

Making a Vintage Base Ball



History Center
of Olmsted County



How Hard Should the Ball Be?

- Small field or large field
- Men or women
- Age and skill level
- Competition or exhibition
- Uniform or mixed skill levels
- Broken fingers or not

Costs involved in making a base ball

Rubber bands. \$8 /bag can find online cheaper ~\$4 /bag
can get around 5 rubber band balls per 1 pound bag
cost per ball between \$1.00 - \$1.50.

Yarn. Basic white yarn, worsted (#4), around \$4 per skiene, discounted \$3 per.
can get around 4 balls wrapped per skiene.
cost per ball around \$0.75 to \$1.00

Waxed sinew string. Around \$14 per spool, discounts/coupons ~\$10
8 feet per ball. ~900 feet per spool
cost per ball between \$.09 and \$0.15

Leather. \$300 per half hide. We get about 35 balls per half hide.
can work discount with leather place..
cost per ball between \$6 and \$9 per ball.

Net. Cost of ball discounted, \$7.75 up to \$11.50 for materials.

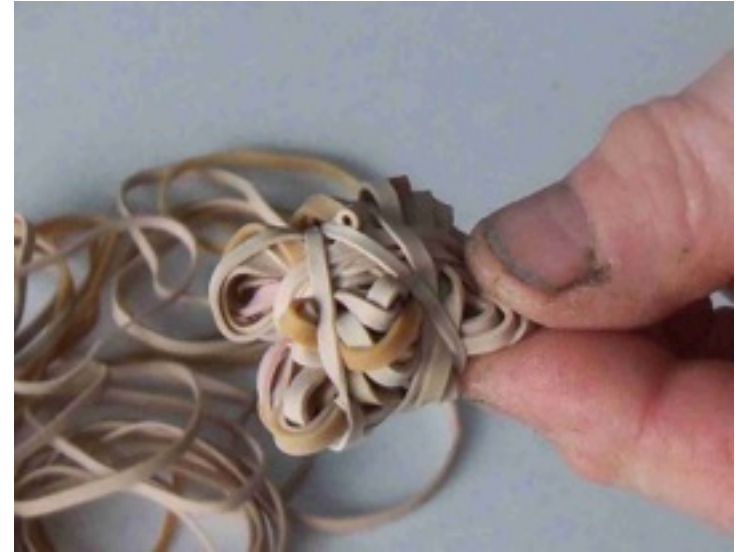
Other: Needles, four hole punch, tape measure, rubber mallet, scissors.

Step 1 – The Rubber Core



Start with about twenty #32 rubber bands.
1 lb bag makes about 4-5 cores.

Put one rubber band through the center,
and then tie it up with a double knot.



Fold the bundle in half.
Wrap one band around it – 2 to
3 winds.
Turn 90° & wrap 2nd band.



Continue wrapping bands around from different sides and angles to obtain and maintain round shape.

Stretch each band to complete 3-5 winds; or 2-3 winds as it gets larger.

Will depend on rubber bands stretch factor. They vary.

Stop when reach 7" circumference. (**)

Should weigh ~ 2.9 – 3.1 ounces.

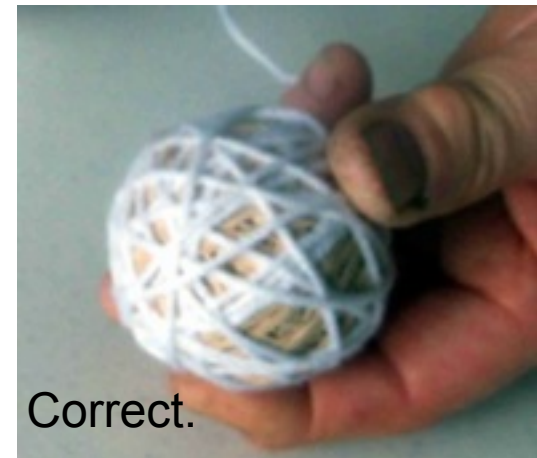
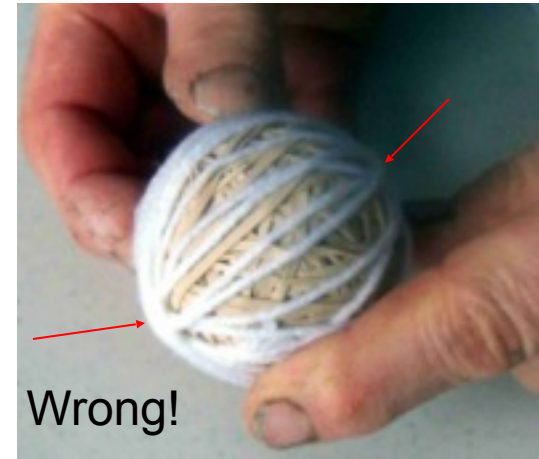
Step 2 – The Yarn Layer



Use Worsted #4 Yarn.

Begin wrapping around the rubber core.

Change directions as you wind to create a round ball.





Wrap yarn until ball is about 9.5"-9.75" in circumference.

Wrap tightly with masking tape to keep the ball firm (optional).

Before you do this, test the ball in a pre-cut cover, so you know it isn't too big or small.

Ball should weigh ~4.75 ounces.

Hold ball firmly and pull yarn fairly tightly as you wrap it around the core.

The tighter the pull, the harder the ball.



Step 3 – Leather Cover



Upon the recommendation of a very knowledgeable man at Tandy Leather we use 2 mm thick Tanners Select Chap Side leather in a cream color. It is sturdy and stands up well over several matches and weather.





The pattern for the cover is designed to tightly cover a 9.75" ball.

The pattern is traced on the leather trying to minimize waste.

Each cover is cut out using a large sturdy scissors. This takes fairly strong hands.

