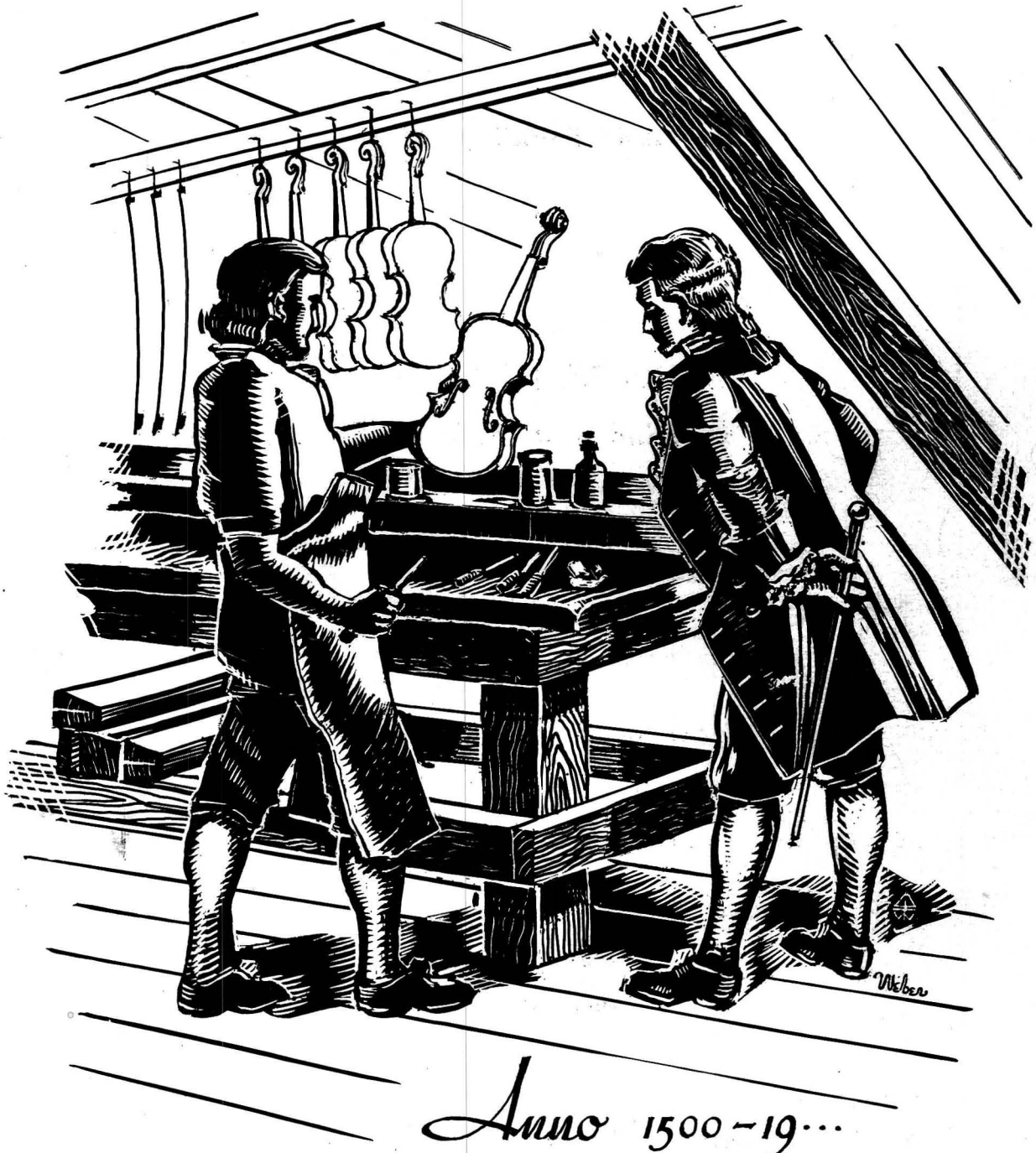
INTERNATIONAL
VIOLIN, GUITAR MAKERS AND MUSICIANS



Anno 1500-19...

Issued as an Educational Feature to encourage and develop the art of violin making.

