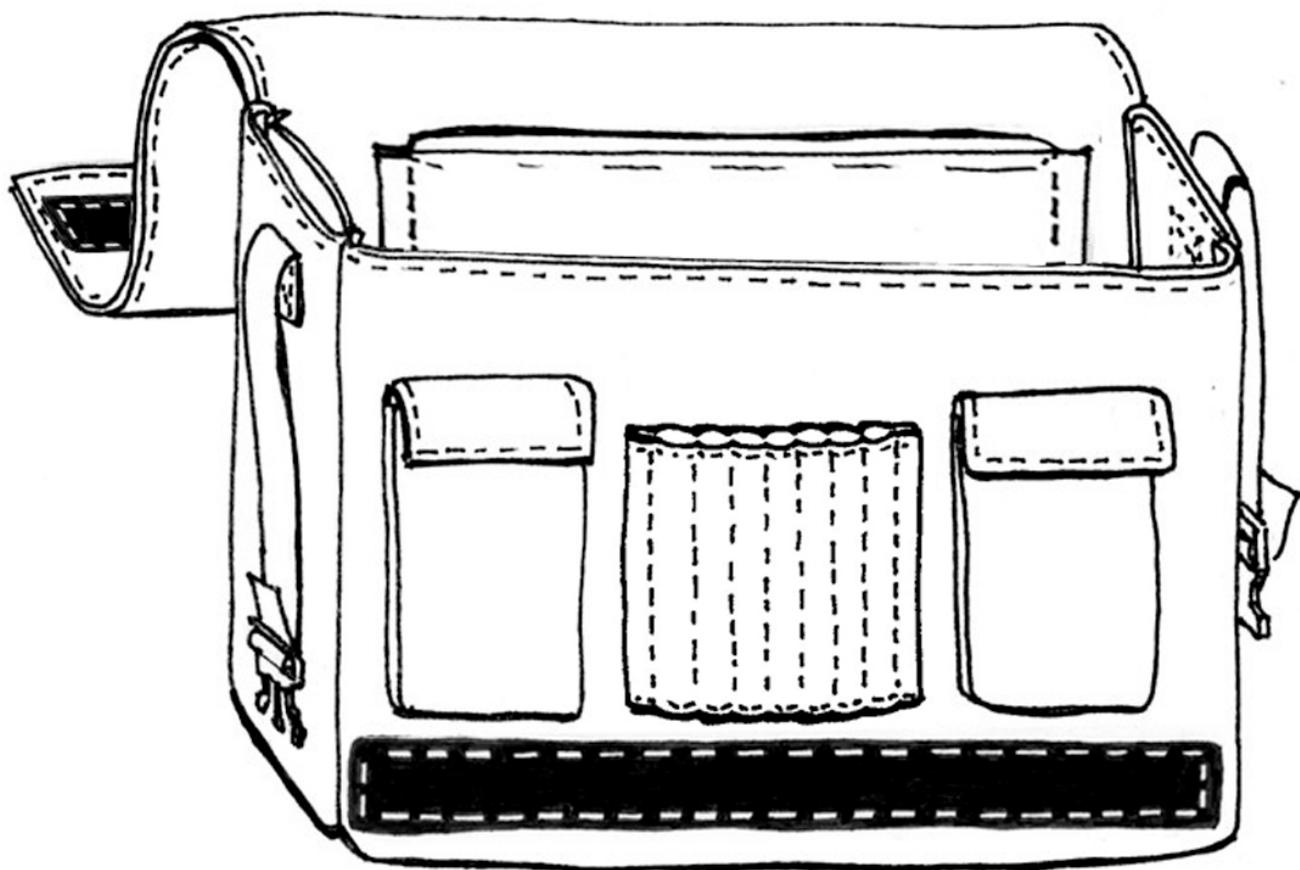


HOW TO
BAG

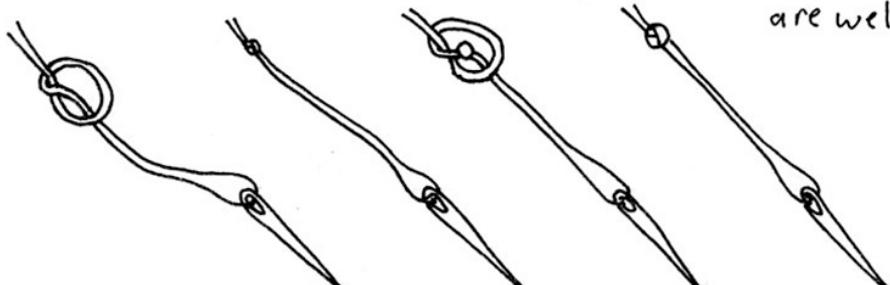


cofree
MMVI

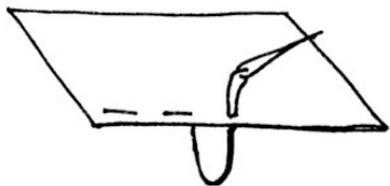
MATERIALS AND METHODS

| MATERIAL | COST |
|--|---|
| 2yds x 2yds of "duck cloth," a heavy canvas \$ | ≈\$7 |
| "weatherproofing" (a shower curtain, tarp, or marine vinyl) + | \$2-\$8 |
| 2spools of ^{waxed} dental floss, not dental tape. this is our thread + | \$3 |
| tape or pins (for holding things) + | \$1 |
| 2" wide strap, one 15" length and one 26" length. rip some seat belts out of a car if you have access to a junkyard \$ | 0-\$3 |
| a buckle that fits a 2" wide strap + | \$2 |
| 2" wide velcro, approx. 18" in length \$ | \$2 |
| "seat foam," two pieces about 2ft x 2ft by 1" thick. find this in seat cushions or a fabric store. \$ | \$4 |
| ½" wide velcro, buttons, or buckles (for holding the small pockets shut) + | \$2 |
| 1" wide strap, about 3ft in length. \$ | \$2 |
| a buckle that fits a 1" wide strap, preferably with a reflector on it. \$ (you probably need to go to a fabric store for this) | \$2 |
| needle, thimble, scissors, ruler, and measuring tape. (borrow from a friend). | — |
| Teasily liberated from WalMart, big chain stores *optional, see pages 15-18 for explanation \$ buy this from a nice small fabric shop. | Total = \$27 - \$36 (assuming you buy everything). |

threading & knotting : loop the floss through the needle and make a slip knot. Make like 5 more knots on top of the knot to make sure your stitches are well anchored.



Stitching



Good!

go all the way through
for each stitch.



Bad!

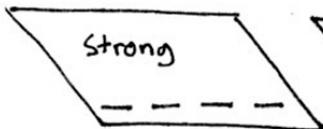
don't scrunch
up the fabric!



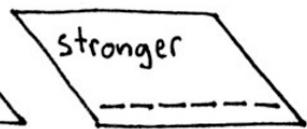
single stitch.



double stitch.



sew a line in one
direction.



... then sew back in the
other direction.

make your stitches big and strong. it's a handmade bag, no need to make it look like a machine was used.

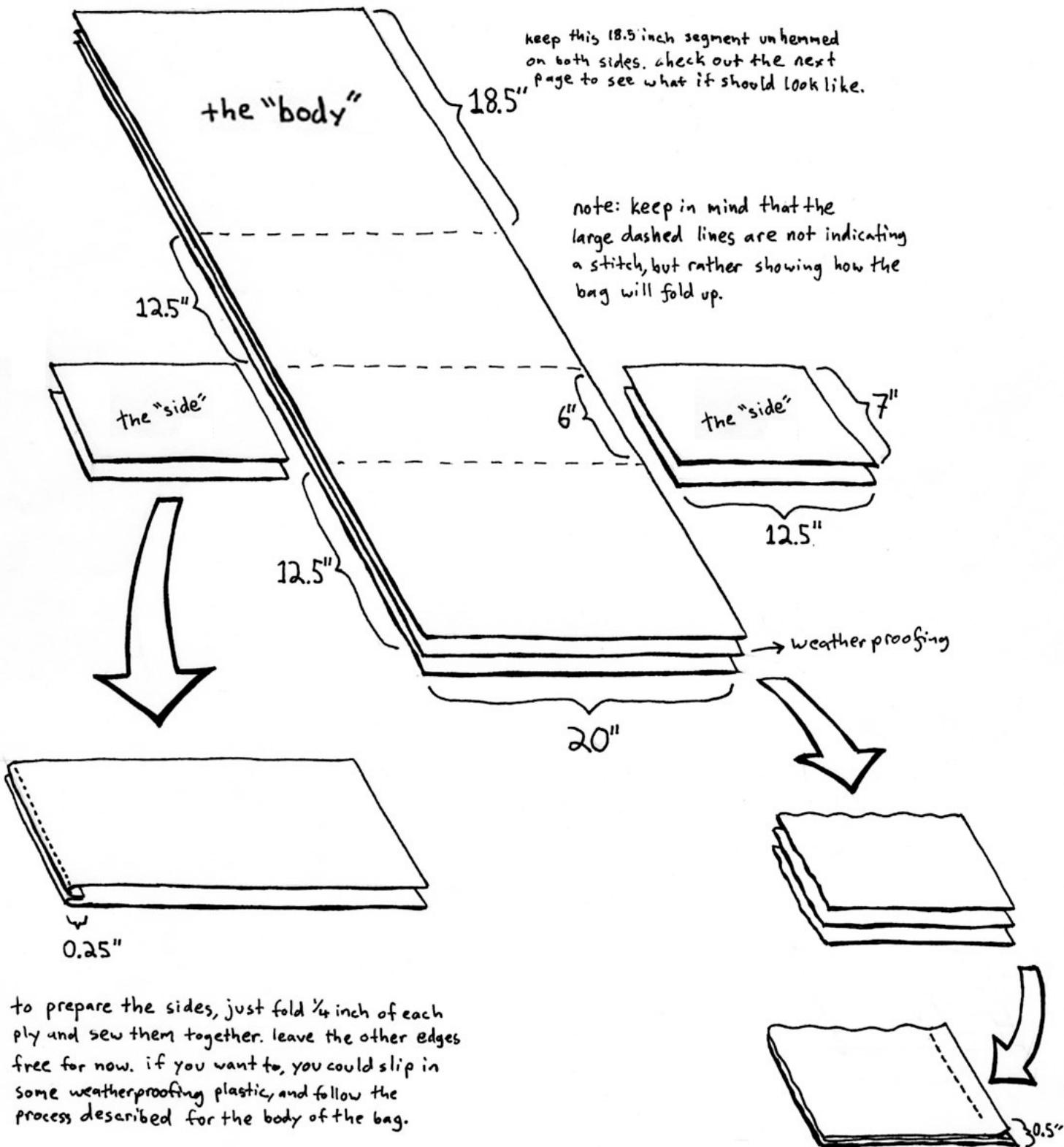
Why make your own bag?

