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In this issue

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Front cover: — Per Brandin in the Tevere Tailwaters *(photo by Alberto Poratelli)*

Photo on page 2 — *Agate* stripping guides Made by Luciano Oltolini

18 April 2010

Stage on RodDNA ed Hexrod software

Editorial

Do you think that someone might think
that we're late publishing the BJ n.5 issue?

No, I didn't.

Honest. I ran outta gas.
I had a flat tire.
I didn't have enough money for cab fare.
My tux didn't come back from the cleaners.
An old friend came in from outta town.
Someone stole my car.
There was an earthquake, a terrible flood, locust's.
It wasn't my fault!!

I swear to God!!.

...Will I be forgiven?

Marco O. Giardina

Translated by Marco Giardina

In this issue

“Mayflies”

Photos by Massimo Strumia

Straightening blanks : What a bore Where is comes from and how to alleviate it

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di Marzio Giglio

Surely one of the greatest frustrations that treacherously comes out at the end of our trip, is to find out after gluing, cleaning and sighting the blanks, that they are slightly curved here and there. Just so much that you can be certain that the curves will be even more evident once the rod has been wrapped and the reel seat and grip applied. But it's too late and all that can be done is to try to dangerously straighten it with heat. This is a risky operation which becomes very difficult if we have used epoxy glues. This short article analyses the reasons that lead to this problem and describes a simple method to straighten the blanks *before* the glue has set.

Origin of the Problem, the cure and some wrong ideas:

Let's start from the second point. By heating and tweaking and twisting the blanks in the areas where they are bent, we can get to a reasonably straight blank. You can now ask yourself whether you have reached the same solution that you would have achieved had you glued the blank to perfection? Not at all!! In practice you are only applying a cosmetic operation that will without doubt leave the blank in worse conditions than before. In fact, we are counter balancing the wrongly glued strips and we force opposite strips to locally "swallow" compressions and stretching in order to smooth out the curves. If you place the strips in an oven at low temperature after varnishing, the problem just comes back as for a subtle vendetta!

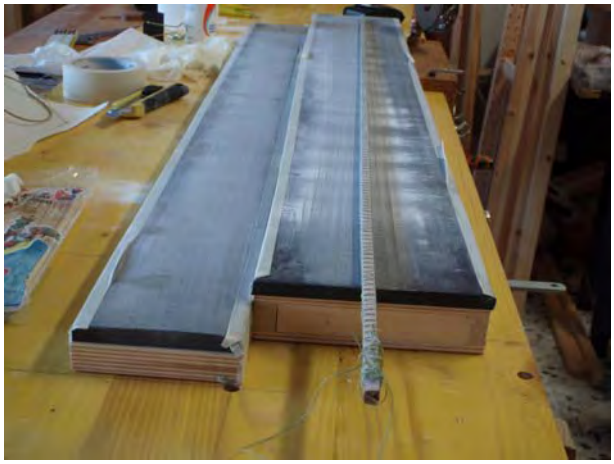
In reality what happens is that during the binding and various other successive manipulations the strips have accidentally slipped one along the other because of the fluidity of the glue. A dangerous accomplice is the binding process which now attempts to keep the strips in this wrong position. So a localized curve can be dealt with before the glue has set only by letting the strips slide correctly, starting from the curved area and getting this deformation to slowly slide out through the tip. This inevitably means fighting against the binding because this tries to prevent the repositioning of the strips due to the friction of the cord on the outer part of the strip.

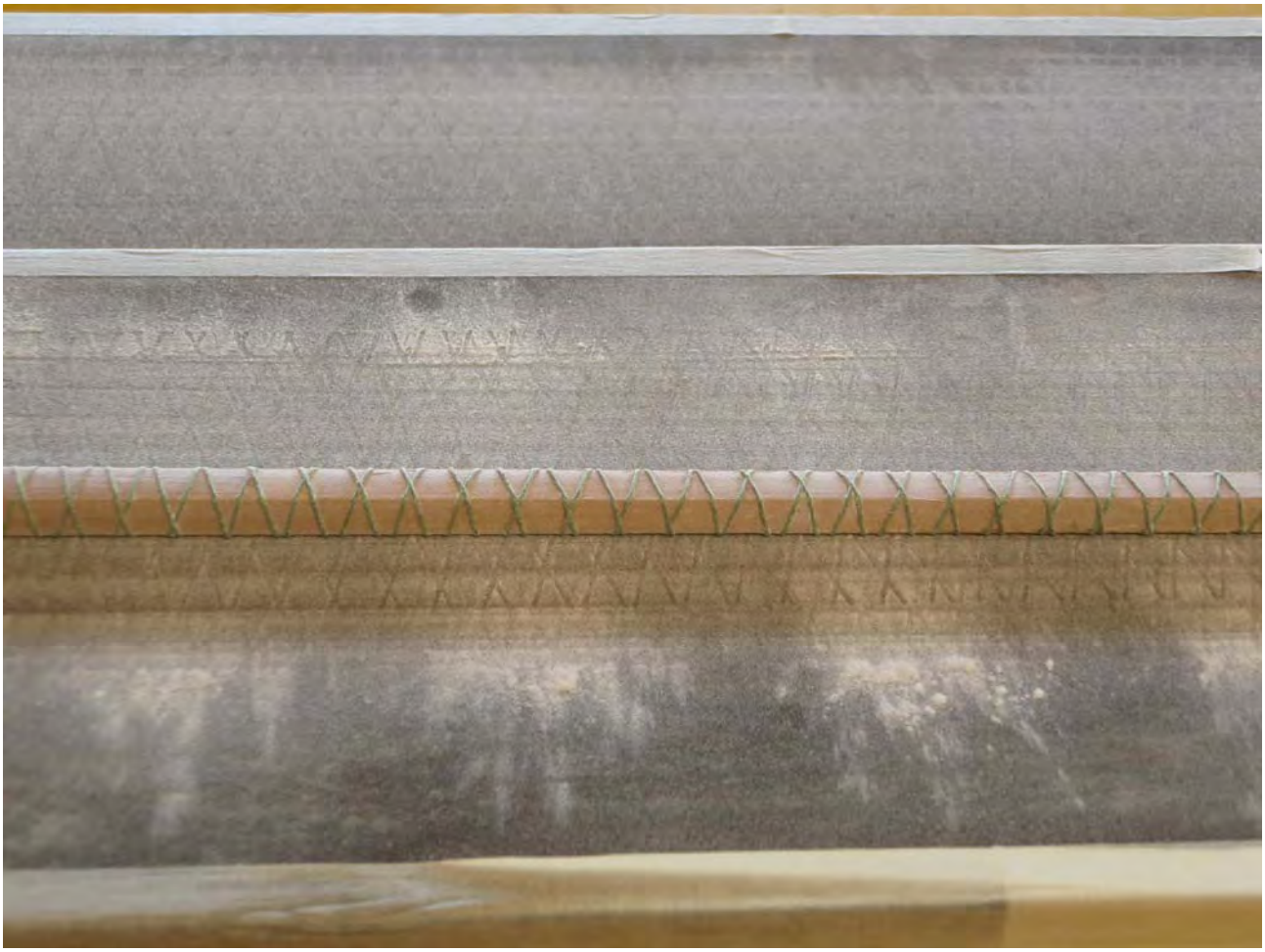
So what can be done?

There are a few methods and in particular the ones described in Jack Howell's wonderful book. One of these is to use a rubber rolling pin (which is excellent to push the deformation along) and the other is to roll the blank on an adequate flat surface. Both systems need to deal with the fact that the blanks are bound with cord and especially at the extremities there are swellings caused by the knots on the binding cord. This is particularly annoying with the tips at the thin end where the knot can be double the size of the blank. Ideally we should rotate the blank around its central axis with a thousand magic fingers that keep the blank in this perfectly aligned position and while rotating these ideal fingers would have to compress the blank towards its centre , so that the bends could be pushed out from the blank. All this seems quite difficult but it can be achieved at very little expense: two quite thick plywood planks that are at least 15 mm thick, 140 cm long and 20 cm wide (these dimensions are not critical); two pieces of foam rubber like the ones the campers use or 10mm thick neoprene to cover the planks. Then some talcum powder like the one that is used to keep rubber dinghies during the off season – technically its magnesium silicate but any talcum powder will do (Tim Anderson suggested that even plain bread flower will do too) .

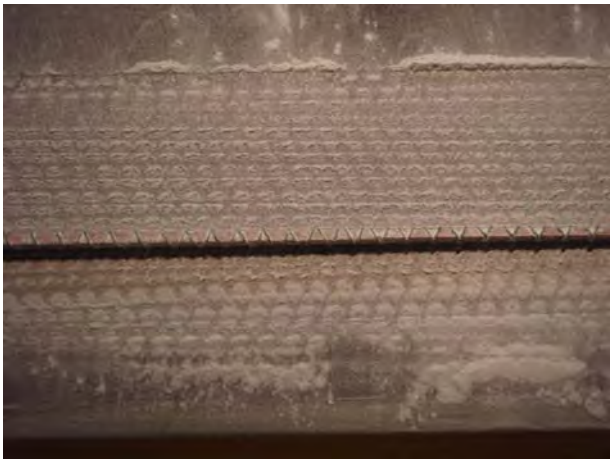
This is how it works: one plank is placed on a table and is dusted liberally with powder, the glued and wrapped blank is placed on the plank (covered with foam or neoprene). The powder helps to absorb the excess glue so that the surface of the foam doesn't get soiled with the excess glue. On top of this you place the second plank covered with foam and dusted with powder so that the blank can roll on the bottom plank. Because they both have the same elasticity and they and yielding in the same way, the symmetrical axis is automatically maintained even in the places where the bind cord knots are. Continue rolling maintaining pressure re leasing gradually when you stop.

Check if the blank is straight by sighting it lengthways. Wait until the glue has set sufficiently before picking it up.