Violin and Guitar Makers Association of Arizona

INTERNATIONAL VIOLIN, GUITAR MAKERS AND MUSICIANS
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Journal free to members , address letters , articles , membership dues and advertisement rates to Bob Wallace 4118 Mill St. Miami. Ariz 85539

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MOTELS

Copper Hills --(Best)-Globe ,Miami, Ariz. Singlr .8.24- for Two 11.00
Copper Manor.. Good) Globe Ariz. ! person 9.00 2 Person. 12.00
Copper $.00 @ persons 5.00 --2 beds 7.00 -921 LIve Oak Miami, Ariz.

B&B 1 Person 4.00 2 persons 5.00 --4 in room 12.00--- 1010 Live oak. miami, Ariz.

Write or call for reservation .
Copper Hills 473-2481------ Copper City 473-2771
Copper Manor . 425 -7124 Globe
B&B 473-9946

Welcome to 1968 contest and convention for violin, violas,

by Bob Wallace
4118 mill st. Miami, Ariz.

According to advanced information letters and so on, this will be the largest ever held in America or so far as I have found out , in the world.

As far as I have heard every one who have ever attended this affair before will be here this year. Along with many makers who plan on coming for the first time . We will welcome all our old attendants back as old friends and all the new one are already friends by mail. And we certainly appreciate the priviledge of meeting them in person.

To name a few of the U.S.A. best makers who did not get to our 1967. makers that I hear will be here this year is Mr. Gangster and Mr. Senhow of Dallas also Carmen White , Tex. Jack Batts, Dr. Grand N.Y.Fred Craig Idaho,Odd Cox Calif,one of the best and I hear from his uncle (probably Odd's teacher) try and beat Odd, thats mighty hard to do . All the

Also Mr. Joseph MIchelman the varnish expert has said he would try to be here.

We expect the entire group of fine Canadians to be here as usual. They have had a mail strike and no letters for nearly a month. We expect the largest Calif. group to come in force to com be denied some top wins

Then we have our Ariz. group of about 20 or 24 makers who are real tough to beat in the points. We win sometimes . I plan on violins in both steel and gut string conte

Some from Okla. Florida, Ark. and nearby every state.

It will ones. It will give you a chance to meet and see what is being done about violin making all over North America. We will have 2 known lady makers, Mrs. Hattie Craig Idaho and Mrs Eva donahoe Neb., both prize winners already. And maybe one more , A kind of dark horse so to speak as a suppise.

See other pages for more information on convention and contest , rules and regulations, Trophies, prizes on different contests in order in which the instrument or judged . Details of how both will be run. As I will write more in this issue than all the rest of the year.

Bob Wallace

Ed: " Do you believe in signs?"
Ned: I don't know , but the fire alarm went off three times during Joe's funeral."

1968 VIOLIN MAKERS CONTEST

BY Bob Wallace
4118 Mill St.
Miami, Ariz.

Will be held Oct 17-18-19th

We will play and judge violins on steel and gut strings, both on tone alone and on all points. Tone up to 100 points. Varnish and workmanship 50 each possible score 200 or less.

Violas., Cellos, Quartettes and Guitars will with a high tone score .

Thropies will be given , 6 trophies : 1 on violin tone alone, 1 violin all points , 1 steel strings , 1 viola , 1 Cello, 1 quarteete , 1 Guitar classicmodel.

Certificate will be awarded as prizes as follow, violin , viola, cello, Tone alone and also on all points.

1st -2nd-3 rd prizes will receive certificates , these are beautiful printed and suitable for framing.

3 judges will be selected who has no violins entered (and also same for other instruments) in contest. 2 distance judges separated and violinist who play the violins will be behind a screen, out of sight , instruments will have a number only, and Kate will have only list of owners. One assistant to each judge to carry each score to two score keepers. 2 judges , one on varnish , one on workmanship . Score on tone - varnish and workmanship will be posted with number on a black board as fast as completed.

We must have absolute quite while instruments are being played and judges.

The varnish and workmanship judges will judge all instruments , other judges will be picked for viola cello Quarte
steel strings violin contest.

This steel string contest is becoming larger each year. I would like to see a lot of makers bring one violin with steel strings . I expect there will be 40 or 50 steel strings violins.

