Hobbies
A WEEKLY JOURNAL FOR AMATEURS OF BOTH SEXES

VOL. 49
No. 1273

MARCH 6.
— 1920 —

OUR FRETWORK DESIGN.
Japanese Convex Mirror Brackets.

THE supplemental Design Sheet with which we present our readers this week consists of patterns from which to make a pair of delightful Japanese Convex Mirror Brackets, as illustrated in the centre of the page. The subject is very highly decorated with fretwork, while the overlay for the mirror is also a very ornamental piece of cutting. The bamboo and also the Oriental character of the roof are both typically Japanese, and will be appreciated by lovers of the delicate in art.

Dimensions and Materials.

The overall dimensions of these Mirror Brackets are as follows:—Height 14ins., width 8ins., while the shelf projects 3ins. from the back. In its construction this bracket will only require two different thicknesses of wood, viz., 3-16in. for the main parts and 1-16in. for the central overlay around the mirror. Our choice falls upon a good clear parcel of whitewood as material in which to execute this pair of brackets, and it is accordingly of that material that Hobbies special parcel consists.

The only fitting which will be required for each of the brackets is the convex mirror. This is an oval mirror of the popular type well backed and entirely of British manufacture. The catalogue number of this mirror is 5744.

No. 1273.—Japanese Convex Mirror Bracket.

Preparation of the Patterns.

Upon the design sheet our readers will find that the whole of the patterns are given in full for independent cutting of the two Brackets, with the natural exception of the pattern for the central overlay, which is to be executed in wood 1-16in. thick, and must therefore be cut plurally even from the point of view of strength and safety.

Plural Cutting.

Before the paper patterns for the main parts of this bracket are affixed to their respective pieces of wood, the decision must be arrived at as to whether the two main backs of these brackets are to be cut plurally or individually.

To cut them plurally would save an enormous amount of saw-work, for the backs are heavily fretted ; the wood in which they are to be cut is, after all, only of 3-16in. thickness, so that there is no insuperable difficulty in so doing, especially as whitewood is by no means one of the harder woods, and may be cut with ease. In the case of fretworkers who have at least had some few months of experience in cutting, we should confidently recommend they cut these two main parts plurally—the work would be reduced by half and at the same time a greater degree of safety during the process of cutting would be secured for fragile work. The overlays, as we have already said, will have to be cut plurally.

When it has been decided whether these parts are to be executed two at a time or not the paper patterns may be pasted to the wood intended for each ; the paste should be applied to the surface of the wood and not to the paper, as to do the latter would probably mean that the distortion of the pattern would result from the stretching of the pattern which always accompanies the application of paste to paper.

The Cutting.

Decoration of the nature of the design before us is delicate work, and should be set about in a thoroughly painstaking manner. The saw-blade with which such work as this should be cut should be quite a fine one, say a Hobbies No. 0 or 1, for so many edges of the cut work will be open to the observation that they should be as clean as possible—*i.e.*, they should be quite free from fraying, and, if possible, should be smooth and slightly polished by the action of the saw. Such a result can only be attained by the employment of a fine blade, while a slight polished effect may be added by simply lubricating the saw-blade with a piece of wax candle during the process of cutting.

In regard to the various shapes to be executed, the leaves of the bamboo will occasion no difficulty to the cutter, as they are quite simple. The same may be said of the stems of the bamboo. It is otherwise, however, with the regular radiating curves which form the roof of the design The great object of the fretworker in executing these regular frets must be to maintain a perfect continuity of line along their upper and lower ends. They are shown in enlarged detail in Fig. 1 ; they must be so cut that their ends are all level with each other, so that if a straight-edge were placed along them at the dotted lines A A they would all meet it exactly. Now this is by no means an easy task, and it will be a good test of the worker's skill. The greatest care should be adopted in seeing that the beginning of the short line in each case is conforming to the exact line.

The numerous rectangular openings which form the lattice portions of the design must also be cut to conform to each other, and on no account must the cutter attempt to turn the saw blade at the corners of such opening without the usual expedient of arresting the progress of the saw at each corner while continuing to operate it in an upward and downward direction, as it is gradually turned round in order to make a satisfactory clearance without risking damage to the line.

Cutting the Bevel on the Mirror Overlay.

It will be noticed that a chamfer or bevel is required on the interior edge of the mirror overlay ; this may most easily be executed at the time the oval opening is taken out with the fretsaw. To form the bevel, all that it is necessary to do is to tilt the cutting table on one side while operating the saw vertically. The only other method is to laboriously work the chamfer on the edge by means of a fish-tail file with a curved section and finishing it with fine sandpaper. This cannot, however, give such a clean and even result as a well-executed bevel cut at the same operation as the cutting out of the oval section in overlay.

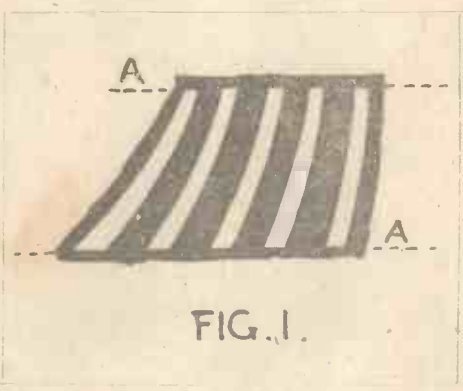


FIG. 1.

It should be pointed out that in the case of a design such as this, it is most expedient to execute the whole of the interior cutting before the outer line of the pattern is attempted ; the latter should invariably be left to the last, for the many pointed frets would be sure to catch in something and be broken off.

Construction.

The construction of such simple things as these mirror brackets requires no special description. After the whole of the parts have been cut they should all receive a good sandpapering by means of the special sandpaper-block, and then the overlay may be glued on by the approved method. This is to warm a piece of glass and give it a coat of thin hot glue ; the overlay is then placed on the glued surface and pressed down to allow the glue to adhere to the under surface. It will be immediately raised by means of a table knife and placed upon the back, pressed down, and finally cramped up until it is set.

The small bracket to support the shelf is next fitted and glued into its slot, and then the shelf is added. The convex mirror is placed

(*Continued on page* 413.)

THE EDITOR'S NOTE BOOK

An Extraordinary Find of Spade Guineas.