Exacto knife needed to get the inside corners cleanly cut.



Leather cover – the next step is to punch the holes for lacing.

Tools needed - poly cutting board placed on a hard surface like a cement floor, 4-in-1 round leather punch, and plastic head hammer.

Optionally, you could hand mark the holes and then use hammer and nail.

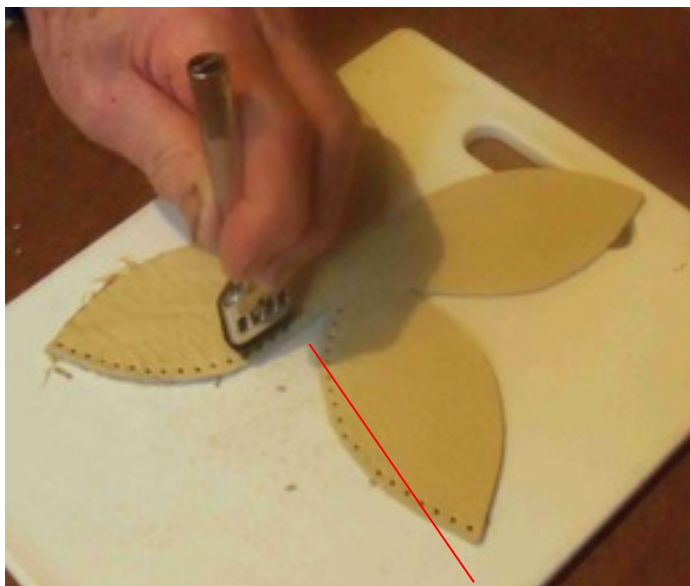


The leather punch is placed at the top of the point and 1/8" from the edge. Use a strong straight blow with the hammer to punch all 4 holes through the leather.

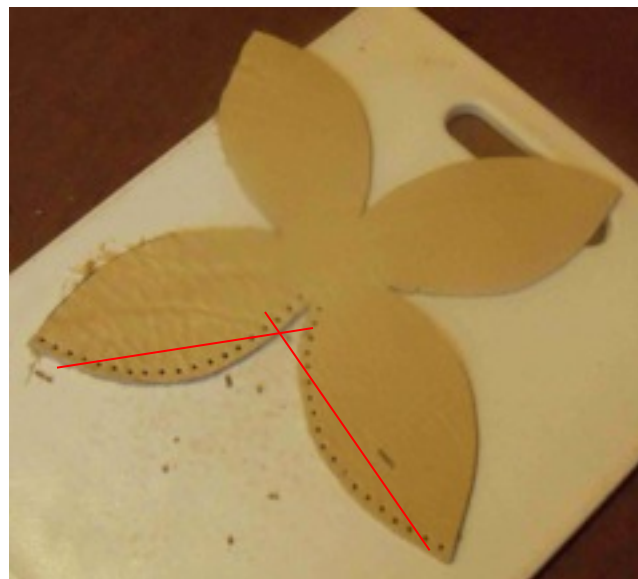
For each subsequent step the punch is placed with the first prong in the last hole from the previous blow so 3 additional holes are punched each time.

The final punch, punch #6, you only punch 2 holes, so put the last 2 tines in the last 2 holes punched, leaving 2 tines to punch the last 2 holes, for a total of 18.

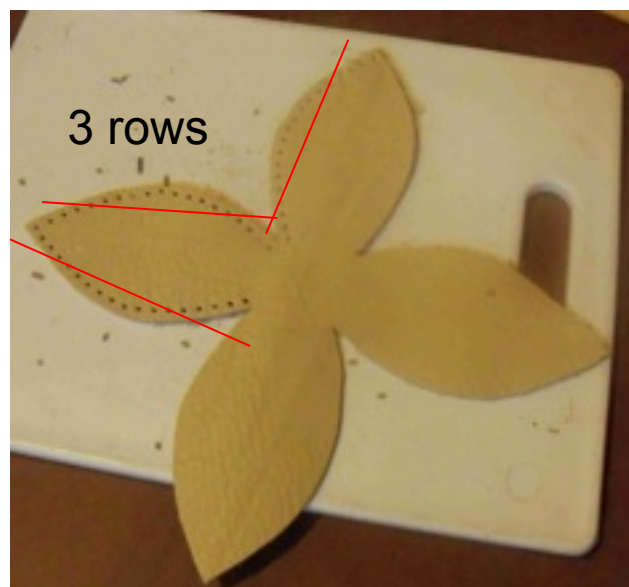
4-3-3-3-3-2 = 18 holes per side. *



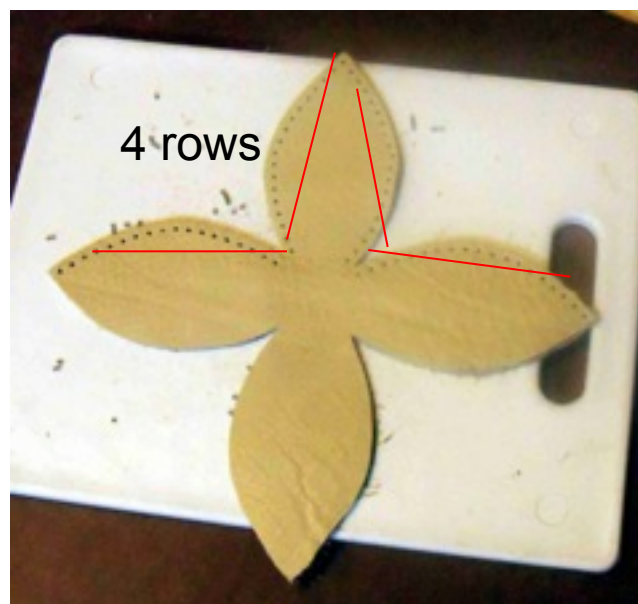
Coming down the 2nd row.



