HOBBIES WERKLY

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MARCH 2nd 1955

VOL. 119

NUMBER 3096

You can make it from this week's Free Design

A SPLENDID WORKING MODEL MOTOR LAUNCH

this allows the motor to run at high revs, leading to greater efficiency. Study carefully the design sheet and

Study carefully the design sheet and the instructions. It will be seen that on the design sheet, because of space reasons, some of the parts overlap, but the heavier lines should make the plans easy to follow. It will also be noticed that pieces such as 16, 17 and 19 are cut to fit and not shown on the design sheet. All the other pieces are numbered as

USING LOWCONSUMPTION
ELECTRIC
MOTOR AND
PRECISION
PROPELLER SHAFT
AND SCREW



PATRICIA' is the model of a power-driven motor launch, a general type used as a runabout on rivers. It is constructed on the hard chine principle, using formers and stringers in a similar manner to that in model aircraft making.

A model with very pleasing lines, 'Patricia' will provide joy for many a youngster—and also for those not so young! With a remarkable turn of speed

from such a comparatively small motor, she will go skidding over the water with ease. She has an overall length of approximately 19ins, and a beam of $4\frac{1}{8}$ ins, while the freeboard extends to 15ins

The Mighty Midget motor, with its high revolutions from a low consumption, is very economical to run on a 4.5 volt battery. Suitably geared down by pulleys to the propeller shaft,

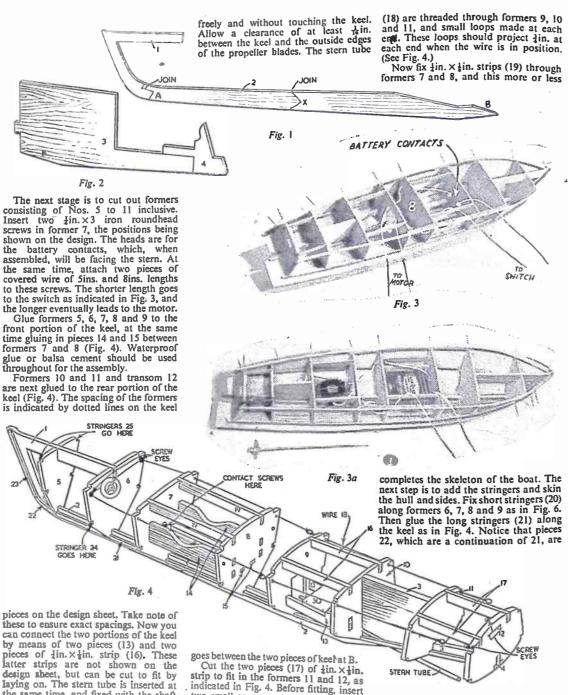
near as possible in the order of assembly.

When you have gone through the design and understood it thoroughly, trace the parts and transfer to the correct thicknesses of wood. The first portion to be assembled is the keel (pieces 1 and 2). Glue the two parts of piece 2 at X, and then to piece 1 at A as shown in Fig. 1. Pieces 3 and 4, which comprise the after-end of the keel, are then glued together as shown in Fig. 2.

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For Modellers, Fretworkers and Home Craftsmen





small shaped pieces of kin. wood shown on the design sheet. The stringers are, of course, all cut from in. square stripwood. Continue by gluing pieces 23 up each side of the bows, as shown in Fig. 4.

slightly over-size you can now trim off the excess. The pinning for this section is shown in Fig. 8. When the skin has been applied to

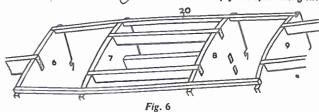
both sides of the hull, the sides themselves can be dealt with in the same manner but, before starting, trim the excess plywood on the hull back to the stringers (24). Now glue and pin the sides (Fig. 9). When the glue is set hard, the sides are then trimmed and cleaned up with glasspaper.

Now cover the transom with a piece of thin plywood, covering the ends of the

OBTAIN A KIT

To build this splendid model you can buy a complete Kit (No. 3096), including a Mighty Midget motor and propeller unit, from any Hobbies branch, or post free from Hobbies Ltd., Dereham, Norfolk,

The motor, price 13/-, and the propeller unit, price 7/-, both post free, can be supplied separately if required.



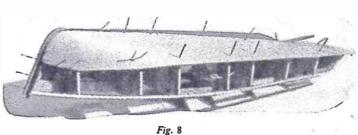


Fig. 5

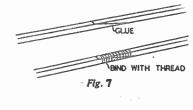


Fig. 10

Stringers 24 and 25, the long ones which go from stem to stern, should next be fixed. Glue the stringers first to the transom, and then to formers 11, 10, 9, 8, 7 and 6, holding them in place until the glue is dry by ordinary household pins. Then steam the bow end of the stringers, if necessary, and, when pliable, fix to Tormer 5 and stem. (Note: To facilitate the curving of the stripwood hold it in the steam of a fastboiling kettle and form the curve when the wood becomes pliable.)

In the kit is an extra piece of hin. square stripwood, which can be used in place of any which has inadvertently been broken in bending. Should this happen, glue and bind as in Fig. 7 to make the join, and remove thread when the glue is set.

The motor wire, already fixed to the contact screw, is then threaded through former 8. The wire which connects motor and switch will also be seen to go through former 8 (Fig. 3).