it's fun. it's easy. it's self-sufficiency. it's cheap. it's an awesome bag! i've held over 60lbs. in mine and it's no worse for wear. i got into a bike wreck where i flew over my handlebars and skidded on my bag; it's unharmed. you can fit two 12-packs of cans in it. it's also a beautiful, cartoony bag that you'll have forever. your stuff will stay dry in downpours, and feel comfy on your back. do it yourself, and customize it as you will.



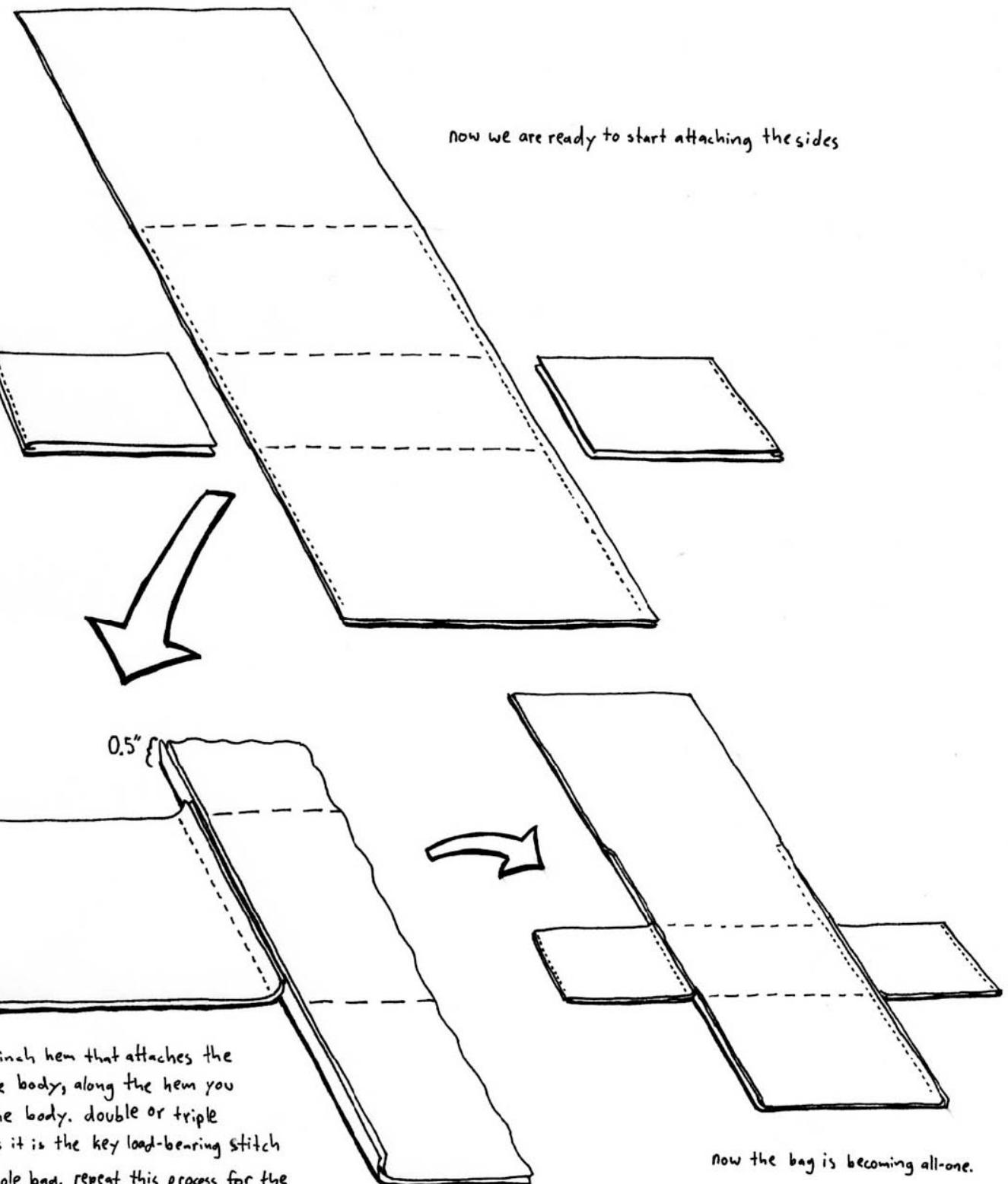
Tim

(tim@lasercave.org)



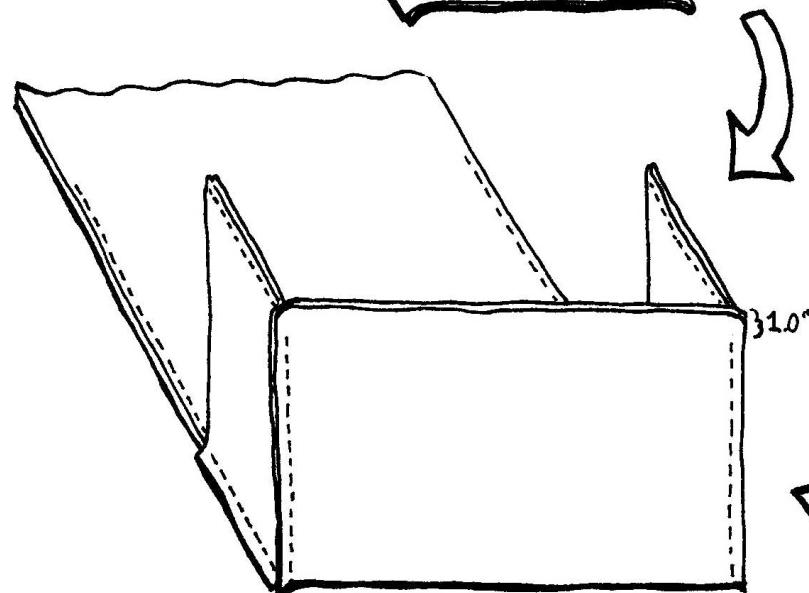
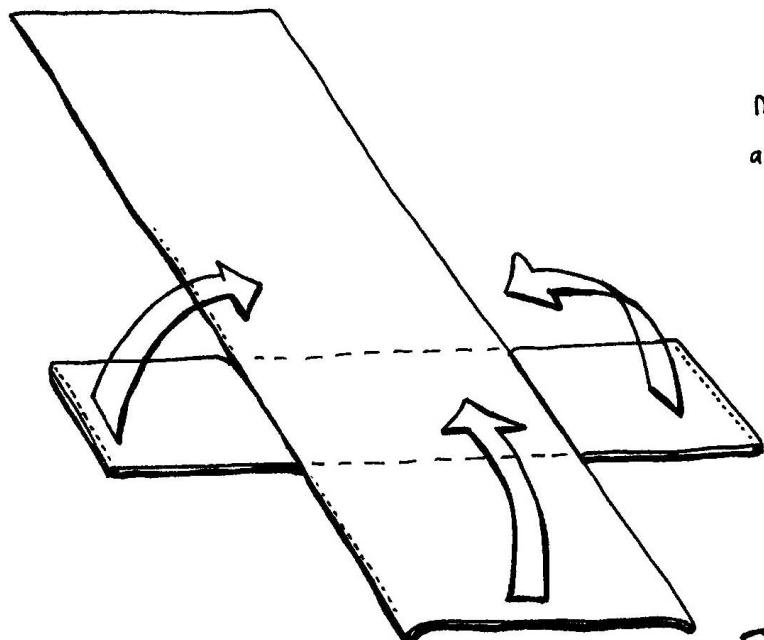
to prepare the sides, just fold $\frac{1}{4}$ inch of each ply and sew them together. leave the other edges free for now. if you want to, you could slip in some weatherproofing plastic, and follow the process described for the body of the bag.

sew a $\frac{1}{2}$ inch hem along the lengths of the body, leaving 18.5 inches on one end unhemmed (for now). also, leave $\frac{1}{2}$ inch free on the other end (the frontmost edge in the picture above).

