

Hobbies

WEEKLY

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An interesting historical model of THE "GREAT EASTERN"

WE are giving our model makers this week a very interesting ship to make. All have heard of that famous steamer the "Great Eastern" which, when built in 1854 was the largest ship in the world. Before commencing on the construction of our model, a few details of this wonderful steamer may be welcome.

The "Great Eastern" was really a merchant steamer built wholly of iron, and was drawn through the water by two huge paddle wheels which could be assisted when required by a propeller at the stern. She was built in London from the designs of T. K. Brunel and Scott Russell, and was 679 feet in length with a beam of 82 feet. Her tonnage was 18,915.

Although never a real success on account of her great size and the consequent difficulty in handling, she was, nevertheless, found useful as a cable-laying ship. When she was about to be given into the hands of the shipbreakers she was wrecked, and the waters closed over her great hulk in 1888.

A Picturesque Model

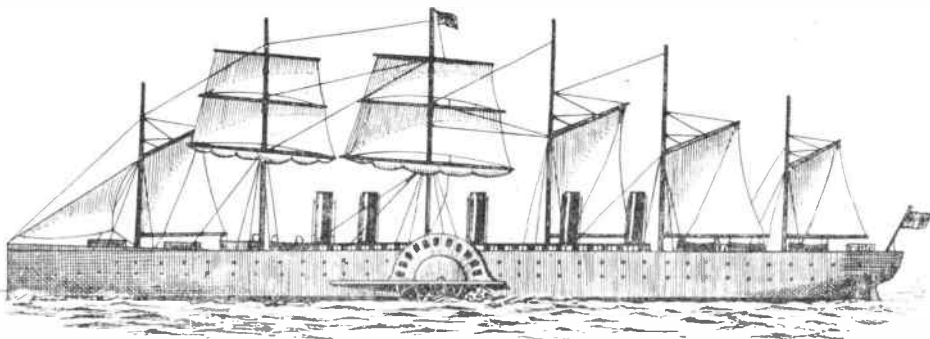
The "Great Eastern" forms a very interesting model to make. Her five funnels and six masts with sails all set look very smart and picturesque,

and we confidently believe that as a floating model she should make a strong appeal.

The hull is made hollow to give buoyancy, and the usual method of building up in layers has again been adopted. In the side view and section in Fig. 1 the five parts are clearly shown as A, B, C, etc., and from the plan it should be a simple

required height at this part. This piece is again seen with measurement in the detail of the hull at Fig. 2 which shows how it is shaped down to a feather-edge where it meets the deck.

The lower piece (E) of the hull is also a plain solid piece $\frac{1}{4}$ in. thick, but all three intermediate layers (B), (C) and (D) are hollowed out according



matter to get the outline of each of these pieces.

Just below the plan a scale is included so that all measurements can be plotted from the above details either direct on to the wood or on to paper for subsequent transference on to the wood.

The Deck

The deck (A) is one plain piece $\frac{1}{4}$ in. thick cut to outline. A thinner piece is glued on at the bow to give it the

to the dotted lines in the plan at Fig. 1. Pieces (B), (C) and (D) are all $\frac{1}{2}$ in. thick and should be of deal wood which is easily carved and shaped.

Pieces (B), (C), (D) and (E) will all be glued together with waterproof glue and cramped up, the deck (A) being built up separately and screwed in after the hull is finished.

The shaping to the stern of the boat is seen in Fig. 2 and in the side view, Fig. 1. Whilst the latter also shows how the rudder is cut and put on.

The outline of each piece of wood forming the hull will be cut with the fretsaw, the final rounding and shaping both at the bow and the stern being finished with a sharp penknife and rasp and file. When the true shape is secured the whole hull should be thoroughly glasspapered with coarse paper and a smooth finishing made with a fine grade paper.

Painting the Hull

Two coats of oil paint should be put on the hull after a preliminary coating of red lead paint which must be

the ship in the finished model. The three parts forming the paddle-box are shown in Fig. 3, the frame may be of thin wood with the circular covering of tin bent up and secured to it with small screws or nails.

The fretted front of the box should also be of tin soldered to the circular back piece. A shaped stiffening piece as an overlay can be added to the front as shown.

For the paddles themselves two circular frames of stout wire will be required for each wheel, and these will be connected up by soldering on flat

other paddle-wheel. The correct length of the piece of wire forming the axle will be $3\frac{3}{4}$ ins.

Paddle Box Colours

The paddle-boxes will be suitably painted black with red and white linings and the wheels themselves including the paddles should be red.

The deck fittings include the upper deck (F) which consists of a shaped piece nailed to the deck, and the pieces (G) all of $\frac{1}{8}$ in. wood.

The positions of the five funnels are shown on the deck plan and they are cut from $\frac{1}{4}$ in. round rod each $\frac{7}{8}$ in. long.

