

DO-IT-YOURSELF

Assistive Technology Projects

YING CARD HOLDER

If you use only one hand, holding playing cards can be frustrating. The playing card holder on this page is a simple-to-make solution to this problem. If every player at the table uses a card holder, then nobody will feel different or singled out.

This set of four card holders makes a nice gift, accompanied by a deck of cards with large numbers. The holders can be decorated creatively with magic markers or paint.

You will need:

1 4'-long piece of 1" x 2" lumber (finished size $\frac{3}{4}$ " x $1\frac{1}{2}$ ")

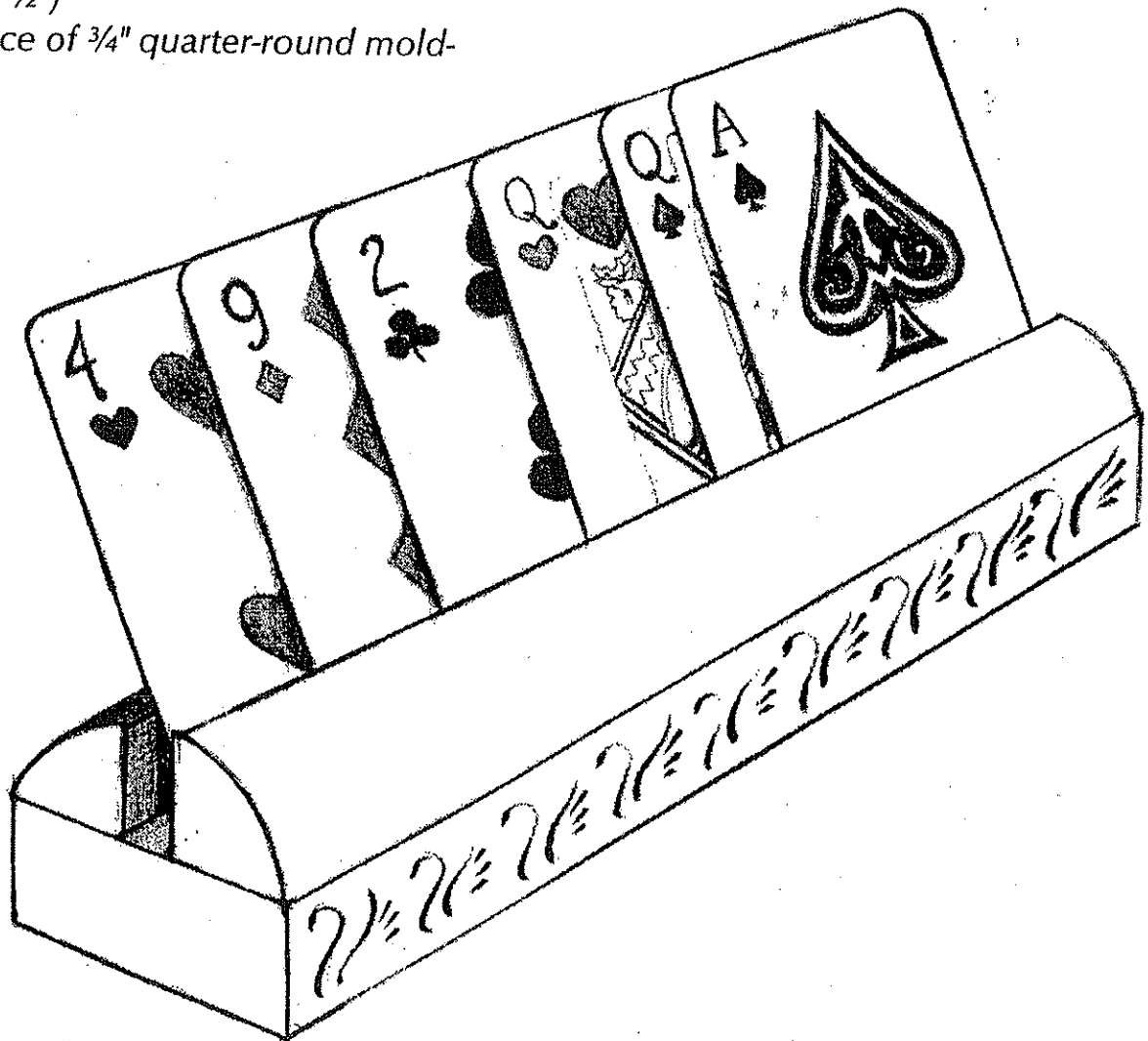
1 8'-long piece of $\frac{3}{4}$ " quarter-round molding

sandpaper
white glue

paint or polyurethane
magic markers, stencils, or other decorations

Directions:

1. Cut all the wood into 12" lengths. You'll have four pieces of the 1" x 2" and eight pieces of the quarter-round molding.
2. Glue two pieces of molding to each length of 1" x 2" as shown, leaving a slot in the middle.
3. Sand the rough edges, paint, and decorate the card holders as desired. To make the slot easier to see, you can paint the inner surfaces of the slot a darker, contrasting color.



DINING SMOCK

If you need to protect your clothing when you eat, but you are self-conscious about wearing a "bib" in public, you may like this dining smock, invented by an Iowa woman for her husband. It will work just as well for a woman. You simply slip your arms into the sleeves and fasten it in back. Wear the smock over your shirt or dress and spread a cloth napkin on your lap. You will probably need someone to help you put this smock on.