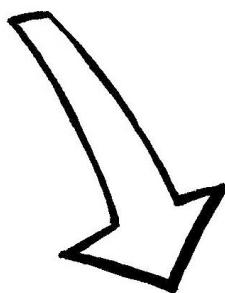


Sew a $\frac{1}{2}$ inch hem that attaches the side to the body, along the hem you sewed on the body. double or triple stitch this, as it is the key load-bearing stitch for the whole bag. repeat this process for the other side.

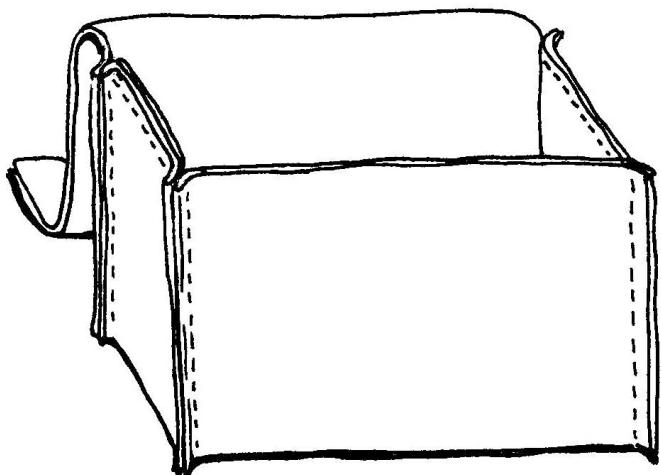
now flip the whole thing over, fold the front up
as shown and start attaching the sides. easy.

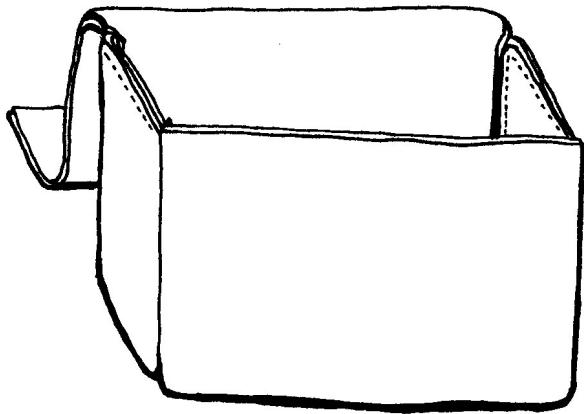


leave 1 inch unsewn on the front. We'll deal with this later. its really starting to look baggish, right? Oh, and make sure to double/triple stitch these seams. now we can sew the back on.

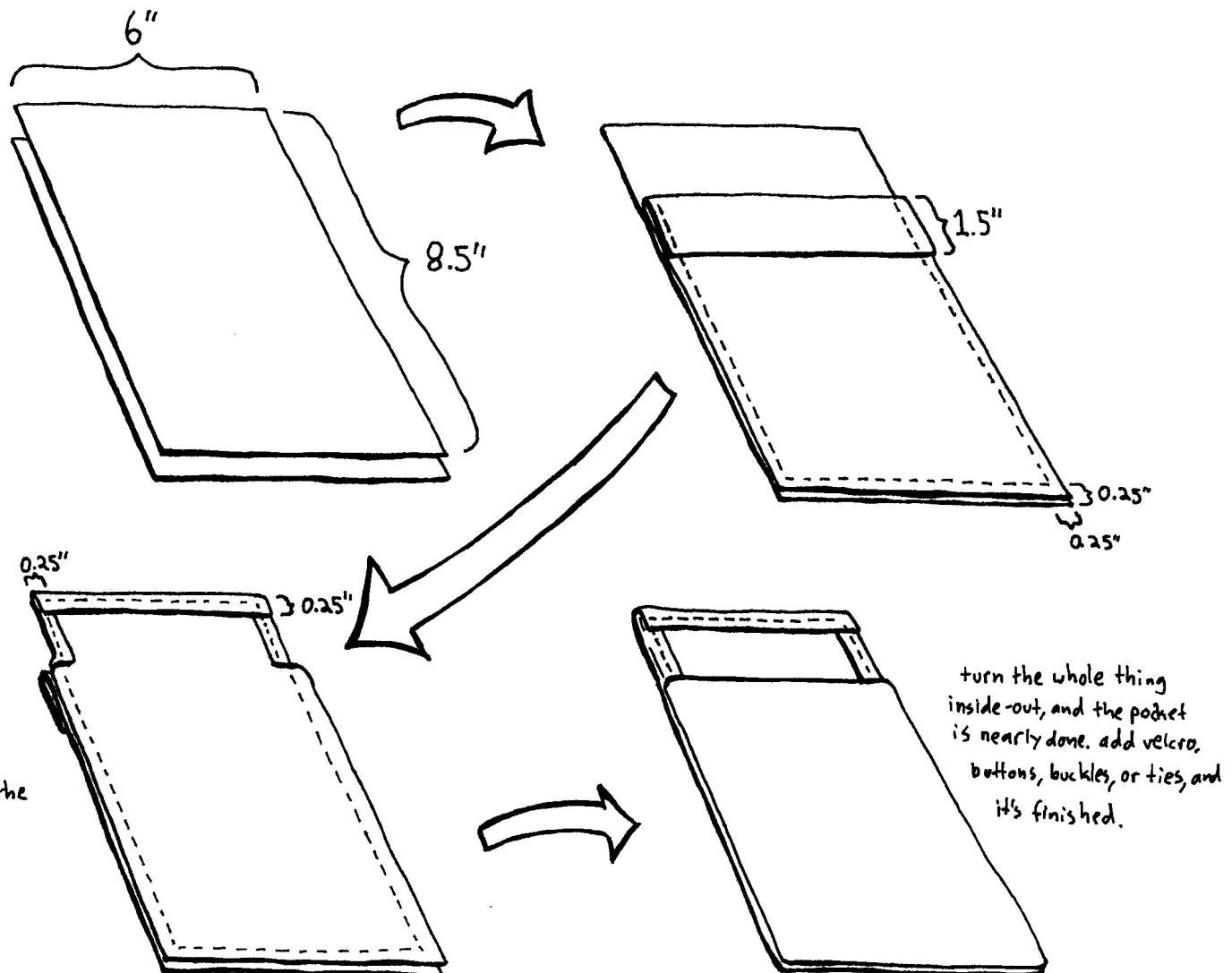


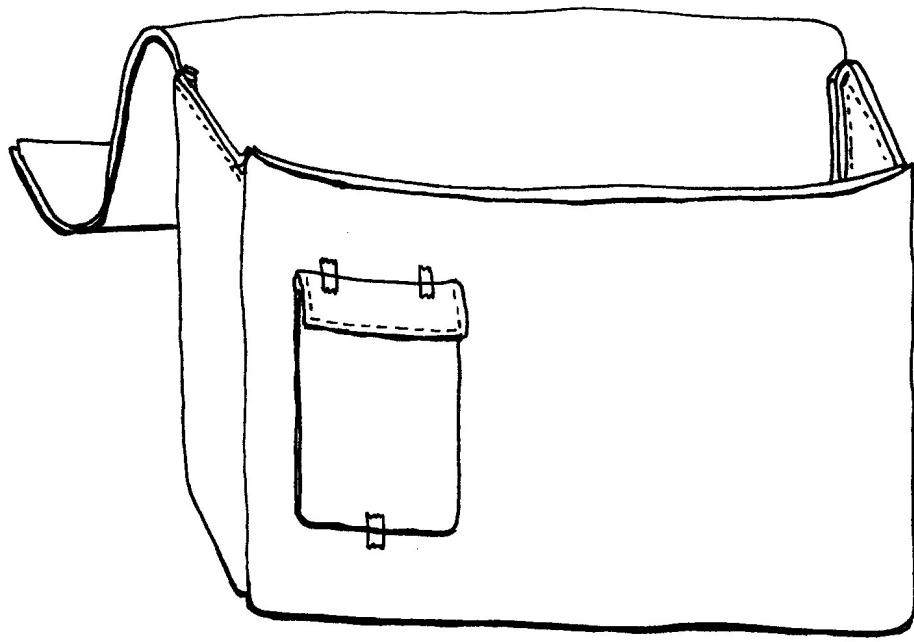
Sew the back on, which should leave
the 18.5 inches we left unhemmed
hanging loose. If it takes more, use it.
no rules!