THE extraordinary find of spade guineas recently made by the purchaser of an old manor house in Hertfordshire brings to our recollection a very similar occurrence for which one of HOBBIES readers was responsible. It will be remembered by many of our old readers that in the latter case HOBBIES was responsible for the original recognition of the importance of the find which was declared "Treasure Trove." Mr. Walter Wake, a labourer on the Marquis of Townshend's Raynham Estate in Norfolk, drove his pick into an earthen jar two feet beneath the surface, while digging a drain, and saw to his amazement 200 coins. He had no idea of their value until he wrote to the writer of these notes, but he understood better when, after a legal struggle, a sum of nearly £400 was forthcoming for their sale. The coins were all gold nobles of the reign of Edward III., and several of the mintings discovered were not even in the collections of the Mint or the British Museum. It proved quite one of the most interesting numismatic finds of the last hundred years, and many of the coins now exist in the museums of the nation.

The present find, while not so rich in coin interest, was discovered in a most romantic manner—in fact in a manner resembling the wonderful stories in fiction. The purchaser of the manor house in question systematically examined the attics of the place after his purchase, and there came upon a number of faded and tattered old books, among them being a copy of Dr. Croly's "Salathiel." He glanced at it in a casual way, and came upon a magnificent pencil note which stated that valuables had been hidden in the house during the '45 rebellion, and indicating their location. As a result he set to work and removed the flooring of an ancient cupboard, and there he found a large assortment of rare old china, some beautiful silver, first editions of some of the works of Dryden, Congreve and Wycherley, besides a number of first editions of the later Elizabethan writers, while carefully wrapped up in old silken dresses of that period he found a whole thousand spade guineas. Such fortune as that does not often come the way of any man, and we congratulate the lucky finder.

THE SUBJECT OF NEXT WEEK'S DESIGN SHEET.

A Question and its Answer.

Some folk have been recently asking why fretwork is now more popular than ever before. The question is easy to answer by those who have had their fingers upon the pulse of the hobby world for years past, as we have. First and foremost, fretwork is a hobby which appeals more widely than any other to all ages and all classes. Secondly, it can be more easily accomplished and acquired and costs less than most hobbies. Beyond this, fretwork has been well placed before the public and its path made easy chiefly through the instrumentality of this paper. For many years we have been pegging away at fretwork, improving it here, developing it there and generally making it attractive to its devotees, and now it has really come into its own, and we are naturally rather proud of the work HOBBIES has done.

The Influence of the Pencil.

The power of the pen is often referred to, but less the power of the pencil, if the alliteration may be forgiven. The influence of the pencil from the point of view of Art is considerable. We should like to think that our readers try to develop the artistic sense which is latent in many of them by the employment of the pencil. It is wonderful how sketching can and does develop the artistic sense. Even the most crude attempts lead one on to do better, and each attempted subject enables the worker to recognise those little elements of artistry which ultimately create "soul": and soul is so necessary if the amateur is to excel in artistic work, whether of a more or less mechanical nature, or of a purely æsthetic value.

THE EDITOR.

IX.—UMBRELLA STANDS.

A FEW hints on umbrella stands will this week be given. There is no doubt that it is better to have a separate umbrella holder apart from the hall stand proper, since in most hall stands the coat tails are usually against the wet umbrellas. Then, of course, where only a hat rail is used instead of a stand, an umbrella stand is absolutely necessary. In Fig. 1 will be seen a stand that is designed for simplicity in work, so that it can be constructed by quite a beginner, and at a minimum cost, the most difficult part is just an ordinary lapped halving joint.

Start by making two frames exactly alike for the top and bottom, for which prepare four side pieces, 19½ in. by 1½in. by ⅞ in. and four ends, 10ins. by 1½in. by ½in. oak for preference, mark out the sides with a groove at 2ins. from each end and 1½in. wide ⅜in. deep, then on the under side of the end pieces cut a corresponding groove 2ins. from one end, but at the other end halve out from the end of the wood to the 1½in. depth, since there is no need to have a projection at the back, because of being up against the wall. All the projecting ends can be rounded off as shown in Fig. 2, or shaped to any other form; finally clean and glue up both frames. The squares A (Fig. 2) are 1in., and indicate the position of the posts, it would be better to mortise at these places to a depth of ¼in. upon the upper side of the bottom frame and the under side of the top frame. Now prepare four posts, 1in square and 20ins. in length. These must be firmly glued and screwed by one good length screw, passing through the frame into the centre of the post.

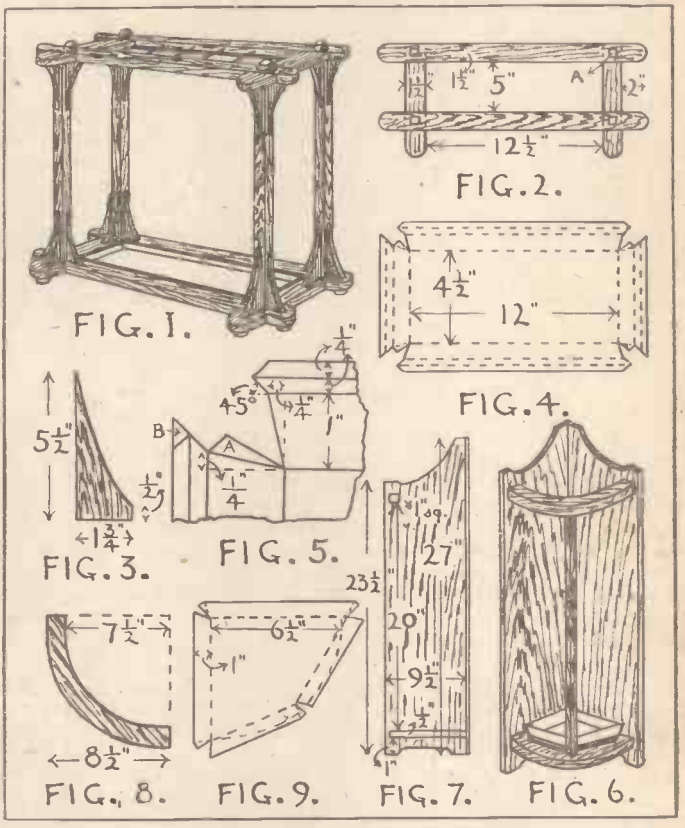
A series of brackets, twenty-eight, are required to serve the double purposes of giving a more finished appearance and stiffening the whole framework. These are 5½ins. by 1¾in. by ½in., and shaped quite plainly, as in Fig. 3: four are placed at the top and bottom of each post in the front, and three at the back. They must be screwed both to the post and the frame, but naturally the screws should not show. There are two ways of hiding up the screw heads. In the first case, at the correct positions in the bracket bore a hole with a centre bit, about ⅜in. deep and slightly larger than the head of the screw; now bore one through with the bradawl or pin bit for the screw itself. Having screwed everything in place, cut and pare some circular discs of wood to fit the holes, and then glue them in, but be careful to let the grain be in the same direction as that of the bracket. A less satisfactory way, but of course easier, is to use rather thin screws and just sink them below the surface in the usual way; then get some sawdust of the same wood that the stand is made of, and make a paste of glue and sawdust mixed; fill up the holes with it. With such woods as oak these fillings are hardly noticeable, particularly if the work is treated to imitate fumed oak. Now cut six circular discs about 1¼in. diameter, and fasten these to the underside of the bottom frame, near the end of each projection to form feet, also a set of four similar discs nicely rounded off to place over the centre of each joint on the top to form a finish, and cover up the screw heads that hold the posts. Anyone with a lathe could turn up some neat little finials for this purpose.

