MODEL TORPPEDC BOAT DESIGN FREE INSIDE


ASCARECROW is of national importance. It is vital and an absolute necessity on all fields and plots of land where vegetables are being cultivated, or corn, wheat, oats, barley-in fact, everything that is edible. It must be a good, effective scarecrow to scare off the crows and all other seed-eating scavengers.

Scarecrows are easy and cheap to make. There are several ways in which they can be constructed to be


## MAKING SCARECROWS

effective sentinels in the plots and fields. The easier and cheapest figure of the lot is shown at Fig. 1.
The right way to fix the arm piece in position is first to drive a nail through it into the stake piece. The picces are then bound tightly with cord. The "head" is
an old turnip, the eyes, mouth and nose being gouged out with a penknife.

Having rammed the turnip, on the "neck"
of the skeleton, the latter is clothed with an ancient shirt. We show how the shirt is tied to the skeleton.
The scarecrow just described has a "loose" arm which of course, swings and waves about in gusts of wind.

All birds are, by nature, very wary and fly away at the least sound or movement.

An improved form of scarecrow is shown at Fig. 5. "Two-legged Pete" is made from a skeleton of branching put together as shown. Before planting the leg pieces in the ground, pull on the pants and tie them securely to the " hip" cross-picce. The old sports coat is then wrapped around and tied here and there with cord to keep it in place.

Pete's head is shaped from a turnip. A big, over-grown, gone-bad turnip is the best, for then there is no wastage. A relic of a cap completes the figure. Fix it on permanently by hammering a few wire nails through it into the turnip.

## Novelty Scarecrows

The " novelty" scarecrows depicted at Figs. 2 and 3 are very simple, but more effective than the other two models. For instance, the stooped figure at Fig. 3 gives the appearance of a man working in a field. The " hangover " allows the coat arms to swing about freely as gusts of wind dictate.
"Hang-over Bill" is thus all backbone, so select a fairly stout, strong length of branch for the main prop. Before driving the skeleton pieces in the soil, slip on old baggy trousers (on the branching, of course)
and secure the fork of the support to the other with cord, following which the waist of the trousers are gathered up and tied in a bunch above the fork. An old coat is now fitted, being secured at the waist with cord. A nail
the bottom so as to provide a "skirt" that will rustle effectively.
When hanging the figure, the " back-bone" piece must be 2 ins. or 3ins. above the ground. See, too, that the outstretched arms do not,
can be packed with old straw or shavings, tying same to the "skeleton" first. The arm piece should be slightly bent or curved so that, when attached, one arm will be raised up in a typical manner.

is knocked into the neck of the main prop so the coat can be looped over it.
If desired, the chest of the coat could be swelled out by packing with straw. The head and cap completes the work.

An extremely unusal, but rather effective form of scarecrow is provided at Fig. 2. We have here, ladies and gents, a close resemblance of the ghost of "Peg-leg Sue" of Timbuctoo.

Having made the skeleton, the straw is bunched together and tied around it, as indicated. Leave the straw free at
when swinging about, touch the supporting stake.

Nothing like making a fool of the fool who tried to fool us-and the world, is there? We are already doing it of course, but take a peep at the scarecrow at Fig. l. Some scarecrow, eh ?

A prop, after the style of the one shown at Fig. 5, is wanted. You also need an old sports coat, old flannels, an old peak cap and a pair of Wellington boots that are not fit for the scrap heap.

The trousers, as well as the coat,


## Plastics-

IN Hobbies Weekly of Feb. 17th, I noticed that a reader asked for suitable substance for raising painted crests and shields from the surface of the wood.

I also, am interested in this work and about a year ago began using "Gesso" powder. This powder can be bought quite cheaply at any Art Store. It is mixed into a thin paste with cold water and applied to the parts to be raised with a paint brush.

A very small quantity is applied to the wood at a time, and the object is gradually built up in layers which are modelled to the required shape as they are applied. One layer is applied as soon as the one before is dry.

When raised to the required height the work is left for a few hours to harden off thoroughly.

Great care must be taken with the raised parts as they are very brittle until painted and yarnished. Oil colours are the best paints to use although
good water colours can be used as they are easier and cheaper to buy. When the paint has thoroughly dried, a good clear varnish is applied over the whole of the work.
Although the 'Gesso' was found to be very brittle and easily damaged in the building-up stage, it will now be found to be quite hard and strong, and difficult to break.

