Hobbies WEEKLY

CONTENTS



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# AN INEXPENSIVE POULTRY RUN

HENS are as temperamental as human beings. They thrive in happy conditions, but if ill-cared or and miserable they just show their feelings by ceasing to do the job. Hens will not continue to lay in a draughty, cold, and probably insect-infested house, made of a few orange boxes thrown together, and a muddy run into which rain water drains.

The ideal type of back garden poultry run should have a roosting house, a covered run for bad weather, and an open run for sunny days. Normally there is not enough room for ideal conditions in town or suburbs. Building material is a somewhat expensive problem, but it pays to start well.

Soft woods have been in short supply, but suitable timber is now easier to obtain. There is much that is favourable to be said for wood substitutes of the asbestos composition, or beaver board type. They have the advantage of being rot and insect proof.

## For 8 to 10 Hens

A combined roosting or nesting house here described, which will accommodate eight or ten hens, is designed on the semi-intensive system. The roosting house is 3ft. 6ins. long, 5ft. wide, 4ft. high at the eaves, and 5ft. 6ins. to the roof ridge. A covered portable run attached is 12ft. long, 5ft. wide and 3ft. high at the eaves. The run is made as a separate unit which can be moved when the hens are required to run on fresh soil.

Most amateur carpenters jib at elaborate woodwork jointing, but for strength and durability some joints are necessary. Nails and screws rust and butt joints secured by them soon fall apart. All carpentry joints are kept as simple as possible, so professional carpenters are requested not to be too critical.

## Material Needed

For a hen house of the dimensions given, approximately 100ft. of 2in. square deal, 100ft. of 2ins. by 1in. batten, 1½ squares of ⅜in. matchboard, and one bundle of thick plasterer's laths, 4ft. long, will be required. The run will take 12yds. of 36in. galvanized

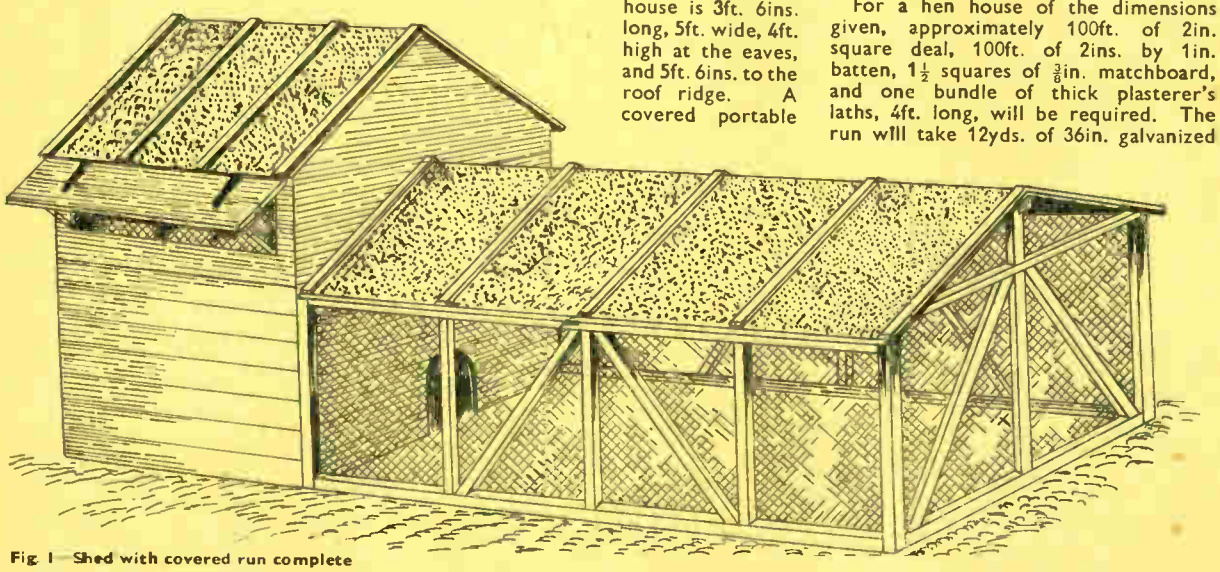


Fig 1—Shed with covered run complete

iron wire netting, and the roof a roll of tarred felt. Other oddments will include nails and screws.

Begin by making the two end frames of the roosting house, as shown in Fig. 2. There are two methods by which a corner joint can be made: a tongued joint, as at A, or a simple halving joint, B. When completed, the two end frames

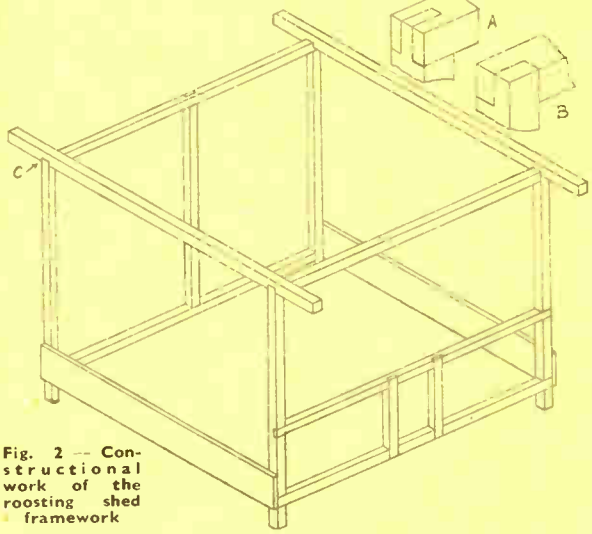



Fig. 2 — Constructional work of the roosting shed framework

are set up and joined by the longitudinal cross-bars which form the roof bearers. These can be jointed by halving, as shown at C, each end overhanging the end frames by about 3ins. No bottom rail is required because the match-boarding braces the uprights.

The two sides can now be boarded, one completely; but the front side to within 8ins. or 9ins. of the eaves. A hinged ventilating shutter is fitted at the top, as shown in Fig. 1. So the hens will not find this space a means of escape, a piece of wire netting is fixed across on the inside of the house.

At the back end a central strut is fitted, by halving joints, which divides the end frame. One half is boarded in, while in the other half a door is fitted; the construction of this door is shown in Fig. 3.

In the front frame next to the run is fitted a small trap door supported by a cross strut and bearers in the end frame, as in Fig. 2. The trap slides are easily made from odd scraps of wood and are fitted after the frame is boarded.

The roof struts and cross beam are fitted as shown in Fig. 4; the struts being cut and fitted to give a roof fall of approximately 45 degrees. At this angle the roof beam will fit exactly on the squared ends of the struts, which can be either nailed or screwed in position.

Fig. 3—The shed door

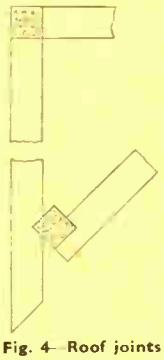


Fig. 4—Roof joints

At this stage the sides and ends should be completed, boarded and finished, before putting on the roof. It will be found that the top rails of the side frames will need planing to coincide with the angle of the roof. The roofing boards can now be nailed on; they should be cut to allow an overhang of 3ins. at the eaves so that rain water can shoot clear of the sides of the house.

All rough and sharp corners must be removed, and the roof boards covered with tarred felt. This is nailed at the eaves and allowed to overhang all round about 2ins. or 3ins. It can be made more secure by nailing on laths at intervals, as in Fig. 1.

The run is constructed of four 2ins. by 2ins. deal uprights joined, to form side frames, by longitudinal struts of 2ins. by 1in. deal. These are braced at intervals, as in Fig. 1, and covered on the inside with galvanized iron wire netting. The roof is built on central posts at each end, which support a stout roof ridge of 2ins. square deal, as shown in Fig. 5.

Roof rafters, consisting of thick plasterer's laths nailed from ridge to eaves at intervals of 9ins. support a tarred felt roof. Every fourth pair of laths is braced by a cross strut spanning the roof. Tarred felt is laid across the roof from eaves to eaves. As felt in itself is not a very strong material, it is advised first to cover the roof with wire netting, and then to secure the felt over it.

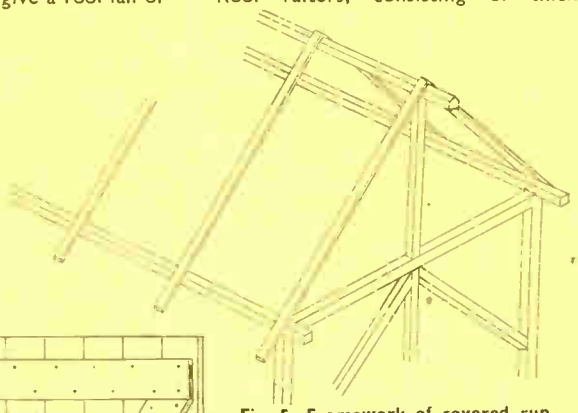


Fig. 5—Framework of covered run

Use galvanized or copper nails to fasten down the felt at the ridge and eaves, and also to the laths. If laths are nailed on top of the roof to the laths beneath, as on the roosting house, there will be little fear of the felt lifting in a storm. While driving nails from the top an assistant should support the woodwork from beneath with a heavy hammer. A wired door can be fitted in any convenient position to give access to the run.