Now clean up all work thoroughly with glasspaper and remove excess glue with a knife. It will be noticed that stringers and formers must be shaped slightly, . so that the plywood skin will go on flat.

The skin of the hull can now be added, using 1/32in. plywood. Cut a piece of card to the approximate size for a rough fit, in order to use it as a template for marking off the plywood. Run glue along the stringers, formers, and the keel, and hold the skin in place by gently tapping in ordinary household pins. It should not be necessary to use steam in order to get the curve for the bow. If the plywood has been cut

stringers and keel, but leaving a hole through which the rudder bar will protrude.

Fig. 9

The steering wheel consists of a steering column (26) and wheel (27). Make a shallow V-groove round the column, and round off the steering wheel to make a realistic job of it. Then glue the column to the wheel. Drill through both to take a 1 in. × 1 roundhead screw. Fix the steering wheel to the former 6 (Fig. 10) and tighten up the screw so that the wheel can be turned, but ensure that it is not too loose.

····· This article will be concluded in next week's issue. 2

two small screw eyes on the underside,

Two screw eyes are also inserted in

lin. from the rear edge.

the same time, and fixed with the shaft

and pulley in position, so that the pulley

does not project beyond piece 9 for-

ward (Fig. 5). When placed in position.

the propeller should be able to revolve

Concentrating hard

acceleration, acute braking and placing to a nicety. It is important to remember that movement at an angle to your lens calls for a higher shutter speed than

By E. G. Gaze

movement directly towards or away from the camera. With a car passing broadside on you need a very high speed. It has been found that 1/200th of a second is a good round figure to use for cars entering or leaving a bend where corner and brakes check road speed. But if your camera has a higher shutter speed, then use it.

Shots in the 'Paddock'

However, if you haven't got high shutter speeds on your camera—maybe it's a box-camera type with instantaneous and time, and the instantaneous is about 1/25th or 1/40th of a secondyou can still make good use of it. There are shots to be taken in the 'paddock' or at the starting-line itself. The illustration. Old Timer, was taken in the public car

FF you have a camera and are familiar with shutter speeds, lens aperture numbers (f nos.) and with depth of focus, and you haven't tried it out at a hill-climb yet . . . well, it's about time you did!

Hill-climbs are friendly and intimate. You are not kept well behind safety barriers, as in track racing. You I:an comfortably on a fence with the track below and maybe the opposite verge no more than 30ft away. One car at a time tussles with the gradient and the cunningly awkward corners. It's a 'close-up' sport—with plenty of excite-ment, open exhausts and the smell of

Arrive early, take a walk up the hill and then choose your vantage spot. Bends are ideal. Better still, where you can get a view into and out of a bend and up to the next. Remember that the way a car comes out of a bend will often give interesting pictures, when both car and driver are fighting hard—and not always together!

Time-lag

A zone focus setting, to cover a definite area of view, is best. Set your focus and shutter speed and forget them. There's no time to fiddle with adjustments when a car is hurtling towards you. And remember time-lag. Begin your pressure on the shutter release a fraction before the car is where



'Old Timer'-a photograph taken in the car park

you hope it will be when you want it there. A sense of timing soon comes after watching a few runs past your chosen corner-and your trigger-finger itches at the 'ready'.

The car speeds won't be fantastically high, though to average 40 m.p.h. up a twistingly steep gradient calls for vivid

And lack of a high shutter speed will teach you to 'pan'—an asset even the owner of a high-speed shutter will find worth while to gain. To 'pan' is simply to off-set the movement of the car across the lens by swinging the camera to keep the car centrally in the view of Continued on page 342 STRAIGHTFORWARD WOODWORK

Making a Firescreen

THE screen shown in our sketch is of the simplest construction and any amateur craftsman should be able to make a good job of it. An oblong frame is made first from four rails, 14 ins. by 18 in. in section, the two vertical rails being 28 ins. long, and the horizontal rails 193 ins. long.

From the working diagram, Fig. 1, you will see how to set out the rails, and

be made by the use of Jin. squares.

Cut a panel of plywood about Jin.
thick to fit accurately into the frame and rest it on a beading of No. 24 moulding. (See detail Fig. 4.) The moulding is mitred at the corners and set back a little in the frame as shown. Glue and fret pins will hold the moulding securely. The plywood panel is dropped into place, and held by picture-frame sprigs

POSITION Fig. 1

Fig. 2 shows, in detail, the cutting of the halving joints of the frame. Bore holes centrally in the halvings, and countersink the holes so that the heads of the screws lie flush with the face of the frame. The heads of the screws are covered later with kin. squares of kin. wood.

Fig. 3

Shaped Corner Pieces

The top cross-rail between the two upright rails measures 152ins, by 22ins. by fin. It is glued to the top rail, with, perhaps, a couple of countersunk screws put through each end. Two shaped corner pieces (A) are glued underneath the lower rail, the detail at Fig. 3 showing how the enlargement may or by stout gummed paper strips mitred over the joint.

