

# Hobbies

## WEEKLY

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### A Safety model Three-wheel

# RUNABOUT

HERE is a jolly little safety runabout for the children. We term it "safety," because it is a rather out-of-the-ordinary scooter, and has three wheels instead of just the two.

Any youngster can sit on it and coast down hills, or he can be pushed about and steer himself just where he likes. It is in fact a light, manoeuvrable little tricycle of sturdy construction.

The method of assembling the parts can be gathered from the side view Fig. 1. Sound pieces of deal will do well for the framework, while harder wood such as beech should be got for the wheels. The wheels, however, would be much better bought ready-made.

#### The Baseboard

At Fig. 1 we see that the base A will be the first part to set out and cut. On this piece all the other parts are built. In Fig. 2 measurements are included for the base, which tapers slightly towards the front from 6ins. to 4ins. This piece should be from  $\frac{1}{2}$ ins. to  $\frac{3}{4}$ in. thick.

The upright piece B should also be about  $\frac{3}{4}$ in. thick, cut to the measurements given in Fig. 3. Note the tenon along the lower edge which must be cut to fit tightly into the

mortise in the floor. The tenon at the top, too, is intended to fit into the seat, which is a piece of  $\frac{1}{2}$ in. stuff about 7ins. by 5ins. with the mortise cut centrally in it.

#### The Seat

The seat piece should be tapered towards the front and have all its edges rounded off and made smooth. To further strengthen the upright, two side brackets C are added. These are from  $\frac{1}{2}$ in. wood and measure 4 $\frac{1}{2}$ ins. by 3ins. and cut at the angle as seen in the detail Fig. 4. Screws are put up through the floor into these.

The two side uprights D are next set out, cut to measurements given in Fig. 4. Sandwiched between these last two pieces is the front E. 11ins. long and 2 $\frac{1}{2}$ ins. wide.

At a distance of 2ins. from

the top edge of the piece there is to be a 4in. long mortise to take the outstanding piece G. Screw all these pieces together, and then to the floor. Add a screw also through E into the front end of B.

Then the tops of the pieces D, D and E can be connected firmly by adding the cross piece F which measures 5ins. by 3ins. and  $\frac{1}{2}$ in. thick.

Piece D must be a well-chosen piece of wood of good quality, and its



A delightful article to make for the youngster

size is given in the detail Fig. 4. It is to this piece that the front steering wheel support is pivoted, so the front sloping edges must be rounded, and a hole about  $\frac{1}{2}$  in. diameter bored right down through it to take a  $\frac{3}{16}$  in. piece of iron rod.

The best way to bore this hole will be by a gimlet, first boring down to

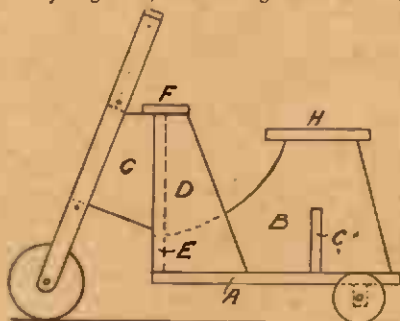


Fig. 1 Side elevation with lettered parts

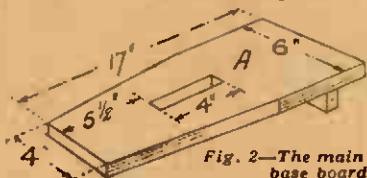


Fig. 2—The main base board

about half way then boring upwards to meet this hole. By carefully marking the line of the hole in pencil on the outside, and sighting off also from the front while boring the hole may be got through successfully and cleanly.

Glue D firmly into E and add a couple of screws through the latter piece one above and one below the tenon joint. The body framework of the tricycle is now complete with the exception of the wheels.

#### The Wheels

These should be  $3\frac{1}{2}$  ins. diameter and are screwed to an axle piece 6 ins.

long by  $1\frac{1}{2}$  ins. wide by  $\frac{1}{2}$  in. thick. Screws must be run in from above into the cross axle and this can be further strengthened by adding a couple of glued angle blocks below.

When putting on the wheels use roundhead screws, and insert a metal washer each side of the wheel to make for smooth running and eliminating

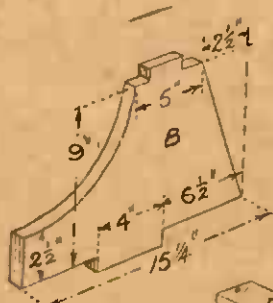


Fig. 3 The central seat support piece

friction on the bearings.

The steering wheel support and its top handle bar will need a little careful thought and work in a ship, although there is nothing difficult in the fitting. A

complete detail of the support is given in Fig. 5, and for themain uprights two pieces of straightgrained wood are required about 20 ins. long and  $1\frac{1}{2}$  ins. by  $\frac{1}{2}$  in. in section.

The lower ends of the pieces are to be cut to a semi-circle while the tops are cut square. At 6 ins. and  $7\frac{1}{2}$  ins. centres respectively there are cross blocks of wood in between which the pivot piece G is to work.

The blocks are  $2\frac{1}{2}$  ins. long and  $1\frac{1}{2}$  ins. by  $\frac{1}{2}$  in. in section, with a hole bored

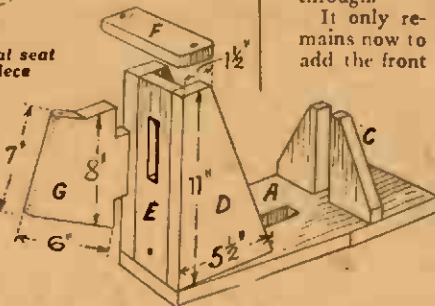


Fig. 4 General assembly of parts

through the centre to receive the  $\frac{3}{16}$  in. iron pivot pin.

