

FOR CRAFTSMEN OF ALL AGES



World Radio History

F you have ever been 'caught napping' when someone in the house has needed first aid treatment for cuts or burns you will realise the wisdom of keeping a box of essentials handy. 'Essentials' will of course include bandages, lint, gauze, cotton wool, plasters, a pair of scissors, and a bottle of Dettol or T.C.P. Only a small quantity of each should be kept, but they MUST be replaced as they are used.

The box is designed with a sloping lid to provide easier access to the interior, the taller items in the front compartments standing clear as shown in the main illustration. A shallow drawer is also provided, and is intended to be used for scissors, safety pins, aspirins, etc.

The measurements are indicated in Fig. 1, the side and front views showing positions of compartments and drawer. The overall size is 12 in. by 8 in. by 8 in. high. Use $\frac{3}{2}$ in. wood for the whole box with the exception of the front and bottom of the drawer which is $\frac{1}{2}$ in. as will be explained later.

Commence by constructing the box as detailed in Fig. 2. Note that the ends go between top, bottom and sides. Remember to leave a 2 in. gap at the front for the drawer. Nail and glue the pieces together and when the glue is dry saw the box into two pieces by cutting along the line of the lid. This will ensure a perfect fit between lid and box. You can, of course, make the lid and box in two separate pieces if you wish.

The two compartments are next glued and pinned in place, spacing them 3 in. apart as shown in the side view in Fig. 1.

The lid is hinged in place by means of two light brass butt hinges as shown in



Fig. 3. They are recessed into both lid and box to make a neat fit.

The drawer is shown in Fig. 4 and it

will be seen that the front and back go between the sides. The bottom, consisting of $\frac{1}{4}$ in. plywood, is then nailed in





place before fitting the front, also $\frac{1}{2}$ in. wood. The front will overlap $\frac{1}{2}$ in. all round and the edges should be slightly rounded.



The front can now be decorated by the addition of a red cross on a circular background as suggested in the illustration of the finished box. Both circle and cross may be cut from odd pieces of in, wood or hardboard.



Clean up all round and paint the inside white, giving two undercoats and one top coat. The outside could be left plain and varnished. Rub down between coats to obtain a high gloss finish. Finally paint the circle white and the cross bright red. Two knobs should be added, one to the drawer and one to the lid as seen in the illustration. (M.h.)

3 in. each way. If the soil is moist, they should need no watering for at least a fortnight. Stand them on the staging where there is a little bottom heat, if possible. This will hasten germination. The boxes should be covered with glass and brown paper and should be inspected every other day after a fortnight. Once the first shoots appear remove the brown paper. The glass can be removed when most have germinated.

The seedlings are left in the boxes in the greenhouse until they are about 3 in. high. Keep a lookout for greenfly which will only appear if the greenhouse is neglected and not fumigated regularly.

The next stage is to harden off in a cold frame, opening the frame a little after two or three days and gradually giving more air until the lights are left open all day. After about 10 to 14 days the plants are ready to plant out in the garden. Put them under suitable cloches, leaving them under until they touch the glass or until flowers appear. Gradually harden off altogether until the cloches can be removed.

These dwarf beans usually show flowers within an inch or two of the ground and provided no late frosts destroy the flowers they will produce beans very early. They are small and closely packed and a first picking can be made when they are about 3 in to 4 in. long, cooking and eating the complete pod. They are delicious at this stage and provide a welcome addition to the food table. These early dwarf beans are seldom troubled by black aphis, but if you do spot any, treat them immediately by removing growing points.

ardener's EARLY BROAD BEANS

> out as soon as conditions are favourable. Broad beans, too, are a useful early

crop, but unfortunately if they are planted during autumn they often fail during a vigorous winter. An early planting outside will hardly beat the first peas to maturity, but a February sowing in boxes in the greenhouse will produce a crop well ahead of the peas.

The secret is to use a dwarf bean, selecting a variety which grows no more than 1 ft. to 18 in. high — Sutton's Dwarf is ideal for this purpose. Since they will remain in the boxes for at least two months, they should not be sown in seed compost, but direct into J.I. No. 1. which will give them sufficient food so that they receive no check in growth.

