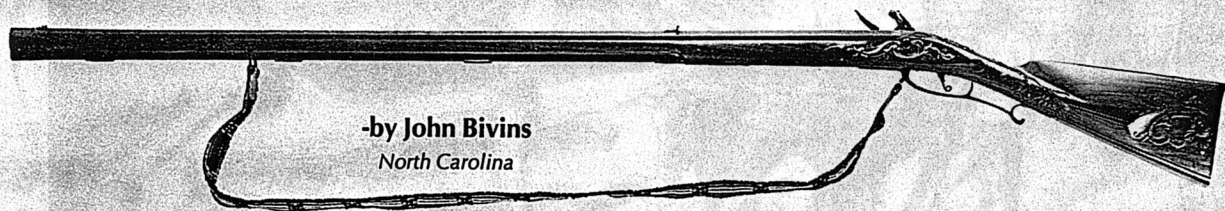


ON MATTERS OF GUNMAKING....and other things



-by John Bivins
North Carolina

For reasons which I trust will become apparent later in this article, our illustrious editor has asked me to make some general comments about the gunmaking trade, and things related to it. While reflecting upon such elevated and metaphysical matters, though, my thoughts strayed to something more mundane: stock finishes. Probably due to the massive onset of winter's gunmaking projects around the country, I've received a number of requests recently for information on that subject. Since I haven't written anything on stock finishing for a number of years, I started making a few notes about the system I use. It's nothing unusual, actually, and doesn't require expensive oils and ointments that must be furtively stirred in the graveyard under the dark of the moon, as some early formulas seem to imply. I've always been intrigued by the means which early trade masters used to protect their secret potions, whatever the use was to be. The standard language of eighteenth and early nineteenth century apprentice indentures, whether for budding gunmakers or fledgling widget-forgers, contained the phrase "learn him the art & mystery of the trade." Apprentices were sternly warned about haunting alehouses, gambling, and other such heady pastimes, but the heavy hand of authority really came down in matters of privy trade techniques. When an apprentice was told that "his master's secrets he shall keep," the kid knew without any question that nobody was kidding about that. A few rolls at the dice or a clandestine pull at the jug might bring on no more than a quick and vigorous birching, but giving out the master's recipes might well have resulted in a steady diet of cold gruel and wormy biscuits for a fort-

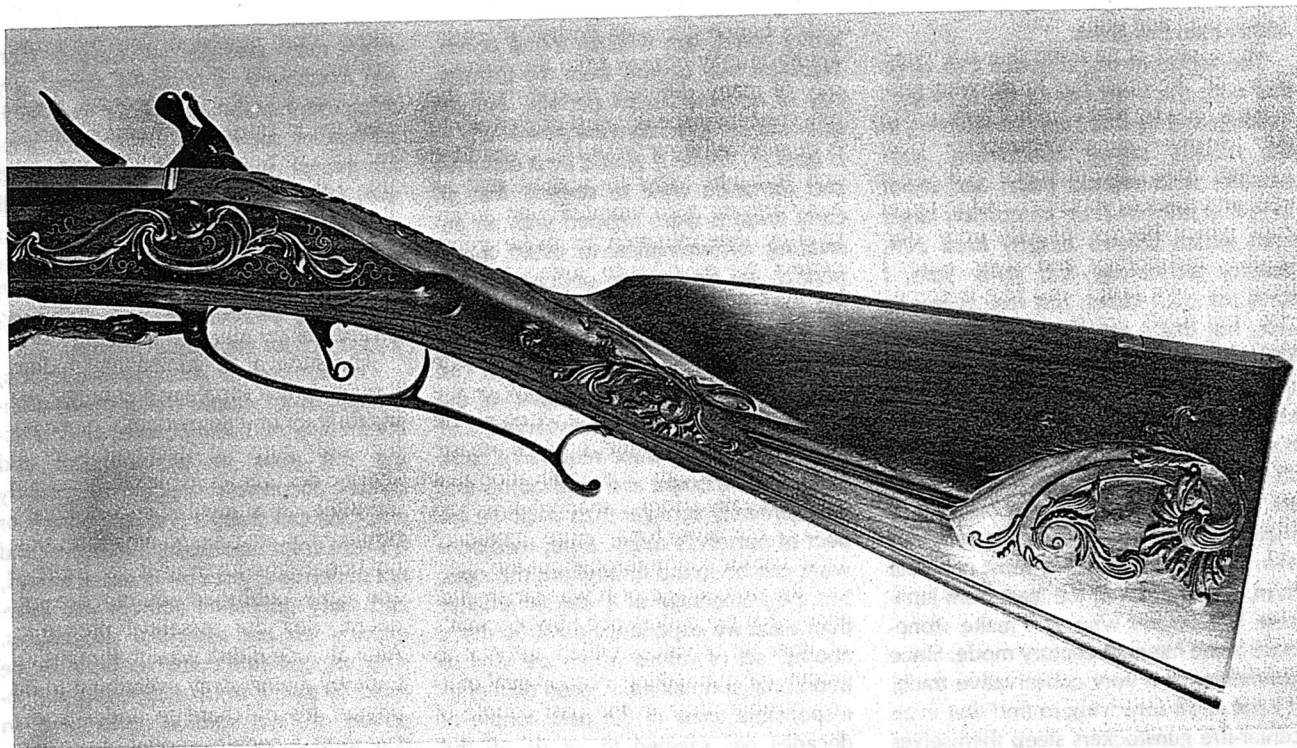
night - if the hapless apprentice was allowed to remain in the establishment. While there were no formal trade guilds in this country like the ancient institutions of Europe, the old protectionist tradition survived its transatlantic hop quite well.