2 rows completed.



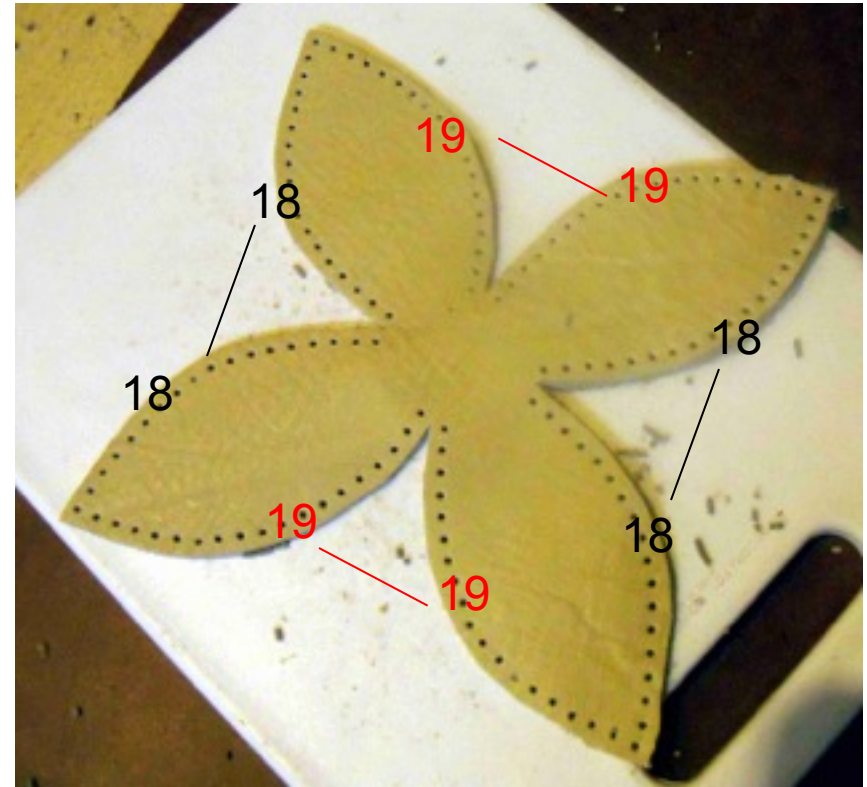
3 rows



4 rows



Coming down the final row. Note how the first prong gets placed in the last hole punched.



Cover with all the holes punched and ready for lacing onto the ball.

Matching edges have to have exactly the same number of holes.

You could make all 8 sides have 18 punched holes, if you count the hole at the tip as #1 when you count.



Pull the leather cover up around the ball. Notice that the cover is smaller than the ball.

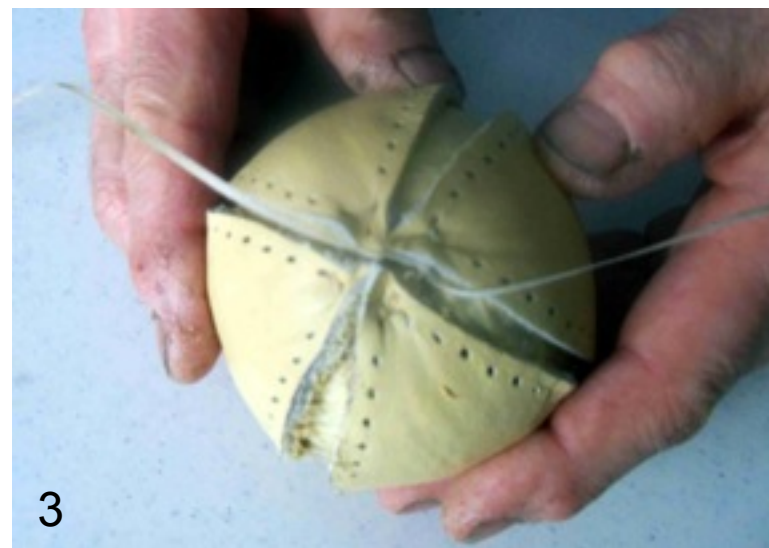
One 10-12 “ piece of waxed, natural artificial sinew , plus a 96” piece , and two #18 stitching needles are the answer.







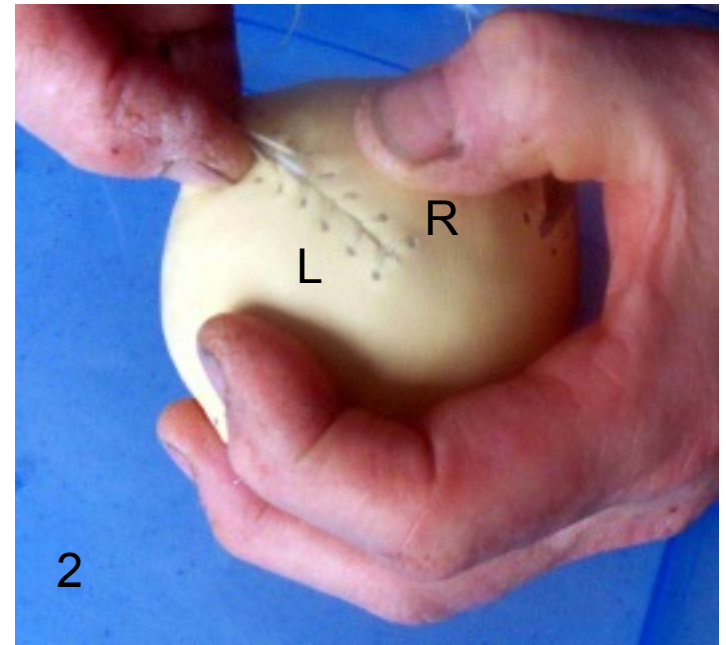
1. Lace the shorter piece, 10-12", of sinew through a needle, and then through the 4 points or through the holes just below.
 By using the tips, you can reduce the pucker, but it also makes for a bit more work when stringing the ball back through these holes later in the process.
2. Working the leather to stretch it, pull the ends of the lace together.
3. Have someone pull the 2 ends as you work the leather upward. Tie a double knot when points are touching.





