## HOBBIEA WEBKLY <br> A Splendid Working Model Motor Launch - . - . . . . . . 337 Take Your Camera to $=$ Hill-Climb - 340 Makinc a Firescreen - . . . . 341 How to Keep Your Tools Sharp - . 342 Mako Your Own Domino Set. . . 343 You Can Fit Adjustablo Tablo Legs - 344 1t's Easy to Make these Decoracivo Candjeaticks . 345 <br> Formulas for Useful Houschoid <br> Products - . . . . . . 346 <br> Replies of Intercst . . . . . . 348 <br> Patterns for Candicsticks . . . . 351

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 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 notied 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 LOW-

## CONSUMPTION

 ELECTRICMOTOR AND PRECISION<br>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 ifins., while the freeboard extends to 1 gíns.
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 kecl (pieces 1 and 2). Giue 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.
 between the keel and the outside edges eng. These loops should project tin. a (See Fig. 4.) Nowf fix $\ddagger$ in. $x$ in. strips (19) through


Fig. 2
The next stage is to cut out formers consisting of Nos. ${ }^{5}$ to 11 inclusive.
Insert two
tin. $\times 3$ iron roundhead screws in former 7, the positions being
shown on the design. The heads are for shown on the design. The heads are for
the battery contacts, which, when assembled, will be facing the stern. At the same time, attach two pieces of covered wire of Sins. and 8ins. lengths
to these screws. The shorter length goes to these screws. The shorter length goes
to the switch as indicated in Figi 3 , and the longer eventually leads to the motor. Glue formers 5, 6, 7, 8 and 9 to the front portion of the keel, at the same
time gluing in pisces 14 and 15 between formers 7 and 8 (Fig. 4). Waterproof glue or balsa cement should be used throughout for the assembly.
Formers 10 and 11 and transom 12
are next glued to the rear portion of the are next glued to the rear portion of the
keel (Fig. 4). The spacing of the formers is indicated by dotted lines on the keel



goes between the two pieces or keel at $B$. strip to fit in the formers of tin. $x$ tin. strip to in in the formers 11 and 12, as two small screw cyes on the underside iln , from the rear edge.
Two screw eyes are also inserted former 6, to take the cord leading from

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slightly over-size you can now trim off is shown in Fig. 8 . When the skin has been applied to both sides of the hull, the sides thermselves 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
 Unit, brice 7 bot both post fres. can be


- Flg. 7

Fiso

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 houseuntil the glue is dry by ordinary housethe stringers, if necessary, and, when pliable, fix to Yormer 5 and stem. (Note: To facilitate the curving of the stripwood hold it in the steam of a fast-
boiling kettle and form the curve when the wood becomes pliable.)
In the kit is an extra) piece of tin.
square stripwood, which can be used in 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 thejoin, 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 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 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 steam in order to get the curve for the bow. If the plywood has been cut

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Fig. 9
stringers and keel, but leaving a hole hrough which the rudder bar will The stcering wheel consists of 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. Dril through both to take a $\frac{1}{2 i n} . \times 1$ round head screw. Fix the steering wheel to the screw so that the wheel can be turned but ensure that it is not too loose.
~nn This article will be conclu
small shaped pieces of .in. wood shown on the design sheet. The stringers artipwood. Continue by gluing pieces 23 up each side of the bows, as shown in Fig. 4.

