Bamboo Journal

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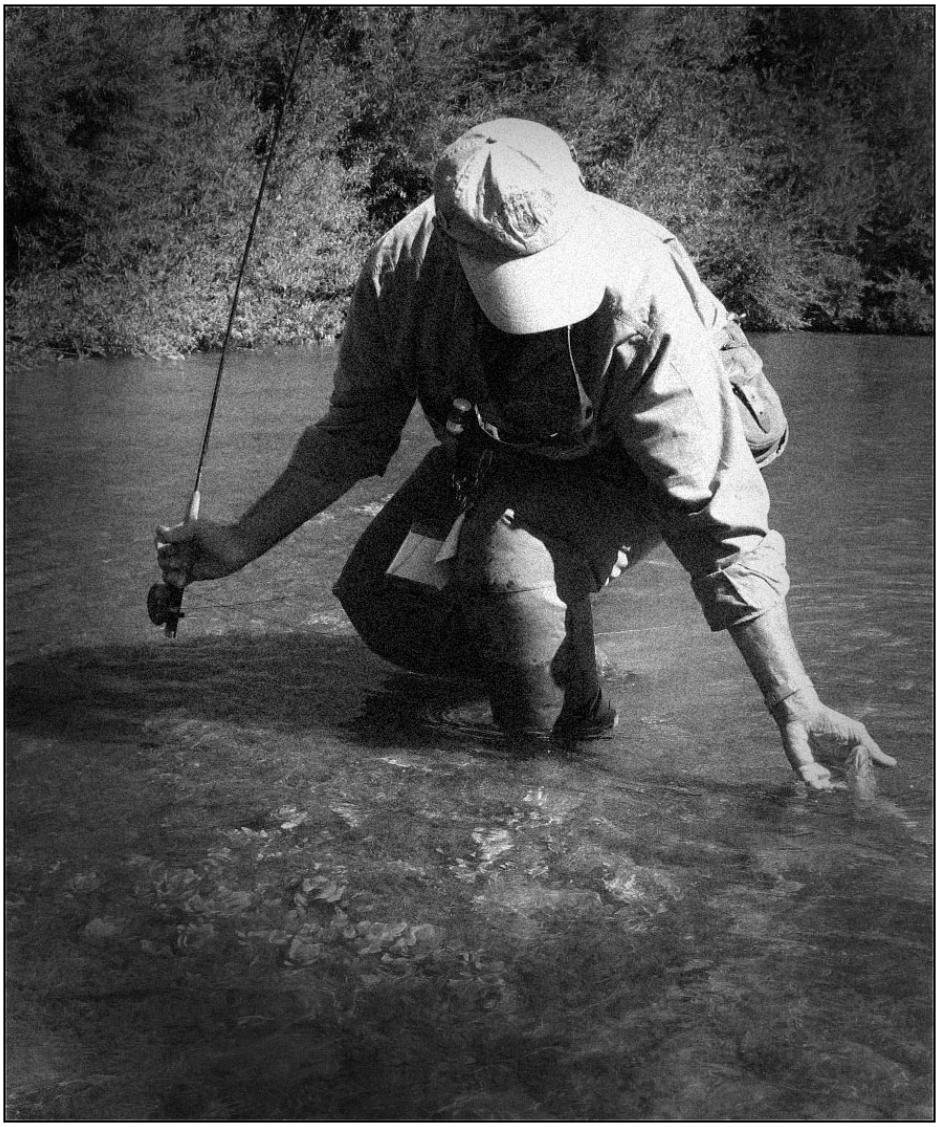

Italian Bamboo Rodmakers Association

In this number

Bamboo Journal n. 3 september 2009

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Cover: Bill Harms and a trout from the Tiber *(photo by Moreno Borriero)*

***Alice**: "Please, Sir!"*

***White Rabbit**: "I'm late! I'm late! For a very important date! No time to say hello, goodbye!*

I'm late, I'm late, I'm late!"

I really feel like the White Rabbit from Alice in Wonderland. It's late! It's late! BJ was supposed to be on-line by July and while writing I realize it is already August. When will issue n.3 be published?

I would not like to hear the Queen of Hearts shouting "... off with your head!"

I can't do anything about it, but as July stepped in summer burst, the sky turned deep blue and the lure of the sea was quite strong. How can you hurry in front of a Caprese salad– mozzarella, tomatoes and a few drops of Cilento olive oil – or a sea fruit salad ready on the table?

So, please, don't hold it against me.

You may have noticed that the Editor has changed.

Alberto Azzoni, in fact, is on a sabbatical leave and I took over his Office, a hard task to put up with as Alberto superbly managed the first three issues of the Bamboo Journal, always rich of ideas, suggestions and significant articles often enticing for their intellectual novelties.

I hope I will be up to it and be able to follow the standard that Alberto set.

So, many thanks are due to Alberto from IBRA and, definitely, from all the readers of BJ.

Thank you Alberto!

Let's turn to this issue now.

The fifth year of life of IBRA is getting closer, and the Association is in very good health and certainly has not lessened its propulsive and propositive drive, as the content of this issue shows us.

Jerry Kustich and Moreno Borriero tell us the story of what, starting a few years ago, has today become the most significant event for our association, that involving European and overseas rodmakers alike: the IBRA Gathering and the River Tiber Bamboo Day.

IBRA President and Vice-President strongly believed and wanted the gathering to be, not only a relaxing time, but mainly an opportunity for the exchange of opinions, development of ideas and intellectual challenge among rodmakers.

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Prof. Ottaviani of L'Aquila University with IBRA Presi-President Gabriele Gori upon delivery of the proceeds of the raffle

Consequently, this year we had two very welcome guests, Glenn Brackett and Jerry Kustich from Sweetgrass. Meeting them offered one of the opportunities our management is seeking for. Their participation gave a great thrust to the improvement of the quality of our passion.

Alberto Poratelli takes you on visual tour across faces and images of the Gathering, so everybody can get the feeling or remember the three days in Sansepolcro.

In two articles Gabriele Gori and David Bolin present an innovative tool for dealing with nodes and an alternative method for working on the strips respectively.

Alberto Azzoni, then, introduces Marco Boretti to us, certainly one of the most important and charismatic italian rodmakers. He is a well known caster who was formed at the school of Mario Riccardi and has a keen deep knowledge of Brunner's rods.

The ferrules are the main topic of two articles. In the first one Antonio Paglia discusses the making of ferrule in NS with a mini-lathe. In the second one Alberto Poratelli presents what looks like the beginning of the *Summa Teologica* on ferrules in bamboo.

As in previous issues, Roberto Natali introduces one classic of the European bamboo rods production. This time he tells us about Hardy's Marvel.

Gabriele Gori and Marco Giardina examine the topic "*hand made*" in bamboo rodmaking.

To complete this introduction to issue n.3 of Bamboo Journal, I would like to express my thanks to all the people who very generously joined in the IBRA initiative to hold a raffle for collecting money to donate to the people of Abruzzo hit by the earthquake on April 6 2009.

Thanks to the earnest generosity of rodmakers from all over the world – even from New Zeland - € 5000 were collected and delivered by IBRA President Gabriele Gori to the Department of Physics of L'Aquila University, which was very badly hit by the disaster. We believe that helping the University, that is education and culture, is the best way to help the local Society rise up again.

MOG The New Editor

Under the Tuscan Sun

Di Jerry Kustich

I just watched **Under the Tuscan Sun**. It was a wonderful movie that captured the beauty, charm, spirit, goodwill, food, wine and comradery that my partner Glenn Brackett and I just recently experienced at the Italian Bamboo Rodmakers Association gathering in the heart of Tuscany at the Podere Violino in San Sepolcro.

For Glenn and I, it was an opportunity to step into an historic culture that has contributed so much to the world of art for centuries, and it was our pleasure to observe that a growing number of Italians are continuing to keep that cultural tradition alive by creating some high quality rods, reels, and flies to pass on for the benefit of future generations as well.

Not only were Glenn and I impressed with the quality of Italian craftsmanship, but we were overwhelmed by the dedication to the craft, the willingness to be innovative, and the heartfelt bamboo spirit connecting us all as one despite the language barrier that prevented us from engaging in conversation with everyone in attendance. Although we regrettably were not able to communicate directly with some members, in many ways we did speak the same language.

Thanks to the guiding expertise of Moreno Borriero and Massimo Giuliani Glenn and I were treated to two wonderful days exploring the Tiber, a river I once read about in my Latin studies many years ago. For me the Tiber is similar to many rivers I have experienced in the Eastern United States, and the fish are just as challenging. Although the hatches were scant, we did manage to bring a number of fish to the surface. For me landing my very first European brown trout was quite a thrill and the highlight for Glenn was taking a prize grayling. Although I had the opportunity to cast to a nice grayling, I was only able to land a bambino. In the end the trout and the river accented a week that was as perfect as a dream.

Throughout our visit the topic of conversation would often lead back to the fishing in Montana. Glenn and I can attest that the beauty of the "Big Sky" State and its wonderful trout fishing are unparalleled. We would like to encourage our Italian friends to consider making a trip to Montana.

The rivers are easy to access, the roads are uncrowded, and the Euro is strong as compared to the US dollar.

I have had the opportunity to attend several bamboo gatherings over the years and for those around the world who would be interested in a wonderful international experience, this annual event would be well worth the consideration. We did meet a few other builders from around Europe and the friendships we developed with them and our Italian comrades will be cherished for a lifetime. Glenn and I would like to thank Gabriele Gori and the entire IBRA board and members for inviting us and sharing the passion for an enduring craft in such an enchanting country. We are also very grateful for the honorary membership to IBRA. Truly it is our honor. Glenn and I will long remember our week spent under the Tuscan sun.

Jerry Kustich

Rodmaker of Sweetgrass Rods and author of books "At the river's edge" and "A Wisp in the wind", lives and works in Twin Bridge in Montana State.

Tiber River

Two new friends bamboo and The Tuscan Skies

By Moreno Borriero

It was decided. Marco O. Giardina had taken care of the official invitations and Glenn Brackett a "Boo boy" from Sweetgrass had agreed to to be our guest of honour at the 5th annual Italian Bamboo Rodmakers gathering which would take place in May 22nd / 24th . Marco forwarded me all the contact details and since I have always taken care of our foreign guests, I willingly took over all the travel arrangements. Glenn soon informed me that another Boo boy would be coming along too and with pleasure we learned that it would be Jerry Kustich – Rodmaker and author of *"A Wisp in the wind"*. Their arrival had been organised for the 21st of May and I was at Florence Airport to pick them up. It was a scorching hot day and the Air conditioning in my car had just packed up so we almost roasted on the way to the IBRA clubhouse at Podere Violino in Sansepolcro. Although it was hot, the conversation long from being shunned, continued on interesting tones until we finally arrived.

I really felt for Glenn and Jerry since when they had left Montana it was still snowing! When we arrived, the IBRA President Gabriele Gori and Vice President Alberto Poratelli were there waiting to welcome Glenn and Jerry. It was great to see that Rolf Baginski, Philipp Sicher and Beno Gisler had already arrived as had many other participants. We all met under the Violino's verandah for an excellent meal and we had the opportunity to try Vanni's excellent wines from his estate in Montevarchi.

The gathering this year should have been a little toned down, since we had spent a great deal of energy on the 1St European gathering but surprisingly many Rodmakers turned out. Traditionally the first day of the gathering is Bamboo Only Day on the Tevere (Tiber) Tailwaters. On this day the whole beat is reserved to fishermen with bamboo rods and those who do not own one can use one of the IBRA members' creations. An excellent opportunity to try out rods made by other rodmakers and to get people who have never fished bamboo to try the thrill of catching a trout or a grayling on Bamboo. Many have turned to bamboo after this experience and some have even become excellent rodmakers.

The appointment was for 8.30 am on the 22nd and Jerry and Glenn were taken under the knowledgeable guidance of Massimo Giuliani and Marzio Giglio.

Massimo had the right flies since he fishes the Tevere Tailwaters at least once a week so he knew exactly what was rising and at what time. There wasn't much activity but thanks to Massimo's expert advice, a number of trout and also a grayling were caught. At lunch everyone met at the picnic area where we enjoyed a light picnic lunch which was washed down with some good red wine and it was off again to the river for another bout of fishing with some good catches. Glenn and Jerry didn't need much advice – they knew exactly what to do! But they do live in Montana!

That evening more guests had arrived and we really started to be a numerous bunch. As always it was great to see rodmakers from all over the world, discussing methods and techniques and there is always something to learn! Jerry and Glenn were still under the weather because of their long trip but the others stayed up till late chatting, sharing news and generally enjoying each other's company.

These moments are so rare during the year that when we are all together we sit back and savour every moment. I love to sit, smoke a good Toscano cigar, sip some single malt and listen to the animated discussions about the different ways every rodmaker develops to do the same thing. This has always amazed me about rodmaking. We've all read the Bible of Rodmaking but there doesn't seem to be anything written in stone! These are the best moments.

Saturday 23rd we all met after breakfast in the gathering hall and Gabriele Gori welcomed all the guests and participants on behalf of IBRA and Philipp Sicher announced the upcoming 2nd European gathering which will be held in Sarnen, Switzerland on 25th /27th September. Who would have thought that after such a short time, so much would happen in the European Rodmaking world?