Concluding, I would like to say that this method is cheap and gives a good result. When dealing with the tips that are usually treated quite badly before the glue has set, you need to exert a little more pressure and continue rolling a little longer. It can happen that there is a slight continuous curve especially if we haven't insisted enough with the rolling (about a few millimeters – little but visible. I remember that a few years ago I had constructed a braid out of synthetic yarn which was pulled taught by an adjuster. I would place by glued blanks in this system and the adjuster would pull the blank as tight as violin strings. I noticed that sometimes there would be a slight curve even though I would let the glue set with the blanks pulled tight.



I believe that the problem is given by the friction of the binding cord and by the very small forces needed to create such a small curve. These can of course be corrected with heat.

Tortoise shell — Tiger flaming

A short description and photos to talk about the things I didn't mention at the Gathering.

ooo

By Giovanni Nese

There are more things that I didn't say than those I did!

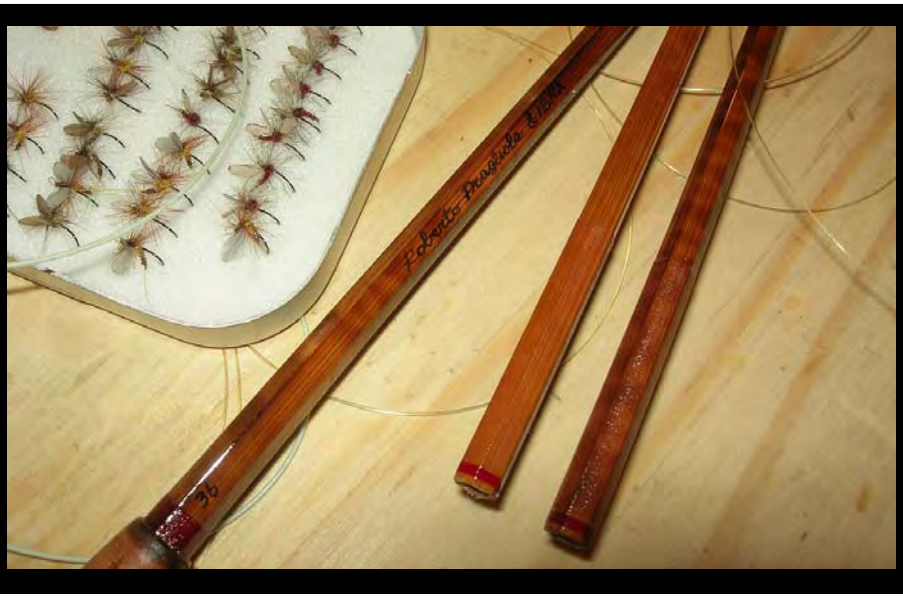
Why? I thought that not many people would have been interested and that those few who were, didn't really need a detailed description to make a decent Tiger flaming. Afterwards and having given the matter some thought, also in consideration of the frenzy of information and requests that I received during the gathering, I realized that if someone had wanted to try out the method, he would have considered that it isn't functional and would have abandoned the idea.

So how did the Tiger flaming come about? By chance! One day I had a blank based on a Garrison 212E taper in the oven and I turned on the hot air gun full blast. After cooling I realized I hadn't achieved the result I was looking for. The heat treatment (tempering) didn't happen. I try again with a second cycle. Same unsatisfactory result.

"So what shall I do?", I asked the blanks but they didn't answer!

"So I'll do an open flame heat treatment" – No! Everything will burn.

To make the most out of this bad situation, I tried to see what happens to the wood when heated directly on the outlet of the hot air pistol. I quickly made a fish tail from a piece of pipe to get a wider jet of air and I start the heat treatment directly on the hot air pistol. The strips were just a few millimetres above the nozzle. The bamboo changed colour immediately and I liked the result. I darkened a section and went forward. I noticed that if I turn quickly, it takes longer to flame; if I slow down or slop a dark burnt patch is created. Later on while planing I notice that in the areas where I had turned quickly, the heat had penetrated deeply into the strip and tempering also took place. On the contrary you only burn the surface and temper only the outer layers.



The results are very good to look at

If you bind the strips and then later glue them in the opposite way, the sequence of marks becomes irregular and the appearance is great. The results of the heat treatment is also good, very similar to the one achieved with an open flame. Perhaps it's a little deeper and similar to the Young method but less brutal and also useable on level strips.

Equipment：

1) Moisturising nasal cream ；

2) Dust mask;

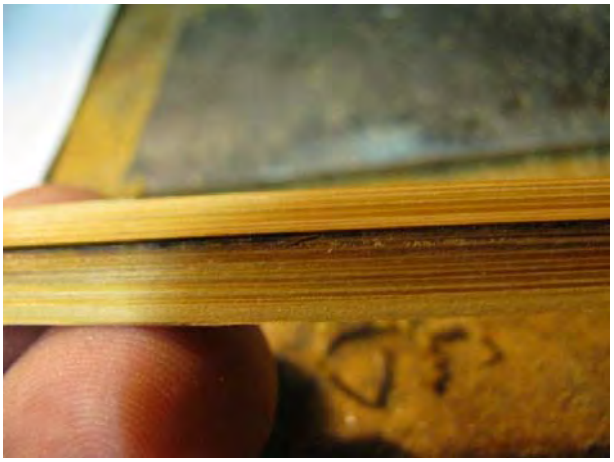
3) Powerful hot air gun – at least 1500-2000 W, The stronger the better;

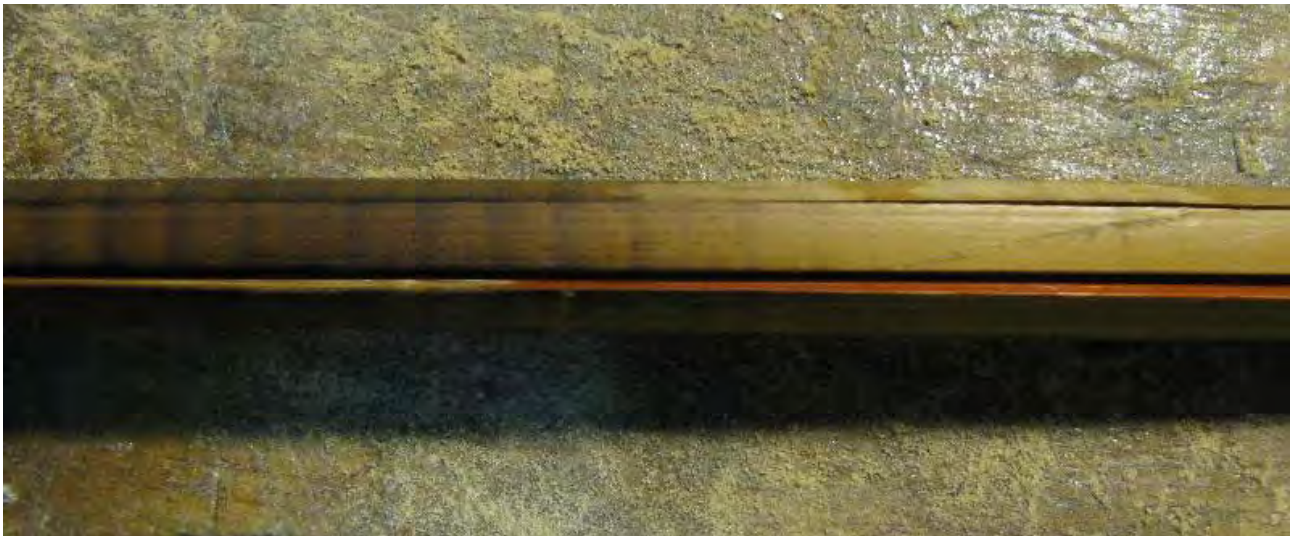
4) Fish tail nozzle;

5) Thick cotton thread (unwaxed);

6) Garrison binder;

7) Time;





1. Any moisturizing cream that will help to keep your nostrils from drying out;

2. Protects the nose and lungs from the hot fumes – always use it;

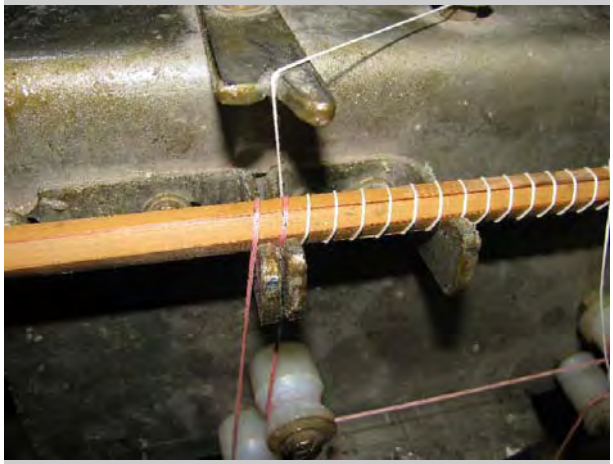
3. Buy the best one on the market. It is the most important investment after the planning form and the planes. Treat it well, never let it fall on the floor, Respect the on – off and cooling times and keep it in its dust proof box.... it will last you 15 years. My Metabo has almost come of age and can't handle the tiger flaming but it's still OK for straightening and to polymerize glues. Bosch is good; the best is METABO. Ask for a professional gun form a supplier of panel beaters or mechanics. You will have a guaranteed tool and they will suggest the best one because you will be using at full power. The higher the temperature the faster the job gets done. At lower temperatures the tempering is deeper but the look isn't as good.

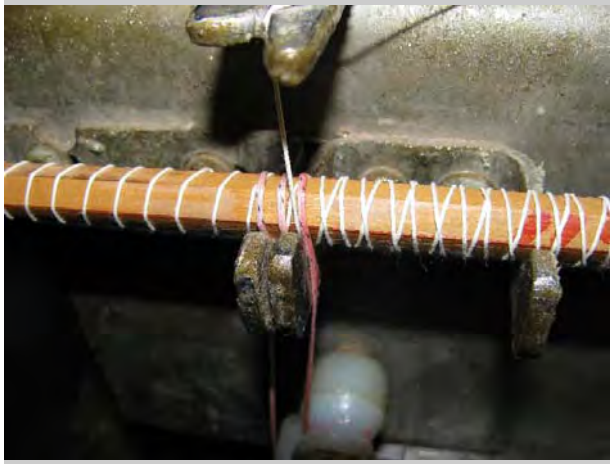
4. All you need is a pipe which you squeeze to shape. Some guns come with it as an accessory.;

5. Delicate paragraph but that can influence our result. I tried various cottons from the one my mother used for crochet work, waving cotton, but at the end I chose shoemaker's thread which is very strong and withstands high temperatures. To achieve a natural look you should have two kinds of binding. One wider and one narrower buy changing the position of the support of the binder or making and extra turn of the binding cord.

