

VOL. 49.

# OUR FRETWORK DESIGN. Combined Photo Frame and Pipe Rack.

FEBRUARY 7, --- 1920 ---

HE subject of the supplemental design sheet with which we present our readers this week is a handsome combined Photograph Frame for a carte-de-vizite photo and a Pipe Rack. The construction is thoroughly substantial and designed for real use. The Photo Frame portion is surrounded with an overlay in embossed gilt metal and will add very materially to the finished appearance of the article.

Dimensions and Materials.

The overall dimensions of this Photo Frame

with the pipe rack are 15½ ins. long by 9ins. high, while the pipe rack portion has a projection of 2½ ins.

The material in which it is to be cut is of two thicknesses, viz., lin. for the main portion of the construction, with wood gin. thick for the overlay around the photo opening. The most convenient way to secure all that is necessary in the direction of wood is to purchase one of the special parcels made up by Hobbies Ltd. for this design.

In addition to the wood there is the clear glass, oval in shape, for covering the photo, and the metal embossed overlay to mount upon the wood overlay around the opening and which forms the rebate. The respective catalogue numbers of these fittings are No. 5838 and No. 5352; they may be had with the parcel of wood from Hobbies Ltd., or any of their branches or agents.

#### The Patterns.

As this design only consists of four sections in all, there has been no difficulty in getting them all upon the printed design sheet, and they may, therefore, all be cut away from the sheet and affixed at once to the respective pieces of wood intended for them. In a case like this, where little preparatory work has

to be done before the cutting may commence, there is always, the danger of the inexperienced fre tworker making a premature start the cutting before the paper patterns have had a sufficient interval of time during which to dry. No fretcutting should be attempted while a pattern retains any moisture from the fixing, and for two reasons: the first is that a damp pattern of the wood would prevent the saw running smoothly. and the second is

No. 1269.—Combined Photo Frame and Pipe Rack. Height, 9lns. Length, 15 lns. Projection, 2 lins.

the liability of the pattern becoming shifted in parts and so causing the article to be incorrectly cut, with the resultant detriment to either the decorative or the constructional features.



Some Cutting Notes.

These designs, the decoration of which is taken from the highly effective laurel forms, ere are ong the most simple forms to be executed If the fretworker; in saying that, however, we do not mean that less care may be taken in their execution, for that would be fatal to all work, but we mean that with ordinary care a laurel decoration may be made to look as effective as the best styles which are included in the fretworker's art.

Each leaf of the laurel is composed of just two lines and those lines should be quite regular in their conformation; slight deviations from the cutting line are immaterial so

long as the curve is kept even and consistent. If, therefore, the saw manages to wander slightly from the line of the design in the cutting of one the lines which compose a laurel leaf the cutter must not suddenly alter the direction of the saw, but must judge how best to continue the line without spoiling the finished effect of the leaf. This latitude is quite permissible in such a form as a laurel leaf, for nature does not make all leaves the same in width, and as long as the finished

effect is satisfactory, that is all that need be

In regard to the fretsaw to be selected we advise as fine a blade as possible, for a fine saw always gives that smooth-edge finish which is such a desirable feature where a smooth leaf or a scroll is to be executed. True, a fine saw needs more careful manipulation than a coarse one, for it more easily strays from the cutting-line than a coarser one.

The tenons upon the shelf and its small supporting bracket should be cut before the corresponding mortise slots in order that the tenons may be tested for size and position against the patterns from which the slots are to be cut. This is a safeguard which always renders the fitting more exact and easy.

Returning for a moment to the question of the laurel leaves, it should be pointed out that each leaf should be executed with two independent cuts, both starting from a place a little removed and in advance of the point of the leaf as indicated by the diagram, one of the sides being cut as shown from A and the other from B.

The Construction.

The work of construction may be undertaken when the whole of the parts have received a good sandpapering with a Hobbies special The wooden overlay will be the first part to be fixed on, and it may be done either by means of glue or some fine fret-pins; glue is to be recommended as it will hold the overlay closer to the background than pins at intervals. The glued overlay will be cramped up until well set. The metal overlay may then be added, and this will need to be fixed with the

finest or rather the shortest fret-pins obtainable. Ordinary brads, while more easily obtainable, should never be em-ployed for fretwork purposes, for they are far too coarse and would mar the finished effect.