Prepare the seed boxes, using those that have been treated with green Cuprinol, and fill to within $\frac{1}{2}$ in. of the top. Press the beans into the soil, giving them plenty of space - about

EBRUARY is often referred to as 'filldyke', and we can expect anything from rain or snow to severe and prolonged frosts. In such conditions the gardener with a small cool greenhouse will do well to spend time preparing and sowing batches of seed for early displays. Such bedding plants as lobelia, antirrhinums, border carnations and the fibrous rooted begonias need longer to mature and flower than most bedding plants, and an early start is advisable.

For the vegetable garden too an early start is an advantage. For example, an early sowing of cauliflowers or leeks will produce a welcome early crop if planted



WHAT sort of a collection have you of the stamps from France? Surely this is the one country from which every collector in England should have a relatively large number of stamps; it is the nearest foreign country (except Eire) and every summer countless British tourists journey southwards for a holiday on the Continent.

Again, we have many exchange visits, boys and girls spending weeks at each others homes. And as you know, there are many pen friends corresponding regularly between the two countries.

With all these links available it should not be a very difficult matter to contact someone who will help you to increase your stamp collection. What about making a pen friend yourself? It means that you would have to go to a little trouble to find English stamps to send away just as your French friend would have to collect for you.

In the last few years France has issued a large number of rather pretty and interesting stamps so it might prove a profitable effort to get in touch with someone on the other side of the Channel as soon as you possibly can. It is up to you to agree upon what you want, unused stamps or used ones - if you want unused then you must be careful to tell your friend up to what value you want to go. If you want used stamps then you should make it clear that you want the stamps lightly postmarked so that the design may be seen properly. We have had quite a large number of new designs and values this year - quite

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enough to enable you to send a large number in exchange for those you get. Since 1961 there have been 32 new stamps but remember that you also have the same stamps printed with phosphor bars and these should be sent as well, making over 60. Anniversary of European Postal and Telecommunications Conference then the 1s. 6d. stamp is now catalogued at 8s. 6d. unused and 7s. 6d. used.

If you have any of the earlier stamps of Great Britain they will be even more acceptable, and then you can with a calm conscience ask for some of the older French issues.

The first French stamps were issued in 1849 and showed the head of Ceres (see illustration). Some of these are, of course, very costly but the 20 and 25c. values are fairly easy to obtain. In 1853 the lettering at the top of the stamp was changed from 'Repub. Franc' to 'Empire Franc' and these are quite common.

In 1870 back came the Republic with the head of Ceres. Then in 1876 came the well known design — the 'Peace and Commerce' as it was called (see illustration). There are two varieties which are well worth seeking. If you look carefully at the bottom of the frame then just below 'U' of Republic you will see.



French type Ceres

By the way, have you these sets your-

self? If not, then you should make every

effort to complete them. In many cases

the used stamps of the higher values are

now worth more than the unused. In the

new Gibbons stamp catalogue the 1s. 3d.

used of the Seventh Commonwealth

Parliamentary Conference is priced at

3s. 0d. whereas the unused is only 2s.6d.

And if you go back to 1960 to the First

Peace and Commerce Sower with ground

the letters 'INV'. In the other type the letters 'INV' will be found below the 'B' of Republic. This is certainly only a small difference, but it is a difference that is catalogued. By finding out these differences you can easily add quite a large number of stamps to your collection.

After the 'Peace and Commerce' design France had what are known as the Blanc type and these can be distinguished by the circular tablet for the value. This was used only for the 1c. to 5c. values. From 10c. to 30c. the type of design was the Mouchon with a rectangular value tablet at the top. For the higher values still there was the 'Olivier Merson' design - that is the early large oblong stamp. Next was the 'Mouchon' type, redrawn with a shield-shaped value tablet, and then comes the very familiar 'Sower' type. Some of these 10c. values have ground under the feet, as in our illustration. This is a very difficult stamp to find, although the catalogue value is only a few pence.