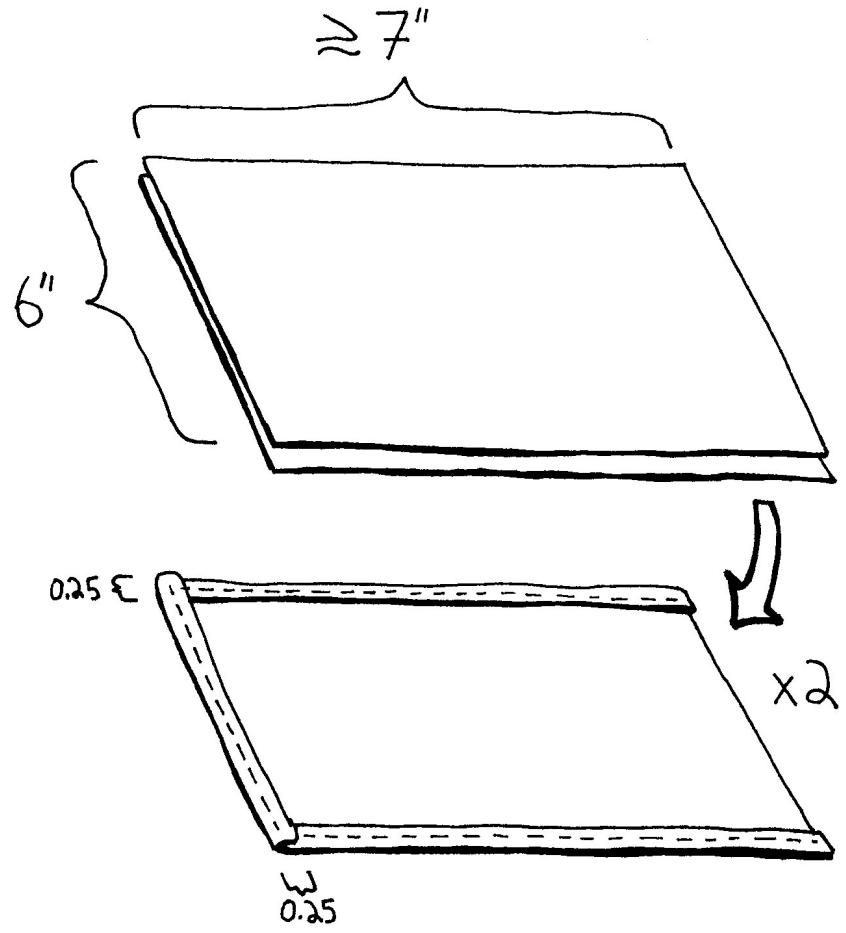
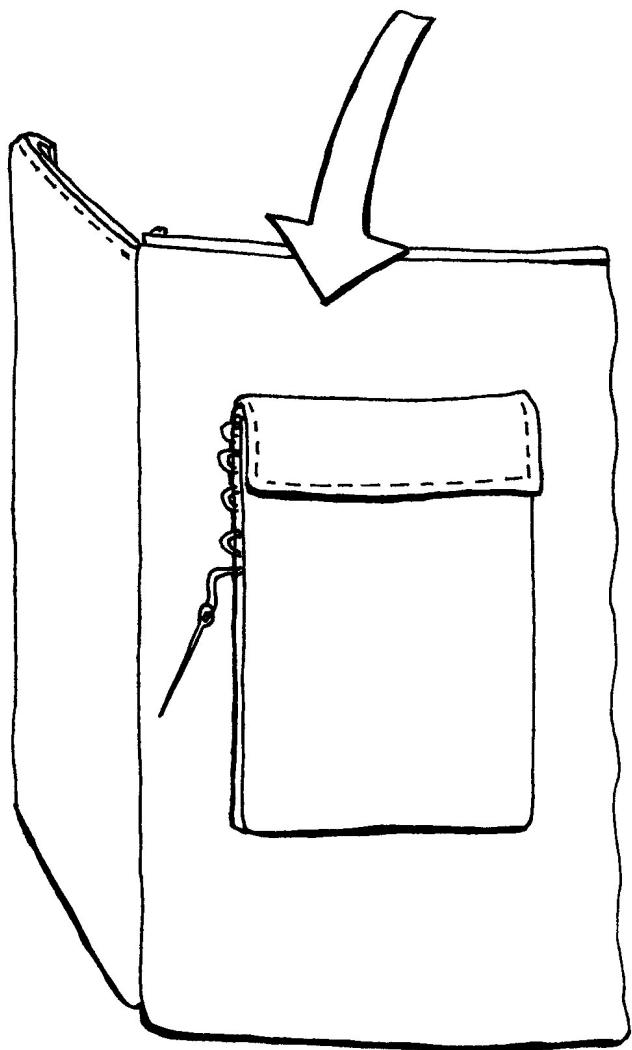


now turn what is very much a bag inside-out... or outside-in. the main structure is all done, so now lets make pockets for the front of the bag. I keep a calculator, organizer, and markers in mine at all times, so it's kindof customized for me. if you have stuff you like to have with you, tailor the pockets to your whim.

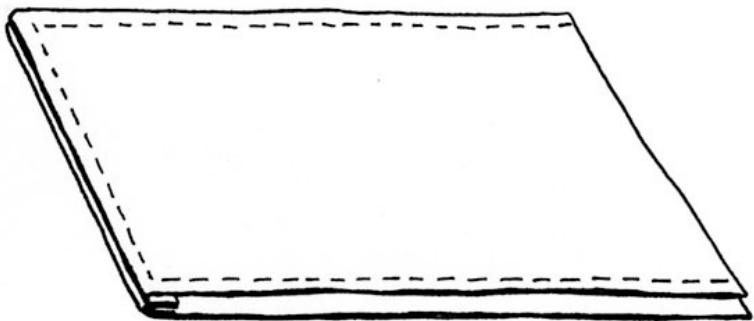




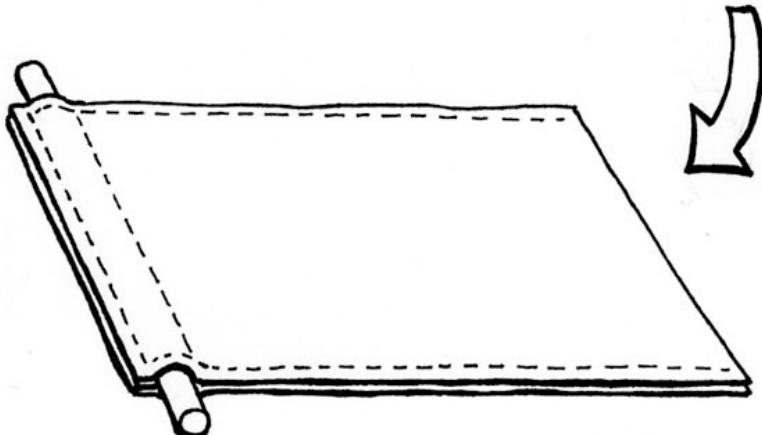
Pick a good spot for your pocket and tape/pin it on there. don't pin through the weather proofing.



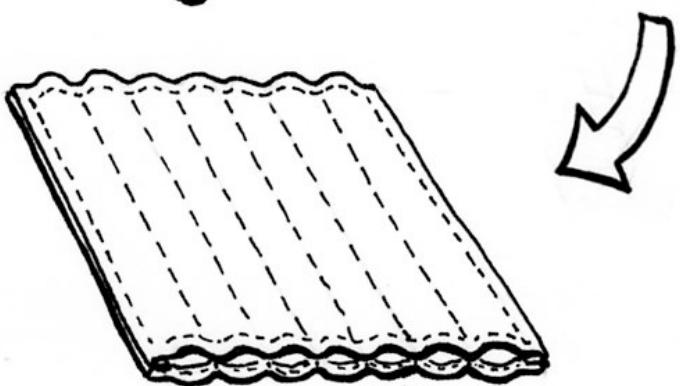
Slip one hand into the unhemmed front of the bag. sew along the hem of the pocket through only the first layer of duck cloth. you should end up with an invisible stitch. Only sew the left, bottom, and right sides, so as to



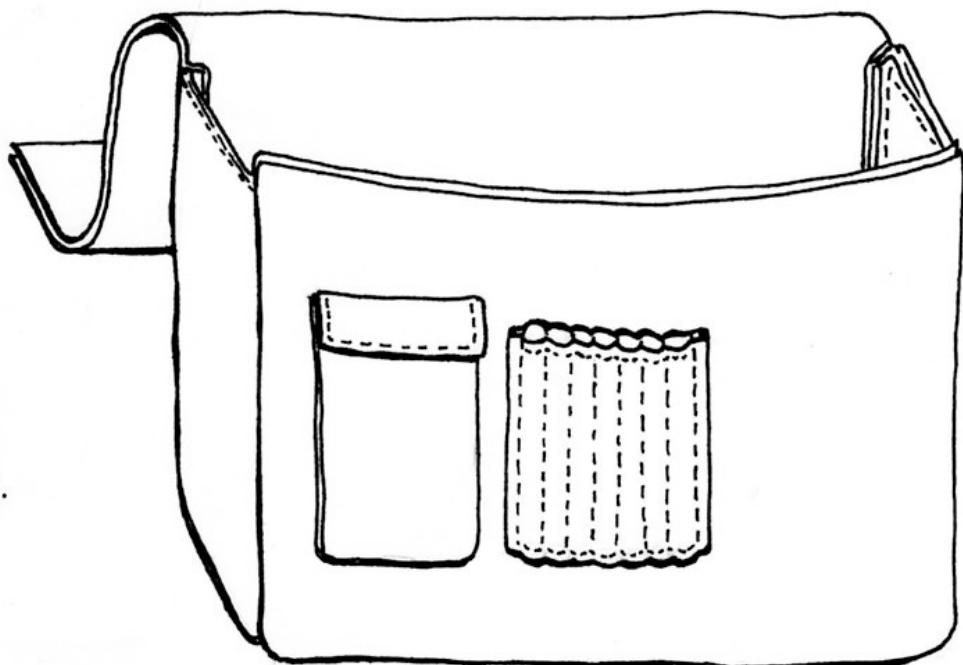
sew both pieces together like this.