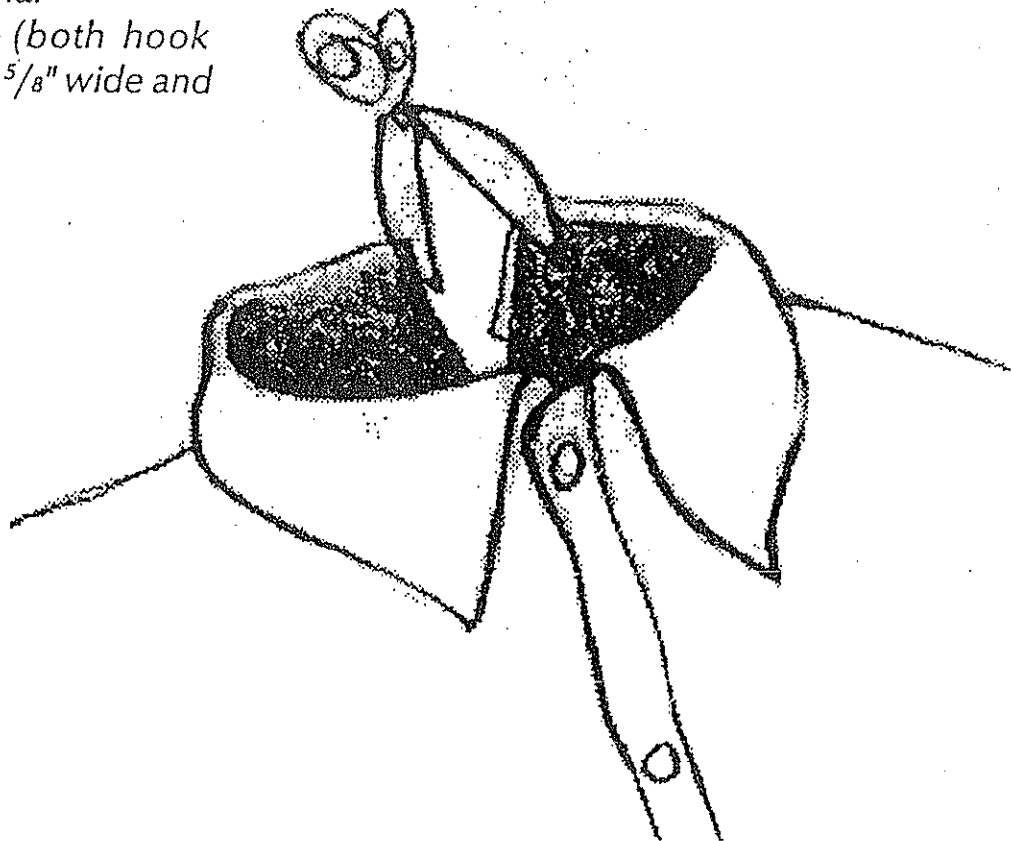
The woman who thought of this idea suggested buying inexpensive, dark-colored shirts at a used clothing store. It is easier to cut straight down the back if the shirt is striped or plaid.

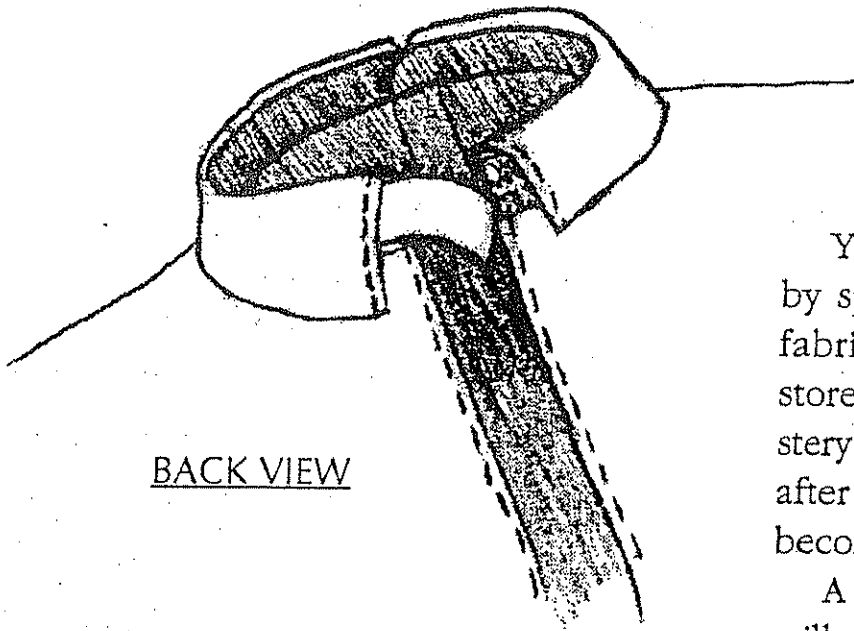
You will need:

- 1 used shirt or blouse, one size larger than normal.
- 1 strip of Velcro (both hook and loop parts), $\frac{5}{8}$ " wide and 4" long

Directions:

1. Button the shirt up the front, and cut the shirt down the center of the back, through the collar, the yoke, and the length of the back.
2. Overcast the raw edges by hand or sewing machine, sewing through all thicknesses of the folded collar, as shown.
3. Sew on the Velcro fastener tape as shown in the picture on the next page. Sew the rough "hook" part of the Velcro on the right side of the shirt (so it can't rub on your skin). Don't put Velcro further down the shirt, since you will be seated while eating.
4. If you want the cuffs to be easy to slip on and off without undoing buttons, enlarge the cuff opening by using elastic thread or ponytail holders (as shown in Chapter 2, p. 27), and leave the cuff buttons permanently fastened.

