Pen Turner’s Workbook
Making Pens from Simple to Stunning

Barry Gross

Fox Chapel Publishing
Acknowledgments

You hear horror stories of deadlines and editors that are demanding—maybe that is the way it is with other publishers, but the organization that Alan Giagnocavo has assembled is top shelf. From my editors John Kelsey, Paul Hambke, and Peg Couch, to Paul McGahren and his sales team, the ‘family’ at Fox Chapel makes it a pleasure to write books for them. I want to thank them for putting up with my hectic schedule and working around my needs.

This is the third book I have written for Fox Chapel, and my friend Ed Ryan continues to be my mentor through this process. Ed is still unselfishly teaching students turning, and his “ABC’s of tool techniques” is still the gold standard for students learning to turn. I want to thank Ed for showing me this technique and allowing me to pass it on to all of you.

— Barry Gross

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Dedication
This book is dedicated to my best friend in life, my partner, my wife, Lenora, who always keeps encouraging and inspiring me to reach higher while never looking back! Analogous to the tree above with deep roots she keeps me grounded and without her unwavering support, this fifth book would not be possible.
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Introduction

Creating your own masterpiece pen!

Since 2003 when the first *Pen Turner’s Workbook* was published, tens of thousands of pen turners have used my books as a reference guide to learn to turn pens. Some of you have created them for fun, others to earn extra income. No matter what your reasoning, you have turned to the *Pen Turner’s Workbook* and I want to personally thank you.

My objective for this book—the completely revised and expanded third edition of the *Pen Turner’s Workbook*—as well as for all my books is to approach the subject from the mind of the individual asking the question, “How do they do that?” This book will guide you step by step through your journey to creating the fine writing instrument you want to make, whether you want to work with a mother nature inspired piece of wood, an alternative material, or an acrylic blank you cast yourself. This instructional book is the definitive state-of-the-art guide you will need on your quest to learn the skills necessary to make a better pen for yourself and your customer.

This guide will discuss the fundamental skills you need to turn pens as well as the techniques used to create segmented pens and laser cut pens. You’ll also learn about working with biologicals, such as antler and snakeskin. All along the way, I’ll give you many tips and tricks to make your life easier when creating your masterpieces.

I will assist and guide the individual who has not decided which lathe to purchase and which turning tools are best suited for your particular skill set, and what are some of the other various pieces of shop equipment such as safety equipment and dust collection used in making pens. Tool techniques will be demonstrated to help you build skill quickly and avoid the dreaded dig-in with a skew chisel.

Selecting wood for larger pen styles will be discussed as well as a debate on what is the best pen plating to use in conjunction with any particular pen blank. We will look into wood dyes for coloring your wooden pen blank and alternate ways of preparing the same wooden pen blank to obtain three very distinct outcomes. An expanded “what do I do now” or the “oops” section will show you how to correct some of the common mistakes that everyone makes—myself included.

The book opens with a gallery section with some other very talented pen makers’ favorite masterpieces they have created. And the book closes with a gallery section to provide you with some ideas on how to market and display your work to maximize your efforts.

As I have stated in the past, life is too short to carry an ugly pen, so please join me in the workshop, and let’s get busy creating that one-of-a-kind fine writing instrument you will be proud to use and display!
You’ll learn how to make terrific pens like these by following the instructions in this book.
There are many very talented and skillful artisans who create wonderful, handmade, one-of-a-kind fine writing instruments. The pens that you will see in this gallery show the work of some of these “master pen makers.” The artists include Brian Gisi, Richard Kleinhenz, Anthony Turchetta, Mark Gisi, Seamus Rooney, Glenn McCullough, and myself—all of whom are members of the prestigious Pen Makers Guild. However, the gallery is just a sampling of work. There are many more very talented pen makers who are part of this organization, and everyone in the guild shares their experience and knowledge so that each member’s skill level can progress.

As your ability improves with each pen, the challenge will be to seek out other pen makers who could offer a different approach to pen making and to see if that method could be adapted to your individual style. The Internet is a great tool to research and discover other skilled craftsman. Observe them and absorb the information they offer on pen making because that will increase your ability to manufacture one-of-a-kind pens. I hope you enjoy these fine writing instruments!

This amazing array of pens is featured on the gallery pages.
1. Simply extend the length of the lower pen blank when you are first cutting the pen blank (A). Extend the length by ¼", which is longer than the size of the center band.

2. Trim the ends of the pen blank as you normally would, but leave the extra wood on the one end of the pen blank. The pen tube is recessed inside the pen blank. Use the barrel trimmer to trim just the wood, leaving the blank ¼" longer than the normal length (B).

3. Place the blanks on a mandrel with the 7mm slimline bushings, and turn the blanks even with the bushings on the clip and tip ends, leaving the center section of the pen blanks larger than the bushings (C). The diameter of the lower barrel should be slightly smaller than the diameter of the upper barrel.

4. Because you will not use the center band that came with the kit, a center band or decoration of some sort must be created. Use the very tip of a skew to score small lines at the end of the barrel, and then use wire burners to create the burned lines (D).

5. Sand and finish your pen blank as previously demonstrated in Steps 28 to 36 on pages 58 and 59.
Corian Center-Banded Slimline Pen

This variation of the slimline pen in Project 1 is turned from a redwood burl and features a Corian center band. Start this project just as you did the wire-burned slimline by making the center portion of the slimline fatter. Using Corian as a center band gives this project a touch of color. You can also try using Color Grain or other dyed wood for the center band.

