

September 13th. 1944

Price Twopence

Vol. 98. No. 2552

Waterline Model of The QUEEN MARY

UR model makers this week have the necessary patterns and details for making an Slin. long model of that giant pre-war liner the "Queen Mary" and we show here what this looks like at sea. Its graceful lines and clean-cut superstructure and its three majestic All the minute and funnels. intricate detail of such a liner cannot be introduced, of course, into a model of the size suggested here, but nevertheless with patience and skill an excellent reproduction can be made.

Patterns

We have a whole page (cover iii) with the full-size diagrams of the main structure of the model. This, together with the side view, plan, section and perspective detail should simplify the making of the ship.

It will no doubt be asked at once "is it a floating model, or purely a show model?"

The reply may be "both" Of course we really intend it as a show model, to be finished in the hest style possible and to be stood upon a suitable stand.

If a floating model is wanted, then the ship structure will have to be modified. For instance the 'depth of hull itself will have to be slightly deepened, hollowed out, and weighted accurately to get the necessary buoyancy and finished balance.

As we are treating with a "show" model we will therefore pass over a further detailed description of work for the floating model. The work in making the hull will first be undertaken, and we draw attention therefore to parts A and B on cover iii of the full-size diagrams.

Piece A is in. thick, cut to the outline shown with the fretsaw. To this piece, piece B of 3/16in. thick stuff will be glued. Now some care must be taken to get the correct shaping of the keel and the hull, and this may be simplified by using the three templates shown on the page of diagrams.

Full Parts

Trace off accurately the three shapes shown, transfer them to card and cut round with scissors. Next draw lines across the flat top of the hull pieces lately glued together (as shown at 1, 2 and 3) and then commence paring away the wood in small fine layers until the rounded hull falls into shape.

At the line marked 2, test the shaping with No. 2 template. This profile will actually be the same throughout from line 2 to within about 2½ ins. from the stern end of the hull.

Then, taking up template No. 1, pare away the bow wood until this fits, and proceed in the same way with template No. 3 at the stern. Cut back for the keel and rudder.

> Completed model is 8¹/₂ ins. long. Patterns on Cover iii

185

to the shape shown on the side view of the ship, Fig. 1.

If a piece of satin-walnut can be found from which to make the hull so much the better, as this wood works nicely with knife or chisel and glasspaper.

When the hull has been shaped and each side tested and made symmetrical Piece F, representing the prome-nade deck, will be of $\frac{1}{2}$ in. wood, with piece G, above it, of $\frac{1}{2}$ in. stuff. The bridge piece H, is of $\frac{1}{2}$ in. wood also, glued on according to the dotted lines. Overlays K and L are simply cut from thin wood and stuck on as shown.

The sides to the promenade deck



Figs. 1 and 2-Section and plan showing position of all parts in place

with the templates, the remainder of the work, consisting of the superstructure of the model will be found to be fairly simple. Piece C is cut fron 3/16in. wood and glued to B according to the dotted lines, the

CHIEF FEATURES OF THE QUEEN MARY.

- Overall length, 1,018 feet. Beam (width) 118 feet.
- Depth (from keel to masthead) 234 feet.

Diameter of (larger funnels 30 feet. Number of propellers 4 each weighing 35 tons.

Number of peace-time passengers 2.000.

Number of normal crew 1,050.

edges being carefully cleaned off

with fine glasspaper first. Next, piece D, which is of kin. wood or even less in thickness. Glue D to position shown, making its back shaped edge fit accurately to piece C. The small piece E, representing the peak at the bow, will be cut from in. stuff and glued on. A thin piece of card cut to the shape shown in the detail of the bow in Fig. 4 will afterwards be angled up and glued round.

" V.C." Work box-(Cortinued from opposite page)

screw holes with a fine bradawl through the holes in the hinges. The hinges can now be re-screwed to the box.

From the half of the second panel of fretwood left, cut a ring to size, Fig. 3, A. Keep the centre disc, this will be wanted later. There will be a small piece of wood left from the first panel also.

From this cut a bit 4ins. long and. cut one side of it to a curve of the same diameter as the ring, to fit against it, thus making an extension

will be formed from card. Cut the two strips M from the pattern sheet and paste them down to stout card. Afterwards cut them round to the outline with scissors.