The inside of the roosting house is fitted with perch rails and a droppings board, as in Fig. 6. It will greatly facilitate cleaning operations if the droppings board is made in the form of a detachable tray that can be lifted out bodily. Under the board the nesting boxes can be built in. If all such fittings are made detachable, rather than rigid fixtures, it will save a lot of maintenance labour, making cleaning easier and more thorough.

To preserve the woodwork from deterioration it must either be painted or treated with a preservative, such as creosote. It will be found very well worth while to give the inside of the roosting house two or three coats of paint, preferably white. Cleaning can be done with a hosepipe or soap and water.

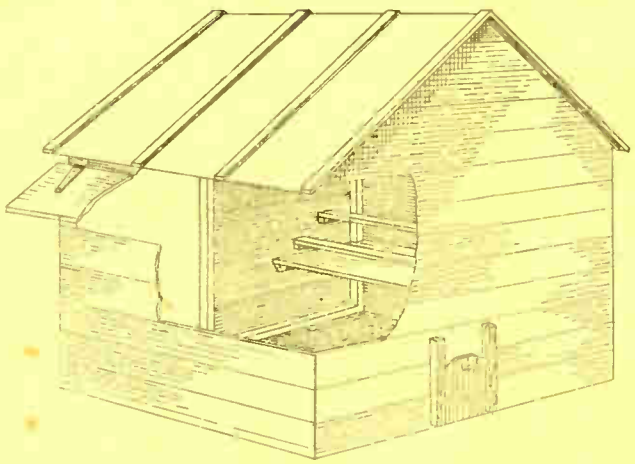


Fig. 6 Cut-away view of roosting shed to show perches and droppings board

There are several important points to note when you are

# PHOTOGRAPHING MODELS

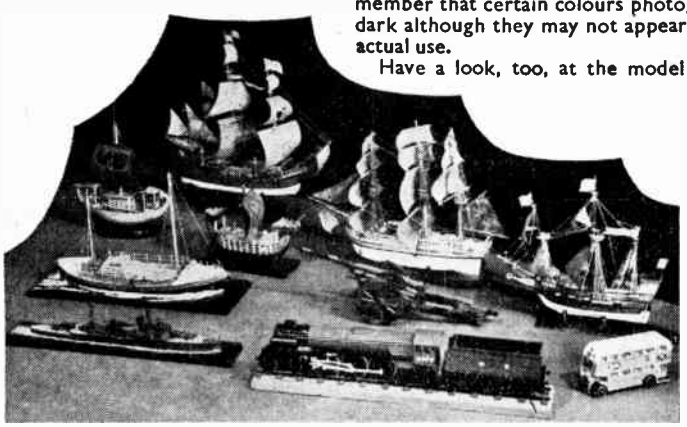
WE are always delighted to receive pictures of models or pieces of work which our readers have undertaken, and are grateful for the large number sent to us to prove the ability of the enthusiastic worker. Unfortunately, however, very few of them can be used in our pages, although we should like to insert them more frequently to show others what excellent jobs are being done.

More and more of our readers, too, are undertaking their own photography and developing, and this in turn forms a pleasing combination of two happy hobbies. In view, therefore, of the number of unusable pictures which we receive, a few hints on taking the photographs will not be out of place.

### Think before Taking

Spools of films are still not too easy to get, and as our photographic expert is always saying, the ideal is to get 100 per cent results on the films which you do develop. In pre-war days, of course, you could use a whole spool on a single model and choose the best picture which came out. Now, however, we have to study the subject thoroughly to guarantee the result we want with just one 'snap'.

All the same, if you can possibly spare them, it is better to take two pictures of each to ensure that at least one of them is satisfactory. Even the professional does this if possible, because there may be a flaw on the film, or something may have moved or altered, which will render the film useless.



Viewed from above prevents the models being "bunched" too much

If you are taking a picture of a single model, there are several points to consider, and to ensure an attractive picture, it is worth spending a little time over the question of position, lighting, etc.

First of all, and probably most important, is the question of the background. Too many people take their model out in the garden, stand it on a table and photograph it hopeful of obtaining good results. A glance at the background, however, will probably show you either an unsightly shed or brick wall, or else an amazing variety of garden produce, flowers or vegetables, none of which will make an appropriate or restful backing.

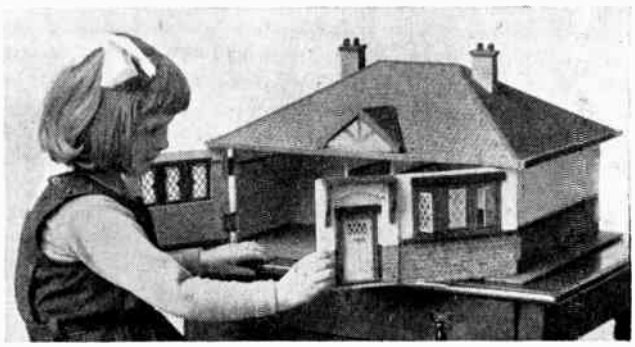
Remember, the whole concentration should be on the model itself, so that when you look at a print afterwards, you will see it without the eyes being subconsciously detracted into a glance at the background. Arranging this suitable backcloth should not be very troublesome, and certainly does make a great difference in the finished result.

Put your table near a wall and hang upon that wall a light tablecloth free from creases. The actual piece of work will probably be dark—particularly if painted—so that the background itself should be light to make the actual article stand up more strongly. Remember that certain colours photograph dark although they may not appear so in actual use.

Have a look, too, at the model from the actual view of the lens of the camera. Very often, the backcloth is wide enough to take the middle of the subject, but when looked at from the lens angle, some projecting pieces extend beyond the cloth itself. This is too frequently the case in photographing a galleon, where the long bowsprit sticks out beyond the rest of the background as viewed by the camera lens.

Arrange your backcloth to drape down nicely either going behind the table which should also be covered, or draping forward to form a continuation under the model itself. Get your subject as large as possible, and if you have one, use a portrait attachment for this purpose.

The angle at which the picture is taken should also be studied carefully. A flat front view is never attractive. Stand your model down where it is to be photographed, and then view it from various angles and various heights. A three-quarter view is better than a dead flat one. If you cannot move the camera, then the model itself can be turned. You can also tilt the base slightly if you want to look down more on the subject, but remember in so doing, you are apt to throw out of true any upright or vertical lines on the model itself.



Note the interest of the child and the natural view of the bungalow model

### Height and Angle

Apart from the actual angle, take a look at the subject from various heights. Some of these models naturally picture better from above, whilst others should have their eye level about the centre. A really striking view of, say, a double-deck bus, can be obtained with the camera actually looking up at the bus. The result is a much more natural picture, giving the impression of size in comparison to the pedestrian's ordinary view.

On the other hand, models such as galleons are best viewed from above, because there is often much detail on the deck which should be seen. Try out angles and different views before finally settling down to the exposure. A doll's house, for instance, looks quite flat at certain angles. If the doors and windows are slightly open and the picture taken to show one end wall, then a much more attractive result is obtained.

### Lighting

Lighting, too, should be considered and outdoor light is preferable, providing you do not get too bright a glare which will create hard, flat surfaces, and dark overpowering shadows. As these subjects are quite still, it is better to take the picture without any brilliant

sunshine and, of course, giving the exposure a longer period accordingly.

It is better to 'rig' your camera to have it steady and firm, rather than attempt to hold it. You can find the angle and view you want, by holding the camera first, then, having obtained the position, put your camera on a stand or table, or some solid object, and hold it there steadily during the period of the exposure.

### Indoor Pictures

Many readers who undertake photography, like to try their hand at indoor pictures, and here the lighting is a different matter. It can be arranged as required, and is in many ways, an advantage with indoor photography. One of the usual troubles with artificial lighting is that it comes all from one direction. This must be remembered, and a second subsidiary light carried round to relieve the heavy shadows which would otherwise spoil the picture.

If, for instance, you have a bright 100-watt lamp to the right-hand side of the model, then you should have another one not quite so bright, on the left-hand. If you stand the model in position and put the right-hand light on, you can see exactly where dark shadows would look bad on the print. You can either then fix temporarily a light to take these shadows away, or get a friend to hold a bulb on a flex—out of the camera vision, of course—during actual exposure.

Some subjects lend themselves to accentuated shadow work, and here it is largely a matter of the best position for the light to get the sharp shadows on the background to the size and at the angle required.

If you are photographing a group of models, then pay some attention to their size and proportion. Do not have them all facing one way in a straight line. Arrange them at odd angles, with the largest at the back. Look at the picture again from the view of the lens, and notice whether the models in front are obliterating parts of those at the back. If so, it means moving experimentally to get the best result.

### Spacing

To prevent these models 'running together' in any way, you will naturally have to put them a distance apart, and so provide ugly spaces on the picture. The models can, however, be put reasonably close together with certain minor parts overlapping. Those who want to do the job thoroughly are well advised to obtain one of the several books on table top photography, which give a number of hints in grouping, lighting, subjects, etc.

Models by themselves give no idea of their size, and occasionally it is worth introducing something different by which comparison can be made. In miniature models, a matchbox will often show up the size clearly. Some photographers prefer to have a folding rule lying near the subject, so that the actual inches can be seen.

### Figure Included

A better method is to incorporate a figure or portion of a figure which will clearly show the relative sizes. Even a hand holding the piece of work, seems to make the result more 'human', although this is not advisable if very tiny work is involved so that the hand looks absurdly large in proportion.