I have already made several shields and crests with this method and so far all have turned out quite satis-factorily.-(G.R.A.)

# With fretsaw and some wood you can make this WORKING MODEL CRANE 

HERE is an interesting model that when made up should please the boys. We find that model cranes are always welcome, especially if they are working models that can be used realistically. Cranes that can be swung out, loaded, and cranked up and again swung round and deposit their load just where required.

Such then is our model given here, and a glance at the picture of the finished crane gives a sound idea of what we are going to make.

There is a good solid base in the form of a hollow box which may be filled with dry sand to give it weight so there will be no fear of the upper part capsizing when the load is being manipulated. Above this is a circular turntable to which the upper body part and arm are attached.

## Winding Gear

In the lower part of the body there is housed the winding gear consisting of a spindle with crank and handle attached. The cord for the winding gear is fixed to the spindle and then passes upwards through the top platform and over a pulley and thence to the pulley at the outer end of the jib of the crane.

At the hanging end of the cord there should be a ball weight and hook. It will be observed that the whole body of the crane with the arm can be swung round as wanted to raise and deposit the " goods."

The base is made up, as Fig. 1 shows, of a floor, four sides and a top. There are two sides measuring 4ins. by 2 ins. and two sides $3 \frac{1}{2}$ ins. by 2 ins. These are glued and nailed to a floor $4 \frac{1}{2}$ ins. square and tin. thick.

The top to this base is 4ins. square and in the centre of this piece there must be drilled or cut a $3 / 16 \mathrm{in}$. hole to take the central spindle round which the crane will turn.

Also in the top there must be a disc cut out to allow for the sand to be put in. This disc should be cut on the bevel as shown in Fig. 1 so the


Fig. 1-The base foundation
"plug" can be returned and glued in afterwards.
The main upper part on the crane can next be put in hand, and Fig. 2 shows the chief parts wanted for this. Two of each section shown will be required and they can be drawn out full-size with the help of the scale of inches shown below the parts in the diagram.

Wood 3/16in. should be got and when the parts have been enlarged on to paper they may be transferred to the wood by means of carbon paper. Note holes A, B and C, these are for the $3 / 16 \mathrm{in}$. spindles which will pass right through from side to side.

Note that the two pieces D will go in between the larger side sections, and that the platform $E$ will fit between all four parts. In Fig. 3 the positions of all the foregoing parts are soen.

## The Turntable

The turntable to which the body of the crane is glued is 4ins. in diameter and $\frac{1}{i n}$. thick. Note the hole in the platform $E$ for the passage of the cord down to the winding gear.
The measurements for the winding spindle, the crank and the handle are given in Fig. 3, make these up and insert them in the holes in the sides. Then cut another piece of spindle as $B$ and thread and glue on it two small washers with a loose pulley wheel between them. See there is sufficient clearance for the pulley to revolve freely.

A third piece of spindle must be cut $1 \frac{1}{2}$ ins. long for the jib pulley as C , Fig. 4. This pulley again will revolve freely about the spindle. Before the latter spindle can be fitted however, further work upon the crane arm is necessary.

Two pieces of $3 / 16 \mathrm{in}$. wood must be cut to the dimensions given in Fig. 4 and glued in between the two

sides of the arm, these pieces being carefully drawn in slightly and nailed with fine fret pins to the former sections.
The $6 \frac{1}{2} \mathrm{in}$. long section will go at the top of the arm while the 5 in . piece will be glued beneath it. The size of the completed crane body at its base should measure 3 ins. by $2 \frac{1}{2}$ ins. and it can now be fixed to its turntable with glue and screws.
It must be rigidly held at this point because a great part of the weight on the arm is brought to bear here. The main upright spindle to carry the crane is finally cut and inserted in the base and carried down to the level of the floor where a fret pin is put up through it into the spindle.
The length of this spindle should be 63 ins. and after insertion it should stand rigid and ready for the crane to be put over it.

It should be mentioned in conclusion that the lattice girder work of the body and arm of the crane must be carefully cut with the fretsaw and any little irregularities cleaned off with the small fretwork files and glasspaper


Fig. 4-Jtb arm and pulley

# Every amateur worker in wood should realise these POINTS ABOUT SAWS 



The position for ripping down a board

IF you ask the ordinary amateur worker how many types of saw there were he would probably think round the ordinary ones and say about three or four. Actually, of course, the professional carpenter may have a range of a dozen, and even then not more than two of any particular kind.