The bracket under the shelf will next be added, and then the shelf itself. These parts will be glued on all edge surfaces which come in contact with the wood of the background and will be cramped up till set.

The photo will be cut to the oval shape of

the opening provided for it, and then inserted in the rebate at the back; it will be closed in by reinserting the piece of wood originally cut from the in. thick back, but the edges must first be fined down with plane or file in order that they may meet the surrounding wood flush. This part may be held in position in its turn by either fixing a pair of metal photo clips or by glueing a stout piece of brown paper over it.

In regard to the style of finish to be adopted, it must be left to the individual worker to make his or her own selection.—E. S.

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FIG. 1

# THE FDITORY BOOK.

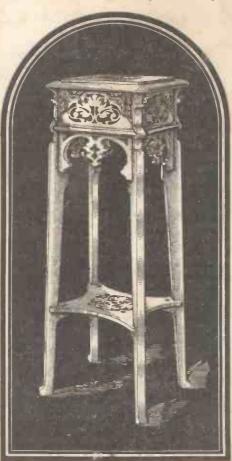
HE expression "fretsaw temper" may be taken in two distinct ways: it may mean, possibly in the mind of some readers, that lack of personal self-control which frequently comes to fretworkers.

when they meet with difficulties or accidents, or it may refer that process of tempering which should be adopted in the manufacture of fretsaws. Both these meanings are closely related, however, alwhen though the writer sat down to pen this note he only had in his mind the second meaning, for it was his intention to refer to the need for using a well-tempered saw-blade if good work is to result and accidents are to be avoided. Now the tempering of such a very fine tool as a fretsaw-and there is no finer wood - working tool in existence—is a very important and, as mechanical processes go, a very delicate operation, which requires special machinery and a special furnace. There are. of course, a number of manufacturers of fretsaws in foreign countries, but it is one thing to make a fretsaw and quite a different matter to temper it correctly; it is unthis doubtedly for reason-that difficulty

of tempering a fretsaw properly—that foreign blades are so often unreliable, that they so often snap just at the critical moment and spoil what would otherwise have been good work. As the writer has sometimes watched the making and tempering of Hobbies famous British fretsaws he has often been impressed with the delicacy of the operation and the minute care which has to be devoted to each individual blade. With a tempering method such as the one employed at Hobbies factory the blades are tempered to a nicety, and for

that reason may be recommended as being the nearest approach to perfection which is likely to be attainable in this very imperfect world.

Stripwork.



THE SUBJECT OF NEXT WEEK'S DESIGN SHEET.

All through the recent holidays hundreds of young folk have had their first experience of strip-work, while many others are quite experienced at the hobby already. one and all who take up stripwork the conviction comes that it is a hobby of a most satisfactory nature. especially in the direction of model-mak-ing. We know of no other hobby which is so easy to pick up, and which, at the same time, can be more widely applied than stripwork. Where fretwork is the hobby which aids in the development of the artistic sense if it is intelligently practised, stripwork most certainly is the simple hobby which aids in the development of the mechanical sense, and the best hand and eye training method in existence. Parents should certainly give their youngsters the chance of picking up the aptness for mechanical work which is bound to follow the doing of stripwork as a hobby.

Any of Hobbies branch managers or agents would be happy to explain the work fully to those interested if they would take care to call.

Next Week's Design

Above we illustrate the subject of our next week's Fretwork Design Sheet—a Palm Stand in oak. Its height is 18 inches, and is of a very substantial character—just the kind of article fretworkers generally like making.

THE EDITOR.

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# VII.-CLOTHES RACKS.

HERE are many forms of clothes racks, all with their special advantages; hardly any household can dispense with something of the kind. Four types are illustrated here. The ordinary type, Fig. 1, can be made in two, three or even four leaves. A detailed description is hardly necessary. Each frame is made independently and then hinged together. All the stuff should be prepared, then for setting out, place the posts altogether, and square the various measurements across the lot, thus saving time, and ensuring uniformity. The rails should also be set out in this manner. A mortise and tenon joint, Fig. 2, is the most suitable construction, although for those not very advanced in woodworking, a simple halving joint would do, if screwed as well as For hingeing, it is better to avoid metal hinges, because of the wet clothes coming in contact with them: pieces of webbing, tacked on in two strips for each hingeing, in the manner indicated in Fig. 3, are the better arrangement. Three sets of webbing placed about 3ins, from top and bottom and in the centre will hold the frames quite firm and also allow a complete hinge joint folding right over in both directions. One strip of webbing is tacked on to a post, then folded over the edge, the other frame is then put close up to it. and the webbing stetched across the back of the post of second frame, and tacked on there. The second piece of webbing is arranged above or below the first, but fastened in opposite way, that is, tacked on to the back of first frame, pulled through between the two, and fastened to the front of second frame.