Then the very interesting seminars began. There was an interesting talk By Gabriele Gori how rods vibrate under stress and his interesting node press. We watched a fantastic slide show of how Luciano Oltolini makes his beautiful agate strippers with Giuseppe Verdi's "Và Pensiero" in the background. Antonio Paglia showed us how he makes Nickel Silver ferrules using simple machines and Alberto Poratelli discussed the evolution of his bamboo ferrules. Glenn showed us slides about the Sweetgrass shop and the fantastic Montana scenery and rivers. We all got the urge to jump on a plane and fly to Montana to the temple of fly fishing.

After the day's seminars we all met for aperitifs and after dinner we had an excellent speech by Gabriele who thanked all the guests for having come and announced the IBRA honorary membership of Glenn Brackett and Jerry Kustich and they were presented with a commemorative statue made by the artist Alberto Coppini. Glenn and Jerry were visibly moved!

The commemorative statues were also presented to Luciano Oltolini, Antonio Paglia and Günter Feuerstein as gathering speakers. Sundays at our gatherings are usually quite easy going. We had a casting demonstration by the *EFFA - European Fly Fishing Association* president Günter Feuerstein. Günter was favourably impressed with our modern action bamboo rods and he showed us a few tricks with his unmistakably gentle style.

The morning ended with the drawing of the IBRA – Abruzzi earthquake relief fund raffle and the prizes we handed out to the lucky winners. Then everyone went off casting everyone else's rods and of course the group photo! Everyone was off after lunch excepting Glenn and Jerry who had decided to stay on another day to enjoy some fishing because they had found out that I am also guide so they asked me to stay on another day so that we could all fish together. Rolf Baginski had also stayed on but unfortunately he had to leave early on Monday morning to catch his flight but we all spent Sunday evening together and enjoyed a tasty pizza and a good bottle of wine. The Violino seemed so empty after all the bustle of the gathering and I was a little sad but the thought of the next day's fishing with two fantastic guys like Jerry and Glenn made up for everything. Rolf left at about 5am the next morning and we all met for breakfast then it was off to the TWT. It was great watching these two well known rodmakers take out their rods, string them up and admiring two very experienced fishermen. We tried out the "university" in the morning and we managed to get a few decent fish.

Later we changed and Glenn after casting to a rising grayling for about ten minutes managed to hook a good one. In the afternoon the water levels dropped suddenly which made the fishing quite difficult but we still managed to get a few good ones! To cap it all we fished under boiling hot sun with not a cloud to be seen. On the whole it was a good day!

After fishing, I drove them back to their hotel in the centre of Florence because the next day they had booked a tour of the Uffizi Gallery. That evening Gabriele Gori had invited us all for dinner at his beautiful house on the hill surrounding Florence. Carla, his wife, outclassed herself by preparing a wonderful Tuscan meal. Gabriele was so excited to have two great Rodmakers in his shop, but I was even more as I had three master rodmakers in front of me!

These were five fantastic days spent with two new IBRA friends and bamboo under the Tuscan skies.

Moreno Borriero

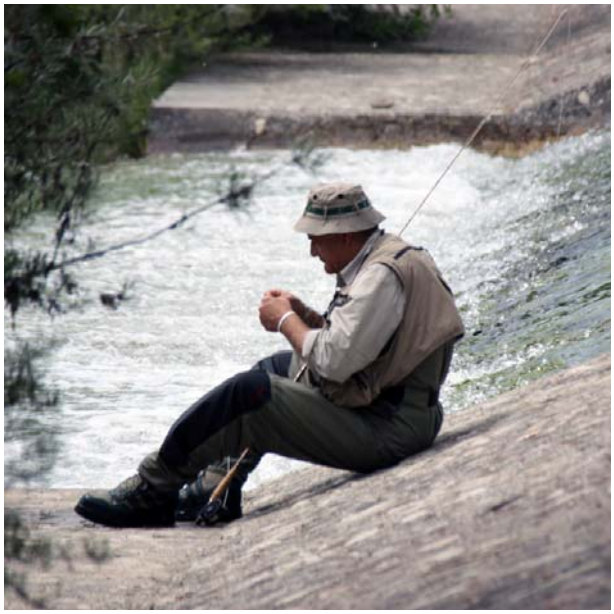
Rodmaker and fly fishing guide in Tuscany, lives and works in Lucca.

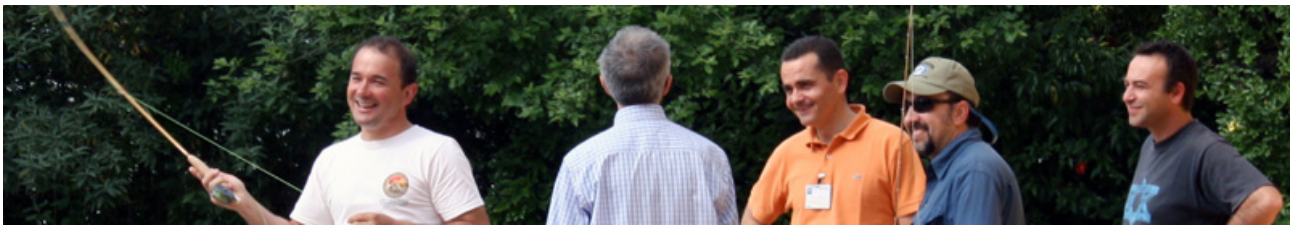
www.mbrods.it

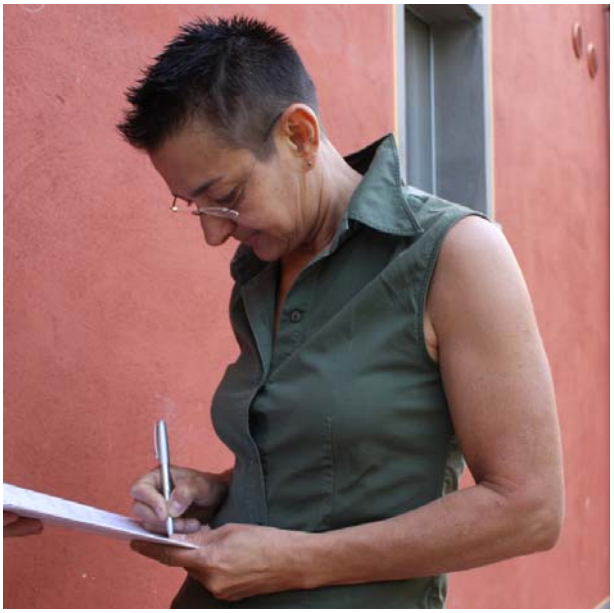
Liri River

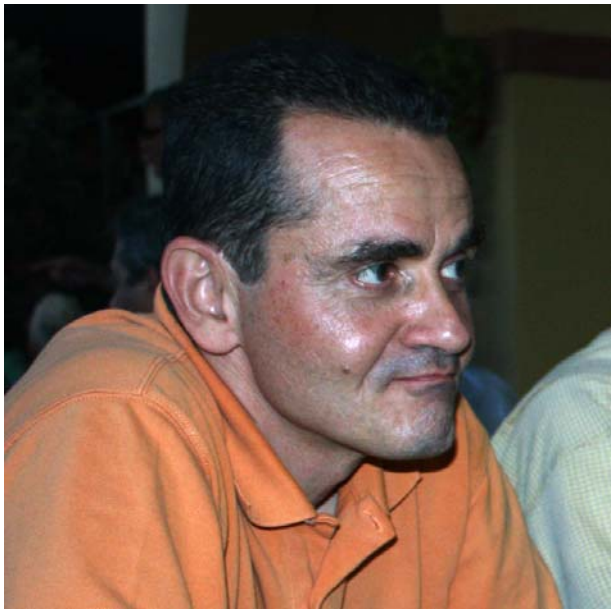
“Faces of the Gathering”

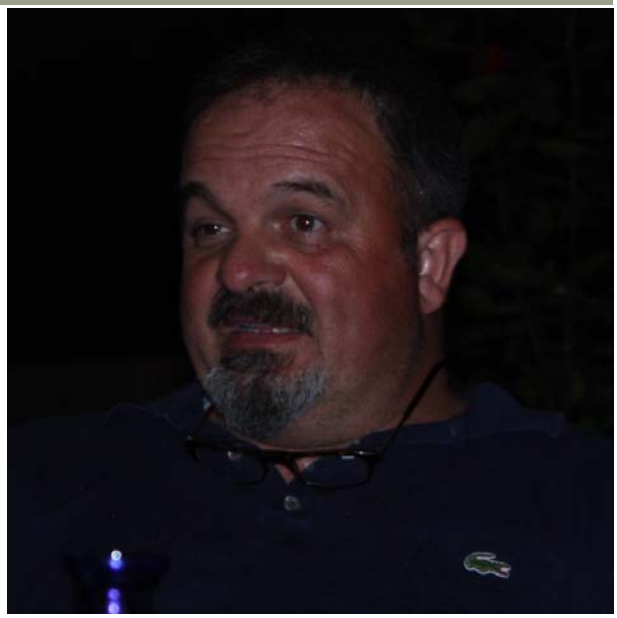
An overview on the participants in a completely random order











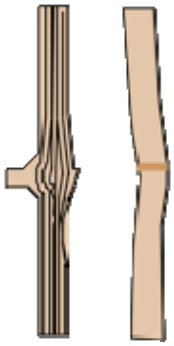
Volturno River

A simple node dressing tool

by Gabriele Gori

One of the most important operations in bamboo rodmaking and which determines the good workmanship of the rodmaker, is the node dressing.

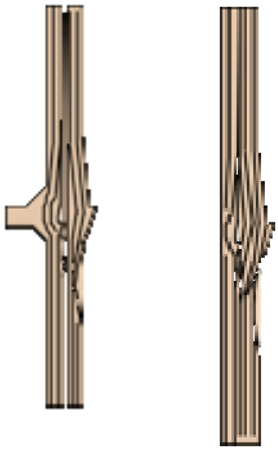
The strips need to be straightened especially in the node area which often present big bends that must be removed at all costs. Without this we will never manage to achieve accurate final planing especially if the external enamel side isn't perfectly smooth.



I have always preferred node pressing to simple filing or sanding in order to reduce the extension of the treated node area as much as possible.

More than node pressing, I try to achieve a new disposition of the fibres.

The procedure that I follow was illustrated by Tony Spezio in the Rodmakers tips page and which I integrated with a few small variations. After having split the culm e before proceeding with any other preliminary work, I eliminate the diaphragms with a chisel.

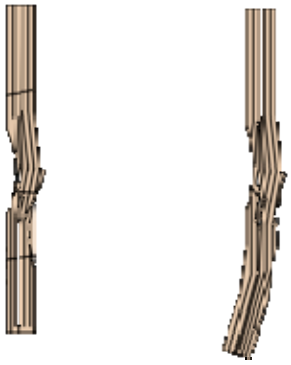


Then with a grinding disc mounted on a drill or with a file, I create a small half moon dent on the inner part of the node to "make space" for the node fibres.

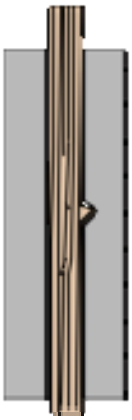
I then flatten the pith side with a plane.

At this point I soak the strips in water with a little bleach for 3 – 5 days: this part isn't essential, you can dress the node without soaking but I prefer it because the node is less "stressed" by the application of heat.

I then heat of the node with a hot-air pistol.



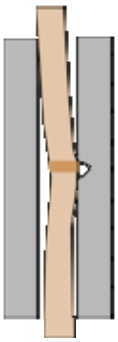
During the heating process, with pressure from my fingers I try to eliminate the little valley that is often found below the node.



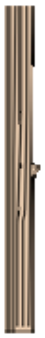
When the bamboo becomes "plastic", I tighten it in the vise on the enamel side for 10 seconds.

One of the vise jaws has a V-shaped groove and I place the lip of the outer node in this groove.

I then free the strip and rotate it 90° and press the lateral faces. I let it cool while warming up another strip.



Finally, with a file I eliminate the external lip



With this method, the treated area of the node is very small and this makes the finished rod look a lot better – naturally in my opinion it does!

The problem is that the procedure isn't always successful: often the second manoeuvre influences the first one negatively and it is probable that the node will need to be heated again and the previously pressed node often comes out again complicating things.

The pressure should be exerted simultaneously on all four sides.

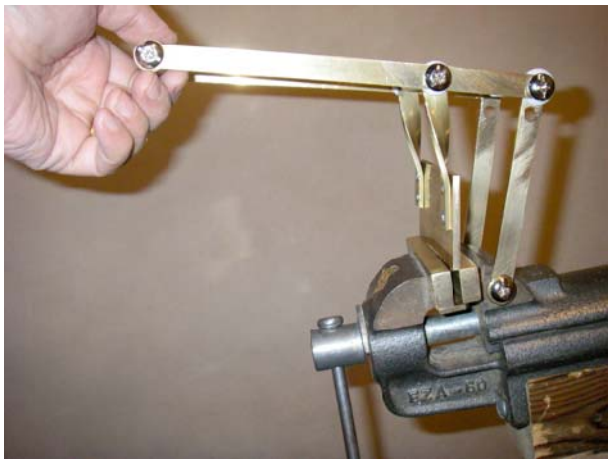
A few months ago I was discussing this with Marco Orlando Giardina, the excellent and internationally known Rodmaker from Naples (Italy).

Well he suggested his idea on how to solve the problem. I reflected on it, I bettered it and made it. And this is the final result: a vise that presses the node simultaneously on all four sides. It's actually quite a simple commonplace tool.