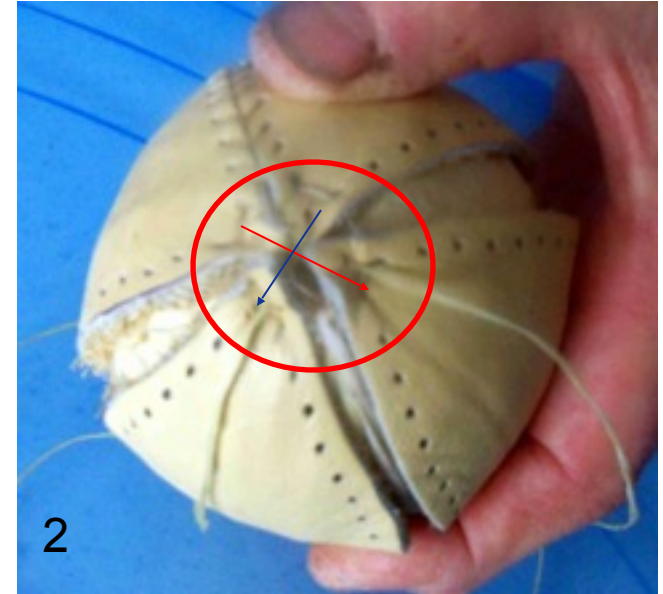
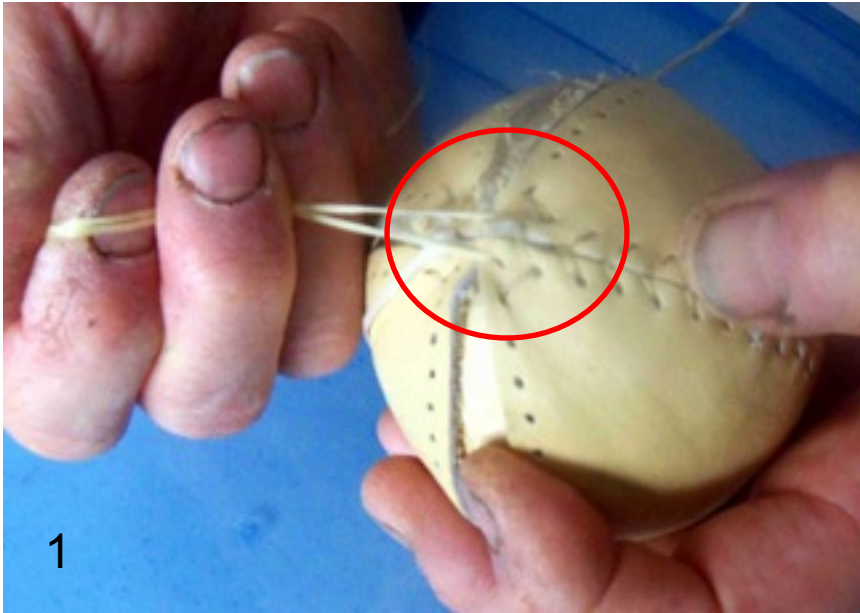
1. You will need 2 #18 needles and a 96" piece of waxed sinew for the final stitching.
2. Lace one end of the sinew through one needle, then lace the other end through the other needle. You can fold over the ends so they don't pull back through when stitching.
3. Push each needle through the bottom holes from underneath (picture top left)
4. Pull lace through so equal length on each side.
5. One lace comes from under and one over. The lace from the left side always goes on top.



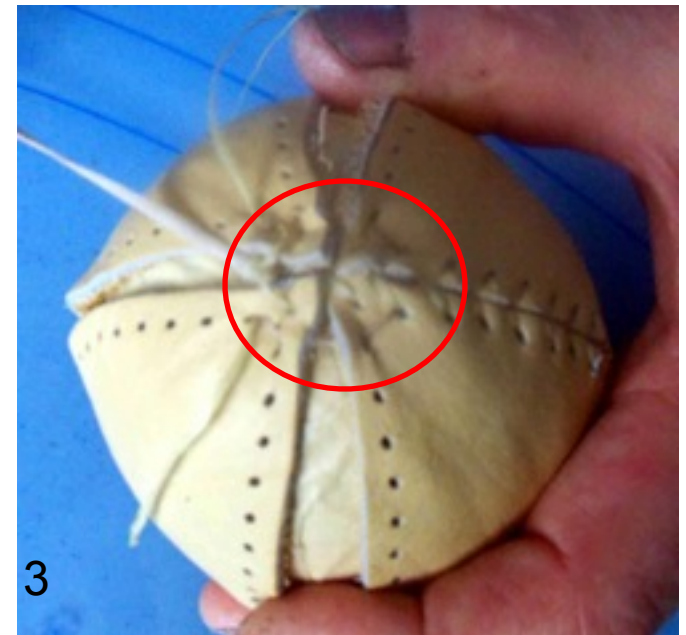


1. Note the lace coming from the left side crosses over the right side lace.
2. Laces pulled tight.
3. Make sure both right and left side laces are pulled equally tight to prevent puckers.





1. Lacing up to the top
 This is where you will run into the spot if you started the ball going through the 4 holes at the tip.
2. Continue lacing over the top. This can require some patience to work under and up, as you work around the initial piece you used to hold the points together. It will be an X shape crossing.
3. At least one point will pucker up.