The three other racks are various styles for fastening or hanging to the walls of kitchen or scullery. Fig. 4 is a simple construction quite easy to make, but its capacity is not much. Two semi-circular shelves about 5ins. diameter, are firmly fixed into a back, with a space of 2ins. between them, by the form of mortise joint shown in Fig. 5. Four holes \( \frac{3}{2} \) in. in diameter having been bored through each shelf, in exactly similar positions, four strips, 18ins. long of 2ins. by 1in. stuff, are now prepared to form given in Fig. 6, the wide end rounded off and a \( \frac{3}{2} \) in. hole drilled down through. These pieces are pivotted between the two shelves by using some \( \frac{3}{2} \) in. round rod.

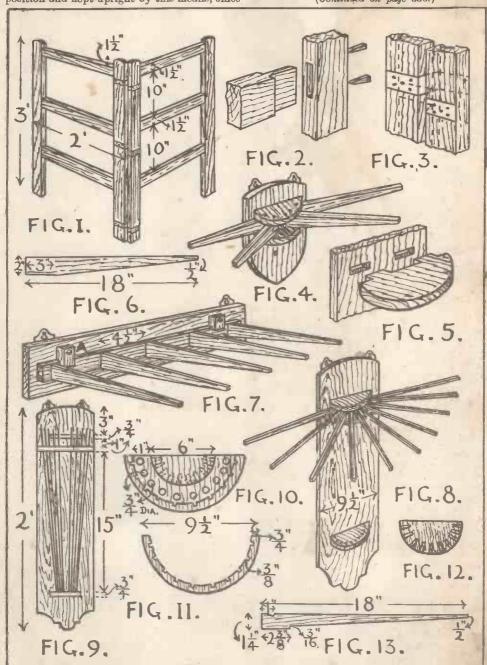
Small nails should be put into each rod from the shelf edges to keep them from working out, The rails fold back against the wall when not in use. A simple form of clothes rack, which can be made to any capacity by increasing the length or by extra sections, is shown in Fig. 7. It consists of merely a backboard, with rails projecting out at right angles. If there is no need for the rails to be put out of the way, they can be mortised direct into the back as fixtures, but there is not much trouble in making the arrangement as given in the sketch allowing the rails to hinge down, flat against the wall when not in use. The rails are mortised into a separate piece of batten, which is hinged at the under edge, to the backboard, by a couple of ordinary 2ins. butt hinges. Two button pieces, A, Fig. 6, are cut with a recess equal to the thickness of the batten They are screwed into the back with a good strong screw, in such a position that the lip part turns over the batten and keeps the whole set of rails up horizontally. There will be a tendency, owing to weight of clothes, for these screws to get pulled out of the wood, so to safeguard against this, screws a 4in. longer than required could be used, and rivetted over at the back, or better still, use some form of light bolt instead of screws. If a rather long rack is made, it would be best to arrange the rails in two or three sets, with two buttons, for each set, and thus save the risk of too much strain coming on the buttons, and give the advantage of not having all the set up, when only a few clothes are drying. more convenient form of the second example is shown by Fig. 8, a long back piece is necessary to get the bottom bracket on for taking the sticks when not in use. Near the top of this back two shelves are arranged only lin. apart; they should be 3 in. thick, the upper one is semi-circular and 6 ins. across on its under edge there are ten stopped grooves, lin. long and in. deep; this shelf is shown inside Fig. 10 and separately at Fig. 12. The lower shelf of these two is also semi-circular, but 91 ins. across. It has a series of ten holes of \$in. diameter, whose centres are 11in. from the edge, these are for putting the ends of the sticks up through when not in use. A piece of 3-16in. fretwood should now be cut according to Fig. 11, this is fastened down upon the first piece, its purpose being to give fixed

