

# Hobbies

## WEEKLY

April 14th. 1943

Price Twopence

Vol. 96. No. 2478

## Non-flying model in wood of a DEFIANT FIGHTER

**H**OW'S this for a model of a "Defiant" Fighter? It looks like any other non-flying model, doesn't it? But, this one is really different, something you have never had before—a model you will be proud to own and show to your friends—for it is a real exhibition piece in every sense of the word.

You see, although it is quite small (9½ ins. long by 11 ins. wide by 3½ ins. high), it is fitted with an electric motor, a battery and a switch. A turn of this switch—the movable gun turret—and the "engine" starts "ticking over" in a most realistic fashion. It cannot fly, of course, being much too heavy, but the whole effect is thrilling and strangely true-to-life.

### The Motor Used

The model has been designed to take a miniature "Daimon" electric motor. It is a motor that, owing to previous articles which have appeared in these pages, many of our readers will possess, including others who may have purchased the motor owing to its novel, diminutive size. An illustration of the

motor appears in the second—and concluding—article.

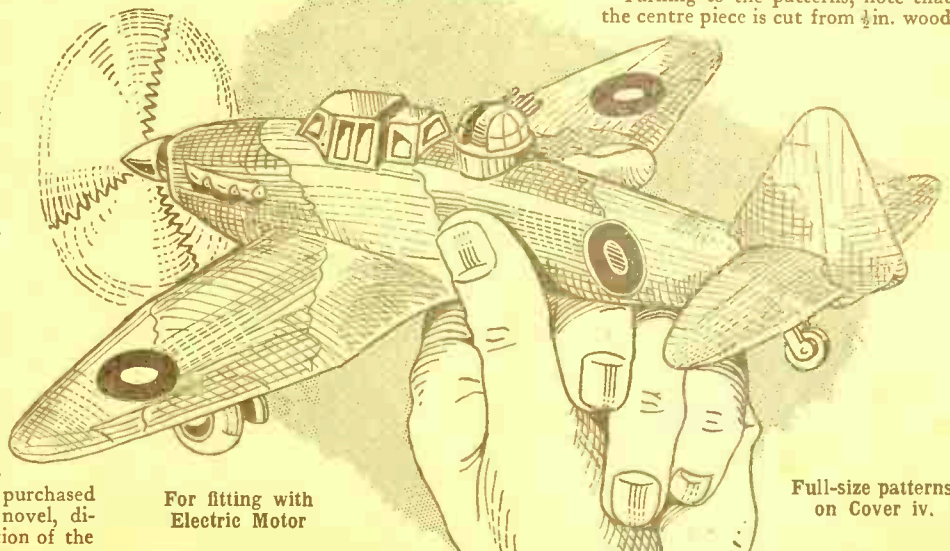
It is unlikely that the motor used is still obtainable, but do not be down-hearted if you cannot obtain one, because you can, owing to the elongated cavity in the fuselage of the model, fit an elastic motor. Indeed, such a motor will be more powerful than the electric one, although shorter in dura-

tion, and may actually pull the model along.

### Construction of Fuselage

At the moment, proceed with the construction of the fuselage. To help you make a success of the model, we are providing two separate pages of patterns, sheet No. 1 appearing on Cover iv this being followed with sheet No. 2 next week.

Turning to the patterns, note that the centre piece is cut from ¼ in. wood



For fitting with  
Electric Motor

Full-size patterns  
on Cover iv.

Letters to the Editor should be addressed to Hobbies Weekly, Dereham, Norfolk. Address orders for goods to Hobbies Limited.

Two side pieces are cut from  $\frac{1}{4}$ in. wood and two cover pieces from  $\frac{3}{8}$ in. stuff.

Cut out these pieces as right and left. When marking out the side piece shapes, be sure to mark the  $\frac{1}{4}$ in. deep recess which has to be cut in them. The recess is cut by scoring  $\frac{1}{4}$ in. deep with a penknife and then removing the waste with a sharp wood chisel or the penknife.

You will notice a dotted line running towards the centre of the spinner. Have this line marked on the centre

wood and levelling it off by glass-papering.

### Exhausts and Spring Contact

Now prepare the exhausts. Trace two shapes on  $3/16$ in. wood and cut out. To add some realism, make tiny holes in the ends of the three pipes, then round the edges of the pipes, as detailed, with a folded piece of fine glasspaper. Nothing like making the exhausts true-to-life, is there?

A springy switch contact is the next item on the programme. Cut

as shown by the bottom view at Fig. 2. The joints (indicated by the dotted lines) act as a guide; the same shape is marked on the top side of the work.

Pare away the surplus wood with the penknife to the pencil lines. Work from the centre to the front and rear ends and not vice versa. Use a sharp penknife, for the paring is hard and tedious, even through a soft wood, such as deal, is used. A spokeshave will be found useful in finishing off the shape.

At this juncture, mark the "nose" of the fuselage at the fore end of the fuselage (see sections at Fig. 3). Proceed by sloping the sides of the cabin and slicing off the foremost corners (see top view and side view). The body of the fuselage is then carefully pared and rounded to the shape of the sections.

### Correct Balance

There is no necessity for templates, unless you prefer to use them. The shaping can be easily judged by the eye alone. The rounding calls for considerable skill—and patience! Chip off a little here and there until you get the shapes balanced, always cutting down *over* the grain, the same as you do when sharpening a pencil.