6. This is the tool that you already use or that you most certainly already have. The binding cord should be very tight with at least 1 Kg (2,2 lbs) of weight.

7. Time. How long does it take to get the tiger flaming done? At least 40-50 minutes for three levels blanks.





I usually squeeze the nodes with a vice and every time you heat them again they come up again. They even come up when you straighten a finished blank. After the tiger flaming, I let them rest a few days so that they rehydrate. In this way it is easier to straighten the nodes again. To do so I use the pistol, the vise and a little tool like this.

Now you know everything! (sic). You can try your luck..

Ciao

A Rodmaker's profile: Edoardo Scapin

Interview by Enrico Rossi

Edoardo, what were your first experiences in fly .fishing?

I started in the early 80's after having tried most other techniques including spinning right at the end. Starting to fly fish was just a natural evolution that brought me to completely abandon all other types of fishing.

After all these years spent on the rivers, which is the aspect that today you still find interesting about fly fishing?

I have to admit that I went through phases during which my interest in Fly Fishing was decreasing but bamboo really helped me to get over them. Let me tell you an anecdote. At the end of the 80's I used to often fish the Traun in Gmunden which in those days was absolutely fabulous for dry fly fishing. It was in that period that some Austrian friends taught me to use a strike indicator and this seemed to open vast new horizons for me. The technique was immediately a killer: I could catch one fish after another and it wasn't even necessary to cast. I got to the point that I was nymphing even when the fish were rising, but I didn't enjoy those moments and situations that had been so fascinating at the beginning. I continued in this way until it dawned on me that I couldn't take it any longer and that all my efforts to learn to fly fish were disappearing together with my interest. Then thanks to my meeting with bamboo, I took a step back and rediscovered the sport and the essence of our "discipline" – I call it this today because that's what I think it is. Let it be clear, I don't disdain the use of a "bobber", which in some occasions I still use, but I believe it's like with alcohol – it should be taken in small doses. But to answer your question, I must confess that after nearly 30 years of fly fishing, the thing that really gets me is staying out on a river, enjoying the scenery and the nature and challenging the trout I have spotted in the way that is most pleasing to me.

Which is your favourite river in your area?

It's been a while that I almost exclusively fish the Piave downstream from Belluno. I find that it is a splendid river and there are not many like it in the rest of Europe. There are kilometres and kilometres of slow moving waters, riffles and pockets. The trout are still "real" and difficult. The marble trout and hybrids are not there to wait for any fisherman: you must respect their times and wait for them patiently. The river would have incredible potential. It is a pity that the various management schemes have never managed to valorise it. But let me stop here because the discussion would become too complicated....

An a broad?

As a fly fisher, I was formed more abroad than in Italy. My approach to fly fishing right from the start has involved a travel dimension. In those days I was attracted by the gurus, I started travelling, map in the hand between Padua and Slovenia. Sometimes I would take day trips – so this meant getting up early in the morning and coming back late at night. In those days you needed a passport to cross the border and also the permits were quite expensive and they were to be paid in German Marks or USD, but even so, admittedly those rivers with respect to ours were really worth the extra fee. Then with the passing of time I became disenchanted to the point that my last outing on the Unec before this last outing with you and the other friends, goes back to 1996. I stopped going because there were so many fishermen that they might have well have paved the banks. Instead the Gacka in Croatia has become a fixed venue and I've been there every year since with great pleasure (war permitting of course). Just think that in January 1991- yes I was there during January with Francesco Palù just a few months from the Serbo-Croatian war. For me the Gacka is like a beautiful woman that first charms you but then leads to a love hate relationship. It is a great river that requires a very technical approach except for the stockies that are regularly stocked along the main road. I have also got good memories about the "mythical" Buna in Bosnia Herzegovina. A part from the fishing, just driving there along the Dalmatian coast is a spectacle. But my second fishing home is Austria which I started fishing at the same time as Slovenia. In over twenty years of fishing there, I have the fortune of having a great knowledge of its most beautiful waters and I still collaborate with O.E.F.G. in Vienna for the distribution in Italy of a limited number of fishing permits. I often smile when reading the various Italian forums about the real potential of these rivers. Many are convinced that Austria is only Carinthia, while in reality there is a little of everything and without generalizing you can say that some of the rivers are managed extremely well. Some are quite exclusive and difficult to get permits for – limited permits available, right of access to the elderly members, costs etc. Talking of fishing abroad, in 1992 I was struck by the stories told by the American fishermen and so I decided to go for Bonefish and tarpon. Someone said –"But what the hell are these Bonefish....rather go for Salmon!" In those days we knew very little about it.

There were some pioneers like Riccardi and Leombianchi but the vast majority of Italian fisherman completely ignored the great potential offered by those tropical paradises. After that first trip, others followed because I was really taken by the beauty of the places and by SWFF.

Which are your favourite techniques?

Without doubt dry fly fishing, but if the prey is interesting I adapt quickly to the situation alternating between dries, nymphs and streamers. In the whole I prefer to fish for localized fish, so I walk and observe a lot before finalizing my presentation.

How did you get to bamboo and when did you start making rods?

It wasn't love at first sight, but something that matured in time. As a fervid carbon fibre supporter, I approached bamboo thanks to a friend. In the beginning I teased him – a little because of his attachment to these rods that to me seemed outdated but then in the end I landed up thanking him.

In the beginning my approach was directed towards collecting, firstly European rods (Hardy, P&M, Foster, Milward and others) but I soon moved my interest to rodmakers from across the ocean and here the world opened. The was no internet so I waited anxiously for the American dealers' catalogue (Martin Keane, Len Codella and Bob Corsetti) which would arrive by post and even today I keep them jealously. Those catalogues had commercial goals but they were also little "encyclopaedias" that opened the doors to a world made of dreams – so high was the level of the rods proposed and with the harsh reality of prices. I bought and swapped and so I managed to see a bit of everything but over the years I had to admit to the superiority of the Americans when it came to rodmaking, from a construction point of view and also for some highly refined projects. Just as an example: try to compare any Hardy made between the 30's and the 60's with a Leonard from the same period. Both were companies with large productions but the American rod prevail over the whole line of rods even thug it must be said that among the many rods made by Hardy, there are some fabulous ones like the Marvel. Sometimes when purchasing without having seen the rods, I would receive some that needed some attention and so I started with restoration work, but I was already brewing the idea that I needed to make something that was really mine. This "something" saw the light during the winter of '92-'93 when in perfect solitude and as a self-taught man, I made my first rod using Garrison's book as a guide since there was no internet – I wish to reiterate this point for the benefit of my "younger colleagues.

Did that first rod work out well and how long did it take before you were really satisfied with the rods you were making?

Well at the time it seemed marvellous to me! It was all flamed because I had no oven at the time. When I look at it today, it sends shivers up my spine, but I think this is perfectly normal. As time passed the results came too. I had a very clear idea both in terms of construction methods and design and soon I left Garrison behind. Let's say that after the first ten rods I had reached quite a high standard of production.

On average how many rods do you make a year?

About ten.

Who are your favourite classical rodmaker?

I've always been fascinated by the Catskills school: above all Leonard and then by other masters that were formed in the Central Valley factory like Jim Payne.

And among the contemporary rodmakers in Europe and the US?

In Europe the ones I like best are Rolf Baginski and my friend Gunter Henseler. In the US I admire the latest followers of the Catskills school like the late Tom Maxwell but also Bob Taylor, Walt Carpenter and Marc Aroner.

Which tapers inspire your work when designing and what kind of action do you prefer living your rods?

Over the years we have developed a series of designs that I like trying to incorporate a specific taper for each section. I've never believed that the same taper can give it's best in any given section and with all respect for Garrison, I'm convinced that for each section one should look for the right taper based on the power of the rod (line weight), how the rod will be used and last but not least the feeling with the rod. In any case, bamboo rods reflect the rodmakers personality, his way of casting and the way he intends fishing, his sensibility and cultural background. On the whole I prefer medium fast rod, not necessarily powerful but that can be very precise and accurate in presentation. I don't mind rods that are purely parabolic and I've developed a couple of models but I find them to be less accurate, at least in the way I feel about casting.

Now let's discuss your rodmaking techniques. How do you heat treat the bamboo?

I use a simple hot air oven.

Do you feel that flaming has an effect on the action of the rods or does it only affect the looks?

A lot has been said about this, but in my opinion it depends on the type of flaming. In light flamed or tiger flamed rods, the treatment has little or no effect. Instead in those flamed uniformly and quite deeply, you can consider it a proper heat treatment even if done using empirical method, like direct contact with fire as opposed to the homogeneous treatment used for heat treating blonde rods.

Have you ever considered using a beveller or a handmill?

A few years ago with a friend I made a beveller. After having seen what had already been done in the rodmaking world, we decided to make this machine to make level strips; a conical straight taper which would need to be planed later. It was a self feeding beveller, a real spectacle to watch and simple to use but after a few trials I set it aside. Perhaps this type of machine is more suitable for someone who makes 3-5 rods at a time. From that day on, I hand plane my rods completely. It may seem ridiculous, but that's the way I feel.

Do you make hollow built rods and with which method?

The only model I've made with this system is the "Hollow" – an 8 foot two piece rod which I scallop with a self made device which is very simple but that works well!

What kind of varnish do you use and how do you varnish?

I use a polyurethane varnish which I apply using a diptank. This is the only way to get the same thickness of varnish on all sides of the hexagon.

Where do you purchase your reel seats and other components?