If you have executed a piece of work, and want to be photographed with it, a good plan is to have the subject on the table at which you are sitting. The picture can then incorporate the model and the upper half of the body, without showing the unnecessary legs of either the table or yourself. Remember it is the model which is the subject of the picture, so its surroundings should not be too blatant. A figure shown mainly helps to give a comparison in size.

## Next time you eat a chicken remember these

# WISHBONE NOVELTIES

AS everyone knows, the usual way with a chicken's wishbone, is for two people to hook little fingers around the long parts, and to pull, the one who gets the larger portion having his or her "wish".

Whilst no one would want to disparage or discourage such old customs, the handyman and home craftsman can put wishbones to more interesting and profitable uses. In fact, some people have made a spare-time job out of making wishbone novelties and get their raw material from such places as rural factories where chickens, etc., are processed on a large scale, or from hotel, etc., kitchens.

However, even with only one or two wishbones from a turkey or similar poultry, we can make some interesting novelties.

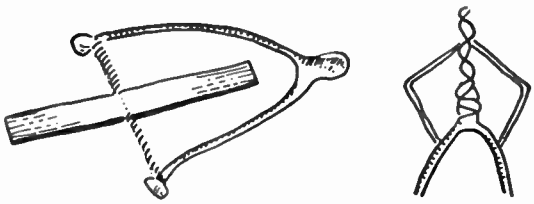
Suppose we want to keep to the "wish" or "good luck" idea. After cleaning the intact bone thoroughly, we can dress it up with a ribbon, tied in a tasteful bow with, perhaps, some very small artificial flowers, as shown in the sketch. A slip of paper, bearing, in small neat handwriting, suitable greetings can then be attached. These can then be given or sold as good luck emblems to go with birthday, wedding, or other presents. By their very unusualness, they will attract more attention than the usual card.


Somewhat different is Billy Bowlegs, illustrated in the second sketch. His legs, of course, are the wishbone itself whilst the body and head are made of putty, plastic wood or sealing wax. In the latter case, two different colours could be used and no further painting would be required.

To make for strength, some wire is twisted on the upper part of the bone, as shown, and the arms are of wire. The base is just a scrap of cardboard. Sealing wax will enable the figure to be fixed to the base. A small calendar pad could be fixed to the legs if it is required to make the figure useful as well as decorative.

### The Jumper

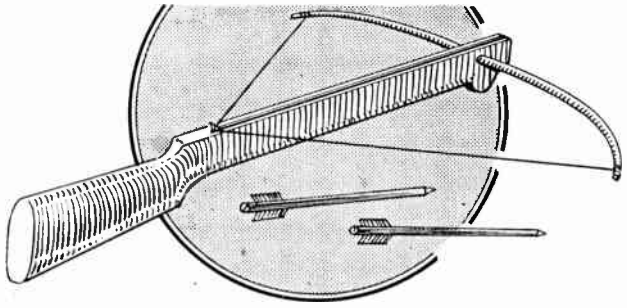
An after-dinner novelty for the children can soon be rigged up, as shown in the third sketch. An elastic band is stretched across the open ends of the bone, and a slip of card or thin wood is inserted. The wood is then wound up, taking care, of course, not to stretch the bone too much. Upon releasing the strip, it will spin round like a propeller, and the bone will jump up and down. For some, the action is over too quickly, so it may be slowed down as follows.



Have the strip of thin wood long enough to reach under (or over) the knob at the end. Put a dab of wax (candle grease would serve) on the knob. Wind the elastic up and press the stick on the wax. It will hold there for a moment or two. Lay the whole contraption on the table. After a while, the pull of the elastic will overcome the stickiness of the wax, and the "Frog" (or whatever you call the toy) will spring up.

Readers may like to know how to make both the

# ARCHERY AND CROSS BOW



MANY readers will probably decide immediately to make these two ancient weapons of the chase. They are quite capable of affording plenty of sport and amusement. For the crossbow, pictured in Fig. 1, procure a piece of 1in. thick beech, or other fairly hard wood, 30in. long and 4in. wide.

### Arrow Groove

On this wood mark out a series of 1in. squares in soft pencil, as in Fig. 2, and proceed to follow the outline of the stock and barrel through the squares, using each as a guide in getting a true outline.

When this is done cut out the shape with the fretsaw and the handsaw and then shape the butt end to a graceful curve, as shown, and that part of the stock round which the hand grips. Make all parts smooth with coarse and fine glasspaper.

On the top edge of the barrel and in the position shown in Fig. 2, cut a mortise slot 2in. long and ¼in. wide, right through from top to bottom. Then, from the slot, work a groove ½in. wide and ¼in. deep for the arrows to lie in.

The release trigger action arrangement is shown in Fig. 3, and should be easy to understand. The trigger catch measures 2⅜in. by 1⅜in. and should be cut from stiff brass 1/16in. or more in thickness. This is placed in the slot with a brass washer each side to centre it properly, and pivoted by means of a stout wire nail driven through the stock In the place shown. A small part of the slot underneath should be chiselled out so that a spring can be fixed therein with a screw attachment.

### Spring Trigger

The other end of the spring is hooked in the small hole drilled in the trigger. A suitable spring can easily be made by winding a piece of steel wire round a stout knitting needle. Fine piano wire or a banjo string would be found suitable.

To keep the trigger in place and to prevent the spring pulling it too far forward, a stop is fixed. This is seen in Fig. 3, and is merely a wire staple driven in to bridge the slot and keep the trigger back so that the catch appears just above the groove and slot in the barrel.

For the bow, get a length of ash, hickory or lancewood, ¾ in. square and from 24in. to 30in. long. Plane this to a round section and taper gradually from the middle to each end where it should be ⅜in. Let the taper be a gradual one so the bow bends evenly all along. Finish the wood well with glasspaper.

Bore a hole in the muzzle end of the barrel just sufficient in diameter to allow the bow to wedge in securely. Fix the bow by driving in a nail or screw from beneath. Good quality fishing line or whipcord will do for the bow string. Cut a shallow notch near each end of the bow and tie the cord across. Add some binding cord to hold it very securely.

The tips of the bow should lie just below the level of the top surface of the barrel, so the string will just keep contact when released by the trigger.

### Making the Arrows

An illustration showing how the arrows are made is given in Fig. 4. Cut from round rod about ¼in. diameter several 12in. lengths, and point off at one end as shown. To make the flights or guides, at the opposite end of the rod, run a fine saw-cut or knife-cut, making an open slot about 3in. long. Feathers may be used for the flights. Trim off one side of each feather to the centre rib, cut to the length and glue it in the saw-cut each side, filling in the spare open slot with glue and sawdust. When the fixing glue has hardened the feathers may be trimmed to shape.

In the place of the feather flights it might be possible to use card in the same way. Finish the crossbow by coating evenly with varnish. To use the weapon, draw the cord back by pulling with the first finger and thumb until it slips over the catch. Set an arrow in the groove, with its flight end, of course, against the trigger. Then release the latter with the finger and the arrow will immediately fly forward.

### The Archery Bow

To make an archery bow, as shown in Fig. 5, get a length of ash, hickory or lancewood as before suggested for the crossbow. The bow can be made from 3ft. to 6ft., but a beginner is not advised to start with too-powerful a bow. One about 4ft. long and shaped from a piece of ¾in. square wood will answer excellently for a start.

Care must be taken in the shaping and the tapering of the wood if a well-balanced bow is to be made. A space of 5in. in the centre should be made round in shape, to be afterwards bound with stout thread like that used for cricket bats. From here it is tapered to the ends to about ⅜in.

### D-shaped

Note the cross section, to which it is to be shaped in the enlarged diagram in Fig. 5. This is almost in shape like a D and the rounded side should face the operator. The ends of the bow are notched out slightly to take the ends of the cord, which could be bound round securely. Whipcord or sea-fishing line will do well also for the string. Test the bow to prove it bends evenly when the string is drawn well out.

When satisfactory, bind the centre part of the string for about 5in. with silk thread. Mark the exact centre by either red paint or a piece of red thread bound round. The arrows should be made from ash ¼in. in diameter and about 20in. to 30in. long. They should be provided with flights in a similar manner to those previously mentioned, and must be varnished.

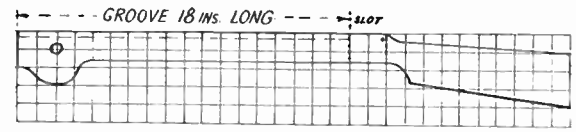



Fig. 2—Outline of the cross bow marked out in 1 in. squares

Fig. 5—The taper of the archery bow and showing its shape

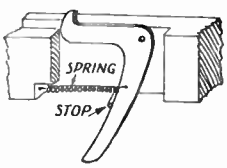



Fig. 3—The trigger action


Fig. 4—The arrow and flight saw cut

## Hints from a practical watchmaker about

# ALARM CLOCK CLEANING

AN alarm clock is a sturdy thing. With a little knowledge and care there is no reason why the average handyman should not take his own to pieces, clean it and put it together again. The tools needed are likely to be found in most homes with the exception of a pair of tweezers with fairly fine points. Usually these can be obtained quite cheaply from the local ironmonger and as they are useful things to have about the house their cost will never be regretted. For the rest of the tools, a pair of small pliers fairly smooth between the jaws, a small adjustable spanner and some very light oil is all that is needed.