The tops of the support are held by a sturdier block of wood as shown, securely nailed in between. A central hole will also be bored up through this block to take the fixing for the cross handle which might be in the form of a bolt and nut, or perhaps just two screws.

Fix or pivot the support allowing freedom of movement and adding a metal washer both at the top and at the bottom of the piece G while the pivot pin is being inserted. The pivot pin must be bent to an eye at the top to prevent it falling right through.

It only remains now to add the front

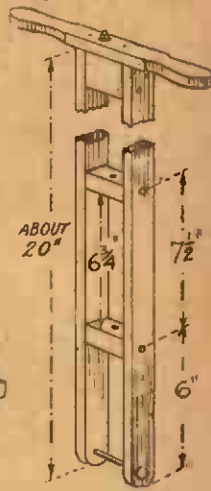


Fig. 5 The steering column and handle

wheel bins. in diameter and held to the supports by a bolt with washers each side to prevent lateral movement.

A handlebar can be made from flat or square-section wood and to any convenient length, the extremities being shaped to form hand grips.

Two coats of paint should be applied to all the woodwork, bright and attractive colours being chosen. A little lubricating oil should be dropped on the axles of the wheels occasionally and also on the pivot pin washers.

## Result of a Reader's Two Hobbies

THE pictures shown prove the happy combination of photography and model-making, and a number of helpful hints were forwarded with them by C. R. Temple of Grapes Hill, Norwich. He has completed all the models we have published and even added some of his own—including the Graf Spee 3ft. bins. long. Here is how the table top photographs were taken. Two large sheets of blue tinfoil, well crumpled, were spread on the table with a black-out board used as background. With models suitably arranged, the camera with portrait attachment was fixed on a pair of steps. Distance was correctly measured off and the shutter set for time. A lamp of 100 volts was used for illumination, and  $2\frac{1}{2}$  minutes allowed for exposure.

As Mr. Temple says, apart from the pleasure of making the models, the photographing, developing and printing provide added interest. He, too, has made it profitable by winning prizes in "Table Top" photographic competitions and

reproduction in several national daily newspapers. The guineas, he correctly remarks, come in handy for buying more tools and materials. Other readers should bear these suggestions in mind.





# Some practical articles the carpenter can make for GARDEN WOODWORK

**T**HIS is the time of year when the handyman with woodwork tools can turn his ability to useful pieces of work for his other hobby—in the garden. Time and labour can both be saved by putting in an hour or two's work with those gadgets shown.

They come in useful for a number of operations and if properly made will last for years. The wood involved can be from any old boards and there need not be the care taken in shape and finish that there would be with a more delicate piece of work.

After all, these tools are for rough usage on the land, and need not therefore have a great deal of time



Fig. 1—A useful dibber



Fig. 3—Running Line Holder

spent on them to make them look nice.

During the course of planting quite a large number of holes are normally required, and various home-made tools are used, extending from a plain piece of stick to an elaborate dibber. The one illustrated at Fig. 1 is of an adjustable hole maker quite easily made, and suitable for various occasions.

## A Hole Maker

It consists of a round shaft about 2½ ins. in diameter, with a cross strut of round wood near the top to form the hand hole. This can be a piece of ½ in. dowel projecting about 4 ins. each side. The other end of the shaft is gradually tapered to a smooth round point, and four holes made right through. The first hole can be about 3 ins. from the bottom with a distance of 2 ins. between the others.

A circular length of rod the same diameter as the hole is required, and

when this is put through (see Fig. 1) the dibber is automatically stopped at the depth required. The point is pressed into the ground and the cross strut prevents it going too far. In this way, a series of holes can be made quite easily, and all guaranteed the same depth.

Remember to keep the stick a fairly tight fit, and to see that the other holes are kept clean when not in use.

## Drill Formers

For marking off drills for small seeds, you have two simple forms of rake shown at Fig. 2. Here again there is the adjustable one with the wooden dowel pegs put in as required, the other being a definitely fixed space between the teeth.

The first mentioned is made of

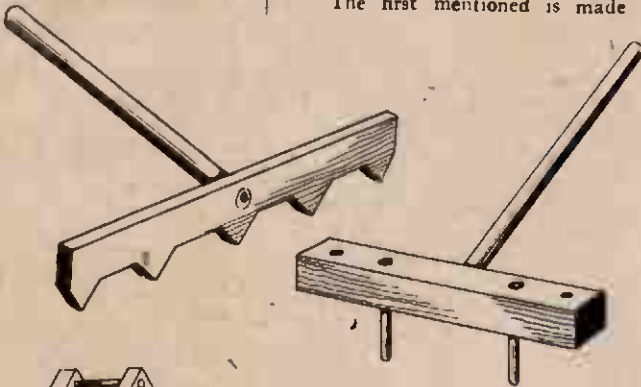


Fig. 2—Two forms of rakes for marking drills

a crossbar of fairly thick wood (about 2 ins. square). Through this a series of holes is bored taking the centre as a starting point and placing each the same distance on the opposite side.

The dowel rods which form the marking for the drill are short pieces which can be firmly put into whatever hole is required. They must, of course, fit reasonably tightly so that they do not disappear when the marker is put in use.

cut at a distance apart likely to be required in the drills concerned. The piece of board should be at least 3 ins. wide with the teeth cut in 1 in. deep. In this tool also a handle is fixed.