Apart from the reel seats, all the components (snake guides, stripping guides, and threads) come from US manufacturers. I make my own reel seats to my design in collaboration with a friend who is an artisan. I've always used steel for the metal parts and I make both sliding band and screw locking seats. I've been asked why steel and not nickel silver – the answer is very simple: I like the look of shiny steel. It doesn't oxidize with time. The inserts are mainly olive, walnut respectively for blond and flamed rods and without doubt also other more precious burls.

How important are the looks of the rod and in what measure do you think it affects the general quality of the rod?

I feel that the way a rod looks has the same importance as the structural one even though I will not dedicate too much time to wrappings and varnishing if this means neglecting the node dressing and planing. I'm quite accurate by nature and I dedicate the same attention to making the blank that I dedicate to the details and style of the rod. I do not tolerate that a rodmaker says that the looks do not influence the functionality of the rod. In my opinion, sloppy work does nothing for the rodmaking skills of the person who makes a rod. If I'm allowed to say so, we Italians should be masters at international level. The aesthetics have always been an unmistakable sign of someone who makes something and bamboo rods are no exception to this rule, even though we really see some kitsch and overworked rods. The elements that distinguish a good rodmaker are elegance, sobriety, the right colour match in the wrappings, the shape and proportions of the grip and the perfection of the finish. It's no use being a good woodworker but you need to be a bit of an artist. That's how it was at the time of the great classical rodmakers and this is still the case today for those that make it to become famous.

What's your secrete to get such elegant and refined wrappings?

No secret. I use very fine threads that are a little difficult to use and that take longer and that require more precision. In other words: a lot of patience.

In this decade there has been a lot of interest around bamboo ferule and many rodmakers have adopted this technique partially or totally. What's your opinion on bamboo ferrules?

I've always used nickel silver ferule and I do not have any direct experience on the study and building technique of these elements, but I do own and I have used rods with this type of ferrule and so I can give an opinion.

I fundamentally have a few doubts about their duration on rods that fish of course and not on exposition rods. For example the rod I own which was made by an internationally famous rodmaker is starting to show a few problems but perhaps this may depend from the rod in my possession or perhaps scarce attention in workmanship.

In my opinion, the biggest advantage is the reduction of weight in a crucial area of the rod which is immediately evident but at the same time I am perplexed about

a blatant increase in section of the rod in the area which will increase the moment of inertia which perhaps goes against the main idea on which the element bases its principle i.e. to give a continuous action to the rod without metallic interruptions .

To be quite honest, I've always been of the opinion that if a taper is well designed also in the area of the ferrule, there should be no sensation that an interruption of the action takes place. I'm also aware of the studies on the matter by some IBRA members, studies that have been carried out also for the benefit of those who wish to know more about the subject. To them go my compliments to have managed to confront and develop this kind of ferrule, a subject that is very interesting for the rodmakers' community.

I repeat though, mine are simple observations, by someone who knows nothing about the subject of bamboo ferrules.

Contrarily to most contemporary rodmakers, in these last times you have dedicated your time to making rather long and powerful rods. But what are the true limits of bamboo?

The most powerful rod I make is an 8'6" six weight. Then there are a few "little sisters" of this rod; same length and that cast a 5 and a 4 weight. In my opinion, they are good all round rods – very versatile and by all means not too heavy. I won't hide the fact that to design well balanced rods for this kind of rod is no easy matter i.e. achieving the best performance with the least possible "sensation" of weight. This was a challenge that is still ongoing!! Talking of which, a few years back I reflected on an article in the magazine Fly Line which was called Bamboo Essence.

Unfortunately rods of this length are no longer kept in consideration by most rodmakers and bamboo lovers or rather not in Europe and nor in Italy in particular.

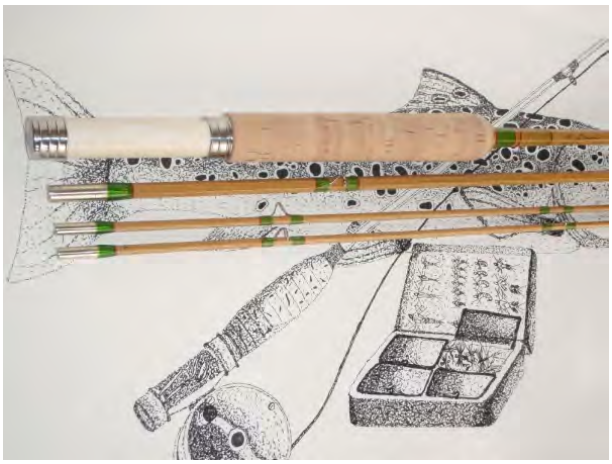
In fact it is commonplace that 8'6" rods are heavy and antiquated to satisfy the modern fisherman while in reality they are fantastic. It goes without saying that for a rodmaker, it is easier to design a good 7' rod than an 8'6" one but it's no coincidence that some of the best tapers of the great rodmakers of the past are 8'6" ones, and that they have always been considered the most efficient to fish with. As far as limits of bamboo, these are the same limits that trout and grayling have even though my interpretation is rather relative because I have friends that use 9' rods for eight weight lines for streamer fishing and some even use two handed rods for salmon fishing.

What's your idea on the recent diffusion of rodmaking techniques in an ever growing number of rodmakers?

The spreading of the arts and ancient disciplines is a matter for much discussion, more for the way things are passed on, rather than for the fact that they are actually passed on. Italy has always been a great land of great artists and extraordinary artisans but many of our traditional crafts are disappearing because the young people have other things in mind and they are no real generational turnover. Today, thanks to internet, every one of us can potentially become a Michelangelo but the mere theory and knowledge that can be picked up on-line is not sufficient. The problem is that there is little will to apply oneself. The click of a mouse gets you used to getting everything immediately without stopping to think about what's behind a final result and without thinking about the cultural background that the arts, the crafts and the disciplines have brought on for decades if not centuries. Planing and gluing 6 strips of bamboo is a woodworkers' job, or better it is like making a model – nothing more, nothing less. Making a high quality rod is something else. So associations like IBRA are welcome. IBRA has been dedicating years to the spreading of rodmaking techniques and culture for the benefit of those who wish to learn this noble art. Then all depends on the Honesty and humility of the apprentice to realize what he should really be working towards.

The years pass for everyone and although you are still young, you are considered to be among the elders of rodmaking in our country. Do you think that bamboo rods will continue to be considered a niche item or that the market offers space for growth?

For a number of reasons, bamboo rods will always be a niche product even in the years to come. But this also depends from the fact that in the collective imagination, carbon fibre has become the standard rodmaking material. I'd like to be proven wrong but in our country fly fishing has reached certain levels and with this there has been a parallel reduction in the costs of equipment and this doesn't certain do much for our sector. Perhaps the requests would increase if there were to be the right kind of promotion especially among the young people for what is the essence of fly fishing: that is not only the learning of casting techniques but also the capacity to incorporate the intellectual component of what I obstinately continue calling our "Discipline". Instead I see the constant cultural involution of our sector and this is blatant especially observing the behaviour of many, too many fly fishermen who cast a line but that have nothing to do with the world of fly fishing.



The 5th Rodmaking Class

IBRA

Gathering 2010

Sansepolcro 22/23 may 2010

The ring-tailed Lemur

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Marco O. Giardina

The ring-tailed Lemur also known as Lemur Catta is a graceful and charming little animal that lives in southern Madagascar. The Catta is very sociable and gregarious living in groups of 20-30 individuals.

Their distinctive feature is a long tail with alternating white and black rings.

So what's a Lemur got to do with rodmaking?

In 2003 I had no bamboo and my restless drive to making rods was breaking up against this hard reality.

In addition and to make things a little worse, I was even alone.

In fact at the time I didn't know any other rodmaker to whom I could ask for help or suggestions.

I was alone with Carmichael and Cattanach's books.

Both books are of great help in rodmaking, but of little help in purchasing bamboo in Italy.

I don't believe in luck, but sometimes.....

I was paging lazily through the classifieds on Pipam – for those who are not familiar with Pipam, it is the most important fly fishing forum in Italy – and I was suddenly struck by an advertising:

"Tonkin bamboo for rodmaking for sale....". I had found Bamboo in Italy. That was my first contact with Gabriele Gori.

But this is another story.

Within a week, the culms were in my shop.

They had been bought from Andy Royer and were of excellent quality: straight as a sword, internodes as long as the legs of Cuban dancers, very rich in Power fibers, but...somewhat stained. Water stains.

But on the whole, the best bamboo culms I had ever used.

I had been fascinated by Paul Young's flamed rods and so I thought that flaming would be a good way to hide the stains. Later on it came to my mind me that perhaps Young had had a similar experience.

No more said! I purchased a butane gas flame torch, a pair of thick leather gloves and I started flaming the bamboo. Random flaming, casually placed but not too much casually as, in any case, I had to mask the water stains and the final effect was nice.

The fact is that I had become so used to flame my rods that even when finally Andy Royer sent me a load of flawless culms... it was too late. My rods were flamed rods.

Among the various experiments with flaming, I noticed that if with a pattern which was more or less regular, I associated a 2x2x2 staggering, the final effect was like a kaleidoscope and in particular it produced a spiral illusion.

That's why I began flaming with the "Catta" method" so that the culm looks like the tail of the Catta Lemur .

All that is needed is to make a series of ring shaped by flaming at regular intervals and parallel to each other.

The flamed part should have that nice colour of the Monk's tunic.

It is important that the flamed rings be slightly wider than the non flamed rings and the latter should have so much space between them as the length of the staggering.

In short – if the staggering should be 2,5 inches, the flamed rings should be 3 inches wide or slightly less and they should be about 2,5 inches apart from each other.