The two strips finally will be glued, one each side of the ship to the piece C as indicated in the cross section of the model, Fig. 3. The markings on pieces M should be already set out and will need no further work upon them.

Ventilators

At N on the pattern sheet the two sizes of ventilators are shown. Eight of the larger kind will be wanted and the two of the more slender kind will be glued behind the rear funnel.

The size and section of the three funnels are given at O and after shaping up they will be glued to deck G with the overlays I in between them. The pattern J shows the roofing to cover the rear portion

for the "lion." Of course, ring and "lion" could be cut from one piece

Glue together and when the glue is

quite hard paste to it the pattern for the "lion," given in Fig. 4, drawn over in. squares. Note that the curved

dotted line on the pattern should come directly over the joint where the

extension piece joins the ring. Now cut the outline of the "lion"

down to the ring, and with fretsaw

cut the feature lines, both on piece and

but that method is wasteful.

of piece C and this will be of thin card glued on.

There are twenty four boats-twelve each side -and they will be carved out of little blocks of wood measuring



Fig. 3-Section of hull

5/16in. long by kin. square. From top to keel they should be somewhat less than in and on the inside of each boat there should be wire davits, see the section Fig. 3. The positions for the boats and the davits can be accurately judged from the plan, Fig. 2.

Masts and Supports

The masts and the ropes are formed from wire, or the masts could be formed from two needles, with points being taken off and the eye end driven into the decks. The fine wire "ropes" could be touched with glue to hold them in place until painted.

Wire supports for the funnels could be added if desired, and wire also attached to the fronts of two funnels as steam piping. The water-line should be marked round the hull and all below it painted brilliant red.

Above this should be black with numerous tiny white dots added to the sides to represent portholes. All the superstructure and the boats should be white, the tops of the funnels being black, below which a brilliant red again is added. The anchors and howse-hole may be painted on at the bows.

Interesting Data

A few particulars of this mighty ship are included here for those readers who are interested. It would be a good point, if our model makers have made a suitable stand for their ship, to have a small slip of card attached giving such data neatly and carefully painted on.



Fig. 4-Details of bow end

should be glued to the cross with the "lion" part on the same arm as the hinges will come.

For the pincushion, take the disc cut from the ring and file the edge so as to make it a loose fit in the ring. On it make a little pile of cotton wool and cover with a piece of silk or other thin material. Draw the edges of the material over, leaving a nicely rounded cushion as in section B.

Now draw the edges together under the disc with cotton, tightly (as in C, an underview).

Any lady would like to have a sewing companion of A "V.C." WORK BOX



HIS novel work box would make a pleasing gift to a lady, or a saleable bazaar article. The novel part, of course, is the lid-a representation of the Victoria Cross. Some little liberty has been taken with the Cross as the central crown has been omitted to make room for a pincushion. Also the side scrolls and lettering has been left out to simplify the work.

These omissions, however, do not in the least affect the general design, and in any case the lettering " For Valour" can be put in if the reader desires.

Wood Economy

To economise in fretwood, the box part can be made in fin. thick deal, leaving the fretwood for the lid. Fig. 1 shows the box, minus the lid. As will be seen, it is of simple construction and forms a cross.

For convenience when nailing together, the short sides should be nailed to the long sides before the



Fig. 1-General constructional details

latter are themselves nailed to their end pieces. Plain glued and nailed butt joints will serve, though a mitred joint would look neater, and show no end grain, if the extra trouble is not minded.

The bottom of the box is cut large enough to extend in. all round. For strength, one piece is cut and fitted across, where shown, forming a bottom to the short side boxes as well as covering part of the long middle box.

The remainder is fixed each side, two pieces being required to complete the bottom. When the bottom. When the glue is hard give the work a rubbing with glass-paper to

make it smooth all over.

It adds to appearance if the nails are punched down a trifle and the holes filled up level with plastic wood.

The Lid

Two panels of fretwood (14ins. by 7ins.) are required for the lid, 3/16in. thick. First draw a pattern as shown in Fig. 2, as follows. Draw a square to dimensions given and diagonal lines from corner to corner to find the centre. Here strike the circle.

Then draw lines a-b, and c-d, parallel to the sides and touching the edge of the circle. Where the diagonals cross the circle, strike the small circles shown, and draw the cross with lines from the points thus gained. Two of the four arms of the cross have dovetails added to them, as seen.