Remember in fixing any of these handles, to make them quite secure because a considerable amount of pull and strain comes on to them during the course of use. Cut the end to a wedge shaped angle and then cut a similar hole into the head.

Glue the two pieces together and drive a nail through the head so that it pierces the projecting wedge of the handle itself. This will help to spread the wood and to serve as a secure fixer for the whole thing.

## Running Line Holder

The running line holder shown at Fig. 3 will save much time over the usual method of winding the rope round a plain stick. Here you have two triangles of wood with 3 in. sides revolving on a central spindle.

These triangles of wood are held apart—about 4 ins.—by a strong dowel rod drilled into each corner as shown. Drill the holes carefully so the wood does not split, and glue the dowel firmly, driving a nail in at the end to secure additional grip. The central handle can be 18 ins. long and one end should be tapered off to a point.

In this way, the line holder can be used in both hands or can be stuck into the ground at the required point and the end of the cord drawn away to the opposite end of the row. The rope or line is bound around the three dowels at the corners of the triangle, and the whole thing revolves on the centre spindle.

## The Revolving Body

This spindle can be 1 in. or 1½ in. in diameter, made perfectly smooth to allow the line holder to run easily. Suitable holes are bored in that part for this purpose.

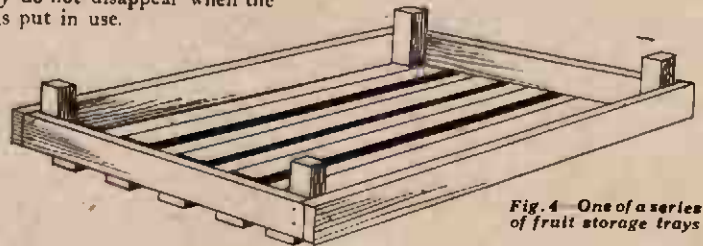


Fig. 4—One of a series of fruit storage trays

An ordinary broomstick handle can be fitted into the cross head at a suitable angle for holding. The other suggestion in Fig. 2 is a plain piece of wood about 1 in. thick into which four or five pointed teeth are

Side play is prevented by driving a nail carefully through the central spindle fairly close up to the outside surface of the line holder itself. One of those headless nails—or a piece of stiff wire would do—as shown at Fig. 3.

Later in the season, the gathering of the fruit and the question of its storage will arise, and it is not too early therefore to plan for making suitable carriers and trays for the purpose. They can thus be undertaken on some of those wet days which you will not be able to occupy in outside work.

### Fruit Storage Tray

A suitable tray is shown at Fig. 4 and it can be made economically with struts of wood and just square section blocks at the corners. The size depends on the number you need, and the storage room available. The corner posts, as you see, project above the sides and so form a block on which the next similar tray can be stood.

The bottom of the tray consists of strips placed slightly apart so the whole arrangement provides the necessary circulation of air and the

availability for the hand to take out any which happen to go rotten.

A useful length for a small tray of this character is 2ft. 6ins. by 1ft 6ins. made of  $\frac{1}{2}$ in. strips 2 $\frac{1}{2}$ ins. wide with an equal space between them to fill the extent of the tray. Nail them securely to the end rails driving in the nails at an angle so they do not pull out.

If you think the weight is likely to do this, the bottom strips can be shortened slightly and nailed between the upright ends. In this case you must ensure all of them being the same length to fit snugly between the end pieces

### Firm Corners

The side upright strips must be nailed not only to each other and to the bottom rail, but also to the corner posts. It is indeed essential that these corner posts are very firm, because they actually take the weight of the whole thing.

Do not make them too long (6ins. is ample) for if they extend too far and you build a number of trays on each other, the top tiers may make the whole thing apt to wobble. It is a good plan, too, to test each of these corner posts for squareness so that the trays coming immediately above and below form a combination of the corner pillar.

### Wood Finish

If one of these corner blocks is out of true it is apt to spoil the stability of the others. The trays should be left with the wood in their natural state after having been cleaned to ensure that no shivers are left to pierce the fruit or to tear the fingers.

The other articles mentioned here are for rougher garden use and can therefore be creosoted or painted with some similar preservative to impregnate them against the weather.

## Our amateur carpenters will find these useful HINTS ON GRINDING

**W**HEN grinding a tool, such as a wood chisel or a plane iron cutter, the emery wheel should always turn away from the implement—i.e., in an anti-clockwise direction—and not towards it, otherwise a needless “burr” of metal will form on the cutting-edge side which will have to be removed on the oilstone.

Moreover, the emery wheel, turning in a clockwise direction, is unnatural and results in poor grinding and bad wear on the grindstone itself.

### The Question of Water

Bench grinders, or other types, fitted with emery wheels should not be watered, unless specified by the makers. An emery wheel is very porous and becomes rather “soft” when saturated with water—so soft, in fact, that a small item, such as a drill, would cut a groove in it almost at once.

The main reason for “watering” a grindstone wheel is that the water keeps tools from over-heating and thus losing their temper. Only certain types of hard grinding wheels, such as the carborundum types, or water trough types, may be watered. When wheels, such as the coarser types fitted to geared grinders, cannot be watered, a tin of cold water is used to cool tools, these being dipped into the water frequently.

### Do Not Lean

Never lean heavily on tools when grinding them on geared (bench type) grinders. This produces great friction and much over-heating, apart from the speed of the emery wheel.

Most bench grinders have a ratio of 7 to 1.

In other words, the emery wheel revolves seven times with each complete revolution of the handle. The handle, therefore, should be turned in a steady, leisurely manner, with the implement to be ground resting flatly on the circumference edge of the emery wheel at the desired angle and moved slowly, but firmly, from side to side.