Fig. 7

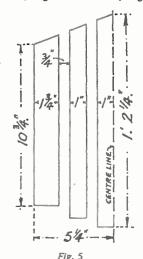
Panel Decoration

Fig. 4

If it is desired to include the panel decoration it will have to be finished before the panel is fixed in the frame. The enlarging detail shown in Fig. 5 will be used when setting out the five fretted openings, a centre line being set up on the panel for the purpose. In addition to the openings, it is suggested that strips of wood in contrasting colour to the panel itself be arranged and glued on as shown in Fig. 1. A piece of suitable material should be raw linseed oil.

glued behind the frets in the panel.

Each of the feet of the screen consists of two shaped sections glued and bolted through to the uprights as seen in the side view, Fig. 6. The detail, Fig. 7,



overruled with in. squares, may be enlarged on to lin. or lin. wood and cut round with a coarse fretsaw. A bolt with spherical head is run through the three sections and nutted up at the back.

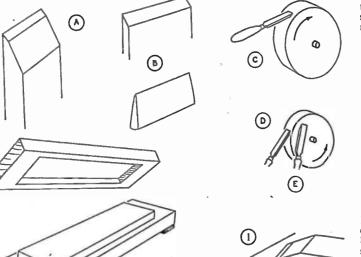
Oak should be adopted for preference when making the screen, and it should be lightly stained and rubbed up with

How to Keep Your Tools Sharp

THE quality of most woodworking jobs depends on the condition of the edge of the tools, such as planes, chisels and spokeshaves. First-edge work is cally really a really and the same (B). When a tool has they are the same (B). class work is only possible with sharp tools, so time spent on sharpening is well

There are two stages in sharpeninggrinding, to remove the bulk of the

they are the same (B). When a tool has been ground, you can sharpen it many times before it will need regrinding. Grinding is done on a rotating stone. Sharpening is done on a flat oilstone.



metal; and sharpening proper, to produce the cutting edge. On the thicker tools the two bevels are distinct (A), but on thin plane irons and knife-edge tools

It is best to grind on a sandstone, lubricated with water. This is turned away from you slowly, and you hold the tool steadily to produce an even bevel

Continued from page 340

Amateur Photography
finder as it approaches, passes your background will be blurred, but that

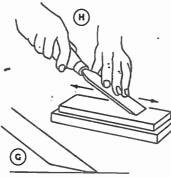
shutter release point and travels on. But it is essential to keep a level, even swing, to 'follow-through' after releasing the shutter, and not to allow shutter release momentarily to halt the swing. It takes practice, but it's a knack which once found is retained.

Of course, as you have swung the camera, something is going to be blurred-but not the car if you have accurately judged your swing. The

generally gives a fine impression of speed to the clear-cut image of the car on the final print.

If you haven't spent a day at a hillclimb yet with your camera take steps to remedy the omission. Even on a duil, misty day with a promise of drizzle-as it was when these prints were takenyou will enjoy yourself, with or without a camera. But if you have a camera-

about in. long on the average chisel (C). You are not likely to have a sandstone at home. It is best, if you can get the use of one at school or elsewhere. but most amateurs have to depend on a small fast-turning emery wheel. The danger with this is overheating. The danger with this is overheating. The wheel has to be used dry and careless grinding will cause friction to generate so much heat at the tool edge that colours appear, indicating that the temper has been drawn and the tool is softened. To guard against this the tool must be frequently dipped in water.



Most of the waste can be ground away on the rim of the wheel (D), but the bevel may be finally flattened on the

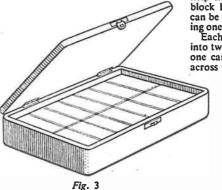
If you have no means of grinding, a tool shop will do this job for you, but every woodworker should have one or two oilstones so that he can 'touch up' his tools whenever necessary. A generalpurpose oilstone should measure about 8ins. by 2ins. by 1in. A fast-cutting one will serve for most purposes, but for the finest edge this should be followed by a finer one. Make a box and cover for the stone, and put leather or spikes on the bottom to prevent it slipping (F). Use only the thinnest machine oil or paraffin on your stones. If you have an old stone clogged with thick oil and dirt, soak it in paraffin.

To sharpen a chisel or plane iron, hold it on the stone and lift it so that the grinding bevel is a few degrees above the surface (G). Hold the tool with both hands-one hand at the upper end to provide the push, while the fingers of the other hand are spread out to apply even pressure (H). Work backwards and forwards along the stone, without dipping the hands at the end. If it is a narrow tool move over the whole surface of the stone, to avoid uneven

• Continued on page 345

MAKE YOUR OWN DOMINO SET

TN most homes the game of dominoes continues to be an established I favourite for young and old alike. It passes the time pleasantly, especially for invalids. But even a set of dominoes is not cheap these days, so why not make a set yourself? Less than one evening's work will result in a set that will give countless evenings of fun in the years ahead, and a big point is that no great skill is needed.



The ideal material for making dominoes is one of the various hard-set plastics which are manufactured today. But the expense involved will almost certainly rule this out. One must, therefore, fall back on wood, preferably as hard as possible, and with a smooth texture. The colour and graining will also affect one's choice. Dominoes are traditionally black with white spots, but there is no real reason why they should not be of a light colour with dark spots. Moreover, wood can be stained any number of colours and tones. The reader might, for instance, care for a domino stained a deep red, or even yellow, to brighten things up a bit.