## TOGRAPHERS <br> Take Your Camera to a Hill-Climb



Concentraling hard

By E. G. Gaze
acceleration, acule braking and placing to a niecty. It is important to remember that movement at an angle to your lens
calls for a higher shutter speed than calls for a higher shutter speed than movement camera. With a car passing broadside on you need a very high speed. It has been found that $1 / 200$ th of a second is a good round figure to use for cars entering or leaving a bend
where corner and brakes check speed. But if your camera has a higher shutter speed, then use it.
Shots in the 'Paddock'
However, if you haven't got high it's a box-camera type with instan tancous and time, and the instantancous is about $1 / 25$ th or $1 / 40$ th of a second you can still make good use of it. There are shots to be taken in the 'pilddock' o
at the starting-line itself. The illustration Old Timer, was taken in the public car park.
$T$ Fon hou have a camera and are aperture numbers ( $f$ nos.) and with depth of focus, and you haven't tried it about time you did!
Hill-climbs are friendly and intimate. You are not kept well behind safety barriers, as in track racing. You isan comfortably on a fence with the track
below and maybe the opposite verge no below than maybe the opposite verge no tussles with the gradient and the cunningly awkward corners. It's a "close-up' sport-with plenty of excitemenl. open exhaus
Arrive tarly, take a walk up the hill and then choose yourvantage spot. Bends are ideal. Better stiu, where you can get the next. Remember that the way a car comes out of a bend will onen give interesting pictures, when both car and driver are fighting hard-and not always Tluetag
A zone focus metting to cover a focius and shutter speed and forget them. There's no time to fiddle with adjuserneats when a car is hurting towards you. And remember timeta.
Begin your premere on the shutter

'Old Timer'-a phosograph saken in the car park
you hope it will be when you want it And lack of a high shutter speed will there. A sease of timing soon comes chosen corner-and your trigger-finger The car 'ready".
high, though to aven't be fantastically twistindy atoep gerndient calls for vivid
teach you to 'pan'-an asset even the owner of a high-speed shutter is simply worth while to gain. To 'pan' is shmp car across the lens by swinging the camern to keep the car centrally in the view

STRAIGHTFORIHARDWOODWORK

## Making a Firescreen

HE screen shown in our sketch is of the simplest construction and
any amatcur craftsman should be any amatcur craftsman should be able to make a good job of it. An
oblong frame is made first from four rails, idins. by 17 in . in section, the two vertical rails being 28 ins. long, and the horizontal rails 19 ins. long.
fou will sec how to set out the rails, I. rails, and
be made by the use of $\frac{1}{2}$. squares. Cut a pancl of plywood about ⿺in. rest it on a beading of No. 24 moulding (See detail Fig. 4.) The moulding is mitred at the corners and set back
litte in the frame as shown. Glue and fret pins will hold the moulding securely The plywood panel is dropped into


Fig. 7


Fig. 4

Fig. 2 shows, in detail, the cutting of the
halving joinis of the frame. Bore holes halving joints of the frame. Bore holes centrally in the halvings, and counter-
sink 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 fin . squares of fin. wood.

Shaped Corner Pieces
The top cross-rail between the two pright rails measures 15 stins. by 2 tins. perhaps, a couple of countersunk screws put through each end. Two shaped cormer pieces (A) are glued
Fig. 3 showing how the enlargement may

$+1+1$
or by stout gummed paper strips mitred over the joint.

## Panel Decoration

If it is desired to include the panel decoration it will have to be Einished
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 up on the panel for the purpose. In that strips of wood in contrasting colour to the panel itself be arranged and glued on as shown in Fig. 1. A

glued behind the frets in the panel. Each of the fect of the screen consist of two shaped sections glued and bolted through to the uprights as seen in the
side view, Fig. 6. The detail, Fig. 7,


$$
\text { Fig. } 5
$$

overruled with $\frac{1}{2}$ in. squares, may be enlarged on to $\frac{s i n}{}$. or $\mathrm{H}_{\mathrm{t}} \mathrm{in}$. wood and cut round with a coarse fretsaw. A bolt whree sections and nutted up at the back. Oak should be adopted for preference
when making the screen, and it should when making the screen, and it should
be lightly stained and rubbed up with he lightly stained and rubbed up wit

## ISEFUL INFORMATION FOR WOODWORKERS

## How to Keep Your Tools Sharp

T
HE quality of most woodworking
jobs depends on the condition of
he edre of the condition of , chisels and spokeshaves. Firstclass work is only possible with sharp cools, so time spent on sharpening is we spent. grinding. to remove the bulk of the