### Simple Mechanism

Before one can attempt to repair a clock, or anything else for that matter, it is as well to know something about how it works. Any kind of watch or clock is essentially a train of gears with an escapement at one end to regulate the speed at which the gears turn under the drive of the mainspring.

Looking at the back of the works of an alarm, the simplest and least complicated of all timepieces, there is a large wheel with a spring attached, on the right hand side. The complete works we know as the movement and this wheel in particular we call the 'Barrel' (1) simply because in better class clocks it is in the shape of a barrel which totally encloses the mainspring.

### The Gear Train

The teeth on the barrel engage with teeth on the spindle of the wheel in the centre of the movement. A spindle with teeth like this we know as a 'pinion'. For obvious reasons this second wheel (2), counting the barrel as number one, is called the 'centre wheel' and the barrel teeth work on the centre pinion. This is the system throughout the gear train. Each wheel drives a pinion to which is fixed another wheel.

On the end of the centre pinion poking through to the front of the clock is fixed the minute hand and a small toothed wheel, usually brass, which drives an idler wheel engaging with the wheel carrying the hour hand.

### Wheel Drives

Centre wheel teeth drive the 'third wheel' (3) which in its turn drive the fourth wheel (4). It is on this fourth wheel that the second hand is fitted, if your clock has one. The fourth wheel drives the escape wheel which has fifteen peculiar shaped teeth.

Running on the edge of these escape teeth are two steel pins set in a lever known as the 'pallets'. One end of the pallets is shaped like a two-pronged fork into which a pin on the balance wheel fits. The balance wheel is the wheel which swings freely if you shake the clock and it is controlled by the hairspring. Each time it swings, the pin, called the 'roller pin', engages with the pallet lever and moves it over so one tooth of the fifteen on the escape wheel is allowed to move.

As it moves its shape pushes the steel pallet pin, giving an impulse to the pallet fork which is transmitted through the roller pin to the balance wheel. In this way the balance wheel is kept swinging so long as there is sufficient power in the mainspring to give the impulse right through the gear train to the escape wheel teeth. The length of the hairspring determines how long it will take the balance wheel to swing backwards and forwards and its effective length is measured from the centre to the point where it is fed through the regulator.

Thus, when the regulator is moved over to the slow position, a greater length of hairspring is brought into play, the balance wheel takes longer to complete its swing and the escape wheel teeth are not allowed to escape so quickly. The whole train of gears runs more slowly and the hands do not go round so fast.

### The Alarm

The alarm system is driven from the barrel on the left of the movement through a gear train and escapement to which is fixed the hammer which strikes the bell or a stud on the back of the case. It is controlled by a cam with a raised step which is fixed on the end of the spindle carrying the alarm hand at one end and the alarm setting knob at the other.

Working with the gears which move the hands is a toothed wheel with a slot in it and behind this wheel is a flat spring with the end bent at right angles. This bent end hooks into the alarm escapement and stops the hammer moving. When the step in the cam and the slot in the wheel come together the toothed wheel is pushed forward by the spring, the bent end leaves the alarm escapement and the bell rings.

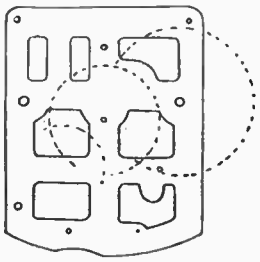
Now we can remove the clock from its case. To do this unscrew the feet and the knob at the top. Modern alarms have this knob; some of the older clocks have a handle clipped into two knobs; some a handle with only one and some have a bell. Whatever is at the top will be screwed right through into the ring to which the movement is fixed.

### Ready for Dismantling

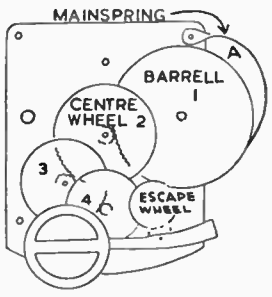
Next unscrew the winding handles and the alarm-setting knob. Many of these have a left-handed thread. The hand-setting knob always pulls straight off; since this is expected to turn both ways, a screw thread is not practical. The back of the case will now pull out like the lid of a tin and then the movement can be lifted out of the case.

In our next article we start dismantling the movement, so that when it is cleaned we can put it together again.

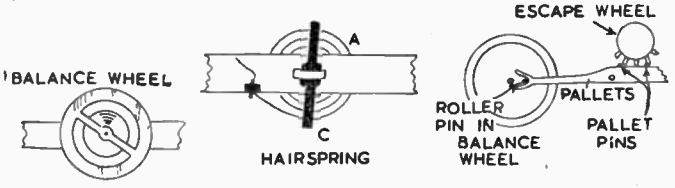
*(To be Continued)*



The clock back plate




The train of wheels

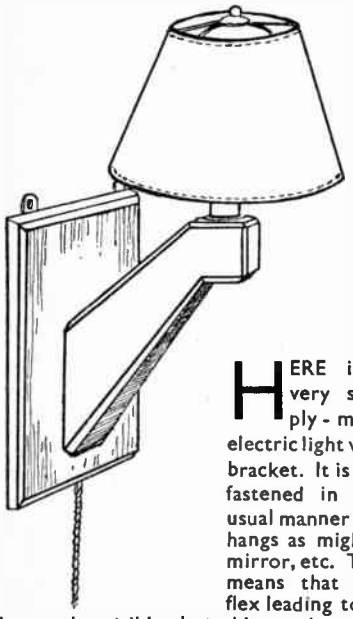



Three normal mechanisms shown in detail

## LONDON PUPPET EXHIBITION

LONDON readers who became interested in the increasingly popular hobby of Puppetry through our recent series of articles would do well to visit an Exhibition, organized by the British Puppet and Model Theatre Guild, being held at The Royal Hotel, Woburn Place, London, from 1st Oct. to 12th Oct. There will be much of interest to amateurs, as well as periodical demonstrations by leading puppeteers. The nearest Underground Station is Russell Square.

# A room looks more distinctive if you add a SIMPLE WALL LAMP



HERE is a very simply-made electric light wall bracket. It is not fastened in the usual manner but hangs as might a mirror, etc. This means that the flex leading to it has to be visible, but this need not of necessity be any drawback if the bracket itself is neatly made and well finished and if the cable is of a colour that tones with the wall or general colour-scheme of the room.

The back-block (A) should be of some wood with a nice-looking grain, such as walnut or cherry. It is 8ins. high and 6ins. wide and has a thickness of $\frac{3}{8}$in. A rectangular opening (a) $\frac{3}{4}$in. by $1\frac{1}{4}$ins. is chiselled out at a position 2ins. from the lower edge. This is to take the projection at the back of the arm (see B). The outer rim of the block is bevelled all round.

### Arm Shape

At B is the shape of the arm, also from the squares, which are 1in., the dimensions can be taken. This part stands out 6ins. from the main board, the projection (b) protruding for an extra $\frac{3}{8}$in. backwards. The flat section at the top forms a square 2ins. square and the thickness of the arm is 1in. All the outer edges are bevelled as shown to agree with the back block.

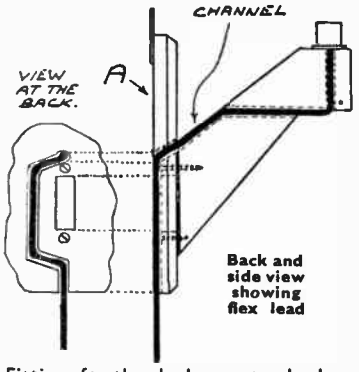
The back and arm are joined by the projection on the latter, being tapped through the opening in the back (it should just fit nicely) and two screws being run through, one above and one below the projection. The joint should also be glued before final fitting. Care must be taken to see that the end of the arm and the surface of the block meet all round without any gaps.

Having got the back and arm firmly joined, the next thing is to prepare the track for the flex (see C). A hole is first bored down the middle of the square section at the top end of the arm and then one at right angles through the arm itself to the inner edge. From here a channel deep enough to take the flex is taken out down the edge to the back.

Here a small hole is bored right through the back and from the point where it emerges at the rear a channel is cut downwards, passing to one side to miss the screws holding the arm as shown. This channel must finish at the mid point of the lower edge and from here the flex should proceed direct down to the skirting board. From here it can be led to any desired inconspicuous point.

The track of the flex may seem rather complicated, but in reality it is very straightforward, and taken in the way described it is virtually invisible to anyone standing in the room.

The lamp holder, which is not of the switch type, is held by a batten holder screwed into the top of the arm. The hole for the flex, of course, leads directly down from the centre of this. Batten holders can be obtained in a number of sizes, and one must be bought so the flange sits comfortably on the wood of the arm without overhang.




Back and side view showing flex lead

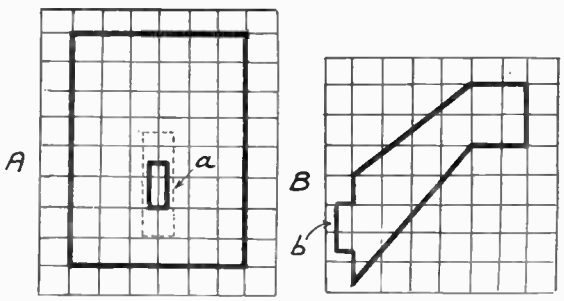
Fittings for the shade are standard, and the shade itself must not have a greater radius than 6ins. The whole bracket is suspended by two brass hangers fastened to the top of the back which slip over nails in the wall.