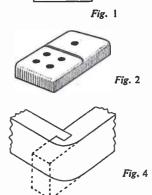
Save Work

A great deal of work can be saved if the separate pieces are sawn off a length of spar that has been bought ready planed of the correct width and thickness. One would only have to deal for the most part with the short ends, as the oblong blocks were sawn off the spar. So it is recommended that sparring should be bought lin. by in in section. The length of the domino should be 17 ins., or even 2 ins. The blocks should be cut off with a very fine toothed saw. But before doing this, the spar should be chamfered all along the two top edges with a plane and then rounded off nicely with the glasspaper

By A. Fraser

block, to produce a section as in Fig. 1. With a tee-square, mark off a block of the required length, and saw off. The sawn ends of the block should then be made perfectly smooth and afterwards rounded off (like the sides) with the glasspaper block. Holding the block in a vice, between two pieces of wood, will help in this operation. When the first block has been perfectly made, then it can be used as a pattern for the succeeding ones.

Each domino, of course, is divided into two sections. To mark this division, one can cut a neat vee-shaped channel across the middle of the block, or make



a square-sectioned channel and fill it in with a different-coloured wood strip fixed in with glue. Alternatively, plastic wood can be used.

The 'pips' which mark the value of each domino can be set in different ways, too. Perhaps the best way is to drill the required number of holes first, to a depth of, say, $\frac{3}{16}$ in., and insert pieces of dowel. These, of course, should be glued in and should be of a contrasting colour so that they are seen clearly against the basic tone of the domino. Instead of wood dowel, pieces of plastic knitting needle will be found excellent material for the 'pips'. These should be fixed with a good-class glue.

When the dowels have been properly set, any projections can be glasspapered level with the surface of the domino.

· Twenty-eight dominoes in all are needed, starting with the double six and going down to the double blank. The

finished domino should appear as in

Quality can be added to the domino, with a little extra work, by decorating the back in some way. By the use of veneers, as thin as possible, an interesting marquetry pattern could be made on the back of the domino.

The finish to the domino will depend on choice. Some will glasspaper the virgin wood to a perfect smoothness. For others a light surface of wax well rubbed out will add the finishing touches.

Making a Case

The case to contain the dominoes can be long and square in section, as it usually is, or broad and shallow in depth. It can have a slide-on lid or a hinged one. In any case, the actual inside dimensions must be ascertained by assembling the dominoes in the particular shape and measuring their

The case illustrated (Fig. 3) takes two



Fig. 5

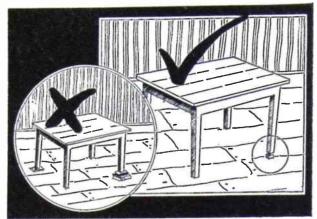
layers of dominoes, fourteen in each layer, the distribution being as shown. There are various ways of assembling such a case, but it is suggested that the sides should be joined by using a shouldered housing joint as illustrated in Fig. 4. The dotted piece should be removed after the glue has set, and the corner rounded off to improve the appearance of the case.

The bottom of the case can then be attached. Make this from ordinary board and round the edges off when fixed to the sides.

The top (or lid) is also made from • plain board, and the edges rounded off. It is attached with small brass hinges, as shown, and closed by means of a brass box catch. Catch and hinges should not cost more than a shilling. For those who wish, the box could be made with rebated edges on lid and sides, so that

Continued on page 346

You Can Fit Adjustable Table Legs



ERY often one sees a kitchen table leg propped up with a piece of cardboard, a wedge of wood, or even a book or two in order to counteract a wobble caused by legs of unequal

table legs. This shortens or lengthens the particular leg as required.

For a quickly fitted cure, the arrangement shown at Fig. 1 should be used. This is quite suitable for kitchen tables on hard stone floors, where the weight concentrated upon the small area of the bolt heads will not cause damage. Dining-room tables standing on wood floors and soft carpets are better fitted

CAVITY FOR

BOLT HEAD

I * THICK

HOLE & CAVITY
FOR BOLT &



Fig. 1

SECTION

length. This happens because of faulty manufacture or wear and tear, or, more often in country houses, through uneven boards or stone tile floors.

It is often a tiresome business to find something to put under the table leg; and if it is a dining-table, it so often seems to develop a disconcerting wobble just when one's guests are to be entertained!

The simple apparatus described and illustrated here can be fitted to almost any table which suffers from wobble, whatever the cause. If, for any reason, the table so fitted should develop a slight wobble, all one has to do is to bend down and give a half-turn or a turn to the adjustable end of one of the

with wood casings to the bolt heads, as illustrated at Fig. 2.

The wood casings are made to the same sectional shape as the table legs, that shown being circular. Fig. 3, illustrates the best combination, with cased bolt head, and screwed nut welded to a metal plate fixed to table leg with two wood screws. Between nut and cased bolt is placed a drilled and tapped locking plate, the small end of which projects about in. from the face of the leg, to allow locking with fingers. Thus, when the correct position is found, and the table stands level, the bolts may be locked in position, preventing any tendency to turn should the table be moved slightly.

In most cases only the two short legs should be fitted with the apparatus, although in cases where there is a very uneven floor, and the table is required to be moved around a good deal, three or even four legs may be fitted.