Often the things that work best are based on simple but effective ideas made from a simple and essential drawing.

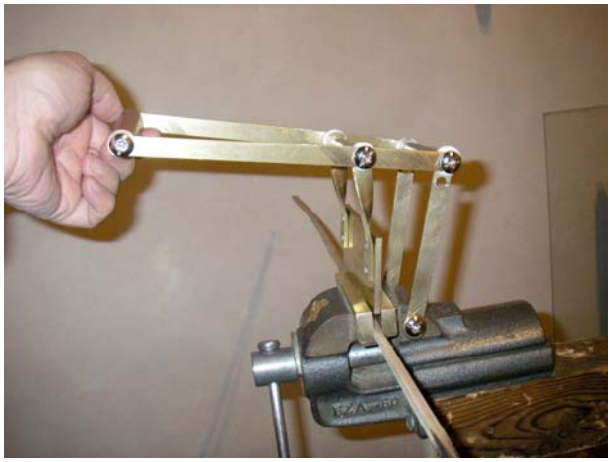
The tool is simple and cheap to build and any rodmaker can make one.

And it works! At the end of the day, this is what really counts. In practice, it is a modification or better an add-on to a normal vise.



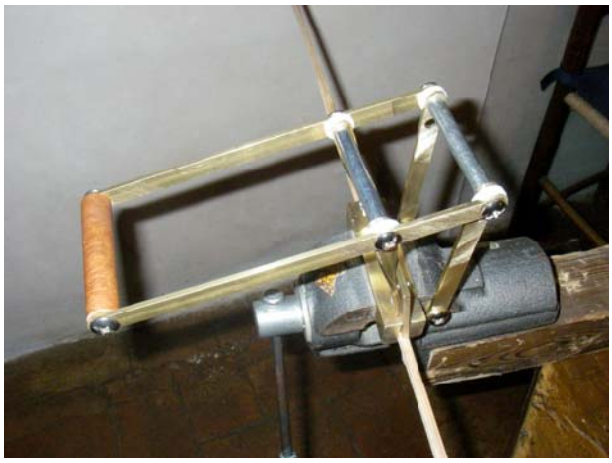
In practice I substituted the original steel jaws of the vise with longer brass ones so that I could grip longer areas of the strip – about 12 cm.

Naturally one of the jaws has the V-shaped groove for the outer lip of the node. One essential part is the bar under one of the jaws made of a 3 mm x 15 mm brass plate which I screwed onto the bottom of the jaw. The strip will find "contrast " on this plate when pressed down by the lever.



The photos describe the procedure more clearly than words.

I proceed as above, heating the bamboo until it becomes “plastic”. At this point the strip is ready to be placed into the vise but the phases are all condensed into one. The strip is placed with the lip in the groove, the lever is pulled down while closing the vise.



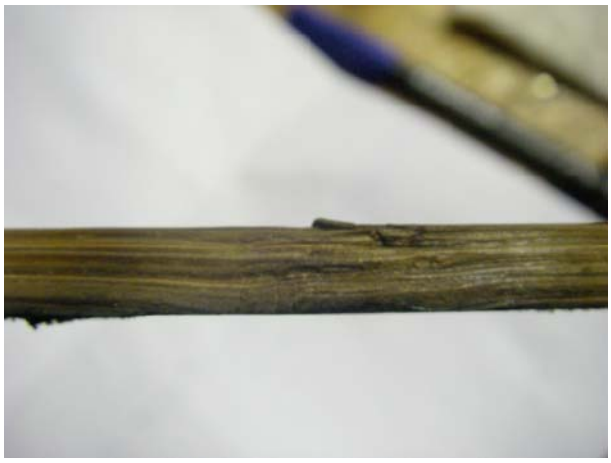
I leave it to cool down and the node is pressed and straight. If everything has been done well, the enamel face of the strip will be perfectly flat except the little leaf-node.

Gabriele Gori

Civil Engineer and Rodmaker,
lives and works in Florence.

www.gorirods.it

A little filing will eliminate the lip and the strip will be perfectly smooth.



Fiscalina River

Milling Tapered Strips with a Benchtop Planer

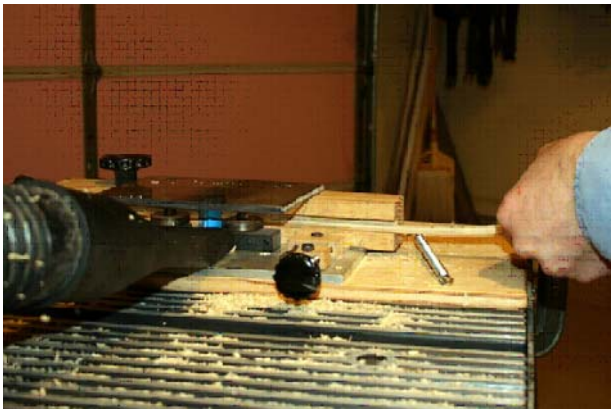
by: David Bolin

There's a bench top planer in my shop that's used to plane hardwood for rod tubes. The thought of using it to rough in tapered strips percolated for a while after watching Tony Spezio plane PMQ strips. I figured hex strips could be planed the same way. Other makers have used a planer to mill strips. Harry Boyd has experimented with a bench top planer in recent years. I'm sure there are others that I'm not aware of.

Following is a two part summary of milling with a bench top planer. Part I covers roughing in the 60 degree bevel with no taper. Part II explains milling a taper into a beveled strip.

Part I – Planing the 60 Degree Bevel

The first step is to straighten the nodes, sand or smash them and flatten the enamel. The milling process described here must start with straight nodes and a reasonably flat enamel side. I touch up the sides of the split strips on a power sander and run them through a router beveller to square them up. This step could be eliminated by cutting the strips with a band saw instead of splitting.

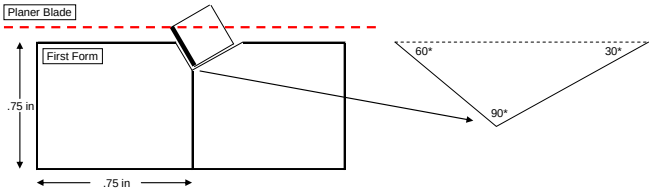


The squared up strips must have a 90* angle at one of the enamel edges to begin the planing process. If you don't start with a reasonably accurate 90* angle (give or take a few degrees), the process described in this article will not produce 60* angles. The angles would have to be correct with a hand plane.

Square up the strips to about the same dimensions so the planer height doesn't have to be adjusted for every strip.

The butt strips will be a little bigger than the tip strips depending on your target dimensions. Plan the roughed in dimensions ahead as usual.

Three different wooden forms are used in the planing process. The first and second forms are not tapered and they have significantly different bevels. Both forms can be made with a table saw. Look up "forms" in the tips section at www.bamboorodmaking.com for more details on making wooden forms. The first form is functionally the same as a hand planers "first form".



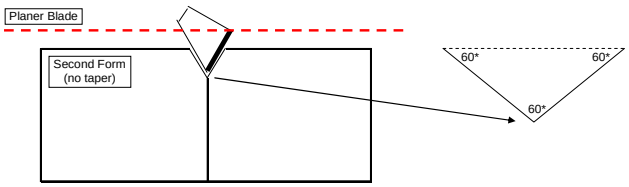
It's critical that the enamel side of the strip is facing the short side of the first form with a 90* edge nestled into the form as illustrated in the drawing above. One pass through the planer will cut the first 60* angle. If the enamel side is not properly positioned, the strip will go in the scrap pile after one pass.

With the strip properly positioned in the form, set the height of the planer so that the rollers just touch the bamboo strip enough to pull the strip and form through the planer at the same time. Don't plane off too much at a time. Taking a deep cut may cause the form to stall in the planer. If it stalls, the sharp edges of the bamboo may cut grooves in the drive rollers.

The height may need to be adjusted a couple times for the first strip until the cut is at the right depth. The goal of the first pass is to cut down to the enamel edge without reducing the width of the enamel side. That will take one or two passes through the planer depending on the size of the squared up strips. As the form and strip are pulled through the planer, carefully hold the strip down in the form as it enters the planer. Here's a photo of a strip after planing with the first form.

Note that the planer knives did not touch the surface of the form. There's no reason for the planer to mill the strip that close to the form like you would with your final forms and a hand plane. The groove in my first and second forms is about .125 inches deep or about one half the width of a split strip.

The second form is on the opposite side of the first form. The second form has a 60 degree groove that is not tapered. The groove is about .125 inches deep. The 60 degree angle of the strip should fit snugly in the bevel of the second form as illustrated below. One pass through the planer should produce a 60 degree equiangular triangle.



Place the strip in the form as illustrated above with the enamel facing either side of the groove. Adjust the height of the planer and feed the form and strip through the planer as described for the first form. Again, the goal is to cut flush with the enamel edge of the strip without reducing the width of the enamel side. Here's a photo after one pass thorough the planer. Check the angles at this point. If they're off a little, make a couple more passes through the planer without changing the planer height and flipping the strip after each pass. If that doesn't correct the angles, touch them up on your steel planing form with a hand plane.

The strips are ready to be tapered. I've been binding the strips at this point and heat treating before milling the taper.

Part II – Planing the Taper

The beveled strips have been heat treated; six packs have been selected, staggered, and cut to length. A couple extra inches have been added to the end of the staggered strips to allow for snipe. Most bench top planers will cut a divot in the last couple inches of the strip (i.e. snipe). Allow a little extra length for snipe.

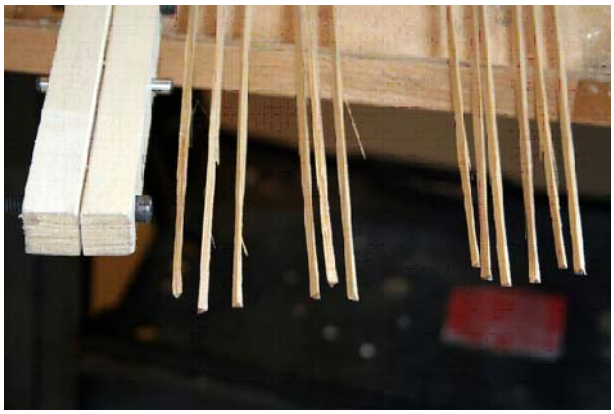
The third form is adjustable and tapered. A standard wooden planning form may or may not work. The form needs to be light enough for the drive rollers to pull it through the planer touching only the bamboo strip. So long as they're light and slide easily, they should work.

I made an adjustable form of white pine to keep it light and easy to make. My form isn't as accurate as I would like but its close enough. Its 6ft long with a 60 degree tapered groove cut on one side. This form can be made with a table saw and a router. A router table with a 30 degree chamfering is perfect for cutting the bevel, but that could also be done with a table saw.

As mentioned earlier, search the tips section at www.bamboorodmaking.com for instructions on how to make an adjustable wooden form.

The form depth is set to the final dimensions. It takes two or three passes through the planer to reach the roughed in target diameter. For the first pass, the height of the planer is set so that the drive rollers touch the bamboo strip at the butt end with just enough pressure to pull the form through the planer. That planer setting is noted as the start point for the rest of the strips. The form is fed into the planer butt end first. It won't start cutting until the fourth or fifth station depending on the slope of the taper. It will cut progressively deeper from butt to tip. After the first pass, the planer will cut the same amount of bamboo from end to end.

Multiple passes are made with the first strip while stopping between each pass and checking the diameter until it's at target. I've been stopping about 80 thousandths over the final dimensions of the taper. The planer height is noted at the target setting for the other strips. The rest of the strips are fed through the planer with two or three passes from the start to target planer heights.



The roughed in strips are sniped and splintered in this picture. I planed these strips dry after heat treating. Soaking them in water a couple hours before planing eliminates most of the splinters. I soak after heat treating to finish planing and then drying them back out in the oven at a little over boiling point. I don't worry too much about keeping the knives razor sharp. Soaked strips cut like butter anyway. Here's a photo of a knife that's milled the strips for eight rods. This knife could not be used for normal planer work. It would leave micro ridges in a piece of hardwood. This set of knives will only be used for roughing strips from now on with occasional sharpening.

Here's a roughed in set of strips for several two piece one tip rods. Tapering with the planer saves a lot of hand planning. A bench top planer and a set of home made forms is a relatively inexpensive alternative to the specialized milling machines that perform the same function.

Conclusion:.

Pros:

11. Just about any inexpensive bench top planer will work so long as the knives are easy to change and relatively inexpensive to replace or sharpen.

2. The wood forms are cheap if you make your own.

3. The automatic feed feature of a planer is perfect for this application.

4. A bench top planer is safer to use than most home made milling machines.

5. It only takes four or five passes through the planer to be within 80 thousandths of final dimensions starting with a squared up strip.

Cons:

1. An expensive planer may not work. If the planer has a high volume chip removal system, it will suck the strip up off the form and shred it. For example, the DeWalt 735 tends to shred bamboo strips.