#### THINGS TO DO ABOUT THE HOME.

Hobbies

position for the rods to stand out from, and also to form a ledge to drop the projecting parts of the rods behind, to safeguard against any falling out. The complete plan of the two shelves, Fig. 10, shows how everything is arranged, the grooves on the underside of uppe shelf must come in line with the recesses in the rim, the rails are retained in their correct position and kept upright by this means, since

the rails are ½in. thick, the grooves and slots must be the same in width. (Both the shelves must be firmly mortised into the back, in similar manner to that indicated in Fig. 5. The bottom shelf can be ¾in. thick with a series of holes of §in. diameter, but on y bored half-way into the wood, the positions corresponding to those bored through the upper (Continued on page 356.)





# Troubles Met with in Cold Weather.

HE average amateur photographer usually meets with more failures and troubles during cold weather than he does in summer weather. Photography, however, is quite as easy in winter time as it is in the warmer weather, and no failures will be met with by the worker who knows what difficulties to expect and is quite prepared to cope with them when they arise.

Only a few years ago it was the custom to put away the camera during the winter months, but this suspension of operations was not because of the cold and the troubles it brought, for the latter could then, as now, be easily overcome; the camera was laid aside because of the absence of rapid lenses and plates. During recent years lenses and plates, also films, have been made to work so rapidly that exposures are possible on most days, even when it is dull or raining, and there is no need whatever to lay aside the camera until the advent of spring.

The chief troubles that arise when photographing in winter weather are three in number, namely, very thin negatives, bad tones, and blistered prints, all of which are due to the lowness of temperature. All plates and films and most printing papers are made of gelatine, a product that is apt to get very hard when it is allowed to feel the cold, and this hardness prevents the chemicals working properly upon it. The obvious remedy is of course to develop, etc., in a warm room, or warm the dishes and solutions if the work has to be done in a cold room. Too much warming, however, brings forward other troubles, and the method of working is so important that the prevention of the three defects named may be dealt with separately.

Photographers who work in cold weather should always use a thermometer to ascertain the temperature of the solutions they use The proper temperature at which to use all developers, fixers and toners is anything between 65 and 70 deg. F. It is difficult to tell the degree without a thermometer, though some workers may be able to tell near enough by the sense of touch; it is, however, rather dangerous to do so, as mistakes are easily made, because when the hands are very cold the temperature of warm water is most deceptive. Hydroquinone will not work at all when cold (below 65 deg.), while other developers work very slowly-so slow, in fact, that the amateur is often led to believe that the plate or film is very much under-exposed, or not exposed at all, when the real cause of the slow or non-appearance of the picture may be due to the coldness of the developer.

In a normal developer a picture rarely takes more than ten minutes to develop and to get the necessary density, but the colder the developer the longer the time of development, and in a very cold solution a plate may take an hour or more to acquire the proper density. The uninitiated workers are not prepared for this trick of the

developer, and take the plate from the solution before density is obtained. The result is, of course, a thin and ghostly negative, too poor in quality to give bright

prints.

The common rough and ready plan of warming solutions and dishes is to pour warm water in the latter to warm them, then pour it away and place the cold developer in the dish. The warm dish naturally takes the chill off the developing solution, but the plan is not a good one; it often results in cracked dishes (if of porcelain or glass), and one is never sure of the temperature of the solution, the latter, of course, becoming cooler every minute, and its developing action slower. The safest plan of working is to fill a biscuit tin with warm (not hot) water and use it as a sort of developing table, placing the developing dish upon the top of the flat lid of the tin. Used in this way the developer keeps of a fairly even temperature, but great care must, of course, be taken not to have the lid of the tin or the developer too hot.

The above rules apply to the fixing bath, which in normal times is always colder than a developer and slower in working. A solution made of hypo and water is a well-known laboratory freezing mixture, as when hypo is added to water the temperature of the latter always drops several degrees, even in the height of summer. One can therefore easily imagine what happens in winter when

hypo is added to very cold water.