Turn the table over, and cut off the two shortest legs (if there are two shortest) a length equal to the thickness of the bolt heads plus \(\frac{1}{2}\)in. Find the centres of the legs and bore with a brace and bit two holes \(\frac{7}{2}\)in. or \(\frac{1}{2}\)in. diameter of a depth just a little greater than the length of the bolts to be used. It will be noted that the longer the bolts, the greater the adjustment available, although \(\frac{1}{2}\)jns. to \(\frac{2}{2}\)ins. should be ample

• Continued on page 348

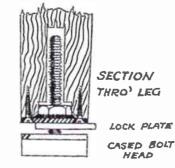




Fig.





It's Easy to Make these Decorative Candlesticks

Full-size patterns are on page 351

HE popularity of contemporary furniture calls for decorative accessories of equally modern and simple design. The emphasis is usually on clean and flowing lines, pleasing to the eye and easy to clean.

The candlesticks illustrated here look extremely well when gracing the dinner table. They are simple to make and require no tools other than a fretsaw.

The pattern page shows all the pieces in full size. They should be traced and transferred to wood by means of carbon paper. Pieces (A) and (B) are cut from

in., piece (C) from in, and pieces (D) from in.

First glue one piece (D) on each side of piece (C) and then pieces (A) and (B) on either side as shown in the sketch. The ball feet (No. 22, obtainable from Hobbies Ltd., Dercham, price 10d. a pair) can now be glued in the holes at the sides. The whole article is cleaned up with fine glasspaper and painted with plastic enamel paint.

An alternative method of finishing is to veneer the body of the candlestick before fixing the ball feet. Glue the veneer right round the body and secure with elastic bands or string until dry. The holes are later cut with a knife. They will, of course, be roughly marked before gluing. The sides may also be veneered. Finish off with several applications of wax polish. Apply the polish with the fingertips and lightly glasspaper after each application. (M.p.)

• Continued from page 342

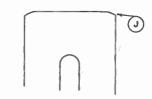
Keep Your Tools Sharp

Wipe surplus oil off the tool and examine the edge. Rub a finger lightly down the back of the tool towards the edge. If you have sharpened sufficiently a roughness at the edge will indicate a 'wire edge'—this is a particle of steel rubbed from the edge, but still clinging to it, which only forms when the tool is sharp. To remove the wire edge, rub the back of the tool a few times absolutely flat on the stone (I), then slice the tool across the edge of a scrap piece of wood.

Fine Stone

A tool sharpened in this way on a fast-cutting stone will be sharp enough for many purposes, but if the edge is examined under a microscope it will look like a saw with teeth of the same size as the grit in the coarse oilstone. For carving or fine cabinet work this edge can be improved by rubbing on a finer stone. Sharpening is done in the same way again, including the removal of the wire edge, but only a few strokes are necessary to remove the grooves left by the coarse stone and replace them by the much finer ones from the second

After a plane iron is sharpened, it is best to tilt it on the stone so as to round the corners slightly (J). A general-purpose plane iron may have a slight curve across the end, but a smoothing



plane should be straight, except for the rounded corners.

Gouges with bevels on the outside may be ground and sharpened in the same way as flat tools, except that they must be rocked from side to side during the process. Oilstones with curved edges are needed for working inside the gouge (K). After sharpening outside, the wire edge is removed by rubbing with one of the curved edge 'slips'. A gouge with the bevel inside is usually of the thin paring type. This does not need

grinding, but can be kept sharp with a slip only.

Knives are sharpened in the same way as chisels, but the bevels have to be the same on opposite sides. Rub about a dozen strokes each side in turn—it is a mistake to turn over at the end of each stroke. Feel for the wire edge, which indicates sharpness, and remove it by slieing across a piece of wood.

Tools such as the blades of wooden spokeshaves, with projections, can be sharpened on the edge of the oilstone.



Pointed tools, such as scribers, are sharpened by holding diagonally to the stone and rolling the end as it travels along the surface. Turning chisels are sharpened like knives, equally on opposite sides.

To keep your oilstone in good condition, wipe it off after use—old dirty oil will cause particles of steel to lodge in the stone and interfere with sharpening.

34



OLISHING cloths are always in use about the house, and here are some hints on their use. They fall into two types-dust cloths and abrasive

DUST CLOTHS-These are impregnated with an oily mixture, such as: Oleic acid (technical grade) I pound; stearic acid { ounce; petroleum jelly 1 ounce; terpineol 1 fluid ounce. Warm the first three ingredients together in the oven or water-bath until the stearic acid and petroleum jelly have dissolved. Remove from the source of heat and stir in the terpineol. Soak flannelette squares of the desired size in the mixture until saturated. Squeeze out thoroughly and then pass through a rubber-rollered wringer whose tension screw has been well tightened. As oils and rubber are poor friends, wash the rollers after use with warm soapy water.

ABRASIVE CLOTHS-A good formula for these is: Soap 1 pound; water 1 quart; jeweller's rouge 1 ounce; tripoli powder 3 ounces. Heat the water and dissolve the soap in it. Stir in the rouge and tripoli powder and in the mixture immerse flannelette squares until saturated. Squeeze thoroughly and

hang to dry. ANTI-STEAMING LIQUID-A preparation useful for rubbing on windows and mirrors to prevent steaming up consists of: Water 2 fluid ounces: salt 1 ounce; glycerine 4 fluid ounces. Dissolve first the salt and then the

glycerine in the water.