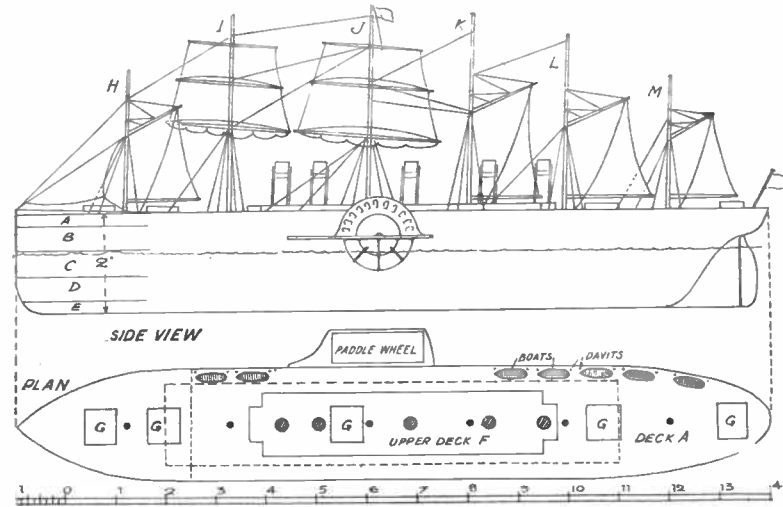


Fig. 1—Side view and plan of boat with scale of inches

allowed to harden thoroughly before the top coats are added. The top part of the hull should be painted matt black with that portion below the waterline red.

At this stage the hull may be put in the water for testing, and getting the proper buoyancy. Mark on the hull previously where the water line should come, then after immersion in the water the requisite amount of lead can be got by gradually adding small pieces along the keel.

Testing for Balance

Having got the right amount, check its weight and finally add one strip of lead to the base of the keel nailing it quite securely. The model requires to be so weighted and carefully balanced that when complete with sails, funnels, etc., it can be tilted in the water to quite an appreciable angle before it will completely turn turtle.

Of the paddle wheels only one is shown on the plan in Fig. 1, but there will, of course, be one on each side of

oblong pieces of tin as seen in Fig. 4.

Paddle Axle

A hub through which the central axle or spindle will pass is formed by first cutting through the wires in the centre of the frames—a sharp-edge file or a pair of wire-cutting pliers would do this—and then soldering on two small stout discs with holes in the centre. Get the correct position of the wheel-centres on the sides of the ship by scaling it from Fig. 1.

Then bore holes with a fine bradawl just the size of the wire which is to form the axle. Insert the paddle-wheels in their boxes at the sides of the ship and push the axle wire through from one side right through to the

LENGTH OF MASTS

H. $3\frac{1}{2}$ ins.	I. $4\frac{1}{2}$ ins.	J. $4\frac{1}{2}$ ins.
K. $4\frac{1}{2}$ ins.	L. $3\frac{1}{2}$ ins.	M. $2\frac{1}{2}$ ins.

Steam pipes both on the front and at the rear of each funnel are made from wire which can be fixed by tiny staples of fine wire.

The funnels will be painted black with a red band round each. The decks will be painted ochre, darkened with an admixture of brown and they should be lined to represent the deck planking.

The small boats number seven along each side of the ship. They rest on the main deck and are hung between derricks which stand up from the deck. Each boat is $\frac{5}{8}$ in. long, and cut from $\frac{3}{16}$ in. wood, shaped down to form a keel as in the detail, Fig. 5. The derricks are wire bent to shape and slightly

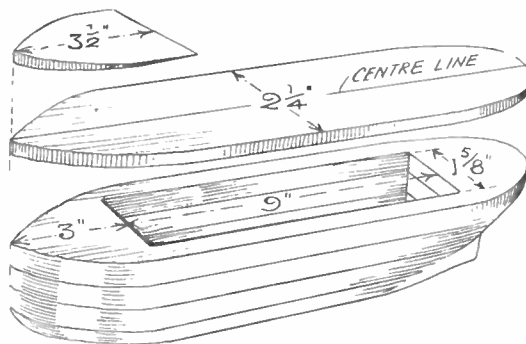


Fig. 2—A shortened view of the hull showing construction

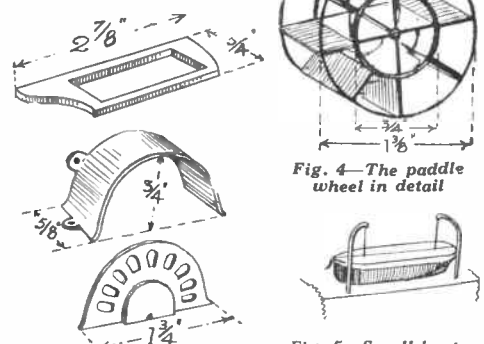


Fig. 4—The paddle wheel in detail



Fig. 5—Small boat and davits

flattened at the top. All the masts are made from $\frac{1}{8}$ in. round rod tapered towards top and glasspapered down to $3/32$ in. Each mast slopes slightly backwards, and the spars, carefully shaped, are wired to them.