Cut these arms out on the lines of the dovetail, then paste the remainder to one panel of the fretwood, and the



Fig. 2-How to mark and cut the lid

two arms with dovetails to the second panel. Paste these last two close together on the panel to leave 7ins. clear for the ring overlay. Now cut out and glue the arms to the centre part to make a complete cross.

On the dotted lines of the cross cut a shallow channel, either with a veining tool or broad chisel. A channel only about 1/16in. deep is required, to suggest the raised border on the real thing.



At this stage the lid can be fitted to hinge to the box. Fix the hinges into recesses cut into one end of the box, so that they lie flush, or level. Turn over and lay the box on the lid, (also inverted) in its correct position.

Then mark the places where the hinges come with a pencil. Remove hinges from box, lay them on the lid in their correct position and mark the

(Continued foot of opposite page)



Fig. 3-Making the pincushion



Fig. 4-Marking out the lion

187

An excellent localized training unit is provided by building FIRE-GUARD MODEL

NEW outlet for the energies of the model-making enthusiast has arrived in the demonstration models that are required by training officers and instructors in the Fire Guard plan. These models show an area of town, complete with houses, miniature factories, etc., and may be anything up to 3ft. square.

Before making such a model it is always as well to get any special requirements of the personnel who will have to use it. But in the main the aim of such a model is to show all the various types of premises that Fire Guards are likely to encounter, i.e. houses, shops, factories and large public buildings.

The Question of Size

Of course, in training any one area it may be desired to make a fairly accurate replica of that area; but in the general tactical model it is a

The buildings are shaped from odd pieces of wood. Their sizes are gauged by the width of the roads employed. Scale modelling is not essential but to get a pleasing result there must be a fairly true relationship between the roads and houses.

Fig. A shows what may be re-garded as the "standard" or basic shape of the "property" Quite long lengths should be made to this design and then cut off in shorter lengths as desired. Short pieces (not much longer than wide) represent detached or semi-detached villas very well, while longer strips represent rows of houses.

Church Buildings

Used with a square " tower " along-side, and of rather larger size, the shape becomes a church as B, while with a long chimney it becomes a quite passable factory building C.

Tanks in a factory yard arc given by short "cuts" of dowelling,

Colouring the premises may be carried out either before or after securing. In very small models it will suffice to colour the roofs of the houses only, either red or greenish grey. In larger efforts dots and squares should be put on the sides to suggest doors and windows.

For demonstration purposes it is good to name the streets on gummed strips of paper placed at their ends and it may help the demonstrator if the area is divided up into "party areas" or sub-sectors, which can be done by colouring all the roots in one sub-sector the same, say all red or all green. Or the effects may be secured by simply putting in boundary lines.

Added Details

Hydrants are shown by small circles of yellow paint while E.W.S. dams are given by flat discs cut from dowelling.

Surface shelters are very small rectangles' of fwood coloured red all



To make such a model the size has first to be decided. If it will always remain at one training centre a greater size can be adopted than if the board has to be continually carried about, when 3ft. by 3ft. is certainly

big enough. For the base, in. plywood can be used or thinner if it is cross-battened. Upon this the streets are first pencilled out as per the large sketch. The roadways are painted in grey to represent concrete, the intermediate spaces being coloured green to look like grass. Areas where factories are to go should be toned brown however.



match stalks. All the " properties ' are stuck down by a strong adhesive FACTORIES SHOWN except in the case of factory chimneys, BY A COLLECTION of

monuments etc., when it is better to TAWKS BUILDINGS En drill a hole so they can be taken out when the model is in transport. Secured by glue it will be found that such items are continually being knocked off.

The houses should be secured a little way in from the road boundaries to suggest a pavement width, but it PIECES AS ABOVE is not necessary in a small-scaled For EXERCISE PURPOSES model to paint a pavement. Railway tracks are shown by fine lines ruled in indian ink against a strip of brown paint laid down first for track.

NOVEL ADJUSTABLE WOOLWINDER

This practical article can be made from the Design Sheet (No. 2552) given with this issue. Com-plete parcel of wood, for all parts is obtainable from Hobbies Branches for 4/7, or sent post free for 5/2 from Hobbies Ltd., Dereham, Norfolk.