The first French pictorial stamp

S.S. Normandie, commemorating maiden voyage 260

World Radio History

During the 1914–1918 war France had two stamps surcharged 5c. for the Red Cross and in 1917 she had an issue of eight values for the War Orphans Fund, the premium varying from 3c. on the lowest value to 5fr. on the 5fr. stamp. A full set of these is a very nice possession. Then there was a last charity war stamp in 1918 showing a sinking hospital ship and a bombed hospital.

The 1924 Olympic Games were celebrated with fcur values. These followed the Pasteur issue of 11 values commemorating this world famous scientist. Then two other Frenchmen were featured — Ronsard and Berthelot their portraits coming on the 400th and the 100th anniversaries of their births.

Then started the flood of commemorative stamps, and it is extremely difficult to decide what to include in a short account. The six values of 1929 showing views seems to be the year when France changed from the prosaic type to the artistic. The first of these views (illustrated) shows the country around the Central Massif including the volcanic cones of 'Le Puy en Velay'. The next values showed the Arc de Triomphe, Rheims Cathedral, Mont St. Michael, Port de la Rochelle and the highest value. The Pont du Gard (20fr.).

An interesting stamp was the one issued in 1934 which showed a picture of Bleriot's monoplane and which commemorates the 25th anniversary of the first air crossing of the English Channel by a powered machine on the 25th July 1909. Not a very expensive stamp, but of great interest to the air minded. A very nice ship stamp appeared in 1935 to commemorate the maiden voyage of S.S. 'Normandie' (illustrated).

Although France has not made a regular feature of issuing Christmas Charity stamps yet she has quite frequently brought out a charity set near Christmas. In 1935 two stamps bore a premium for the Unemployed Intellectuals Relief Fund. In each case the stamps were 50c. for post. On one the premium was 10c. and in the other 2fr.! As might have been expected, the

majority of people were satisfied to give 10c. to the charity but not very many gave the 2fr.

The result is that those who were generous and gave freely have had their reward. The stamps cost 60c. and 2.50, one approximately four times the price of the other. But now either used or unused the better stamp is worth about 20 times that of the other. The next year the more expensive stamp was changed from 2fr. to 20c. premium.

Another set of four stamps was issued in aid of the Unemployed Intellectuals Fund, showing portraits of Jacques Callot, Hector Berlioz, Victor Hugo and Louis Pasteur. The following summer two stamps carried a premium for the same relief.

The next charity effort was for the Postal Workers Sports Fund, three stamps each bearing a 10c. addition.

That only takes us up to 1937, so we shall have to have a following articleon the stamps of France, for there are still a great number of interesting items to discuss.

Project for all who bottle their own Wines

Make a Squeezer for your Corks

The home-made wine maker knows that in order to keep the stock in good condition all jars and bottles must have well-fitting corks. A good cork should be free from holes and flaws, and should be soft and pliable.

Nearly all new corks are very hard, and require some sort of treatment be-



fore they are fit to use. There are several ways of doing this — some good and some not so good. Soaking them in hot water for a time will do the trick, but they will generally become hard again when they have dried out.

Rolling them under the foot is another way, although it is not a very hygenic method. The best way, then, is to use a cork squeezer similar to the one illustrated. The average handyman can make it quite easily, and it will well repay the little time taken. It can very well be likened to a large pair of nut crackers.

A piece of good hardwood such as oak or ash is best for the job. As a considerable amount of pressure will be

exerted during the process of squeezing, the wood should be substantial and also free from knots and similar faults.

Wood about $1\frac{1}{2}$ in. square will serve for both the base and the handle. Cut a piece 9 in. long for the base and 12 in. for the handle. In order to obtain a firm grip, the corners are planed off the handle for a distance of 6 in. and finished by well smoothing with glasspaper.

Two or more grooves to hold the corks are cut in the handle bar, the first one being 2 in. from the end, and the next following with a space of about 1 in. between them, and this one is somewhat smaller.

Most wine bottle corks are 1 in. diameter, tapering off to $\frac{7}{8}$ in. and the

groove is made to hold this to a depth of nearly half way. The next groove will be $\frac{7}{4}$ in. at the widest end, tapering off in proportion. Other sizes can be made as space permits, if needed.