These delicate spars will be found to be sufficiently strong once the sails are fixed. We give a table of the exact lengths of each mast from H to M.

With the aid of the scale given it should be possible to set out each sail fairly accurately. They are to be cut from stout paper and curved slightly to give the appearance of being bellowed out by the wind.

The ropes can be well represented by strong thread and their rigging taken from the side view in Fig. 1.

For this weather you need a BOOT SCRAPER

WHERE much work has to be done on the allotment, or garden, a boot scraper is a useful article. None with thought for those who keep the house clean will care to enter with mud on their boots, but will leave it outside—its proper place.

The scraper illustrated is a somewhat improved form. It is provided with a handle which enables it to be moved and the accumulated mud swept away.

It also acts as a "steady" to grip while scraping the mud off one's boots.

Figs. 1 and 2 give dimensions, the latter is a side section, very helpful in understanding the simple construction.

The Wood to Use.

Any suitable wood can be used to make it. An ideal choice would be teak, or oak, but these are scarce nowadays. Good pine, or deal, can be substituted, if kept painted.

For the side pieces and the cross bars use 1in. thick wood; for the handles 1in. by 2in. stuff. The joints are shown in the detail sketch, Fig. 3. The cross bars are tenoned into the sides, here they are glued and the joints clenched with wire nails where shown.

The handle bars are let into the sides, grooves being cut therein, $\frac{1}{2}$ in. deep. The handles are also reduced by $\frac{1}{4}$ in. where they enter these grooves.

The Hand Grip

Glue the joints firmly in place and screw. The hand grip at the top is a length of 1in. dowel rod, or broomstick, fixed across as shown. At

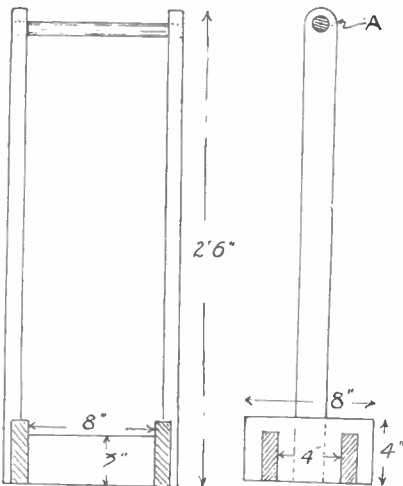


Fig. 1—Front view

Fig. 2—Side view

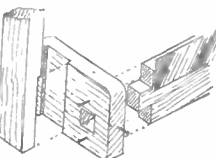
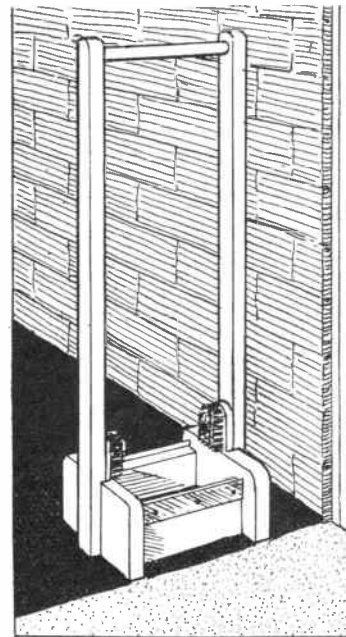


Fig. 3—Detail of joints



point A, drive in a nail each side to clench the joint.

Now clean up the whole article and give it either a coat of creosote as a preservative or, what looks much neater, a couple of coats of paint.

For the scraper itself, in the absence of a strip or two of iron or steel, which would normally be used, lengths of tinplate, doubled over could be substituted.

Possibly tin lids flattened with a hammer, could also be utilised, three lids to each being about sufficient.

Fix these with round-headed brass screws where shown, allowing them to project about $\frac{1}{2}$ in. above the top edges of the cross rails. Fix them to each rail so that the scraper is really a double-sided one.

Finish off the job by fixing a hard brush to each handle at the bottom, as seen in the general view. A hard boot brush, cut into two, would serve.

An old one might be made use of, but even if a new one is bought the expense need be but trifling, a bristle brush not being necessary.

Interesting replies to Readers' Letters

Converting a Starter

I HAVE a twelve-volt starter motor, off an old car, which I would like to run off the mains (A.C.) I should like to know how to set about this. (S.Y.—Caerphilly).

IT is not practicable to run a motor car starter motor off A.C. current unless the motor is series wound, and even so, it will run hot and not be entirely satisfactory as it is designed to run on D.C. current.

Cork Mats

HOW can I make cork mats or any such things? (G.M.—Cairnbulg.)

GROUND cork is used in making the mats, to which an adhesive compound is added to make the whole stick together. Oxidised linseed oil and resin are the usual adhesive admixtures. The former might be obtained from linoleum manufacturers or paint merchants. It is troublesome to prepare at home, and also requires mixing machinery.