Now, here is the most important thing to avoid. Do not cut into the corners of the motor chamber; at least, avoid doing so as much as possible. You should, in fact, glue  $1\frac{1}{4}$ in. length of  $\frac{1}{4}$ in. angle blocking fillet to the corners of the chamber, or motor compartment. Alternatively, you

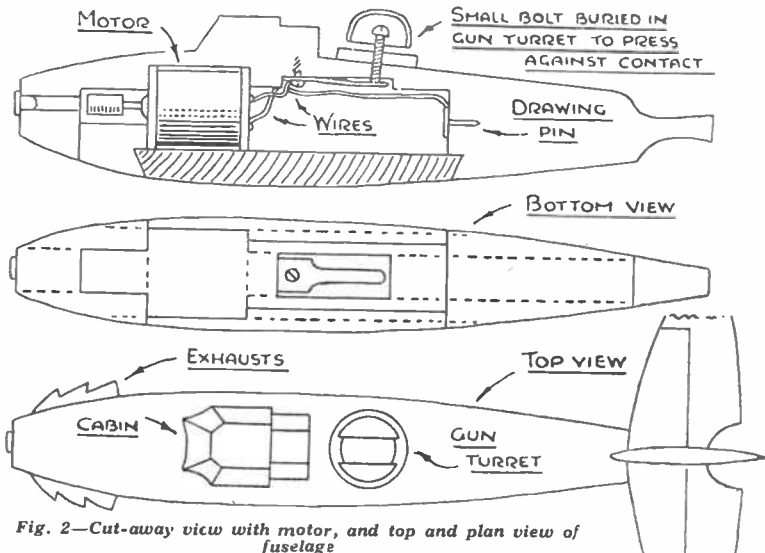


Fig. 2—Cut-away view with motor, and top and plan view of fuselage

piece. Draw it on the nose end, after cutting the shape, for it gives you the exact centre point for the  $3/16$ in. hole to be drilled for the shaft of the propeller and the stud rivet.

Having drilled the hole true, glue the sides to the centre piece, then add the cover pieces over the sides and, rather than hammer in an old nail here and there to keep the parts together, you should screw on fretwork cramps. Leave the work aside to dry.

### Wings and Gun Turret

Meanwhile, cut out the tail-wing and fin from  $3/16$ in. wood and shape up as sectioned at Figs. 2 and 3. By the way, please note the grain directions as indicated by the arrows.

The gun turret base is cut from  $5/16$ in. wood, the underside being filed concave as shown. The gun turret itself is cut, as a disc, from  $\frac{3}{8}$ in. wood. The top is rounded over, then a  $\frac{1}{4}$ in. wide by  $1/16$ in. deep groove filed over it as detailed. This groove makes the dome of the gun turret better in appearance than if merely plain.

As can be seen by the sectional view at Fig. 2, a small bolt is buried in the centre of the turret to project about  $\frac{3}{8}$ in. First drill a hole the thickness of the bolt, then drill a larger hole for the head, finally screwing the bolt in and plugging the resultant cavity with a tiny peg of wood or with plastic

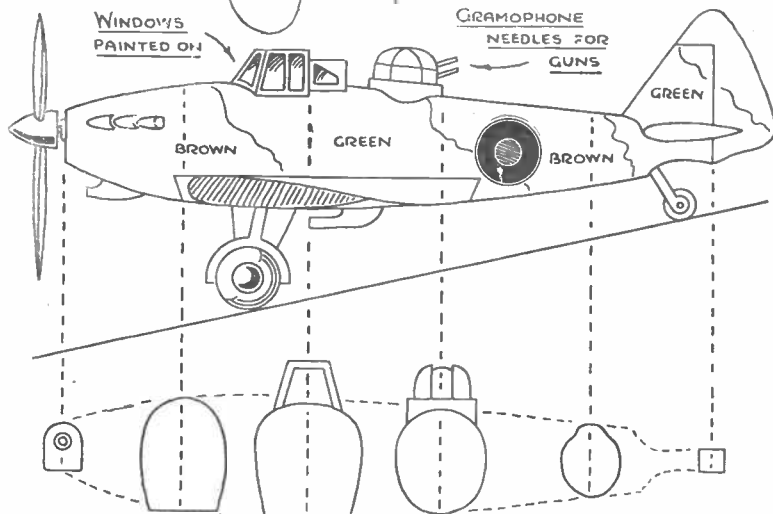


Fig. 3—Side elevation with shaping sections

it to shape from thin, springy brass, copper or tin, then drill the screw hole. The contact must be quite flat and clean.

### Shaping the Fuselage

By this time, we hope, the fuselage work will be ready for shaping, so remove the cramps. Turning the bottom side upwards, pencil the shape,

could fill the corners with plastic material.

The same precaution applies to the battery cell space. Do not fill the corners too much, otherwise the circular body of the motor (1in. diam.) and that of the cell ( $\frac{3}{8}$ ins. diam.) will sit up above the level of the dovetail for the main wing.

(To be Continued)

# You can get lots of fun by making this MINIATURE BALL ALLEY

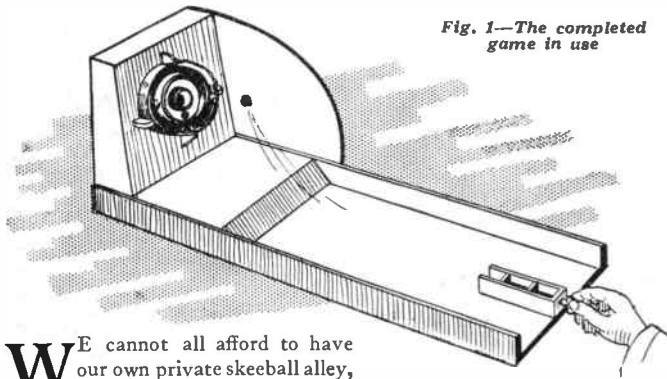


Fig. 1—The completed game in use

WE cannot all afford to have our own private skeeball alley, like those at amusement parks and fun fairs, but we can make our own miniature which will give great fun and amusement. In a full-size alley the balls are trundled by hand, but in this table model we propose to shoot them with the aid of a simple little "gun."