2. Milling bamboo will ruin a set of knives. A different set of knives will be needed for other planning projects.

3. Strips need to be soaked in water before planing to reduce splintering.

4. The sharp edges of a bamboo strip could damage the drive rollers if the cut is set too deep.

5. Most bench top planers are very loud and require devices to protect your hearing (i.e. ear plugs).

David Bolin

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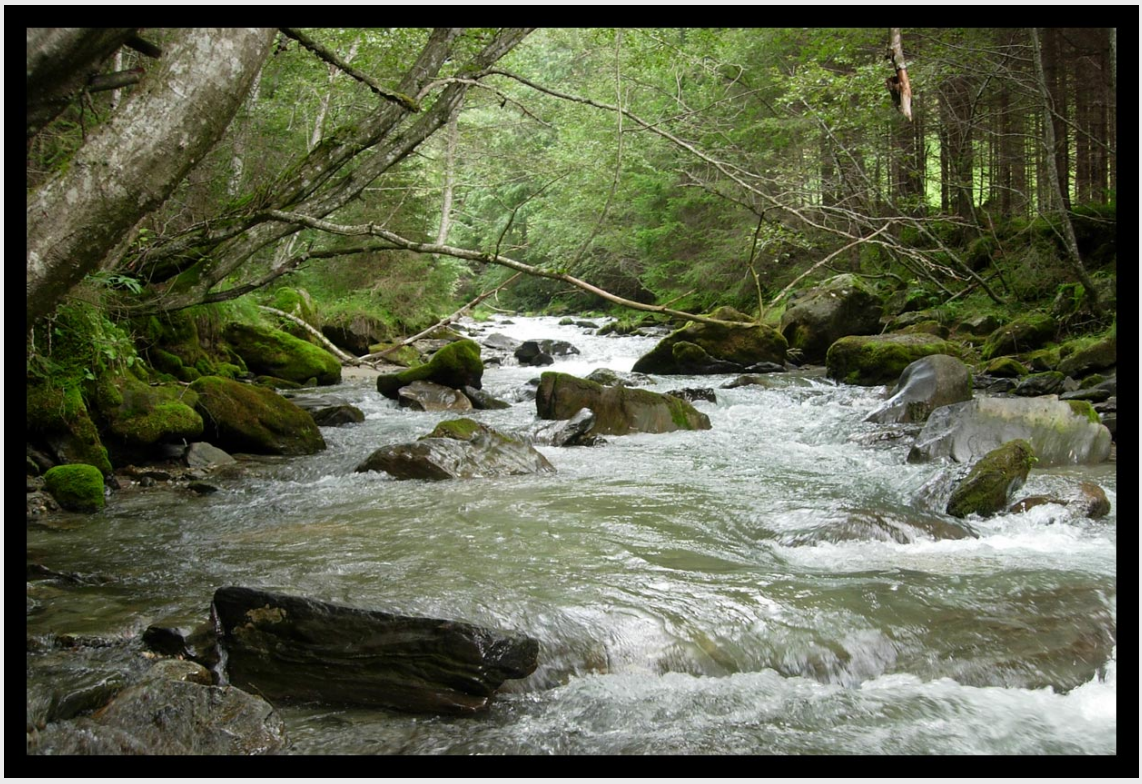


Selva dei Molini River

Rodmaker profiles:

MARCO BORETTI

By Alberto Azzoni

I became aware of the existence of Marco Boretti in 2001: on the pages of the Italian Flyfishing magazine called *Flyline*, where together with a small group of Italian Rodmakers, he described his passion and it is from this story and that of the other pioneer Italian rodmakers that my interest in rodmaking grew. All doubts and hesitations disappeared and a few months later, for my 50th birthday, I sent an order for Bamboo, a planing form a Garrison binder tout to Golden Witch. My Martha Marie was born muuuch later (it was among one of the rods tested in the article for which the taper was available...and it was the one that cast the longest line!)

In that article, among the other rodmakers mentioned by Marco, figured Walter Brunner – the Austrian Rodmaker whom a year later I had the pleasure of meeting and confirming and sharing the high esteem Marco had for him.

It was in the name of Walter Brunner that last inter I earned an invitation to visit Marco at his home in Piacenza. I had just, not without hesitation, published the description and taper of my Brunner "Salza" on the IBRA website when I received an e-mail from Marco Boretti, in which he benevolently underlined the inaccuracy of my description and essentially declared the impossibility to translate the essence of a Brunner rod into simples numbers. Brunner rods, in fact conceal within them some of his secrets and particular methods that go beyond simple standardised measurements of the rod. I accepted the reprimand willingly and this only served to confirm Marco's idea of respect for Brunner's work. I anxiously awaited the day when Marco would give me a hands-on demonstration of what he had written in his e-mail.

So when one afternoon this last winter I found myself in his shop, I forgot that the reason for my visit was to interview him for this Journal with all the usual questions and I didn't even take a photo.

I just sat back and enjoyed my dream come true as Marco started taking numerous rods out one by one from moss green rod bags. With every rod Marco explained the actions, and illustrated the construction methods and it was as if Brunner himself was talking.

Marco was a great friend of Brunner and he owns almost all the models built (...but how can he live with that "*almost"?)*. Some carry his name on the butt section.

He can easily distinguish imitations, the quality of restoration and the work of other good rodmakers. Talking of which, he showed me a rod with an absolutely perfect finish by a young emerging Austrian Rodmaker whom he has grown to admire and who is worth knowing. And the rodmakers Marco has met are really many and the world over.

Marco Boretti, as with many of us, inherited his love for fishing "genetically" or perhaps one could rather say by "imprinting" as he fished with his father on the banks of the small Apennine streams trying to catch his first dace, barbell and trout on natural bait. Then as with Walter Brunner (and perhaps for many of us fly fishers that are not so young) a casual meeting with a "different kind of fisherman – in his case a carousel attendant who was fishing with the traditional Italian Valsesiana fly fishing method sparkled the contagious love of fly fishing.

Then his friendship with Mario Riccardi – a great fisherman and caster – opened his mind towards the casting techniques with regards to the actions of the rods; it was towards the beginning of the 70's – the years in which Pierre Crousevaut, Charles Ritz, Pezon & Michel and Hardy made their best models and with which many fly fishermen of my generation experienced the emotions of their first fish. This was a period in which graphite hadn't changed the personality of rods reducing them to mere industrial consumer items (with all due respect).

Then the rodmaking adventure started: the search for all the possible information regarding the tools, the raw material etc which were very difficult to come by in those years, but his determination was paid off with a bit of luck.

He had the opportunity to purchase a good quantity of culms from an Italian Swedish maker, he made his own oven, and in 1989 his "number one" was born. But as we all know, that was but the beginning, the confirmation that "it could be done" and so this is when he started researching tools and experimenting; he began interacting and sharing experiences with other rodmakers he met. Among these were Marzio Giglio, a true pioneer of Italian rodmaking and Walter Brunner. Marco had come by his first Brunner rod in '87 through Angelo Droetto – a real gold mine of resources in the European and American Bamboo world – and he was struck by the action and workmanship of this rod. (By the way – my first Brunner rod was a Gebetsroither super dated 1981 –, and I came by it not without difficulty from a veterinarian from Genoa).

Marco has quite firm ideas when it comes to rod actions: he doesn't like tip actions much preferring parabolic/progressive ones that exploit all the elasticity and inertia of bamboo, so you can say he was inspired by Brunner, Dickerson, Young and the faster Garrisons. He disdains the computer and designs all his models with graph paper; no stress curves but great experience and capacity in comparing tapers and what it means to increase or reduce the dimensions in one or more stations.

He takes great care of the node dressing and straightening of the strips and has machines for the roughing and tapering work. He has used the MHM and AL Bellinger's beveller.

He is now working on the construction of one similar to the one used by Bob Milward, his friend and mentor for the making of rodmaking tools. The mechanical work is done by his friend Giorgio Comenti who has already built a fluting machine which I had the opportunity to see in Sansepolcro a few years ago.

Quite differently to many rodmakers, he does the heat treatment in a hot air oven on the tapered strips almost to size and brings them to target size afterwards and finally the gluing with high quality vinyl glues, straightening, ferruling, wrapping and dip varnishing. Talking of ferrules he is working on a method to make them from N/S piping. He is very careful that their diameter fit perfectly to the rod dimensions without unsightly swellings.

In the finish there are no frills but only accuracy, respect for proportion, sobriety, harmonious colours - all in line with tradition.

Marco loves wood because it tests his manual workmanship and creativity, it fills those long winter nights and because the approach to fishing is more natural and less exasperated. The relationship between fisherman and rod is mutual and interdependent because only someone that has the correct feeling of timing can get the maximum energy out of a bamboo rod in all occasions

It's a pity that when I visited him, he only had a couple of rods in working but not even one to test.

It doesn't mater. It will be a good occasion to visit him again – perhaps with distractions from that quiet and solitary Austrian gentleman that left silently a year ago.

Or perhaps if Marco decides to show me that treasure of precious old papers that he showed me just before leaving. The documents that the Brunner family decided he should keep.

There must be a good reason for choosing him.

Alberto Azzoni

Medical Doctor and Rodmaker, lives and works in Biella (NO).

He is a great estimator of the rods built by Walter Brunner.

Liro River

Making nickel silver ferrules on a mini-lathe

By Antonio Paglia

I began making bamboo rods about 8 years ago. It wasn't easy because of geographical reasons, I had to work everything our by myself. My determination was essential but I must thank Giovanni Nese (who helped by e-mail or internet) and Nirvano Franzoglio (directly)for their help. I must also thank my wife who not only put up with my passion, but also encouraged me to realize what seemed like a dream . Only now do I realize that time has flown and I look back with a hint of nostalgia to the many difficulties I encountered to get the tools and material together (most self made) and also to find decent bamboo.

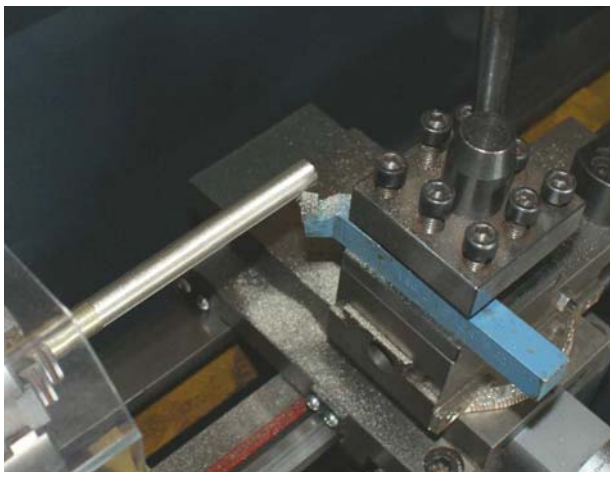
I initially only concentrated on making the blanks of hex rods, which is already satisfying and rewarding and when others suggested I make the other parts too, I would answer: "no thank you – I'm not interested for now." Now that a few years have gone by, I make almost all the components of my rods: butt, tip, reel-seat, cork grips, winding checks, ferrules and guides – all with satisfactory results. I'm only missing the tiptop but I'm getting there. It is very gratifying to make a the whole rod including all components. I also dedicate a lot of time to my rod tubes: a superb instrument deserves a tube that looks good, that is light and resistant. But we will discuss this in an upcoming article.

Let's get back to the object of this article: why build nickel silver ferrules? Isn't it better to buy them? These are questions I often hear. Apart from the considerations on the sheer pleasure of making them, the following are my answers:

1) I don't like waiting. In the beginning, I could find ferrules in my town or in Italy so I was forced to order via internet with consequent long waiting periods. Waiting doesn't bring joy but anxiety. Now I don't have this problem any longer.

2) When choosing a rod model I am rather curious, fickle and open to experiments so I don't think it's convenient to stock up on ferrules of various sizes.

Now that I have all the raw material (Bamboo, cork, wood, nickel silver) I am free to make rods from 6' to 8 ', from 2 weights to 8 weights without the problem of ordering the components. I must admit that with the IBRA group purchases and in particular the work done by Massimo Giuliani to whom I am grateful, things have become a lot easier. From my point of view "making" gives me more satisfaction than "buying". When I decided to buy a lathe I had to take the size of my shop into account.



My shop is rather small with access via a spiral staircase and this didn't allow for the purchasing of a big machine weighing several hundred pounds. My choice was therefore necessarily a mini-lathe which weighs about 100 pounds

For amateur use it is perfect. To those who initially warned me against the use of mini lathes (usually from the far East) because they are not accurate, I feel that in my experience they can be used with acceptable results. The comparison with the costly production machines is useless: it is man that makes the difference. This, on the other hand, is the essence of rodmaking. I decided to fill in my gap by carrying out many trials and experiments. I had no difficultly in finding brass rods, while it was difficult to find nickel silver, so I used the former to gain confidence with my machine. Brass is softer than NS but then when you work it, it isn't so different.

Consider that in life I am an auditor so I work in a completely different field that has nothing to do with lathes. Notwithstanding this I do have some manual skills and with a lot of patience I have managed to make ferrules that even according to others are at least quite decent. I do feel that there is a lot of space for improvement.

Finally a few considerations about the investment for the purchase of a mini-lathe (about 500- 600 euros without accessories.

This expense will be paid off after having made about 10 rods; even less if you manage to make your own seats and grips.

Talking about precision, I feel that one of the main obstacles when using a mini-lathe is its precision.