We have steel string fiddles out here some with master violinists degree that can play these steel strings so well one fine violinist a judge said they could not tell them from gut. All Ariz makers including myself will enter steel string violins . Come on in this new cntest and get your feet wet.

Bob Wallace.

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CONVENTION OCT. 17-18-19 1968
by Bob Wallace

This will be our biggestest convention up till now.

I believe now we will start the playing and judging of instruments each morning at 8 am. This should last till noon and then we will hold the convention each afternoon and evening , as I have the hall rented for all day and night , at least up till 12 oclock.

Oct 17 we will play and judge violas , cellos and quatrettes.
Oct 18 We will play and judge steel strings violins and classic guitars.
Oct 19 Will be the big contest of violins in the gut add st may both may be entered.

In case of ties for first place thts our Grnad Champion, it will be played off . both on tone and also on all points.

For our convention we will have tables for any who have any thing to show , such as any gadget , clamps , forms or any thing to assist maker or viola, cello, Double bass or guitar these will be displayed and the owners can explain their use and how they work. So bring any thing you have made, keys I will show keys - fingerboard, tail piece, chin rest, and end pins hand made and inlaid . A purfling machine , turn table table for making keys hand made calipers, router bits and several more things.

We will elect a chairman and 0 committiemen to run this convention . Their duty will be to line up speeches and subjects to be brought up. That will be question and answer session.

Mr. Joseph Machelman the varnish expert says he will try and come and he will be asked to speak..

I assure you it will be a busy time .

There is a cafe connected with the American Legion and we are trying to make arrangement for the cafe to fix 2 meals a day , lunch and dinner , so members may eat there and save a lot of time for the convention to go on and visit together.

We will try and answer any questions asked about violin and bow making.
This will be a 3 day violin making school , you could say . I'll see you in Oct.

Bob Wallace.

Max. his mistake like a man ?"
Ned." HE sure did . He blamed it all on hi s wife."

You may never know when you are well off, but the Internal Revenue Service does.

HOW TO SHIP YOUR INSTRUMENTS

Ship your instruments , vi
$ 2.00 entrance fee for each instrument . If you are unable
contest or to sen

Be sure and send your instruments early so if there is any thing , such as broken string or fallen bridge ,broke tail gut or broke peg. We will have time to fix it for you.

Ship by Grey Hound Bus is safest ,or by U.S. mail, or express(Railway) After contest I will return same way to you collect..

Bob Wallace

VIOLIN CONTEST

This year only members in good standing (payed up dues) will be allowed to enter violins.

There will be an entrance fee of $2.00 per instrument to pay for cost of con
worth of trophies and other expenses.

WE find this much better than trying to get it by donations, and it is getting too big and expensive to take up by passing the hat. Where some pay and some don't.

We will not take this out of our association funds, for we don't come out with enough to do this , but it would be unfair to deveral hundred members who do not attend , or live out of the U.S.A. and so forth.

SPECIAL NOTICE

I have just been to see my Doctor . It is just a bout a month since my last heart attact, and the Doc. said I could go in my shop and do light violin making work and if my breathing became hard or when I got tired to rest

This was real good news to me . Kate was afraid of it but Dr. said a little light work would keep me from being so nervious . So tomorrow I try it.

I had one heart attact was in the hospita
and two *later I had the second attact . I guess I did too much work as I felt real good . But I had to stay two weeks in the hospital the second time .I've been out of the hospital .two week and I feel good againnow, but I am being very careful this time . * weeks

Hope to seo every one at our Oct 1968 - 17-18-19 convention and contest at Miami, same as last year . I heat old members are coming that are always here , and many new members.

This will bd the biggest afffair yet. I am working on a new violin for the contest. Wtite me and let me know if yor are counting on coming this year.