LAUNDRY BLUE-Block laundry blue is usually made from ultramarine and sodium bicarbonate with enough glucose to bind them. Formulas are many, but a good one is: Ultramarine powder 6 ounces; sodium bicarbonate 4 ounces; glucose I ounce. Grind the ingredients together and work in just enough water to provide a very stiff paste. This can be rolled out into thick sheets, cut into blocks and dried in a slow oven, before being tied up in small calico squares.

Alternatively, the blue may be prepared in powder form simply by grinding together the ultramarine and sodium bicarbonate alone, enough of the powder being added to the water to give the desired tint.

LAUNDRY CREAM-Ingredients comprise: Burnt umber 3 ounces: yellow ochre 2 ounces: Glauber's salt 10 ounces. The Glauber's salt should be finely powdered and ground intimately with the other two ingredients. This preparation can be used as such, in powder form, or, if blocks are desired, made into a stiff paste with 13 ounces of glucose and a little water and rolled.

Formulas for Useful Household **Products**

cut, dried and packed as for laundry blue.

DRAIN DISINFECTANT-The principle behind this is to form a solution of sodium hypochlorite. This is done by allowing washing soda and bleaching powder (chloride of lime) to react. Two solutions will be needed:

Solution A—Washing soda 12 ounces; water (hot) 2 quarts. Stir until the soda has dissolved and allow to cool.

Solution B - Bleaching powder 8 ounces; water (cold) 2 quarts. Stir until an even milky liquid results, free from lumps. Filter after standing 24 hours and mix with Solution A.

After standing about a day, filter the liquid and use the clear filtrate for disinfecting purposes. An alternative to filtering is to allow the liquid to stand until the sediment settles and then decanting off the clear upper liquid.

An odourless drain disinfectant, which should not be used on white sinks, for it may produce a brown stain which would need removal with sodium bisulphite, consists of: Potassium permanganate 3 ounces; hot water 1 gallon. Stir until the potassium permanganate has all dissolved and allow to cool. This solution has a deep purple colour and readily removes odours.

CREOSOTE DISINFECTANT—This is a popular type which becomes creamy when mixed with water and has a carbolic odour. Ingredients are: water 170 c.c.; sodium hydroxide 33 grams: powdered rosin 250 grams; creosote 375 grams. Dissolve the sodium hydroxide in the water, boil the solution and stir in the rosin. Continue stirring until the rosin has dissolved. Remove

the flame and when the solution just stops boiling stir in the creosote. Heat again, keeping the whole just under the boil, until the creosote has dissolved, Allow to cool, when the disinfectant is ready for use.

FLY PAPERS-These are simple to make, the requirements being: Castor oil 14 fluid ounces; rosin 34 ounces. Heat the oil in a tin and drop in the rosin. Stir with a thin stick until the rosin has melted and dispersed in the oil. Cut strips of thin brown paper and glue a string loop to each. Dip in the hot mixture and drain well. If all the mixture is not used at one time it will keep well and only needs reheating to prepare another lot of papers. If you happen to get any of the sticky mixture on your hands, methylated spirit will quickly remove it.

DUBBIN-This is a useful item if there is a footballer in the house. There will be needed: Ceresine 30 grams; tallow 30 grams; rosin 26 grams; cotton-seed oil 75 c.c. Heat the first three ingredients in a tin over a low flame until just melted and evenly mixed. Add the cotton-seed oil and keep up the heat until an even mixture has formed. Pour off hot into tins and allow to solidify by spontaneous cooling.

SEWING-MACHINE OIL-A simple mixture for this purpose consists of: Parassin oil 34 sluid ounces; petroleum jelly 1 ounce. Heat the parassin oil in a water-bath which has just boiled and the flame been extinguished. Add the petroleum jelly and stir until dissolved. Bottle when cold.

Another good formula consists of: Cotton-seed oil 2 fluid ounces; paraffin oil 1 fluid ounce; olive oil 1 fluid ounce. Shake these together in a bottle until evenly mixed.

(L.A.F.)

• Continued from page 343

Domino Set

these fit into each other and so help to exclude dust, and also, incidentally, to keep the lid more firmly in place. (See Fig. 5.)

Inlaid Decoration

The case again provides opportunity for the marquetry hobbyist to show his skill. There is no limit to the beauty of marquetry which could be displayed in the decoration of such a case, and to those who would go to the trouble, the

opportunity is here to produce a real work of art that would be the admiration of all who saw it, and a possession to be prized.

For those who make things for sale, a well-turned-out domino set would appear to be a good proposition.

Finally, don't forget to allow sufficient space in the case for the dominoes. Far better let them rattle a little, than make such a tight fit that it is hard to get them either in or out.

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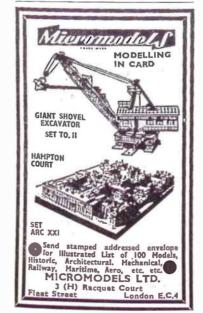
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Varnish Remover

AN you give me a formula for the Unreparation of a paint and varnish remover? I should be pleased if you could also give me instructions for its application. I desire the stripper to remove what appears to be varnish from a very old table top which is extensively marked. (J.H.—Kegworth.)