The fixing solution should be of the same temperature as the developer, and this may be brought about by warming up the hypo solution as one does a developer, or by dissolving the hypo in hot water and using when cool enough, the hypo bringing the hot water to a cool stage very quickly. There is, however, not the danger threatening when using a cold fixer as when using a cold developer for negatives, simply because one may easily see when a negative is fixed. With prints one may meet with trouble by not fixing thoroughly, the action of a fixing bath on a print not being visible, as it is when fixing negatives. The warmer a fixing bath the quicker it works, and when very cold it may take hours instead of minutes to do its duty.

It is most important to have the bath at something between 65 and 70 deg. F., when using self-toning papers, otherwise the colours (tones) will be unsatisfactory, and the pictures may fade very rapidly because of the cold preventing the hypo doing its work of fixing. If the hypo solution happens to be freshly

(Continued on page 356.)



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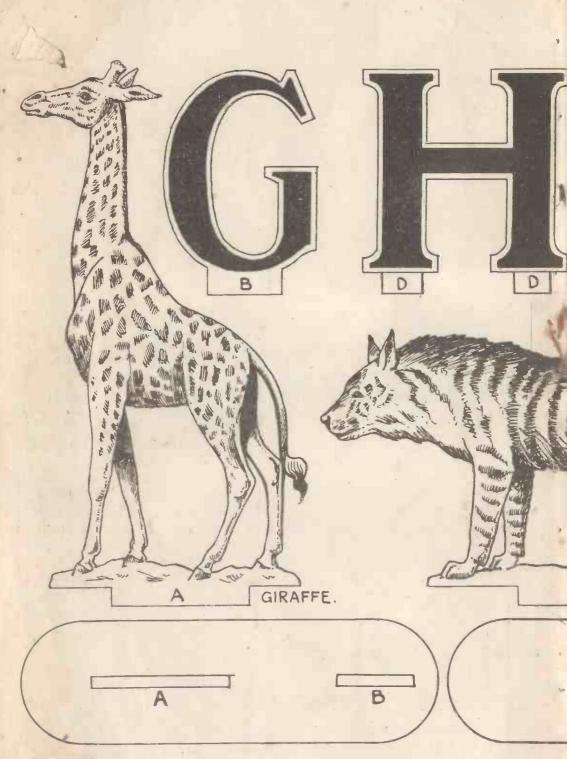


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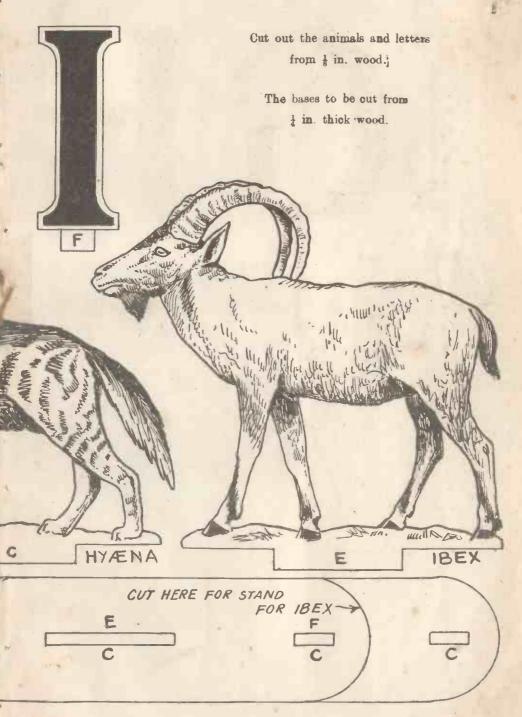
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# FRETWORK ANIMALS & ALPHABET.

