From: ben_fulbright@juno.com (Fulbright, Ben E.)

I have included below, an additional part of the Introduction which I call as titled. Note that it requests that if any material is used that the source be cited.

DEDICATION, DISCLAIMER, and DOCUMENTATION,

These pages are dedicated to all the "Masters" of clock and watch collecting and repair. You know who you are. If you have any doubts, then you probably are not truly a master; however, there is hope that you may become a Master. With the guidance of these Masters many a novice collector has become more adept, more professional, more concerned, and more dedicated and has even been introduced to the proper techniques of repair, restoration, and collecting. With that in mind, this project has been undertaken in hopes that it might well provide an incentive, a germ of an idea to all you Masters and Master-Wannabees to share your knowledge, experience, techniques, and shortcuts in this arena with those who may yet be unsure and perhaps a little more unknowing.

This is a collection which I have kept ongoing for several years. Most of the hints and tips I can personally vouchsafe, however there is no guarantee or claim made as to the time or effort you might save by following any of them. Just try it: if it works, good! If it fails to work for any reason, let me know! This constitutes a special plea to anyone who reads any part of this material. Please comment directly to me, insofar as accuracy, efficacy, or completeness is concerned. If you have any additional thoughts or hints to share, please supply them directly to me. I will continue this collection and hopefully some day may publish an update to this original edition. Please note the paucity of watch-related material. This is due, largely to the fact that I have little or no experience in watch work.

There are very few sources cited within these pages. This is because I have chosen that particular avenue. If you feel that I have used something which you originated, I do apologize for not citing you as the source. Many of the ideas have been passed to me directly by the person who developed them; I have discovered many of them myself; several have been plagiarized from forgotten sources; many have been cited by others to others; many are just good common sense; and, in general, all do seem reasonable. (The truth of the matter is that I have forgotten or lost the source of most of them.)

Feel free to use the information in these pages in any manner you wish. However, it is suggested that it be cited as the source or referenced in any reuse or re-publication of the material.

Finally, I wish to express my appreciation to any

and all who contributed to this effort: proofreaders, for finding all the mistakes and errors; mentors, those who have mentored me, those who have mentored others, and those who will in the future mentor someone else; contributors, both known and unknown; readers, without whom this would all be superfluous; without whom this tome would not be published; and especially to my wife, Heidi, for her forbearance.

Ben E. Fulbright, FNAWCC

About a month ago, on Clocksmiths, Ben Bowen inquired about the subject. The following is an excerpt from the introduction from a possible publication under my authorship. There will be a second message which contains a couple of pages from the same document dealing specifically with the issue.

THOUGHTS ON THE INTRODUCTION TO THESE NOTES, SPECIFICALLY RELEVANT TO SETH THOMAS ADAMANTINE CASE RESTORATION

INTRODUCTION, PAGE 1

The letters found below and on the following page were printed in cited issues of the BULLETIN of the National Association of Watch and Clock Collectors. These letters and the sentiments expressed therein about sharing information are the precipitate reason behind the assembly of this document. Expansion upon the specific issues raised about Adamantine finishing are on pages 26 and 27.

FEBRUARY, 1993, NAWCC BULLETIN, VOLUME 35\1, NUMBER 282, PAGE 53. "WHAT WE ARE ALL ABOUT" (excerpt)

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I intend to give a program on this subject at our local NAWCC meeting so that others may benefit from this knowledge. In my mind, this is what NAWCC is all about; sharing horological knowledge. Recently, at a regional, I came across a man who was restoring Seth Thomas Adamantine clock cases. They were shinier and brighter than I had ever seen. He would not share his method with anyone, claiming it is a "trade secret". I only wish he could understand the basic tenets of our organization as you do.