### Lubrication

Bearings and cog-wheels in geared grinders require to be lubricated occasionally. A thick oil, not a thin machine oil, should be applied to the moving parts. Apart from preventing squeaking noises, the thick oil keeps emery dust away from the bearings.

### OUR FREE DESIGN FOR BOOK ENDS

These attractive pair of book ends can be made in wood from our Design No. 2582 in this issue. The necessary wood is obtainable for 7/3 from any Hobbies Branch or for 7/10 post free from Hobbies Ltd., Dereham, Norfolk.



A thin oil is more apt to create an abrasive “paste” at the outside of the bearings so that the spindles quickly become worn and loose.

### To Prevent Hollows

Always grind small implements, such as drills, screw-drivers, etc., on the side of the emery stone—never on the edge. This prevents hollows and grooves forming in the edge so that wider edge tools, like plane iron cutters, are evenly ground.

When the circumference edge of an emery wheel becomes badly worn, it can be straightened by means of a piece of metal piping, such as electric wire casing, gas pipe, etc., made from iron or steel. Whilst turning the wheel, keep the end of the pipe flatly against it, with the end supported by the tool rest. The pipe is slowly turned during the grinding; a piece of pipe is better to use than a flat piece of metal.

### Rigid Fixing

If you possess a geared grinder, make a habit of always screwing it to the bench top in the same position. By doing so, the supporting feet and cup of the fixing screw will make beds for themselves in the wood and thus always ensure a firm fixture on the bench top.

Should there be no projection to which the grinder can be screwed, a scrap piece of wood could be clamped, or screwed, to the bench top. The space between the supporting “claws” and the fixing screw cup is often limited to 2 $\frac{1}{2}$ ins. When, therefore, a bench top is 3ins. thick, the tip mentioned can be resorted to.



# Wood, paint and fretsaw combine to make a novel NOVELTY SPILL HOLDER

**H**ERE is a little novelty that can be made up from a few pieces of spare fretwood. As our picture on this page shows, it is a double spill-holder in the form of a castle with two towers. The draw-bridge in front of the main gate forms a shelf for a box of matches.

The length and height of the main back is 8½ ins. and 7½ ins. respectively, while its total projection from the wall is 3½ ins. There is some very simple fretsaw cutting but its whole attractiveness relies upon painting it realistically to represent stonework, etc.

It will really make a very colourful and showy object for either hanging on the wall or standing on sideboard or side table.

## Wood and Drawing

The whole article can be made up from 3/16 in. wood, glued and screwed together. There is a little drawing to be done to get the correct shape of outline of back and towers, but this should not be difficult in view of the fact that we have included here an illustration of the whole

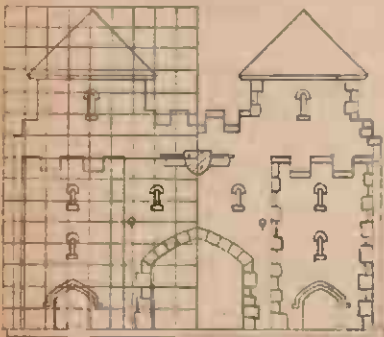


Fig. 1—Outline to draw and paint

of the back with one half squared over to make reproduction as simple as possible.

All the worker has to do is to set out the series of ¼ in. squares as shown on the left half of Fig. 1; nine squares horizontally and fifteen squares vertically.

He should use either a tee-square and set square for this job, or even two set squares will do the work satisfactorily providing he keeps the angles true in the working out. When the squares are formed on paper first transfer the outline to the wood afterwards.

## Background

Note the general outline of the background and the central archway in relation to the squares and draw in carefully. Include also, of course, the angular roof, and on this paper drawing add the outline—battlements, windows and archway of the side tower which is included in the detail Fig. 1.

When one half of the design has been completed—all that contained within the squares—trace it on to thin paper and turn this over on the centre line and proceed to outline the second half through this paper to finish the complete front of the castle. With all the detail transferred to the wood cut round the outline with the fretsaw, and cut out the arch opening.



Fig. 2—The floor board.

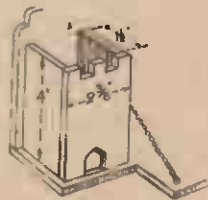


Fig. 3—Tower piece

This arch opening will later have a piece of thin wood or card glued at the back, as will the



two tower doorways.

Paint the front of the castle grey and put in the lines of the stonework in black, with heads of windows and arch painted red. Glue additional triangular pieces to the roofs as overlays and paint these red and line in for tiles. Add the shield above the central arch in red, blue and yellow.

## Floor Piece

Next make the floor for the castle, as Fig. 2, and clean up the cut edges before screwing on the back upright. The two side towers are constructed as Fig. 3, the shaping of the top of the front of each and the doorway being got from the previously prepared paper tracing.

Cut the four side pieces 4 ins. long by 1½ ins. wide and glue and screw them between the main back and the tower fronts as shown in the detail Fig. 3.

Paint the towers in the same manner as the back and finally add two chains with eyes and hooks to represent the drawbridge.

## How Nails were Made long ago —

**T**HE search for salvage has brought to light many unusual articles. One such I came across in a Worcestershire village, and I mention it here because it is of particular interest to those of us who use hammer and nails. It was the iron block on which, not many years ago, nails were made by hand.

It was not large, but on it was everything necessary for making the nail from beginning to end. There was a gadget rather like a very tiny sharp boot scraper for cutting the wire, and

there was a small nozzle affair in which the heads were rounded. Knowing the owner, I listened to an entertaining account of how nails were made by the country folk.