This method will add tremendously to the attractiveness of the game. The illustration Fig. 1 gives a good idea of the alley and the method of playing. There is an open-end "tray" made of thin wood, and at the far end there is a raised floor upon which stands the scoring box.

At the junction of the floors at the two levels there must be a sloping fillet arranged so that when the balls are shot along the low level floor they are deflected upwards and automatically thrown into one of the rings in the front of the scoring box.

## Side Shields

On each side of the scoring box must be fixed protective shields to prevent the balls from flying all over the room. The near-side shield in our sketch Fig. 1 has purposely been omitted to show the scoring box, etc.

The construction of the alley is clearly shown in Fig. 2. A base board A, is cut to a convenient length and about 8ins. wide and shallow sides are nailed on.

At some little distance from the far end of the board a squared fillet of wood D (see the circled diagram in Fig. 2) is glued across and on this the raised floor C is glued and pinned.

A similar fillet to D is fixed to the base board at the extreme far end to support the raised floor at this part.

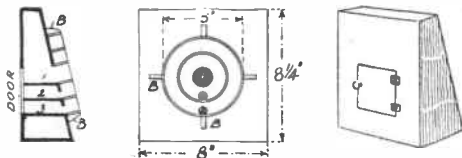


Fig. 3—Details of the three-circle score box

In the rightangle thus formed between the base A and the fillet D is glued a piece of triangular wood E.

This may be planed from a square piece to any angle, which is found best for the guidance of the balls.

## Scoring Circles

The scoring box can be made from thin wood as in Fig. 3. There are two shaped sides fixed to a plain back with a door cut in it as shown. The latter is for the removal of the balls from the three compartments which are clearly seen in the sectional diagram on the left of Fig. 3.

The actual compartments are formed by having three shelves cut to the length of the box, each shelf being of such a width that it meets the sloping front in which holes are cut opposite the three compartments.

The holes are seen in the view of the front board in Fig. 3. The centre hole is cut 1½in. in diam. and in it is glued a short piece of cardboard tubing as seen at the left in Fig. 4.

From the edge of the card tubing to the centre of the hole beneath should measure ½in. the actual hole being ¼in. in diameter. Then from the above centre, mark the centre for the lower hole, one inch away, and strike another circle of same diameter.

Next make two circles of stout card—one 3½in. in diam. and one 5ins. in diam. and both about ¾in. to 1in. in width. Allow in the cutting of these for four gluing tabs (see Fig. 4) to act as fixing for the rings to the wood.

As an extra fixing for the larger ring of card glue in the angle four little shaped wood blocks as B in the

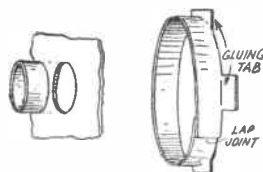


Fig. 4—The card rings

sketch M. The rings of card must be so arranged that they come at the level of the holes. The balls, when shot accurately will thus fall through and into their respective compartment at the rear of the front.

## The Firing Mechanism

The construction of the simple "gun" is shown in Fig. 5. It consists of a floor, two sides, one end and a partition all of say 3/16in. thick wood. The whole thing could be 6ins. or 7ins. long.

In the centre of the end piece and in the partition there must be drilled or cut a 3/16in. hole for the passage of the rod which carries the pull handle and the sliding partition.

This latter must be so made that it slides smoothly between the sides and the floor of the box. In the circled diagram in Fig. 5 is shown how the elastic is held to the slide to form the spring, as it were, for the gun.

A screw eye is run into the end of the rod where it is glued into the

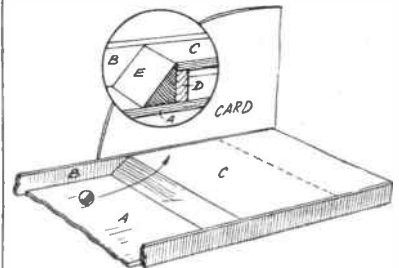


Fig. 2—The end of the alley

"slide", and the elastic carried through this and brought round the ends of the box where it is again held by screws, as shown in the large detail.

## Elastic "Spring"

Thus an excellent "pull" is made sufficient for "firing" the shots. A shaped handle is fixed to the near end of the rod as shown.

For playing, small wooden balls or marbles will answer, and of course one only at a time must be fired. The "gun" should be very slightly tilted back, and the handle withdrawn. The ball is then allowed to contact with the slide.

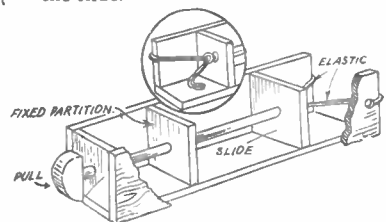


Fig. 5—The shooting mechanism

# A money-making proposition for the home is to have A SPILL-MAKING PLANE

A SUPPLY of spills are a great help these days when matches are so scarce. The spill plane illustrated is a useful tool for cutting spills easily and quickly. It is an improvement on the usual spill cutter, as the more common type requires the wood to be pushed against the cutter instead of vice-versa. This means some strain on the wrists, especially when the wood is too small to afford a firm grip.

Hardwood should be used for making the plane, as deal is too soft by far. Cut two pieces of  $\frac{1}{2}$  in. wood to the shape in Fig. 1. These are the sides of the plane. The narrow slot shown is to receive the cutter. This can conveniently measure 1 in. sq. and should be of sufficiently stout steel plate to remain rigid.

## The Cutter

An old broken plane iron, or chisel, if of suitable size, could be utilised, as the length of the slot to receive it can be altered to fit.