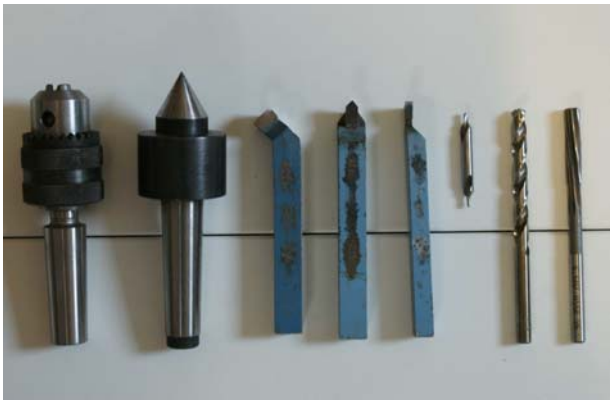
I've read that this can be considered acceptable up to a tolerance of 0.05 or 0.06 millimetre (0.0020 – 0.0023 inch) . In theory the only possible solution to keep the tolerances low is to not remove the piece until it is completely finished but as we will see further on, this isn't always possible. Keeping the margin of error indicated above, will let you achieve ferrules with quite a constant wall thickness.

If we consider that, the most commonly used ferrules in which the walls of the female part are subject to the greatest stresses are quite thin, it goes without saying that differences as indicated above will invariably expose the ferrule to break under stress.

Before beginning I would like to invite everyone to use the lathe with care. Do not remove the safety guards, use protective eyewear, remove bracelets, do not wear loose clothing that could get caught up in the moving parts.

Let's take a quick look at the tools you will need, other than the lathe naturally.

In photo N. 2 you can see the mandrel, the live centre point, tools, centre point, drill bit and reamer. Regarding the tools, there is a vast choice.



You can spend from a few euros to over a hundred. I chose the cutting tools with the carbide insert .

In the photo you can see three lathe tools, one for roughing, one for finishing and one for cutting. You don't need anything else.

The live centring tool is indispensable before drilling so that the hole is perfectly centred with the axis of rotation; start with this tool before drilling with a normal drill bit. It is important that all tools and bits are perfectly sharp in order to get a prefect job.

The reamer is used to finish the female part and to get it perfectly cylindrical.

Its cost isn't marginal (from 20 to 30 euros according to the diameter). The first ferrules I made weren't reamed; they worked well but were a little scratchy when fitting in the male and this wasn't pleasant.

To increase the cutting power of our tools, it may be good to use an aerosol lubricant which helps also to cool the part. .

Finally sandpaper with 400 to 1200 grit and abrasive paste (the one for polishing Silver). A Vernier and a depth gauge are necessary.

Regarding the design and the sizes, I use the ones from Super Z but you can choose from other sizes on the web.

To make the ferrule we start from adequate diameter, solid stock nickel Silver. You can use NS piping to save on material, but they are difficult to find and you will not have the inner diaphragm on the female. Remember that without the live center point, or a steady rest the part will tend to bend because of the pushing action of the tool.

In fact you will note that the diameter tends to grow the further you are from the mandrel with differences of up to 0.10/0.15 mm. The steady rest cannot be used with small pieces but you can use the counter point, but only in certain occasions.

So it's a good idea to work "short", working as close as possible to the mandrel and when you are close to the final dimensions, do a few more passes without modifying the tool post adjustments.

I repeat, it is fundamentally important to have very sharp tools. In general do not remove more than 20/100 – 25/100 mm of material at a time so that you don't risk ruining the part; likewise, when drilling advance very slowly to prevent bending and turning out of axis.

Regarding velocity – use low velocities when drilling and medium/low when turning.

We firstly make two trued-up cylinders which are about 30 mm longer than the female and the male.

Sand the surface with 600 grit sandpaper to remove the rough parts.

Let's move on to the female.

Block the longer cylinder in the mandrel and make the hole on the bamboo end; do not ream this hole so that the inner surface remains rough so that the glue will hold better.

At this point turn the cylinder around and block it in the chuckjawa. As I said earlier, you should move the part until it is finished. In this case you must or you will have no diaphragm. In order to not lose the centre, I mark the chuck and the part with a marker so that I do not rotate the part when I turn it around.

I block it about 15 mm in and I check that it rotates in axis with a depth gauge which is held up by a staff mounted on the turret ;

you can also use a magnetic base.

Place the point of the gauge on the surface of the cylinder and rotate the spindle slowly checking that it is centered: if the gauge measures variations more than 5/100, I will unblock the part and rotate it a few degrees, block it again and try again until I have variations of less than 5/100mm. Once the part has been centered, I drill the other hole in the female.

I first center the hole with the centering bit, then I drill with a bit that is 0.5mm smaller than the final diameter.

If you want you can polish the hole with abrasive paste.

At this point, block the part with a live center point to prevent the part from flexing

and finish and shape the outside surface. The tapered part can be achieved with a series of little divots (easy) or conical (difficult) because in small lathes you do not have a precise way of measuring turret angles (or fractions of angles), so you need to proceed empirically.

For example a 14/64 ferrule with a 1,5° cone is made only on 5mm of the ferrule. Once it has been shaped, cut the part and the female is ready. Going onto the male part.

There are two ways to make the male: I will describe the one I feel is more valid. Block the cylinder in the chuckjaws and drill it almost all the way through, leaving 1 mm. Then turn it around and block it again as was done with the female. The first part we work on is the one furthest from the mandrel.

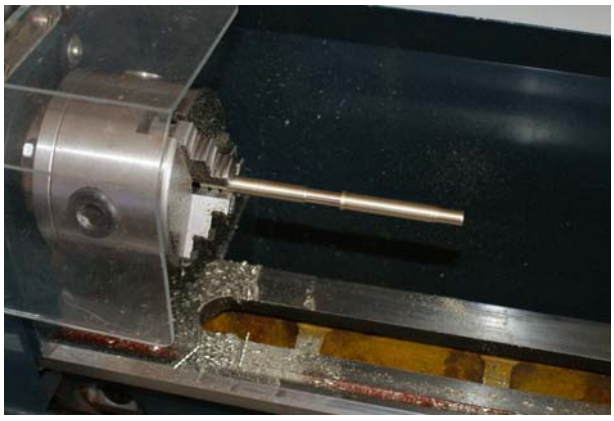
Turn it until it is 10/100 from the final size.

When close to the final size it is a good idea to carry out various passes without adjusting the turret.

Stop a few minutes to cool it down. Never underestimate the effect of heat on the diameter of the male, I have often worked a male that fitted perfectly into the female and when cooled it turned out to be undersized and would tend to slip off.

I have always found the hand finishing of the male for fitting as a tedious job and so I prefer doing it with the lathe. The ferrule must

be sanded with strips of sandpaper – decreasing the grit from 400 to 1.200. When trying the fitting always let it cool down. Once inserted if it is difficult to remove



pull decisively maintaining the same axis in both male and female or you risk bending the ferrule. If it refuses to budge, then warm it up lightly with a flame. Once the male part is finished, shape the rest of it, cut it and it is finished.

With the second method, you can make the male part without removing it from the chuckjaws once you have drilled the hole.

Block the part, drill the hole on the bamboo side, block it with a live center point and shape it until you are 10/100 mm from final shape.

Then cut it and finish by hand or by placing it in on the drill bit you used for the hole making sure you place some masking tape on the bit, block the bit in the mandrel

and finish the fitting as before although it won't be as precise as the first method.

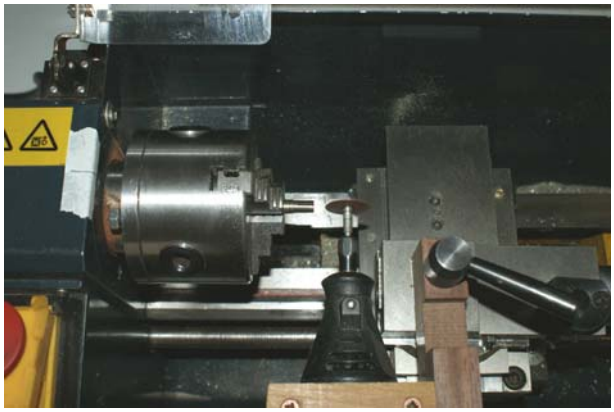
Two last pieces of advise:

1) *When shaping the male and female, remember to create a small divot in the area which will be wrapped so that it will be flush with the NS once the silk has been wrapped.*

2) *I've heard a number of complaints that ferrules come unglued when taking the rod apart. Well, before fitting the ferrule, clean it inside with a solvent that will remove the grease and the inside will therefore be rougher and this will help the glue to adhere.*

Then when removing the corners of the bamboo of the part that fits inside the ferrule, make sure you have left enough space for sufficient glue to fit.

Finally you need to make the serrations. Protect the male and female parts with masking tape. Block them in the chuckjaws, attach the Dremel to the turret (I made a special wooden attachment)



in such a way that it is perpendicular and in axis with the ferrule and cut the serrations using a maximum 0.5 mm disc. (You can get thinner ones from dental supply shops).

Rotate the spindle to the next point and cut until you have all the serrations.

The jaws in the mandrel are situated at 120° from each other so you can use these as references.

The perfectionist will make the ferrule caps: choose your shape and make sure you have cork on the part that goes into the ferrule.

After about three hours work you will have a finished ferrule ready for use

I hope I haven't bored you and I'm sure this will act as a stimulus to make your own ferrules and perhaps will convince those that have thought about it but found it too difficult to try.

As I said I'm not a professional machinist but even so, with passion, patience, dedication and a little manual skill, I have achieved results that a year ago were unthinkable.

Now it's your turn.

Antonio Paglia

Business consultant and Rodmaker lives and works in Frosinone.

Val Loga Valley River

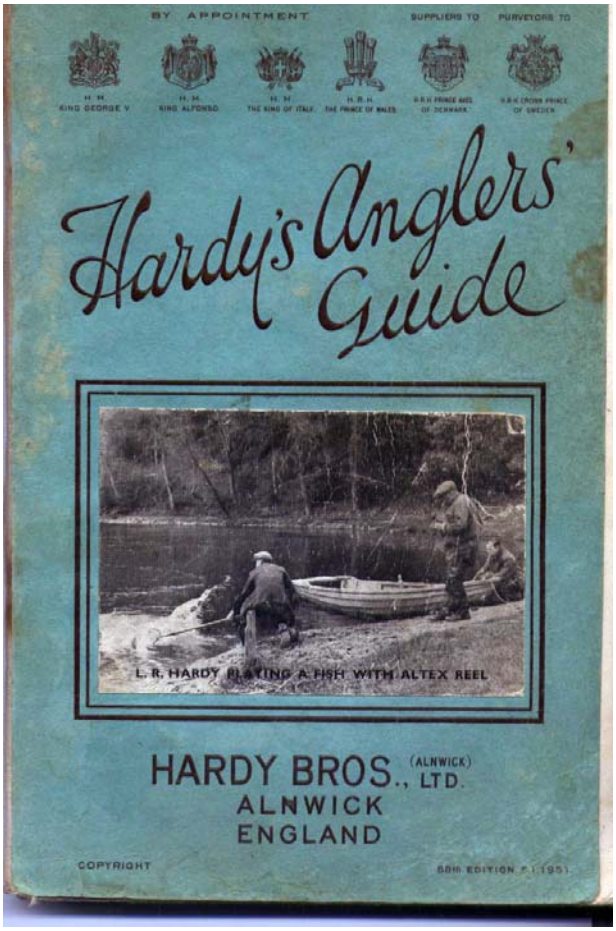
The “Marvel” di L. R. & J.J. Hardy

Di Roberto Natali

The “Marvel” by L. R. & J.J. Hardy

This time for the historic rod corner it’s back to England to talk about a rod that represents the “Old English Style!”: The Marvel “The lightest pratical fly-fishing Rod in the world”.

This rod is sought after by collectors but I believe that not many use it for fishing because just by holding it you understand that the action, which was defined as “medium” by the House, is today somewhat anachronistic for most fly fishermen



Hardy catalogue

I have owned two for a number of years and I must admit that I still haven’t found the courage to fish with them. Every time I prepare a fishing trip, I pick them up, wiggle them a about a little and then images of rivers and fishing situations flow through my head . I invariably repeat to myself that you need an Avon or a Test, a Risle or an Unec where you sit down waiting for a rise – perhaps in the company of a good cigar and a glass of the “good one” to sip. But since I often land up in fast flowing streams, I put it back and I say to myself ...”next time...”

My sensations are punctually disproved by a well known collector who was at the 5th IBRA gathering in Sansepolcro.

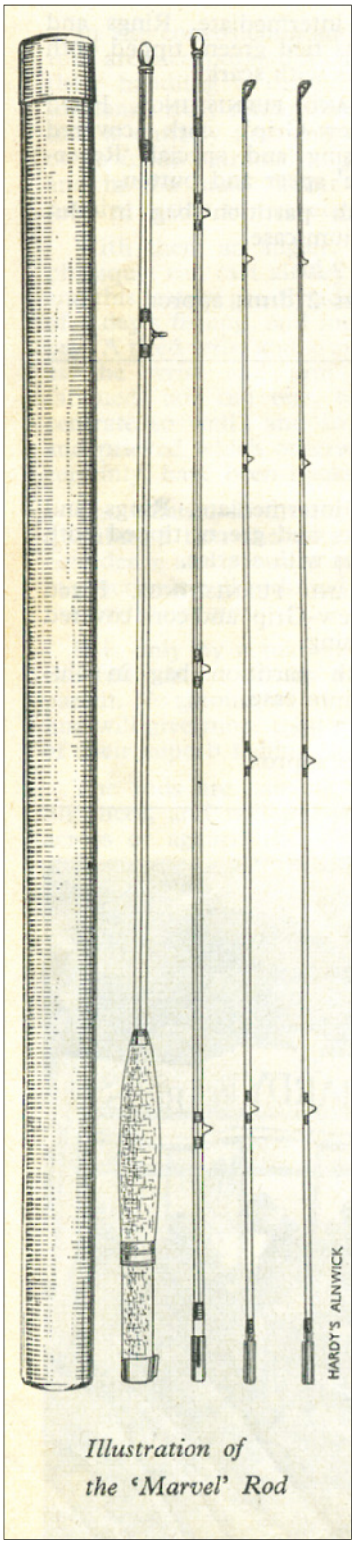


Illustration of the ‘Marvel’ Rod

He exhibited five of them and fishes with them regularly in Appennine streams. For him it is the best bamboo rod in the world!