I learned how the raw material, iron, was bought in lengths of, perhaps, 2 or 3 ft., how it was doubled so that two nails could be made at a time, and the end heated in a cinder fire blown to a glowing heat with large bellows.

The nails were fashioned at surprising speed, the red-hot tip of the

square rod being hammered to shape, then partly severed, leaving sufficient for the head. Finally the heads were hammered out to the correct shape, and the completed nails ejected by touching a handle. With a length of wire and a hammer I was shown how dexterously the rod was twisted this way and that as the nail was shaped.

The nails were packed in small bags which were stacked till the end of the week; when they were taken by donkey and cart for sale at a nearby town.

# STAMP COLLECTOR'S CORNER

## STAMPS OF THE FAR EAST

(Concluded)

THE first portion of this interesting article appeared in our issue of December 28th, 1944, and should be read in conjunction. This part completes the particulars.

Hong Kong, the second oldest of the British Colonies on the perimeter of the China Sea, was acquired in 1841 as the result of the opium war with China. China had for some centuries been closed to foreigners except for the single port of Canton opposite Hong Kong.

Here English traders had exchanged opium of India for the China tea that was in such growing demand at home. Both the Chinese and British Governments attempted to stop the opium traffic but neither the arrogant Chinese officials in Canton nor the not-over-scrupulous British traders paid

the Harbour, the Hong Kong bank, and a Street Scene (see Fig. 3). On the 4c. value a Chinese junk is matched against a modern liner and on the dollar value a Chinese clipper of the old opium-trading days is set against a seaplane.

### Hong Kong Surcharges

The capture of Hong Kong by the Japanese early in February, 1942, has made the used set considerably scarcer than the mint.

Apart from the design, the chief interest of the earlier issues of Hong Kong is the numerous surcharges, with many rare varieties, and the frequency with which "treaty port" cancellations occur. Some collectors specialise in these.

The last group of British possessions in

His position in the British Empire was unique for he was both a British subject and the ruler of an independent state. The only stamp that bears his portrait is the first stamp issued by Sarawak, the 3c. brown on yellow (see Fig. 4) It appeared in March, 1868, and Brooke had died the year before.

He was succeeded by his nephew, Sir Charles Brooke, whose portrait appears in all later issues till 1917, when he died (see Fig. 5). The most recent stamps bear the portrait of the third white Rajah, Sir Charles Vyner Brooke.

### Sarawak Sets

Sarawak stamps make a good show when arranged in sets and are easy to get. Even the original James Brooke issue is catalogued at only



Fig. 1—Victoria (surcharged) Fig. 2—King Edward VII.



Fig. 3—Street Scene



Fig. 4—Sir James Brooke Fig. 5—Sir Charles Brooke



Fig. 6—The Tapir and Stag

much regard to government wishes.

Growing friction between them finally brought war in 1839. The Chinese were easily beaten and in the treaty that followed China was forced to recognise the British conquest of Hong Kong and to admit British traders to five "treaty ports", including Canton. The Closed door of China was thus forced open.

It was not, however, until December 1862, that the first stamps were issued for Hong Kong. The design was simple but effective. It was of Queen Victoria's head framed in a rectangular panel with Chinese characters in the side labels and English in the top and bottom (see Fig. 1).

### The King's Head

All the subsequent main issues are of a roughly similar type, except that in the Edward VII and George V issues the King's head was set against a dark background in a crowned oval and scroll work added to the corners of the main frame and the side labels (see Fig. 2). The additions were not an improvement and many collectors were glad when a return was made in the George VI issue to the plainer first design.

The only pictorial issue was the Centenary set of 1941, portraying

these Eastern waters is the string of protectorates in North Borneo—Sarawak, Brunei, Labuan, and British North Borneo.

The portraits on the stamps of Sarawak are a reminder of the romantic circumstances in which this territory was acquired. When the Dutch became the paramount power in the East Indies in the seventeenth century they extended their control only over the eastern and southern parts of the island. The north remained under the independent rule of the Sultan of Brunei.

By the early nineteenth century his power had declined, his subjects had fallen into discord and his coasts, as in Malaya, had become the haunt of pirates who preyed on the shipping bound from Singapore into the China Sea.

### A British Rajah

In 1839 James Brooke, an officer in the Indian Army, visited the country. Seeing how wretched was the state of the people, he helped the Sultan to restore order. As a result he became Rajah of Sarawak, a province of Brunei. He devoted the rest of his life to improving the territory and was knighted by Queen Victoria.

7/- mint.

Sir James also helped the Navy to put down piracy on the adjacent coasts. Since to do the job properly the Navy needed a base close at hand, Great Britain in 1846 took over the uninhabited island of Labuan, opposite Brunei. A small colony then developed there.

### The Queen's Head

From 1879 till 1890 stamps bearing the Queen's head were issued for Labuan by the Government. The design resembled that of the Hong Kong portrait types. In 1890 the administration of Labuan was transferred to the British North Borneo Company, which was responsible for all later issues until 1906. Then the island was incorporated in the Straits Settlements.

The first stamps of the Brunei Protectorate, issued in 1906, were overprints on stamps of Labuan. Since then there have been three pictorial issues. They were in different colours and with different watermarks, but with only two designs. One was a view on Brunei river, the other a view of Brunei town.

The north-east corner of Borneo was claimed both by the Sultan of Brunei and by the Sultan of Sulu, an island lying to the eastward.



# For holding small odds and ends you cannot beat a MATCH BOX CABINET



**H**ERE is a simply-made cabinet—principally out of ordinary match boxes—which is just the thing to hold various sized sprigs and other small items of the work bench or kitchen.