After cutting out with a gouge the grooves should be well smoothed with a file, then glasspapered. Grooves are now cut in the base strip to correspond with those already cut in the handle, but allowing for the projecting piece of 3 in. beyond the hinge. This is to hold the tool securely on the table with the hand, or it may be clamped down to make the job easier.

The squeezer is completed by flushfitting a very strong steel hinge in the position shown. Some corks may want a considerable amount of squeezing in order to make them pliable; they will need turning round a little after each squeeze. Very obstinate corks may sometimes be helped by soaking them in hot water for a while before continuing with the process of squeezing. Very little hardening should occur when the corks have dried out and after they have been well squeezed. (E.)



DIAGRAMS ON CENTRE PAGES

THIS pull-along Toy Windmill will prove a very attractive toy for a toddler. It will keep him happy for many hours, pulling it along over the carpet and watching the sails go round.

It can be made from the Hobbies panels of wood shown in the separate list, the various parts being $\frac{3}{16}$ in., $\frac{1}{4}$ in., and $\frac{3}{2}$ in. thick. The parts are shown full size, or alternatively with appropriate measurements, on the centre pages of this issue. They are marked off or transferred direct to the wood by means of carbon paper. The finished toy will be painted in bright colours, such as red, green and brown. The sails revolve on a loose axle and, of course, the whole thing pulls along on the four wheels provided.

The construction is simple. On the underside of the platform, two side rails are added and then cross axle bars fitted between as shown by the detail in Fig.1. Get the axle bars to fit snugly, and the whole framework glued securely to the underside of the floor itself. The hole cut in each end is for the fancy string by which the toy is pulled in either direction.

The mill can be made up complete, and then finally glued to the centre of the base platform. Screws should be added underneath to run into the edge of the wood to provide further strength. Their positions should be marked off, and holes made to ensure the screw passing into the thickness correctly.

Two long rectangle sides are glued between the back and front. The bottom end must project slightly beyond the bottom of the front and back, and then be glasspapered flush. You can strengthen the inside with little corner blocks glued along.

The two roof slopes fit at the top by cutting the edges to an angle to provide a suitable chamfer. The shaded section on the pattern shows the angle of this. Do not glue the roof slopes in place until you have fitted the axles and sails.

Fig. 2 shows a detail of the sail bearers. Each piece is cut to the size shown in the pattern, and then a chisel slope provided at each end, and in the reverse direction (see Fig. 2). Do this carefully, and leave a perfectly flat surface to take the actual mill sails. Four of these are cut and glued firmly on to the sloping edge of the bearers.

The bearers are halved together and a hole bored through to take $\frac{1}{4}$ in. rod. This rod is 4 in. long, passing through the holes in the back and front of the mill. Project $\frac{3}{16}$ in. of the rod out of the back, and then glue on to it one of the circular wooden washers. At the front end of the axle two further washers are glued on to the rod, just sufficiently clear of the front to allow the axle to revolve freely.

By the way, it will be helpful if this rod is glasspapered perfectly smooth and rubbed with the graphite from a pencil to reduce friction still further where it rubs in the holes of the mill.

The mill sails are now added to the rod and glued in place as well as to the washer. The model can now be completed by painting after cleaning up with glasspaper. HOBBIES PANELS REQUIRED ONE K4 ONE G4 TWO G3 ONE GD6 ONE PIECE OF 4 in. ROD 6 in. LONG FOUR 14 in. WOOD WHEELS.

Use bright colours as previously mentioned, after giving two flat undercoats. The windows and doors can be painted on in black or dark blue and outlined in a bright colour such as yellow.

The wheels, which are $1\frac{1}{2}$ in. diameter can be cut from $\frac{1}{8}$ in. wood or you can use ready turned wood wheels which can be obtained from Hobbies Ltd., Dereham, Norfolk, price 1s. 3d. for four, post 1s. 3d. The wheels can be finished off by varnishing and are pivoted in place by means of roundhead screws.

(M.h.)