If difficulty is experienced in buying it, try boiled linseed oil to which a little litharge is added to hasten drying. The oil and a small quantity of resin are heated and the ground cork then mixed in to form a plastic doughy mass.

At this stage you can add any colouring matter required. Roll out to the required thickness, lay on a piece of coarse canvas, like scrim, and press flat. Leave until dry and set hard.

Grinding Angle

THE grinding angle for a plane iron is 25 degrees I think, and the sharpening angle is 35 degrees. Is this correct? (G.F.C.—Sennen).

THE angle for grinding is about 15 degrees and that for sharpening is about 30 degrees.

WRITING A STORY OR WAR EXPERIENCES?

Here is an infallible Guide to the Beginner's Success

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Helpful suggestions on how to build various types of MODEL SHOWCASES

A LARGE number of readers who make models of motor cars, locomotives, ships, etc., are often at a loss as to how to keep them safe and clean. Such models are always a source of admiration, and it is a pity they should be put away somewhere out of sight.

On the other hand, if the models stand about they get dusty and are apt to be broken by constant lifting and handling in admiration. After all, a model can be examined quite closely without being picked up, although it is a propensity of everyone to do so.

For Exhibition Purposes

Most models, too, are sent to exhibitions at some time or other, and must therefore be shown to the best advantage. But exhibitions are dusty affairs so some protection must be given to the model.

Moreover, no model seen in an exhibition would have a chance for a prize unless it is on a suitable stand or in an attractive case. Many regular exhibitors, indeed, pay as much attention to the preparation of the case as they do the model itself, knowing that the former will attract attention equally with the latter.

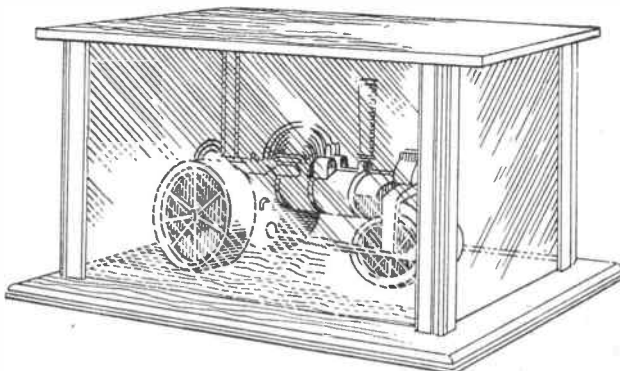
The best method, therefore, is to keep the models in a glass case, and the fellow with a few carpentry tools and a fretsaw can quite easily undertake the making of them. These

The actual size of the case depends, of course, on the model itself, but in every instance the model should have plenty of room on every side. It looks much more imposing if set in a large glass case, than if squeezed into an insignificant one. The large case, too, is no more difficult to make than a smaller one.

As an example, take the model steam-roller made from Design No. 2409 of Dec. 17th. This measures just 11 ins. long, and is quite a fine-looking piece of work to set off in an imposing case. To the sizes given, allow an extra 4 ins. at each end, and 3 ins. on each side. The top to the case shown should be well above the model, not less than 4 1/2 ins. to allow the onlooker to see the top of it. If the top of the case is of glass a height of about 3 ins. is sufficient.

A Suitable Moulding

This size case will not do for every model, of course, and a small piece of work only needs a small case. If the case is to be square, the same measurement should be made on each side.



fixing it in the ordinary way by a number of fillets.

There are two kinds of moulding obtainable, square and a fancy shape (see Fig. 1) and it is a matter of taste which is preferred. There are three sizes 3/16 in. groove, 1/4 in. groove and 3/8 in. The largest is most suitable where fairly large models are used, and if the groove is not entirely filled by the thickness of glass, thin fillet strips of wood like very long match stalks can be used to make up the difference. The glass should not be too thick or it will be heavy, and a good idea of the method is given at Fig. 2.

The Baseboard

The baseboard should be of mahogany or oak, 1/2 in. thick. The dimensions of the upright framework of