Any amendment in length, however, should be added to or subtracted from the right end of the slot so as to ensure the cutting edge being the same distance from the back edge of the plane as that given, i.e.  $2\frac{1}{2}$  ins. The slot should be a tight fit for the iron.

Wood,  $\frac{1}{2}$  in. thick, should be used to make the middle part of the plane, shown in Fig. 2. Hardwood of this thickness, however, may be difficult to get. A satisfactory alternative would be to make the part in  $\frac{1}{2}$  in. deal and glue a strip of  $\frac{1}{4}$  in. hardwood to the working edge, which of course, will be the bottom one.

## The Spacing Block

This slip should not increase the width of the part, the deal portion of which must be cut correspondingly less to allow for it. Glue the strip to the edge and clamp up until the glue is hard. Then plane the side edges level.

The middle part is then sandwiched between the outer parts and all three screwed together to make the body of the plane. The position of these screws should be approximately where shown in Fig. 1, so as not to

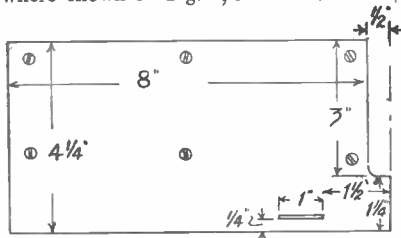
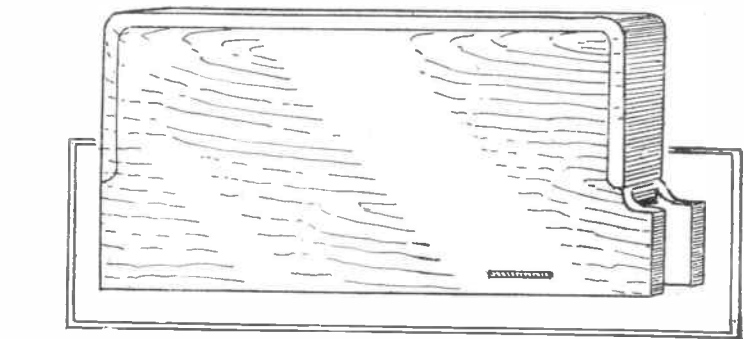


Fig. 1—Shape and details of sides



interfere with the cutter or foul the outlet space, C, from which the spills will emerge.

As the middle part is  $\frac{1}{2}$  in. less in width than the outer ones, a groove  $\frac{1}{2}$  in. deep will be left in the bottom of the plane.

Now unscrew the parts and holding the middle one upside down in a vice take off a shaving or two from the working edge. Rescrew together, temporarily (two screws will be enough.) Get the cutter and tap it into its slots.

## Getting the Thickness

The cutter, or at least its edge, will now be a trifle below the working edge of the middle part, the latter having been planed. This difference will be the thickness of the spills when cut—about  $1/32$  in. Try the plane and test for yourself; it is quite easy to use.

The wood for the spills should be pine and little less than  $\frac{1}{2}$  in. thick, free from knots and straight grained. Pieces of  $\frac{3}{8}$  in. thick matchboarding are quite good for making spills, if cut into suitable lengths.

Old boards are really better than new ones, or short ends could be bought from a timber yard at fire-wood price. Grip a piece about 8 ins. long in a vice, and use the plane in the same manner as a rebate plane is used.

Should the spills be too thin, take the plane apart and remove another shaving from the middle piece. Do not overdo this as the thicker the spills the harder the cutting may be and the less number from a given piece of wood.

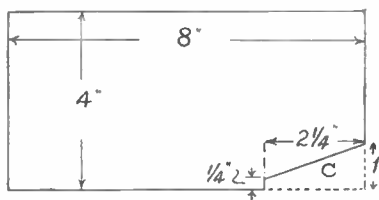


Fig. 2—The central spacing piece

When satisfactory, re-screw the parts together, all the screws this time. Where shown in the view of the finished plane, lightly bevel the edges and give the whole a good rubbing with glasspaper to make it comfortable for the hands to grip. A rubbing with linseed oil will finish the work.

A final word about fixing the cutter must be given. The detail (Fig. 3, A), shows how the cutter can be fixed through the slots, already described. As stated the fit must be a tight one or the strain put upon the cutter will make it work loose in time.

## Permanent Cutter

A more permanent method of fixing the cutter would be to drill two holes in it and fix it to the outer pieces of the plane with a screw each side, as at B. In this case, instead of a slot, a piece  $\frac{1}{2}$  in. wide and  $2\frac{1}{2}$  ins. long, is cut away from the bottom corner of the sides, as shown.

Where the cutter is to come a recess is sawn out to receive it, it is screwed in this recess. As, however, the cutter would have to be drilled, and drilling is not easy in steel unless it has been softened previously and re-hardened. Readers not caring to undertake the job can fix the cutter in slots as already described.

## Ready for Selling

A ready sale will be found for spills. They should be done up in bundles of 100 or so, and tied with coloured thread, or paper bands, to look well.

Or better still, they can be sold in fancy cases, or vases. Cases to hold these spills are quite easily made in cardboard or other suitable material and have been described before.

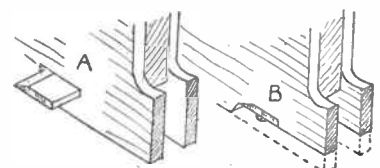


Fig. 3—Details of the cutting end



## NOTES ABOUT NEW ISSUES

**T**HIS week we are lucky in being able to describe and illustrate some of the new issues which come to hand from time to time. The first is one of a set of stamps from the Bahamas. This West Indian group consists of about twenty inhabited islands and an immense number of small islands and rocks. They are over 4,000 square miles in area, and have over 60,000 inhabitants. The Governor is H.R.H. the Duke of Windsor.