DISPLAY CASES

FOR SMALL OBJECTS

MALL display cases can be made from the flip-top packets of some brands of cigarettes. These are very handy for storing very small microscope specimens, chemicals, stamps, etc.



Clip off the tops of the cigarette boxes, and glue several on to card to form a line. Note from the illustrations that the tops can be positioned in two ways — either as boxes or trays. A strip of glass can be Sellotaped over the fronts, and the insides covered with silver paper. You can then see at a glance what is inside the containers. Small labels can also be stuck on the edges. (E.)



HERE cannot be any real freedom of expression in sound recording with only one machine. Recording ability must be limited unless you can record anything --- anywhere.

It is not my intention in this article to tell my readers what make to buy, because there comes a point when it can only be the individual choice that counts in deciding what to accept and what to reject of many desirable aspects which have not yet been united in one portable, regardless of price.



THE 'SOUND' IS THE THING

Primarily the chief need is for good recording and play back performance; and let us face it, you will not be likely to get it from any machine that has cost less than £20 new. Let yourselves not be tempted by any amount of gadgets. I would swop them all for the basic sound that can be boosted to high fidelity quality.

Concerning the microphone, this is an accessory that must be accounted for separately. Portable tape recorders do have 'appropriate microphones supplied, but 'appropriate' for what conditions? Certainly not every!

An easily worked temporary stop (such

as in Grundig machines) is a boon, which enables split second timing. A fast forward wind will keep you clear of any recording you wish to preserve. On many occasions I have wound back too far, and then found I could not take an emergency snap recording without losing a recording as yet not transferred to a master tape.

Things to look for and consider are:

Transparent plastic lid, which enables the recordist to see not only how much tape he has left, but whether he has laced up at all.

Portability. If you wish to record everything you must be able to take your machine everywhere.

Plastic spool locks. No recordist wants to open up to find his spools and tape in a mess.

Car battery socket, which will enable the recordist to prolong the life of the portable batteries.

At least two speeds. Some things are easier to record at $7\frac{1}{2}$ ips than $3\frac{1}{2}$ ips.

Remote control unit, which will enable you to record under circumstances when human presence may disturb the sound source.

Lastly, and least important, the adaptability of the machine to other purposes than location recording, i.e., tape loops. the coupling to the mains for echo effects, etc.

As for me, well I am a Grundig man all the way. You see I am a clumsy clot, and these machines are really unbreakable, I should know, I've tried hard enough!



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World Radio History





RECORD PLAYER The case is 10 in. by 9 in. inside, as

shown in Fig. 1. The bottom, which contains the battery, speaker, amplifier and turntable unit, is $4\frac{1}{2}$ in. deep inside. The lid is 11 in. deep inside.

Front, back and sides can be made from $\frac{1}{4}$ in. plywood. The lid portion is sawn off afterwards. This means that two pieces of wood 9 in. by 6 in. are required, and two pieces 101 in. by 6 in. The top and bottom can be $\frac{3}{16}$ in. plywood, or hardboard. Each is 91 in. by 101 in.

The pieces are sawn accurately, and smoothed with glasspaper. The speaker opening is then cut in one $10\frac{1}{2}$ in. section. This aperture is about $3\frac{1}{2}$ in. by $4\frac{1}{2}$ in., so that the unit will fit centrally, as in Fig. 1, with its edge against the bottom of the cabinet.

COMPONENTS NEEDED
Greencoat 9V 33/45 r.p.m. record player com-
plete, or similar.
Cabinet: Two 101 in. by 6 in. by 1 in., two
9 in. by 6 in. by ½ in., two 10½ in. by 9½ in. by
a in.
Motorboard: 9 in. by 10 in. by 🛔 in.
Pair No. 6229 hinges, one No. 6228 fastener,
and one No. 6230 plastic handle (Hobbies Ltd).
500k volume control with knob.
Cabinet covering material to choice. Speaker
gauze, 2 ft. 1 in. stripwood, etc.

N amplifier suitable for the portable battery operated record player, for 33 and 45 r.p.m. records was described in our last week's issue. A cabinet is dealt with here, and connections to motor, pick-up, volume control, and loudspeaker, in order to complete the job.