You might well ask what on earth this has to do with finishing gunstocks, or gunmaking philosophy for that matter. Indeed. Well, that business of the "art & mystery" is a subject which has brought me to these pages, so to speak. Let me try to explain myself, at least for the benefit of our worthy readers who don't know what I'm about, or why I would make so bold as to write on gunmaking and such.

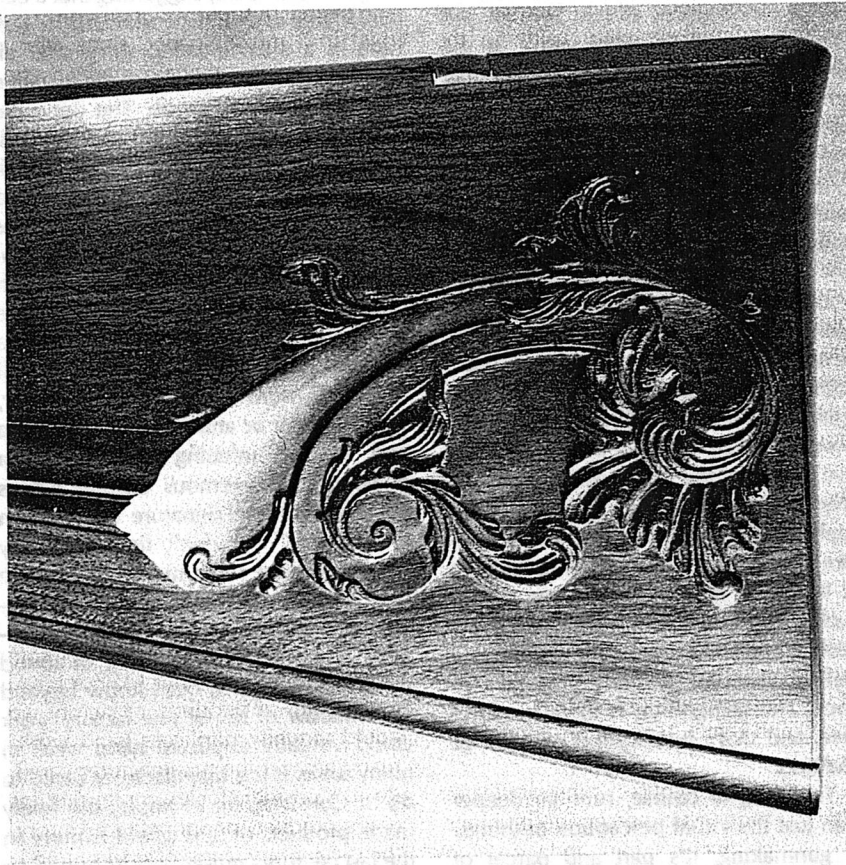
I'm a gunmaker. I feel that I can honestly call myself that, since I design most of the components I use in making a firearm, though I don't necessarily make all of those items - locks and barrels, for example. I can call myself a gunstocker, for that's basically what I am. I fabricate metal parts and decorate them, so I'm doing something of the work of both a whitesmith and a silversmith. In the historical sense, I am not a gunsmith, for I have neither the training nor the inclination to make firearms "lock, stock, and barrel" as the old saw has it. There are indeed gunsmiths amongst us, fellows such as Gary Brumfield, Jon Laubach, Jud Brennan, and others. In any event, whether gunmaker or gunstocker, I've been at the trade for twenty years now, part-time, then full time for five years, now part-time again. Regardless of the amount of hours I put in at the bench, which these days amounts to around 65 hours a month, I've tried to understand how I could spend my bench time in a professional fashion - that is, I've always had the idea that if I was going to take up