A tray can easily he made by cutting a sheet of metal according to Fig. 4. This will fold up and give a sloping sided tray, with a flange for resting upon the frame. This flange is first ½in. wide on the plain sheet of metal, but before making up the tray turn a ¼ in. of this down and flat underneath, as shown in No. 3 of this series, so that a stiffened edge is the result—this being ¼ in. wide. Fig. 5 is an enlarged detail of one corner, to show how two flange bits are arranged to give a good joint. The bottom piece A is folded round the back of the other side, but the piece B tucked within the folded edge. A touch of solder will be required to keep always secure.

If the tray is made of copper, the metal will be oxidised or left plain, but if tinned iron plate is used it must be coated with enamel paint; green is commonly used. It is a matter of choice whether the top opening is left plain or divided into squares, as shown in Fig. 1. If this is done use 3-16in. wire, dividing up into 2½in. squares, but holes of the correct size must be bored ⅜in. deep into the edges before the frame is put together. The wires can be put in during the time of joining up the frame, or could be left out until the end. Put the long one in first, placing one end in a hole and springing the other end in by bending the wire: now place the

cross wires alternately over and under the first one.

Fig. 6 gives an easy way for making a corner stand. It is constructed of two pieces of ½in. stuff, shaped as in Fig. 7, At the bottom a complete shelf and not a frame is arranged; the sides are screwed direct to the base, being mitred where they meet, and screwed together near the top and the middle. A piece of wood must then be cut out in the form of a quadrant (Fig. 8). Draw this on paper first and cut out a pattern; place the paper on a piece of wood, 1in. thick, so as to get the grain the same as in Fig. 8. After cutting out and shaping, get this screwed in place. A light support will be required in the centre; make it of stuff ½in. square and for a good job mortise the top and bottom in a shallow mortise. It will not be worth while to make a tray shaped to the curved form, owing to the trouble it would entail, but one made from a sheet of metal cut to the shape given in Fig. 9 will answer quite as well; in this instance no horizontal ledge has to be provided, since the tray merely rests upon the shelf, and is kept back in place by a couple of small fillets of wood, nailed on the shelf, against the two front edges of the trays. An extra ½in. turned down on the edges will give a better finish. Naturally stronger and more elaborate stands can easily be designed than these, but it will be found that these are quite satisfactory, with the great advantage of being very easy to make; and after all it is not by any means the elaborate piece of furniture that is the best, particularly in a thing that is expressly for utility and perhaps remains in a semi-dark passage way, where it can scarcely be seen.



OUR FRETWORK DESIGN—continued.

in the frame from the back and closed in by the replacing of the oval part originally cut from the back; its edges will need fining down by means of a sharp plane or file to meet the surface of the surrounding wood.—E. S.

FRETWOOD. — For this design we supply a selected parcel of Whitewood 6s.; post free 6s. 6d.

FITTINGS.—Two British-made Oval Convex Mirrors No. 5744, 1s. 6d. each; 3s. 2d. per pair, post free; postage on complete parcel 6d.

Orders by post to HOBBIES LTD., Dereham. Goods may also be had at :—LONDON : 65, New Oxford Street, W.C.; 147, Bishopsgate, E.C.; 79, Walworth Road, S.E. · GLASGOW : 326, Argyle Street. MANCHESTER : 10a, Piccadilly. BIRMINGHAM : 9a, High Street. LEEDS : 15, County Arcade. And Agents.

POULTRY KEEPING NOTES

THE results attained in the *Daily Mail* £250 laying competition are sufficiently good to convince thousands of people of the advantage of keeping well-bred stock on up-to-date lines, and while the winner will gain a substantial reward in the shape of a cheque for £100, the public generally will reap an even higher value if they put into practice the lessons taught by this competition. All the contestants were amateurs keeping not more than fifty laying hens, and the fact that the competition began on October 1st and ran for only four months during the worst part of the year, when egg supplies are very low, imposed a severe test of stamina and productiveness. That any pen of four pullets should have attained such a fine record as 300 eggs, an average of 75 per bird, is highly creditable to the breeders, and a fine testimony to the efficacy of good breeding and good housing. I daresay many people will open their eyes and question whether such a thing is possible, for many have become accustomed to no eggs between September and February. But there is no hokey-pokey about it. The thing was actually done, and —what is more—it can be done by anyone who will acquire such stock as these, and house them in the same way as these were housed. Once for all, however, it means the banishment of the old-fashioned mongrel hen, and the equally antiquated and discredited system of housing fowls in a mere roosting house with a small open run attached. Thousands of poultry-keepers have got to abandon these easy-going ways of keeping fowls if they want winter eggs in plenty, and in the first place they must open their hearts and their purse strings in order to purchase stock of a strain that has been bred to lay generation after generation until the laying habit is dependent entirely upon favourable conditions.

It has already been explained on several occasions that a cheap start in poultry-keeping is a common cause of failure. Such prolific hens as I have referred to cannot be bought cheaply, for the very good reason that the laying habit is a cultivated one, and owners of bred-to-lay stock are very properly able to command better prices than are obtainable for mongrels. Consequently, cheap birds must inevitably be of inferior class, with low productive capacity, while cheap housing accommodation generally consists of a mere roost that provides no facilities for daytime shelter and scratching exercise in bad weather. By cutting down the cost, and making a start on quite the wrong lines, one practically disposes of one's chances of earning good profits, for low grade birds that are badly kept never do any good as winter layers, and it is in winter that the best profits are earned, when eggs are fetching top prices. There is no denying the fact that in these days it is an expensive matter to make a real good start with poultry, but many people do not realise that despite the heavy cost it is by far the most economical plan in the long run.