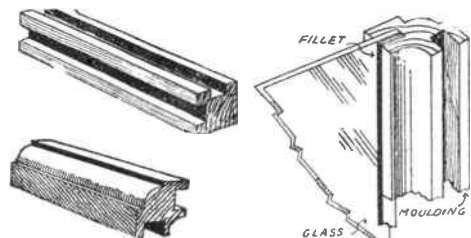


Fig. 1—Two kinds of corner moulding

Fig. 2—How the groove holds glass and fillet

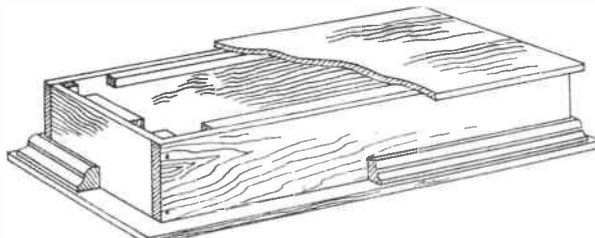


Fig. 3—Showing construction of built-up base

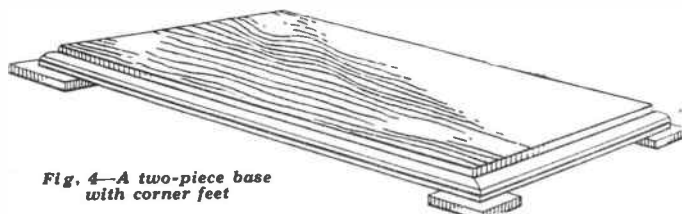


Fig. 4—A two-piece base with corner feet

show-cases are hollow frames of wood built on a baseboard with glass sides and top. The addition of a glass top makes the construction much more difficult, and workers may probably decide to have a wooden top so the model can be seen from four sides.

The case itself can be made the more easily by means of Hobbies corner moulding. This forms the pillar and is made with a groove cut down two of its sides. This groove provides the slot into which the glass fits, so doing away with the need for

glass should first be decided upon. To the length and breadth of it add, say, 2 ins. all round to give you the measurements of the baseboard.

The pillars must stand a little way in to allow for screwing up from underneath without splitting the board. Mark the positions carefully in conjunction with the glass, then glue and screw the corner pieces of moulding in place. They must be the same length as the width of the glass, and be cut square and flush so they lie flat on the wood.

The Top

Another piece of wood serves as the top and this is glued down to the top

of the corner posts. It should be slightly smaller than the baseboard, and not quite so thick as that part.

It can be glued to the top and screwed on as well, but this will prevent the model being taken out again. If a loose top is required, round-headed screws should be driven carefully into the moulding and no glue used at all.

The plain base described can be

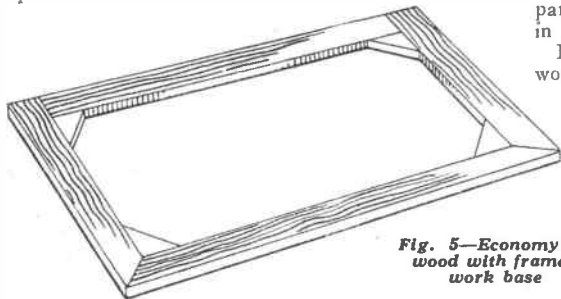


Fig. 5—Economy in wood with frame-work base

elaborated quite easily and a much more interesting piece of work is shown in the illustration of the other case. Here is a base built up into an imposing plinth with the addition of fancy moulding to increase its beauty.

This plinth is built in the form of a hollow box upon which the case itself is stood. The detail at Fig. 3 gives a good idea of the construction. A large thick piece of wood forms the main piece and on this, set back from the edges, two long and two short sides are stood up.

Moulding and Blocks

The moulding round the edge is Hobbies No. 17 and as this has a surface $\frac{3}{8}$ in. wide, the upright pieces must be set back $\frac{1}{4}$ ins. from the edges of the baseboard. Corner blocks can be put in to strengthen the part up, and strips also added flush with the top (see Fig. 3), to provide a surface to hold the base of the glass case portion.

The glass case is made up as previously mentioned, with its base projecting slightly beyond the walls of the plinth. The whole is then

glued in position and the moulding mitred to fit round the base.

There are, of course, a number of mouldings which can be used, or the ornamental ball or fancy beading will do just as well. Not only does a case with this class of plinth look more imposing, but the front wall provides space for a label giving particulars about the model inside. This label should be cut from ivory with the particulars written in Indian ink.

If, however, the worker does not

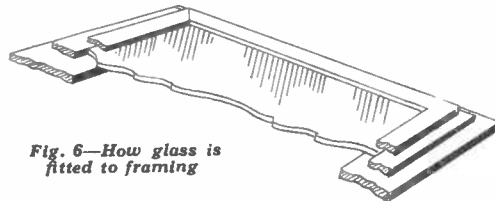


Fig. 6—How glass is fitted to framing

As mentioned previously, the fitting of a glass top to the case involves much more work because an extra frame has to be added. It is worth while, however, in the case of small models which would otherwise be "smothered" by a complete wooden top. A flat hollow frame composed of strips about $1\frac{1}{2}$ ins. wide must be fitted round first to hold the top of the corner posts.

This frame is glued firmly in place (see Fig. 6) and on top of it another hollow frame is put to hold the glass. It should be cut from one piece if

want the trouble or expense of making this extra base, another form can be made merely by adding a second piece of wood.

This is shown in Fig. 4 and as can be seen, makes up a very strong double base. The under one should be thicker and larger than the top, and both glued together after the pillars have been fitted to the upper one. The whole thing is raised by four small blocks as feet, glued beneath the corners with an equal projection on two sides.

An Alternative Base Form

To save the cost of such a large piece of wood for this under-base, another method can be made use of, as illustrated in Fig. 5. Here the base is made up of four comparatively narrow strips of wood which, when glued under the other piece, give the impression of a complete board.