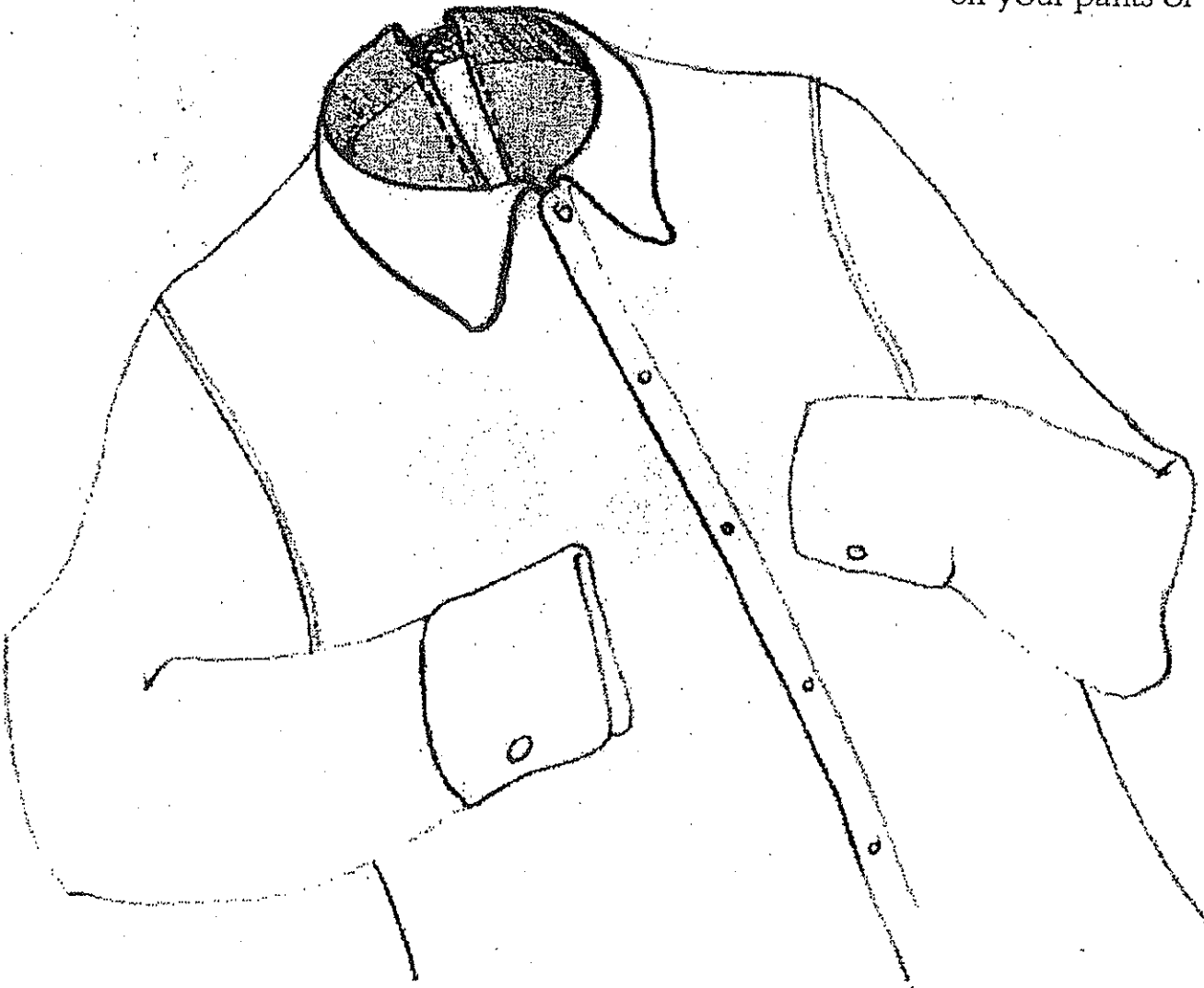




BACK VIEW

You can make the shirt stain-resistant by spraying the front with Scotchgard fabric protector (automobile supply stores carry this product for car upholstery fabric). Or you can launder the shirt after each use and discard it when it becomes stained.

A cloth napkin draped on your lap will conceal the shirt-tails. You can sew a fabric napkin permanently to the shirt front at lap level. A sewn-on napkin may be more effective in keeping spills off your pants or skirts.



BATH MITT

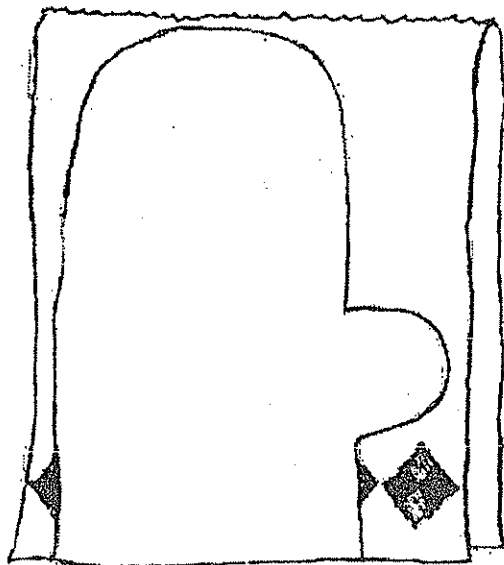
This soap mitt can keep a bar of soap from slipping out of your grasp. Accompanied by fragrant soap or after-bath powder, a soap mitt made from a pretty hand or dish towel can be a special handmade gift.

You will need:

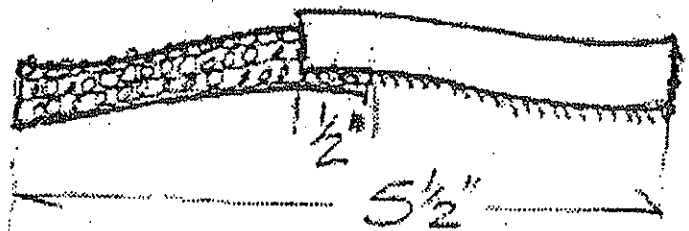
- 1 terry-cloth hand or dish towel (approximately 14 x 24")
- 1 two-part 3" piece of $\frac{1}{2}$ " wide sew-on Velcro fastener tape (3" each of the loop part and the hook part)

Directions:

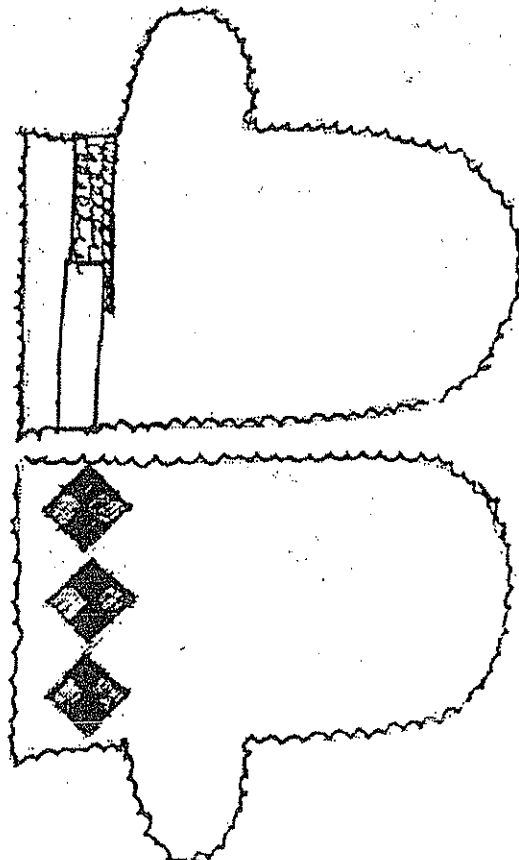
1. Trace the solid line of this mitt pattern on paper. This is your *sewing line*. Add $\frac{1}{2}$ " all the way around (1" if your hand is very large) for your *cutting line*.
2. Fold the towel in half, matching hemmed ends. Cut along the fold line so you have two equal pieces. Place the paper pattern on the towel, matching the wrist end of pattern with the hemmed ends. Cut around the pattern. You now have two mitt pieces.



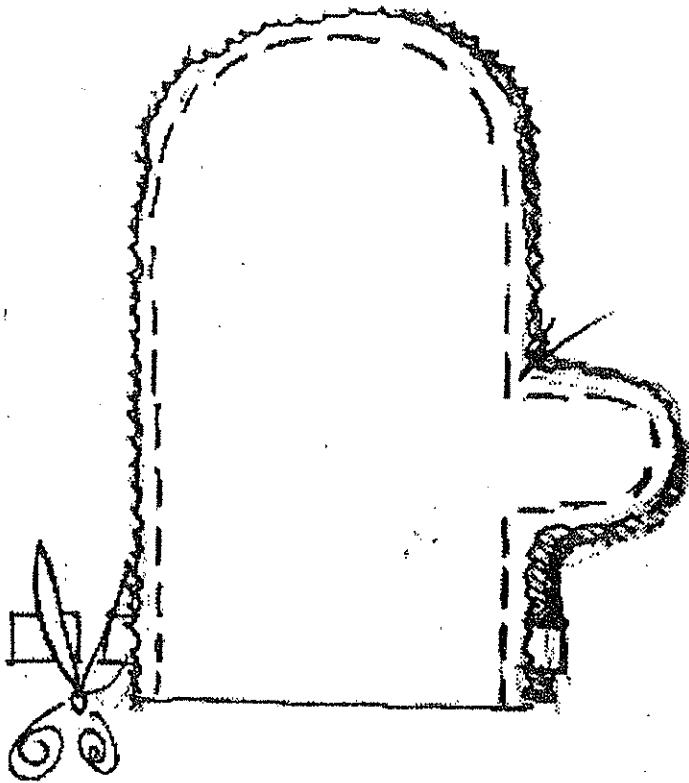
3. Overlap by $\frac{1}{2}$ " the ends of the pieces of Velcro tape. You should now have a $5\frac{1}{2}$ " long strip (as shown here).



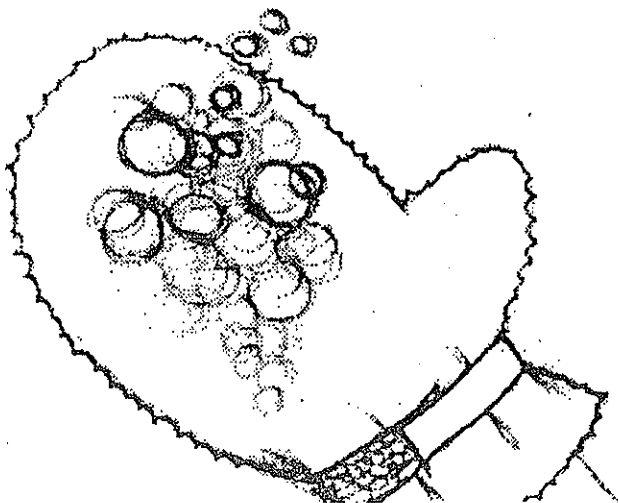
4. Separate the two mitt pieces. Lay the Velcro strip on the right (decorated) side of one mitt piece, about $1\frac{1}{2}$ " from the wrist end. Baste or pin the Velcro in place.
5. With right sides together, stitch the two mitt pieces together along the stitching line, sewing through the basted-in Velcro tape. Reinforce the stitching at the wrist ends. Clip the seam at the base of the thumb, almost to the stitching.



6. To prevent the rough end of the Velcro strip from rubbing your wrist, cut it off close to the seam. Turn the mitt right side out.



7. To use the mitt, put it on your hand and slip a small bar of soap inside the palm. Fasten the Velcro strap snugly. Wet the mitt and work up a lather.