(c)

metal; and sharpening proper, to protools the two bevels are distinct (A), but

It is best to grind on a sandstone on thin plane irons and knife-edge tools away from you slowly, and you hold the

- Continued from paze 340


## Amateur Photography

finder as it approaches, passes your background will be blurred, but that But it is essential to keep a level cyen swing, to "follow-through' affer releasing the shutter, and not to allow shutter release momentarily to halt the swing. It
takes practice, but it's a knack which takes practice, but it's a knack which Of course, as you have swung the camera, something is going to be
blurred-but not the car if you have blurred-but not the car if,you have
accurately judged your swing. The
generally gives a fine impression of on the final print
If you haven't spent a day at a hill climb yet with your camera take steps to remedy the omission. Even on a duil, misty day with a promise of drizle-as
it was when these prints were takenyou will enjoy yourself, with or without a camera. But if you have a camera-
take it!
about fin. long on the average chisel (C). Yot are not likely to have a sand-
stone at home. It is best, if you can get stone'at home. It is best, if you can get
the use of one at school or elsewhere, the use of amateurs have to depend on a small fast-turning emery wheel. 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 softened. To guard against this the tool
must be frequently dipped in water. must be frequently dipped in water.

(c)

Most of the waste can be ground away on the rim of the whecl (D), but the bevel may side ( E ).
If you have no means of grinding, a
tool shop will do this job for you, but tool shop will do this job for you, but every woodworker should have one or his tools whenever necessary. A generalpurpose oilstone should measure about 8 purp. by 2ins. by lin. 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 (F). Use
bottom to prevent it slipping bottom to prevent it slipping (he paraffin on your stones. If you have an old stone clogged with thick
soak it in paraffin. 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, withou dipping the hands at the end. If it is narrow tool move over the wneven
surface of the stone, to avoid une wear.

- Continued on page 345


## EASY AND INEXPENSIVE

## MAKE YOUR OWN DOMINO SET

I
N most homes the game of dominoes continues to be an established passes the time pleasantly, especially or invalids. But even a set of dominoes 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 grea


The ideal material for making dominoes is one of the various hard-se plastics which are manufactured today. But the expense involved will almos fore, fall back on wood, preferably a hard as possible, and with a smoot texture. The colour and graining will also affect one's choice. Dominoes ar there is no real reason why they should not be of a light colour with dark spots. Moreover, wood can be stained any rader might for instance, care for a reader might, for instance, care for
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 spar that has been bought ready planed of the correct width and thickness. One would only have to deal for oblong blocks were sawn off the spar. So it is recommended that sparring should be bought lin. by fin. in section. The length of the domino blocks should be cut off with a very fine oothed saw. But before doing this, the spar should be chamfered all along the wo top edges with a plane and then.

Fig. 2
By A. Fraser
block, to produce a section as in Fig. 1.
With a tee-square, mark of a block of the required length, and saw off. The sawn ends of the block should then be made perfectly smooth and anterwards glasspaper block. Holding the block in a vice, between two pieces of wood, will help in this operation. When the first block has been perfectiy made, then it ing ones. into two sections. To mark this division, one can cut a neat vec-shaped channe ross the middle of the block, or make


Fig. 4
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 diveren ways, too. Perhaps the best way is to
drill the required number of holes first to a depth of, say, sin., and inseri pieces of dowel. These, of course, should be glued in and should be of a con-
trasting 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 going down to the double blank. The
finished domino should appear as in Fig. 2. Quality can be added to the domino, with a little extra work, by decorating the "back in some way, By the use of ing marquetry pattern could be made on he back of the domino.
The finish to the domino will depend on choice. Some will glasspaper th 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 is usually is, or broad and shallow in depth. It can have a slide-on lid or a 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 ayer, the distribution being as shown. here are various ways of assembling sides should be joined by using houldered housing joint as illustrated in Fig. 4. The dotted piece should be removed afer the glue has set, and bo appearance of the case.
The bottom of the case can then be attached. Make this from ordinary board and round the ades off whed
The top (or lid) is also made from plain board, and the edges rounded off It is attached with small brass hinges, as hown, and closed by means of a bras cost more than a shilling. For those who wish, the box could be made with rebated edres colid and made wh