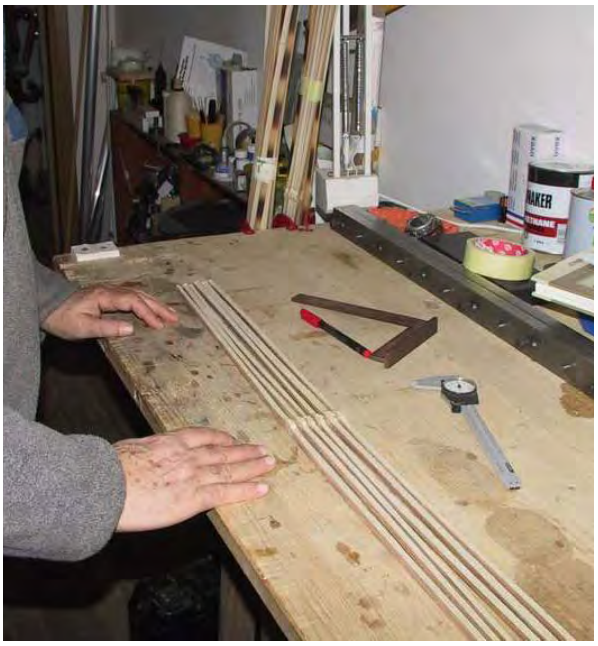
Once the rod is finished, the flamed parts seem to chase each other along the rod .

I've been asked if the rod has been glued in a spiral.

This is an optical effect which, quite frankly, I like so much that it has become the trademark of my rods, although some may not like it at all.

A recommendation – when flaming take all the necessary precautions. Gloves, protective eyewear. Do not use a base-ball cap because the peak of the cap is a great shelter to receive and direct heat towards your eyes. Wear woollen clothes – wool doesn't burn as easily as synthetic fabrics. Work outside in the open.

Do not insist too much with the flame. It must be flamed – not burnt.



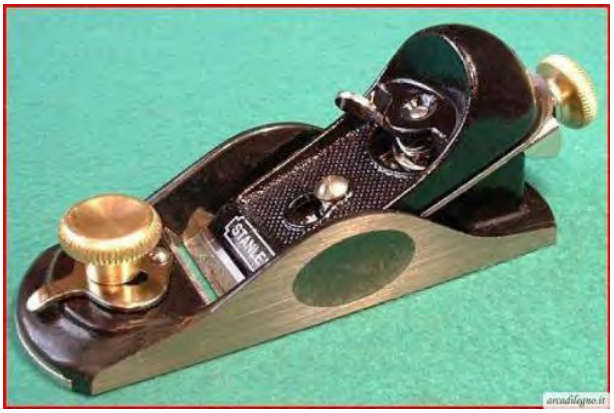
HSS plane blades.

Interesting facts and figures about the blades used by rodmakers

by Giovanni Nese

(12/09/2000 the test lasted long!)

One of the problems facing bamboo rodmakers daily is honing. The iron that receives the most attention is the one that get used for the finishing plane. Generally this plane is metal and has an adjustable mouth.



Bamboo is very hard and this leads to a quick deterioration of the iron. The need to get shavings down to 3/100 of a mm calls for accurate honing skills.

Facts regarding the characteristics of blades and which of these are necessary for cutting.

A good blade must be tenacious and hard. It was be able to take knocks without chipping and it should stay sharp for long and you should be able to sharpen it in "human" times without any particular technical gadgets or special tools.

Let me try to explain what is meant by cutting. In layman words, it means inserting a wedge of a harder material in between the fibres of what we are cutting. How is the efficiency of the cut determined? With the amount of energy required to carry it out. The equilibrium of forces requires that the harder the material to cut, the thinner the wedge that must penetrate it. The system has problems when the pressure that the wedge must support is bigger than its mechanical resistance and it gets deformed, the cutting angle gets blunt and it loses the capacity to penetrate. In these conditions you need to increase the force.

Research or better still experience have defined that for each material that needs to be cut there is an equilibrium that considers: the cutting angle, the back angle and the mechanical characteristics of the materials used.

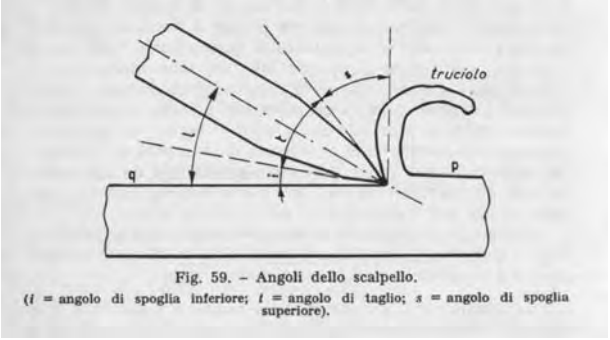


Fig. 59. – Angoli dello scalpello.
(*i* = angolo di spoglia inferiore; *t* = angolo di taglio; *s* = angolo di spoglia superiore).

Stories ...

Let's see how the problem used to be solved in the old days. We are not talking about Japanese swords – they are too complicated and articulated in the making. Perhaps we can discuss them another time. Instead let's talk about sickle (scythes). It's probably the right tool to demonstrate our situation even if rodmakers would not want it to be so. Sickles work in the worst possible conditions: dust and humidity; the stems of many grasses have a siliceous (flinty) protection; stones.... They need to be sharpened on the spot without cumbersome tools or lengthy operations.

They are made of mild steel.

Why?

Because this material represents the right compromise between various requirements: the blade must stay sharp for long, it must keep its shape even though it is subjected to great forces of torsion and bending; it must be easy to sharpen.

Maintenance: keeping the blade sharp – this must take place with a simple operation (rubbing a hone which is an abrasive stone; usually a cheap and easy to find sandstone)

The resistance to bending is given by the geometry of the blade: the blade is wide and tapers rapidly; it is arched and had a rib and this gives the right kind of rigidity and strength. The shape makes it light. In a normal working day with 6 – 7000 movements *to and fro* of a tool that weighs about 2 Kg make it quite hard work. So the fact that a few grams of weight are saved make it quite interesting.

The blade doesn't stay sharp very long, because the steel isn't of the greatest quality so continuous honing is necessary. Every now and then, about 10 – 20 minutes, the reaper rubs his hone on the blade to sharpen it. This operation slowly changes the geometry of the cutting edge and makes it obtuse, so at least once a day the blade needs to be hammered.

On a small anvil and with a properly shaped hammer, the cutting edge is hammered down and then it is honed. It is an art to hammer down the cutting edge so that it can shave the hairs on your arm. I can assure you that it isn't easy and the old timers would tease the youngsters asking how many "battlements" they had made in the fields. You can understand that if the hammering is done wrong the blade is straightened and this create waves in the corn storks instead of an ideal straight line. These "waves" look like the "battlements" on castles are testimony to an inexperienced hammerer! But battlements or not, a slight rub with the hone levelled everything and sharpened the blade.

Last but not least, the cost of the blade must be low.

The blade has the characteristic to stay sharp but it needs to be honed continuously and without a great waste of time. Once the blade was worn out because of continuous hammering and honing, a new blade was nailed on by the blacksmith and it was as good as new. The old blade could also be forged again into a smaller sickle, a knife or pruning hook.

The technology of steel, which has been common knowledge for a couple of millennia, could have lead to the making of tools with better and harder materials and that would have stayed sharp longer. This wasn't the case mainly because of the cost. The costs of producing the blade would have been higher than the total cost of labour used for honing. At the same time, problems arising from the brittleness of the steel have been avoided. If with a certain approximation we can formulate a rule for the characteristics of steel you could say: a hard steel is brittle, a tenacious steel is mild.

I've discussed sickles to find out the problems and how the problems relating to cutting have been solved. We could have discussed any other cutting tool. There are more than 5.000 years of history behind the sickle, the type of material used and its shape. The evolution of the this tool has passed from uncountable improvements and afterthoughts. Today it is practically impossible to develop an idea to improve its efficiency *(the choice of metal. Mild steel for easy cold forging. The material used for the blade can also be used as a reserve source of metal which can be used to maintain its function...ingenious!)*

In brief: what do we need?

- A light and easy to maintain tool;
- Low production costs to make the tool;
- User friendliness when it comes to cutting;
- Precision of the cut.

How did this situation evolve. Let's discuss cutting in general. No more cutting of hay. The machines that cut textiles with the technology of a bad saw are constantly honed by a device that works on the blade after each passage.

In other situations, like industrial woodworking, material with high mechanical characteristics are used on machines that rotate at high velocity (reduction of the vibrations and of the intensity of each single impact between cutting tool and wood). In this case the sharpening of the tools is delegated to specialized workshops or the cutting bits are discarded and substituted very frequently.

For example – the drill bits – the ones we all know. To sharpen them, you need a special device that places the point in the right position so that it will have the right inclination with respect to the cup grinding wheel.

The operation can be carried out by hand but it is quite difficult and a lot of experience is required together with a firm hand and a good eye. Even so, you rarely get a perfectly centred and sharp drill bit that will drill a hole the size that it should. To prevent this, many workshops prefer discarding blunt bits rather than sharpening them. The costs much less than the cost of labour and the tools required for this purpose. The opposite is taking place with respect to what happened than with our reapers. It is the tool that costs little and not the labour.

Wood and planes

Manual woodworking has always involved the use of hardwoods. In our areas most of the wood used in cabinetmaking is: beech, pine, walnut and cherry wood. These are relatively hard woods but that can be worked relatively easily. Even so it is obvious that it is better to work with sharp tools. The “poor” joiners in the last century used old files as blades in their planes. The blacksmith would anneal the file, he would shape it on the forge according to requirements and then temper it again. Not everyone knew about case hardening but it was quite common to enrich the surface with carbon deriving from the addition of hide scraps and charcoal from the forge or tempering in horse urine but in the end river water was preferred to water from wells because it contained less calcium carbonate which could alter the surface chemistry of the metal. My grandfather as a young shop boy was forced to travel a few kilometres everyday to fetch river water for tempering. An old file is an excellent raw material to make plane blades. It is excellent for tempering and case hardening.

(A plane blade made from a forged file. Some of the teeth are still visible along the edges. The blade is marked BG and belonged to my Great Grandfather)

(My Great Grandfather Giuseppe (BG) and his contemporaries used to forge files because in those days it was the best quality steel they could find. I don't think he ever used a hacksaw. His tools were the forge and the anvil. The iron was heated and cut with a chisel and then shaped on the anvil)

(The anvil which is missing a foot is dated 1875. My Great Grandfather and his sons hammered on it until 1930 making horse shoes, plough blades, scythes. The hammer dates from the same period.)