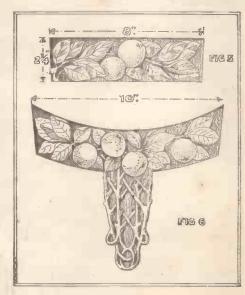


## Ornamental Vase or Palm Box.



HE palm box shown complete in the perspective sketch on this page is somewhat of a novelty, and should make a very attractive piece of furniture. A feature of the design lies in the carving to the front and sides of the box, but as will be seen by a glance at the details given in Figs. 5 and 6, the work entailed is not heavy, or of a very exacting nature. The leafwork and apples are fairly plain, and should be cut in quite low relief, while the stems should be cut sharply and the background matted to give effect. Many workers not experienced with the carving tools may, with quite an excellent result, adorn the front and sides of the palm box with plain or embossed copper panels of simple outline. Or again, a pokerwork craftsman may decide to transfer to his wood the outline of the fruit and leaves shown in the details and burn his design in relief, and finally, with the help of a few art stains, produce a most charming effect. The construction of the box itself is not difficult, and should not prove too much for the amateur woodworker. The box consists simply of four sides, and a bottom, or, perhaps, more properly speaking, a shelf, to hold the decorative fern or palm pot. The two sides are the largest pieces required, and each measures 21 ins. long by 10½ ins. at the top, tapering to 8¾ ins. at the bottom. The thickness suggested for front, sides and back of the box is \$in., while the shelf may be \$in. The work upon each of the sides consists of first of all shaping to outline, then cutting out the elliptical hand-hold and the shaped base, and finally cutting in the grooves or housings to accommodate the front and

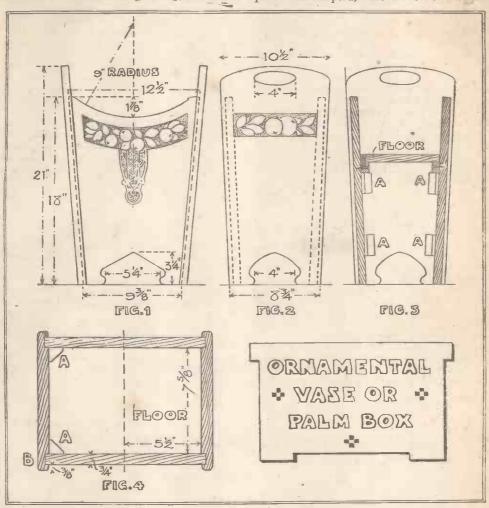
back of the box. Care should be exercised in setting out the sides symmetrically. The piece of wood measuring llins, wide should have a line drawn down its centre and at a length of 21ins. should have 43ins. set out at each side. Then half the shaped top should be drawn in with a width of 5½ ins. on each side of the centre line Check off the width on the opposite side of the centre line, and connect up the points, which should result in the slopes being quite true. The half of the top curve may now be traced and reversed over the centre line, thus getting this portion correct. Having completed all the outline and internal cutting to one side, the outline of the second may be produced by scribing round this piece and cutting as before. The sharp edges should be slightly rounded, as shown in enlarged plan (Fig. 4). The cutting in of the housing to receive the front and back may next be taken in hand. Fig. 2 shows the outline of one of the ends with the position of the grooves shown dotted. The grooves are set back in. from the edge and are in. deep, and they should be cut rather under in. wide to allow of a perfectly tight fit when all are being finally secured together. The grooves should measure 18ins. long from the base upwards, and then be neatly stopped as shown in Fig. 2. The full measurements of the two pieces forming the front and the back to the box are given in Fig. 1. Here again the tapering should be accurately obtained by the same method as that adopted for the sides, while the curve to the top should be struck with the compasses, the radius, as shown, being 9ins. For the shelf a plain rectangular piece of wood should be cut Ilins. long by 75 ins. wide, and for its support two





fillets of wood, lin. deep by the fine wide, are screwed on the inside face of the front and back of the box, as shown in the diagram, Fig. 3. The height of the shelf should be 12 ins. from the floor or foot of the palm box. When the box has been fitted and glued up, additional

panels, should be executed before the final putting together and glueing up is accomplished, as it is much more convenient to work upon the wood flat on the bench than it would be if in box form. If the metal panels be adopted, care must be taken to



strength may be obtained by glueing blocks of wood about lin. square and 2ins. long up the inside angles, as indicated by the letters A in Figs. 3 and 4. The carving, or whatever embellishment is placed upon the side and ends of the box, excepting perhaps the metal

obtain round-headed screws for the fixing.
Mahogany would be a very suitable wood
from which to make this palm box, and after
receiving a finish of French polish it should
look well and repay the worker for his wellspent time and patience.

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made with cold water in winter weather, it may be so icy cold as to take an hour to fix a print, and if the amateur is not prepared for this slow working he may think the action complete in ten minutes—as it would be in warm weather—and take the pictures from the bath before they are properly finished. The same applies also to gaslight and other prints.