### Varnish or Paint

Finish will be according to the wood used. If the material was poor or it is not desired to spend too much time on the article, a varnish stain will do. But if it is desired to make a good looking bracket, the wood itself being good, the parts should first be well glasspapered, then three thin coats of shellac applied. After which, a rub must be given with pumice, followed by a final polishing.

Incidentally, should the bracket be used in a room where the other woodwork is enamelled to one colour (this being a popular modern way of doing things) it will look best finished in the same enamel. This, in fact, in the case of such a room would really be better than a more elaborate livery.

With regard to the switch, most table, stand and wall lamps have these incorporated in the actual bulb-holder, but this lamp is only hung on the wall and the continual action of switching on and off might in time tend to make the nails loose and, perhaps, "draw". The switch, therefore, should either be at some point in the flex or use made of the usual room switch. The bracket, however, should be left untouched once in position on the wall.




Marking out back and arm

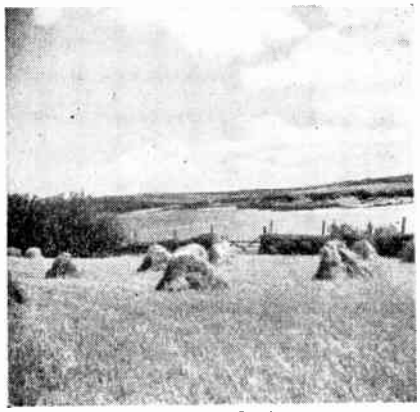
### Suitable Switch

The fitting known as a "torpedo" switch is useful for a situation like this, as it can be put in the flex anywhere. One wire is cut and the severed ends fastened to the terminals of the torpedo, after its case has been opened by unscrewing. Some of these switches are quite small and are not too conspicuous in a length of cable. The switch can also be bought in various colours and so can be made to tone with your colour scheme.

## Some hints and examples of pictures to get in

# AUTUMN PHOTOGRAPHY

WHAT a glorious month September is for holiday making. Most persons who have had the experience will agree that in most respects it is better than the so-called holiday months of June/August. The seaside and other resorts are not so full of visitors, therefore, accommodation is somewhat easier to find. The temperature is generally more genial and inviting for long rambles and picnicking. And, what is, perhaps, even more attractive about this month, the weather is more settled. The author has actually found this to be so during the last seven or eight years.



Cornish Cornfield—H.P.3 film—F.8.—1/50th —Filter 2x—Time 5.30

If all these special features make an appeal to the ordinary holiday makers how much more should they influence amateur photographers to try taking their vacation at such a time. Especially when it is realised that the countryside in September is just chockful of beauty and scenes that can keep the camera clicking from morn till evening.

### Waving Corn

Have you ever been thrilled by the sight, or rather the effect, of a fairly good breeze over a field of corn and wondered whether it would be possible to reproduce that delightful effect on a film? It is possible, but it means a very short exposure on a fast film.

If the film in use is not particularly fast then it calls for a larger stop to be used, such as F8 or F6·5 instead of F11 or F16. But it is most certainly worth while trying to get. The effect is, of course, the result of the breeze bending the corn in such a way as to reveal the lighter tone values or colour of the stalks just below the ears.

Should there be such a field near where you are staying you should try to learn from the farmer when harvesting is likely to start. Obtain his permission to go into the field on one of the days in order to get some shots while the actual cutting is being done. If the work is to be done by horse-drawn reapers you will find innumerable opportunities and will probably want more than one extra spool of film.

### The Best Position

Whatever you do have plenty of time on hand and do not be in a hurry. Before making any exposures take a walk round the field to ascertain the best position so far as the light and the actual cutting is concerned. Usually there is a corner where the reaper has to take a sharp turn and the horses then are full of action. There may be a five barred gate close to that corner, or a view of a haystack occupying the middle distance, or it may be an old barn; any such object will serve to compose the picture.

When you have found the spot, then give a little thought to the exposure time and what stop to use, and in your view finder try to build up the picture by standing in the best position where the stationary details, such as the gate, barn, etc., are correctly placed. You will then be ready to keep your eye fixed on the reaper as it comes into line with the camera.

Loading—H.P.3.—F.16—1/25—Filter 2x—Time 12.30

If you wish to take a snap of the horses —and usually they are such lovely creatures that one is very prone to use a film for this purpose—you can either take when the animals are standing still or when you can get them coming straight at you. The latter is, perhaps, preferable, because there is likely to be a suggestion of action. Do not forget to promise the farmer a print of the horses and remember to keep the promise. Most of our farmers are intensely proud of their horses and are pleased if visitors show an interest in them.

If you are able and feel inclined to spend a few hours of your holiday doing farm work, offer to give a hand. It is a capital way of getting an introduction and opportunities for getting some good subjects will come along quite frequently during the day. The break at midday for the meal is usually the chance for a group of the farm hands to be taken. They will, of course, want you to take them while they are actually squatting in a group and eating and drinking and in order to get them in a happy frame of mind it is profitable to use a film for their satisfaction. After doing so you should be able to get something a little more picturesque when work restarts by arranging three or four of the hands, one at the head of the horses, a couple at the cut corn binding and carrying, and a fourth leaning on his fork waiting.

### Other Suggestions

Another branch of harvesting comes when the sheaves are being loaded and carted to the barn. To make a successful picture of this scene it is again advisable to select your position and this should be in a spot where the cart and the workers occupy the foreground but where a stretch of the field complete with plenty of sheaves covers the middle distance. Failing this, show a portion of the barn, even if that happens to be a little distance away, in the near background. The object of this is to show a continuity of the work.

Finally get a shot of the field of sheaves. It is always a pleasing record, especially if you get the lighting right and exposure correct.

On this question of exposure time it is well to remember that normally September requires 50 per cent increase over the times of June/July, and towards the end of the month a further 50 per cent extra may probably be necessary.

Three in Action on H.P.3 Film—F.8—1/50th Filter 2x

The fact must be always in mind that September light is very variable. It is more constant between 11 o'clock and 3 o'clock, but if you have a meter it will pay to use it. Watch for the clouds and make good use of them, for they do add a marvellous charm to our autumn photographs.

(*Continued foot of opposite page*)

# How to add movement and realistic operations in your MODEL RAILWAY CONTROL

FOR a model railway to keep the interest of its owner, it must be capable of being operated with some semblance of reality. The locomotives must be able to run fast or slow, and must be capable of being reversed without the introduction of the out-of-scale human hand.

All these movements take place at any railway station, and are easily reproducible on an electrically-powered model line if the correct methods of wiring are carried out. Model locomotives can be made to do practically every movement that their big brothers will do—and quite as naturally.

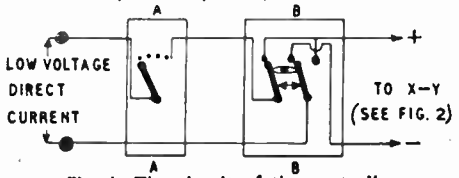


Fig. 1—The circuit of the controller

Most readers interested in model railways are well aware of the fundamental system of electrification used, whereby the engine derives its current supply through the medium of a third rail, which is insulated from the running-rails. The current runs via the collector shoes on the loco, through the motor, and back to the running-rails by way of the axles and wheels of the engine.

### The Control Circuit

This rudimentary circuit is shown in Fig. 1, and it will be seen that by the insertion of a speed controller at the point (A-A) it becomes possible to vary the speed of the engine by varying the amount of current being fed to its motor. Similarly by the insertion of a reversing switch at the point (B-B) the direction of travel of the loco can be altered by reversing the polarity of the supply current.

Let us assume a layout such as that shown in Fig. 2 is being used comprising an oval run with a station with two small sidings on one side. To obtain such train movements as stopping at the station, detaching the engine (running it into a siding) and bringing another loco out in its place, some different wiring will be needed to that used for simple running around an oval of track.

### Isolated Rails

The wire + from the controller is taken direct to all the running-rails, whilst that marked minus goes to the complete oval of third-rail. The latter is cut at points (A) and (B) so that the section of third-rail at the station is electrically isolated from the rest of the oval. Then from the main — feed-wire, lengths of wire are taken to the switch (S) and the two push-buttons (C) and (D). Afterwards they connect from the switch and bell-pushes to the live (third) rails in the sidings, and the length of live-rail in the station.

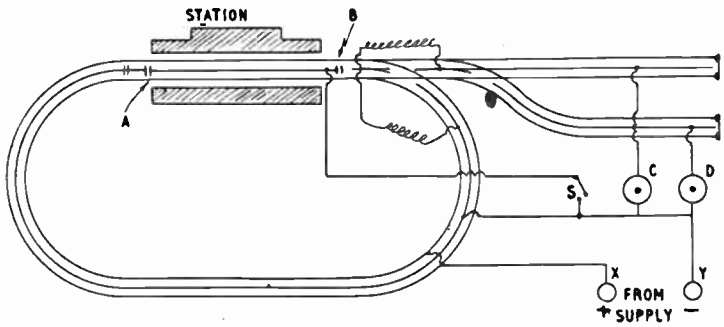


Fig. 2—An example layout with controls introduced as explained

It will be seen that, by reason of the pushes and switch, it becomes possible to control the flow of current to the station area and to the sidings. If the switch is left 'on', the train can be run round the oval in a normal way, but if it is brought to rest on the station section, the current can there be switched off, and on 'opening up' the controller, the loco will not move.