First collect ten empty match boxes of any variety which have strong stays, and then strengthen the trays by a second wall made from a strip of card the same depth as the tray and bent to just fit inside. Glue well before finally springing into position.

Having done this glue the covers (with trays inside) together as shown at Fig. 1—putting the block so formed between even pressure while drying proceeds. Books on either side, with a not too heavy weight on top will do.

## Corner Top Pieces

Next cut two triangular blocks (H) and (K) (Fig. 2) with width, height and length the same as the dimensions of a match box, which are 11/16 in., 1 1/2 ins. and 2 1/4 ins. respectively.

Prepare also the two side-pieces (A) 2 ins. by the height of your three boxes, from 1/2 in. wood. Also the two pieces (B) 2 ins. by 2 1/4 ins., and the top rectangle (C) 1 1/2 ins. by 2 1/4 ins.

The back (D) is shaped as Fig. 3, and is of 3/16 in. material and is from a rectangle 5 ins. by 3 ins., the top corners being cut away from 2 1/4 ins.

up either side to two points 1 1/4 ins. apart on the top edge. These points will be 1 1/2 ins. from either side. Or the back can be fitted and cut afterwards.

Having made the pieces draw out the lines (as shown in Fig. 5) in pencil to get the centre position of the boxes and at each centre drill out a hole about 7/16 in. diameter. These holes are to make it easy to push out any given drawer, either by pressure from the little finger or by inserting and giving a slight push with something like a pencil.

The base is a 7 ins. by 3 ins. rectangle of any suitable material, with the sides bevelled (or better still curved) to 8 1/2 ins. by 2 1/4 ins. to meet the bottom of the boxes and back.

To assemble, glue the triangular blocks (H and K) to either side of the upper match box, and glue the boxes to the base with a 1/4 in. of it protruding on either side.

Next fit the back level with the ends of the base, which will leave a 1/4 in. beyond the boxes all round. Drill two small holes and insert 1/4 in. screws through to the triangular blocks and gently drive several sprigs up through the base into the lower edge.

Sides, (A), sloping pieces (B) and top (C) can now be fitted. The top (C) should be put on first, being glued on its under side to the top of the upper match box. Sprigs are driven in from the top edge of the back.

Next fit the sides (A) leaving the sloping rectangle (B) till last. As with the top, the sides are glued in

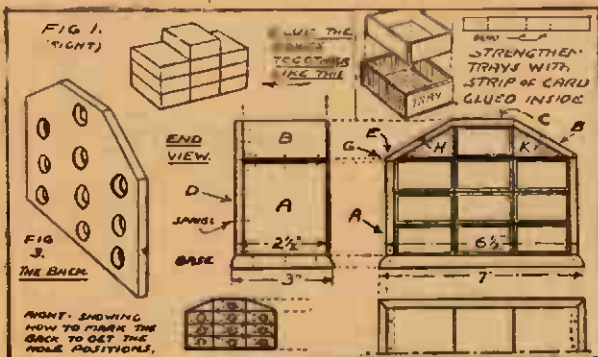
their inner faces to the boxes and then secured with sprigs through the back to their rear and lower edges.

The sections (B) will have to be bevelled and good fitting is best arrived at by "trial and error," sloping the 2 1/4 ins. sides till the pieces just drop in nicely between (C) and (A) on either side. When good fitting has been arrived at, secure the pieces with a small screw in each through to the top of the triangular blocks and with sprigs through the sloping edges of the back. Three sprigs at (E) driven gently down into the upper edges of the sides, complete rigidity. There is no need to make any connection with the top pieces (C).

## Cleaning and Staining

When all is assembled glasspaper the edges of the back flush with (A), (B) and (C), and if necessary take off any small overlap at (C) to bring (A) and (B) together on a clean joint.

The main construction is now finished, and the woodwork can be cleaned and stained to individual taste, followed by polishing again if



desired. To finish the front of the trays, supply each with a small rectangle of card 1/2 in. by 1/4 in., upon which can be printed in indian ink detail of the item they hold.

The cabinet is now completed with a rectangle of green baize glued to the under side of the base.

## Stamp Collecting (Continued from page 14)

Taking advantage of their rivalry, European traders obtained concessions there in the 'seventies and in 1881 the Crown issued a charter to the British North Borneo Company to administer and develop the territory. In 1888 it was made a British Protectorate.

The Company issued several striking sets of stamps of the arms type and later some of the finest pictorials ever issued by any country in the Empire. Two are illustrated here. Unhappily

these issues fell under a cloud—like those of post-1890 Labuan.

The suspicion grew that they were being issued to draw revenue from the pocket of over-eager collectors. Issue followed issue with suspicious swiftness, filling several pages of the "Big Gibbons." The stamps were made as attractive to the eye as possible and remainders, mint or "cancelled to order" with three black bars, were dumped on the market.

Since 1931, however, when a set was issued to commemorate the Jubilee of the formation of the Company, this questionable policy has apparently been abandoned.

The philatelic history of this group of colonies, therefore, has been as chequered as its political fortunes in recent years. Whatever the future may bring to them, one thing is certain—it will be reflected in their stamps.

The advertisements are inserted at the rate of 3d. per word or group of letters prepaid. Postal Order and Stamps must accompany the order, and the advertisements will be inserted in the earliest issue. Fretwork goods or those shown in Hobbies Handbook not accepted. Orders can be sent to Hobbies Weekly, Advertisement Dept., as below.