But the greatest trouble of all that an amateur meets with in cold weather is the blistering of bromide and gaslight prints—a defect met with very often in warm weather, but in winter the trouble is the greatest. Blisters are due to varying temperatures of the solutions and washing water, and the greater the difference the greater the danger of blisters. Prints, it will be understood, are treated with a developer and fixer, also washing water, and if blisters are to be avoided the developer and the fixer, also the washing

water, must be of the same temperature or very nearly the same. Blisters rarely appear during developing and fixing, they generally appear during the washing after fixing because of the difference in the temperature of the hypo solution and the washing water.

A simple method of preventing blisters is to let all the prints remain in the hypo solution, then to let the washing water run slowly into the fixing bath so that the change may not be sudden. It is the suddenness of the change that does the damage. The washing water thus gradually displaces the hypo, which, of course, goes down the sink, and the change takes place very slowly.

But the best plan of all of preventing blisters is to use a combined hardening and fixing bath; such a bath, for which there are many formulæ, makes the pictures as tough as leather and blistering will be impossible, or at any rate very difficult to produce.

#### THINGS TO DO ABOUT THE HOME.-Continued.

shelf. This shelf must also be mortised in; 6in. would be a suitable size. The rods, when not in use, are pushed up through the holes at the top by the thin end and then dropped so that a corner catches in the incomplete hole at the bottom, which is better if mortised into the form of a slot for holding the rather wide ends that come into them. The rails are made out of ½ in. stuff, which should be ash or similar material and shaped as in Fig. 13. All edges being rounded off, it is necessary to cut the V-piece out of the top edge, so that the rod can be tilted up far enough for the

under edge to pass over the 3-16in. guard piece fastened on the large shelf. Fig. 9 shows method of stacking the rails when not in use.

One other system of clothes airer is to make a light frame of bars and suspend the frame by cords passing over pulleys fixed on or near the ceiling. For loading the rack it is lowered by means of the cords, and then hoisted up. For lack of space this is not illustrated here, but the idea is so simple that anyone can manage it if necessary; also, with careful planning of cords and pulleys, the whole affair can be pulled up evenly from one position.

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# A NEW RING GAME.

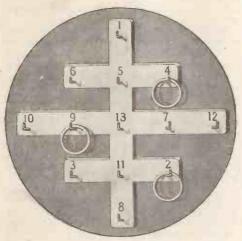


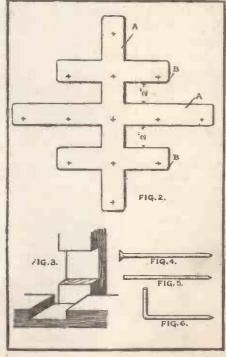
FIG. 1.

AMES, in common with everything else, have greatly increased in price, and a boy's pocket money generally will not allow him to purchase all the things he would like, especially in the way of games. Now, "rings" is one of the most, if not the most, popular indoor games, and in our illustration, Fig. 1, we show a new ring game which may be made by any handy boy. difficulty in making one of the usual type of ring boards is to obtain wood sufficiently wide, but this is obviated in the present case by building up a board with narrow strips, which are notched, or to use a more correct term, halflapped together. Almost everyone has command of a few narrow strips of thin board, who would find it difficult to obtain a wide board, and for the board we show here any strips 2in. wide, and from in. to in. thick are suitable. The tools required for making the board are a plane, saw, chisel, and hammer The rubber rings can be purchased at a toy or fancy

Four strips of wood will be required (see Fig. 2), the two marked A are 18in. long, and the two B are 10ins. long. The strips are A first half-lapped together, the joints being cut exactly in the middle of each. A half-lapped joint is shown at Fig. 3, and is made by cutting a notch in the front of one strip, and in the back of the other, so that when the pieces are fitted together they will be quite level on each

side. The notch should be cut into the depth, which is exactly half the thickness of the wood with a saw, and the waste is chiselled out. The joints should fit tightly together, and could be fixed either with nails or screws, while if they are glued they would be greatly strengthened. The two strips B are half-lapped into the upright strip A, in the positions shown at Fig. 2, the joints being similar to that just described. It will be well to round off the sharp corners at the ends of the strips.