The case used has a lid and carrying handle, so that the pick-up will be protected when the lid is closed. Attache case cabinets of this kind are easily made. Ready constructed cases can also be purchased, but naturally cost more.



Fig. 1-Items on the motor board

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The case can then be assembled as a closed box, using a strong adhesive and panel pins. After assembly, allow the adhesive to harden. Corners and joints can then be cleaned up with a glasspaper block.

A line is then drawn right round the box, to leave the lid 11 in. deep inside. A tenon saw is used to detach the lid, and the cut edges are smoothed with the glasspaper block.

A durable finish is most easily achieved by covering the box with one of the plastic or cloth-like materials which can be obtained. All loose dust must be wiped off the wood. The lid is placed on a sheet of the material, which is self adhesive. It should then be brought up each side, and cut with scissors at the corners. It completely overlaps the edges and inside of the lid, and should extend $\frac{1}{2}$ in. or so on to the 9½ by 10½ in. ply or hardboard. A piece of the same material is then cut 9 in. by 10 in. in size, and is placed in the lid, to cover the edges.

The bottom is covered in the same way, but the material is simply turned down about $1\frac{1}{2}$ in. inside the case. The material is then cut so that it can be turned inwards to cover the edges of the

speaker opening. A piece of speaker fret or expanded metal is placed over the opening inside, and clamped down by screwing the speaker in place.

Hinges and the carrying handle are screwed on, and a snap fastener added to hold the lid closed. A string or cord supports the opened lid.

Motor board

This has to be cut just under 10 in. by 9 in. in size, so that it will fit in the case. An aperture like that in Fig. 2 is cut for the turntable unit. A check should be made that the auto switch mechanism has free movement in both directions. A hole is also cut or drilled for the volume control bush, Fig. 1.

A piece of the adhesive material similar to that used for the case, or of contrasting colour if preferred, is placed over the motor board. It should be about 12 in. by 11 in., to allow some overlap. It is taken round the edges of the motor board. The aperture for the turntable unit is then cut with a sharp blade or scissors.

The turntable and motor are fixed with screws, as in Fig. 1, The motorboard rests on strips of wood glued and pinned round inside the case, the height being arranged so that the pick-up is about $1\frac{1}{4}$ in. above the case. (That is, so that there is some clearance with the $1\frac{1}{2}$ in. deep lid closed.)



Battery Box

A piece of wood $2\frac{1}{2}$ in. by 2 in. and a second piece $2\frac{1}{2}$ in. by $2\frac{2}{6}$ in. are pinned together, and glued in one corner of the case, to form a battery box for a PP9 power pack. When replacing the battery, it is necessary to remove the four screws holding the motor board in the cabinet. If preferred, the motor board may be hinged at the front.

Electrical connections

Red and black flex, with positive and negative battery clips, runs to the connecting points shown in Fig. 2. That is, to the switch contact, and to motor negative at the ferrite bead. The second switch contact goes to the motor frame tag, and the lead then passes through the further bead to the motor positive tag. The suppressor capacitor is 5000pF, and a 'disc ceramic' one is best.

Volume control

This is a small 500k potentiometer, and is wired as in Fig. 3. A screened lead already emerges from the pick-up pivot assembly. The outer braiding of this lead is soldered to A, Fig. 3, and the inner wire to C.

A further piece of screened lead is required between control and amplifier. The outer braiding goes to Y on the amplifier, and A on the potentiometer. The inner lead is taken to X, and B on the volume control. Also take a bare wire from A round the control bush, to earth the spindle and control casing.

Screened leads of this kind are best prepared by unbraiding the covering for an inch or so with a pointed tool. The thin strands of wire are then twisted together, to form a pigtail like that at Y, Fig. 3. This can be soldered to the ap-



Fig. 2- Underside of motor board

A further length of thin red and black flex is joined on as shown, to provide positive and negative connections to the amplifier. It will be seen that the current supply to both motor and amplifier passes through the auto switch mechanism. propriate point. A small knob is fitted . on the control spindle.