Unfortunately, they are often tempted to go in for cheap stock and cheap methods, under the impression that they are thereby saving money, whereas in reality they are standing to lose heavily, since they have to go without winter eggs, whilst all the time the well-bred hens of the man who has made a good start under favourable housing conditions are averaging four or five eggs per bird per week, all through the autumn and winter, with eggs selling at 5½d. each.

By favourable housing conditions I mean a scratching shed that provides facilities for exercising under cover so that in winter the birds are practically independent of weather conditions out of doors. Without such accommodation winter laying is almost impossible, whereas with it one can get almost as many eggs as in spring. One of my pens of twelve White Leghorn pullets laid 248 eggs during the month of December, an average of about 20 eggs per bird, or roughly five eggs per bird per week, and as they realised 5½d. each, and the cost of feeding was about 5d. per bird per week, it will be seen that a good profit was earned. But no one could hope to do that with low-grade stock and unfavourable housing conditions, lacking dry scratching quarters under cover, and as it costs just the same to feed a poor hen as a good one, it will be understood that it is sound policy to lay out money on a good start. My experience is that the biggest profits in poultry keeping are made by those who launch out with the best stock and the best accommodation, for anyone who possesses first-class laying stock and breeds them by selective methods, can add considerably to his revenue by selling eggs for hatchings, day-old chickens and stock birds at prices well in advance of those realised for market produce.

Why is it unlucky to cross knives?

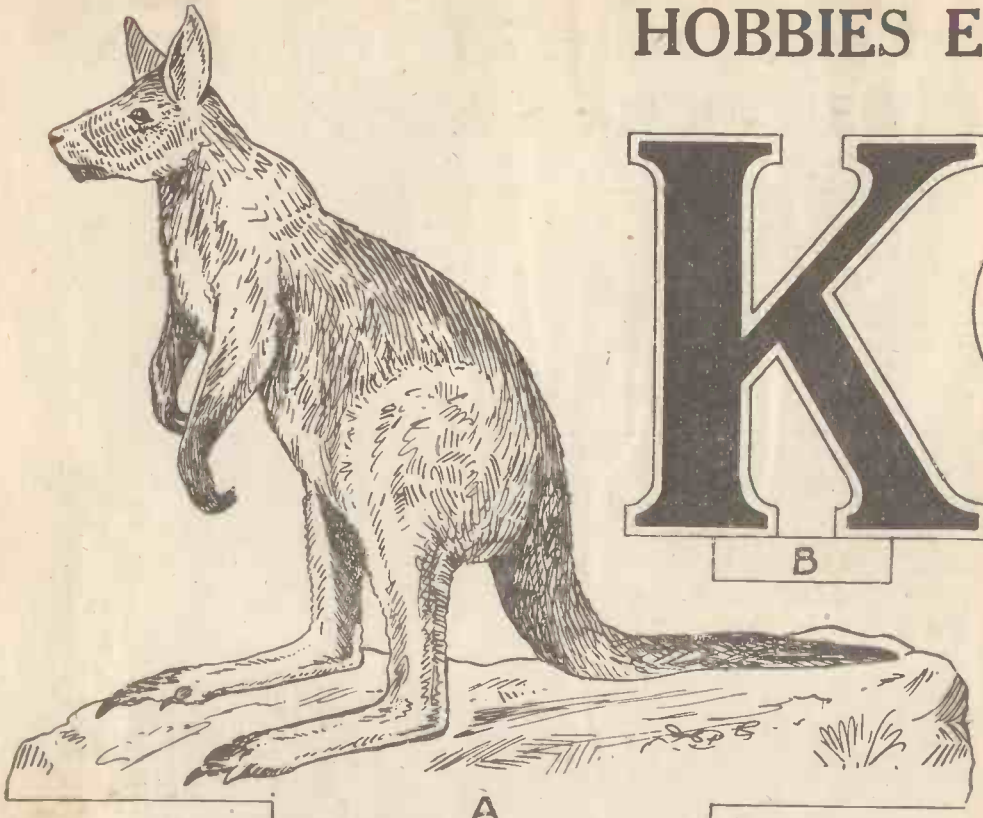
In days of old it was customary, as a sign of good faith, for the guests when lunching to place their short side daggers on the table. If by any chance the daggers became crossed it was a challenge to combat. From this ancient custom is descended the now homely and harmless superstition that it is unlucky to cross the knives.

But it is really far more unlucky to be without mustard, because your food becomes "daggers drawn" with your digestion. Mustard is a necessity if the food eaten is to yield the greatest sustenance and nourishment.

Colman's
D.S.F. Mustard

K

B



A

KANGAROO

C

JAGUAR

B

D

A

C

TRA DESIGN SHEET. No. 417X.

FRETWORK ANIMALS & ALPHABET.

F

E

CUT OUT THE ANIMALS AND LETTERS FROM 1/8" WOOD, THE BASES TO BE CUT FROM 1/4 INCH WOOD.

J

F

E

JACKAL

J

D

A TABLE CROQUET SET.

BILLIARDS has probably premier place in regard to our indoor games, but it is not everybody who is in the fortunate position of being able to purchase one, nor is it everyone who, if he could afford it, could find room for the table in the home, especially in some of the kind built to-day where there is not room to turn a cat round, never mind yourself. The initial cost of a billiard board makes same prohibitive to the general public.