THE WHOLE MODEL CAN BE WALLED

NAME STREETS ON

over and Belisha crossings are represented by dotted lines drawn in indian ink at rightangles across the roadways.

To make a really good article the whole model can be "walled" in and a second piece of plywood the same size as the base used as a cover. The walls, however, unless detachable, rather detract from the realisticness of the model when in use.

As will be appreciated, a model of this type gives great scope for imagination and artistic effort and fine details of finish must of necessary be left therefore to the individual maker.

AND GIVEN A LID

World Radio History



Here are practical hints for tool users who are anxious FOR GOOD RESULTS

URING the summer months we all prefer to enjoy outdoor activities, but now that autumn is here we can once again turn more enthnsiastically to our indoor pastimes.

Probably many have neglected their fretsaw and the tools of car-pentry, and left them in "cold storage" for the summer months.

If your tools have to be put away they certainly should be lightly oiled after being thoroughly cleaned.

If you are not actually using them for a time, the present period can well be utilised in overhauling them, getting them in thorough order for later use, and seeing they are in their proper places when required.

Tins for Tidlness

So many workers have an untidy bench and accordingly waste so much time hunting for things when they want them. Odd tins, flat or round, can be used for storing odds and ends of pieces. This is a better way than having one huge box with them all mixed in indiscriminately.

The loz. or 2oz. tobacco tins are helpful in this respect, whilst some people use small jam jars. The last named are better for keeping odds and ends because you can see their contents quite easily through the sides. The tins can be kept for the different sizes of nails, screws, etc.

Save your Glasspaper

Then again, glasspaper is searce now, and a piece is seldom used out to a finish on one small job. The pieces can be kept in an empty cigar box or similar receptacle for further use. Glasspaper, indeed, is valuable waterial, and if you cannot get the very fine grade now, a picce of well-worn medium grade will often serve the same purpose.

Then, too, your rasp or file may have become clogged in frequent use in model-making. Time spent in clean-ing them repays itself by the increased soeed with which they do their job. A stiff wire brush is helpful for this, used briskly across the tool in the direction of the cuts on it.

Shaping Wheels

1

The shaping of wheels for model planes or trucks or cars is often a tiring business, but the finished result is one which can make or mar the whole model. If you have a spokeshave, this is quite helpful to get off the original rounded edge, although. of course, you must finish the whole thing off with file and glasspaper in the usual way.

In shaping these wheels it is essential to mark on the extent of the curve to which you are rounding. On the flat surface, find the centre of the circle and describe a pencil circle near the edge to mark the extent of the rounded "tread."

Tyres actually do not round themselves off to the centre of this tread, but have a flat surface to some extent. The width of this flat surface should, therefore, be marked on the cdge of the wood to show exactly how far you are going to carry the curve.

Use of a Vice

A vice is essential to hold the original llat circular discs. With the wood placed between its jaws, the first shaping is done with a spokeshave or plane or rasp. Be careful not to carry the shape up the pencil lines marked, but allow the further rubbing down to them with the file and glasspaper.

Wheels on model planes are sometimes very tiny, and you can often get the little turned wooden toys used in woodwork, which serve . the purpose quite well. There is, of course, a scarcity of the actually tinned wheels, but if you can find any broken toys the tinned wheels from them might serve for the model in hand.

Do not let the jaws of your cramp, by the way, mark the wood which you are shaping. You must of necessity hold it firmly in the cramp and pull jaws up tight-so tight, indeed, that they may mark the actual material. To overcome this, of course, is an easy matter. Just place a small piece of wood on each side of the actual work, and then cramp the whole thing up.

No Sticking

Another little point, 100, worth remembering, is to cover glued joints or parts with paper before weighting them down, you get two large panels of wood, particularly if it is fretted. and the glue may squeeze out and hold the wrong part, you always cover the work with a piece of board before weighting the parts together, and it is very awkward if this board hecomes glued to some piece.

To overcome this, put a thin piece of paper between the actual glued work and the board being used, as a temporary cover. If glue squeezes ont and actually goes on to the paper, it does not matter very much because this can be cleaned off afterwards.

Clean-up Essential

Cleaning up, in general, is a point which we are frequently stressing in these pages, but which is so often neglected by workers. In their enthusiasm to complete the job, they are apt to put the parts together without paying due attention to the finishing off.