The four strips are mitred at each end to make a good corner, and the pieces cut away in the mitring can be used as angle blocks to strengthen up the inside corners.

possible, and be the same thickness as the glass.

Holding the Glass

When the glass itself is laid in place, it is held there by yet another frame. This in turn is glued partly over the previous strip, but leaving a piece projecting over the glass. The three-piece frame must, of course, be made up quite strong.

It is a good plan if this top is completed as an independent part. It can thus be taken off the case when the model is taken out, and laid back as desired.

Something must be done, however, to prevent it sliding off, and for this a short piece of $\frac{3}{16}$ in. dowelling should be sunk into the corner posts leaving about $\frac{1}{2}$ in. projecting. A hole to correspond with the dowelling is made in the top frame so that it fits comfortably over the little posts when put in place.

The case will look well with fancy wood in its natural state, but if you have some clear varnish or stain and polish, it is much better.

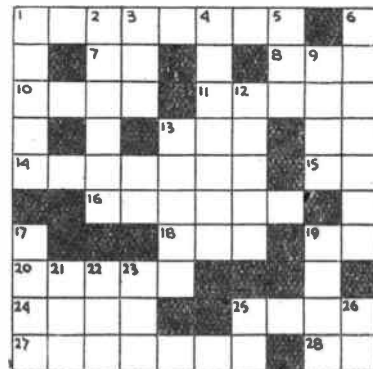
ANOTHER SIMPLE X-WORD PUZZLE

CLUES ACROSS.

1. Building for explosives.
7. "Her" beheaded.
8. More than one.
10. Mother likes to get one.
11. Extraordinary.
13. Shines brightly, at times.
14. It will stretch.
15. Short for "regards."
16. Almost, but not quite.
18. Money paid for service.
19. To proceed.
20. Christian name of German we all love—to see dead!
24. We look down it.
25. This drive is progressing more and more.
27. German secret police.

CLUES DOWN.

1. This leaf is the emblem of Canada.
2. Der youthful one der most trouble cause, ja?
3. Where stripes are put.
4. To ask questions.
5. "Fete" beheaded.
6. Is used for attacking hostile ship under water.
9. Coupons for most stuff we.....
12. Your father's brother.
13. Employees of a firm.
17. Hitler's lot are a crazy one.
19. The A.A. ones sure bring em' down.
21. Female of the fallow deer.
22. "Boss" beheaded.
23. To permit.
25. "Tot" curtailed.
26. Knock out (abbr.)



Any housewife would be delighted with this useful HOUSEHOLD REMINDER

THIS rather novel form of Household Reminder can be cheaply made with a few pieces of wood. It has a special feminine appeal, as it looks not unlike a novel pincushion.

In fact a small pincushion is incorporated in it, not to hold the common household pins but those of the fancy variety, with glass heads. These are stuck in holes against the articles required, as a reminder to order them.

The Main Frame

Any fancy wood, $\frac{1}{2}$ in. thick, can be used for making this article. Cut one piece to the shape shown in Fig. 1, and a second piece to the octagonal part only, omitting the bottom piece

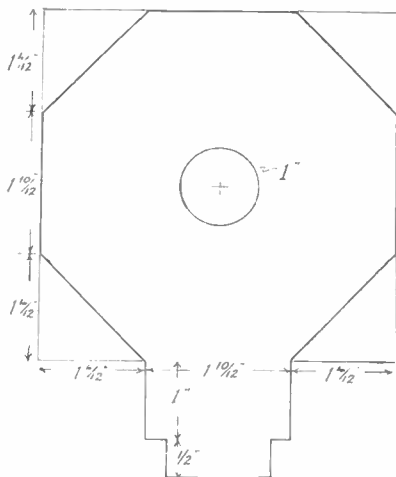


Fig. 1—The shape of the back boards

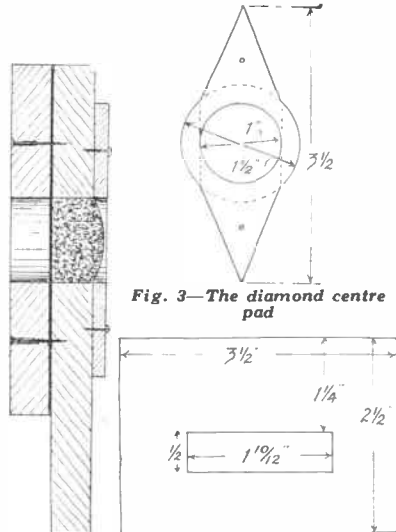


Fig. 2—A side section

Fig. 4—Details of base

part with its tenon. Fasten the two together with four screws from the back. In the centre bore the 1 in. hole right through the two.

The overlay piece, Fig. 3, can be marked out on a piece of $\frac{1}{2}$ in. wood. Fix this temporarily in place with two screws, then remove. Cut the base, Fig. 4, from a piece of $\frac{1}{2}$ in. wood. Bevel off the edges as a finish and saw out the mortise slot.