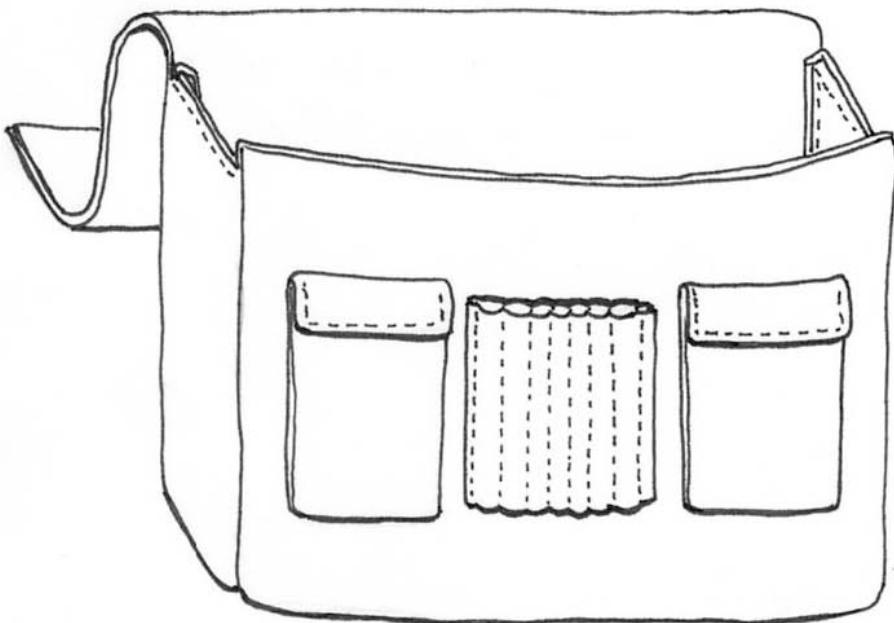
slip in a pen-sized dowel (I use two Sharpies taped end to end) and sew it along the side.



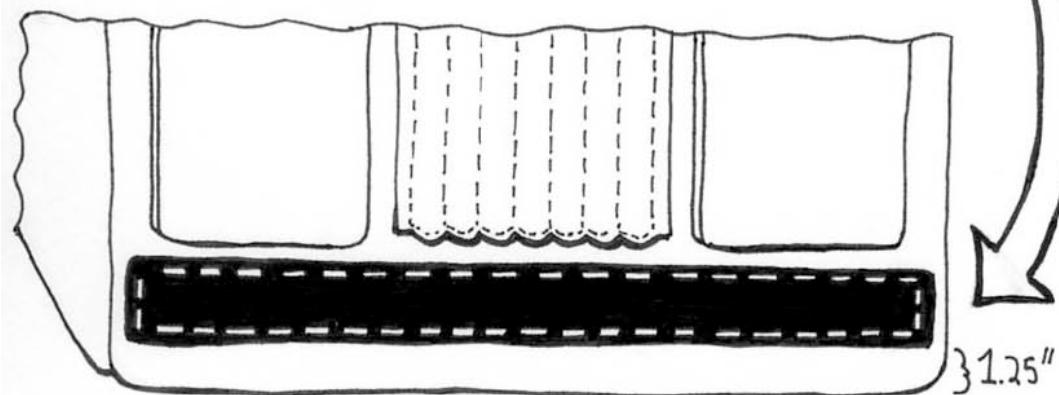
continue this until you run out of fabric, and hem up the edge.



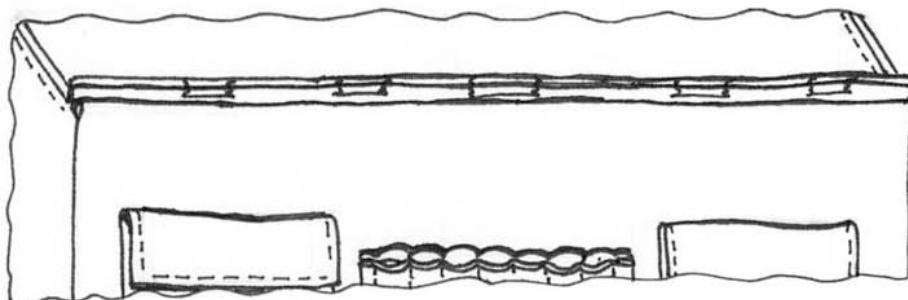
sew it onto the bag along the left, right, and bottom of the pen holder so as to leave a nice pocket behind the whole thing. remember, don't sew through the weatherproofing.



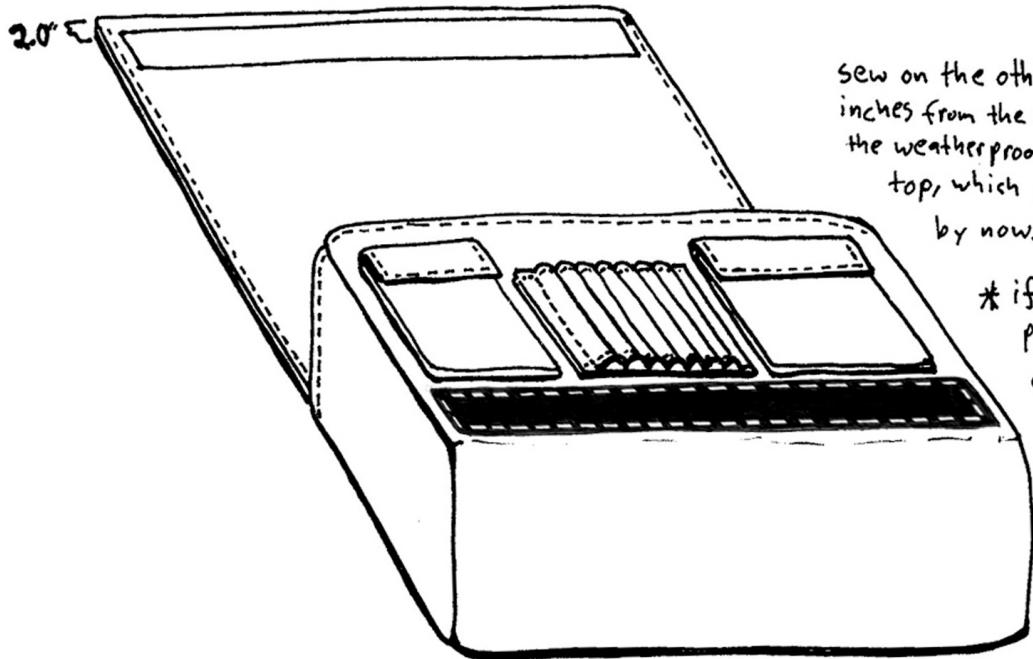
if you want to use something other than velcro, ignore this section and figure out how you want to attach straps, buckles, toggles, etc. if you want to use velcro, read on.



sew on your velcro as such. tape or pin it on, then sew in to the frontmost layer of duckcloth. try not to poke through the weatherproofing.

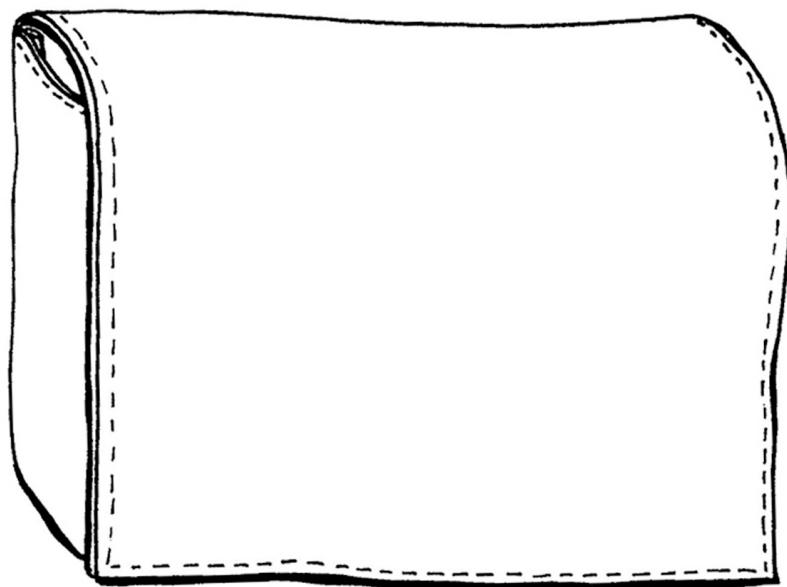


this was hard to draw, but I hope it makes sense. on the unhemmed top seam of the bag, tuck in the frontmost piece of duckcloth so it is flush with the seams on the sides of the bag, then tape together the weatherproofing and the rear layer of duckcloth, and tuck them in too. sew it up, and the front of the bag is done! if there is just too much extra material, trim it up before tucking it in.