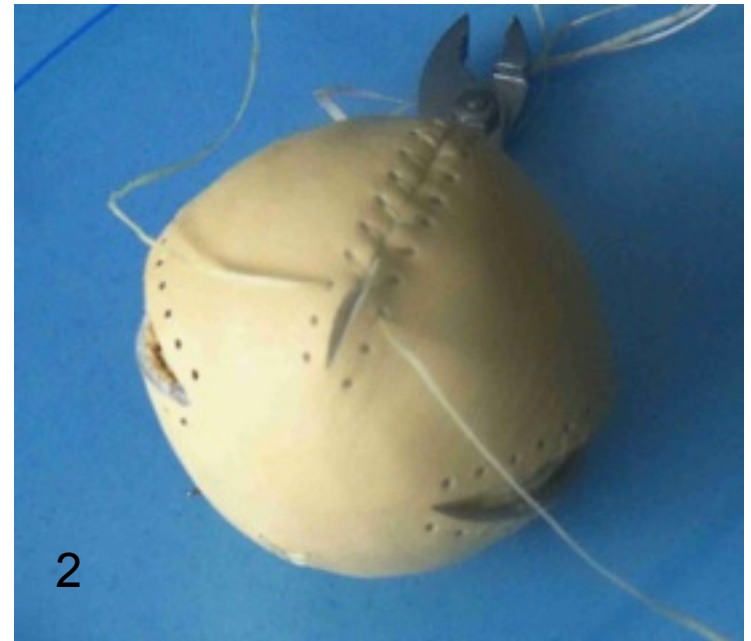
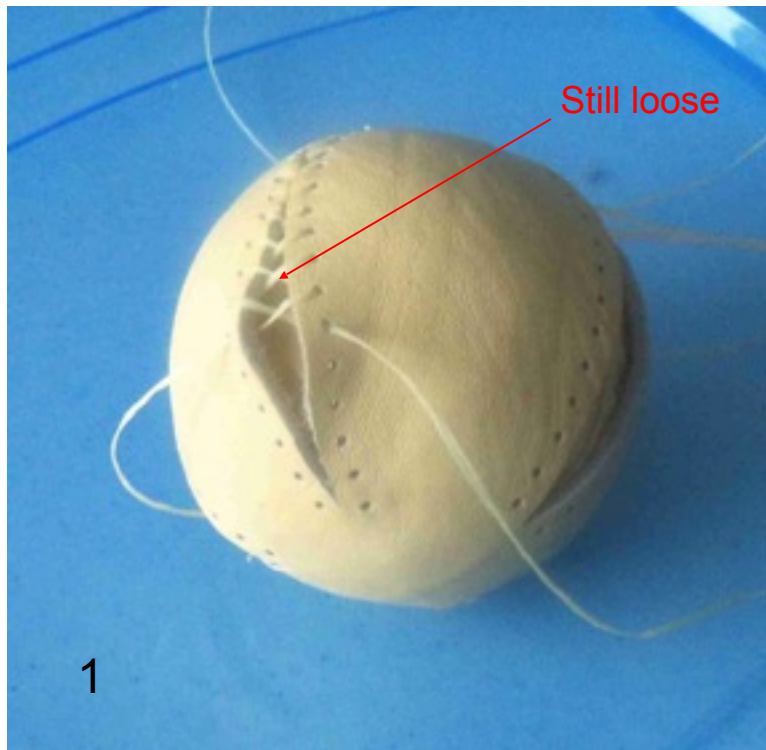


1. After lacing over the top, continue lacing down the 2nd side.

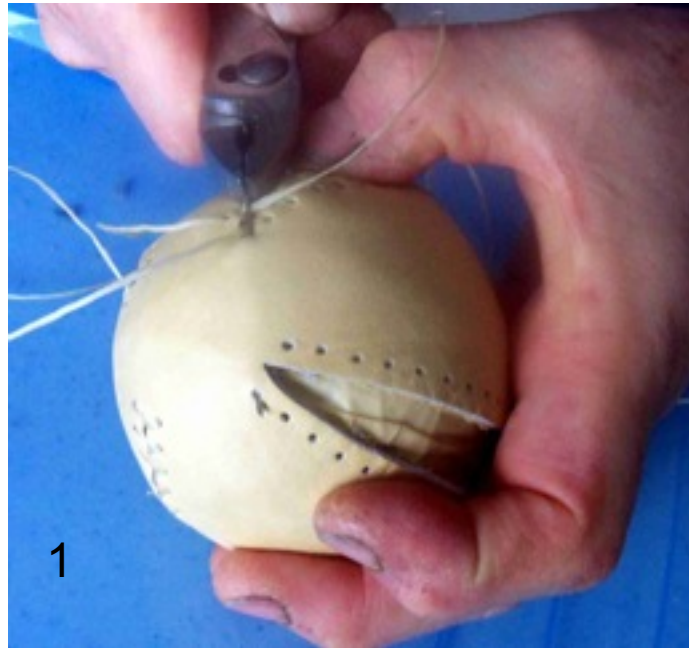
2. Lace a few loose stitches.

3. Pull them tight. Note the strings held under the thumb at the top are from the string holding the 4 corners together. (Note: you can trim these and “bury” them, prior to step 2, if you wish).