◀ The 'Marvel' Rod

The lightest practical Fly-fishing Rod in the world

Specification

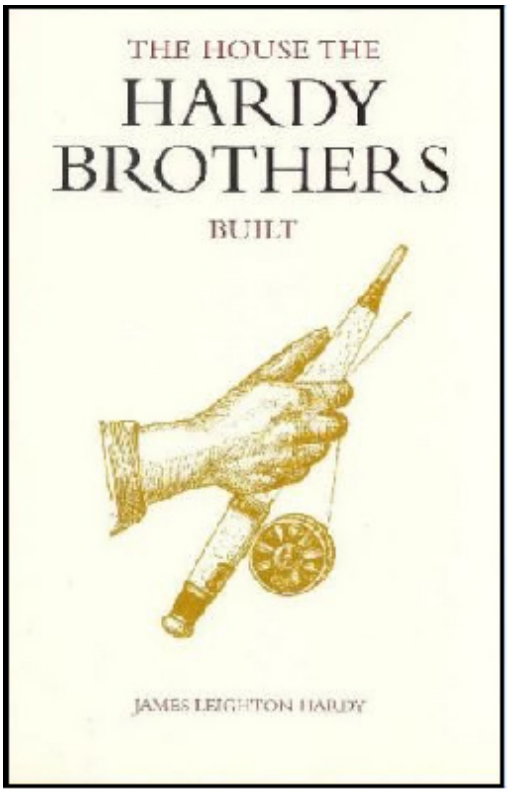
ACTION	Medium.
PIECES	Three with two tops. 'Palakona' split-bamboo.
HANDLE	8¼-in, cork, plain shaped.
JOINTS	Suction, fitted with male rod joint protectors.
RINGS	Agatipe butt and end with 'Snake' intermediate.
TYINGS	No intermediate. Joints green silk, Rings tied transparent silk.
REEL FITTINGS AND FURNISHINGS.	Housed butt cap and adjustable ring.
CONTAINER	Cloth partition bag in aluminium case.
LENGTH	7½ ft.
WEIGHT	2¾ ozs.

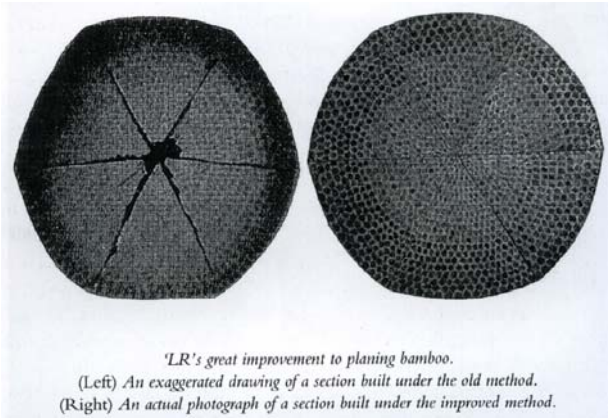
After JJ Hardy's retirement (he stayed on as a consultant until his death in 1932), the technical part of the House passed on to Laurence Robert (L.R.) Hardy was a great caster and had won many competitions. In the decade between 1920 and 1930 the two designed many "special" rods in order to offer a wide range of possibilities to the fisherman.

"The Marvel" was presented in the 1924 catalogue as the lightest rod in the world with the following characteristics which remained unchanged for 46 years (until 1970): length 7'6", weight 2 ¾ ounces, three pieces, two tips, aluminium tube and guards for the male and female ferrules. Only for the American market where it was known as President Eisenhower's favorite rod, a special 7 foot version was made at the beginning of 2000.

L.R. Hardy prepares his line for fishing

L.R.Hardy checks production





'LR's great improvement to planing bamboo.
(Left) *An exaggerated drawing of a section built under the old method.*
(Right) *An actual photograph of a section built under the improved method.*

James Leighton Hardy, the last of the Hardy family to run of the House, in his book "The House The Hardy Brothers Built", writes that at that time the head rodmaker of the House of Hardy was Antony McCutcheon (1863-1933). He had started working as a rodmaker for Hardy in 1883 and continued for 44 years until 1927) and it was about him that LR Hardy wrote in the Houghton Club Fishing Gazette, "he was the most capable and able man, as good a judge of a rod as anybody I know. … He was a most excellent angler for both salmon and trout, chiefly with the fly, and many happy days I spent with him on the riverside." LR Hardy's contribution to the technical development of the House of Hardy in 57 years (1900 – 1957) is testified by the 56 patents in his name and the merit of passing from wooden planing forms to highly accurate mills as can be seen in the photos of the cataloge. To appreciate it better let's look at the photos of two Marvels – one dated 1964 and the other 1970 and finally the taper.


THE WORLD'S
HARRIS & SHELTON


MADE BY
MADE BY

Design report	The Marvel
maker	L.R. Hardy of Hardy Bros Year of fabrication: 1964 Measurements including varnish
section	Hex
lenghth	7' 6" (229 cm.)
Line weight	4
Pieces	3 pieces with two tips N.B. Hardy rods have the butt and mid sections longer than the tip: Tip 30" 2/8 , mid 30" 7/8 e Butt 31" 1/16
ferrule	14/64 and 10/64 Blued brass

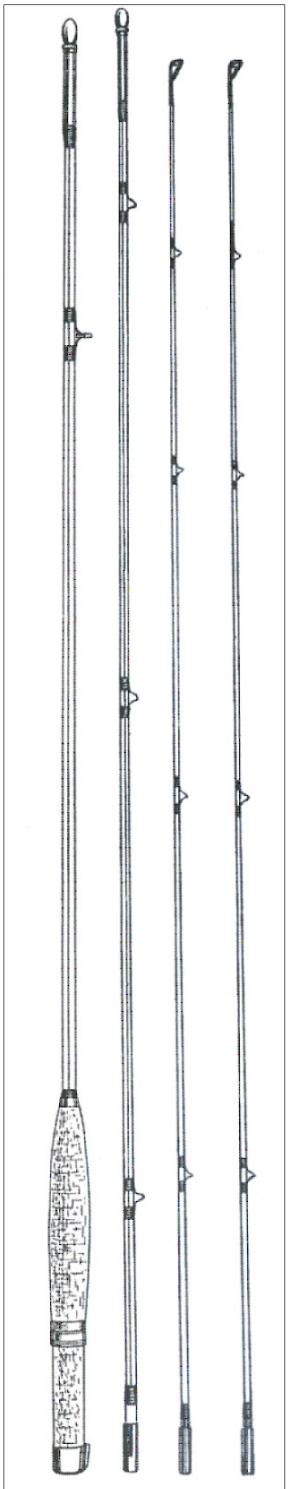
taper	Station	dimensions	
		inches	mm.
	0	0,0690	1,753
	5	0,0800	2,032
	10	0,0970	2,464
	15	0,1180	2,997
	20	0,1280	3,251
	25	0,1350	3,429
	30	0,1520	3,861
	35	0,1580	4,013
	40	0,1720	4,369
	45	0,1830	4,648
	50	0,1910	4,851
	55	0,2010	5,105
	60	0,2160	5,486
	65	0,2290	5,817
	70	0,2450	6,223
	75	0,2700	6,858
	80	0,2900	7,366
	85	0,2970	7,544
	90*	0,2970	7,544

* station 90 is under the grip.

The guides are situated at 0, 4, 8 6/8, 15 5/8, 24, 33 1/2, 43 7/8, 54 6/8 e 66 2/8, agate stripping guide, blued guides

Wrapped in green silk tipped in with gold

The grip is 7" 7/8 long all in cork with aluminium sliding band



The Marvel
'The lightest practicable fly-fishing rod in the world'

Roberto Natali

Collector of bamboo rods and Rodmaker, lives and works in Capannori (LU)

Masino River

HAND MADE

FATTO A MANO

By Gabriele Gori and Marco Giardina

This is a subject that appears periodically on forums and American Rodmakers lists with small variations on the theme: hand planed is one of these.

The discussion usually begins with the assertion of the superiority of hand-planed rods against those that have "undergone", partially or totally, a fabrication process with the help of a machine. The controversy, which on the usually peaceful forums from across the pond where higher tones are not readily accepted, is soon censored without too many qualms. Just like on the Italian forums – it soon sets just like a custard in the fridge. A few harsh comments here and there are never missing, but everything remains within a very civilized confrontation – or at least so it formally appears.

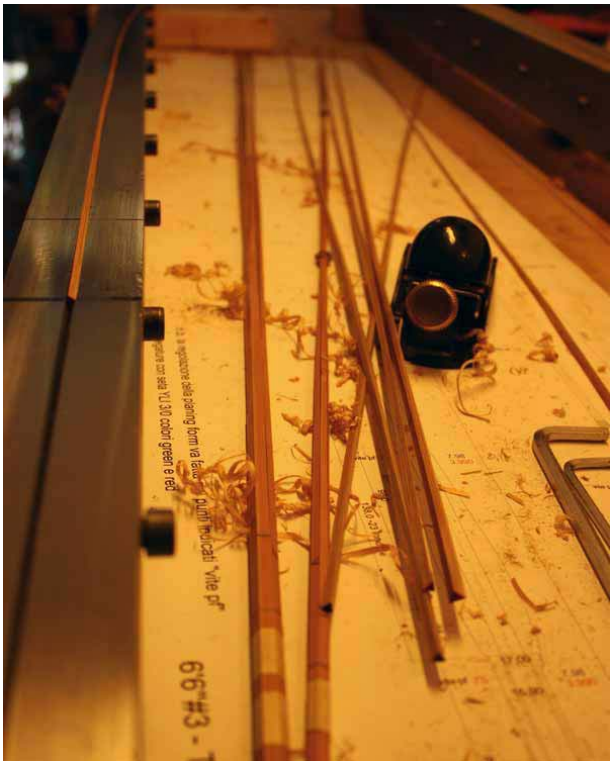
The subject which is still felt quite a lot, as if it were part of an ideological fraternity is unmistakeably passionate and appears very frequently.

The latest skirmish appeared on The Classic Fly Rod Forum and it all begun with a seemingly neutral question:

Is a blank that has the rough planing done with a milling machine, and the final fitting planing done by hand, make it any less as good than one where the rough planing is done by hand?

The first reply which was very much on the defensive was a classical one: "the most desirable rods were made with milling machines and never saw a hand plane". In this there is certainly a profound truth. The Leonards, Paynes, Youngs – just to keep it in the classics, were made by using power mills or mills with circular blades.

Today they are among the most desirable rods – T&T, Winston or the beautiful Sweet Grass rods



by Glenn Brackett – are machine made and, above all, let us not forget that the famous Brunners, European pride, were also machine made.

The response arrived immediately: "Garrison did not use machines!"

An absolute truth. It is also true that Everett Garrisson in the overall rodmaking scenario, was a sort of space/time anomaly.

He wasn't an amateur. He wasn't a professional or if you prefer a full time rodmaker unless you exclude a brief period during the 1929 depression. He was appreciated and the most renowned rodmakers of the time Payne, Gillum, Ritz, followed

His example. He was loved and acclaimed in the temple of US fly fishing – The Anglers Club of New York. He was most certainly a genius and as such he kept away from rules and regulations. An alien.

If it is true that today's rodmaking Renaissance stems from his ideas and from Carmichael's

book, it is equally true that most of the quality rods made today come from rodmakers that use machines partially if not totally. The advocates of "Hand Planned Only" have a somewhat elitist or superior moral attitude.

As if a machine depreciates the rod as an object. But then again, what is a machine in the rodmaking world?

Is a binder a machine? There are pulleys that turn and a binding cord, or not? Or perhaps the difference lies with the idea of a motor? Now if the Garrison binder had a motor, would it become a machine and could a rod no longer be defined as "Hand Made"?

Vice versa, if a beveller for preparing level strips or a mill for tapered strips were powered not by a motor but rather by a windmill or a water wheel or paradoxically by a group of migrant workers that move levers and cranks, well in this case would the instrument be more noble and could the label "hand made" be applied?

If we consider that a lever or a wedge are true "machines", then the definition "hand made" becomes rather vague.

Perhaps it would be much clearer if we referred to the use of "manual tools" or "powered tools" because it is between these two types of "machines" that the question lies, essentially for the specific work for preparing final strips.

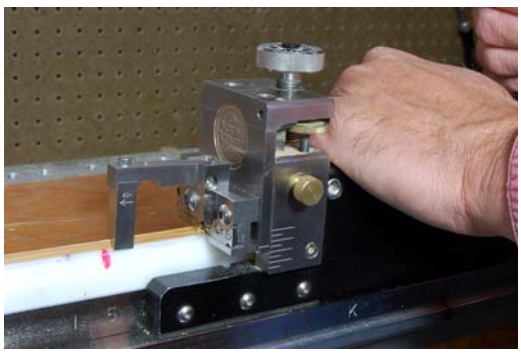
Some admit that their passionate exclusion of machines derives from ideological reasons – like excluding from their creations all references to modern things and this creates quite a few existential problems. We can define this choice as an "Existentialist" one.