Glue the octagonal upright in the base piece and give the whole a coat of stain. Dead black stain would do nicely. Omit the overlay as this looks better in the natural wood, providing a pleasing contrast.

The Names

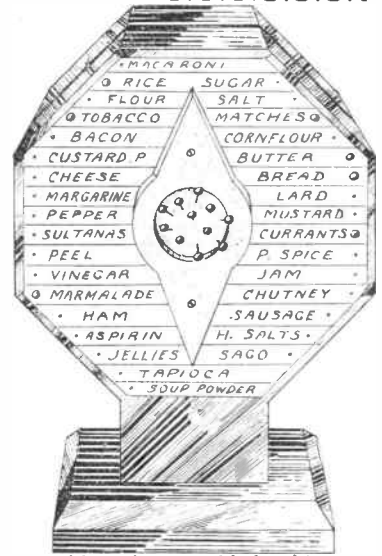
While the stain is drying, draw on a piece of white glazed paper an octagon, just $\frac{1}{2}$ in. smaller all round than that in Fig. 1. Cut out a central 1 in. hole and rule the paper into parallel lines, $\frac{1}{4}$ in. apart.

As the paper will be varnished over afterwards get a quality which will take this satisfactorily. A cartridge paper or stiff non-absorbent material is needed and it is best to take a piece of waste out with the varnish first.

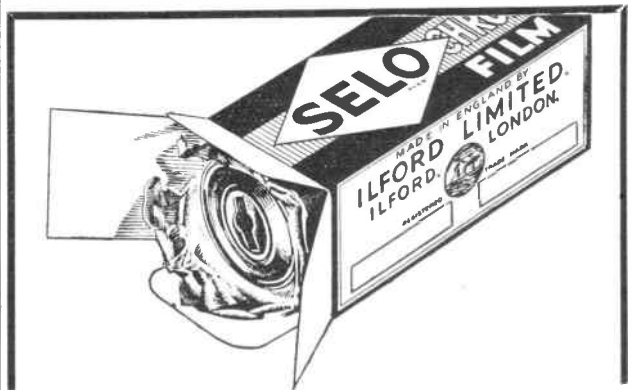
In these spaces print as neatly as possible the names of the articles likely to be required. Those shown in the general view of the Reminder will be a guide. Glue this paper to the wood.

With a fine drill bit or awl bore a hole opposite the name of each article. These holes should penetrate the two thicknesses of wood. Now withdraw the screws and let the two pieces of wood come apart.

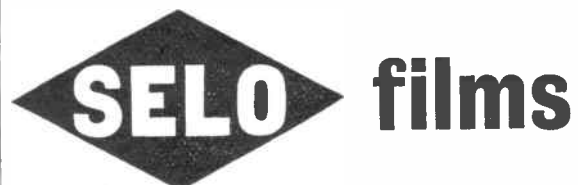
Cut an octagonal shape, the size of the paper, in a piece of thick cloth, sandwich this between the two pieces of wood and re-screw them together.



Fill up the central hole with cotton wool, allowing enough to rise above the surface in the middle. Cut a circular piece of silk, or satin, $1\frac{1}{2}$ ins. diameter, and gum to the back of the overlay covering the hole.

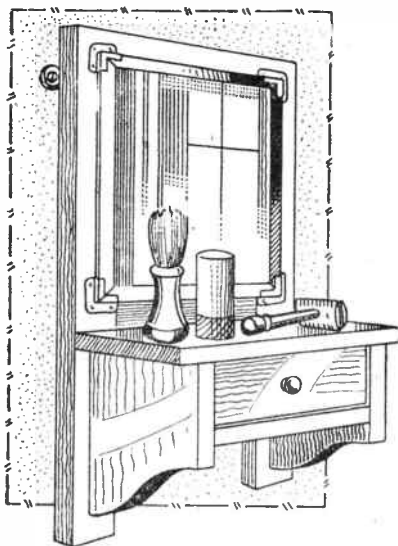


Although there is not enough SELO FILM today to meet the big demand, all available supplies are being distributed through the usual trade channels.



made by ILFORD ILFORD LIMITED, ILFORD, LONDON

A practical job for the home carpenter is to make A SHAVING TIDY



WHY not a shaving tidy? Like a sewing tidy, the shaving tidy illustrated hangs on a wall at a suitable height for the people who will use it. It is a wartime shaving cabinet—designed with an eye on the difficulty of obtaining wood.

The back is merely a thin frame of laths of wood $1\frac{1}{2}$ ins. wide by $\frac{1}{2}$ in. thick. The cross pieces are half-lapped and screwed to the uprights. The spaces in the frame are hidden by the bevelled (or plain) mirror used and a small drawer, the top of the compartment for this serving as a shelf when using the shaving articles.