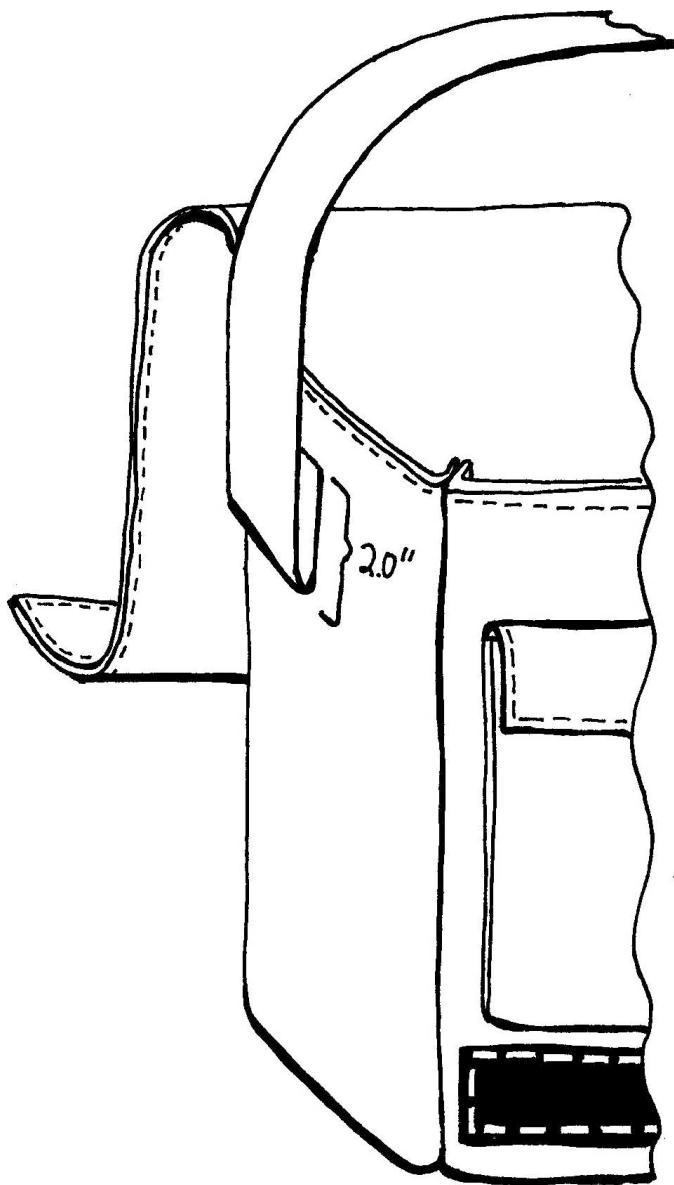


sew on the other piece of velcro two inches from the edge. don't sew through the weatherproofing. then hem up the top, which you know how to do well by now.

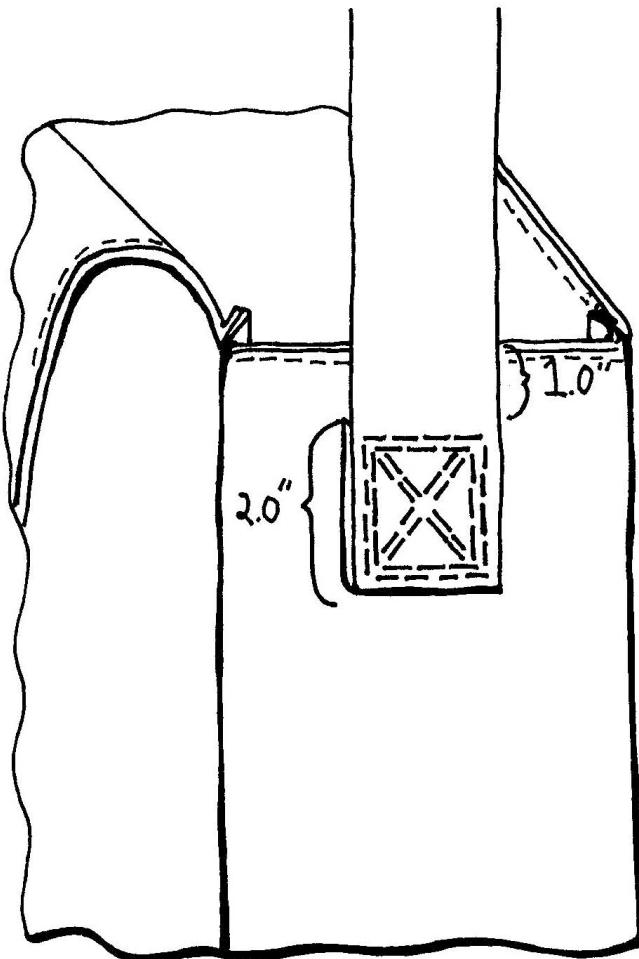
* if you want to put in a padded slot for laptop/delicates, check out page 15 before you sew the top closed.



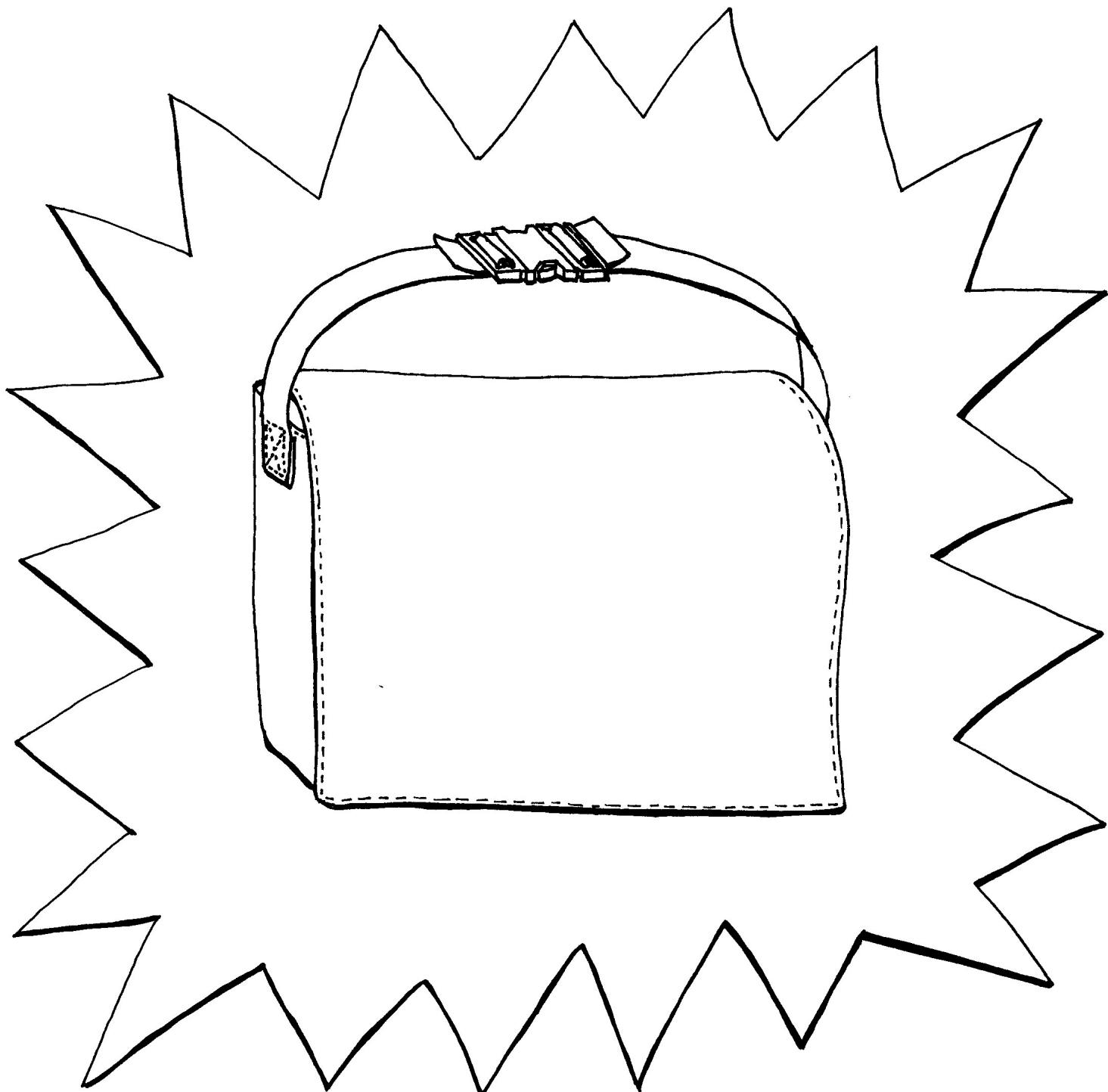
check to see how it fits. the bag is basically done. look at how blank the flap is! its perfect material to screen print on. now all we need to do is sew on straps.



place the 26" strap on the left-hand side (when front of bag is facing you) like this, then pin/tape it on.

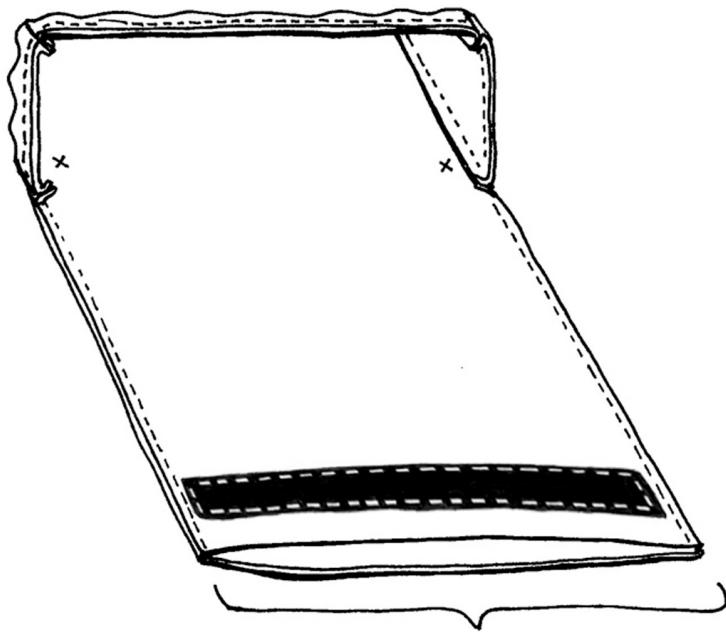


here is a suggested pattern. triple stitch this whole area, as it's vital to make it strong. sew through all 3 layers of the side panel, and tie-off the stitching inside with a strong slipknot. sew the 15 inch strap onto the other (right) side of the bag. You'll want to use a lighter to melt nylon frays at the ends of the straps to prevent unravelling. attach the buckle, and...