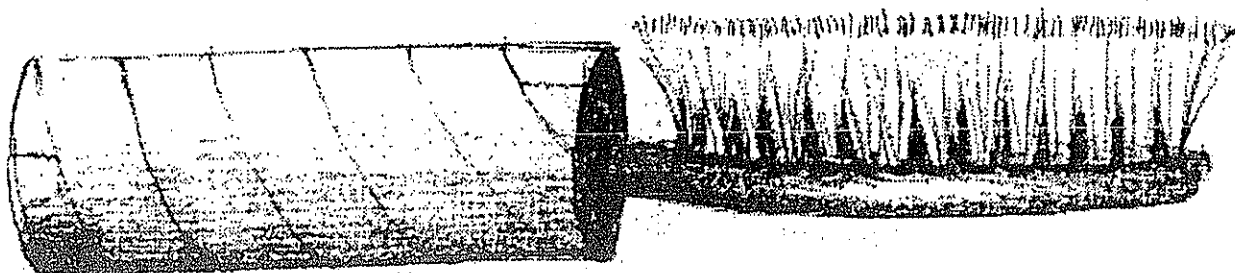
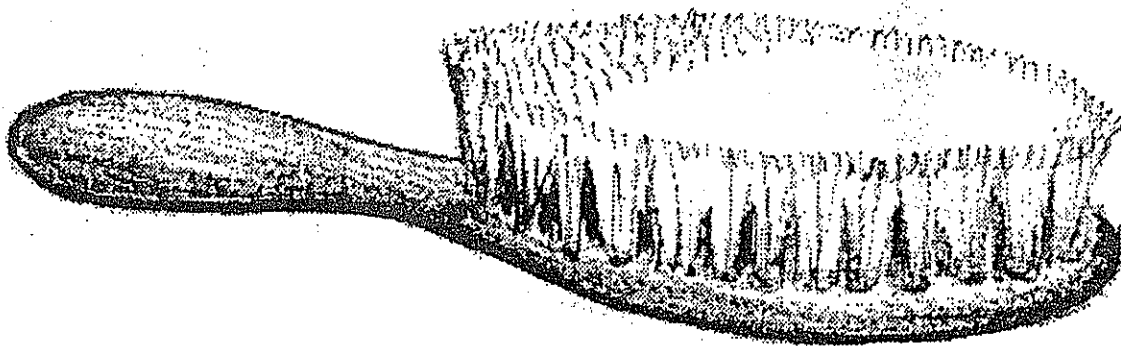
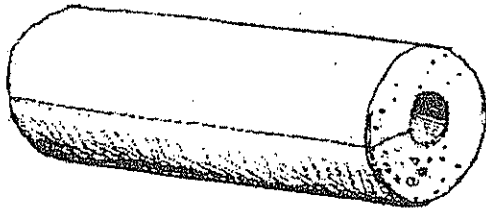
BUILT-UP HANDLES FOR HAIRBRUSH AND TOOTHBRUSH

Hairbrush

If you have difficulty grasping things, or if you prefer having a handle that is soft to hold, you can build up the handle of your hairbrush.

Use hot-water-pipe insulation made of preshaped foam and wrap it with plastic tape. Tape comes in many colors, so you can choose one that matches your decor.

1. Take a short piece of hot-water-pipe insulation (available at hardware and plumbing stores), and cut a section the



length of your hairbrush handle.

2. Use pipe insulation with an inner diameter that will fit snugly around your hairbrush handle. If this makes it too bulky, you can cut a lengthwise wedge out of the insulation to make it fit better (see p. 44 for detailed instructions).
3. Fit the insulation snugly around the hairbrush handle and wrap it tightly with plastic tape, as shown.

Toothbrush

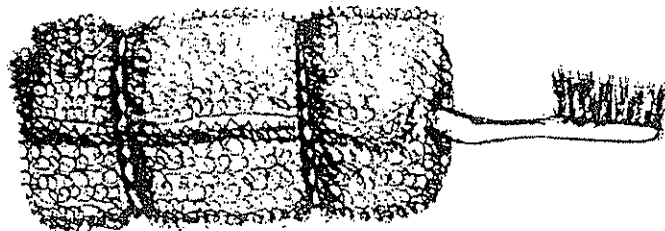
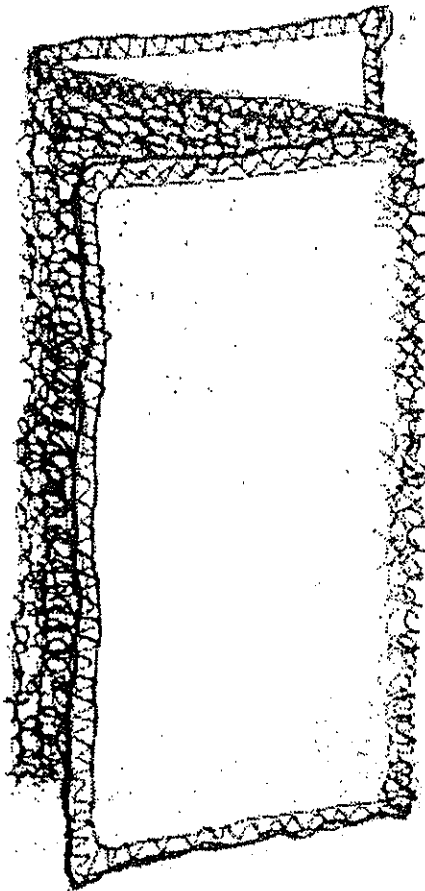
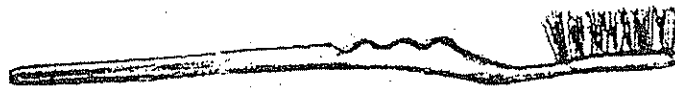
You can also create a simple, built-up handle for your toothbrush, but you will want to make it out of something washable.

1. Take a piece of terry cloth or an old washcloth.
2. Fold the washcloth into a rectangle whose short side is a little shorter than the handle.
3. Wrap it snugly around the toothbrush handle as shown in the picture.

4. Fasten it with a couple of rubber bands or ponytail holders.

It's easy to take the toothbrush grip off when you want to launder the cloth.

If it is hard for you to manipulate a regular toothbrush, try an electric one. For cleaning dentures, a nail brush or vegetable brush works well and will be easier to hold onto than a toothbrush.