This neglect will, in turn, not only spoil the look of the article, but will

A Simple Cross-word Puzzle

Cross-words always provide a little mental recreation, and we offer one occasionally as a change from manual effort. Here is one which should while away a short time and prove simple to complete. There are no awkward alternatives, and the solution will be given next week for you to check up by.

1. 5. 9. 12. 15. 17.	A i Be An Im Alt To Us	gin ele pri titu pro	CL ren nin son de ocea	UE t of g of ic s (ab ed, c ey	S A lair fan lign br.) yes.	20. 21. 22. 25. 26. 28. 29. 31. 32	Negative Sorry—n To ascen State of a Containe Used in a Performi Makes a Board al					
-	2	3	4	1	15	6	T	7	8		· C.	Board al
	9	-		10		-		-			2.	" Ann " c
		1		12	122	-		-			3.	An achie
1		201		12	1.2		PI				6 .	Bed for h
15	IB			17	1		Ha				7.	Scarce.
19	+		10		-	21	-	-			8.	A nobody
	-		-			-				1	U. J	Kind of n
22	-	23			24				-	i	3.	A refusal
25			-		26	-			-	1	4.	Particula
-		-				-				1	9. 10	Made wit
				27		28				2	1	Form of
	29				30					2	3.	A sour fr
	-			-	-		1		-	2	4.	You and l
31	1			32						2	G .	Short for
	<u> </u>	-	-	-	-	-	-	-	-	3	Ő.	Thodium

a . 1	Negative answer
ĩ.	Sorry-no clue
Ϊ.	To ascend
2	State of being alone
5.	Tip of a cone.
8.	Container in fountain ne
٩.	Used in first aid.
i.	Performs mechanical we
1.	Makes a breeze.
2.	Board along a wall.
	CLUES DOWN
2.	" Ann " curtailed.
3,	An achievement.
۱.	Telegraph Office (abbr.).
š.	Bed for babies.
Γ.	Scarce.
š. –	A nobody.
).	It follows day.
	Kind of pram.
	A refusal.
	Postionles and

- r one. h lassocs,
- and tenure.
- ut.
- - ignal.
 - mother.
- (abbr.).

prevent it being properly coloured or painted satisfactorily. Each part, as it is completed, should, therefore, be thoroughly cleaned with glasspaper. If it is going to fit into another part, take care not to rub it down sufficient to spoil the joint.

Final **Examination**

Then, when the whole thing is fitted together, look the job over and see if there are any final points which need adjusting with file or glasspaper. In any case, a final clean-up with some well-used glasspaper is helpful.

Do not forget, too, after using the glasspaper, to run a duster over the work to take away the very fine dust which may have settled. Of course, if the model is an intricate one, a duster may be too clumsy for this job, and a soft paint brush should be used.

Another point worth remembering is in the organisation of the job before you take it in hand. Suppose, for instance, you are making a model truck. You cut out all the pieces required, and have them cleaned up and shaped properly as you go along, coming finally to the assembly. You glue, say, the body of the car together and want to continue with the construction. But can you?

No, because you have to wait for the box truck portion to set firmly before you can handle satisfactorily to add other pieces. In the meantime, you have nothing to do.

Plan Progress

Here is a better plan, which will keep the work steadily progressing. Cut out the foundation work but not all the pieces of the completed model. In the example we have given, it would be the sides, floor and possibly the chassis of the truck itself. These parts are finished completely and put together in the actual construction of the truck form.

Now, whilst the glue is setting you can proceed with the cutting, out of the, say, cabin or radiator, or engine cover. By the time these parts are done, the first portion which was stood aside is hard enough to handle safely and you can then glue on the pieces most recently cut.

They in turn must be stood aside to harden and in the meantime you can go along with the making of the wheels and the undercarriage portions. Finally, these shaped wheels, etc., are added, and the whole thing is completed in the usual way. You see the point?

In Stages

Undertake the work in stages and plan ahead so that you always have something to do and something in hand at each stage. Many models and pieces of work can indeed be completed in separate units and then finally put together in the finishing assembly.

The same foresight will be helpful, too, in the use of your materials. See that you have the necessary wood before you start and that glue, nails and tools are available sharp and handy. This, again, is where the neat worker has the advantage because he can put his hand on whatever he needs without waste of time or effort.