The chief industry is sponge gathering; the writer well remembers that in 1935 a friend of his wrote to the Bahamas for a pound's worth of sponges to give away as Christmas presents. He received not only sponge but also the stamps which were on the parcel—a 6d. and 1- of the King George V Jubilee set. The catalogue value of these two stamps is today very nearly the cost of the sponges.

### Columbus' Landing Anniversary

The set of stamps, one of which is here illustrated, is that which was issued in 1938. It has now been overprinted "1492 Landfall of Columbus 1942" and commemorates the 450th anniversary of Columbus's discovery of the land in the New World.

It is rather curious that the date should be made up of this year's figures in a different order (the set was issued last year).

This Alcove Bracket Design presented free with this issue. Wood for making is supplied any branch of Hobbies Ltd. for 6/1 or obtainable by post from Dereham, Norfolk, for 6/8 post free.



Christopher Columbus was born in 1450, a Genoese navigator, who under the patronage of Ferdinand and Isabella of Spain set out on August 3rd. 1492, with three ships. The largest was only 100 tons but he tried to reach Asia by sailing not east but west—hence the reason for the name "West Indies."

The adventurers thought that they had reached India via the west when land was sighted on October 12th. Columbus soon returned and set out again next year, and discovered the island of Dominica. Three years later he again returned to Spain, but in 1498 he went out again and reached the northern shores of South America, only to be sent back to Spain a prisoner in chains.

### A Picturesque Series

However, he was restored to Court favour and again set out in 1502, this time for his last voyage, as he died in 1506. Most of the stamps of this set are like the one illustrated here, but the 4d., 6d. and 8d. are the picturesque stamps entitled respectively "Sea Garden at Nassau," "Fort Charlotte" and the third "Flamingoes in flight."

Another value has been added to those already issued for Kenya, Uganda and Tanganyika. This is the 70c surcharged on the 1/- value of South Africa. The lower values were mentioned and one of them illustrated some time ago.

It was then mentioned that since the original stamp is printed in English and Afrikaans alternatively, you should try to collect the unused stamps in pairs to show each language on adjacent stamps. Used stamps will be difficult to get in pairs, but nevertheless, a specimen of each printing should appear in the album. Do not attempt to join them by means of a piece of stamp-paper on the back for this should never be done.

### Pair if Possible

If you do and anyone sees it they may not say anything but they will think a lot and it will not be very complimentary either. It is better to say that you know the two stamps are printed together, although you have not been able to get a pair, than to pretend that you already have what you have not.

We also illustrate one of the New Zealand Christmas Charity stamps. There are two values; the 1d. postal value with a ½d. added to help the Childrens Health Fund and a 2d. postal value with a 1d. added.

New Zealand usually produces an attractive design for her charity stamps and this one is no exception. These New Zealand issues have proved very popular in the stamp album and their market value has gone up very considerably.

### A Distinction

The King George VI Ceylon 5c. stamp which is illustrated is a new value for the later stamps of this colony. Have you noticed that all the stamps of King George VI, although they are like those of King George V in design are without the words "postage and revenue"?

Ask your friends to tell you any difference between stamps of this reign and the same value stamps of the last reign in addition to the change of portrait. You will catch all those except the very observant.

They will spend some time looking for little differences in the picture and neglect the frame round the picture and so miss the fact that there are no words as indicated.



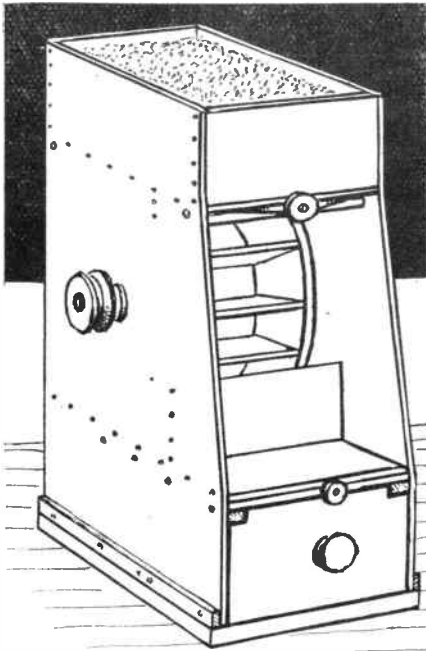
Christmas Charity Ceylon, New Value

New issues have come from Nyasaland too, and these you must be careful about as the designs are the same as the old ones but the colours have been changed. You will also notice that the words "postage and revenue" are left out from the King George V stamps from this colony as with the last. The new colours are as follows: the ½d. brown, the 1d. green, the 1½d. grey and the 2d. carmine.

These should, of course, be remembered when you are exchanging, otherwise you will lose the chance of obtaining fresh specimens.

No doubt most of you have got specimens of the new Indian stamps by now. They are easily distinguished from the old by the fact that the background is clear white, and, in addition, the designs are somewhat different.

# You can drive small models by linking them to A NOVEL SAND MOTOR



round the inner discs, clipping the end till it meets nicely as a continuous band. Hold temporarily in position by pins pushed through at a slant into the discs—four at the end corners will be quite enough.

## A Sturdy Wheel

Now set the rectangles (g) in their correct positions (lines drawn at  $22\frac{1}{2}^\circ$  from the centre giving these) and secure each by several small model-maker's spikes driven in through the outer discs to their edges.

When fully assembled, the wheel will be very sturdy and rigid, and the card (h) will require no further holding except at the joint, when four side spikes may be needed.

The parts already made can now be assembled, but before doing so bore two  $\frac{1}{4}$ in. diameter holes in the sides, at positions 10ins. up from the base and  $3\frac{1}{2}$ ins. from the back edge, to take the spindle.