- Continued on page 346


## To Cure a Wobbly Table

## You Can Fit Adjustable Table Legs



T ERY often one sces a kitchen table leg propped up with a piece
of cardboard, a wedge of wood, or even a book or two in order to counter-


Fig. 1
table legs. This shortens or lengthens
the particular leg as required. For a quickly fitted cure, the arrangeThis is quite suitabie for kitchen tables on hard stone floors, where the weigh concentrated upon the small area of the bolt heads will not cause damage.
Dining-room tables standing on wood Dioors and soft carpets are better fitted
hole a CAVITY
FOR BOLT $:$
ength. This happens because of faulty manufacture or wear and tear, or, more even boards or stone tide floors.
It is often a tiresome business to find something to put under the table leg; and if it is 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 almos 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

with wood casings
illustrated at Fig. 2.
The weod g. 2 . same sectional shape are made to the that shown being circular. Fig. $;$ tillustrates 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 cased bolt is placed a drilled and tapped
locking plate, the small end of which projects about $\ddagger$ in. from the face of the leg, to allow locking with fingers. Thus. when the correct position is found, and he table stands level, the bolts may be tendency to turn should the table be moved slightly.
In most cases only the two short legs should be fitted with the apparatus, aneven 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 shortest) a length equal to the thickness of the bolt heads plus tin. Find the centres of the legs and bore with a brace and bit two holes $\frac{7}{\text { on in. or tin. }}$ diameter of a depth just a little greaser
than the length of the bolts to be used. It will be noted that the longer the bolts, the greater the adjustment available, - Continued on page 348


VUT WELDED 70
/8" METAL PLATE.

## CONTEMPORARY DESIGN



- 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 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 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 remova 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
stone.

After a plane iron is sharpened, it is best corners slightly (J). A generalpurpose plane iron may have a slight curve across the end, but a smoothing

lane 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). Afer 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

3in. pieci (C) from zin and pieces (D) (D) on each side First glue one piece (D) on each side
of piece (C) and then pieces (A) and (B) on cither side as shown in the sketch. The ball feet (No. 22, obtainable from
Hobbies Ltd., Dereham, 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 They will, of course, be roughly marked before gluing. The sides may also be veneered. Finish off with several applica-
tions of wax polish. Apply the polish tions of wax polish. Apply the polish with the fingertips and lightly glass-
paper after each application.
(M.p.)
grinding, Knives are sharpened in the same way as chiscls, 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 slicing across a picce of wood
spokeshaves, with projections, can be 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 sharpened like knives, equally on opposite sides.
To keep your oilstone in good condition, wipe it off after uso-old dirty in the stone and interfere with shampening.