Joiners used their planes continuously and the shop boys sharpened daily on sandstone honing wheels.

Every so often, the joiner would take the iron off the plane to hone it on a wetting stone, put it back on to continue working. This is one of the operations we would want to do away with. Taking the iron off and putting it back in the right position takes time and often cause blade marks on the surface of the wood that is being planed. In bamboo the geometry of the equilateral triangle can be altered. The problem was solved already at the end of the 1800's when metal planes with blade guides and adjusting knobs appeared that would place the blade back in its original position.

Technology has led to the substitution of planes with spindle moulders (woodshapers) and hand held power planers. Manual planes are now only used for smoothing and other operations on site. A drawback of this sporadic use at that when put back into use, the aggressive oxidizing agents on high carbon steel will have "eaten" away the cutting edge of the blade making it useless. A solution has been to make the irons out of stainless steel, but this material is difficult to keep sharp. It is milder chemical reasons for this behaviour (for example kitchen knives would not stay sharp more than two minutes if they were used on bamboo).

And the rodmaker?

Rodmakers use the same material as joiners and they are is confronted with the same problems with mediocre stainless steel blades.

How does they solve this problem? By changing blades with one that isn't stainless steel or honing frequently. The latter solution which is usually acceptable in the initial phases soon becomes irritating. There is another issue – the costs and where to find them. High quality blades are handmade and made in small quantities and costs round $35 each and are not easy to find. The price is significantly indicated in U$D

I will give you a solution or two!!

The irons on the roughing planes:

The photos speak clearly. We use and old hacksaw blade.

These bladed are for cutting metals.

You should choose those that are completely in HSS. Technology has evolved these blades to lower costs and increase performance. Today they are made of bimetallic elements and laser welded and perform incredibly as far as precision of the cut and working velocity (they are no good for us Rodmakers).

So you cut or break off a piece and the teeth are filed off and the blade is sharpened. When doing this you should be careful to not overheat the blade during the grinding. A container with water helps with this. After the final honing, the chuck is annealed to prevent chipping and the iron is ready. Garrison used this system with his roughing plane. A photo in the book shows clearly where the teeth hadn't been completely eliminated.

Composite irons for the smoothing plane.

The solution for the roughing irons is easily found but how do you overcome the main problem which lies with the smoothing irons? It isn't easy to adapt a hacksaw blade to adjustable planes, as the adjustment grooves and the centre hole are missing.

The proper operations to make one would involve a laser cutter or other technology that you can't find around the corner. So a different strategy is adopted: an old blade is used and a hard metal patch is applied.

- Ok! I need to weld the iron.

I needed to have this done by someone because I don't have the right equipment. I could find anyone who could do it for me. You need to find an artisan who knows his craft and who will not ruin the geometry of the tool. It's already difficult to find a welder, and finding one that is available to do what you tell him ... that's another problem.

I must do it by myself!

I tried gluing it. I prepared the gluing surfaces,

and I try with Superglue. It takes a few seconds. The first bending test is passed. I hone the iron, I place it in the plane, I tighten the lever and the blade comes apart! Better now than when I'm in the middle of finishing a strip. Superglue is brittle and decomposes when it undergoes even minimum thermal stresses. Honing even if it is done well does produce heat and the glue gets ruined.

Second attempt: I use a metal epoxy. I had read an article of epoxies and carbon fibre rods. It was quite eye opening as far as detail yet a little controversial. It was long and very technical but very useful (see attachment – I don't remember where I found it)

I apply the first rule I learned from it:

"**pressure**"

After 24 hours I try the blade and I still use it to this day. There is only one recommendation. When the blade is not in use, loosen the lever.

Honing:

What we try to achieve is an edge with a very defined geometry! The honing angle and cutting angle must have a very precise value which is a compromise between solidity of the tool, keeping the edge and applied force in use.

Garrison, who was a meticulous experimenter, would work on various angles in respect to the thickness of the shavings he was trying to get: acute angles for roughing and slowly more and more obtuse for the slower finishing work with finer shavings.

Who can guarantee this angle?

Adopt a similar device:

The wetting stone has 2 grains. One rougher side to work down the metal quickly and one finer one for polishing.

One last passage - freehanded on a razor corundum – the final touch and it is razor sharp.

What does HSS mean?

High Speed Steel. This name qualifies a metal that can support high mechanical stresses because of its hardness and tenacity.

The term come from the beginning of the 1900's with the invention of ball bearings when the improvements in the quality of tooling machines, the availability of Energy and power tools increased productivity of engineering work and so the right tools that could put up with all these stresses and high speeds had to be developed. This kind of steel is alternatively to tempering and annealing. Normal drill bits are made in HSS.

Files

These are very old tools. The Persians made them in bronze, the Romans already made them in steel. Leonardo Da Vinci invented a machine to make the teeth on files. He had already thought that the regularity of the teeth is a parameter on which the efficiency of the tool is based. His production ideas were only implemented around the 1700's

If you are interested in the subject of file. Read "File Philosophy" by Nycholson. 50 pages but it's a sort of bible. The students at technical schools should be forced to read it instead of the Divine Comedy. They would have many more advantages. The only copy I have is in English and it comes from the Public Library in New York. I know that at the national library in Florence they have one that still need restoration after the 1966 floods.

The technology of steel.

I will not discuss this. You have already read enough. But it would be great to talk a little about the chemical properties of iron, of iron-carbon, of alloys, of the ternary mixtures and who damask steel on shotguns or Japanese swords is made. We are always researching and trying to recover old documentation of "common" use items. The Italian guide book to read about something that is made very well on our planet is: "LA SPADA GIAPPONESE" di A. ROATTI e S. VERRINA edizioni PLANETARIO (The Japanese Sword by A. ROATTI e S. VERRINA edited by PLANETARIO.)

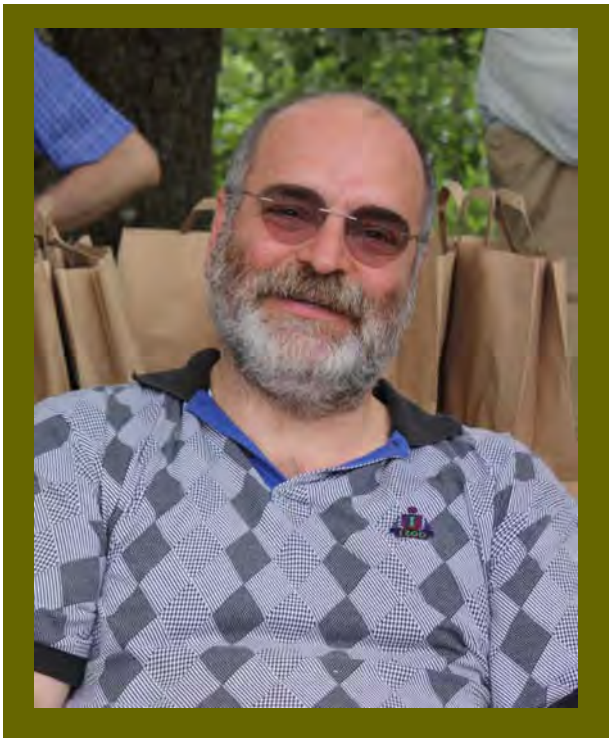
Conclusions:

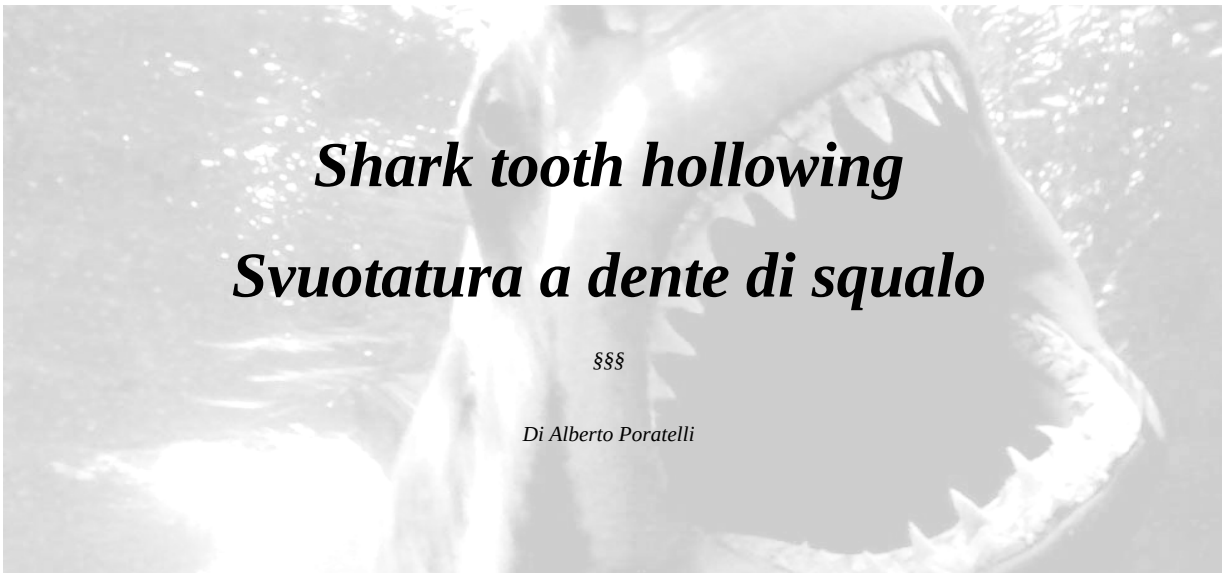
I hope my illustrations can help to understand the process sufficiently well and I hope the long notes haven't bored you to death. If looking at the pictures and you manage to understand the process, you are exempted from reading the whole family technical and scientific saga. It helped me to remember and cherish the things that my grandfathers told me. It isn't really a Venetian "Roots" but the anecdotes were numerous and funny. What I haven't managed to convey is the hard work behind both the jobs I mentioned but I don't mind. Cesare Pavese has managed to describe the hardships of reapers to perfection.