For ordinary use the amateur may be satisfied with the popular tenon saw and the hand saw, and these are certainly the most generally employable. The tenon saw, of course, is the straight bladed one with the brass back and a comfortable handle.

## The Hand Saw

The handsaw is the larger one used essentially on cutting larger wood. In both these types there are numerous sizes, and in each case a different width and length of tooth. A small tenon saw has fine teeth, just as a short fine handsaw would have them.

At the other end of the range the teeth of a large saw are much more imposing, and in consequence are essentially of use on rougher or larger work. Remember, too, that the set of a saw tooth makes a difference to the width of the cutting line, and this setting is an expert's job because it is only by getting the teeth in alignment at the same angle that you can get a smooth, easy cut.

Each tooth on a saw is alternatively


[^0]turned outwards, and naturally, the more they are turned, the wider is the cut. Another name for the handsaw is the rip saw, and they may vary in having a long straight back tapering towards the teeth and toe, or they may be a hollow backed one in which the line is shaped.

## General Sizes

This hand saw may vary from a 20 in . blade to 28 ins. but either a 24 in . or 26 in . is a useful size for the ordinary amateur. Actually it is interesting to note that in the real rip saw made specially for that purpose the angle of the teeth is greater than in the handsaw, and even in the distance apart.

Remember, by the way, in using these larger saws that wet timber requires larger teeth and more set than seasoned wood. So do not attempt to use a small fine toothed handsaw in cutting that type of material. Your saw will bind and may buckle sufficiently to spoil the alignment of the teeth in doing so.

The tenon saw mentioned has its back strengthened by a brass binding, and this will prevent any bending. At the same time, it does not prevent a twist in use, and unfortunately some amateurs wring the teeth edge rather badly, particularly at the point.


## A typical bench hook for sawing

Probably the fault lies, as in all cases with the beginner, in trying to force the work too much. Any saw cuts its own way through the wood if properly sharpened and set. It. should not have to be forced through with hard work and great pressure.

## Using the Tenon Saw

It is so often that the amateur tries to make the saw cut twice as fast as it should which causes it to bind or bend or both. The great point, too, of course, is to hold the saw correctly, cutting a straight line the whole way through the wood so it does not gradually turn and again bind in its cut.

A tenon saw is principally used on a bench or table, but in every case
an ordinary bench hook is needed in conjunction with it.

A simple type is shown herewith, and as can be seen, the front drop portion hooks against the front of the workbench, whilst the stop strip at the opposite end and side, allows the work to be held firmly to it during the operation of sawing.

Hold the board firmly against this stop and start the tenon saw off on its mark so the blade slides just beyond the end of the stop strip. In using a tenon saw commence with one or two up strokes, gently getting the correct position. If you start at an angle of about $30^{\circ}$ with the toe downwards to the work and gradually bring the handle lower you will get a good cut without any trouble.

## For General Work

As mentioned, tenon saws vary in length, and normally you are able to obtain from them about 10 ins. to 18ins. If you are undertaking a considerable amount of work then, of course, you should have a large and small one but a medium one say about 14 ins. is quite sufficient for the average amateur.

Whatever saw you are buying, make sure to get one of reliable quality. A cheap blade is made of inferior metal. It will probably bend or buckle and the teeth will not stand up to sharpening or keep their set.

## A. Dovetail Saw

A dovetail saw is very similar to a tenon saw but smaller, and has finer teeth. As its name implies, it is mainly used for cutting dovetails and similar snall work. As in all other tools the beginner must learn to control it in use.

This will prevent a number of unsightly cuts and ravishes on the wood which plainly show the inexpert craftsman.

By the way, a useful additional control may be had on the saw by extending the fore-finger to rest against the side of the handle instead of turning it round inside the handle.


Commencing a cut with a Tenon Saw

# Complete details on how the handyman can build A BRICK BIRD BATH 

AS most of us like to keep a little bit of our garden devoted to a few flowers, just to remind us of old times, why not make a bird bath as a centre ornament?
Little expense is incurred, as such a bath, and a quite artistic one too, can be built with a few old bricks plus a small quantity of sand and cement. The job is in fact, an elementary lesson in bricklaying, quite within the capability of a handy chap.

