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Honolulu 10, Territory of Hawaii UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

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UPHOLSTERED FOOTSTOOL

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Re-upholstering of furniture requires time and patience. The article to be upholatered should have a strong frame to make the work worthwhile.

Making a footstool is an excellent way to learn the various steps in upholstering. The principles learned can be used to re-upholster punees and simple chairs. The footstool is also a convenient article to have in the home.

Tools and Materials for Making Footstool

Hammer, medium sized

Tack puller

Strong sharp scissors

Hand drill

Pliors Scrow driver Webbing stretcher

Ice pick (use as regulator)

Upholstering needles (6-inch mattress needlo) (4-inch upholstery needle)

Plane for finishing stool legs

Sand paper

Lumber Needed: 2 boards 1 inch x 4 inches, 18 inches long;

2 boards 1 inch x 4 inches, 12 inches long;

4 boards 2 inches x 2 inches, 8 inches long for the legs

6 seat springs, No. 2 (8 inches)

Upholsterer's Tacks: No. 4 (for muslin);
No. 8 (for burlap and webbing);

No. 12 (for twine)

8 wood screws, 13 inches

28 finishing nails (24 inches)

4 yds. seaming cord

1 lb. horsehair for padding

Upholstery pins

Cardboard (medium weight)

Upholstery material for outside cover

Tape measure

Pencil.

4 yds. cording

2 1/3 yds. webbing

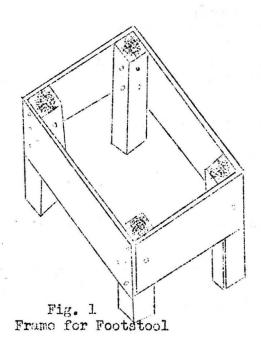
Closely woven burlap sack (cover for springs)

Feed sack or unbleached muslin (cover for padding)

b lb. folted upholstery cotton

Jute twine for tying springs

Mattress twine for sewing springs and padding



Making Frame

Make a rectangle of the 4 boards (1 inch x 4 inches), putting the 18-inch ones on the outside. Use three finishing nails at each corner. The frame will measure 18 inches x 14 inches.

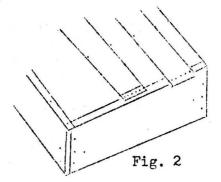
The legs are nailed into each corner. A wood screw $1\frac{3}{4}$ inches long is added on each side to make the footstool strong.

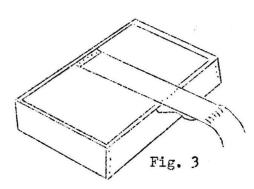
If the legs are to be shaped and finished, it should be done before they are nailed into place. (For finishing see circular No. 107.)

Figure 1 gives details of the frame-work construction.

Placing Webbing

The webbing is nailed to the under side of the frame, two strips lengthwise and three strips crosswise. The center crosswise strip is placed first. One inch of the free end of the uncut webbing is allowed to extend beyond the frame edge. Tack the webbing to the center of the rail with 4 of the No. 8 tacks. The inch of webbing is then turned back over the first row of tacks and 5 No. 8 tacks are added. (See Fig. 2.) Be sure that the fold of webbing does not extend to the outer edge of the frame.



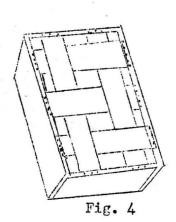


The webbing stretcher is used to stretch the webbing tightly across the frame. Place the smooth end of the stretcher against the side of the frame directly beneath the webbing. Push the webbing over the nails in the stretcher, then push down until the webbing is taut. Nail in place with 4 No. 2 tacks. Next cut the webbing off one inch from the tack; fold back over the tacks and fasten with 5 tacks. (Fig. 3) The two remaining crosswise strips are placed on either side of the center band and fastened in exactly the same manner.

The two lengthwise strips of webbing are woven through the crosswise strips before the loose end is attached. The spacing between the lengthwise strips should correspond to that of the crosswise strips. (See Fig. 4.)

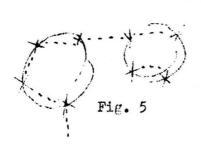
Attaching Springs

A spring is placed at the center of each intersection of the webbing with the loose wire at the top turned toward the inside.



To fasten the springs to the webbing use the 6-inch mattress needle and a long double strand of the mattress twine. Each spring is seved in four places. The stitching is so arranged that the threads proceed from one spring to the next without breaking.