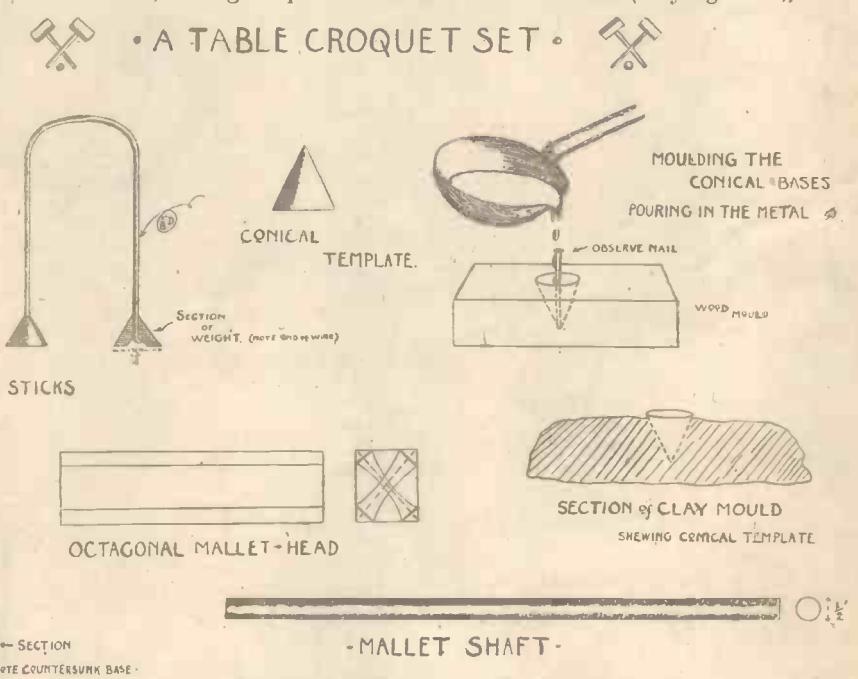
However, there is one game which can be both played and made by the hobby worker, and that is croquet. Croquet is known generally as a lawn game for the summer-time, but it is one of the most delightful of table games, and can be arranged either on the oval, circular, oblong, or squaretop table.

As before remarked, a croquet set can easily be made, and should consist of 10 wire loops and 8 small wood mallets, 2 king or queen sticks, and 8 boxwood balls. The hoops, perhaps, are the most difficult to make, but this need not be if the following instructions and suggestions are followed.

They are best made out of brass wire, ⅛ in. diameter, and the top portion semi-circular, the difficult part is the making of the feet; these can be made out of lead and can be cast by two different methods. No. 1 is as follows: Make in hardwood a small cone about 1 in. high and ¾ in. diameter with a hole down the centre for a wire nail ⅛ in. diameter to pass through. When this has been made a piece of ordinary clay can be got or even putty, and the wood cone inserted in same to form a shape for molten lead to be poured in. Withdraw the wood cone out of the putty or clay, and insert a nail vertical where the block has been, then fill the cavity with molten lead. It should be noted that in pouring out the metal care should be taken to see that no water is about, as the lead will "fly" all over if it comes in contact with water; therefore keep your eyes away from the object when pouring; it should be noticed that it is not necessary that the lead feet should fit tight on the brass wire, for the underside of the feet can be countersunk, and when the wire is placed on the feet the wire can be turned a ¼ in. at the end. The result is that when the hoops are placed into position on the table top the lead feet will fall to the bottom.

Another way of casting the lead feet is to make a hollow tin cone (very light tin), and make provision for this into a block of hard wood, again with a nail through the centre for the brass wire to pass through. The advantage of this method is that the metal leaves the tin cone with a better surface than when done in putty or clay, and as a general rule requires no filing.

After these feet have been cast and cleaned up they then are ready to receive a coat of red paint before being fixed on to the brass-wire. A point that should be mentioned in regard to the nail leaving the cast lead feet, a good plan is to slightly oil the nail with



(*Continued on page* 421)

UMBRELLA REPAIRING AT HOME

IV.—Broken End of Stick. Recovering.

A VERY awkward repair to those not experienced in umbrella and walking stick repairing is when the dowel screw breaks off short, leaving a portion in the handle. The difficulty is when this is too short to be gripped with the pliers and consequently must be drilled out. The best and easiest plan is to get a hollow drill, which will drill around the screw, leaving the broken part in the drill, which can be extracted afterwards. When refixing the handle a thicker screw must be used or the hole well plugged and allowed to set, then drilled for the screw it is desired to use. As regards the hollow drill, these can be made from a piece of old hollow tube or a few inches can be bought where the work is constantly being done, the extreme end of the tube being filed across with a three-corner file, so as to make teeth in it like the edge of a saw. Used very gently at first it will soon cut away the horn or wood holding it, then the screw can be found inside the piece of tube. Failing this, the repairer can get it extracted at any shop where repairing is done for a copper or two.

HOLLOW OR FERRET DRILL.

Another very frequent repair to the umbrella is the broken end. This is often caused by putting the end of the umbrella in a hole and breaking the end off. This can be done quite easily and a new stick is not needed. The first thing is to remove the stopper pins as described before and slip the stick out of the umbrella. Now obtain a splicing tube to fit the end of this stick, then a short length of wood to use as the new end, which can be placed inside the tube until both meet in the middle. Three or four holes should be drilled in each end of the tube and the new end rivetted firmly, taking care that it is rigid and firm to the stick. A piece of stick should have been chosen that will go through the notch at the lower end of the umbrella, having first removed the rivet in this. When the splicing has been done, place it through the runner and also through the notch and let the former rest in its proper place on the thumb spring—the one nearest the handle—then place a rivet through the notch to keep it in position. Open the umbrella to see if the work is correct, and if so place the outside cap on close up to the cover, and then the ferrule and this repair is then complete. In the case where the stick is made of steel or iron, as so many are at the present time and should it be broken off sharp at the notch, a length of stick can be drilled and the end of the tube inserted and cemented, then placed into the umbrella, using a notch to fit the new wood end—as the small notch used for the tube will not be large enough. The end can then be finished off as already described, and will look like many of the best umbrellas which have a steel tube and nice tapering wood end.

The recovering of umbrellas is not a difficult process. The first thing is to obtain the new cover. It is only necessary to state the length of the rib from end to end and the number of ribs composing the frames, as they vary from seven to twelve, but eight is the usual number used at the present time. Having obtained this, the next thing is to remove the old ferrule and cap off the end. Then with the blade of the knife cut the threads securing the cover to the end of the ribs, also the stitches inside at the seams. Now the cover can be removed. The ribs should be unwired at the runner and notch and the small piece of cloth sewn over the joint also removed. Then rewire the ribs again with a new strong piece of wire, seeing that the ribs are placed in opposite nicks, so that when the frame is opened the runner will slide into the spring quite easily. If this is not so the ribs must be undone until the correct nick is found. Then open the frame and give the ribs a coating of black, thinly applied. Cycle black will do for the purpose well if a short stiff brush is used. Allow this to dry, then sew some small pieces of silk over the joints of the ribs; these can be the size of a shilling piece and a good plan is to put a spot of oil on the joint of the rib first as this adds to the life of the frame at this part. Now the frame is ready for the cover, so that a small piece of silk usually

SPLICING TUBE.

(*Continued on page* 421.)

OUR BOYS DEPARTMENT

A Simple Bookcase and Cupboard.