AN easy varnish remover can be made by dissolving trisodium phosphate in the ratio of one pound to the gallon of hot water. Brush on liberally and allow to stand about half an hour. Rub off and rinse with water. A type similar to those sold can be made as follows:-Benzene 3 fluid ounces; Meths. 2 fluid ounces. Mix by shaking together. Apply by rubbing in with a cloth. The varnish softens and rubs away. This is also suitable for paint. The mixture is, of course, inflammable.

Proofing Canvas
7 AM thinking of making a saddlebag and a small tent out of an old ex-army hell tent which has gone beyond repair in certain parts. For the saddlebag I intend to make the frame out of wood and then cover it with canvas. Can you tell me of anything I can use to paint the dark brown canvas black, and at the same time make it waterproof? Also, for the small tent, is there any waterproofing I can put on it which would make the colour light green or white? (N.R.P .-Pembroke Dock.)

THE saddlebag may be proofed and I coloured black with 'Gnu' proofing solution. The tent may be proofed with the same stuff, but if the existing brown is dark you may not get a very good green. Another suitable proofing solution is 'Mesowax'. Both may be bought from dealers in tents and canvas goods.

Hair Cream Recipe

AN you let me have a recipe for hair cream? (J.B.G.—Dumfries.) GOOD all-round hair fixative A consists of:—Gum tragacanth powder 5 grams; glycerine 25 c.c.; water 400 c.c.; sodium salicylate 4 grams. Reserve about one-quarter of the water. Stir the gum tragacanth into the rest of the water and allow it to stand overnight to swell. Stir well to form an even mucilage and dissolve the glycerine in it. Lastly, dissolve the sodium salicylate in the reserved water and mix this with the mucilage. Perfume may be added if desired.

Revolving Mirror Ball DLEASE advise me how to make a I revolving ball of mirrors to be suspended from the ceiling, and to work aff 250 volts A.C. (B.J.W.-Worthing.)

THE balls you mention are usually L about 10 to 14ins, in diameter, and hollow. You could fashion this in two halves from metal or papier maché, and glue small sections of mirror over the outside. If you wish the motor to be inside, the driving mechanism would have to be contained in a suitable frame, and the ball be in sections, so that it could be assembled round the motor. etc. The leads to the motor can pass up through a hollow tube, terminating in a hook for hanging to the ceiling. A

further tube, turning about this, would be driven from gearing from the motor, and have the ball secured to it. A simpler form of construction could have the motor and gearing in a small box, the rotating spindle protruding below. with a loop or hook to hang the ball on. Only a small motor would be required. such as used for radiogram units, etc. A large reduction ratio would be required, by means of worm drive or a series of belts, so that the ball only revolves slowly. One or more spotlights, usually coloured, are directed on the ball from some convenient point.

Chimney-breast Dampness

THERE is a large damp patch on our L living-room wall; this has spread very much over the past few years. It is on the chinney breast and the corner of the recess although there is a fire there continually. We have been told this may be due to salt in the sand used in the plaster. Do you think this is so, as it is far worse before it rains? Can you advise what to do about it? (A.S.—Weybridge.)

THE damp patch is most likely to be caused by salt sand, as suggested. It does not appear to be due to damp conditions outside or inside the house. To cure this trouble, apply B 4 Metallic Primer to the wall. Particulars of this. also the primer, can be obtained from the Concrete Paint Co., Barnstaple,

• Continued from page 344

Adjustable Table Legs

in most cases. Take the two bolts and nuts, diameter lin. or lin. (to allow min. or more clearance in the holes) and screw on the nuts. Place the bolts centrally in the holes and scribe accurately round the nuts with a marking knife. This portion of wood has now to be carefully cut out with mallet and chisel, to the depth of the nut, making a tight-fitting recess or cavity for same. (See Fig. 1.)

The nuts may now be hammered home into their cavities, when the two bolts will screw up into the legs, and the appropriate adjustments can be made. It is important to see that the amount of leg cut off in the first place is sufficient, so that the two short legs do not become the two long legs when the bolts are screwed right up. Thus in the case of a table where all legs are of equal length (no wear has taken place) the amount to cut off should exceed the bolt head thickness by half the total amount of adjustment required.

To case the bolt heads, as in Fig. 2, cut the appropriate shape of wood to

suit the table legs, about lin. thick. In the centre of this a cavity is chopped out to take the bolt head. The bolt head is retained in position by a piece \(\frac{1}{2} \) in. thick held by two or three \(\frac{2}{2} \) in. wood screws. Now the two short legs must be cut off by an additional 11ins., i.e., thickness of adjustable portion plus half the total adjustment distance.

Fig. 3 illustrates a nut welded (or soldered to a brass plate) to a lin. or in. metal plate which is screwed up on to the end of the table leg, the nut fitting into its cavity as before. The locking plate should be hacksawed and filed from a piece of fin., mild steel, drilled and tapped with a thread to suit the bolts used.

The wood casings should be made of hardwood to suit the particular table,. and suitably painted or polished.

Exact sizes and dimensions are not given on the drawings in all cases, as no two tables are likely to suit the same parts. A little experiment with pencil and paper and rule will soon decide all the additional data required.