If there is another engine in the siding, it may be moved by merely depressing the appropriate push-button, driving it out on to the main oval. Providing the station section is not entered, the train engine will still remain stationary.

When the new engine has been coupled to the train, and the first loco uncoupled, the train can be moved off in reverse direction, the original engine being run 'light' into the siding. It is quite simple to elaborate upon this 'sectional' method of control, and to multiply sidings and station sections as required; extra switches or push-buttons being provided for each section.

If sidings are of any length, it will be found a great advantage to isolate about 1ft. of the third rail nearest the buffer-stop, and to connect it to the rest of the siding third rail through the medium of a push-button.

### Standing "Dead"

This will enable a loco to be run right up to the buffers (whilst keeping the push depressed), afterwards releasing the push, upon which the loco will stand in the siding 'dead'—irrespective of other engine movements going on in the rest of the siding. It can immediately be brought into action by pressing the push, and opening the controller.

Although, of course, it is totally impossible within the limits of so short an article, to do more than mention these three applications of section electric railway control, the reader will, no doubt, expand upon the ideas, and will find that such schemes are applied easily, and at practically no cost; adding very materially to the realistic working possibilities of his model railway.

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**Photography**—(*Continued from page 296*)

So far only corn harvesting has been dealt with in this article, but there is another which takes place round about this time of the year and that is the Apple Gathering. Should you be anywhere near the Cider country where there are extensive fields of apple trees and where the gathering of the fruit is a big event of the year and, likewise, of the village, it is worth while trying to be on the spot.

If the apples are for the cider press they are gathered in large heaps on the ground immediately around the trees and wait there for the time when carting is to be done, which may be a few days later. The picking is done by men and women and the heaps are usually shovelled into carts or lorries and taken direct to the cider breweries.

If the apples are of the dessert quality and intended for the market much more care is employed in the picking and each apple is carefully handled and examined. Packing takes place sometimes on the spot, but where large quantities are handled, then it is the usual custom to place a fair number in small crates or boxes and cart them to the packing place or barn for final overhauling, packing or storing.

In any case the fruit harvest does not quite compare with the corn harvest for opportunities for the camera, yet the trees and fields, the workers and their work, can offer some very interesting and pictorial records of the holiday.

September is very definitely a photographer's month and a holiday in any part of our beautiful country will render many valuable items for filling a most interesting and pleasing album or for producing a fine collection of lantern slides for an evening at the club. Do not let the opportunity slip.

# Hints for the fisherman on how to enjoy good PERCH FISHING

OCTOBER is a great month for the angler—all the various species of fish classified under the somewhat misleading term of "coarse" fish, or "freshwater" fish (as distinct from the game fish) are now in their prime, affording grand fun when hooked on fine tackle. It is, perhaps, a wise plan to concentrate on two or three kinds that may be said to be in tip-top form just now.

In October there is no better fish for the young angler or beginner than the dark-striped perch, a handsome, hard-fighting creature full of beans and never shy of risking his chances when your bait comes within his ken. Big perch, say, of 1lb. to 3lbs., will give you a run for your money every time.

### A Beauty

An adult perch is a gorgeous fish, with his dark green and olive colouring, striped with dusky bars. His hog back gives him a truculent appearance, which he does not belie. Few fish possess more beautifully tinted fins, but beware how you handle him when hooked. Watch that dorsal fin with its sharp spines; a prick from these needle-keen spines is indeed painful.

Perch are predatory; they will seize almost any bright moving object coming into their range, thus affording the angler many of the more fascinating methods of fishing. These include spinning; roving with live minnow for bait; and the "sink-and-draw" procedure, in which you let the bait sink to the bottom of the hole or pool and slowly draw it to the surface again, repeating the process until you get a bite.

### Tackle to Use

The roving method is interesting fun. Do not have tackle too fine; 3x gut and a No. 1 silk line with a cork and quill float will be O.K. Use in conjunction with a light cane rod of about 10ft. in length. Shoot your line so the float is nicely balanced with the crimson top riding on the surface in an upright position.

Proceed along the river bank until a nice swirly eddy is found, an eddy off the edge of a brisk streamy run. Here the water steadies up and circles round, backing up under the bank. Now, do not go peering over the bank to see if there are perch in that particular spot—unless the water is well coloured after rain. Keep back and do not allow curiosity to get master of you. For, if the fish glimpse you, off they will go.

You can try out the hole by dropping in your bait, which in this case, may be a live minnow, a red worm, or a bunch of maggots. If perch are there, and hungry, they will soon let you know it. There will follow the usual series of sharp tugs, the float goes bob, bob, bob, and then dives under. Do not be in too big a hurry! Wait a few seconds, and then drive the hook home by raising the rod and top and giving a sharp strike.

### When to Strike

Usually, if minnow is the bait the perch makes two or three grabs before getting well hold of it. When at last he does, he will run off with it, the float then disappearing under water. The preliminary jerks are not to be taken as denoting that the fish has actually got the bait and hook in his biggish mouth.

Even when the tip of the float is disappearing beneath the surface you need not hesitate to count "one, two, three", before striking. Then you will have the fish well and truly hooked.

Float-fishing with red worm as bait, using a cane rod and a free-running reel of the Nottingham pattern with check, is also worth while. The usual cork or quill float is used, and a cast of gut or nylon, 3x thick mounted with a No. 8 or No. 10 crystal hook.

Keep your bait moving in mid-water and between there and the bottom. It is little use fishing dead on the bed of the stream for perch. Keep your bait on the move.

Paternostering is another good method. A paternoster consists of two or three hooks at intervals on a length of good nylon gut or other gut-substitute, with a lead at the bottom. No float is required. In coloured water a worm fished on a ledger tackle is often effective.

Bait the hook and swing it out to the desired spot where you fancy perch are collected together, letting the lead touch bottom. Keep a taut line so you can just feel the lead—you can tell then directly a fish takes the worm.

### Where to Find Them

Haunts of perch include rivers, canals, lakes, dams, and ponds. Perch are gregarious and go around in shoals, so where one is caught others may also be taken. Baits and lures are various, including worms, maggots, wasp-grubs, caddis grubs, raw meat, peeled shrimps, and small live fish such as minnows, loaches, or tiny bleak. In some waters perch will take a small artificial lure, a spoon or a quill minnow or "wagtail".

Live minnows can be carried in a bottle, but do not fill with water to the brim—about three-parts full is better. You can cork the bottle if you wish to carry it in your bag.

## A Builder of Hobbies Passes

*SO much of what we do and use is nowadays taken very much for granted, and we give little thought of the organisation and effort which must go on to provide our everyday happenings and needs. Very often there is behind the scenes, as it were, a master mind with planning and foresight, to enable others to work out and put into operation, ideas and suggestions for the greater good of many people. Readers should be interested to know of the directing mind which was behind Hobbies Ltd., and which is now no more able to carry on that great work.*

*Mr. Richard Jewson, J.P., Chairman of Hobbies Ltd., died a little time ago at his home at Norwich, at the age of 82, after a prominent and energetic life, not only in business activities, but in the more satisfying spheres of religious, philanthropic and social welfare work. He had been Lord Mayor of the City of Norwich, Chairman of the great timber firm of Jewson and Sons Ltd., and Boulton and Paul Ltd., the well known constructional engineers, past President of the Timber Trades Federation, etc. Of great mental as well as physical ability, his keen brain had been a great asset in building the firm of Hobbies Ltd., and his interest and enthusiasm were largely responsible for its increasing range and popularity as the name of Hobbies became more and more renowned in the world.*

*He had been a director for 42 years, of which 28 were as chairman of the company and almost all the earlier ones as Vice-Chairman. Throughout, he had taken a keen interest in the business and in the welfare of the employees. One of his last activities was to suggest and attend the firm's Thanksgiving Jubilee Service held at Dereham Parish Church last year.*

*There was a large and representative gathering at the memorial service held on the day of his funeral. All directors of Hobbies Ltd. were present, with representative heads of the numerous departments of the firm and its branches.*

*The number of floral tributes sent also showed the esteem in which the late Chairman had been held throughout all Hobbies.*

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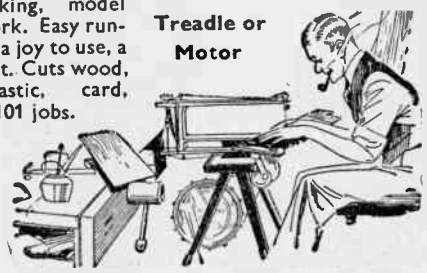