ARMCHAIR CADDY

The armchair caddy is a convenient three-pocket "hold-all" that you can attach to the arm of your favorite upholstered chair. It can hold your reading glasses, TV guide, and remote control for your television. This is a simple sewing project and makes a nice gift. There's no cutting involved, only simple sewing.

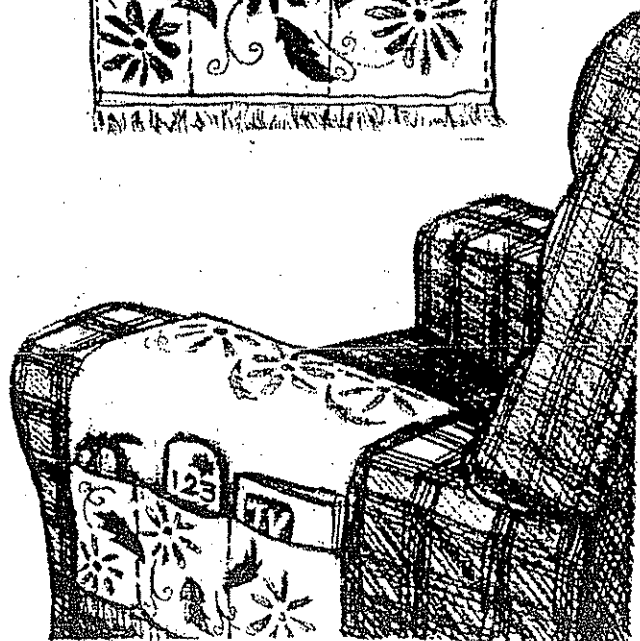
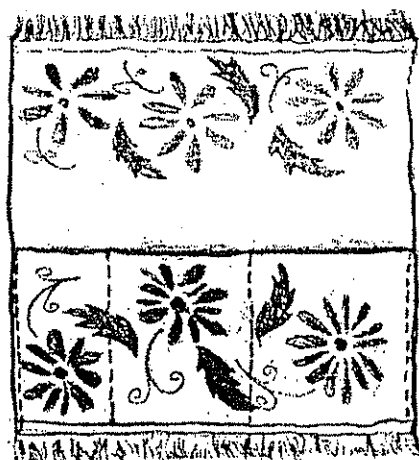
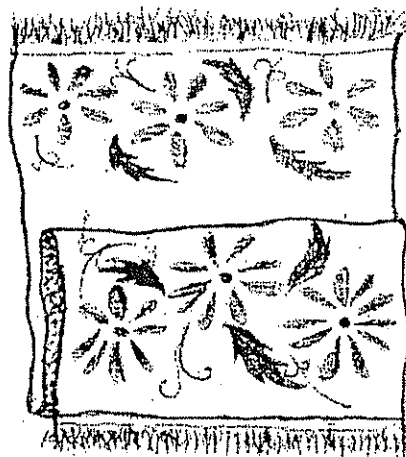
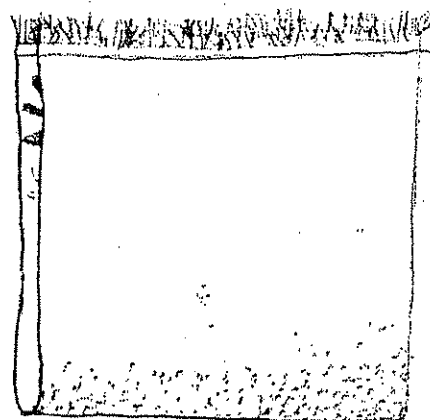
You will need:

1 hand or dish towel, about 15" x 24"
sewing thread

Directions:

1. Fold the towel in half (as illustrated) with the decorated sides together. Then fold back one side so the hemmed edge lines up with the halfway fold. The double-folded part will form the pockets.
2. Pin the edges of the pockets and sew through all three layers of fabric along the two edges of the bag. Reinforce your stitching at the top of the pocket.
3. Sew two other parallel lines of stitching as shown in the drawing, dividing the pocket into three sections. (You may want to make the pockets of unequal sizes, depending on what you plan to put in them.) Reinforce your stitching at the tops of the middle seams.

The seams form three pockets. Depending on the style of your armchair, you can fasten the caddy to the arm of your chair with safety pins (tucked out of sight), or add extra fabric to the end of the towel to slide between the cushion and the chair arm.



Simple Walker Bag

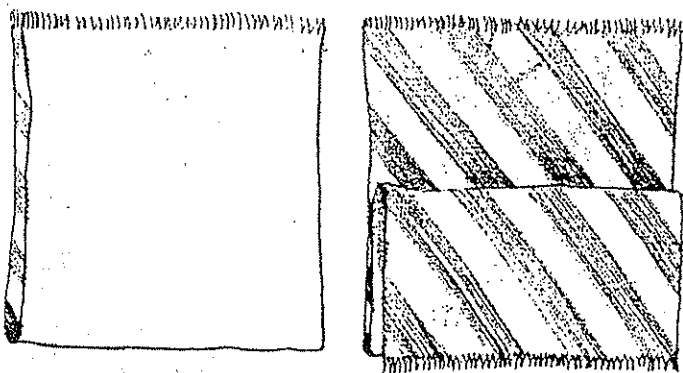
The walker bag is a convenient, washable, two-pocket carry-all that attaches to a walker and can hold paperback books, eye-glasses, tissues, medicines, and other light-weight items. This is a simple sewing project and makes a nice gift. No cutting is needed, just some simple sewing.