Others candidly admit that they eliminate machines from their work for the simple reason that they make a noise. They cause distractions and ruin your concentration and they are annoying and produce a sense of impatience.

We can describe this choice as a "Sensitive" one

A more extremist vision– perhaps a strongly Calvinistic one based on the views of Max Weber – is the one that bases the "superiority" of "hand-made" on "machine-made", on the moral superiority of manual work which is not intruded by any tool/machine. A quite different application to the biblical "You will earn *your* bread with the sweat of your brow". Perhaps it is the word "*your*" that casts some suspicion on rods made by more than one person.

A few years ago a German rodmaker hidden behind an anonymous nickname made an interestingly significant admission on a forum that he makes use of a beveller and that if his colleagues and countrymen had found out, he would have been ostracized by everyone and perhaps would



have been put in public stocks in the main square in the centre of his town.

We can define this choice as a "Fundamentalist" one.

Years ago, at the end of the nineties, there was an animated debate on the theme of rods made with a Morgan Hand Mill (MHM)– to those who do not know it, we would like to point out that it is pushed by hand and above all in summer you sweat like slaves at the wheel (remember Conan?). Can a rod made with a MHM be defined as "hand made/planed", or should it be called "hand milled"?

And if paradoxically, instead of using a plane someone decided to use an axe to make his strips? It is not a strange idea – it is just a little more complicated, but trying to complicate things really has no limits.

Getting back to the axe.

There is a type of Swedish carpenter's axe called Gränsfors Bruks, hand-made for right handed users (it exist for left handed people too) with an asymmetrical cutting edge. It is used to do extremely small and precise work. Similarly you could use the Japanese Yarri-Kanna, hand-made like the Gränsfors Bruks – by Hideo Iyoroi. It has a precious handle of magnolia wood and it looks like a short spear with a wide leaf shaped tip and is made out of san-mai metal. It is extremely sharp and the traditional Japanese carpenters use it free hand as if it were a plane.

In this case would the intrinsic value of the rod sky rocket?

There is another interesting variation on "Hand Made", that is "All components made by the rodmaker".

Some believe that a great rod should have all components hand made by the rodmaker. No outsourcing.

Undeniably, a rodmaker that has the capacity to make all his own components, adds a certain *plus* to his rods, although there is a but...

Can a rodmaker match the structural and formal quality of the best products found on the market? Historically, rodmakers like Dickerson or Payne made almost all their own components. Quite frankly I have never seen grosser reel seats than the aluminium ones by Dickerson: perhaps it would have been better if he had outsourced them on the market. As far as Payne or Leonard if you prefer, is concerned, their components were good but they were made in their factories by qualified turners. So should a lonely rodmaker's (a one man shop) work be considered less just because he has his components made? Or should he purchase a lathe and get an excellent professional turner to come over whenever he needs one? Anyway, in the 50's Garrison fitted his rods with Super Z ferrules by Louis Feierabend.

Our thought is, that when making a bamboo rod, you should look for the best, to the high end and perfectly made products. We should always look for quality. Who can better the snake guides and the stripping guides by Michael and Susan McCoy of Snake Brand?

Who can do better than Bailey Wood of CSE in making ferrules? Who is better than Bellinger, Venneri and REC for reelseats?

Certainly, we have been able to admire good quality ferrules, reel seats and even agate stripping guides made by Italian rodmakers, but they are marginal numbers. On the other hand, we have never seen good handmade guides – to say nothing of the tip tops.

But do not think that the debate on the "rightness" of rod-making is limited to these arguments or to the "hand or machine made" debate.

About ten years ago, there was an earnest proposal to institute a Board of Rodmakers and Collectors, a Commission of Rodmakers and Collectors that would write Recommendations for making ethical rods. The conflict then was mainly about the tapers: those that were copies of the ones made by famous rodmakers, the derivatives/ modifications of the same and those absolutely original, and the use of these tapers in making bamboo rods.

A high level rod is the fruit of magic or if we want to be materialistic, a cocktail of experiences, capacity, process control, aesthetic sensitivity, skill and technical knowledge.

Capacity.

The whole constructive method, however it is achieved must tend towards quality.

This is the central point of the issue, where there should be no compromising.

Whichever tools used, manual, power, it is the Work (with a capital W) of the Rodmaker whose goal isn't only to make some rod to fish with, but to make rods with the highest standards of excellence and to achieve the highest quality.

The rodmaker who puts all his efforts into choosing the best culm, will always work to the best of his capacity and use procedures which he considers as the best ones and will never neglect either of these two issues.

He will never take short cuts that could bring to even minor deterioration of his product, He will discard any piece that isn't perfect even if he must make it again and again looking at both the functional and aesthetic aspects.

If the blank is the heart of the rod – if you prefer we can say the soul, or the personality – all the other elements that complete the rod must contribute to the creation of a quality rod. As we were saying, no distractions or contradictions should be allowed on the road to achieving this result. The end results shouldn't be the method, the procedure, the norm or the recommendation. The end result must be achieved without compromise or prejudice. The rod must be judged for its action (taper) and the judgements must come from the final user of the rod. In other more fashionable words one could say by the "market". The making of a bamboo rod is in fact handcraft like many others and not an artistic work like making furniture, clothes, buildings or jewels. At the same time, there is the acceptance in the western culture, that some of these products have reached such high levels of details, innovations and refinement that they are considered works of art.

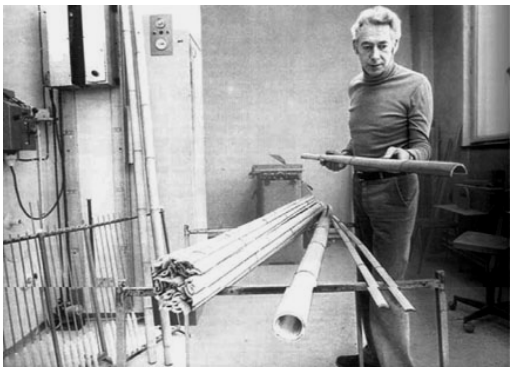
Giuseppe Maggiolini, Michael Thonet, Chippendale, or remaining in this century, Jacques Emile Ruhlmann, Charles Rennie Mackintosh, Mies Van Der Rohe have reached the highest levels in furniture design and not to mention Cocò Chanel, Yves Saint Laurent, Ferrè, or Cartier and Fabergè for jewels and in architecture the list would be even longer - Antonio Gaudi, Frank Lloyd Wright, Le Corbusier, just to mention a few names of paramount value. They have reached the highest levels of Artistic Acts in their works.

If Artistic Acts is a creative act, it can be carried out in full awareness.

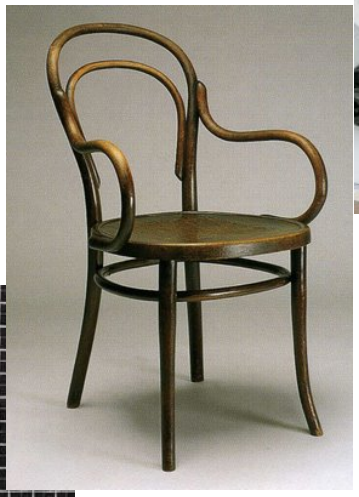
It is this awareness that distinguishes an Artistic Acts from handicraft – or from manufacture- thus the primary distinction is tied to the charismatic figure of the *AUTHOR*. In creating a bamboo rod, the dividing line between the able craftsman who can make something extremely refined and the Author, is the awareness of the Author that he is giving life to a product that transcends from its material and is externalized by the Artistic Act. In rodmaking the Artistic Act is even more complex and uncertain, because of the limited amplitude and the reduced degree of freedom that the very essentiality - tied to an indispensable function- of the object impose upon the Author.

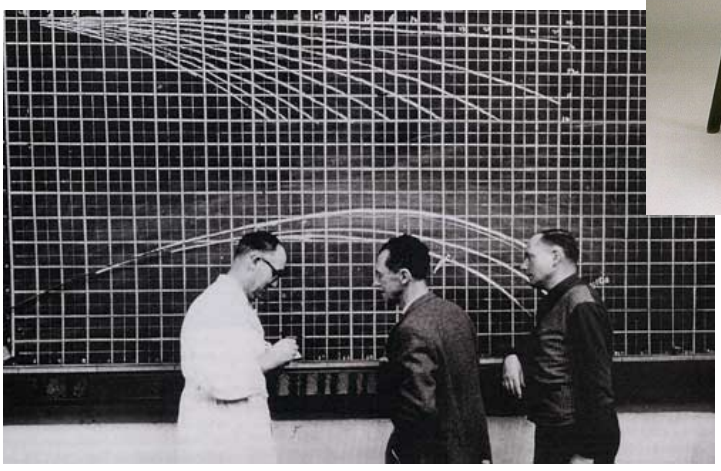
It is from these considerations that the theorem originates that making bamboo rods is purely handicraft *per se*, often the result of high quality handwork, only rarely of an Artistic Act. Only a few rodmakers have the awareness of the Author who is able to enact the Artistic Act, from which inevitably the Rod/Artistic Act derives.

Results of high excellence can, in fact, be attained by both manual tools and power tools according to the aptitude, the inclinations, the tastes, the financial means and the needs of each of us, either with a well tuned economical hand plane or a 20.000 Euro mill.



No feeling superior because you plane by hand or because you have a costly mill. As usual and as always, what counts is the man, with his passion, his creativity, his ability and his culture. Heart, mind and hands: that is what really counts. All the rest including the type of tools used, if you think carefully doesn't really count.





Marco Orlando Giardina

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Gabriele Gori

Civil Engineer and Rodmaker, lives and works in Firenze.
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Sangro River

BAMBOO FERRULES

By Alberto Poratelli

After having written my presentation for the European Gathering in 2008, I realized that in the last years , I have gathered quite a vast knowledge of Bamboo Ferrules. These articles are a collection in a single text which will be published in the BJ of all my experiences and research on the matter .In this issue, the introduction and Chapter One and to follow the other articles on dimensioning, construction techniques, maintenance and my continuous attempt to improvement.
It is a vast subject and I hope it will be of interest to the readers. But first of all I would like to thank two friends.

Without these two exquisite people, who always gave me excellent technical advice I would have probably stopped my research on the making of practical good looking and reliable bamboo ferrules.

Gabriele Gori

Gabriele is a great Italian rodmaker of the last generation and he has done some interesting research on the comparison of the moment of inertia in solid and hollow rods with various different geometries. He is always available to help anyone and his advice on theoretical and practical issues were indispensable for my work and my technical deficiencies.
"The Engineer" from Florence, is a friend, a companion and President in the IBRA adventure and was the person who in moments when I wanted to give up, gave me the right foothold to continue in my endeavours.

Marco Orlando Giardina

Marco, known by everyone the world over as "MOG" is the most knowledgeable person in Italy of the history and the universe of bamboo fly rods; his blog is unanimously known as the Encyclopaedia of Rodmaking. .
Wise and learned, his Neapolitan spirit makes him an excellent companion during our endless evenings during which we discuss bamboo related topics. His words of appreciation on my work convinced me that maybe I was doing something useful for all Rodmakers. Rodmakers

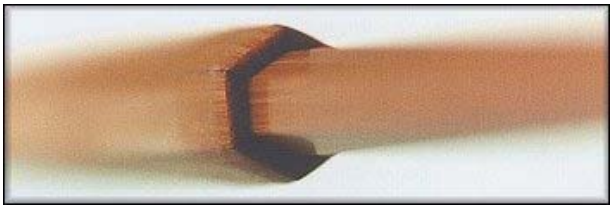
Meditations and research on bamboo ferrules

Or: "The art of bamboo rodmaking is attractive because it has no limits".

Introduction

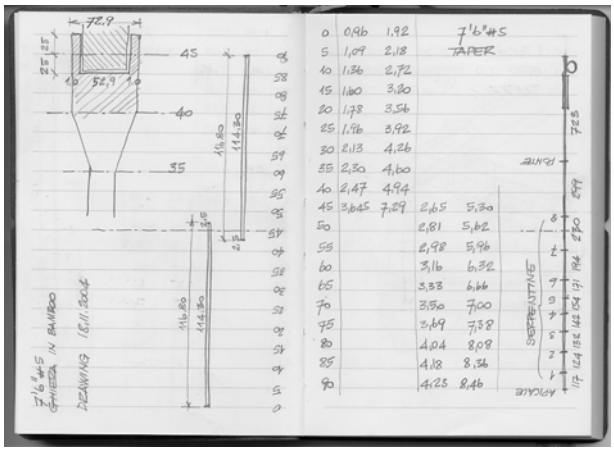
How the interest in bamboo ferrules was born

When in 2004, I began my adventure with bamboo ferrules, I did so because I was fascinated by the pictures of those made by Bjarne Fries. With their simplicity, they made bamboo rods look even more attractive than what they were.



From a purely aesthetic point of view, the ones by the Argentine Marcelo Calviello were unsurpassable, the longer swell and the brightly coloured wrappings make his ferrules really harmonious. From a construction point of view, the little metal mini ferrule placed on the tip of the butt section was an intrusion which reduces the quality.