Two kinds of bird baths are drawn, one the finished view and the other just a plain side elevation, Fig. 1. The difference is mainly of height, the latter one being more suitable where the birds are likely to be in peril from cats. Dealing with the low one first, a foundation for it must be provided.

## The Foundation

Fig. 2, A, shows a plan of this foundation and the order in which the first course of bricks is laid on it. First mark out a square to the dimensions given and dig out the earth to a depth of 4 ins., flattening out the bottom and beating it down a little to harden and level the surface. Into this shovel a concrete mixture

The bricks by the way, look better if laid with their recessed tops underneath. Fill up the centre space with crushed brick and mortar.
On this lay the second course, B , filling in the centre as before. Now lay a third course of A, and a fourth of C. Do not fill up the centre of the fourth course.
Try to lay the bricks so that a regular even space is left all round between each course, when they differ in area covered, as in the illustration where courses 3 and 4 overhang these below.
Now get busy with the trowel and scrape off any loose mortar, then fill the joints between the brickwork flush with the outside, with the mortar and finish off neatly. Do not mix more mortar than is necessary for the job in hand, as the surplus will harden and become useless.

## Making the Bath

To make the bath itself, mix a mortar of equal parts of cement and sand, and half fill the opening left in the centre of the top course of bricks as at D, Fig. 3.

Make this smooth and leave for a day then fill in the corner angles with the cement, bevelling it off. Carry


Fig. 1-Taller type of
of one part cement and two parts sand and three parts coarse aggregate. The coarse aggregate can be cinders, crushed brick or small stones, a mixture of all three if you like. Measure the parts in a small box or other convenient receptacle, and mix together in a dry state on a board.

Sprinkle with water and turn over until the whole is moist but not sloppy. Then shovel it in, level off the surface and leave for a day or two to set.

## For Bricklaying

For the bricklaying, mix a cement mortar of one part cement to three parts of sand. Lay a $\frac{1}{2} \mathrm{in}$. coating over this on the foundation and on it press down the bricks, as at A, leaving a space of 2 ins. between the bricks where the gaps show.


Fig. 2-Layers of the brickwork shapes


Fig. 3-Section of the actual bath work
this above the bricks to a height of lin. flatten the top of it and bevel the outside of it down to the bricks, as at E.

The diagrams at Fig. 3 are cross sections and help to make the above details clear. Leave the work for a week before putting water in the bath and then change the water a few times before allowing the birds to use it.

The appearance of the old bricks can be improved if they are scrubbed down, also they can be rubbed all over with a suitable polish such as red Cardinal. Brickwork harmonises with a flower garden, but those who may prefer stone coloured appearance can wash over the work with liquid cement, which is cement and water mixed to the consistency of cream.
As an alternative, the whole

brickwork can be coated with cement mortar to look like stone, it is quite easy. Make up a cement mortar and lay it on the brickwork to a thickness of $\frac{8}{\mathrm{~g}} \mathrm{in}$.

Then scratch the surface with the tip of the trowel, a series of crossed diagonal lines, to form a "key," When this has set lay on a finishing coat, $\frac{1}{4} \mathrm{in}$. thick over all and trowel off smooth.

The procedure for bricklaying given above can be followed out if the taller bath in Fig. 1 is decided upon, but the foundation base should be a little larger, say lft. 8ins. each way.

## The Coursework

The courses of bricks are lettered A, B and C, these courses being laid to the pattern A, B, C, in Fig. 2, so no difficulty should arise. The interior spaces are filled up as the work proceeds with crushed brick and mortar as before, except the top space. As this is for the bath it should be cemented in the manner already described.

A little food can be laid on the brick ledge surrounding the bath for the benefit of the birds. Under the rationing laws we are not allowed to give bread to the birds, but the crumbs from the tea-table can be saved and will be devoured with avidity.

All lovers of nature will find much of interest in watching the birds disporting themselves in the water and gathering together with fluttering expectancy at tea time for any crumbs of food that may be going.