Neatness and Patience

It is not, of course, given to everybody to have the same characteristics of neatness, but it is certainly a virtue which can be acquired A little thought and attention given to these points will make all the difference and provide a happier hobby, because you are apt to get irritated by little things when you are so very anxious to go on with your work, and when everything seems to be thrown out of gear because you cannot find the nail or screw or piece of glasspaper you want.

A smooth, easy-running job provides much more pleasure than one which is constantly having to be broken off to find some lost material or misplaced tool.

Make up your mind to remember all these points in your future work.



BOY Scouts are finding it knives these days, due to the shortage of supply. In this connection, many may be interested in the suggestion of using a substitute in the form of a lino knife. This knife is, of course, not unlike a sheath knife in appearance it has a neat, curved blade and it is possible to grind and hone both edges, if desired. A holder for the blade could be easily made from thin leather or even leatherette.

GRAMOPHONE records, when Cleft lying about shelves and cupboards, invariably become dusty. It is generally considered that the sound-box needle, running in the sound track, clears thetrack free of dust and fluff. While it does so, however, the needle will, specially if blunt, leave a trace of minute grit dust and particles in the grooves. The latter are never properly cleaned so that reproduction is scratchy and this scratchiness is quickly spread to other parts of the grooves and made permanent.

There is no alternative, consequently, but to wash dusty records, but not by heating a basin of water and by im-

mersing the records in it. The heat, indeed, will not only remove dirt, but also the face labels, including some of the dye in the plastic composition from which the records are made, apart from making it soft. The best way is to heat a cup of water in a pot, add a little soap, then allow to become lukewarm.

An old tooth-brush is dipped in the water and rubbed on the disc briskly, in the direction of the sound track, after which the disc is rinsed under a running tap and set up on its end to dry. Never dry it by using a cloth, as the cloth will merely rub most of the loose dust and fluff into the grooves again. If records are gritty, owing to bad abuse or old age, a thin coating of graphite rubbed over the surfaces (a recently-used blacklead brush is a good thing to use, as it will contain sufficient graphite on its bristles to lubricate the grooves) will reduce scratching. "WHISTLE while you work" is an excellnet motto for workers with the fretsaw for two reasons. Firstly, the jet of air blown from the lips automatically clears the dust away from the work and so enables you to always see what you are doing. Secondly, if whistling a gay marching song or a lively foxtrot melody, you "keep time" unconsciously by the up and down movement of the handframe.

With a fretmachine, your feet keep time on the treadle; you thus get over the cutting easily and tirelessly. You will find there is nothing like music and rhythm to help you along and keep you good-tempered.

Do you know that every time you use a loofah to wash your skin you are really using the skeleton of a fruit of the gourd family? Possibly you thought it grew in the sea like a sponge, as many people are apt to think. Actually, the loofah, or fruit, grows on a climbing plant to be found in Japan and Egypt.

To protect the seed, there is a network of fibres inside the fruit. When dried, the surrounding flesh, ring and seeds are removed by pounding and washing, leaving us the familiar skeleton of fibres; a few seeds are often to be seen clinging inside a loofah.



Large Stocks of books on Woodwork, Metalwork, Etc.



Nearly 3 million volumes in stock. New & second hand books on all subjects BOOKS BOUGHT

119-125 CHARING CROSS ROAD, LONDON, W.C.2 Phone: GERrard 5660 (16 lines) Open 9-6 including Sate.

FREE DUTCH-FREE!



The WINDSOR STAMP COMPANY will give you, ABSOLUTELY FREE, this interesting new stamp just issued by the FREE NETHERLANDS GOVERN-MENT in London. This stamp has been issued for use on board DUTCH WAR-SHIPS now, and in HOLLAND following liberation, and pictures a DUTCH WAR-SOLDIER with his file. He is wearing a Tin Hat and the usual British Army Battledress. This stamp has only just been issued, and you can be one of the first to have this new issue ; a very interesting and historical War Stamp that will add value and lots of interest to YOUR collection. Send now

SOLDER with his rifle. He is wearing a Tin Hat and the usual British Army Battedress. This stamp has only just been issued, and you can be one of the first to have this new issue; a very interesting and historical War Stamp that will add value and lots of interest to YOUR collection. Send now to the Windsor Stamp Co. for it. Just ask for FREE DUTCH PKT., approvals and Price Lists. Your name and address must be clearly written and you must place 3d. in stamps inside your letter. (This 3d. is to cover cost of Lists and pc stage of the approvals and Free Dutch Pkt, to you). Post your letter to: WINDSOR STAMP CO. (Dept.12), UCKFIELD, SUSSEX



REE ! 25 KG. VI. Request Approvels ('Id.).-H. Thompson, 21 Springbridg, Road, London, W.5.