You will need:

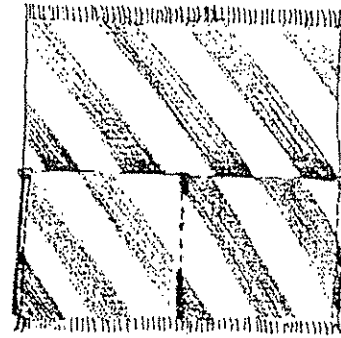
- 1 hand or dish towel, approximately 15" x 24"
- safety pins or sew-on Velcro tape fastener
- sewing thread

Directions:

1. Fold the towel in half (as illustrated) with the decorated sides together, and then fold back one side so the hemmed edge lines up with the halfway fold. The decorated side will be showing now. The double-folded part will form the pockets.



2. Pin the edges of the pockets and sew all three layers of fabric along the two edges of the bag. Reinforce your stitching at the top of the pocket.
3. Sew another line of stitching down the middle as shown in the drawing, dividing the pocket into two equal sections.



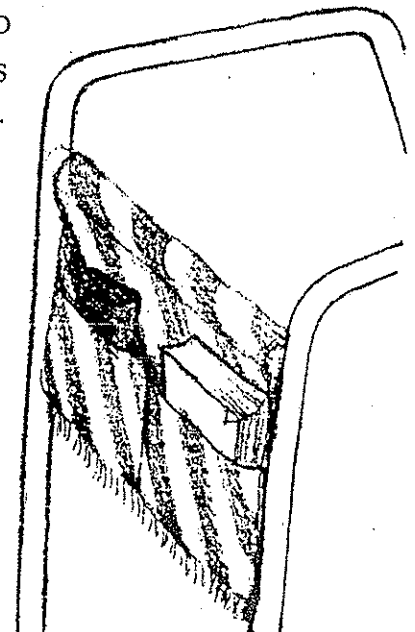
Reinforce your stitching at the top of the middle seam. The seams form two pockets.

5. The bag can be easily fastened to the walker with safety pins as shown, or with strips of sew-on Velcro tape; or you can sew on buttons and make button-



holes to fasten it to the walker. Safety pins are the easiest, and they make the bag easily removable for washing.

A variation on this idea is to make a narrow, deep bag out of terrycloth, to carry a cordless telephone, knitting needles, or a rolled-up magazine.



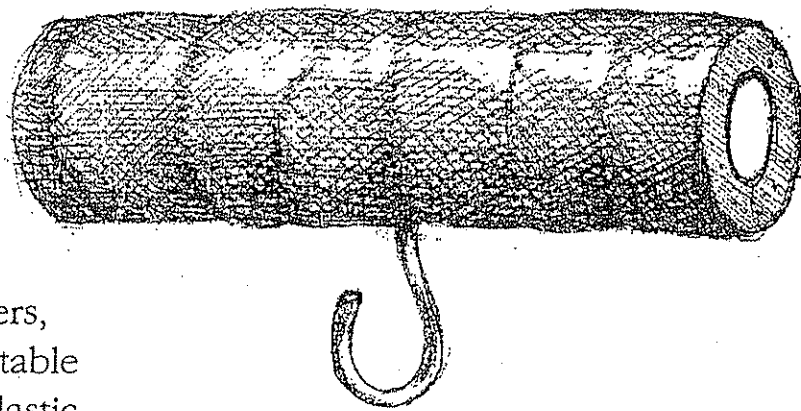
GROCERY BAG HANDLES

Plastic grocery bags have their good and bad points. If you have arthritis in your hands, or weak fingers, you may find it difficult or uncomfortable to carry your grocery bags by the plastic handles. These simple grocery bag handles may be very helpful. The handles can be stored in your handbag or fanny pack when they are not being used. A set of two handles, perhaps with one of each type of handle, would make a nice gift.

One-Hook Handle

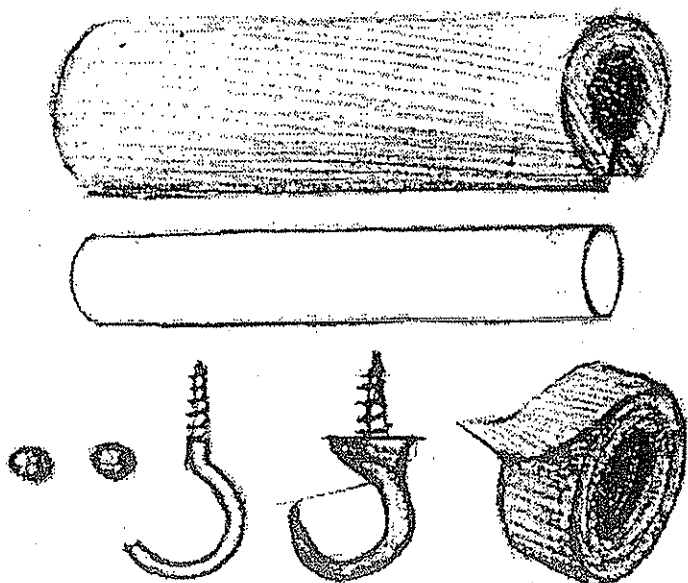
You will need:

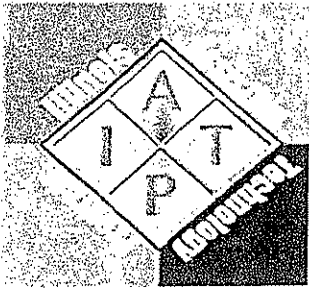
- 1 large cup hook (1"), or 1 large safety cup hook plus one wooden bead
- 1 4"-long piece of $\frac{3}{4}$ " dowel
- 1 4" piece of foam hot-water-pipe insulation to fit over the dowel
- plastic tape to wrap



Directions:

1. Drill a pilot hole in the middle of the dowel.
2. Screw in the cup hook so that the hook opens at right angles to the length of the dowel.
3. Split the foam pipe insulation and slip it over the dowel and hook as shown.
4. Wrap snugly with plastic tape.
5. To make a safety cup hook easier to open, use epoxy or other strong cement to glue a bead on the end of each cup hook spring (as shown on the next page in the illustration of the two-hook handle).