Assemble as shown in the sketches, using side strips (k) at the base to give added strength; also the cross strengthener (l) of  $\frac{1}{4}$ in. square strip wood.

The spindle is any  $\frac{1}{4}$ in. diameter circular rodding and fits tightly through the centre hole in the wheel. It protrudes on either side, and is held at each with a pin going through a carefully bored hole over a metal washer. Should the spindle not fit tightly in the wheel put in extra discs (y) and run pins through to the wheel and spindle as shown.

## Regulating the Sand

Put a piece of  $\frac{1}{4}$ in. strip between the sides directly below the front edge of the opening in (a), but  $\frac{1}{4}$ in. down. Also fix the piece (m), and over them fit (p), a piece of  $\frac{1}{4}$ in. material shaped as indicated, so it slides under the opening in (a) forming a valve to regulate the flow of sand.

A similar piece to (m) is put in position as (q), and another sliding piece (r), although in this case the "valve" slides on two runners (s), again made of  $\frac{1}{4}$ in. strip.

All is complete now except the boxes. The lower box is made to take out as a separate item, the idea being that as it fills up, the valve (r) can be closed. The box is then withdrawn, emptied

**H**ERE is a really novel design for woodworkers with a mechanical turn of mind. It is a sand motor and works on the same principle as a water-wheel, falling sand taking the place of water. A pulley is attached as shown, and the motor is quite capable of driving small models.

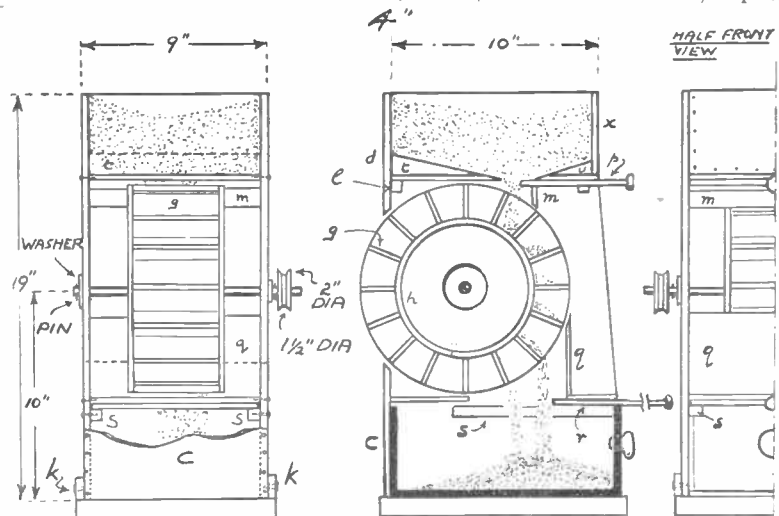
First cut some of the main parts. The base is 12ins. by  $9\frac{1}{2}$ ins. and is 1in. thick (as the whole construction must be sturdy, sand having a somewhat considerable weight) and the sides are 19ins. by 11ins. at the lower edge, reducing to 10ins. at the upper. Any suitable  $3/16$ in. material is used for them.

## Commencing Work

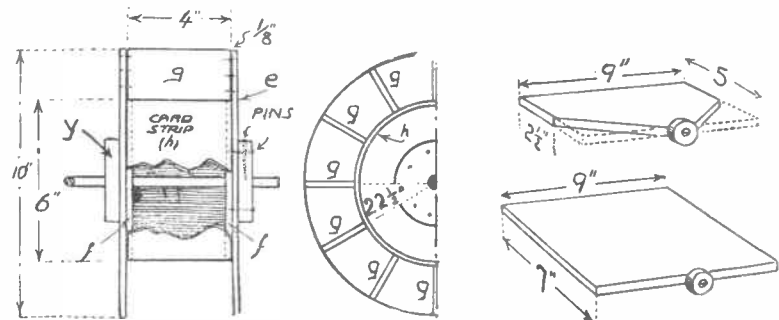
The parts shown, marked (a) and (b) with openings as shown, are for floors. They are  $8.5/8$ ins. wide and of sufficient length to bring them flush with the front edge of the sides. Cut them first to 11ins. long and trim level with the edges later. Prepare also the two pieces (c) and (d), 9ins. by  $5\frac{1}{2}$ ins. and 9ins. by 6ins. respectively.

Now make the mill wheel. This is constructed of four discs of  $\frac{1}{4}$ in. plywood, two of them (e), 10ins. diameter, and the other two (f) 6ins. diameter; also sixteen rectangles (g) 4ins. by  $1\frac{1}{2}$ ins. by  $\frac{1}{4}$ in. Assemble by securing the smaller discs accurately inside the larger and boring  $\frac{1}{4}$ in. diameter holes at the centres of each pair.

Next take a strip of stiff card 4ins. wide and 19ins. long (h) and lay it



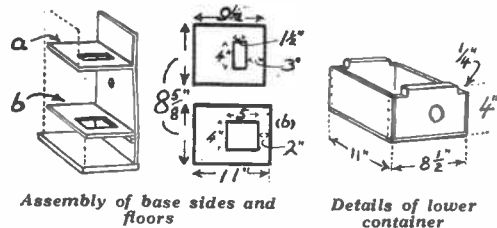
Sectional views showing various other parts mentioned in construction



Side and front view of wheel

How valves are made

into the top container and replaced. The wheel can still be running if this is done quickly, the sand falling on to



the top of the valve (r) for the moment.

The upper box is completed by putting in the end (x) and the two

wedges (t) and (u) to facilitate the flow of the sand, and also to help general rigidity.

Details of the lower box are given in the sketch. A knob is fitted in front to make the pulling out easy and the ends are cut as shown to slide under the valve runners (s).