The amplifier is held inside the case by two screws. It should be clear of the motor. The pick-up lead and lead from the volume control should also be away from the motor and battery leads, to avoid unnecessary interference, which will be amplified and heard in the loudspeaker.

Finally, a length of twin flex is taken from points S on the amplifier panel, to the loudspeaker speech coil tags.

Pick-up

The pick-up unit used has a speed selector, so that both 33 and 45 r.p.m. records can be played. The lever should be moved to the appropriate position.

The actual pick-up is a crystal unit, suitable for both 33 and 45 r.p.m. records, and it has a clip type rest, which holds it secure when not in use.

To switch the motor and amplifier on, the pick-up arm is moved away from the turntable. When the motor commences to run, the pick-up can be placed on the record. Volume is adjusted in the usual way. When the pick-up reaches the end of the record, this switches off both the motor and amplifier.

Modifications

The turntable unit in the component list is for 7 in., 10 in. or 12 in. records, 33 or 45 r.p.m., as mentioned and has a 9V. motor.

If preferred, a cheaper single speed unit can be employed. This can be for 45 r.p.m., and may be purchased for 6Vor $7\frac{1}{2}V$. running. It is then necessary to employ a $7\frac{1}{2}V$. battery. The amplifier described will work satisfactorily with **Continued on page 268**



ARQUETRY and the making of pictures in wood has been a popular craft for a very long time, but have you ever tried the production of pictures from fabrics. In this, instead of using the varying grains of different coloured woods, the design is made up from a selection of materials.

Some extremely attractive pictures can be made, often just from the scraps of materials which quickly accumulate in most households. Pieces left over from dressmaking activities, curtain making, and furnishing fabrics, help to swell the collection of suitable material.

The kind of cloth to use will depend to a certain extent on the class of picture you are making, and some very realistic effects can be obtained by choosing suitable fabrics. The nature of the material plays a very important part in creating the right 'atmosphere', and from the thousands of different textures, patterns, and colours it should not be difficult to pick something appropriate for the job.

Like wood marquetry, a substantial board is necessary on which to make the picture, and this can take several forms. For small pictures stout cardboard or thin plywood is suitable, but for larger work a heavier board must be used. Hardboard makes an ideal base for pictures of all sizes, and the fabric can be applied with a latex adhesive such as Fabrex or Copydex.

To start off with we must have a good design, and the simpler this is the better.

Attractive and unusual

FABRIC PICTURES

Bold features prove the most effective for the type of material we are using, especially for the first pictures you make. As progress is made with the craft, then the design can be made more elaborate.

Draw the design to the full size on a sheet of stiff paper, and transfer it to the baseboard with carbon paper. The paper design can now be cut out, and each part used as a template for cutting the cloth pieces to the correct shape.

Linen and other types of stiff material are the easiest to cut, but thinner fabrics that have become crumpled can be

improved by damping slightly and ironing before cutting them out.

The illustration shows a very simple design which will look quite effective when made with materials to be found in the scrap box of most households. A few hints will, perhaps, help you to make an attractive picture. Two shades of brown tweed are used for the hull of the boat, and if the lighter one is cut in narrow strips it will give the appearance of planking.

Different shades of blue or blueygreen form the sea, with pure white to represent the foam on the crest of the waves. Make the sails of cream or parchment-coloured cloth, and with a bright red cross in the centre of the lower one. White clouds on a pale blue sky will look better if edged with a thin strip of pale grey on the underside.

Too much attention should not be paid to detail, but a little of the rigging may be added in a simple way. Fine string or even wool in the appropriate colour will do for this.

It is generally best to use materials which are of about the same thickness, but sometimes the effect of depth can be achieved by combining thick and thin fabrics. Experiment with different materials before fixing them in position.

Besides the many different cloths available we must not forget that felt and leather in its many forms can often give excellent results.

Although the pictures can be made almost any size the most-satisfactory ones are those which are kept to medium dimensions. A design of, say, 10 in. by 7 in. is ideal and quite ambitious enough for a start.

These cloth marquetry pictures look very nice when suitably framed, or they may be just mounted on a stiff board, and made up into a calendar. In such a case a narrow strip of thin wood or even veneer glued round the picture forms a suitable edging and greatly improves its appearance.