Card Holder

Materials:

- 2 buttons
- 2 margarine tub lids (The smaller tubs, usually about 3.5" in diameter.)
- Thread
- Needle (Use one of your bigger needles.)

Directions:

- Put the lids together, top to top and lay them on the table.
- Put one of the buttons in the center of the stacked lids.
- With the needle poke two holes through the button holes into the center of the tub lids.
- Now pick it up the stacked items and place the second button over the holes on the back side. Sew together.

You're done!

Variations:

De suggests that you can use coffee can tops too. They are larger and a little sturdier.

NAIL CLIPPER

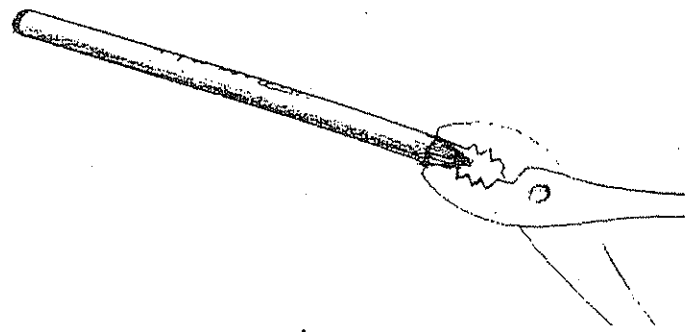
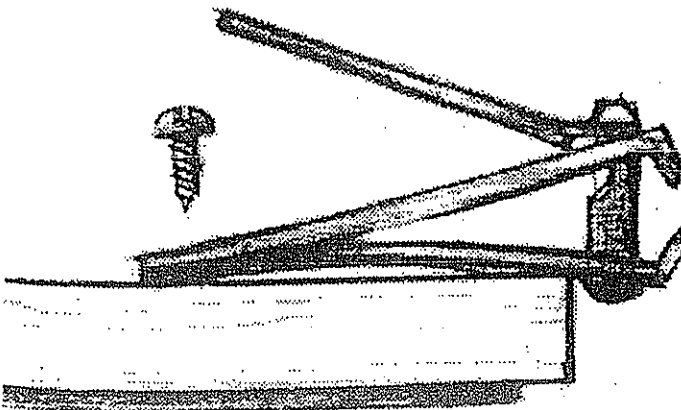
Try this stabilized nail clipper. The long handle provides extra leverage so it's easier to use. The nonslip base keeps the nail clipper steady.

You will need:

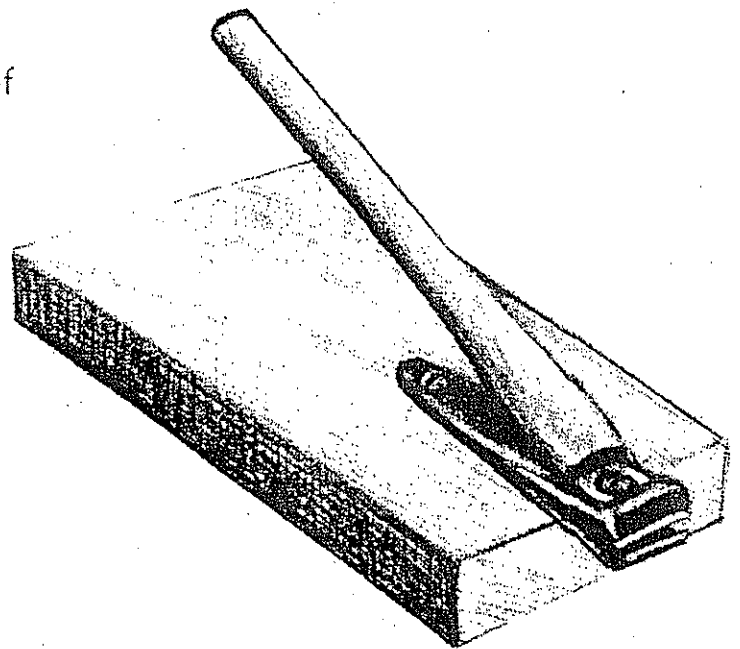
- 1 regular nail clipper
- 1 5" long piece of 1" x 3" lumber (finished size $\frac{3}{4}$ " x $2\frac{1}{2}$ ") or other similar piece of scrap lumber
- 1 # 6 x $\frac{3}{4}$ " roundheaded screw
- 1 discarded stick-type ballpoint pen
- silicone bathtub and tile sealant
- sandpaper
- paint or polyurethane finish if desired

Directions:

1. Cut your piece of lumber to size, sand it, and apply finish if desired.
2. Center the nail clipper on one end of the piece of lumber, allowing it to stick out $\frac{1}{2}$ ".
3. Use a pencil to mark the position under the hole in the nail clipper.
4. On the mark, drill a small pilot hole in the wood.



5. Put a dab of sealant on the underside of the nail clipper. Attach the nail clipper to the wood block with the screw.
6. Take the pen apart as shown in the picture. Use a pair of pliers to extract the ink cartridge if you can't twist the pen apart with your hands.
7. Slip the empty pen shaft over the handle of the nail clipper. Force the shaft all the way to the base of the handle, or as far as you can push it on.



8. To create a nonslip surface, spread a thin coating of silicone bathtub and tile sealant on the underside of the wood block, or glue a piece of nonslip mesh rug backing to the underside.



Get a Grip!!

Creative Uses for Grip-It

- (1) As a shelf liner, to keep items from sliding
- (2) Under a mixing bowl, to keep it from sliding while mixing (especially good for those preparing food with one hand)
- (3) Under seat cushion on a wooden chair, to keep cushion from sliding
- (4) Under area rugs, to keep from slipping
- (5) As a jar opener
- (6) Under the telephone, to keep it from sliding
- (7) On a food or serving tray, to keep dinnerware from sliding
- (8) As a small strip sewn into a waistband, to keep shirttails from coming out