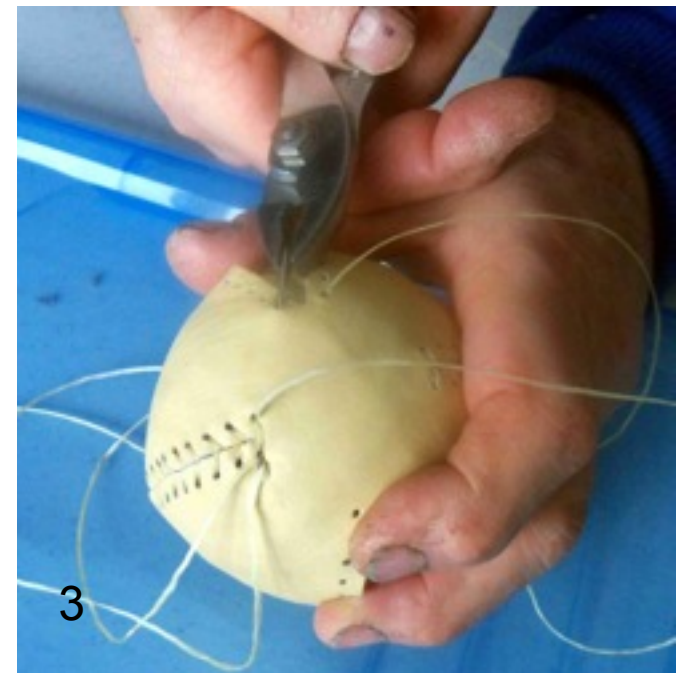


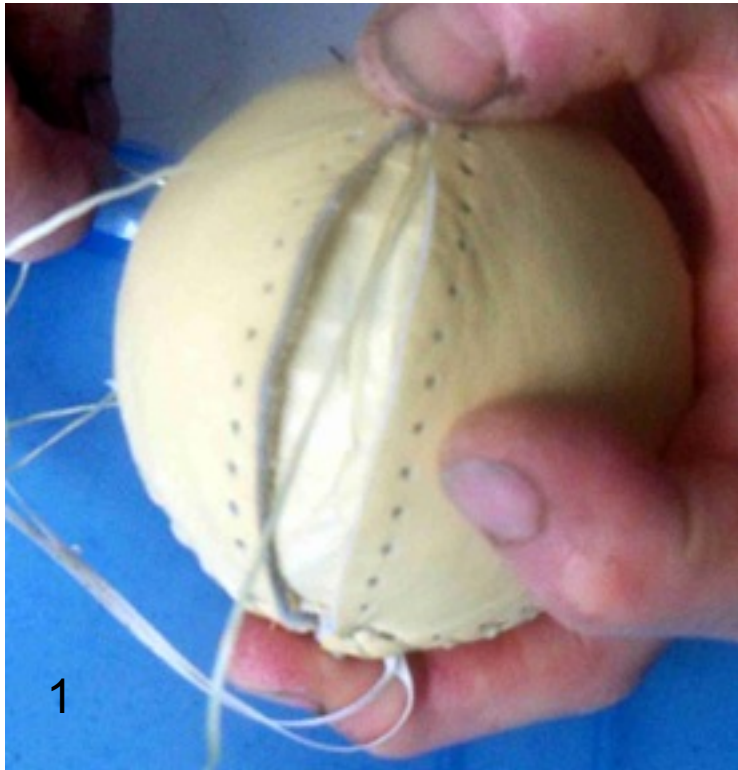


1. Coming down to the bottom.
2. Laces pulled tight.
3. Laced tightly to the bottom of the first side.



1. Use a small pliers to push the 1st needle through to the hole of the next row to be laced. (Right side hole to right side hole).
2. Push the 2nd needle through. (left side hole to left side hole)
3. Grab the point of the needle and pull through. Both needles and laces are ready to sew the 2nd row.





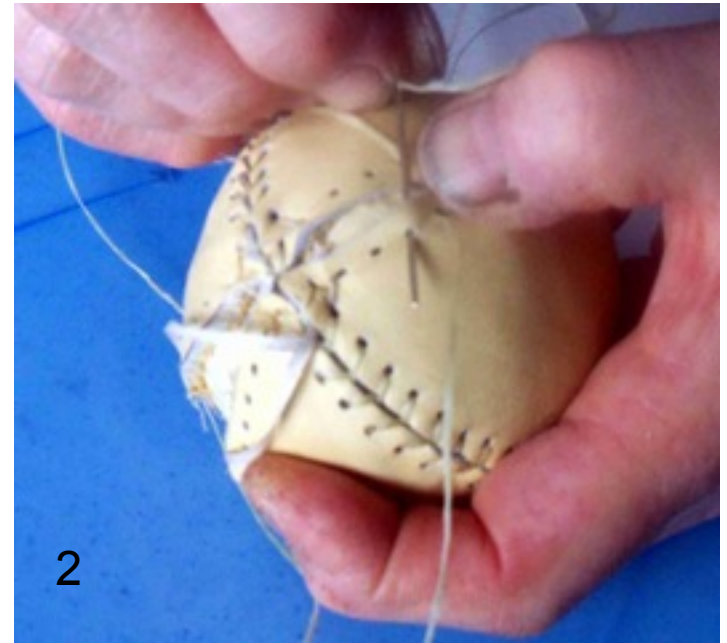
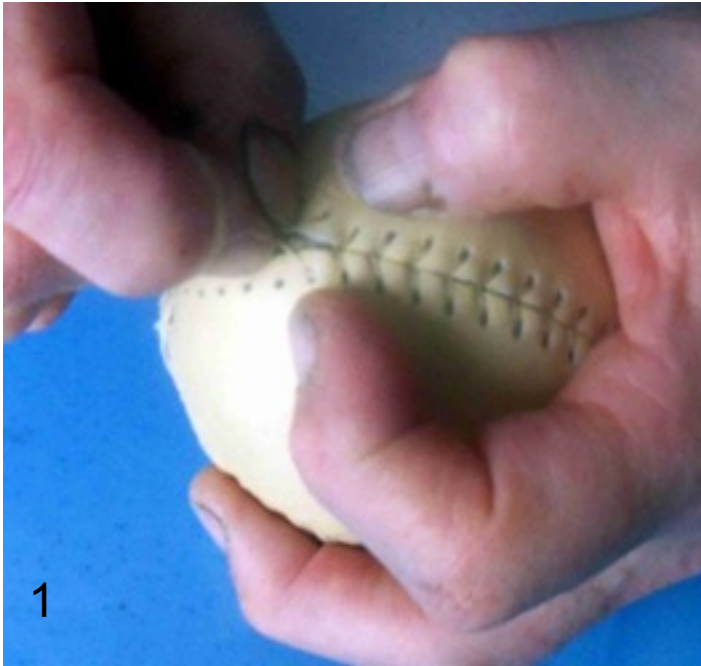
1. Ready to lace 2nd side. Note the gap to be pulled tightly together.