... Dell W. Littlefield 606 Crowder Court Fort Walton Beach, FL 53247

DECEMBER, 1994, NAWCC BULLETIN, VOLUME 36\6, NUMBER 293, PAGE 806. "SHARE YOUR SECRETS"

I read the article "What We Are All About" by NAWCC member Dell W. Littlefield, and agree 100

percent that one of our responsibilities is to share our technicaland artistic horological talents. I too approached the individual who was selling the very attractively restored adamantine clock cases at our local regional. And, I too received the same "trade secret" reply regarding the method used in the restored, shiny, bright finish.

As I recall, ironically, the individual who invented the adamantine process for the Seth Thomas Clock Co. also took this "trade secret" to his grave. Many years later, a celluloid was invented which, in my opinion, was comparable to the adamantine process.

Perhaps someone else may come up with the adamantine restoration and hopefully share it with fellow clock collectors.

Darrell B. Carr 12407 W. 100 St. Lenexa, KS 66215

FEBRUARY, 1995, NAWCC BULLETIN, VOLUME 37\1, NUMBER 294, PAGE 95. "ADAMANTINE RESTORING METHOD"

In the Timely Voices section of the February 1993 BULLETIN there was a letter entitled "What We Are All About" by Dell W. Littlefield. The topic of restoring Adamantine covered clock cases held some interest for me since I have restored several of them with reasonable results. This is what I do:

- 1. Remove works and all metal legs and ornaments.
 - a. Restore works.
 - b. Clean all metal parts with soap and water.
- 2. Take as much of the case apart by removing all wood screws.
- 3. Remove surface dirt by using waterless cleaner.
- 4. Polish all Adamantine-covered wood with:
 - a. #7 Rubbing Compound.
 - b. Simichrome Polish.
 - c. Meguir's car cleaner/wax.

I'm sure other compounds do just as well as long as they are not very abrasive.

5. The case is then reassembled.

What I would be interested in is how to replate the copper flash that is used on metal ornaments and legs.

Joseph J. Singer 6404 Woodhawk Dr. Mayfield Hts, OH 44124

THOUGHTS ON THE INTRODUCTION TO THESE NOTES, SPECIFICALLY RELEVANT TO SETH THOMAS ADAMANTINE CASE RESTORATION

The suggestions contained in the letter from Joseph Singer quoted in the INTRODUCTION are well and good; however, I have some suggestions to add. His five steps are repeated below for your convenience. The second set of instructions below contains the additions which I have added to Mr. Singer's.

JOSEPH SINGER RECOMMENDATIONS

- 1. Remove works and all metal legs and ornaments.
 - a. Restore works.
 - b. Clean all metal parts with soap and water.
- 2. Take as much of the case apart by removing all wood screws.
- 3. Remove surface dirt by using waterless cleaner.
- 4. Polish all Adamantine-covered wood with:
 - a. #7 Rubbing Compound.
 - b. "Simichrome Polish."
 - c. Meguir's car cleaner/wax.

I'm sure other compounds do just as well as long as they are not very abrasive.

5. The case is then reassembled.

JOSEPH SINGER'S RECOMMENDATIONS, AUGMENTED

- 1. First and foremost, be sure that you begin with a case which has a good, if not perfect, Adamantine surface. It is difficult if not impossible to deal with faults and blemishes in the Adamantine. Minor cracks can be handled as described below.
- Remove the works and all metal legs and ornaments.
 a. Restore the works.
- b. Clean all metal parts with soap and water.
- 3. Disassemble as much of the case you can.
- 4. Thoroughly clean the surface areas of the case with a waterless cleaner, such as "Go-Jo" hand cleaner, which is excellent for this purpose, and is available from the local automotive parts supply store. Use a light solvent (not water) to remove any residue from whatever waterless cleaner you use.
- 5. Polish all the remaining case parts including the Adamantine-covered surfaces with a carnauba wax. TREEWAX is one available brand. This or some other brand can be found at your local automotive parts store, just be sure that the product you get is labeled as "pure carnauba wax." Carnauba wax will give by far the best finish and will help in covering minor cracks and imperfections, often making them seem to disappear. It is extremely hard, the hardest wax available, and will require considerable effort to apply and polish to a high gloss, but once applied the finish will be very resilient and quite attractive. I recommend use of a buffing wheel for the final polishing step to get a bright and beautiful finish. (Other cleaners/polishes such as #7 rubbing compound, "Simichrome" polish, or "Meguir's" car cleaner/wax will work, however carnauba wax will provide overall the best results.)
- 6. See the next page for tips and techniques for hints on refinishing and/or restoring metal statuary or ornamentation.