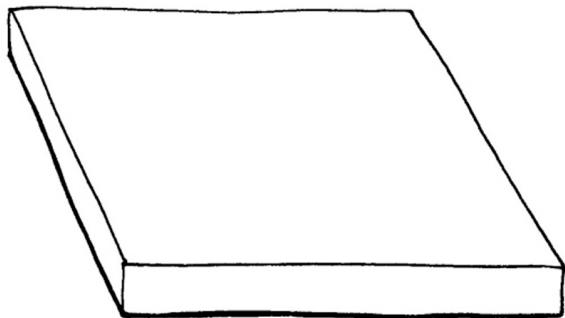
DONE!!!

now, there are some other things we can do/could've done to add to the bag. if you're satisfied here, congratulations! now, the bag is really a blank canvas to add to, modify, and play with. here are a few suggestions...



this width +0.25" will be the width of the pad. the height of the pad will be approx. 12".

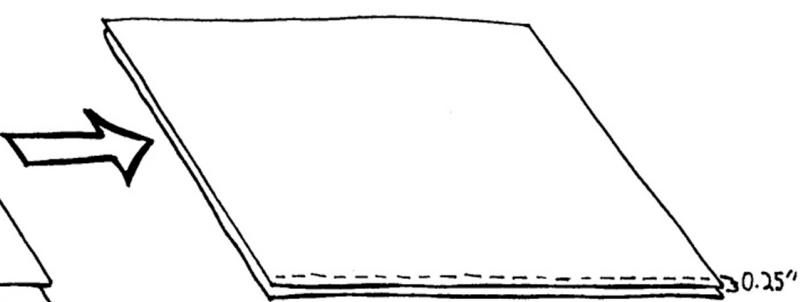
slip the pad all the way in, between the weatherproofing and the innermost layer of duck cloth. sew it to the innermost layer of duck cloth on the X's shown.



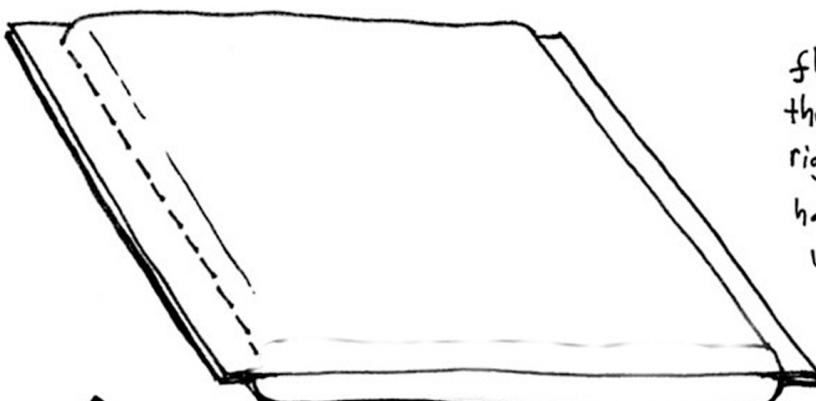
now trace a $\frac{1}{2}$ inch border around the foam square, and cut out 2 pieces of cloth in this shape.



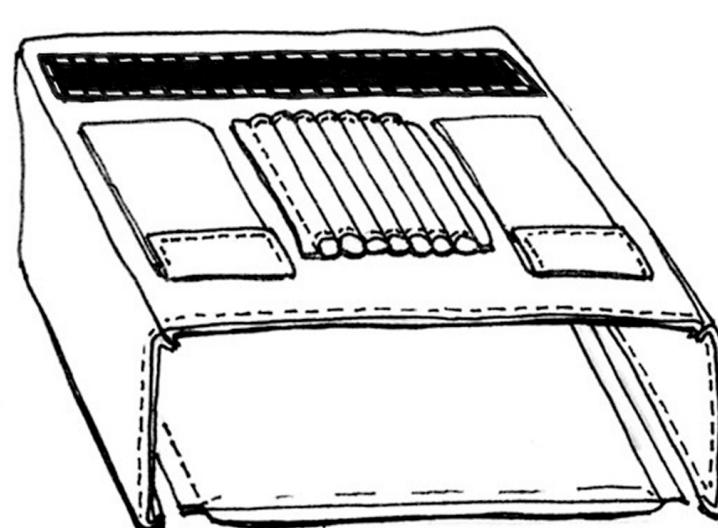
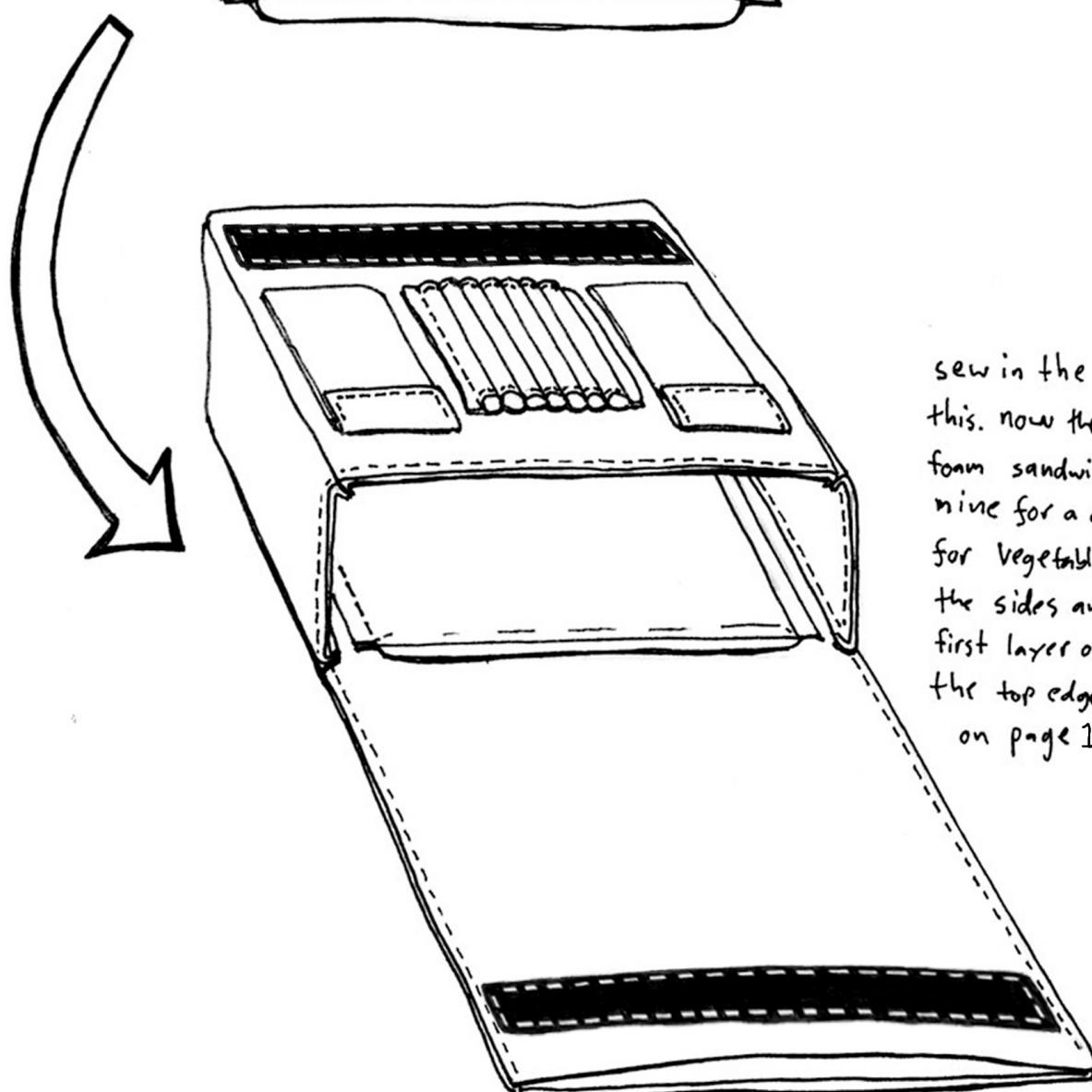
(*the extra 0.25 just makes sure there is a snug fit.)