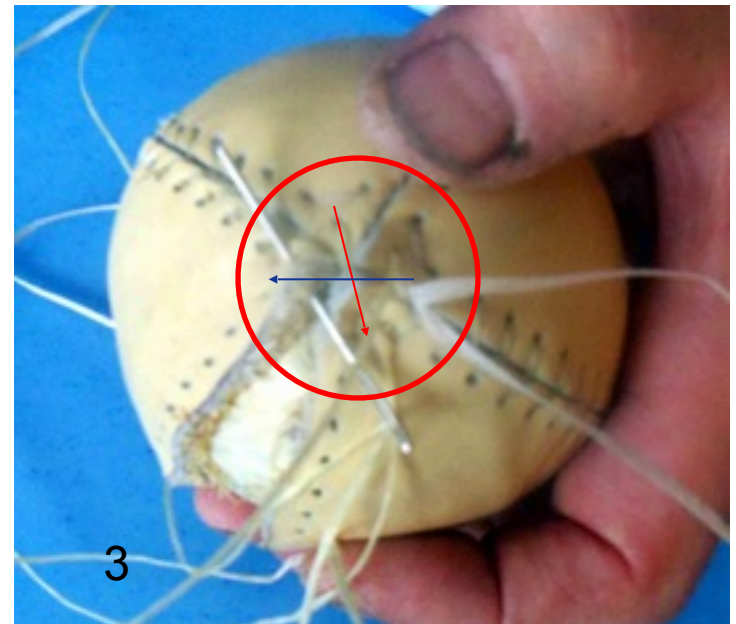
2. Note one lace comes over the top and the other comes underneath the leather.

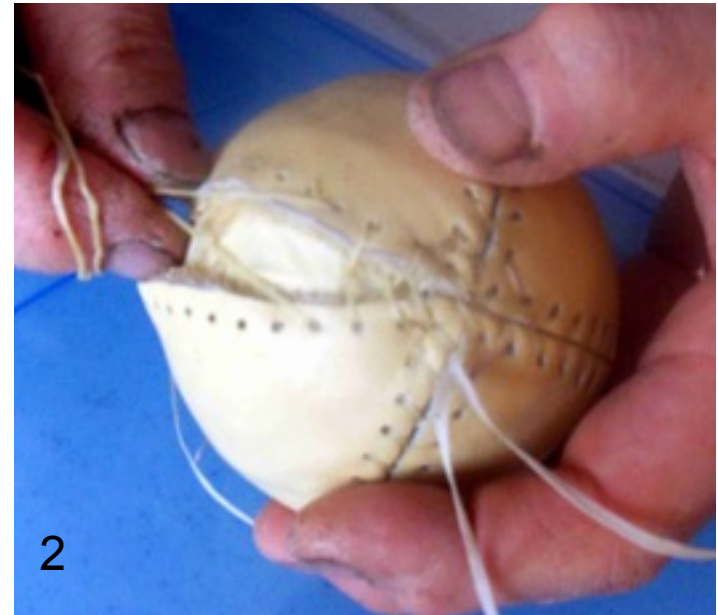
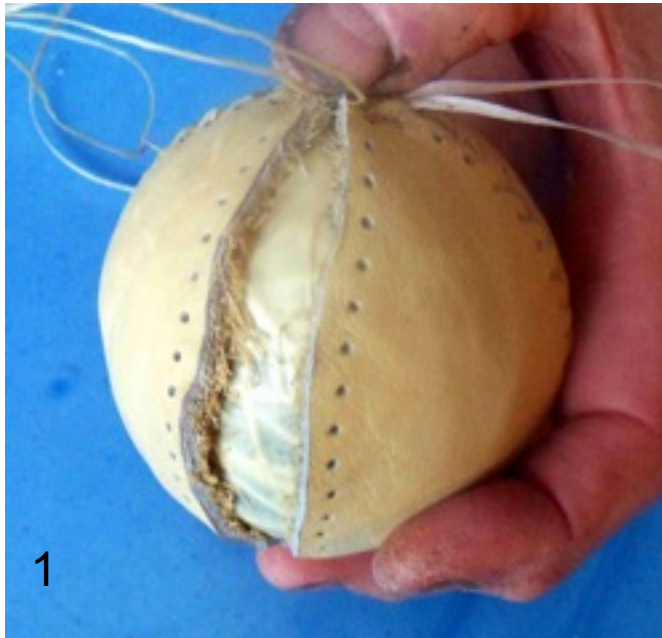