## MODEL MOTOR TORPEDO BOAT

A fine voaterline model in wood can be built from Design No. 2484 free with this issue. Complete parcel of wood for all parts from Branches of Hobbies Ltd. for 7/3. Or sent post free for $7 / 11$ from Hobbies Ltd., Dereham, Norfolk.

# For your tongued and grooved joint you can make a SIMPLE 

ATONGUED and grooved joint in jobs of carpentry is so frequently called for that a plough plane is really necessary to amateur woodworkers. A plough plane is not a cheap tool to buy, however, and nowadays it may not be easy to get one at all.
A simple form of plough, quite capable of doing most of the jobs usually required can be easily made, and is a most useful tool to own. Such a plough plane is illustrated, and this is how to make it.
First cut a piece of $\frac{4}{}$ in. fretwood (hardwood) to the dimensions given in Fig. 1. Then cut a second piece, this time in $\frac{1}{2} \mathrm{in}$. wood. This piece is the same length, but $\frac{1}{2} \mathrm{in}$. narrower, $2 \frac{1}{2}$ ins. wide in fact. It need not be hardwood, deal would serve.

## Marking Out

On the first piece mark off the distances given at top and bottom, and draw the sloping lines shown, from the points marked.
Erect the dotted line, a, and on this at a distance from the bottom of $1 \frac{1}{\mathrm{~g}} \mathrm{in}$. and with a radius of $\frac{5}{5} \mathrm{in}$. strike the curve, b. With the same radius strike the curve, $c$, a little higher up., say $\frac{3}{3}$ in.
Now fix the 4 in. piece of wood just marked to the $\frac{1}{2}$ in. piece, both being level at the top, as in the end view. The fixing should be done with screws driven in approximately where shown.


Fig. 1-Dimensions and details of the body
Unscrew and take off the thinner piece, and saw along the sloping lines. The space left between these is where the wedge and plane iron will subsequently come.
Saw out the curved opening, $b$, and bevel this down from curve, $c$. The two pieces are now glued and rescrewed to the thicker back piece again. This completes the body of the plane.

The wedge, Fig. 2 is cut from 1 in . hardwood. Try this in the plane and see it fits well-a little careful shaping may be necessary to ensure this.

For the plane iron, it is proposed to employ a $\frac{\mathrm{in}}{}$. wood chisel. This will serve quite well and it can be easily withdrawn when required for more legitimate use.


Try this in now. The wedge should then be tapered off, as shown at A to force the shaving to one side. The taper should commence where the wedge comes against the curved opening, $b-c$, and be continued to the toe of the wedge.

The cut should be a slanting one, to conform to the bevel of the opening. If satisfactory, the shavings will be ejected sideways and no clogging occur.

## A Holder Piece

At $d$, on the side of the plane, a small piece of metal (sheet brass will do) is screwed. This presses against the chisel and prevents it working out.
Now give the plane a clean up with glasspaper. The upper corners should be rounded off and all the sharp edges glasspapered to make the plane com-

Fig. 2-The wedge shape
Cut it to shape, and where shown bore $\frac{1}{2}$ in. holes. Extend these to form slots wide enough to allow the shank of a $\frac{3}{4} \mathrm{in}$. stout screw to move along them.
Two strips of wood should be prepared, as long as the fence and lin. wide. One is cut from $\frac{1}{8} \mathrm{in}$. wood and one from $\frac{1}{2}$ in. wood. These pieces are glued to the fence either side, at the bottom.
The fence is now fixed to the plane with two round-headed screws, the screws being driven in through the bottom of the slots. See the glued on strips come just under the body of the plane, as in Fig. 4.

## Using the Tool

This completes the work. With the tin. strip of the fence in the position shown (Fig. 4) wood, 3 in. thick can be ploughed. By pushing the fence downwards, until the screw heads come to the holes, it can be reremoved and reversed.
With the $\frac{1}{3}$ in. strip in position, wood $\frac{7}{8} \mathrm{in}$. or lin. thick can be ploughed. It is true that ploughing the $\frac{7}{8} \mathrm{in}$. stuff the groove will not be central, but that is no matter.

If at any time it is necessary to work a groove at a greater distance than the fence allows, for instance, a groove in a drawer for the bottom to slide in, then lower the screws and between the fence and plane interpose spacing slips of wood, as at $B$, to the required thickness, and tighten up again.
The plane is limited to grooves of $\frac{1}{2}$ in. width and $\frac{1}{2} \mathrm{in}$. depth, which will, in most cases, be enough for the amateur who really has little use for other sizes.

