INSTRUCTIONS FOR "HOME-BREW" PARKERIZING

You need a number of things to do a "home-brew" "Parker-job", but only 4 ingredients.

1. Phosphoric Acid (the active ingredient in Naval Jelly) usually procured at a chemical supply house.

2. Powdered Manganese Dioxide (a very dense and heavy dark gray to black powder) also available at any chemical supply house.

3. Distilled water (I've used tap water, but the distilled stuff gives more consistent results.

4. A biscuit of steel wool (don't use soap pads or Brillo pads!)

I used to do this on the kitchen stove (I wasn't married in those days) in a one gallon Pyrex beaker (these little beasts are expensive, so be careful with them). Metal pots don't work as well (if at all) I understand, but then I never used anything else but Pyrex.

Proceed as follows:

1. Use one whiskey jigger (yeah, this is really scientific, right?) of phosphoric acid added to the water. Remember your high school chemistry, ALWAYS add the acid to the water, and it is best done by pouring it down a glass rod!

2. Use one whiskey jigger of the (powdered) Manganese Dioxide in the solution.

3. Bring the solution to an extremely slooowwww rolling boil .

4. Now add your biscuit of steel wool.

I used wooden sticks placed across the top of the beaker and suspended the parts in the solution using steel or iron "machinist's wire or some such. DON'T use painted coat hangers or any wire with grease on it! You can usually get this stuff from a machine shop or from Brownell's.

The parts should be totally immersed in the solution, being careful that anywhere the wire touches the part won't show on the finished part (usually easy to do – like in the firing pin hole of a bolt). The part(s) to be Parkerized should be totally "de-greased" and sand or bead blasted prior to finishing (depending on the texture you desire on the finished part). Once you have bead blasted the part, you should handle the part with gloves (never greasy hands) and store them wrapped in clean paper towels awaiting the Parker Bath. Any grease on the parts or wire will cause what can only be politely called a variation in color (the parts come out streaked and spotted like a "paint horse").

I usually let the part remain in the solution for a total of 20 minutes (less MAY work, but I was told 20 minutes so that's what I used and it worked marvelously). When you withdraw the part, immediately rinse it in hot running water to get the solution off of it. Use extremely hot water, and the part will dry itself. Let it dry (and get cool enough to touch) on some clean paper towels, spray on some lubricant and viola' you are done!

Rumor control said that if you immersed the freshly rinsed and still hot part in Cosmoline, it would give the sometimes sought after "gray-green" tint to it. I have never tried it. Cosmoline is still available from Brownells if you are adventurous!

The original formula called for iron filings vice steel wool, but since I didn't have any floating around, and didn't want to file on the cast iron stove, I found that the steel wool worked just fine. What you get is a chemical reaction that causes an iron phosphate to form on the metal (steel phosphate I suppose, using steel wool). I have found that the resultant finish is just as durable as the Arsenal finishes and has exactly the same appearance! – an attractive dark gray, almost black. Some say that adding more manganese dioxide causes a darker finish, but I've never tried it, as I was happy with what I got!

We often used this technique when finishing .45s built on early Essex frames that needed a lot of fitting, thus often requiring the removal of offending metal. I used to checker the front straps (also violating the finish in a rather spectacular fashion) and the resultant finish worked great and showed little or no wear even with extensive use – much like the official GI finish. I'm still using a wadcutter gun I performed the magic on back in the '70s and it still looks new.

A couple of cautions:

1. Always be careful of any sort of acid, even such an innocuous acid as phosphoric. I certainly would never deliberately inhale the fumes (although there is no great odor to the process that I could tell, but then I smoke cigars). I started doing this back in the early to mid '70s and still have no "twitch" that I can directly attribute to Parkerizing on the kitchen stove. Just use common sense, WEAR GLOVES AND EYE PROTECTION ANYTIME YOU ARE PLAYING AROUND WITH BOILING SOLUTIONS (with or without acids being involved).

2. Be very careful not to cause any splashes with the boiling solution (of course the same can be said of boiling corn).

3. Prepare your area and your parts before hand, don't try to do this on the spur of the moment.

4. Send your wife to see "Gone With the Wind" or "Titanic" or some other movie that whiles away a number of hours. If you ever want to do this again, make sure the kitchen is spiffy when she returns! In Gloria's case, she would be attaching the parts, but then I'm just lucky in that respect...

5. Once you have allowed the solution to cool, you are DONE! Re-heating it don't cut it, It simply doesn't work (I've tried it on several occasions). Have everything that you want to Parkerize ready to go when you fire up the solution. You can keep

Parkerizing as long as the solution is hot, but allowing it to get cold kills it – you've gotta' brew up a new solution and start from scratch.