## HOME CHEMISTRY

## Formulas

P
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 cloths.
DUST CLoThs--These are impregnated With an oily mixture, such as: acid (technical grade) 1 pound; stearic acid $\frac{1}{2}$ ounce: petroleum jelly 1 ounce terpineol $\frac{1}{2}$ fluid ounce. Warm the first three ingredients together in the oven or water-bath until the stsaric achere 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 then pass through a rubber-rollered wringer whose tension screw has been well tightened. As oils and rubber are poor friends, was wher rollers after us abrasive cloths-A good formula for these is: Soap $\frac{1}{2}$.pound; water 1 quart; jeweller's rouge ounce; and dissolve the soap in it. Stir in the rouge and tripoli powder and in the mixture immerse flannelette squares until saturated. Squecze thoroughly and hang to dry. tion useful for rubbing on windows and mirrors 10 prevent steaming up consists of: Water 2 nuid ounces; salt $\frac{1}{2}$ ounce; glycerine 4 fluid ounces. glycerine in the water.
is Laundry blue-Block laundry blue is usually made from ultramarine and sodium bicarbonate with enough glucose good one is: Ultramarine powder 6 ounces; sodium bicarbonate 4 ounces; glucose I ounce. Grind the ingredients
together and work in just enourh water together and work in just enough water rolled out into thick sheets, cut into blocks and dried in a slow oven, before being tied up in small calico squares. pared in powder form simply by grinding together the ultramarine and sodium bicarbonate alone, enough of the powder being added to
give the desired tint. LaUNDRY CREAM-Ingredients comprise: Burnt umber 3 ounces; yellow The Glauber's salt should be finely. powdered and ground intimately with tion can be used as such. in powder form, or, if blocks are desired, made

## for Useful Household

## Products

cut, dried and packed as for laundry blue. Dran pisinfectant-The principle DRAN DISINFECTANT-The principle
behind this is to form a solution of sodium hypochlorite. This is done by allowing washing soda and bleaching powder (chloride or lime) to Solution A-Washing so water (hot) 2 quarts. Stir until the soda has dissolved and allow to cool.
Solution $\underset{ }{B}-$ Bleaching powder
8 ounces; water (cold) 2 quarts. Stir 8 ounces; water (cold) 2 quarts. Stir
until an even milky liquid results, free from lumps. Fitter after standing 24 hours and mix with Solution $A$ After standing about a day, filter the
liquid and use the clear filtrate for liquid and use the clear hitrate filtering is to allow the liquid to stand until the sediment settles and then decanting off the clear upper liquid. should not be used on white sinks, for it may produce a brown stain which would need removal with sodium
bisulphite, consists of: Potassium perbisulphite, consists of: Potassium per-
manganate 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 odour popular type which becomes creamy when mixed with water and has a carbolic odour. Ingredients are: wate powdered rosin 250 cidroxide 33 grams 375 grams. Dissolve the sodium hydroxide in the water, boil the solution and stir in the rosin has dissolved stirring

- Continued from page 343


## Domino Set

these fit into each other and so help to kepp the lid more firmly in place. (See Fig. 5.)
Inlald Decoration
The case again provides opportunity for the marquetry hobbyist to show of marquetry which could to displayed in the decoration of such a case, and to those who would go to the trouble, the

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the flame and when the solution jus 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. These are simple to FLY PAPERS-These are simple to
make, the requirements being: Castor oil $1 \frac{1}{2}$ huid ounces; rosin $3 \frac{f}{f}$ ounces. Heat the oil in a tin and drop in the
rosin. Stir with a thin stick until the rosin. Stir with a thin stick until the 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 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: cotion-seed 30 grams; rosin 26 grams: cotton-seed
oil 75 c.c. Heat the first three ingredients in a tin over a low flame until jusi 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 off hot into tins and
spontan
sewing machine oil-A simple mixture for this purpose consists of: Paraffin oil $3 \frac{1}{2}$ fluid ounces; petroleum jelly $\frac{1}{2}$ ounce. Heat the paraffin oil in
water-bath which has just boiled the flame been extinguished. Add the petroleum jelly and stir until dissolved.
Bottle when cold. Bottle when cold.
Another good formula consists of:
Cotton-seed oil 2 fluid ounces. Cotton-seed oil 2 fluid ounces; paraffin
oil 1 fuid ounce; olive oil 1 fluid ounce. Shake these together in a bottle until evenly mixed.
(L.A.F.)
opportunity is here to produce a real work of art that would be the admira tion of all who saw it, and a possession 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 dinoes. Far space in the case for the dominoes. Fak such a tight fit that it is hard to get whem either in or out.