To start the sewing, begin on the bottom with the spring in the right hand corner. Pull the needle through the webbing leaving a short loose end on the under side. For the next stitch push the needle through the webbing very close to the same wire but on the opposite side; draw the thread through. The thread is again

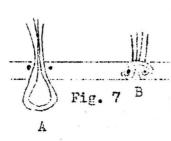


drawn up through the webbing slightly to one side of the first stitch. The loese end on the bottom is then tied with a square knot around the last thread. Again but the needle down through the webbing, making a cross over the wire. Pull the thread through and proceed to the next stitch. Continue, making four "crosses" on the bottom side of each spring. Go from spring to spring without cutting the thread. Tie ends of thread togother when necessary to add more.

Tying Springs

Heavy jute or upholstery twine is used to the springs. The length of twine needed for each row is approximately twice the length from one side of the frame across the top of the springs to the opposite side of the frame. The springs are tied lengthwise, crosswise, and diagonally.

Next partially drive two No. 12 tacks into the center of the top rail in line with the middle of each row of springs but far enough apart for two strands of the jute twine to pass between. See Fig. 6.



For tying the springs, begin with the middle row of springs. To fusten the twine to the tacks, form a bight in the twine about one inch from the end and lay it between the two tacks. (See Fig. 7-A.) Fold the bight back over the tacks to form a loop over each tack. (Fig. 7-B) Draw the twine taut and nail the tacks down.

Proceeding in the direction away from the worker, press the first spring down with the palm of the left hand until the spring is about one inch above the frame. Hold in this position, being sure the spring is erect. With the right hand, pass the free end of the twine over the top wire next to the frame, bring back under the wire and to the left of the twine previously fastened with the tacks. (Fig. 8-A) Pull tightly but keep the spring erect. Hold the twine in clace with the thumb of the left hand. Again pass the free end of the twine over the same coil and to the right, leaving a loop of twine behind the vire. Bring the twine under the wire, and through the loop. (Fig. 8-B) Pull the tuine tightly and away from the worker. (Fig. 8-C)

Stretch the twine across the top of the spring and make the same knot on the opposite side of the coil. Continue across the row of springs, tying them in exactly the same manner. When the

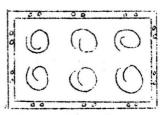
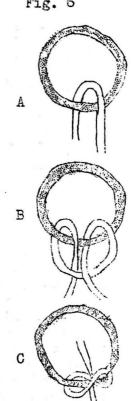
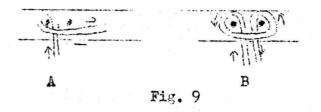


Fig. 6

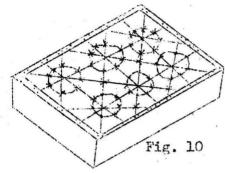




strings in the mer are all blod, fasion the end of the twine to the two tacks previously placed in the frame. To the the twine, hold the oprings in position with the right hand, pull the twine between the tucks and around the tack on the left (see Fig. 9-A). Hold in place and drive the tack down. To finish the

knot, hold the twine in the left hand but placed between the tacks, make an outward twist with the right hand to make a similar loop over the second tack. Pull tightly and drive the tack down (Fig. 9-B).

Proceed in the same manner tying all springs, crosswise, lengthwise, and diagonally. For the final diagonals, the every wire and every cord passed over. (Fig. 10) When the tying is finished, the top of the stool should have a slightly rounded appearance with each spring standing erect.



Covering Springs

After the springs are tied, they are covered with a piece of closely weven burlap that has been cut to measure 26 inches by 30 inches. Lay the burlap evenly over the springs, draw tightly enough to be smooth, tack down with No. 3 tacks near the outside edge of the top. There will be 6 inches of burlap hanging on all sides. This will be used for making the roll.

Sewing Cover To Springs

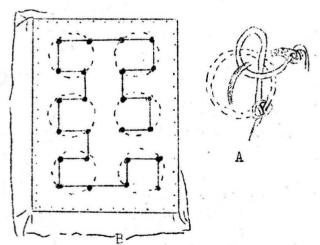


Fig. 11

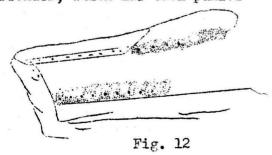
The burlap is sewed to each spring in four places. Use a curved upholstery needle and waxed mattress twine.