my time with gunmaking, then I would learn how to do it in a manner that seemed in line with what the English haughtily refer to as "best" quality. Looking back, I can say that there have been elements of some jobs I've done that I felt moderately satisfied with, but I've never completed a piece that I felt totally happy about. The carrot has always been well out in front of me, so to speak, and I don't expect to ever touch it. That's one of the things I like about this trade; about the time you allow yourself a little smugness or complacency, along comes some fellow who's done it ever so much better than your very best effort, and he's only been at the bench for three years. Tough nougies, as my kids would say; back to the bench and try to work it out. The fact that most of us have had to teach ourselves the bulk of what we know may be the reason I take a strong dislike to the current and facile use of the term "master"... "master gunsmith" or whatever. Doggone few of us have any real right to use that appellation, any more than we can call ourselves gunsmiths, if we still have historical matters in mind. And to me, it's traditional values that are the backbone of this organization, and provide a philosophical framework for fine gunmaking. This is not to say that we should offer ourselves dewy-eyed and naked before the goddess of humility. We can perceive our own attempts at competence without having to glorify whatever level we think we've reached with lofty and noble titles. As for me, I never served any seven year apprenticeship. If I must find a slot for myself within the traditional system of the trades, then it would have to be "journeyman."

But what of this matter of "tradition?"



That's a word almost as ill-used as "master." I think, perhaps, that in historical gunmaking it's very likely easier to identify what tradition is *not*. For example, tradition is certainly not embodied in a muzzleloading hunting rifle with a variable power scope-sight sitting atop the barrel. Tradition actually means a great number of things to me, and trying to layout a comprehensive definition of something so labyrinthine would defy a host of Oxford English Dictionary editors. Tradition is at once temporal communication and a state of mind. The communication part of it tends to preserve a set of values which are apt to be conservative and "safe," that is, familiar values or concepts which in their very familiarity are as friendly to us as the act of pulling on an old and worn hunting boot. Non-traditional or "new" concepts are not as friendly, but since we are constantly besieged with such things, the traditional values seem all the more important, and function all the more as anchors on reality. Now, I'm no sociologist, but then I'm not much of a buckskinner, either, at least not on the surface. When I first started shooting black powder rifles over thirty years ago, there weren't any plastic priming horns or fast loading devices. One wore a pouch and horn. I had an old east Tennessee pouch made from a boot; it was pretty ratty, but it worked fine. I have a



better pouch now, and a much better horn, thanks to Tom White, and I've never been terribly tempted to use any fast loading devices other than the usual

old loading block drilled for three patched balls. So that's one sort of tradition, or retention of early concepts, even though my standard uniform is jeans

rather than fine skins.

The aspect of tradition that I've wrestled with the most has to do with gunmaking, and by that I am not referring to the usually raging controversy over whether folks should make and shoot long flint rifles or short percussion target guns which borrow heavily from 20th century technology and style. Sure, I have my own tastes, just like everyone else, but that's not so much the point. We copy old guns, or we absorb some of their details and rearrange them in new combinations, or we try to develop our own designs within a framework of early styles. Whichever of these viewpoints we work from, we utilize a heritage of shared stylistic language that is centuries old. That's tradition in its most concrete form, no different in the least from Japanese hill potters who still make stoneware in the fifteenth century mode. Since gunmaking is a very conservative trade, it's not at all surprising to find that even center-fire gunstockers steep themselves in accepted and familiar details, such as coved cheek-pieces which German and British gunmakers were using in the eighteenth century, or checkering, which is really an extension of early Rococo "diaperwork" or cross-hatching, in use on carved surfaces in France before 1720. Those of us who make muzzleloaders, of course, are totally absorbed with matters of traditional style, which is not easy for many modern gunmakers to understand. For that matter, such a complete acceptance of early tradition isn't easy for any of us to comprehend, but it seems to me that the root of it returns again to values. It's difficult to conceive how we could possibly better the creative genius of the seventeenth and eighteenth centuries, and attain a more sophisticated understanding of the system of nature and how all things relate to it. It doesn't matter whether we pursue such an understanding with academic zeal, or just feel a warm and undefinable feeling when we handle a graceful flintlock. The recognition is there in either case, and that's justification enough for tradition.