RAILWAYS. A new "Planbook" by P. R. Wickham. "Scenic Railway Model.ing" will add a new interest to constructing and operating miniature Railways. AIRCRAFT. "Making Miniature Aircraft" is another new "Flanbook," by R. H. Warring. It tells how to make realistic solid scale models. YACHT "Plinbook" tells how to make and race Model. New simple timerace Model. New simple time-saving method of construction. GAS ENGINE. "Planbook" gives instructions and drawings for working model which runs on air. Made with simple tools and materials. New technique. GALLEONS. All the secrets of making lovely models of taese old-time ships are in this "Planbook," with working drawings. AIRCRAFT, SHIPS and RAIL-WAYS. Use "Scaleline" plans. Send 3d. and unstamped addressed envelope for list of over 100 Plans and details of above Modeleraft "Planbooks."-Ti(H) Grosvenor Road, I ondon, S.W.I.

LONELY? Then write Secretary C.C.C., 5B.B. Hay St., Braug.ing, Horrs Conduine. Est. 1905. BE TALLER! Quickly! Safely! Privately! No Appliances — No Tablets—No Dieting. Details, 6d. stamp.—Malcolm Ross, Height Specialist, EM/HYTE, London, W.C.1

WANTED for Dublo Electric Railway. Points and Odd Track in working condition. Good price paid.—Write H. Hemment, 6, Norwich Street, Dercham, Norfolk.

MODEL Engineers' Sundries For Sale. Copper and Brass Tubing. Copper Rivets, B.A. Screws, Taps, Dies, Drills, Swiss Files, Sheet Copper, Bench Drilling Machines, Modelmakers' Lathes, Electric Locos., Silver Jubilee Coal-fired Loco. (exhibition model), Bassett Lowkes Enterprise Steam Loco., Stationary Engines, Casting Moulds (new designs). Stamp for list (Paper Control Order).—Roberts, Engineer, Tai Bach, Maenan, Llanrwst, North Wales.

50 attractive Sets at three-fourths catalogue prices available to Members of SET BY SET CIRCLE. Object :---" Economy in Collecting." No entrance fee or subscription. Send 21d. for details and prices of Sets already included in Monthly Instalments: - A. E. Marsden, 33 Belsize Square, London, N.W.3.

For the LION'S SHARE of fun...

...try modelling in Plasticine. Its thrilling to see your ideas take shape with the aid of this wonderful modelling material. Children and grown-ups, too, are deriving countless hours of amusement and relaxation from this ideal wartime hobby. Strictly rationed supplies only from your usual dealers.



AN AGTUAL MODEL IN "PLASTICINE"



STAMPS FREE ! ! Twenty Unused (21d.).-G. H. Barnett, 1 imington, Somerset.

MODELS. You can make lasting stone-hard models with Sankey's Pyruma Plastic Cement. Supplied in tins by Ironmongers, Hardwaremen, and Builders' Merchants. Ask for Instruction leaflet.

TOYS. Make them yourself from oddments. Range of assorted, popular designs with full instructions, and hints on toy making. 1/6 only post free. You will be delighted.— Harrod. 10, Leaconsfield Road, Maidstore.

LONELY? Join Friendship Circle. Details 6d.—Secretary, 34 Honeywell Rd., London. S.W.11.

MINT Current Colonials. Sets to 3d. at 1/3 each. Falkland, Fiji, Jamaica. List 1d. C.W.O. S.A.F. Postage free if Approvals requested.— Brankston, 17 Dipton Avenue, Newcastle-on-Tyne 4.