**SETS** of clear diagrams and instructions for building easily from readily obtainable parts only—at extraordinarily low cost (1) Toy or Model Maker's Lathe, (2) Small power-driven Fretsaw, (3) Treadle-driven Fretsaw. All from the actual well tested, simplified working models. Price per set 3/6.—H. Barham, "Hilltop," Bradmore Green, Coulsdon Surrey.

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**MAKE** a Model Fortress Bomber, (non-flying) from Hobbies Pattern No. 2405, price 4d. (postage 1d.)—From Hobbies Ltd., Dereham, Norfolk or Branches.

**BE TALLER.** Quickly! Safely! Privately! No appliances—No Tablets—No Dieting. Details 6d. stamp.—Malcolm Ross, Height Specialist, BM/HYTE, London, W.C.1.

**CRUISER** Tank Model, 12ins. long made from Design Sheet No. 223 Special (Price 9d.). Parcel of wood for making, 10/9, postage 7d.—Hobbies Ltd., Dereham, Norfolk.

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**STAMP BARGAINS!** Unsorted Smixture, ½ oz. (about 250 stamps) 2/3. 1 oz., 4/3.—L. James, Boltachan, Aberfeldy, Perthshire.

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

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**HOBBIES** still make Fretwork Houtfits and tools, but owing to war needs supplies are short and immediate delivery cannot be guaranteed. Make enquiries before you order.—Hobbies Ltd., Dereham.

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SPACINGS: THE PAPER IS IN 20 LINES SHOWN AND  
GLUE TOGETHER IN PAIRS.



SIDES. CUT ONE OF EACH 1/8\"/>



SIDE. CUT



DETAIL  
SHOWING HOW  
SAND, ETC., ARE  
APPLIED TO THE  
JOINTS.



The arrows indicate the direction of grain of wood.

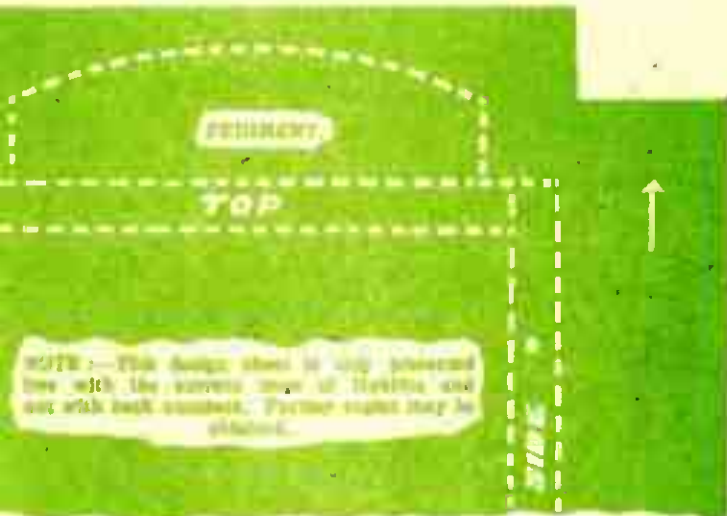
SUPPLEMENT TO HOBBIES No. 268.

# PAIR OF BOOK ENDS

PANELS OF WOOD REQUIRED FOR THIS DESIGN  
**TWO J4 ONE H4 TWO PPM**

The price is shown in Hobbies Weekly, April 11th, 1946, but is subject to revision. See the current edition of Hobbies Handbook, or write for price to Hobbies Limited, Dereham, Norfolk.

- SIZE -  
 5 1/2" BY  
 4 1/2" BY  
 4 1/2" HIGH.



CUT TO LENGTH SHOWN AND PAIRS.



PEDIMENT. CUT TWO OF EACH. SHOW 1/4" AND GLUE TOGETHER IN PAIRS.







SIDE. CUT ONE OF EACH LINE.