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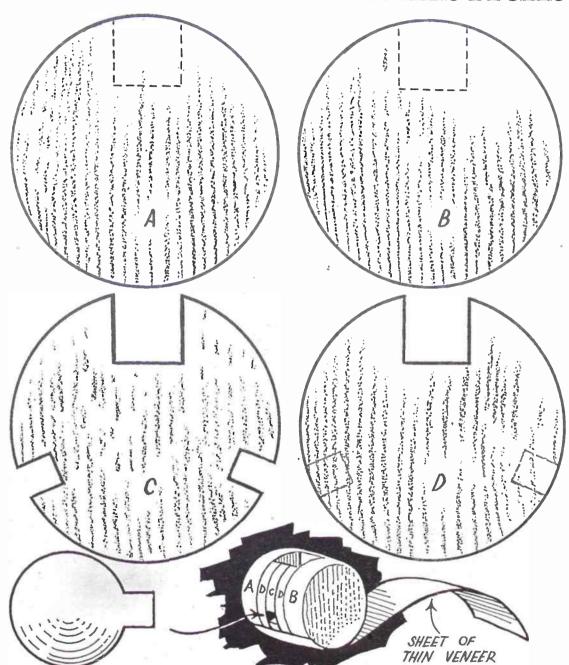
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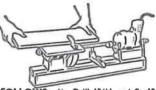
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(32/6). ‡in. Bench Stand 12/II and 8 × 3/I
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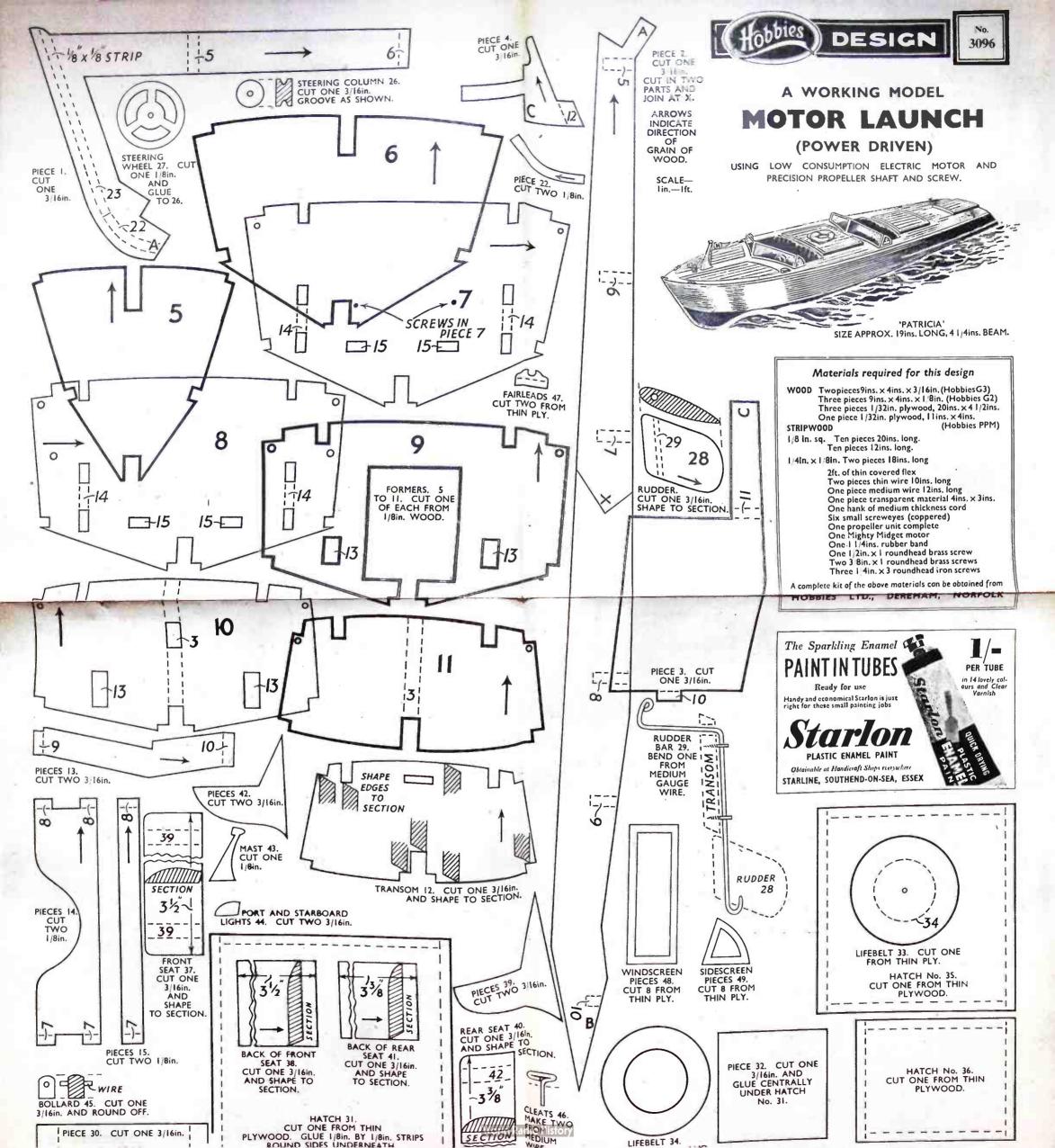
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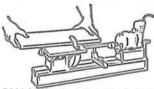
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