A final item is the pulley, this being made up from three discs of 3/4 in. wood glued together. The inside one is 1 1/2 in. diameter and the two outside 2 ins., these two latter being bevelled. A 1/4 in. hole is cut in the centre to take the axle. If the pulley

does not grip tight enough and tends to slip, fine pins pressed through to the spindle (plus glue) will be needed, but a tight fit in the first case (again with a touch of glue) should make the pulley tight enough by direct fitting.

#### Hints on Running

With regard to good operating. A little graphite (lead pencil) rubbed into the axle where it passes through the walls will act as a lubricant. Use also only perfectly dry sand, for the slightest trace of moisture will prevent easy flow. Only connect the motor with models that it can comfortably work, and do not expect it to undertake too much.

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**L**ONELY? Then write confidentially, Secretary, V.C.C. 34 Honeywell Rd. London, S.W.11. Stamp.

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SPINNER



SWITCH CONTACT  
CUT FROM TIN OR  
BRASS

BRASS

# MODEL DEFIANT PATTERNS

Sheet One

See page 9

CENTRE  
CUT ONE FROM  
 $\frac{1}{2}$  IN.

SIDE  
CUT TWO FROM  
 $\frac{1}{4}$  IN.

RECESS CUT  $\frac{1}{8}$  IN. DEEP

FIN

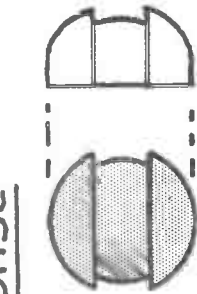
CUT FROM  
 $\frac{3}{16}$  IN.

COVER

CUT TWO FROM  $\frac{1}{8}$  IN. WOOD

BASE

GUN  
TURRET  
PARTS



CUT FROM  $\frac{3}{16}$  IN.

TAIL

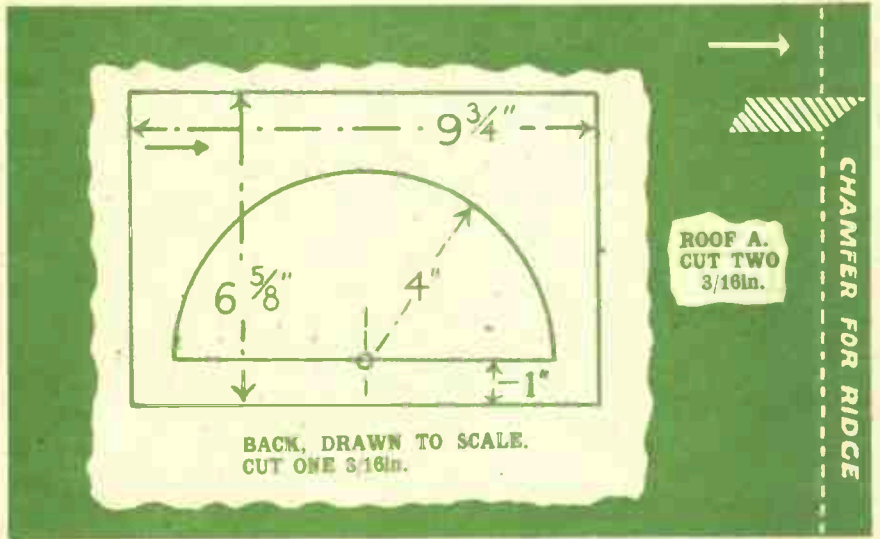


BRACKET.  
CUT ONE  $\frac{3}{16}$ in.



OVERLAY ON FRONT.  
CUT ONE  $\frac{3}{16}$ in.

LOWER BACK.  
CUT ONE  $\frac{3}{16}$ in.



BACK, DRAWN TO SCALE.  
CUT ONE  $\frac{3}{16}$ in.

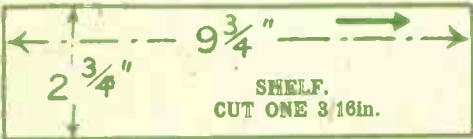
SCREW

SHELF

OVERLAY ON FRONT.  
CUT ONE  $\frac{3}{16}$ in.

ROOF B,  
CUT TWO  $\frac{3}{16}$ in.

BRACKET.  
CUT ONE  
 $\frac{3}{16}$ in.



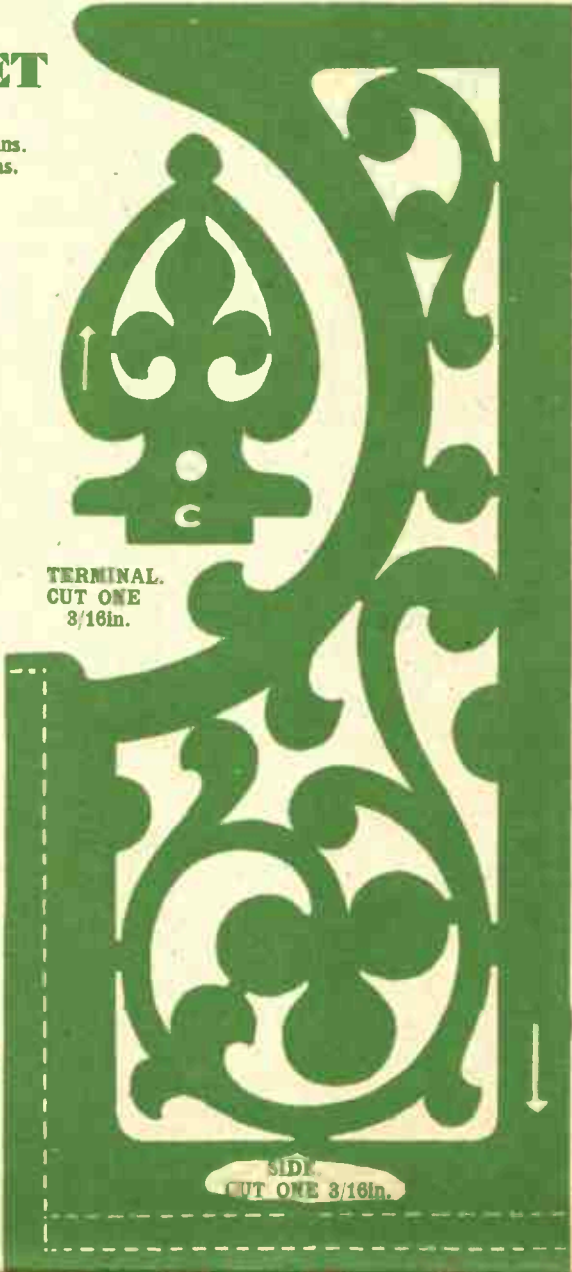
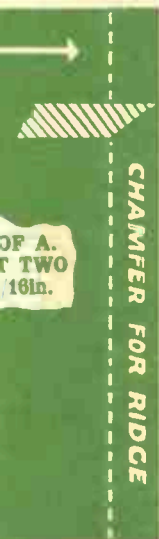
DESIGN