THE sketch, Fig. 1, shows a bookcase and cupboard of simple make for constructing in deal and finishing by staining. It will be found of pleasing appearance and inexpensive to make, the material recommended being 9ins. by ¾in., 30ft. being required altogether, also 9ft. of shelving measuring 9ins. by ½in., 24ft. of 6in. match-boarding for the doors, 7ft. of 10½in. by ¾in. for top of cupboard and upper part, the whole costing altogether about 17s. at present prices.

Fig. 2 gives a side and half front elevation of the cupboard with suitable measurements, whilst Fig. 3 shows the framework of the lower part Start by preparing two sides measuring 4ft. 8ins. by 9ins., and cut out the shape of the legs, afterwards cutting a ⅜in. groove 2ins. from the bottom of each. The top measures 3ft. 3ins. by 10½ins., and the bottom 2ft. 11½ins. by 9ins. Cut the tongue at the ends of the bottom for fitting into the grooves in the sides (Fig. 3A). The top may be fixed by means of 2½in. screws, as these will be hidden by the sides of the upper part.

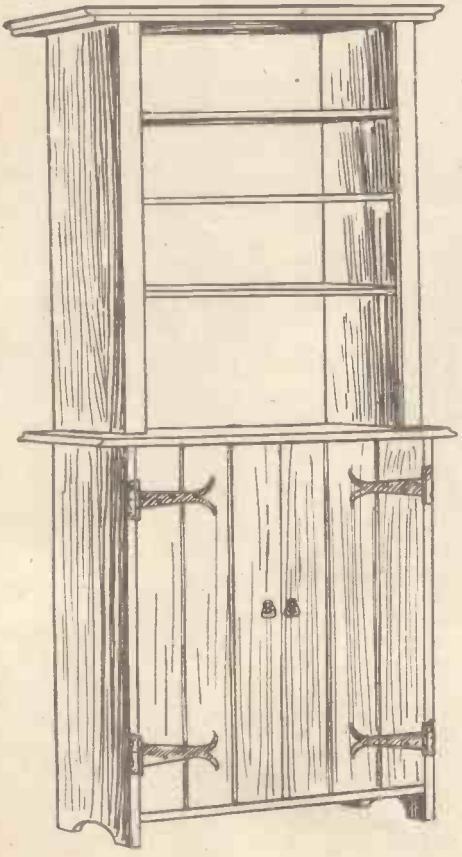


Fig. 1

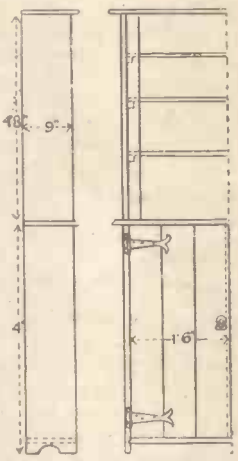


Fig. 2

If economy is essential, the cupboard may be lined with three-ply or stout strawboard, in which case it will be best to put in the two struts B B, Fig. 3, so as to secure a perfectly rigid structure; they can be fixed by means of screws through the top and bottom. Match-boarding measuring 6ins. by ½in. is employed for the doors, the boards being cut to measure 3ft. 9½ins. long. Screw on the strips A A, shown in Fig. 4, and add also that shown by B, the doors being then planed to fit.

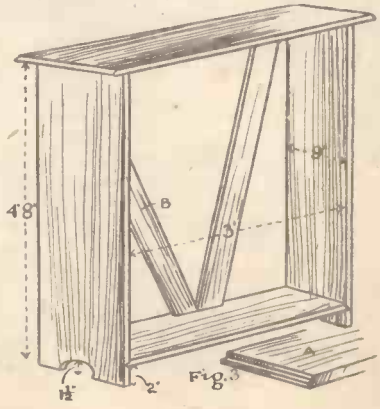


Fig. 3

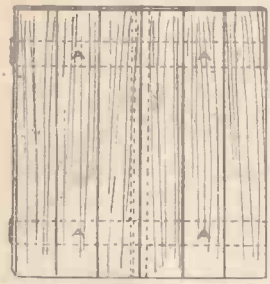


Fig. 4

A cheap and artistic hinge for such a purpose as this can be made by procuring an ordinary iron hinge of the form shown by Fig. 5, splitting it up with a cold chisel almost to the second hole—the ends being then bent round as shown, the other portion of the hinge being shaped with a file, and the whole polished with emery and oil.

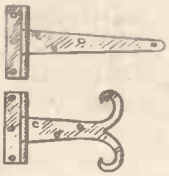


Fig. 5

The top of the cupboard should preferably be moulded with a plane or scratch-stock to some simple form as suggested.

The sides of the upper part measure 4ft. 8ins. by 9ins., top 3ft. 4ins. by 10½ins., shelves 2ft. 10½ins. by 9ins., front strips, 4ft. 8ins. by 2ins. Screw the top to the sides after ¾in. by ¾in. ledges have been fixed for the shelves.

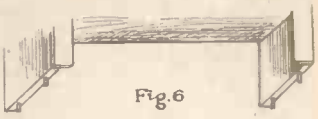


Fig. 6

These are fixed at varying distances apart, to accommodate hooks of different sizes. The shelves should be nailed to the ledges so as to strengthen the structure. Then add the front strips and complete by drilling a couple of holes in each side to take a short length of ⅜in. dowel stick, a portion being left projecting in each case, Fig. 6 A, to fit into corresponding holes drilled in the top of the cupboard.

UMBRELLA REPAIRING AT HOME—continued.

having gold lettering with such as "Home made" and usually supplied with the cover, or failing that cut a piece of the best part of the old cover the size of an ordinary breakfast cup and make a hole in the centre and place it on the end of the stick close up to the notch. This protects the cover from being cut by the ends of the ribs while in use. Now put the end of the stick through the hole in the cover and gently work it down close in to the notch, seeing that one of the seams falls on one of the ribs—in which case the others will fall when opened so long as one is placed in position. With fairly strong black cotton, or silk if preferred, draw up the end of one of the seams to the small eye in the end of the rib and neatly stitch it there. Do not bend the rib too much, or it may break. Do all the ribs the same and then gently open the frame to see if done correctly. If so, half open the umbrella and rest the ferrule end on a bench and the handle on the shoulder, while with both hands you stitch each rib to a seam in the cover. This should be done in two places, one above the joint and one below. The frame should now be fully opened, and if correct can have the cap and ferrule placed on and the cover rolled up. If by any chance the cover should look unsightly, such as being creased or boggy, etc.—which is often the case with some materials—all that is necessary is to get the ordinary household ironing iron nicely hot and rub it over the inside of the cover while the umbrella is fully open. Doing this on a nice flat table—preferably on a large soft cloth to prevent marking it—it is surprising how this little finishing touch adds to the appearance of the recovered umbrella.