The unusual nature of these pictures should make them most attractive as gifts. (E.)

Continued from page 267

RECORD PLAYER CABINET

either 74V. or 9V.

If a $7\frac{1}{2}V$, or 6V, battery is to be used with the motor, and a 9V, battery with the amplifier, the auto switch should be wired to control the motor circuit. The volume control should then be of the usual kind with switch, and this switch is wired in one battery lead to the amplifier. It is then necessary to switch the amplifier on and off separately, with the volume control.

Various kit form and ready-made transistor amplifiers can be obtained. Or one may already be to hand. If so, it may be suitable for record playing. To obtain a good output, the amplifier generally needs at least four transistors.



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(designed by practical photographers to do a better job)

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Excellent results can be achieved by beginners in marquetry Any of these four pictures will give an air of distinction to the modern home.



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No. HH/2 The Gateway



No. HH/I Elm Hill, Norwich

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Polystik PVA adhesive Domestic bottle 2/6







T the time of the General Election, Corgi released a Land Rover in the guise of a candidate's public address car. It turned out to be a basic I had needed for a conversion that had been on the programme for some time. Had such a basic been available, I would have included this conversion in one of the Land Rover features we had a few weeks ago.

The subject in this case is a Land Rover of the type used by members of the Royal Family when making inspection and taking salutes from parades of anything from paratroops to Girl Guides. There are, I understand, three such Land Rovers in the Royal fleet of cars.

The basic model (loudspeaker van) is made up in two separate parts: the diecast car and the special 'chariot' type plastic body. Before any chopping is undertaken, the chariot has to be removed from the car by extracting the two metal retaining studs at the sides. When these are withdrawn, the chariot can be removed without difficulty.

Work can now be carried out on the car. The Royal Land Rovers being open cabbed, the original Corgi cab has to be removed by cutting away with a hacksaw the shaded parts shown in the COMPONENTS FOR CHOPPERS Marc Europa have recently released sets of components for those collectors who like to improve mass produced 1/40th to 1/45th scale miniatures. Six sets have been introduced, each priced at 3s. 6d. Set C1 consists of five wire wheels, one steering wheel of sports car type and two bucket seats. In Set C2 the contents are similar to set C1 but Porsche type wheels are substituted for the 'wires'. Set C3, eight wire wheels; Set C4, eight Porsche type wheels; Set C5, eight steering wheels; Set C6, eight bucket seats.

These component sets are available in a number of model shops but if any difficulty is experienced I will gladly pass on the address of the nearest stockist.

LAND ROVER SALUTING PLATFORM



illustration. Both metal and plastic has to be cut through.

Attention can now be given to the plastic chariot. Cut off the front board, which carries the loudspeakers together with the attached side pieces. Cut off the loudspeakers and use the front board as a step at the rear of the vehicle, cementing the side pieces to the insides of the body sides, under the car.

Cut off the rear side and back walls of the chariot and round off the corners with a flat file.

Cut to shape a piece of thin card to fill in the forward platform of the chariot, covering the hole left by the removal of the figure.

Set the chariot back in place on the car and lock into position with the retaining studs.

A coat of black gloss paint completes the miniature.

GOOD DOG!

F you have a little pottery dog, you can use the figure to make a charming bookmarker, to go by your bedside.

Tie about 12 in. of coloured wool to the dog's neck, to serve as a 'lead'. Then, before putting your novel down, put the lead between the pages to keep your place, and stand the dog on top of the closed book. (A.E.W.)

BALSA MODEL DESTROYER

AKE up this little model from \ddagger in. sheet balsa, cutting out the parts with a sharp modelling knife. The pieces are shown full size, cutting three of G, two each of A and D, and one each of the rest.

Cement the pieces together and shape where necessary. Make the funnel F from two pieces of $\frac{1}{2}$ in. balsa cemented together and rounded. The guns and masts are pieces of thin wire. Clean up with fine glasspaper, and paint matt grey. (M.p.)

EASY TO CUT OUT AND ASSEMBLE



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