enough to allow the metal screws to rotate (g) and at least 2" from the base of the upright). You can glue and pin the broom handle into the uprights, but if they are held into position with screws, the loom can be dismantled after use for easier storage.

A hem, wide enough to take a warp stick, was made on one of the *shorter* ends of each piece of calico and the other end was attached to each roller leaving a clearance of ½" on each side. A warp stick was slid into each hem and the calico was pierced in three places to take pieces of string long enough to tie round a second warp stick an inch or so away (see sketch A). You will also need a 15" heddle, a threading hook (Dryads or "Atlas"), a shuttle for each colour wool used, two shed sticks and a dozen or so warp sticks. The last three items, all 15" long (as illustrated), are quite cheap to buy or can be made of thin plywood or laths.



### PIONEERING MODELS

The scale of  $\frac{1}{2}$ " to 1' is quite a workable size, and must be maintained throughout. You will need a supply of straight twigs not larger than  $\frac{1}{4}$ " at the biggest end., some string and twine (remembering that string  $\frac{1}{24}$ " across is equal to a 3" rope!), some scraps of Balsa wood and a tube of cement, a baseboard  $\frac{1}{2}$ " thick, and some  $\frac{1}{16}$ " dowel rod. It is better to dry the twigs before use and one way to do this is to tie them into a tight bundle and allow them to stand upright in the warm (airing cupboard is ideal!). Natural Macrame twine is suitable for hauling and guy lines, whilst the thin twine sold at Model shops for ships rigging is excellent for lashings. Small pulley blocks are now available, but sketch B shows you how they can be made from bits of Balsa wood with a piece of dowling as a "fixed pulley." Model Scout staffs can be made from 3" lengths of  $\frac{1}{16}$ " dowling; dip them in a weak solution of Indian ink, and when dry, make the familiar marks in them every  $\frac{1}{2}$ " with a small triangular file.

You will find it easier to fix the uprights of your model into holes in the baseboard before attempting any lashing, and clamping the baseboard to the table helps enormously. A pair of forceps are invaluable. To finish off a lashing, stick the end of the twine on to the spar between the turns of the clove hitch (sketch C). A little Balsa wood cement rolled into the ends of the twine or string prevents fraying. Correct knots and lashings should be used throughout, although you will find the clove hitch easier than the lever hitch when making miniature rope-ladders.

The effect of grass can be produced by sprinkling the glued surface of the baseboard with dyed sawdust, or dyed flock on wet paint, or painted glass paper (Strong 2).

To keep the "ropes" taut and to give the effect of the correct specific gravity, pieces of lead sheeting should be used as planks in chair seats.