I therefore began studying a method of making bamboo ferrules without the need for special tools especially as far as the swell goes. I wanted to make a ferrule that was good looking, harmonious and functional, using only the tools that every rodmaker has in his shop; so a standard planing form, with setting screws at every 5" (12.7 cm) station. In the beginning I was quite sceptical about its mechanical strength because I didn't realise the strength of a bamboo plate 0.04" (1 mm thick).



So in that period I looked for the extreme limits, not for the pleasure of doing so, not to make something no one had seen before but only for the curiosity that pushes a man to do something for the sake of research. In my work, I have always borne this limit in mind because let's not forget, we are making fishing instruments not showcase rods.

During the first IBRA gathering in Sansepolcro 2005, I presented my first rod with a bamboo ferrule and there was much appreciation and many rodmakers became interested in it. What pushed me to drastically reduce the thickness of the walls of the ferrule, was a paper that I was given by the laboratory of the physics of materials of the Università di Milano Bicocca and which I presented at the 2006 Gathering.

Tension Test

I analyzed singularly with a tension test various samples that I was given. The results are all very similar in the non impregnated samples while the impregnated sample had different characteristics which were probably due to the impregnation

SAMPLE ANALYZED	Breakage under tension
I – Giovanni Nese – Impregnated	820 kg/cm2
II – Giovanni Nese – Not impregnated	730 kg/cm2
III – Alberto Poratelli – from Andy Royer - USA	700 kg/cm2
IV – Alberto Poratelli – from Andy Royer - USA	700 kg/cm2
V – Alberto Poratelli – from Centre Cane - UK	695 kg/cm2
VI – Alberto Poratelli – from Alain Ourtilani - France	700 kg/cm2

The results are that bamboo in theory is an excellent material. The culm with internodal spaces which are shorter at the bottom where the highest forces act, shows high values of efficiency due to its tubular structure reinforced by nodes. Impregnation increases the resistence to traction which is a fundamental characteristic for certain sectors.

Martina Poratelli

I shamelessly took advantage of the fact that my daughter Martina had access to the use of sophisticated laboratory instruments and I gave her the samples of Arundinaria Amabilis we had purchased from Andy Royer, Alain Ourtilani and a few supplied by my friend Giovanni Nese; I was curious to find out the chemical and physical differences between bamboo from different cultivations. Instead I was surprised to discover from the tests that our splendid wood has a breaking point of 700 kg/cm² (9955 pounds/inch²) !
Simply fantastic – why not take advantage? I never stopped my research even when I thought I had achieved good results because for me the greatest pleasure in rodmaking is always making something new.

Chapter 1

Why a bamboo ferrule?

Justification for the adoption of this connection.

If 99% of all bamboo fly rods, excluding the single piece ones, have metal ferrules, there must be a reason. Before justifying the construction of bamboo ferrules, I want to understand why the majority of rodmakers choose the metal ones.
I believe that the metal ferrules are so prevalent essentially because it is commonly thought that a non metal ferrule cannot have the necessary strength to support the stresses during fishing and for some unmistakable qualities:

1) Metal ferrules are good to look at, especially the new ones with modern profiles like Super Z, which look so attractive that they are often an added value to mediocre blanks.

2) The strength of the metal lets you make very thin walled ferrules which impact lightly on the rod taper.

3) The rodmaker can find a variety of metal ferrules on the market – different sizes, different metals. The metal can be blued electrically or chemically.

4) The metal ferrules are relatively easy to fit and the commercial ones do not need calibration. They are ready to use and have minimal tolerances.

It is also equally true that metal ferrules have a series of defects which are not negligable on a bamboo rod.

A) Weight

Let's consider the most commonly used NS ferrules – they look good and are easy to use: their weight is on average between 6 grams (0,211 Oz) and 9 grams (0,317 Oz), without considering the extra large ones used on spey rods.

The weight of a bamboo ferrule made with my method and considering the same sizes, weighs between 1,3 grams (0,045 Oz) and 2,0 grams (0,070 Oz). That's 80% less.

So we can safely say that a bamboo ferrule reduces mass from the rod which weighs on average 6 grams(0,211 Oz). For someone who is not familiar with dry fly rods, this can seem a negligible weight, but for an expert caster it weighs a ton.

To those who object that 6 grams on the total weight of a rod which including reel and line is around 300 grams (10,582 Oz) and 400 grams (14,109 Oz) is negligible, I normally ask to carry out a simple experiment. I ask them to get out their best rod with their favourite reel and line to carry out a series of casts.

After this I ask them to attach a 6 gram weight with tape to the spigot of the rod and to try the same series of casts. The rod will not be the same. A mass of 6 grams attached to the rod about 110 cm /120 cm (43"/47")n from the grip produces an enormous change in the flexing moment of the rod.

With this I don't mean that metal ferrules are not valid but undoubtedly their presence must be taken into consideration when designing a rod, especially if we are discussing light rods for dry fly fishing. In three piece rods the metal ferrules have a great influence on the action.

We have considered only NS ferrules which regarding weight have an intermediate position;

if we consider titanium this influence is much less while with brass it is higher as they weigh more.

The specific gravity of the main metals used are summarized in the following table:

	g/dm³	Oz/inch³
316 Stainless Steel	7980	4,603
Alluminium	2600	1,499
Nickel Silver	6880	3,968
Brass	8650	4,989
Titanium	4870	2,809

B) Rigidity

Metal ferrules are rigid. This isn't a characteristic that is tested but that must be taken into consideration. A fishing rods is flexible, if it were completely rigid it could not carry out its main two functions: cast a line but above all dampen the weight of a fish on the leader during the strike and while playing the fish.
So the metal ferrule constitutes an element of rigidity in the central part of the rod if in two pieces and 1/3 and 2/3 if in three pieces. This also influences the action of the rod even though not so much as the weight.
The factors that greatly influence the action of the rod are: *Number, Position, Weight, Rigidity of the ferrules.* The same taper made in three sections is completely different to the one made in two. Rodmakers have always kept this in mind when designing a taper.

C) Sliding

One of the main problems encountered by fishermen using bamboo rods is the ferrule which gets stuck. How many times has it happened that you go home with your 7' 6" fully mounted in your car because at the end of the day you cannot get the tip off the butt!

This is a typical problem with metal ferrules and in particular those in aluminium. The ferrules must have a perfect fit and the tolerances are calculated in the order of thousandths.

Unfortunately this creates a situation of friction which in some metals can lead to the blocking of the male ferrule sliding on the female ferrule. That's why it is common to lubricate the male ferrule before mounting it in the female one but sometimes it's not enough.

D) Transmission of force

Fishing rods and in particular fly rods are fundamentally instruments that transmit the force exerted by the fisherman to the line so that it turns over. I didn't want to go into this detail but in the study of ferrules, I must keep in consideration the transmission of the forces from the butt to the tip and then to the line. Let's imagine these forces that start from the grip and that are transmitted along the fibres towards the tip, this transmission takes place thanks to the friction between the fibres and this is favourable in bamboo because the fibres are long and they overlap each other.

When these forces reach the metal ferrule, they "discharge" completely in the metal and are "recharged" again in bamboo fibres above.

This bottle neck doesn't effect the casting action but creates an enormous accumulation of forces at the beginning of the ferrule on the butt section which "needs" to be discharged. On the butt, the beginning of the ferrule is the one that receives the heaviest forces. This is where they usually break.

E) Turning the hex into a round section

It isn't a negligible factor. In order to fit the ferrule, the hex needs to be rounded off to remove the corners so that it fits into the ferrule which is round.

Turning the hex into a cylinder should "never" be done by rodmakers because it means removing the best external power fibres.

If we consider that this rounding is carried out in the exact spot where the highest forces act , it is clear that we create a very weak point.

So summarising, metal ferrules have a series of Pros :

- They are or they can look good
- They are strong
- They are ready for use – no need to make them
- Easy to fit

Cons:

- They are heavy
- They are more rigid than the bamboo of the rod.
- They often grip
- They are an obstacle to the even transmission of forces
- You need to round off the rod in an area where the greatest forces act in order to fit them

So drawing the sums between Pros and Cons, I believe that the latter overweigh the former. All this is compensated by their availability and easy fitting.
When I started making bamboo ferrules I kept all this in great consideration.

So my answer to the opening question of this chapter :

"why a bamboo ferrule?"

is:

"Simply because:

- *A bamboo ferrule can look just as good and be equally valid as one in metal*
- *A bamboo ferrule can be as strong as one in metal*
- *A bamboo ferrule can be or better still " must" be easy to make*
- *A bamboo ferrule is always lighter than a corresponding metal one*
- *A bamboo ferrule is not rigid*
- *A bamboo ferrule doesn't grip*
- *A bamboo ferrule allows for even transmission of forces*
- *A bamboo ferrule doesn't need a reduction of power fibres*

…… to be continued

Alberto Poratelli

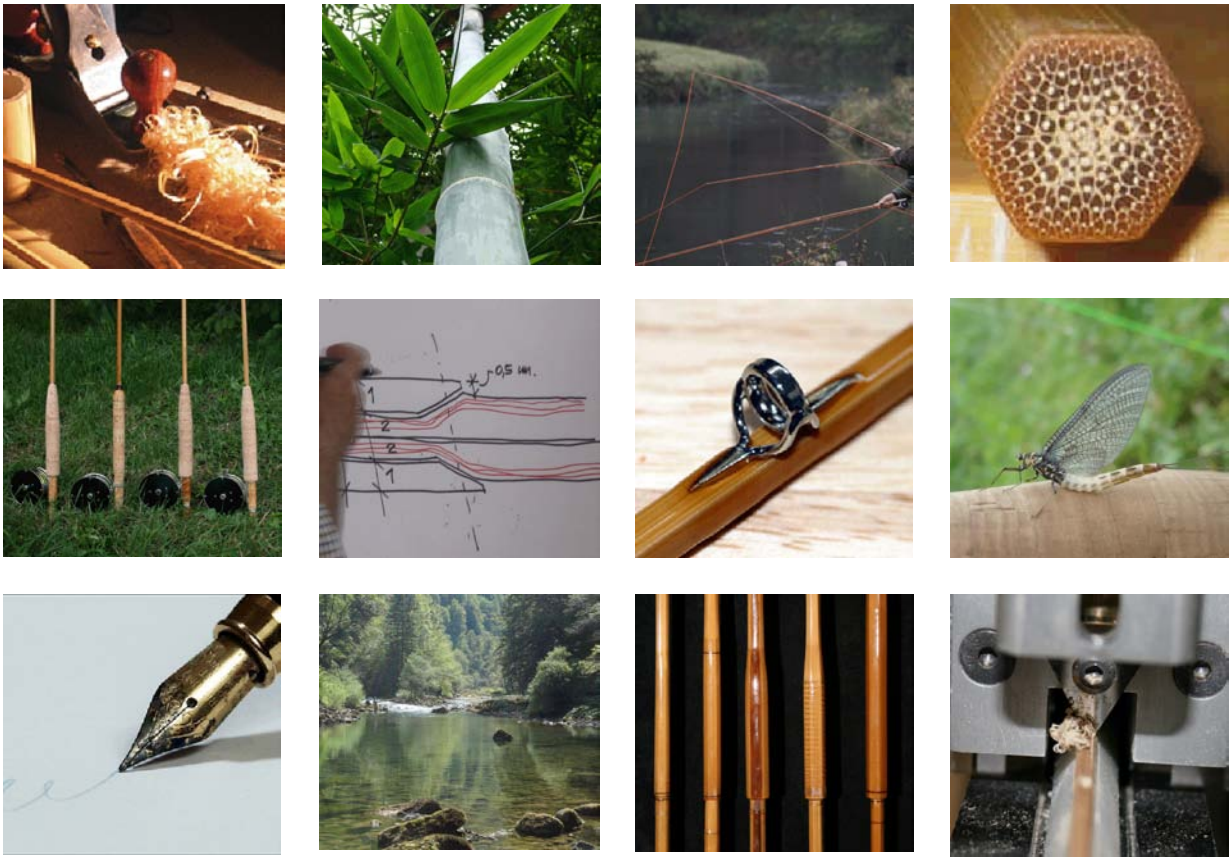
Architect and Rodmaker, lives and works in Bovisio Masciago in Brianza country.

www.aprods.it

»gespliesste.ch«

2nd EUROPEAN RODMAKERS GATHERING

25th – 27th of SEPTEMBER 2009
HAUS DES SCHWEIZER RUDERSPORTS, 6060 SARNEN, OBWALDEN, SCHWEIZ



From 25th to 27th of September 2009, **»gespliesste.ch«** will organize the **2nd European Rodmakers Gathering** in Sarnen, Switzerland.

After the successful Italian, Swiss and German Gatherings, our Italian friends from the IBRA (Italian Bamboo Rodmakers Association) organized in May 2008 in Sansepolcro (Tuscany, Italy) the 1st European Gathering. For the first time, rod builders from all over Europe spent their time together **exchanging new ideas**, **discussing**, with **demonstrations** and **rod tests** as well as **meeting new people** and enjoying a cosy weekend in the circle of rodmakers, under the spirit and fragrance of the lovely reed.

This 2nd European Gathering is held in the **Haus des Schweizer Rudersports** in Sarnen, Switzerland. The „Haus" offers a **perfect infrastructure** with comfortable **double-** and **four-bed sleeping rooms**, **exercising rooms** and a **wonderful surrounding** with a huge sports field amidst a marvellous mountain view.

Bamboo Journal

Newsletter

of Italian Bamboo
Rodmakers Association

c/o Podere Violino
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