Materials

- Rhodium-plated Slimline Pen kit or kit of choice
- 7mm mandrel with slimline bushings
- Redwood burl and a piece of Corian of choice or other materials of choice
- Drill bits, 7mm
- Pen insertion tool
- Cyanoacrylate (CA) glue, thin and medium
- Barrel trimmer
- Pen press
- Assorted grits of sandpaper through 800 grit and Abralon sanding pads
- EEE cream and Woodturner’s Finish if a soft friction finish is desired.
- Medium CA glue as a hard finish
- Acrylic pen buffing system
1 Use a longer 7mm tube from another pen kit (A), such as a European-Style Pen kit, glue it into a pen blank, and square the ends.

2 Turn down the pen blanks as per Step 3 on page 63, but this time use a parting tool and remove ¼" from the end of the lower barrel. Make sure you have cut a square shoulder to assist in gluing the Corian piece to the end (B).

3 Use medium CA glue to glue the Corian piece to the end of the lower barrel. Then, trim the end of the lower barrel with a barrel trimmer (C).

4 Continue to reduce the lower barrel using a skew (D) or a Spindlemaster.

5 Remove the center 7mm bushing and continue to reduce the blank until you have a smooth transition from the upper to the lower barrel (E). Then, sand and finish the blanks as before in Steps 28 to 36 on pages 58 to 59.
The popularity of the comfort pen makes this an admired style of pen and gives it an excellent track record for sales at craft fairs and shows. Shown here is a comfort pen turned from a piece of yellow and red double-dyed buckeye burl. The standard 7mm mandrel is used in conjunction with the comfort bushing set. Use two standard 7mm bushings, then the comfort bushing, followed by the lower blank, another comfort bushing, the upper blank, and a 7mm bushing.

Materials

- Comfort Pen kit or kit of choice
- 7mm mandrel with comfort bushings
- Double dyed buckeye burl or material of choice
- Drill bits, 7mm
- Pen insertion tool
- Cyanoacrylate (CA) glue, thin and medium
- Barrel trimmer
- Pen press
- Assorted grits of sandpaper through 800 grit
- EEE cream and Woodturner’s Finish for a soft friction finish.
- Medium CA glue as a hard finish
- Acrylic pen buffing system
1. Cut the pen blank to the proper length and add \( \frac{1}{16} \)" on each end (A).

2. Rough up the pen tubes by rubbing them on a piece of 100-grit sandpaper.

3. Drill the blank using a drill press and a 7mm Colt drill bit.

4. Glue the pen tubes into the blanks using thin CA glue, followed by medium CA glue. Use a twisting motion to spread the glue evenly inside the pen blank.

5. A 7mm barrel trimmer is used to square the ends of the blanks 90 degrees flush to the ends of the brass tubes (B).

6. Insert an adjustable mandrel into the lathe, place the nib-end comfort bushing on the mandrel followed by the lower pen blank, and add the center bushing for the comfort pen followed by either a mandrel saver or the locking nut for the mandrel.

7. Use the roughing gouge to start turning your pen. Continue to reduce the blanks using either the Spindlemaster or the skew to give the blanks the final shape just slightly proud of the bushings.

8. Because the comfort pen uses a soft gripper collar on the lower barrel, measure 1" from the end of the lower barrel and use a parting tool in bevel-rubbing mode to cut a clean shoulder. Remove wood down to the brass tube, then sand to 800 grit followed by the Abralon pads. Apply a CA finish on the lower portion and buff with the acrylic pen buffing system (C).

9. Turn the upper barrel down to the bushings, sand and apply a CA finish, and buff (D).

10. Line up all of the parts according to the instructions in the Comfort Pen kit and assemble your pen.
PROJECT 5

Acrywood Electra Rollerball Pen

All of the pen kits available on the market today that are a rollerball pen can be easily converted to a fountain pen, and vice-versa. The rollerball tip can merely be unscrewed and the spring and rollerball refill removed and replaced with a fountain pen tip and converter or cartridge. Making the rollerball pen and fountain pen are identical; you will shape the body of the pen, and the only difference is whether the rollerball tip or fountain pen nib is placed on the end of the pen. This project will shape the body of the pen and add the rollerball section. Because this is a combination of wood and acrylic material, we will apply a CA glue finish to the pen.

Materials

- Electra rollerball pen kit or kit of your choice
- Acrywood black pearl pen blank or blank of your choice
- 7mm adjustable mandrel with Electra bushings
- Drill bit 10.5mm
- Pen insertion tool
- 5-minute epoxy to glue pen tubes
- Cyanoacrylate (CA) glue, medium, as a finish
- Barrel trimmer or squaring jig
- Pen Press
- Assorted grits of sandpaper to 800 grit
- Abralon finishing pads
- Acrylic pen buffing system
Create Stunning Writing Implements on Your Lathe

Learn to create—and sell—exquisite custom made pens. If you’re looking for exciting pen turning projects and the most up-to-date information available on tools, materials, and techniques, you’ll find it all in this definitive guide. Expert pen turner Barry Gross shows you how to craft fine writing implements for yourself and your customers, in a completely revised and expanded new edition.

Gorgeous New Color Photographs
Get inspired to create your own one-of-a-kind conversation piece by browsing an updated Gallery of Pens showcasing the latest work from master pen makers.

18 Customizable Pen Turning Projects
Build a classic pen or try something new with a wide range of pen projects for all skill levels. Clear step-by-step photos ensure success for novice turners.

Amazing Advanced Materials
Discover great new pen turning options using advanced materials like Acrywood, Trustone, Alumilite casting resin, Inlace Acrylester, acrylic ripple and Macro Molecular Metal.

NEW IN THIS EDITION

Casting Clear Acrylic Pen Blanks
Learn how to create personalized masterpiece pens by coating almost any art, memorabilia, or found objects with clear acrylic. Experiment with stamps, snakeskin, cigar wrappers, watch parts, pigmy seahorses, or scrapbook photos...the only limit is your imagination.