## The Tongues

There is no provision for cutting the tongues associated with tongued and grooved work. But this will not
fortable to handle.
A fence will be necessary to ensure accurate work. Usually a fence is made to be adjustable to any distance from the plane iron likely to be required, but
 in reality very little adjustability is required for the average job the amateur is likely to undertake. So a very simple fence is suggested, as follows.

Cut from tin. or $\frac{1}{2}$ in. wood the piece shown in Fig. 3. This need not be hardwood, hardwood being scarce, in fact a piece of deal could be used as the plane is not likely to endure hard usage.


Fig. 4-End view matter at all. The usual practice is to cut a groove in each board and use tongues of separate slips of wood, glued between.
This is quite as satisfactory as when the tongues are cut in the boards themselves, as in machinemade work.

The tongue portion must, of course, be accurately cut to fit in the groove, and be glued securely in place.

# For comfort, strength and ease you should know the TECHNIQUE OF CYCLING 

THERE is a technique in doing many things, even in riding a bicycle! Such a statement may be regarded as somewhat incolierent but the fact remains. There is a technique in riding a bike properly. There is much more to it than balance. for the art of balance comes natural to us, even at the scooter stage of our lives.

Scooters and roller-skates prepare the way for balancing on a bike. We know the technique thoroughly. If we feel ourselves falling towards the righthand side we automatically, twist the handlebars towards the righthand side, thus regaining our lost equilibrium.

Anybody can, therefore, ride a bicycle. But, riding it is one thingdoing it properly and scientifically is another thing, the technique. You do not merely mount the machine and pedal off here and there, confident the that is all there is in good cycling.

A bicycle, like a motor car, will carry you almost anywhere you wish to go. But, unlike a car, you are the motive power. That power is limited. It is, if you are a beginner, very low and must be gradually built up. And to really enjoy cycling, it must be conserved in every possible way, thereby ensuring greater mileage without any ill effects at the end of each trip.

## Take Things Easy

Cycling fitness can only be achieved by degrees, for pedalling brings into action muscles and sinews that, in the ordinary way, are seldom used to any extent. Consequently, to go for a 20 -mile or 30 -mile ride when actually unprepared for it is asking for trouble in the form of aches and pains, not only in the legs, but in the arms and shoulders, and apart from an uncomfortable tenderness caused by the saddle, it will be many days before you feel fit again-for a ride on a bike, anyhow!
So, be wise and take things easy. If you have to ride three or five miles to school or work daily, such exercise, for the first week, will put your body in trim for a 20 -mile ride at the weekend, i.e., 10 miles to your destination and the same number on the way back.

When planning your rides choose good, flat stretches of road. If you must take a route that is uphill most of the way, so much the better, for the return journey will be easier.

The thoughts-and joy-of "freewheeling " all the way back home will act as an incentive. You will not be afraid of tiring yourself on the hills, or in travelling too far, knowing that
there is little pedalling to do on the way back.

The Art of " Ankling "

"Ankling" is the hall-mark of a good cyclist, for he rides scientifically. Instead of pressing the pedals down with the toes all the time, the instep of the foot is set on the pedal as it nears the top of its stroke, the heel being used to push the pedal over the dead-centre. The toe is dropped on the pedal as it nears the bottom of its stroke so it can be effectively " clawed' over the bottom dead-centre.

Thus, as one foot drives one pedal forward and downward, the other foot draws the other pedal backward and upward. As a result, there is less strain on the legs. When practised the whole procedure becomes automatic.

When pedalling along, all movement should come from the hips. Swaying from side to side as pressure is put on the pedals is a sheer waste of energy. It is not worth the extra "spurt" it gives to your speed. Pedalling by standing on the pedals, is another way to lose strength.

## Do Not Sway

Swaying is unnecessary, unless due to a high saddle or a bicycle frame that is too large. A saddle peak, for ordinary riding, should be 2ins, or 3 ins. behind the centre of the bottom bracket. The upward tilt of the saddle peak should be slight, whereas the handlebar grips should be just slightly below (or on a level with the peak of the saddle.

If the saddle is brand new, covered with hard leather or rubber material, it is advisable to obtain a soft cover for it. Such a cover not only helps to "break" the saddle in for the rider, but also breaks the rider in for the saddle!