A TABLE CROQUET SET—continued.

lubricating oil; it makes them come out quite easily. For the croquet stick, or king or queen sticks, these again can be made of brass wire with a brass foot.

The mallet heads can be made out of one long length of boxwood, first planed up perfectly square, and then marked out in lengths ready for cutting and squared round at intervals for the positions of the holes for the shafts. The piece should be made octagonal in shape, though those hobby workers who are in a fortunate position of having a wood-turning lathe can turn the piece round, but in all cases take care to bore the holes for the shafts first; the heads can be semi-polished, except on the striking portion.

Re the hammer shafts, these can be made either elliptical or circular and of ash wood; if made circular, ½ in. diameter is a suitable size, and the lengths of shafts can be cut according to judgment.

With the exception that some webbing about 1½in. deep is required to fix round the table edge, and the balls, every requisite can be made by the home hobby worker. *Re* the balls, these can be procured from a wood turner. The mallets and balls require enamelling in their own colours, *i.e.*, in pairs, so that when play is proceeding each player can recognise his or her own ball. See article on "How to Play Table Croquet," which will appear in a later issue of HOBBIES.

THE GARDEN

SUMMARY OF THE WEEK'S WORK

Re-pot Carnations. Take Cuttings of Fuchsias. Sow Begonias. Finish Planting Roses.

THE FLOWER GARDEN.

WITH most of our readers attending to window plants is a work of great delight, and what can be more creditable to the small amateur gardener than to find his half-a-dozen or so plants flourishing as briskly on his window sill as if they were treated under the most salubrious conditions.

The greatest difficulty with window plants is to keep them through the winter months, particularly in localities where fogs are prevalent. Frost is sometimes difficult to guard against, for it penetrates the windows in severe weather. It is not easy to know how to protect the plants without doing them an injury by standing in the dark or a long distance from the light. The best course is to keep them on the dry side as regards watering, allowing no moisture to hang round about them.

At this season of the year it is well to replenish one's stocks for the purpose of maintaining continual display throughout the summer season. The main object now is to keep the plants growing without a check of any kind. For some time yet cold draughts must be avoided. Windows must be opened very guardedly. Watering must be conducted with care, and soon as the plants show signs of good growth, and the pots are fairly filled with new roots an occasional dose of artificial manure should be given them in the form of Hobbies Plant Food. Such food leaves no unpleasant odour in the rooms, but affords a beneficial stimulant to the plants only.

If Sweet Peas were not sown in the autumn for early flowering they should be sown now, or to bring them on quicker they may be sown in pots under glass. Sow ten seeds in a five-inch pot; as soon as they germinate gradually harden the plants off and plant them outdoors.

Carnations, which were layered in the autumn, and have remained in sixty pots during the winter, will now require repotting into five-inch pots. The best mixture of soil is equal proportions of evenly-chopped maiden soil stored last summer and autumn stored leaf soil, either beach or oak, one-eighth part mortar rubbish or charcoal, broken into pieces the size of a hazel nut, and sufficient coarse sand collected from the roadside to enable the whole to sufficiently mature when mixed.

Now is the best time for potting all kinds and varieties of ferns in the conservatory, the aquarium attached to the window or the dwelling. In all places they may be given a little fresh soil as top-dressing or new drainage.

Fuchsias, which were started in the middle of January, are now ready for the selection of cuttings. Place four or five in a three-inch pot, inserting them by the side of the rim of the pot.

Late flowering Chrysanthemum cuttings should be secured till the end of March. Insert five or six in large sixty pots, and place them in a heated frame on a sound coal ash bottom. Allow air as weather permits, so as to preserve the cuttings from damp.

Sow the seed of tuberous begonias now in gentle heat, and then close to the glass. One of the best varieties is the Marmortata or Butterfly type. The flowers of these are beautifully mottled, and are remarkably floriferous. When cut and placed on a dinner table the effect is very beautiful.

Those who intend to add to their Rose collection should think about doing it at once, as it is time that all were planted now. If the weather is severe, however, it is better to wait until later. Those who wish for a good Rose for arches, pergolas, or arbours, should try Crimson Rambler, making yards of growth every season. Never plant any Rambling Roses against a wall, as they resent such treatment, and are usually a miserable failure when grown in such positions.

THE VEGETABLE GARDEN.

Unless a potato has been tested on any particular soil do not rely solely on it, as although it may do well in one garden it may be not a success in another. By planting a collection of potatoes one is enabled to judge from the crops produced as to which varieties do best in their gardens. Even though a variety may crop well in a certain soil it does not follow that it will make a good table variety.

If a gentle heat can be maintained, the present time is a good time to make a small sowing of a good early Celery. One of the best for this purpose is Sandringham Dwarf White. The seed should be sown thinly in boxes of light soil, and kept close to the glass.

Make a sowing of Cabbage now for summer use. Choose one of the earliest varieties, and sow it thinly, either in frames or a warm border, where it will be protected from the cold March winds.

If the garden is a sheltered one, a good sowing of Round Spinach may be now made. This is a crop that is often sown thickly, but it is far best to sow it moderately thin, as the leaves then have a much better texture, and taken on the whole the crop is larger.

SALE & EXCHANGE

PRIVATE ADVERTISEMENTS are inserted at 1/- for the first 12 words or less, and 1d. per word after.—For **TRADE ADVERTISEMENTS**, and Advertisements of **FOREIGN STAMPS**, the rate is 2d. per word.—Every word including the name and address, is counted. Initials and numbers, or groups, such as E.P.S. and £1 11s. 6d., are counted as one word. Advertisements offering **FRETWORK DESIGNS** for sale cannot be accepted. Copy for advertisements in **SALE AND EXCHANGE** columns must be sent to "**HOBBIES**," Dereham, Norfolk.

TRADE

BRICKPAPER, Slatepaper, Tilepaper, for dolls' houses, models, etc. 6 Sheets, 2s.; 12, 3s. 6d. Wallpapers, 6 Sheets, 2s. 6d.; 12, 4s. 6d. Samples, Stamp. Quantities cheaper.—Axon & Harrison, Regent Street, Rugby.