3. Laces pulled tight.

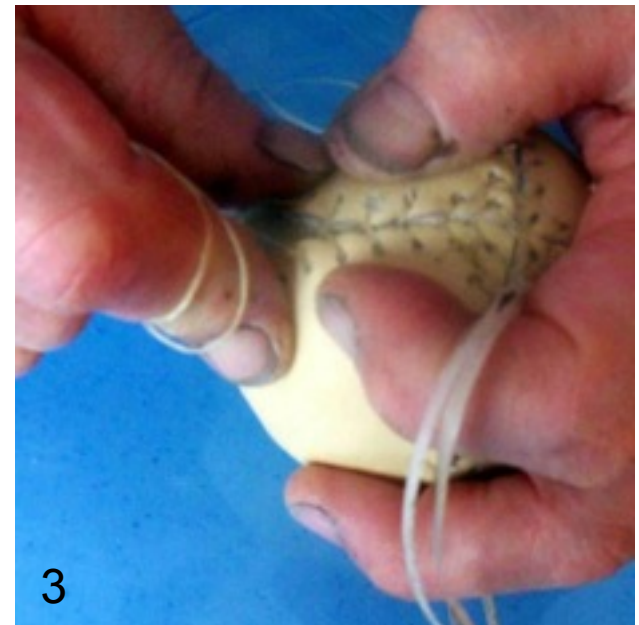


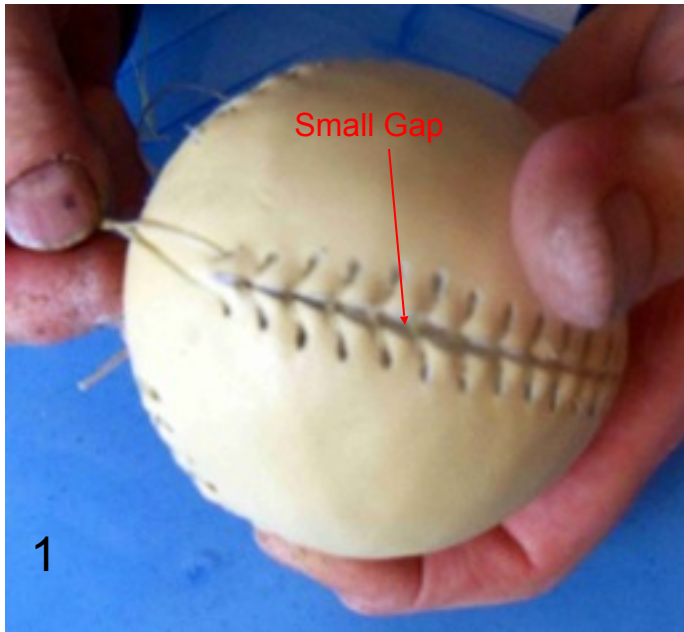
1. It is getting much harder to pull and hold the laces tight.
2. Use your thumb and index finger to hold the laces in place or pulling loose.
3. At the top again. Lace across the 4 corners, in X shape. This takes time.





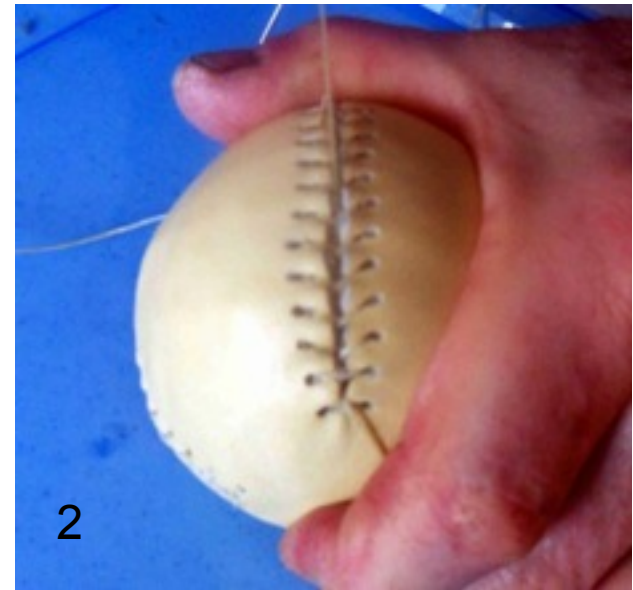
1. The final side has a large gap. It can be pulled tight ! **If you tested the ball in the cover before hand, you should be ok.**
2. Sew a few laces.
3. Pull tight and hold on.





1. All 4 sides have been laced to the bottom. I noted a small gap I don't like !!
2. The left lace goes down through the right hole and comes up in the gap. The right lace goes down the left hole and also comes up in the gap.
3. Tie the 2 laces together with a few square knots.





1. Use the needle to thread the loose end down the gap an inch or two.

2. Pull the loose thread very hard to force the knot under the lacing.

3. Use a needle to pull the other lace down the gap.





1. The starting string that tied the four points together can be removed or the loose ends can be tied in a square knot.



2. The loose ends are laced down the gap and the knot pulled under.



3. Trim off the remaining loose ends.



Finished Ball: 10" circumference, 6 ounces

Re-purposing a base ball

- One advantage of making your own base ball, is that once it becomes a bit worn, or softer than you like, you can take it apart and make it “like new” !
- Carefully cut out the stitches. This takes a little time and be careful not to cut any of the holes as this will make it unable to be sewn back up
- Once you get it apart, you can either add more yarn and “tighten” it up, or, you can cut out the yarn and put a new wrap on it.
- Cut a new piece of waxed sinew and begin the process of sewing the ball back up. Note: The leather wont stretch as much as it did before, if at all, so you might end up needing to make a slightly larger core. Use the “fit core in the cover” trick we talked about before.

Thank You

Questions about ball making?

Contact Corky “Goose” Gaskell

cc.gaskell@gmail.com

Handmade 1860 Base Balls For Sale

\$17.00 each

The Roosters Vendor Table this weekend
or

Order from Corky Gaskell via email

I cannot make large quantity orders timely enough for most clubs, and generally limit sales to 4 or 5 per club, max, just so they can experience using them.