7. Finally, reassemble the case and the clock, polishing the brass parts, such as the bezel, as you please.

REFINISHING AND/OR RESTORING METAL STATUARY OR ORNAMENTATION

If the patina on any white metal ornamentation or statuary is in poor condition, restoration may be worthy of consideration. The following procedure will work. Expect to spend some time in trial and error or just practice, but the results will be well worth the effort you put into it.

- 1. Clean thoroughly the metal parts using "Mr. Clean", "Spic-N-Span," or any other good non-abrasive cleaning agent. Clean the piece several times, rinsing carefully and thoroughly each time.
- 2. Apply a dilute ammonia solution (2% to 4% concentration) to the metal and rinse carefully and thoroughly. Repeat this process several times. The ammonia will open the pores of the metal.
- 3. Dry the piece thoroughly with a hair drier or in an oven at very low temperature. Let it set overnight and dry it once more. The slightest hint of moisture will ruin any hopes of a good and attractive finish.
- 4. Spray the entire piece with a red oxide metal primer (available at your local automotive parts supply store) in several very thin coats, scuffing slightly between before the final coat with fine steel wool or an available substitute. Be sure to turn the material over and upside down to get the primer in all nooks and crevasses. Allow this to dry at least one full day, maybe even longer.
- 5. Spray the entire piece with a matte or dull finish enamel in one of the following colors: nutmeg, gold, yellow, tan, or ochre, again in several very thin coats. Be sure to turn the piece over and upside down to get the primer in all nooks and crevasses. The matte or dull finish is important because it will accept and retain the coloring added in a later step. Allow this to dry at least three or four full days, regardless of the instructions on the can.
- 6. Using a soft cloth, wipe artist oil paint, color BURNT SIENNA or THALO BRONZE over the metal. Be generous with the color application. Work the color into all the nooks and crannies of the figure with an old tooth brush.
- 7. Immediately wipe off all the excess oil paint that you can with another soft cloth.
- 8. Allow a couple of hours, if not overnight for the oil to dry.
- 9. Using yet a different soft cloth, buff vigorously the surface of the metal. On high spots the paint undercoat may show through, as though reflecting an aging of the patina.
- 10. The BURNT SIENNA oil paint over the matte nutmeg color will give a good rich chocolate brown finish and patina. The THALO BRONZE over the matte ochre or nutmeg will provide a rich greenish-bronzy finish.

Other matte finish paint colors and artist oil combinations will give a nice variety of colored patinas. Artist acrylic paints work well too, they dry much faster and produce a different, although quite pleasing appearance.

- 11. There is no substitute for practice to get a good combination of artist color and enamel color to get a finished product in which you may be justifiably proud.
- 12. Optionally, coat the finished product with a good sprayed lacquer finish.
- 13. The final instruction is: Take your time! Rushing any one of the steps above may well cause a disaster. However, should disaster strike, just clean the material (you may have to use paint remover or solvent) and start all over again.

I want to thank Ben Fulbright for taking the time and energy required to assemble the above information and share it with the E-mailing called Clocksmiths.

To personally thank him or to sent comments his E-mail address is: ben_fulbright@juno.com

A service from, E-mail address: Mike@atmos-man.com Mike Murray Founder of Clocksmiths

A specialist in Atmos and 400-day clock repair. Also, I overhaul most plug in electric clocks. In continuous horological service since 04/01/1982.

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