Tradition, of course, runs far deeper than just the visual perception of things. In gunmaking, it's part and parcel of technology as well, no matter whether we use investment castings, modern alloys, or power tools. Technological tradition may ignore style, and have little to do with whether we make a flint rifle or a

heavy bench gun with an inline action. Tradition may borrow from the technology of many different periods, but the one concept it speaks most powerfully to is *quality*. While it would be a distorted and romantic view to suggest that all early artisans were imbued with an answering determination to make things perfect, we do have to understand that the average tradesman of the eighteenth century was working with a different set of values than his counterpart today. The early chap stood in the shadow of the guilds, no matter where he worked, and the essence of his trade required a basic integrity of thought and application that was generally stronger than what we expect of ourselves today. Sure, mediocre work can be found throughout the ages, but the *percentage* of it was far smaller than what we experience now. So that's another set of values which are vital to traditional gunmaking. A good deal of irresponsible press in the past couple of decades has seemed to let us off the hook on that score, suggesting that a certain degree of shoddy workmanship is all right in a muzzleloader, since after all such guns were originally made in a time when things were crude. The opposite, of course, is the real truth. A host of advertising copywriters out there are steadily trying to ease us into a bland acceptance of mediocrity. It's the values which are imbedded in historical gunmaking that will prevent them from doing that, though. We don't even have to do gun work to see that. All we have to do is use our eyes, and when we pull the lock from a fine muzzleloader, whether new or antique, and find sharp and precise inletting rather than a chewed and cavernous disaster left as the unmistakable signature of "modern technology," we don't find it terribly hard to choose what makes us feel the best. If that sounds like a diatribe on behalf of the custom gun trade, don't believe it. I am solidly in favor of sound manufactured guns, but I know beyond any shadow of doubt that factory work could virtually duplicate hand work in many areas if the manufacturer cared to do it. Consider, for example, the finely made products of Springfield Armory in the last century - musket stocks turned on Blanchard lathes, and inletting largely cut by jig borers and the like. Of course, those guns required more hand work than manufacturers like to expend today, but at the same time, consider how

much more precision we have in modern machinery. Should we accept anything less than the quality of a Springfield percussion musket, a weapon designed for inexpensive production and rough use? I think not. And that's where tradition provides us again with some measure of things in our century. It's more than familiarity and nostalgia, and it's more than reverence for past genius. It's a yardstick for measuring integrity.

The survival of gunmaking tradition, though, isn't a simple matter of just wishing for it, or of reading books, or even using old guns as technological and stylistic documents, which they certainly are. One can study a fine stock finish or brilliant color casehardening forever and not understand just how it was achieved, and early published sources not infrequently left out essential procedures. After all, one didn't want to diminish the trade by giving away everything to neophytes. It's not hard to understand, in fact, how a certain amount of protective stuffiness has crept into any trade as complex and difficult as gunmaking over the centuries. If we still were bound by the old "art & mystery" concepts, though, most of us would still be trying to make slingshots, or maybe zip guns if we were particularly bright kids. The guilds are gone, and a good deal of rather spectacular technology has grown dusty or disappeared altogether in the outwash of the Industrial Revolution. If you make semi-conductors, then no one would consider you anything other than prudent to shield manufacturing processes. The gunmaking trade, though, is a different matter. In gunmaking, which is still very much a traditional skill if we care to do it right, trade secrets are worse than a luxury. They're downright damaging to the health of the trade. That's particularly true of historical gunmaking. I am continuously dumbfounded at the amount of time we take re-inventing the wheel. Early techniques used in forge and foundry work, metal finishing, lock design and manufacture, and a host of other such things flee before us like wisps. If we're ever to catch them, and understand them fully, then it seems to me that we need to share what little knowledge we've managed to glean, for we're bloody well not going to find it in trade schools. That's one of the prime reasons for Gunmaker's Hall.