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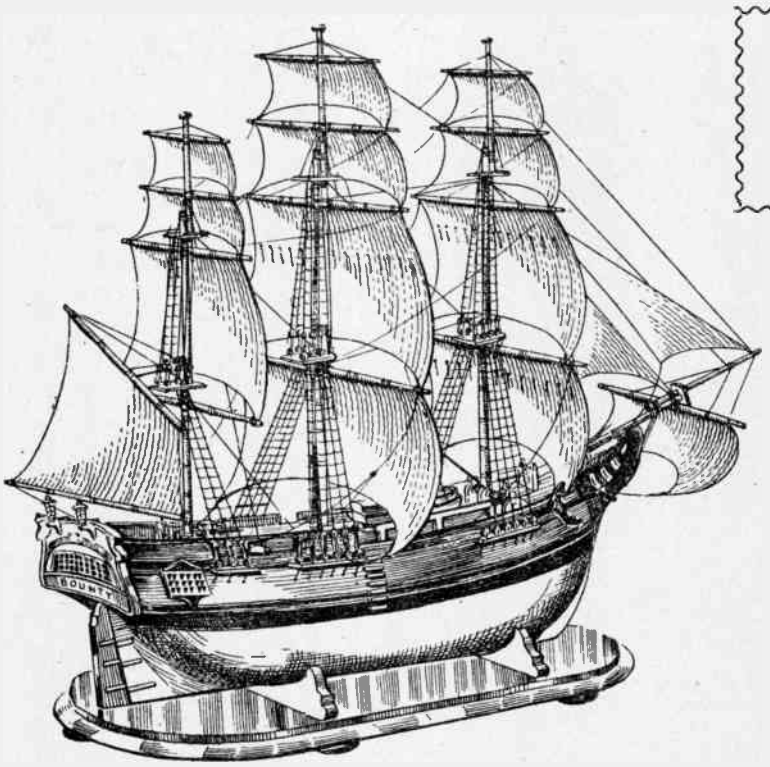
# An 8in. model o
# H.M.S. B



THIS interesting waterline model of the historic ship, H.M.S. Bounty, has a hull just 8ins. long and stands 8¼ins. high on its base to the top of the masts. It is thus of handy size to complete, and can be made from the kit supplied with the aid of a fretsaw for cutting out the parts, and a few odd tools for shaping and finishing.

Many of the parts, of course, are quite small, and will require care and patience in their correct completion. The construction, however, can be quite fascinating, and the finished model made as attractive as any of the others in the Hobbies Old-time Ship Series.

The printed patterns should be transferred direct to the wood and not pasted down. They can be marked on to the boards by means of carbon paper, or traced and redrawn according to individual taste. The sails are shown half size to conserve room, and will have to be duplicated on the opposite side of the centre line given. Study the constructional details here, and the various drawings, so you have a good idea of how the whole thing is made up before you actually commence.

### Hull Parts

The general work of the hull should be completed first, and then painted before the masts, spars and sails, etc., are added. The patterns have dotted lines upon them, indicating where adjoining pieces are to come, and these should be noted carefully. Get out the parts as you proceed, cutting, shaping and fitting as you go along. The hull is made into a complete solid block, and the shaping of this to get the correct curves, needs the use of rasp, file and glasspaper.

The centre upright keel of ½in. wood has three thicker pieces projecting from it to make the solid block. These are the pieces, A, B, and C. Piece, A, in ½in. wood is glued flush with the upper edge of the keel piece. Piece, B, is glued beneath that and piece, C, lower again. You can glue these three parts together first, and then shape them off when the glue has hardened.

Notice the receding line of the bow, and the under sweep at the stern shown by the dotted lines on the keel pattern. The outside curve of the hull must also be rounded nicely, and shaded sections in Fig. 1 show various points and the curve which is required at them. These two complete blocks can be built first, shaped up to balance each other, and then glued each side of the keel piece with part, A, in line with the top.

### The Deck

The actual deck is a piece of ½in. material with a slot at the front linking into the little projecting piece in the keel. A raised stern deck is then added at the back and a foredeck at the bow. Both these pieces taper slightly as shown by the section, in order to slope the deck upwards towards the stern and towards the bow. This is seen in the useful diagram at Fig. 2.

Additional pieces are now added to the deck itself, such as the hatches, the shaped rail and its chair at the front, the windlass, etc. Now add the upper side which is cut from thin wood, and stiffened on the inside by further thin strips. Notice the deck line on the pattern showing these sides to project slightly above the deck level. Fix with glue, commencing with the stern, carrying the strip round to the curve of the deck until it meets at the bow. Stick little pins through the part until the glue is set. The detail at Fig. 3 shows how the bowsprit is added, passing through one chair into the second one in front of the forward mast.

These mast holes should have already been bored in the deck at the positions shown. The hole for the foremast just passes through the upper deck, the main mast is sunk ½in. into the deck itself, and the mizen mast sinks through the raised stern deck and ½in. further into the deck itself. The windlass shown at Fig. 4 is glued to the foredeck just behind the forward mast, in the position shown.

The channel pieces are to take the bottom ends of the shrouds, and the detail at Fig. 5 shows that portion completed. The channels must be glued strongly on edge on the upper side strip in the position shown on the pattern of that part. At the stern, as seen in Fig. 6, two little corner angle brackets are glued inside, and two lantern brackets are put on edge outside the stern.

### Stern Lanterns

Each lantern is cut from a tiny square of ½in. wood to the shape shown, and nicely rounded with a taper from top to bottom. The tiny rounded top can be a bead or a ball of plastic wood. Two small boats are required, each being made from two pieces. As there is no ½in. material in the kit, the part of that thickness of the boat can be made by gluing two ½in. pieces together, and then the upper piece of the seating glued over it. Shape the boat nicely as shown in Fig. 7 and then glue to the deck on the top of the hatches, as shown in the deck pattern. The boats are glued one above the other, bow foremost.

There is a tiny window near the stern on each side of the hull, which should be added after the hull itself is painted. The shape of this window is shown at Fig. 8 as well as the manner in which it can be painted to represent the glass and framework.

### Masts and Spars

The erection of the masts with their spars and sails calls for delicate attention, and a study of Fig. 9 is necessary before you begin. Platforms are provided to form a join for each portion of each mast, and at Fig. 10 you have detail of how these are first made up using the platforms marked on the sheet for the different masts concerned. Th

### Interesting Historical Notes

***H.M.S. Bounty set out in 1787 on a scientific trip to Tahiti. A hard ship's captain (Lieutenant Bligh), caused a mutiny on the return journey. The crew put the master and 18 loyal seamen in an open boat, and then sailed the Bounty to Pitcairn Island. Here, they founded a new home for themselves, of whom the present-day inhabitants of the Island are descendants. The cast-away master, however, managed to reach land, returned to England, and was sent out again to bring back some of the mutineers with their leader, for official court martial in England.***

MAIN MAST.

SPAR 17

SAIL E.

CENTRE LINE

SPAR 16

SAIL D.

CENTRE LINE

SAIL N.

25

SAIL L.

CENTRE LINE

CHANNELS.

CUT FOUR.

ALL 1/8in.

MAKE TWO.

CUT TWO.

SEE DETAIL FOR SHAPING

BOAT. CUT TWO 1/4in. THICK (2 PIECES 1/8in. GLUED UP).

BOAT SEATING. CUT TWO 1/8in. AND GLUE TO BOATS.

CHAIR a

CHAIR FOR BOWSPRIT. CUT ONE 1/8in.

SHAPED RAIL.

PLATFORM MIZEN MAST. CUT ONE 1/8in.

PLATFORM ON MASTS. CUT TWO 1/8in.

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

HATCH

MAIN MAST

MIZEN MAST

LINE OF RAISED FORE DECK

HATCH

BOATS OVER

DECK. CUT ONE 1/8in.

LINE OF RAISED STERN DECK

HATCH BEHIND MAIN MAST. ONE 1/8in.

HATCH ON STERN DECK. ONE 1/8in.

TOP

SHAPE TO SECTION

PIECE C. CUT TWO 1/2in.

LANTERN. MAKE TWO SQUARE IN SECTION.

LINE OF PIECE C

TOP

SHAPE TO SECTION

PIECE B. CUT TWO 1/2in.

LINE OF PIECE C UNDER

LANTERN BRACKET. CUT TWO 1/8in.

LINE OF PIECE B UNDER

TOP

SHAPE TO SECTION

PIECE A. CUT TWO 3/8in.

LINE OF PIECE B UNDER

SLOPE FROM THIS LINE FROM TOP EDGE

TOPS TO MASTS. CUT THREE 1/8in. AND SHAPE.

PIECE A

KEEL. CUT ONE 1/8in.

PIECE B

PIECE C

CHAIR b

FORE MAST

WINDLASS

SECTION

RAISED FORE DECK. CUT ONE 1/8in. AND SHAPE TO SECTION.

SHAPED RAIL ON FORE DECK. CUT ONE 1/8in. AND SHAPE AS SKETCH.

CHAIR b. CUT ONE 1/8in.

WINDLASS ENDS. CUT TWO 1/8in.

UPPER PLATFORMS ON MASTS. CUT THREE 1/8in. AND RUB DOWN.

SECTION

MIZEN MAST

RAISED STERN DECK. CUT ONE 1/8in. AND SHAPE TO SECTION.

BOUNTY

STERN. CUT ONE 1/8in. PAINT ON ALL LINES SHOWN.

BOAT

HATCHES ON DECK. CUT ONE OF EACH 1/8in.

PRINTED IN ENGLAND.

# f the famous
# )UNTY

sails are cut from the parchment paper provided, and glued to their cross spars. These spars will look better if tapered slightly towards each end.

Shrouds are made up with their ratlines in the usual way, and then fixed in the position seen in Fig. 9. The ends of the lower ones carry over the sides, and have deadeyes in pairs before they are fixed to the channels (see Fig. 5). Notice the piece of stiff wire fixed at the bottom of the ratlines to hold the whole thing correctly spaced.

The deadeyes are not provided in the kit, but can be cut from a piece of ⅛in. round rod. With a tiny file, run a groove round the rod, and then cut off just beyond. The detail on the sheet shows how this is done.