CINEMATOGRAPH MACHINES. Home or Small Hall. Film Bargains. Lists free. Apps, 109, Kenlor Road, Tooting.

CONJURING.—The hobby you want. Send 5d. for Illustrated Catalogue and Splendid Coin Trick. Mention HOBBIES.—Magical Apparatus Co., London, E.8., Wholesale and Retail.

ENLARGEMENTS, 20 by 16, 5s.; Miniatures, Plain, 1s.; Tinted 1s. 9d.; 10 by 8 Frames, Oak, with glass and backs, 3s.; set of six Comic Pictures, 1s. All post free. All sizes of Frames supplied to all trades—Broadbelt, Rosemary Road, Clacton-on-Sea.

EXPLOSIVE Cigarettes, Bombs, Itchykoo, Sneezing, 30 Samples, 3s. 2d.; Conjuring Assortments, 2s. 6d., 5s., 10s. 6d.—Brition, Linwood Street, Manchester.

FREE.—Pocket Rubber Stamp of your name and address; also particulars of splendidly paying spare time agency easily worked.—N. Richford, Snow Hill, London.

GRAMOPHONES (New); splendid tone, from 65s. Repairs and parts. Latest Records. Lists free.—Regentbob, 120, Old Street, London.

HOME Cinematograph Machines, £1. Great Bargains for amateurs. Films galore, Lists free.—King, 28, Highgate Road, Kentish Town.

LEARN to write Advertisements and command a good salary. Opportunities are many for the trained man. Complete Correspondence Course.—Prospectus free.—Dept. M., British School of Advertising (Established 1912), 51, New Oxford Street, London, W.C.1.

PATENTS.—Advice and Handbook free.—B. T. King, Director, King's Patent Agency, Ltd., 165, Queen Victoria Street, London.

PHOTO Postcards of yourself, 1s. 3d. doz.; enlargements, 8d.; also cheap photo material; catalogue, samples free.—Hackett's, July Road, Liverpool.

SLOAN-DUPLOYAN SHORTHAND saves a year's study, and holds the Parliamentary reporting records for speed, accuracy and duration. Illustrated handbook, with lessons, specimen, etc., etc., etc.—Sloan-Duployan Headquarters, Dept S., Ramsgate.

THE Art of Lining Cycles is no longer a monopoly of the expert. Anyone can do it easily by our simplified transfer method. You can do it. Gold, Green, Red or Yellow Lines, ready panelled, 1s. 3d. complete set for cycle, with instructions. Double colours, 1s. 9d. Samples, stamp.—Axon & Harrison, Regent Street, Rugby.

TRANSFERS (Enamel), Flowers, Dutch Figures, Comic, Wood Inlay, Aeroplane Circles. Just what fretworkers and toymakers require. Lists, stamp.—Axon & Harrison, Regent Street, Rugby.

PRIVATE

A BRITON Fret Machine for sale, 25s, or nearest; nearly new.—A. Randall, Roper Yard, Human Gate, Chesterfield

"BRITON" Fretwork Machine for sale. Good condition, £1.—R. Kitching, 20, Versailles Road, Anerley, S.E.

B.S.A. Airgun, nearly new, what offers?—Rowbotham. Clifford Grove, Ashford, Middx.

EXCHANGE A.1. Fret Machine, new Christmas, for ½-plate Camera (bellows). Cash Adjustment up to £1.—Cushion, 25, Henley Road, Edmonton.

EXCHANGE No. 1 Brownie Camera and Developing Tank, for Second-hand Hobbies A.1. Treadle Fretsaw.—Apply.—William James, 2, South Terrace, Horden, Co. Durham.

EXCHANGE Stamp Collection, New Catalogue, for Hobbies Fret Machine.—Goodfellow, 9, Dorset Road, Ealing, W.5.

FOR SALE, an Apollo Gramophone with a massive Brass Horn. Large amount of records. Suitable for concerts, £10. or nearest offer. William A. Taylor, Hawthorn Street, Wilmslow, Cheshire.

FOR Sale Briton Fretwork Machine. Brand new.—Jules Verwimp, 4, Beddoes Row, Bonymaen, Swansea.

FOR SALE.—Hobbies Briton Fretwork Machine; nearly new, 17s. 6d.; Ensign Plate Camera (3¼ by 2¼), Accessories, 10s.—Holland, 12, Harcourt House, Regency Street, Westminster, London.

FRETWOOD.—Quantity of good Satin Walnut and Whitewood for sale; very cheap. Small quantity if desired.—Particulars.—R.H.C., 218, Old Ford Road, London E.2.

HOBBIES Horizontal Gas Engine Castings, for sale. Complete set of 34 parts. Bore of Cylinder 2ins., Stroke 3½ins., Diameter of Fly Wheel 9½ins. Also Brass Horizontal Steam Engine: suitable for Driving Models. What offers?—F. Barrow, 131, Chapel Street, St. Helens, Lancs.

NO. 1 Brownie Camera Case and Film, new, 10s.—Hewson, Scriven Road, Knaresborough, Yorks.

WANTED in exchange for Phonograph with number of Records, a fretwork Machine in good condition.—Phillips, 8, South Street, Kennington, S.E.11.

WANTED Second-hand Combined Fretsaw Lathe Tools, etc. State price. Also back HOBBIES.—Lewis, 1,162, Icknield Street, Birmingham.

WANTED 18ft. Roach Pole, must be in good condition. Also Zinc Oval Bait Can. Price and particulars.—Mackay, 10, Eversholt Street, Camden Town, London.

3 Leather Scout Belts. Exchange anything useful.—Bryan, 129, Great Portwood Street, Stockport.

77 Slides, 10s. 6d. Cinematograph Machine, £1.—B.B., 28, Salisbury Rd., Yarmouth.

STAMPS.

ALBUM (200 pages); 100 different Stamps; Packet Stamp Mounts and Handbook; post free, 5s. Applicants asking to see my Cheap Approval Sheets will receive Set Ecuador, unused; FREE.—Jackman, (Dept. 4), 21, Poynder's Road, London, S.W.4.

BULGARIA, 15, 6d.; 25, 1s.; Greece, 18, 6d.; 25, 1s.; Holland, 32, 6d.; 42, 1s.; Canada, 25, 6d.; all different; postage extra.—Bond, Charminster, Dorset.

STAMPS and Album, 790; all different, 25s., or Fretsaw Machine.—J. P. 78, Gipsy Hill, S.E.19.