## Getting the "Knock "

When on long rides, dismount and walk up the less steep hills, including short, flat stretches of ruad. These walks are extremely beneficial, for they exercise cramped muscles, and give the pedalling muscles a rest.

Take frequent rests. A few minutes rest by the roadside will work wonders, doing much to restore new strength and
ritality to the body. Rest right at the start for if you leave the resting periods up to the last moment it is quite likely that, after each rest, you will just crawl on your machine and feel like falling off.

By resting now and again you avoid getting the "knock"-a common thing with most cyclists, even superfit racing men. The " knock" is characterized by an awful feeling of tiredness. Hills seem twice as long and very steep. The wind, for some inexplicable reason, keeps blowing against you, adding to the labour of pedalling. The pedals, too, seem to become stiff-will hardly turn around, and to crown matters, you are miles and miles from home.

If your bike is fitted with a threespeed gear, take full advantage of the low gear. Gradually, the " deadness" in your limbs will go away and you will eventually reach home, but you will be dog-tired and rather fed-up with cycling.

## The " Hunger Knock "

There is another "knock" the tyred cyclist must avoid, this being a sickness caused by hunger. You suddenly feel famished-weak with hunger, in fact. If miles* from anywhere, you just have to tighten up your belt and carry on.

Of course, the remedy is to carry a sandwich, or some chocolate..

Short rides have a habit of turning out to be long ones. This is mainly due to tempting inclines. It is so invigorating to speed down them. There seems to be no wind, just a light breeze, and you haven't the heart to apply the brakes and turn back.

Owing to your speed, the incline will only seem to be a few miles long. Alas, you can find out how wrong you can be when plodding up the incline with a stiff breeze blowing against you for you were travelling at a slightly higher rate of speed than the breeze.

## ABSOLUTELY FREE!

We will give you-absolutely free-the very attractive stamp which the Free Dutch Government in London have just issued (February 1st, 1943) for the Dutch West Indies Islands of Curacao. This extremely handsome stamp is in two colours and shows the Dutch flag flying over the old Fort at Saint Eustatius. Three old cannon can be seen in the foreground of the stamp while inset is a portrait of Her Royal Highness Queen Wilhelmina of the Netherlands (Holland) who is now in London. The Dutch Government have told us that no more stamps will be available when present supplies are exhausted. This very interesting and historical issue should be in every collection. It will increase the value and interest of any collection, and you can get this stamp from us Absolutely Free by asking to see one of our Approval Selections. Also you must send us 3 d . in stamps to cover cost of our postages. Only one of these Gifts can be sent free to each applicant. Write now to:
Windsor Stamp Co. (Dept. 12), Uckfield, Sussex

# There is interest and novelty if you start COLLECTING WOODLAND ODDITIES 

AN absorbing hobby (writes T. Wilson of Skipton-in-Craven), that adds interest to country walks, and one that may be followed with the minimum of cost, is the collecting of odd bush and tree growths. A friend who has pursued this hobby for a score of years has a unique collection valued by a leading insurance company at $£ 400$, and it is still growing.
A tit-bit of the collection is the full alphabet from $A$ to $Z$, each letter a natural growth, and each one as nature fashioned it. "B" was the first letter obtained, and "M" the last. A varicty of trees came to his aid when searching, the honeysuckle and the ivy providing some of the more awkward shapes.

## A Collection of 200

In addition he has over 200 odd growths resembling birds, animals, prehistoric beasts and human beings. Faces and heads have been made more realistic by the insertion of glass eyes, and in some pieces it has been necessary to cut out the mouth and the nostrils with a sharp penknife, otherwise the quaint and life-like growths are nature's sole handiwork.

A pocket saw with a loose blade that
rests in the handle when not in use, is generally stout enough to deal with the greater part of one's "finds" Where necessary, permission should be obtained before a tree is touched, and you will find most owners helpful and even encouraging.

## Penknife Carving

It is advisable, and particularly when the sap is in the wood, to store the cut wood in a dry airy place to thoroughly season. With a sharp penknife, a piece of glass, and sandpaper you will be able to do what little cutting and finishing is necessary.

Before the war, glass eyes in a variety of colours and sizes could be bought cheaply, but glass beads make a good substitute. They should be half-sunk into th ${ }^{2}$ head and glued firmly.