No.  
2478  
14.4.43

SUPPLEMENT TO HOBBIES No. 2478.

# ALCOVE BRACKET

SIZE :- HEIGHT 15ins.  
WIDTH 11ins.



TERMINAL.  
CUT ONE  
3/16in.

PANELS OF WOOD REQUIRED  
FOR THIS DESIGN

ONE H3 TWO J3

The wood supplied for this design is composed of standard panels as detailed above. The price is shown in Hobbies Weekly, dated APRIL 14th, 1943, but is subject to change after that date, when the current edition of Hobbies Handbook should be consulted, or application made direct to Hobbies Limited, Dereham, Norfolk.



The arrows indicate the direction of grain of wood.

UPPER BACK.  
CUT ONE 3/16in.

NOTE.—This design sheet is only presented free with the current issue of Hobbies and not with back numbers. Further copies may be obtained

TO TOP EDGE OF BACK



OVERLAY ON FRONT.  
CUT ONE 3/16in.

ROOF B,  
CUT TWO 3/16in.

BRACKET.  
CUT ONE  
3/16in.

SHELF

ROOF A

ROOF A

ROOF B

FRONT.  
CUT ONE 3/16in.

CAPS.  
CUT ONE  
OF EACH  
3/16in.

The wood supplied for this design is composed of standard panels as detailed above. The price is shown in *Hobbies Weekly*, dated APRIL 14th, 1943, but is subject to change after that date, when the current edition of *Hobbies Handbook* should be consulted, or application made direct to *Hobbies Limited*, Dereham, Norfolk.

ROOF B,  
CUT TWO 3/16in.

The arrows indicate the direction of grain of wood.

UPPER BACK.  
CUT ONE 3/16in.

NOTE.—This design sheet is only presented free with the current issue of *Hobbies* and not with back numbers. Further copies may be obtained.

GLUE THIS EDGE TO TOP EDGE OF BACK

SIDE.  
CUT ONE 3/16in.

TERMINAL.  
CUT ONE  
3/16in.

SIDE.  
CUT ONE 3/16in.

PRINTED IN ENGLAND.

# AN ALCOVE BRACKET

**T**HE patterns on the other side provide for an unusual type of bracket, cut in wood with the ordinary fretwork tools. Apart from the complete patterns shown, it will be necessary to draw out to the sizes indicated, the patterns for the back and for the shelf. All the other parts are as required, and can be pasted down to the wood direct.

Cut each one out carefully and clean up as usual with glasspaper. The construction of the parts requires attention, and should be done carefully. Most of the parts butt up to each other, and in consequence should have definitely straight edges which will hold the glue.

In addition to this it is advisable to put in two or three screws from the back into the edges of the wood, a hole being drilled first to prevent the board splitting. All the wood used is 3/16in. and the parts required can be taken from the various standard panels indicated with the patterns.

## First Operations

To the back the two side uprights are glued and screwed slightly inwards from the outer edge, and spaced just wide enough to take the front canopy piece which is also glued and screwed across. These screws will be covered by the drop overlays on the front, which in turn are surmounted by the small platform caps into which is let the terminal at the joint C.

## The Shelf

The shelf is a plain rectangle 9 $\frac{1}{2}$ ins. by 2 $\frac{3}{4}$ ins. glued and screwed beneath

the sides. Behind this shelf and in line with the main back comes the lower back ornamental piece. This must be glued carefully in line with the back itself, and is held there by the rightangle bracket which goes along the underside of the shelf and on to the hanging back piece.

The joins of all these parts must be carefully undertaken to see that they close up to each other and that the glue is held firmly. The shaped front provides a canopy between it and the back over which a roof portion is fitted.

## Sloping Roof

There are the two flat pieces of the roof (B) glued and screwed to the inside of the sides horizontally. The sloping roof pieces A are then fixed to meet at the top. For this purpose the upper edge must be chamfered to an angle so the two parts bed together closely. Notice the actual angle and position of these roof pieces which is shown very clearly by the dotted lines on the pattern of the front.

A good plan is to mark them off in pencil on the back of the front before fixing in place, and before the paper patterns are cleaned off.

Behind this sloping roof is the triangular upper back. This stands on the main back itself, and provides further support for the roof slopes themselves. The actual boards fit a little inside the edge of the triangular piece, and should be screwed from behind like the other parts.

For hanging, a couple of wall plates should be added to the main back itself, one on each side of the triangular upper back.