DUTTON 1-week Shorthand. Learnt in '12 - hour lessons. Accepted in all Services. Test lesson, Bd.-Dutton's (H.B.) (2.3, Gt. Russell St., Jondon, W.' 1

Printed by BALDING & MANSELL, LTD., London and Wisbech, and Published for the Proprietors, HOBBIES LTD., by HORACE MARSHALL & SON, LTD., Temple House, Tallis Street, E.C.4 Sole Agents for Australia and New Zealand : Gordon & Gotch (A'sia) Ltd. For South Africa : Central News Agency Ltd. Registered for transmission by Canadian Magazine Post.



World Radio History

.



World Radio History

THE REPORT OF A



4

4

SECTION

CENTRE

•

۲

CUT FOUR 3 16in.





AEM SUPPORT. CUT ONE 3 16in.



ARM SUPPORT CUT ONE & 18





SIDE CUT ONE 8 16in.

FLOOR OF BOX. CUT ONE 3 10in. ALSO TOP OF BOX. CUT ONE 3/16in

SIDES OF BOX



SIDE. CUT ONE 3 16in OVERLAYS. CUT TWO OF EACH 1 Mm. В ARM SUPPORT D



н.

World Radio History



World Radio History

WOOL WINDER

HIS really practical article can be made from comparatively small pieces of wood cut to the shapes shown with the fretsaw, and cleaned up carefully before fitting. There is very little intricate cutting to be done, but one must, of course, be correct and pay particular attention to the constructional side.

The usefulness of the article is apparent as a winder for holding a skein of wool while it is being turned off into a ball. The arms revolve on a central pivot and the little end uprights hold the skein of wool in place.

These shaped uprights on the ends of the arms are movable to three positions to take different skeins. The arms themselves are pivoted on the central portions so the whole thing takes up less room.

The base is a plain box formation on which a turntable is provided for the revolving arms. This base when put together should be weighted with lead shot or pieces of lead fixed flat into the floor of the box to form a suitable weight. The four sides of the box are fretted, but a piece of fairly stiff material should be put behind to cover the weights inside.

Floor and top are added, each being the same size and having a central hole of the diameter shown. The whole box is then glued to a base which projects a little all round. The central pillar on which the top

revolves is a circular spindle of

in. round rod 47 ins. long. The top end is rounded, but this should not be done until the revolving portion can be tested on it. Glue the spindle into the circular holes in the floor at the top of the box leaving a portion projecting through.

Now to construct the revolving arms unit. The circular base of the turntable is provided with a hole which revolves reasonably freely round the spindle. On this circular disc glue the four arm support pieces, halving them into each other at A.B.C. and D. Notice in each, the position of the pivot holes, and drill these small before fitting together.

Little spacing pieces cut as plain rectangles are glued between each of these uprights 5/16in. upwards from the bottom edges indicated by the dotted lines. Be sure to get these parallel with the bottom edge or they will throw out the correct angle of the arms.

Each arm is made of three main strips of wood, the central piece being spaced to allow the position of the upright wool holders.

Take one long arm strip and glue on it the shorter piece A. Then fin. away from the end of this, glue on piece B and #in. beyond that piece C. This leaves a further space of #in. before D is glued on at the end. Get the outer edges, of course, level. Finally glue the third side section of the arm to complete it. Weight the whole lot down. securely, or if necessary, drive in some fine headless nails.

Notice the position of the pivot holes in the thicker end of the arm,

and drill these to coincide with the ones cut in the arm supports.

When all four arms have been made, pivot them with headless nails or fairly stiff wire driven through each of the arm supports of the arm. Be sure to get these pivot holes opposite each other, by the way, so the arm will turn up and down freely.

A fancy top to the turntable is provided, and this stiffens the whole thing up by gluing it flat, and if necessary adding small screws or headless nails at the points indicated by the small circles. The great point, of course, is to see that the arms work reasonably freely but are rigid enough to do their job.

The actual wool holders have a long projecting tenon on their bottom end, which should fit fairly tightly into the spaces provided at the outer ends of the arms. To give them further rigidity a tiny overlay piece is glued on each side which forms an additional shoulder to the downward projecting portion.

The whole unit can now be tested out on to the spindle. The rounded end of the latter revolves inside the open box frame of the arm supports. To provide easier motion, a tiny round headed brass nail can be driven into the top of the spindle.

The turntable portion rests on the top of the spindle and the base of the turntable should be so raised very slightly above the top of the box. The top of the spindle can be corrected for height to obtain this.