To sew the burlap to the springs, put the needle down through the burlap, under the top wire of the spring, and up through the burlap. Tie a knot at each stitch as illustrated in Fig. 11-A. Continue in this mannor until all the springs are tied. Proceed from spring to spring without breaking the thread. Fig. 11-B.

Padding Footstool

The sharp edge of the rail is padded by

making an even firm roll around the top. Arrange horsehair, which has been pulled and fluffed, around the edge of the stool. Roll the six-inch edge of burlap over the hair in such a manner as to make an even firm roll. Pin to hold in place. At the corners, miter the burlap and adjust the padding to make this portion of the roll the same size as that on the sides. Sow with curved needle and mattress twine on the inside of the roll. The stitches are taken through the roll and sewed to the burlap covering the springs. (Fig. 12)



When the roll is completed, the top is padded with horsehair that has been fluffed. Lay evenly over the burlap in the center of the stool, just covering the outer roll. This padding should be thick enough so that the springs cannot be felt through it. To prevent this padding from slipping, it is seved to the burlap covering the springs with a curved upholstery needle and mattress twine.

Next, place a layer of upholsterer's cotton over the horsehair. Be sure the surface is smooth.

Covering Padding

Lay a firm piece of muslin over the padding. Draw this covering quite tight and tack to the sides of the frame about one inch from the top. Tack first in the middle of each side and then in either direction toward the corners. Be sure that the threads of the material run straight with the lines of the frame. Pull out all fullness at the corner to give a smooth, rounded top. Fig. 13.

After the muslin cover has been tacked in place it should be trimmed evenly below the tacks.

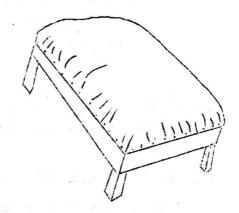


Fig. 13

Outside Covering

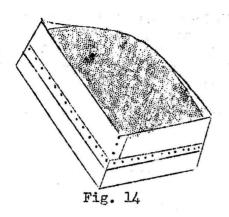
The material selected for the outside covering should be:

- 1. Firm and closely woven for durability.
- 2. Sunfast.
- 3. Similar in texture to the other materials used in room.
- 4. Harmonious with color scheme of the room.

For the outside covering, measure a piece of the material that will extend one inch over the padding cover. Cut and pin in place. Tack with No. 4 tacks, beginning in the center of the sides of the frame and working toward the corners. Small pleats are made at the corners to take care of the fullness.

A piece of cable cord long enough to go around the frame is covered with a 2-inch strip of the outside covering material or with a similar material in a harmonizing color. This finished cording is placed around the stool with the cord at the top edge of the board and with the cut edge of the material down. Pin in place, then sex with a curved needle and heavy duty sewing thread using a blind stitch.

For the band around the frame, cut a strip of the upholstery material 2 inches longer than the distance around the stool and 2 inches wider than the width of the sides. Make an inch seam. Put this band around the stool with the wrong side out. The lower raw edge is in line with the edge of the cable cord covering. The seam in the band should be placed at a corner. Pin in place.



Next, place a 1-inch strip of light-weight cardboard over the edge of the band and push tightly against the lover side of the cord. Tack at intervals of one inch, slightly below the upper edge of the cardboard strip. Fig. 14.

Place a thin layer of cotton padding wide enough to extend from the top of the cardboard strip to the bottom of the frame. Turn band of upholstery material down over the cotton padding. Baste another row of covered cording, which is made exactly as the first one to tie band in line with the lower edge of the frame.

After basting, turn the raw edges under the lower edge of the frame. Tack in place on the under side of the frame, being sure that the cord is exactly at the base of the frame. The covering should fit smoothly.

Attaching Lining On Bottom Of Stool

Cut a piece of dark cambric or muslin 16 inches by 20 inches. Measure in 2 inches from each corner. Fig. 15-A. On the cambric draw four squares the size of legs. Fig. 15-B. Cut the opening for the legs diagonally. (Check to be sure these openings are placed correctly before cutting.) Fit over the legs and onto the bettom of the stool. Turn all raw edges to the wrong side. Tack this lining in place or sew it on with a curved needle.

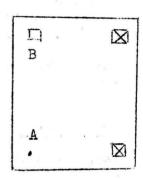


Fig. 15