Other Uses

It is a compact affair, easily made and not costly, yet it is a serviceable shaving utility. It can be put up in the kitchen, scullery or bathroom. The finish is simply a coat of varnish stain or enamel—white enamel, by the way, if intended for a bathroom or at the scullery sink.

Corner clips are used in securing the mirror to the back of the frame. Failing these, however, ordinary single mirror clips would serve, putting two at right angles with each other at the mirror corners. These are obtainable from Hobbies Ltd. at $1/6$ the dozen, post free.

Making the Frame

To make the frame, you need two upright pieces of deal (or any other wood) 16 ins. long by $1\frac{1}{2}$ ins. wide by $\frac{1}{2}$ in. thick. You also need two cross pieces of the same stuff 9 ins. long, with a third piece 9 ins. long by 2 ins. wide.

The parts are half-lapped together as shown (Fig. 1) The side view at Fig. 3 shows the ends of the cross pieces. You can either nail or screw these to the uprights, with the addition of glue.

When levelled and glasspapered, make the shelf and side support pieces. The latter are 5 ins. long by 4 ins. wide. The top piece is 9 ins. long by 4 ins. wide. Nail the supports to this, $\frac{1}{2}$ in. away from the ends as shown (Fig. 2).

Between the supports attach a cross piece measuring 7 ins. long by 4 ins. wide. This part of the work is then screwed to the back in the position shown at Fig. 2. Simply set the work on the front of the framing, pencil around it to mark the position, then bore screw holes right through, counter-sinking these on the other side.

The Drawer

A drawer has now to be made. First of all, fit the drawer front in the opening. The approximate size is 7 ins. by $2\frac{1}{2}$ ins. by $\frac{1}{2}$ in. You need two side pieces $3\frac{1}{2}$ ins. by $2\frac{1}{2}$ ins. by $\frac{1}{2}$ in. Cut rebates for the ends of these in the ends of the drawer front to fit in flush.

Glue and nail the sides to the drawer front, then attach a backpiece

measuring 6 $\frac{1}{2}$ ins. long by 2 ins. by $\frac{1}{2}$ in. A piece of $\frac{3}{8}$ in. stuff is fitted inside and nailed flush at the bottom.

Fixing the Mirror

When you have painted or varnish-stained the work, screw a small knob into the drawer. The mirror is then attached with the clips as explained.

If you cannot obtain a bevelled-edged mirror of suitable size, this being 7 $\frac{1}{2}$ ins. by 8 ins., a plain piece would serve, but the sharp edges must be rubbed with emery paper or with an oilstone.

The latter is the best thing to use. It smooths the rough edges and thus prevents any likelihood of hands or

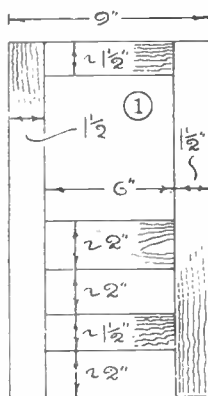


Fig. 1 The back frame

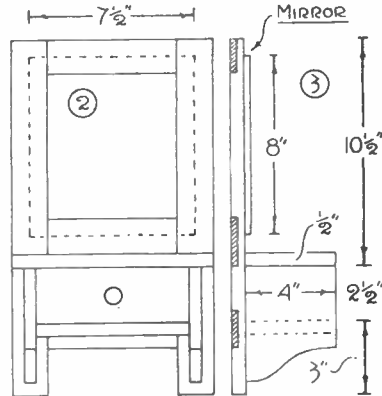


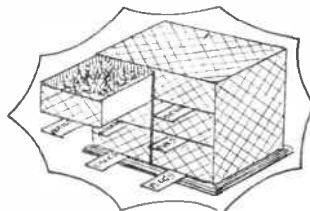
Fig. 2 Front elevation Fig. 3—Side view

fingers being accidentally cut. Two brass hanger plates are screwed to the back of the work.

The drawer is just large enough to hold a safety razor, a supply of blades, a shaving brush and shaving soap.

Miniature Drawers

A SMALL set of drawers, useful for keeping small nails, screws, washers, etc., can easily be made by gluing together a number of empty matchboxes. Small tabs of cloth or paper are printed with the names of



the contents of the drawers, and glued to the underside of each tray as in the diagram to act as handles. The appearance of the drawers may be added to by gluing wallpaper or some

other material round the edges of the structure to cover up the unsightly ends of the boxes. A wooden base may also be added with advantage.—(A. Hart, Redhill).

Model Machine Gun

IN making the armoured car model of Jan. 18th, I find that the sleeve of a 3-speed wire makes a very realistic machine gun, having a hole down the centre.—(A. Croad, Ipswich)

Mudguard Repairs

I FIND it a very useful tip if the mudguards are cracked. Obtain two pieces of Meccano about the width of the guard, place over the crack and drill holes so that the other plate can be bolted the opposite side. This makes a very neat and strong job.—(C. G. Goldsmith, Bromley).

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