In a great sense, it has been Gunmaker's Hall, and all of the fine people be-



hind it, who have brought me to these pages. My greatest interest these days, I think, lies in the area of education. As a writer and editor for a museum, educating people about the material culture - decorative arts, if you will - of the South is my business. As a writer in the firearms field, matters of gunmaking technology and the history of style concern me the most. As many of you know, I've been a staff writer for *Rifle* magazine for ten years. I've written for other periodicals as well, and back in the '60's had a *Muzzle Blasts* column entitled "Showcase," which spotlighted the work of contemporary gunmakers. With the opening of Gunmaker's Hall, I have come to the realization that this magazine, because of what it represents to all of us, should be the place where I direct most of my ramblings on the muzzleloading end of gunmaking. I make no claims about having the best or only method of doing anything; most of what I know has been gleaned in bits and pieces from scores of other people, and when I can remember who they were I am quick to credit them for the help. I consider myself a "pragmatic" traditionalist. That is, I'll seek out any process that I can use to make my work efficient and therefore financially useful, for, after all, this is a business. I refuse, however, to adopt any method which threatens to compromise the finished product, or diminish utility. In other words, I'm satisfied to use investment castings, deep-hole drilled barrels,

and up-to-date compounds for stock finishes, but if I ever use a router for finished cuts in a lock mortise, power buff a butt plate, or epoxy in a thimble, I pray that the Great Mechanic in the Sky reaches down with hoary hand and grabs me by an uncomfortable portion of the anatomy. I use some machines, but I'm not out to reveal all manner of humming, oil panaceas for the trade. For the most part, they don't exist, for this business is still a matter of exacting hand work. In the past couple of years, *Muzzle Blasts* has seen some particularly fine writing about traditional processes, and I refer to Jay Close's "Apprentice's Notebook" and David Richardson's "Traditional Riflemaking." My hat's off to those fellows, and though I have no desire to forge a tang bolt when I can turn it on the lathe, I want to know how to do that. Inherent laziness aside, the only reason that I'd refuse to make all my woodscrews from scratch - as the fellows at Williamsburg do - is that I know that I can't sell a rifle that has better than \$100. tied up in screws alone, or \$1500. or more in a forge-welded barrel. The existence of such skills is very important indeed, though, if we want to understand the whole picture of historical gunmaking, and you'll hear plenty of it from me. I am also interested in making money at the trade, though, and that's why I also write about contemporary methods and materials.

So it seem that you'll see my byline

here with great regularity henceforth; consider this a "hello." You'll also see quite a lot of contemporary work as illustrations in my articles, because I particularly like to give nice work as much press as possible. In some ways, this is a fragile trade, and one that needs all the support it can get. In this issue, I show a piece of my own stuff, though not without a little embarrassment. Those of you who know me also know that I'm not one to blow my own horn. I'm more interested in what the rest of you are doing, and except for procedural shots and the like, you'll see little of my work on these pages. I expect to photograph quite a lot of new work at Gunmaker's Hall, and to find material for articles there as well. For the nonce, we have several things planned, such as the stock finishing I mentioned earlier, a two or three-part series on techniques used to restore missing finishes to original appearance, which is quite a controversial subject indeed - just as it should be. I'll cover the equipment and techniques that are part of schuetzen competition, which Tom Schiffer has been so instrumental in helping to revive in recent years. We'll examine the ins and outs of the British style in muzzleloading, and in one issue during the upcoming year I plan to edit a motivating autobiography by a fellow who's come to be a mainstay of the gunmaking trade: Lynton McKenzie. I certainly welcome any suggestions about topics needed, and I stand ready to help anyone that I can with queries. There is one thing that I ask in that, though. If I'm to get my benchwork done, I've found that I have to stay away from the typewriter except for articles. That means, friends, that I'm going to buy beans, I don't write letters. However, if you're stuck with a problem, call me at (919) 748-0275 any weekday evening after 7:30 eastern standard time, or almost any Saturday. I do want to help, for the Lord knows I've gotten plenty of it over the years myself. I do indeed love a "mystery," but when it comes matters of gunmaking, I prefer solution....