In the good old days at University – we had a friend whom we called Smart. The nickname 30 years ago derived from a corruption of “mart” that is a contraction of “martensitic”.

Martensitic is a class of steel. A particularly hard steel. The match with my friend who was particularly hard at learning is evident.

Giovanni Nese





Shark tooth hollowing

Svuotatura a dente di squalo

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Di Alberto Poratelli

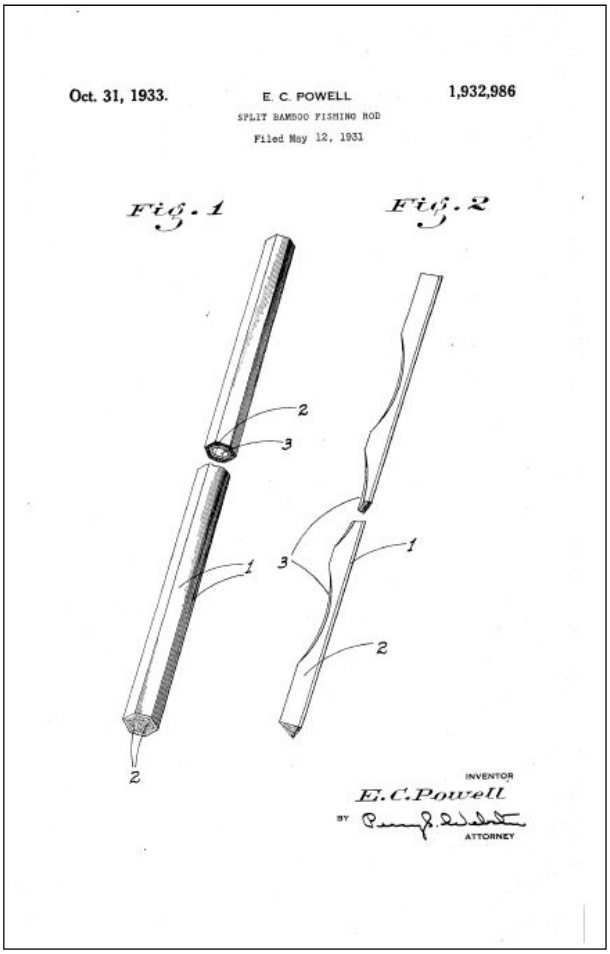
A few months before the 2010 gathering, I read with interest an article published by Bob Maulucci called "*Making Hollow Rods: Beginnings.*" I was fascinated by this article and even though I had worked for years hollowing like Powell, I thought it was worth trying to master the subject of hollowing on the first available occasion.

Shortly after that the 6th Italian Gathering took place and this was the first occasion. I thought I would make a special rod to exhibit in Sansepolcro on the black IBRA table covers: a 7' in three pieces, with streamlined ferrule and hollow built. A rod that was to be surprising for its lightness.

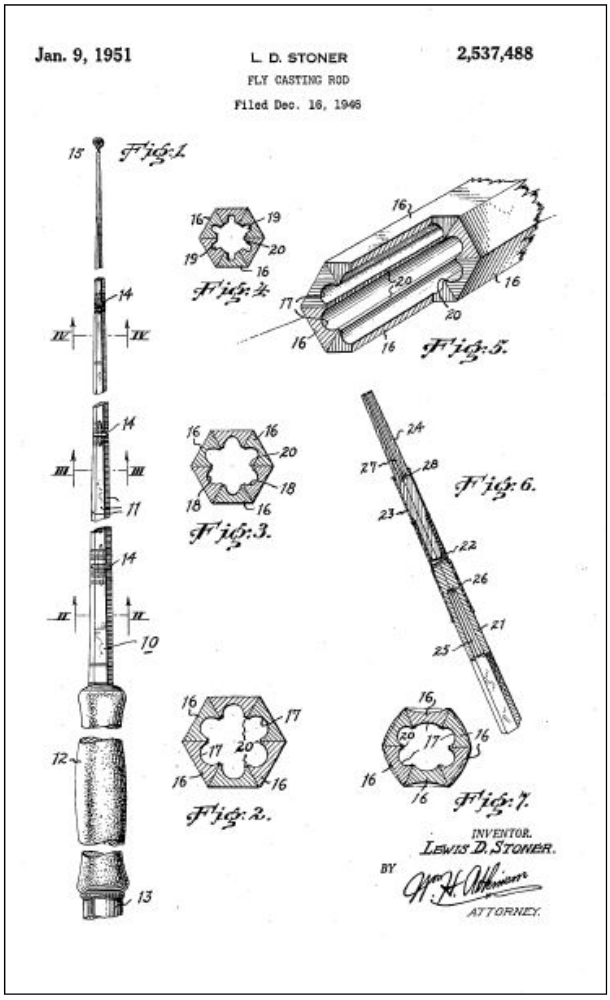
Before making a rod I always draw out the project on a 1:1 scale. This gives me a chance to carefully evaluate the characteristics, above all those concerning the look and the general harmony. To design the hollowing, I studied the methods that are almost universally used by rodmakers the world over and that a substantially refer to EC Powell (1933) and LD Stoner's (1951) patents.

Powell's hollowing is quite simple to do. You get long oval cavities that are compensated by unhollowed sects which are also quite long and that guarantee a sufficient surface area for gluing. The only defect, if you can call it a defect is that the thickness (thinness) of the wall cannot be to extreme or the strips will de laminate and the sections will deform under stress.

The hollowing isn't too extreme and so you don't really save much in weight.



Things are different with Stoner's hollowing which is commonly called fluted which, even though continuous, guarantees a great surface area for gluing and a great deal of volume of hollowing which bring to a a great saving in weight. It has a defect, if you can call it a defect, that it's difficult to achieve without that sublime instrument that Tom Morgan invented: the Morgan Hand Mill.


Jan. 9, 1951 L. D. STONER 2,537,488
FLY CASTING ROD
Filed Dec. 16, 1946
Fig: 1.
Fig: 4.
Fig: 5.
Fig: 3.
Fig: 6.
Fig: 2.
Fig: 7.
INVENTOR.
LEWIS D. STONER.
BY
ATTORNEY.

Both these hollowing techniques bring about a variation of the moment of inertia of the section of the rod and so both need a slight adjustment of the taper to maintain the original action of the rod.

What I was looking for was an easy hollowing technique that brought about a good weight saving with a thinnest wall thickness that would modify the moment of inertia of the hexagonal section as little as possible.

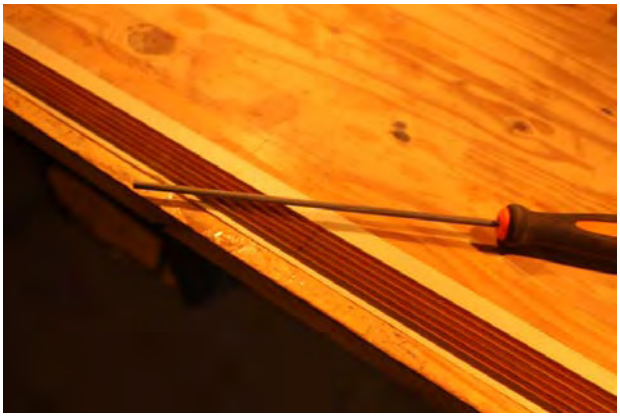
For this I considered that the inside of the rod did not have to have a continuous chamber but a sort of trellis that would guarantee the rigidity of the rod and a good gluing surface and so I started working on the single strips so that once glued would form a series of continuous spherical cavities.

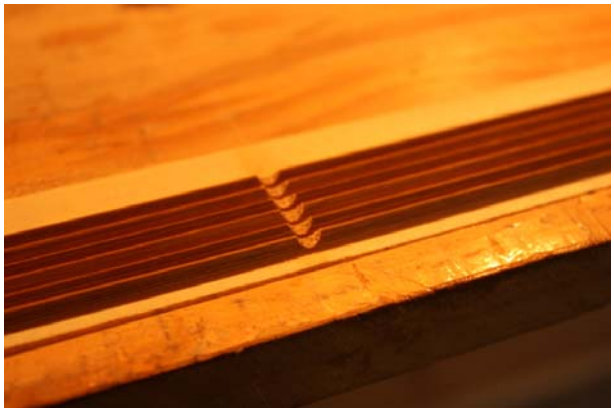
Good to look at and easy to do. What else would one want!!

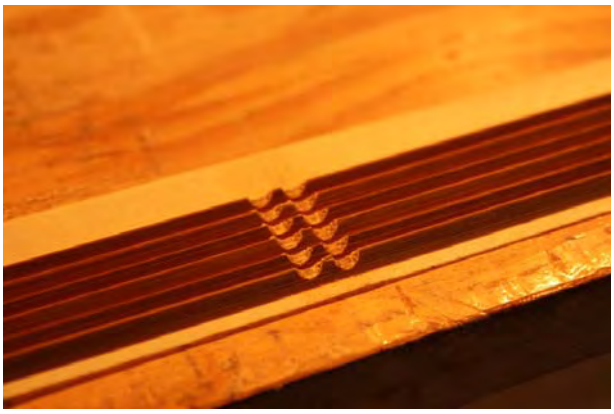
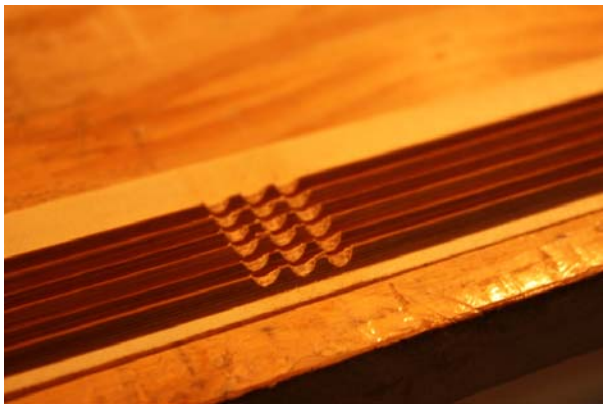
The design of this kind of hollowing and the calculation of the volumes and the gluing surfaces, confirmed that the solution could be a good one. In the following tables you can see the schematization of the hollowing and a summary of the essential data:

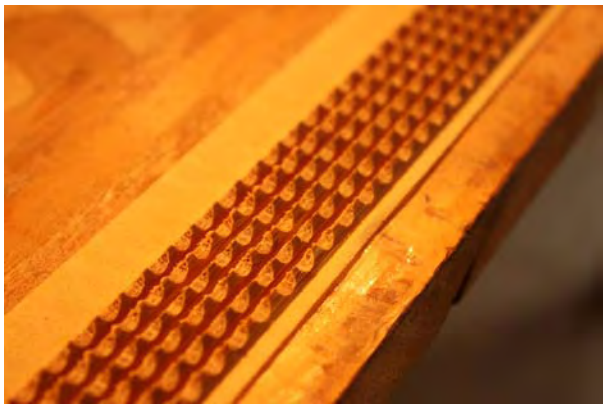
		hollow type		
		Powell type	Stoner type	Shark Tooth type
height strip	mm.	4,00	4,00	4,00
wall tickness	mm.	1,80	1,00	1,00
empty lenght	mm.	60,00	-	-
solid lenght	mm.	10,00	-	-
percentage of empty		25,7%	43,9%	32,2%

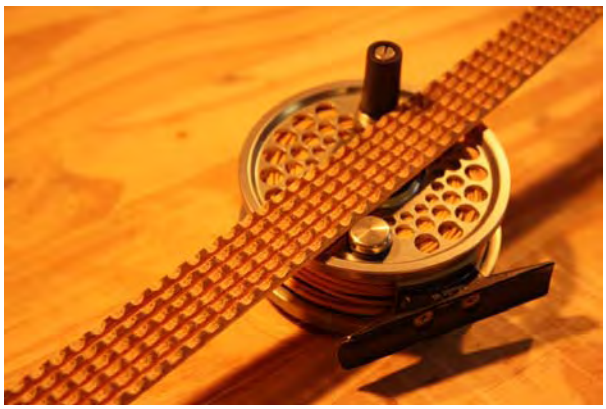
This kind of hollowing is quite easy to do and all you need is a round file of an adequate diameter according to the strips. See the photographic sequence.



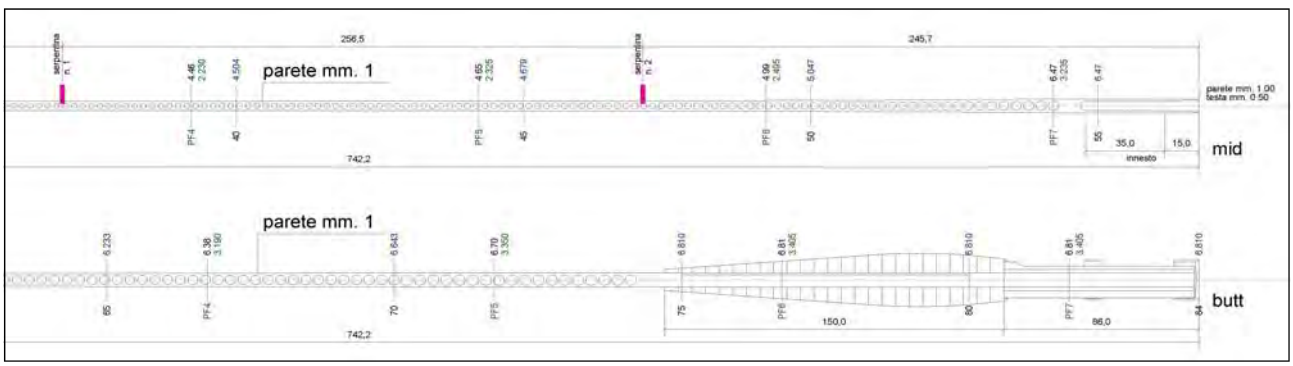


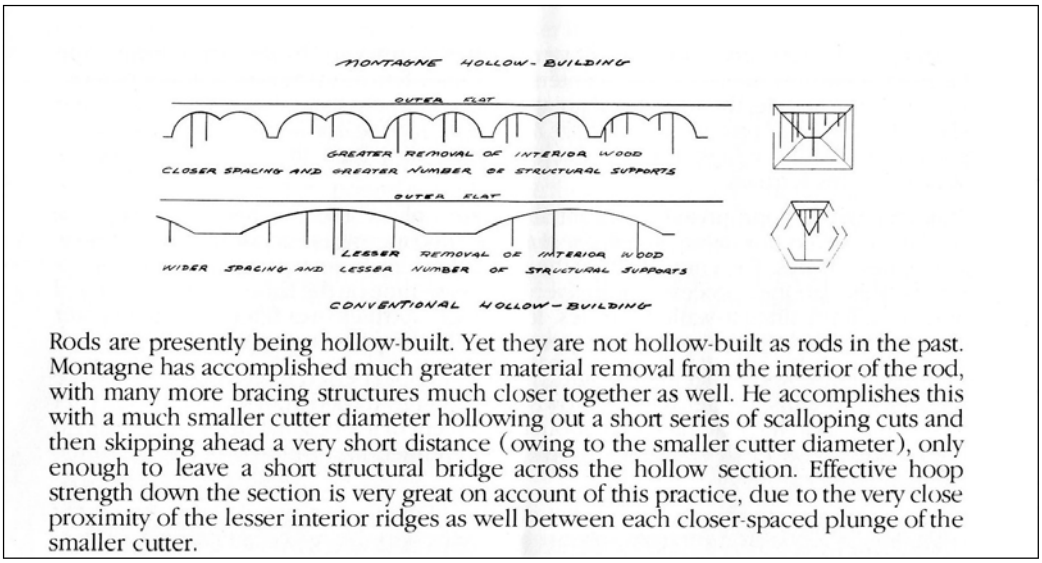




The rod I made is 7' in three pieces with streamlined ferrule. The hollowing is a continuous series of spherical cavities and the results were surprising. A great deal of weight is saved.



This type of hollowing is very similar to the one Montagne used for his rectangular rods as you can see form the extract of the catalogue that Per Brandin kindly sent me. Per Brandin, is surely one of the highest experts in hollowing together with Tom Morgan and Bill Harms.



Rods are presently being hollow-built. Yet they are not hollow-built as rods in the past. Montagne has accomplished much greater material removal from the interior of the rod, with many more bracing structures much closer together as well. He accomplishes this with a much smaller cutter diameter hollowing out a short series of scalloping cuts and then skipping ahead a very short distance (owing to the smaller cutter diameter), only enough to leave a short structural bridge across the hollow section. Effective hoop strength down the section is very great on account of this practice, due to the very close proximity of the lesser interior ridges as well between each closer-spaced plunge of the smaller cutter.

To verify how this kind of hollowing affects the action of the rod, I carried out a static experiment. I made two identical rods from a single culm of bamboo, they were heat treated at the same time, same length, same taper, same ferrules. One was solid and the other hollow built.
These two rods were subjected to the action of two identical weights attached to the tip top in order to evaluation the flexion. This is the result. The hollow rod is the one in front is the hollow one and the variation in flexion is little but inevitably present.

This is an empirical method and far from scientific but the results look interesting.

I'm also convinced that the spherical cavities needn't be continuous. The advantage is that the hollowing can be made in different places and of different dimensions so that you can create differentiated changes in weight or also to create areas of damping of the vibrations especially by knowledgably alternating the solid parts with the hollow ones.

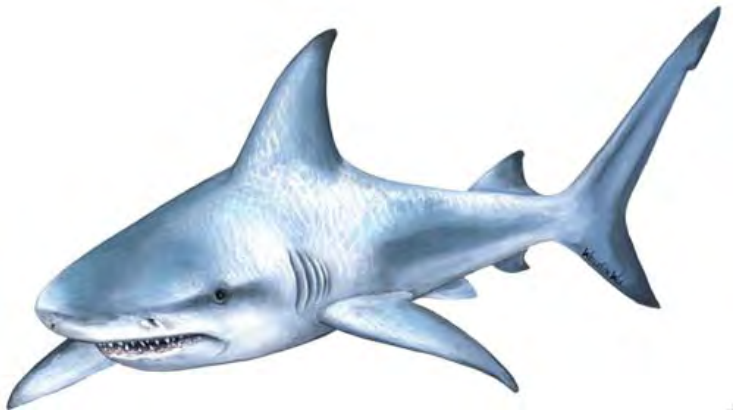
Ample horizons open up and I feel that my work can be the start of experimentation in this fascinating field. I will most certainly do so.

Alberto Poratelli

www.aprods.it

nota:

note: the name "Shark tooth hollowing" which refers to this method was suggested to me by Moreno Borriero, who also named my "streamlined ferrules". When he saw the photos of the hollowed strips he wrote to me saying that they reminded him of a long line of shark teeth.

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Massimo Strumia

Fly fisherman and photographer

I was born on 5th January 1968. My origins are from Turin but I've been living in the green Brianza, precisely in Carate Brianza for many years.

Since I was a child, I've had a passion for nature and wildlife and my parents would often taken me to zoos and nature reserves.

In general I like all "outdoor" photography but I'm particularly interested in Alpine nature which I've learned to appreciate during the vacations I've spent in Chialamberto. A part from photography, my other big passion is the one for fly fishing.

I'm an EFFA casting instructor and I'm on the TFO Prostaff. I also collaborate with the magazine "Fly Fishing"

It's not always easy to reconcile these two hobbies; often the best hours for taking photos i salso the best hour of the day to catch the biggest fish. Anyway, I try and I rather limit the two activities rather than renouncing completely to one or the other.

Our Rodmaker friend Nils Kulle has left us.

We like to remember him in 2008 when he was an enthousiastic participant of the1st European Gathering and as a fisherman with his fly rod in the waters of the Tevere so far from his homeland Sweden where he is now buried.

Now Nils, you can fish in calm waters on the other side with your loved split cane fly rods... Now Nils fish in calm waters on the other side with their loved ones split cane fly rods ...

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WHICH DRAMATICALLY OVERFLOWED RECENTLY

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