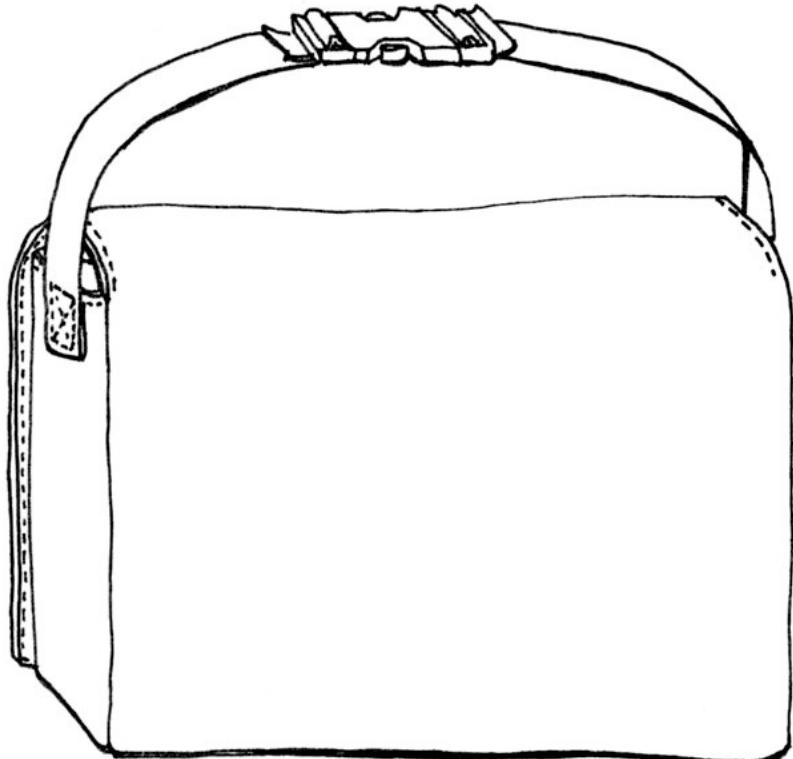
now hem a line on one of the longer edges of the two pieces of cloth.



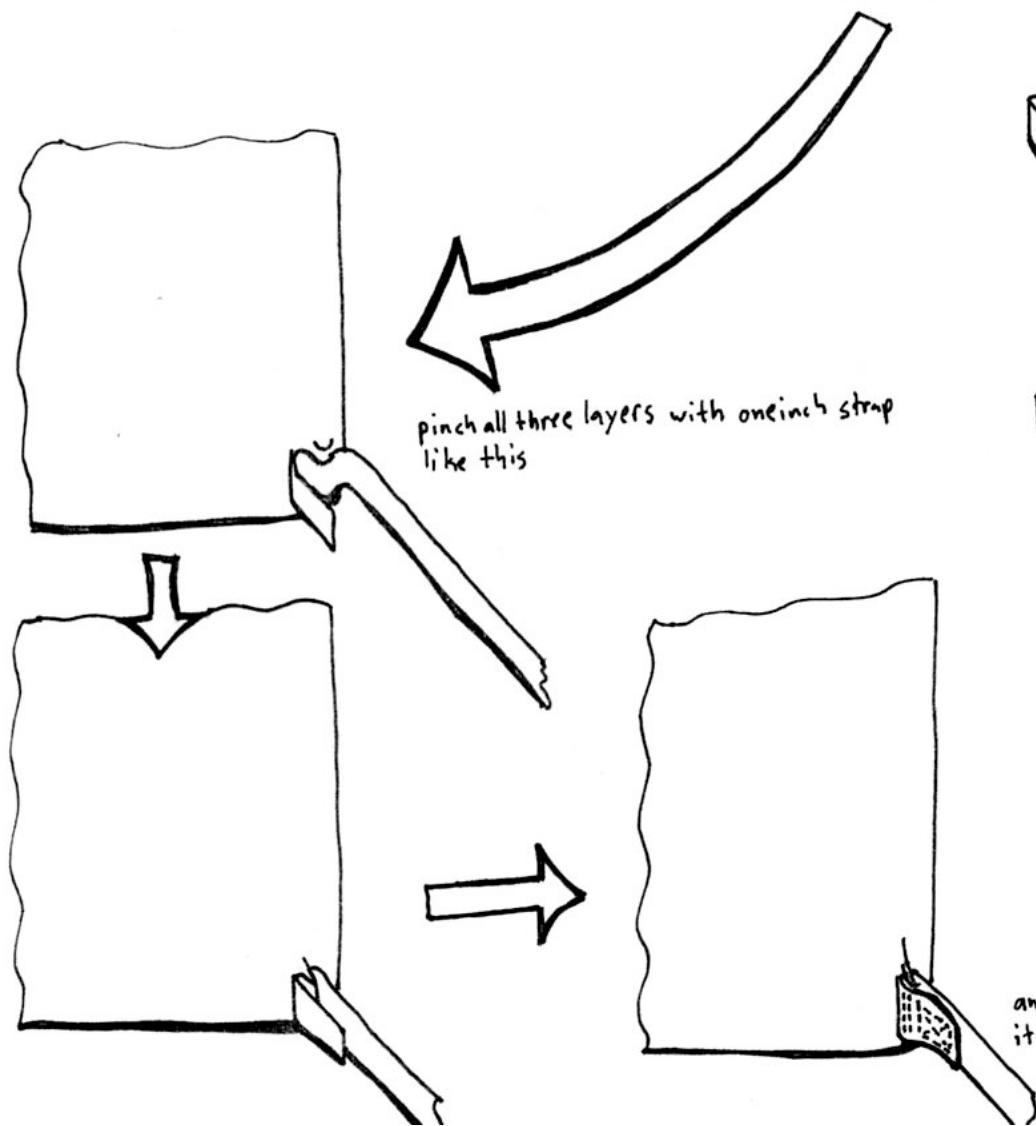
flip the two sheets inside-out, slip in the foam, and tightly sew it up on the right, left, and bottom sides (the top side having previously been sewn up). don't worry about hiding the cut edges, it will be inside the bag.



sew in the foam/cloth pad like this. now there is a sweet foam sandwich to put stuff in. i use nine for a computer as well as for vegetables from the farm. sew the sides and bottom through the first layer of cloth. now sew up the top edge of the flap as shown on page 12.



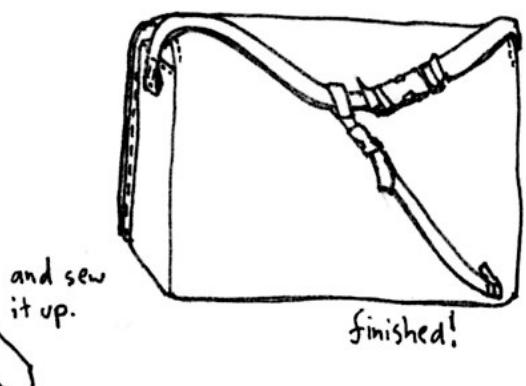
this modification will make the bag easier to ride your bike with.
this is the back of the bag.



take a length of one inch strap and make a loop big enough to barely fit over the shoulder strap, so it doesn't slip over the buckle.



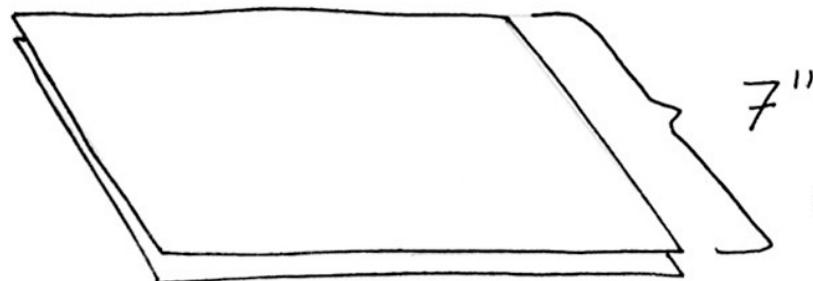
Sew on the buckle as shown.



and sew it up.

finished!

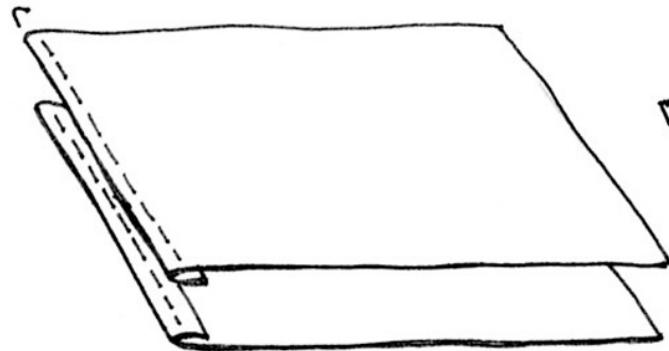
this modification adds a pocket for a water bottle, and a secret pocket for drugs, guns, or other awesome stuff.



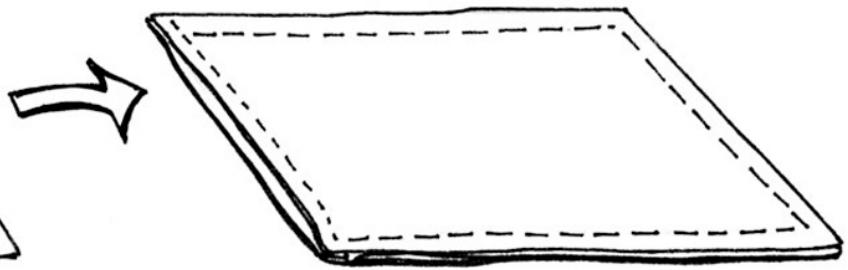
cut two pieces of cloth to these dimensions.



12.5



0.5" tuck in $\frac{1}{2}$ inch on one of the 7inch ends on each sheet, and hem.



sew the two sheets together along the sides and the bottom. you might want to install velcro in between the sheets to keep your secrets secret.



sew the whole assembly to one of the sides. done.