Finally, a coat of varnish adds a good finish to your oddity which may be mounted on a flat board. A more suitable base however, can be fashioned out of an artistically cut $\log$ sawn flat on the underside. A really well-finished oddity makes a delightful and unusual present for one's family and friends.

At first you will not always have the good fortune to return from your outings with another addition to
your collection, but with experience you will develop an eye for the job, and come to know which trees and what localities are the most fruitful.

Free-growing trees produce fewer oddities than the gnarled and stunted ones that have had to fight for their existence; so do hedgerows that have been layered. Look closely at branches embraced by ivy or honevsuckle, for the parasite's squeeze often develops unusual characterstics.

## A Keen Eye Wanted

Use both your eyes and your imagination, and consider growths from every angle. A friend, an expert collector, once went to stay with another who was an amateur. " I'm afraid you'll find little for your collection in this locality" said the latter, whereupon my friend produced a capital likeness of the Australian kiwi. Asked where he had found " that masterpiece," the enquirer was taken to his own garden fence, and shown where it had been cut away.

My schoolboy son, who took up the hobby, found a wonderful likeness of a weasel among the dead oak branches carted into his uncle's farmyard to be chopped into firewood. He was naturally delighted with his find.

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# A <br> MODEL <br> М.Т.В. 

THE boat indicated is the motor torpedo type uscd by the Navy for submarine chasing and fast patrol work round our coasts. It is about 70ft. long, fitted with deck torpedo tubes and anti-aircraft armament amidships.

The model measures $14 \frac{1}{2}$ ins. built in wood, and intended to be on
to the hull, and an opening is cut in the centre portion to allow for the well for the operating crew. Details are given herewith of how the cabin and look-out are built, as well as the parts forming the other deck additions -torpedo tube, guns, etc. The antiaircraft guns are mounted on cylindrical supports.

The multiple guns themselves need
ing the thickness of the wood.
The whole tube is glued on to its little support parts which in turn are glued to the deck. The mast is a

stocks on a flat base. All the parts indicated on the sheet should be transferred to the wood either by drawing through carbon paper direct on to the board, or by pasting the actual patterns down.

The hull is formed by a centre keel piece to each side of which are glued the flat portions A.B.C.D. Having glued them as a solid block, shape to the section shown, getting a nice curve and following the plans both sides. The bottom piece D you will notice tapers towards the stern and leaves a portion of the keel projecting below.

The deck is an all-over piece glued
care, and the actual barrels can be wired together and then fitted to the upright sides whilst the circular magazine drums are laid on top. Card and wire and small pieces of wood will make this satisfactorily.

The torpedo tubes are from $\frac{1}{2}$ in. wood rounded to a cylinder with three pieces of wire fitted on at points shown. The back end is rounded off, the front end is cut to a straight slope. This front end, of course, is really hollow to allow the torpedo exit. If you can cut out the centre of the tube satisfactorily it will make a good finish, otherwise the end should be painted black with a white rim show-
cyelet or staple.
The finished model is painted dark grey for the hull, with the deck natural colour wood lined for planking. This planking is drawn on with fine pencil lines or in indian ink with not more than $\frac{10}{i n}$. between the lines. The tubes, guns and general marking are black.

The whole model is after painting, fixed or left standing loosely on to the base stocks. Cut to the shape shown and glue to the base with ends projecting. This base is made of two pieces of wood and should be painted jet black, or can be given a sea-blue colour.


[^0]:    The teeth of a Rip Saw

[^1]:    STAMPS FREE! Twenty unused (21 d. .).-G. H. Barnett, Limington, Somerset.

[^2]:    Eobbies Weekly-2d. every Wednesday-Subscription Rate 14/- per year or 7/- half year. Editorial Offices, Dereham, Norfolk. Advertising Deot., Dereham or Temple House, Tallis Street, London, E.C.4. Hobbles Branch shops at 78a New Oxford Street, London, F.C.i. 87 Old Broad Street, London, E,C.2. 326 Argyle Street, Glasgow. 10 Piccadilly, Manche ster. 4 St. Paul's Parade, Shefield. 10 Queen Victoria Street. Leeds. 14, Anlaby Road, Hull. 14 Ball Ring, Birmingham.

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