SIDE. CUT ONE 1/4\"/>



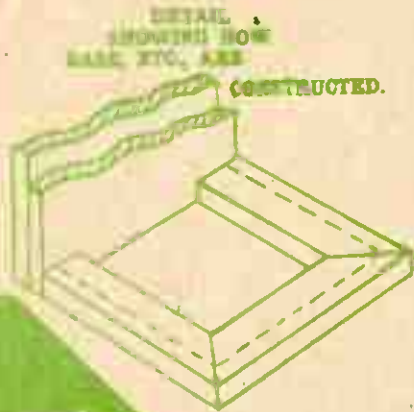
TOP. CUT TWO 1/4\"/>



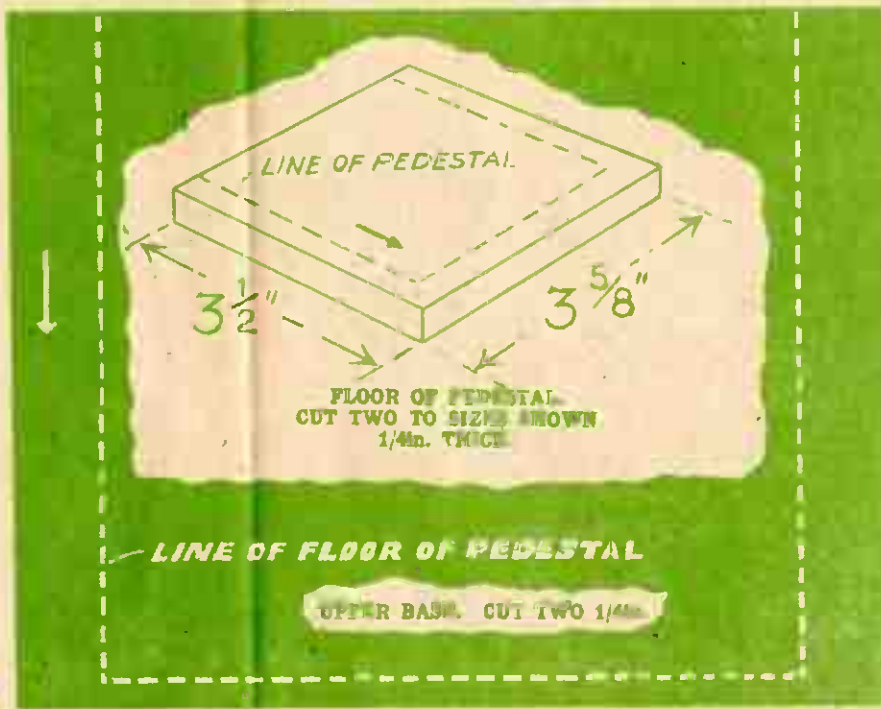
LINE OF UPPER BASE



LINE OF UPPER BASE



CONSTRUCTED.



LINE OF PEDESTAL.

3 1/2"

3 5/8"

FLOOR OF PEDESTAL  
CUT TWO TO SIZES SHOWN  
1/4\"/>

LINE OF FLOOR OF PEDESTAL

UPPER BASE. CUT TWO 1/4\"/>



CUT ONE 1/4\"/>

CHAM

CUT ONE 1/4\"/>

PR



CUT TWO 1/4 IN.

PEDIMENT. CUT TWO OF EACH. SHOW 1/4 IN. AND GLUE TOGETHER IN PAIR.

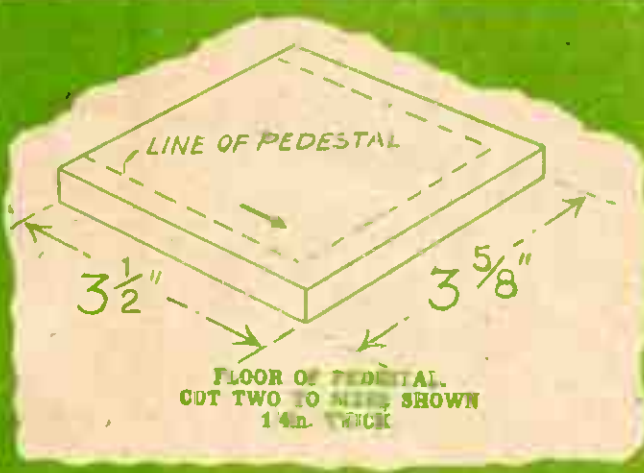
This wood is provided as packing to be fitted part.



SIDE. CUT ONE 1/4 IN.



ED.



LINE OF FLOOR OF PEDESTAL

UPPER BASE. CUT TWO 1/4 IN.

PRINTED IN ENGLAND.



## PAIR OF BOOK ENDS

**W**OOD is provided for making a pair of Book Ends shown on the other side, and their construction can be completed with the fretsaw and a few tools. The parts are cut as shown after—in one case—the patterns have been extended to the length shown.

Apart from the fretted patterns, the straight outlines of the others can be marked direct to the wood to save cleaning off the paper afterwards.

Make up the base first, consisting of three layers of wood. The bottom layer is a framework of three pieces as shown by the detail in the bottom lefthand corner. Above this in turn comes the upper base, a plain rectangular piece, and above that again the floor of the pedestal, a piece of wood  $3\frac{1}{2}$  ins. long and  $3\frac{1}{2}$  ins. wide. Notice the direction of the grain of all these, to get them in the same direction.

### End Blocks

Glue the layers with the back edge exactly flush so it may stand against the upright pieces snugly. Now get out the two sides of the main part with its fretted work carefully done. Between these two pieces are fitted the lower front, the sloping front, and the top.

These go between the sides, and in the case of the top and the lower front, a chamfered edge is required to make them fit snugly. The angle of this chamfer is shown by the shaded portion on the patterns concerned. The lower front is put in first, the sloping fretted front next, and finally the top is added. Stiffen up the inside if necessary with small angle blocks, and back up the fretted portions with the thin wood supplied for the purpose.

If you propose staining the whole article, this backboard should be

stained before being glued in place. It is cut  $\frac{1}{2}$  in. wider all round than the actual fretted portion.

This complete part can now be stood on the base. It is as well to have the main uprights cut so that a proper fitting can be arranged before gluing. Thus, in fixing the fretted carcass to the base and applying the gluing blocks inside, you can temporarily stand the main uprights behind.

### Solid Ends

Notice that the main upright pieces are  $\frac{1}{2}$  in. thick to provide suitable rigidity, but as no  $\frac{1}{2}$  in. wood is supplied in the parcel, two  $\frac{1}{4}$  in. boards are glued together. A good plan is to glue these boards first, and then to cut them out the required size. If you glue them together with two edges in line, only the two other edges will require to be completed. Cut each out as one solid block  $\frac{1}{2}$  in. thick and then glue upright to the base into the main carcass.

Further to strengthen the main portion, two little pediment fancy pieces are added above the fretted front. These are glued to the main upright, and to the top the smaller one in front of the larger one as can be seen.

### Weighted Base

If you are likely to use these completed ends for large books, it is as well to add some weight to them to prevent slipping. This must be done before the parts are finally put together, and it may consist of strips of lead shot screwed inside the fretted carcass to the base, or a small tin packed tight with shot can be nailed down and a lid fixed over to hold firmly.

The whole of the work can be left in its natural state, or finished off with stain and polish in the usual way, as desired.