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##  <br> TH1/6

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Varnish Remover CAN you give me a formula for the Cpreparation of a paint and varnish
remover? I should be pleased if you cunld also give me instructions for its applicasion. I dessire the stripper from and Whas appears to be varnish from a ser (J.H.-Kegworth.)
$\mathrm{A}_{\text {made by }}^{\mathrm{N} \text { easy dissolving trisodium phos }}$ Amade by dissolving trisodium phos gallon of hot water. Brush on liberally and allow to stand about half an hour Rub off and rinse with water. A typ similar to those sold can be made as Meths. 2 fluid ounces. Mix by shakin ogether. Apply by rubbing in with cloth. The varnish softens and rub The mixture is, of course, inflammable.

## Proofing Canvas

 AM thinking of making a saddlebagand a small tent out of an old ex-army bell tent which has goure beyond repair in certain parts. For the saddlubag I intend
to make the frume out of wood and then cover it wish cansas. Can youl sell me of ansthing I can use to puint the dark brown cansus black, and at the same
time make it waterproof? Alsu, for the small tent, is there any waterproofing I can pur on it which would make tho colour light green or whire? (N.R.P.THE saddlebag
$\Gamma_{\text {coloured black with }{ }^{\circ} \text { Gnu }{ }^{\circ} \text { ped and }}$ solution. The tent may be proofed with the same stuff, but if the existing brow is dark you may not get a very good
green. Another suitable proofing solugreen. Another suitabie proying sole from deaters in tents and canvas goods.

Hair Cream Recipe
Chair cream? (J.B.G.- Dumfries.) for A consists ofl--Gum tragacanth powder 5 grams; glycerine 25 c.c.; water 400 c.c. , sodium salicylate 4 , grams. Reserve about one-quarter of the water. the water and allow it to stand over-
further tube, turning about this, would driven from gearing from the motor impler form of construction to it. $A$ e motor and gearing in a small box he rotating spindle protruding below with a loop or hook to hang the ball on Only a small motor would be required A large reduction ratio would be
equired, by means of worm drive or a eries of belts, so that the ball only revolves slowly. One or more spotlights, sually
night to swell. Stir well to form an even mucilage and dissolve the glycerine in it. the reserved water and mix this with the mucilage. Perfume may be added ir desired.

Chimney-breast Dampness Tiving-roon wall: this has spread ver much oser the past few years. It is on the chimuey breast and the corner of the recess although there is a fire ther be due to sult in the sand used in th plaster. Do you think shis is so, as is is far worse before it rains? Can you advis What to do about it? (A.S. - Wepbridge.) $T$ HE damp patch is most likely to be 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, the Concrete Paint Co., Barnstaple Devon.

- Continued from page 344


## Adjustable Table Legs

in most cases. Take the two bolts and fini. 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. (Sce Fig. nuts
home into their cavities be hammered bolts will screw up into the legs, and the appropriate adjustments can be made. leg important to see that the amount of so that the two short legs do not become the two long legs when the bolts are screwed right up. Thus in the case or a 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, cut the appropriate shape of wood to 348
suit the table legs, about lin. thick. In the centre of this a cavity is chopped ou retained in position by a piece $\ddagger$ in. thick held by two or three 4 in. wood screws. Now the two short legs must be cut of by an additional 1 Hins., i.e., thickness o
adjustable portion plus half the tota adjustment distance.
Fig. 3 illustrates a nut welded (or soldered to a brass plate) to a fin. or tin. metal plate which is screwed up on
to the end of the table leg, the nut filting into its cavity as before. The locking plate should be hacksawed and filed from a piece of sitin., mild steel drilled and tapped with a thread to sui
The wood casings should be made of hardwood to suit the particular table. and suitably painted or polished Exact sizes and dimensions are no given on the drawings in all cases, as no parts. A little experiment with pencil and paper and rule will soon decide all the
additional data required.


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