The hooks for the rings could be fashioned from ordinary wire nails, similar to Fig. 4. Thirteen are required; first remove the heads (see Fig. 5), and then turn up about ½in. of the ends (see Fig. 6) to form the hooks. The hooks are kept ½in. up from the bottom edges of the strips of wood, and are simply driven in position. Before fixing, however, it would be best to either paint or varnish the board, and add the numbers. White paint and black numbers are best, as shown at Fig. 1





#### THE VEGETABLE GARDEN.

HE present is considered a good time to make new plantations of horseradish. Be careful where it is planted, as when once it becomes established it is almost impossible to eradicate it by ordinary means, for every piece of a root left in the ground will quickly grow into a plant. So much has the plant relied on the roots for its propagation that it has lost the power of seed formation, although it flowers most profusely. It is best to set apart an odd corner of the garden for clump in order that it may be left undisturbed. A small store should always be lifted. and kept in moist sand during the winter, in order to ensure of a supply when the ground is locked by frost.

By planting early potatoes at the depth of six inches, close beside a warm wall, an early supply may be relied on if they are well protected during severe weather. In such positions they are easy to protect during sharp weather. The soil should be light and well drained. A small sowing of silver skin onions may be made now in frames, as they will be

found useful for early salading.

Sowing of peas may now be made on a warm border. Choose the best early sorts for the purpose. As the sun's rays are very slanting at this time of the year, the rows should be farther apart than they are later in the season, in order to allow them the fullest amount of light possible. Many growers arrange their rows so that the sun shines directly on to them This may be in the middle of the day. usually arranged for by sowing in oblique rows on a warm border. If they are sown in rows at an angle of 45 deg. on a south border, with the tops of the rows towards the east, they will enjoy the full benefit of the morning

In warm districts a small sowing of early turnips may now be made. Choose a warm position and see that the soil is thoroughly

pulverised.

Seakale is easily forced, merely requiring to be potted or put into boxes with earth and then placed in a dark warm house, the darkness, of course, being to blanch it. Rhubarb needs less care. Good strong roots taken up and simply laid under the stage of the house and covered up with litter will come on freely. Both rhubarb and seakale are better for a proper root action.

Parsaips and carrots that still remain in the ground must now be taken up. Store them in sand or dry ashes in a dry shed, and they will

keep till the early crops come in outside

### THE FLOWER GARDEN.

Now we are fairly at the end of the chrysanthemum season, as far as the large blooming varieties are concerned, and the commencement of another year's work is rapidly approaching. Before any cuttings are taken it is well to search over the old stools and select those varieties which are shy and wellknown to produce their cuttings very sparingly. Such varieties should be placed in a warm greenhouse or early vinery on a shelf close to

Furthermore, to encourage them to throw up their cuttings quickly they should be syringed once a day with lukewarm water.

Those varieties which produce cuttings more freely are better stood in a cold greenhouse or frame, where every protection from frost can be given them.

A few sweet peas should now be sown in pots, six seeds to a five-inch pot. Stand the pots in a cool greenhouse on a shelf close to the glass, and if weather permits allow all the air possible.

Carnations should be frequently looked over, and any foliage showing signs of disease immediately cut off. Aphis among the plants is very troublesome just now, but a fumigating once or twice a week will quickly destroy the pests.

Hasten on with rose planting and finish pruning, and tie the climbing varieties in

Ferns make very little progress at this sea-The young fronds, being subject to damping, should be closely watched, or the plants are quickly ruined.

Use the watering pots very cautiously, and always the first thing in the morning, never at

night.

#### THE FRUIT GARDEN.

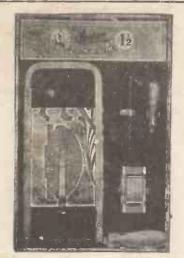
Look over stored apples, pears and potatoes while wintry weather prevails, but be careful to admit no frost.

Strawberry beds should have attention now. Remove all runners and free the beds from weeds. When this has been done, lightly fork over the ground and then carefully work old hot bed dung into the surface. Some people prefer to use long litter; but this usually becomes decayed before the fruits require it. March is quite early enough to apply litter; it then has plenty of time to sweeten before the fruits require it to protect them from the soil.

It is now time to proceed with the important work of digging between rows of

fruit trees.





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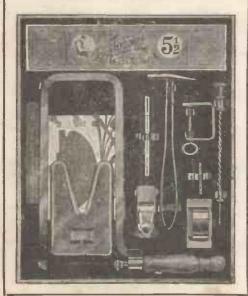
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