The running lines and standing rigging are shown in Fig. 9, spots of glue stiffening up at joints and wherever necessary. Those lines running down to the deck can be finished through a tiny staple or screw-eye driven into the wood. The detail at Fig. 3 shows the finishing of the bowsprit, and the method of cording it down through the bow, which must, of course, be done before the sail, A, is added.

### Painting the Model

Much care must be taken in painting the model when completed. The hull is dark brown above the waterline, and white below. The rudder and plates are painted on, and the steps at the side of the hull as you can see in the picture of the finished model. Lanterns are also carefully done in gold and blue, and a special diagram is given at Fig. 11 showing the decorations on the stern.

The best method of doing this is to copy the detail on to a piece of stiff white paper, and paint it up before gluing in place on the stern itself. The windows are blue with white surrounding, and the engraved work can be cut out in gold or red. All this lining can be done with coloured indian ink, and care should be taken that the lines themselves are not made thick and unsightly.

Wood is also provided in the kit for the base. It is composed of two pieces, the lower one ¼in. thick and the upper one ⅛in. thick. The bottom panel measures 9ins. by 4ins. (as supplied), the upper one (in ⅛in. wood), should have a ¼in. strip cut down one side and one end. This will make it ¼in. smaller all round than the lower base. The ends of both pieces before gluing must be rounded, the 2in. diameter semi-circle being marked off to provide the curve. Shape the edge of the lower base to make a moulded effect, and then glue the upper base centrally upon it.

The addition of four small circular feet beneath the whole thing, will raise the model and prevent the wood scratching any polished table surface. These four little feet can be cut in ¼in. wood, ¾in. diameter from any waste pieces. The whole base can be stained and then given a coat of varnish or french polished.

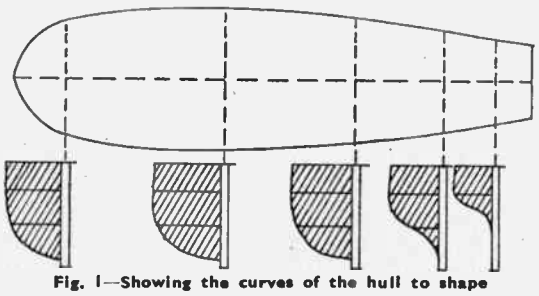


Fig. 1—Showing the curves of the hull to shape

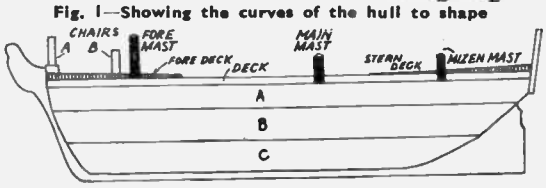



Fig. 2—Section showing deck additions

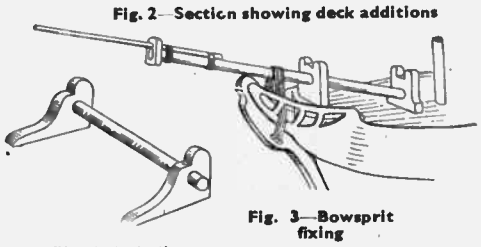


Fig. 3—Bowsprit fixing



Fig. 4—Windlass

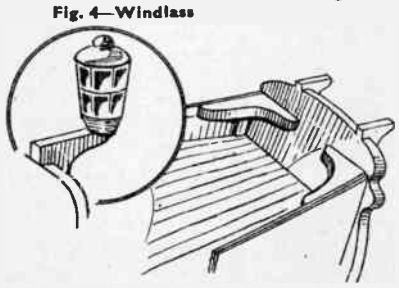


Fig. 6—Stern parts and lantern


Fig. 11—Stern decoration

Fig. 10—The masts

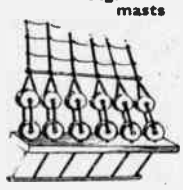


Fig. 5—Dead eyes and channel

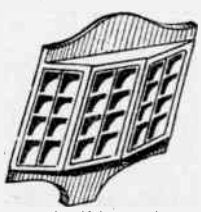


Fig. 8—Side window

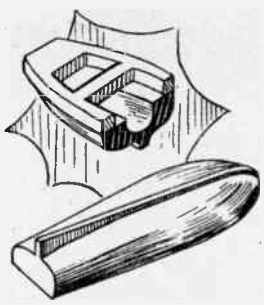


Fig. 7—Shape of boats

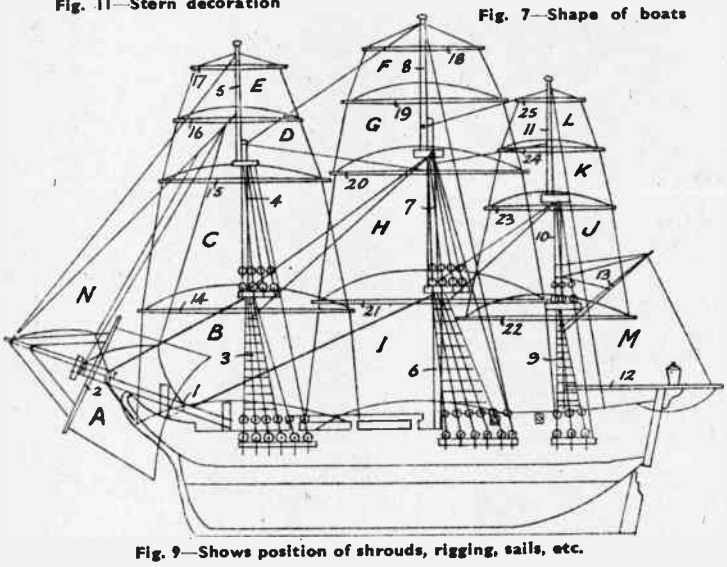



Fig. 9—Shows position of shrouds, rigging, sails, etc.

Hobbies DESIGN
No: 2812
21-9-49

SUPPLEMENT TO HOBBIES No. 2812.

— MODEL OF —

# H.M.S. BOUNTY

SIZE—11¼ins. LONG. 8½ins. HIGH.

PANELS OF WOOD REQUIRED FOR THIS DESIGN

ONE GD6 ONE MD8
ONE G4 THREE G2
ONE PPM

Materials for making this design are supplied by HOBBIES LIMITED, Dereham, Norfolk. Price on application.

THE ARROWS INDICATE THE DIRECTION OF GRAIN OF WOOD.

8 JUNCTION BLOCK. ONE 1/8in.

ALL SPARS WILL BE SHAPED THUS FROM 1/8in. ROD.

SPRIT 2ins. LONG.

SPAR 2

SPAR 15

SAIL C. FOREMAST.

CENTRE LINE

SPAR 19

SAIL G.

CENTRE LINE

NOTE:—HALF ONLY OF ALL THE SAILS, EXCEPT SAILS M AND N ARE SHOWN HERE.

9"

ONE PANEL G4

4"

2"

ONE PANEL G2

BASE FOR MODEL. TWO PANELS GLUED TOGETHER.

CRADLE FOR MODEL. CUT TWO 3/8in. AND THIN DOWN TO 1/4in. THICK.

STEPS ON STARBOARD SIDE OF MODEL. MAKE SIX FROM CARD AND GLUE ON.

SPAR 14

SAIL B. FOREMAST.

CENTRE LINE

SPAR 21

SAIL I.

CENTRE LINE

SPAR 13

SAIL M. MIZEN.

SPAR 12

SHALLOW GROOVES FILED IN.

CUT THROUGH ON DOTTED LINES.

FINISHED DEADEYE.

SHOWING HOW DEADEYES CAN BE MADE FROM 1/8in. ROUND ROD.

| No. | Length | No. | Length | No. | Length | No. | Length |
|---|---|---|---|---|---|---|---|
| 2 | 1⅞ins. | 8 | 2½ins. | 14 | 3½ins. | 20 | 3½ins. |
| 3 | 3ins. | 9 | 2⅝ins. | 15 | 2¾ins. | 21 | 4ins. |
| 4 | 2⅝ins. | 10 | 2½ins. | 16 | 2½ins. | 22 | 3ins. |
| 5 | 2ins. | 11 | 2ins. | 17 | 1⅝ins. | 23 | 2½ins. |
| 6 | 3½ins. | 12 | 2⅜ins. | 18 | 2ins. | 24 | 1⅞ins. |
| 7 | 2⅜ins. | 13 | 2ins. | 19 | 2⅛ins. | 25 | 1½ins. |

MASTS AND SPARS. ONE EACH FROM 1/8in. ROD. Nos. 3 TO 12 INCLUSIVE WILL BE PLAIN. ALL OTHERS TO BE SHAPED.

SPAR 23

SAIL J. MIZEN.

CENTRE LINE

SPAR 20

SAIL H.

CENTRE LINE

SPAR 2

SAIL A.

CENTRE LINE

STERN BRACKETS. CUT TWO 1/8in.

STERN WINDOW. CUT TWO 1/8in.

STIFFENING RAILS GLUED TO INSIDE OF UPPER SIDES.

CUT TWO OF EACH THIN WOOD.

DECK

UPPER SIDE. CUT TWO TOGETHER

CHANNEL

CHANNEL

WINDOW

SPAR 18

CENTRE LINE

SPAR 24

SAIL K.

CENTRE LINE