Bob

FOR SALE

Shell Maple violin wood . I Have colleted and have quite a supply of this most beautiful wood . I have more of this wood so I will sell as long as

This wood when sawed on the quarter has the widest most beautiful fiddle back curls I know of , and when sawed on the slab it is the most wonderful sight a violin maker has ever seen, looks like a complete mass of over lapping shells. Sure its hard to scrape and to get a violin made of but when you do its the most beautiful v

This is the wood Mr. Johnston of New Zealand has been writing about , it only grows in one small erea of the world and that is in U.S.A. and Canada. One attractive thing about it is that ev ribs and scroll made out it is out of this world for beauty. It is like an old time patch quilt , very violin is a little different. A gun stock of this wood lists and sells for $58.00 - Most people loose their breath when they first see it .

Bob Wallace
1448 Mill St Miami. Ariz.

WHY CONDAX RECEIVED THE U.S. GOVERNMENT
GRANT FOR VIOLIN VARN$SH

BY Joseph MIchel an
6316 Wiehere Road,
Cincinnati, Ohio.

IN the first three articles of this series, I reported in the N vember 1967 issue about the Background of the CondaxProject; in the December 1967 issue about the Condex Special Distillation Work in Greece; in the March 1968 issue, I explained how Condex obtained the frant by falsely discrediting my researches.

Before pro
Condex , a further disclosure should be added to the item of $2,500 .00 for " travel". Condex also included a tour of Europe , stating that h tended to visit Germany,England , France, Italy and Switzerland, in addition to his visit to Greece (where he once lived and went to school).

Why was Condex able to get $7,350.00 for " violin varnish research"-- A portion from a g , the National Council of the Arts and Humanities (Mr. Roger Stevens, Chairman)?A reader wisely gave me his version of the matter when he wrote :" Since it was a U.S. Government grant , it is not what you know but whom you know that

Whom did Condex" know" in order to get the grant? The following item from Washington Society Reporter Betty Beale's syndicated colum) more than 100 news pape 5th , 1967, should shed so e light on the question.

" Presidential Assistant Roger Stevens came up with an intriguing fact....that at a recent Council of the Arts meeting , Isaac Stern brought up the subject of research on the Stradivarius violin to determine why its tone cannot be reproduced today?"

"Lewis Condex , a retired Chemist with Eastman Kodak,has been studying the problam for years and has discovered that it probably lies in the difference between modern turpentine and glue from that used by Stradivarius. The method of making the turpentine that goes in violin varnish was changed 200 years ago. Also the kettles they were mixed in were different."

" A repres
about it that he jumped up and asked if his foundation would b
to pay for half of the research. So , the council commissioned Condex to keep working until he gets the answer."

To substantiate the foregoing, I have a copy of a memorandum to the above Mr.
24th, 1967, in regard to the grant, an excerpt from which I shall quote verbatim:

"At the December ,'66 Council meeting , the eminent violinist,Mr. Isaac Stern, described a research project into the mysterious properties of the varnish of the famous violins made by Stradivarious , Guarnerius, and others in the 17th and 18 centuries.."

Thus, it appears that Mr. Stern may have been instrumental in having Condex receive the grant,Mr. Stern's prestige and presentation presumably caused the representative of the Mellon Foundation to become " so exited about it that he jumped up and asked if his foundation would be allowed to pay for half of the research"... Thus , Condex was " commissioned." Apparentlly ,the mere mention of Mr. Stern's name or a comment from him l aura of authenticity to the subject. Knowing or not, he became a " Why" in the granting of the " commission" To Condax.

Mr. Stern sbould also give his version of the matter which I have reason to believe should be interesting .Mr. Stern is an accomplished violinist, but it is doubtful if he is qualified to pass judgement on chemical research on the old Italian violin varnish . Mr. Stren knew about my book " VIOLIN VARNISH" and might have obtained an opinion of the merits of the Condeax project-- especially since the tax payers money was being spent.

A startling developement has come to light recently in that Mr. Isaac Stern is a member of the Council of Arts and the Humanities (a government agency) that gave Condax the grant, I have suggested that Mr. Stern should reimburse the U.S. Goverment for the portion that it gave Condax. To date, I have not received any response from Mr. Stern, which will be reported if and when such response is received.

It is now more than a year and half since December , 1966, when Condax was " commissioned". By this tim
to report ,especially since he has been doing research on the old Italian varnish for 35 years previouslu . Mr. Condax received government funds , he is under moral obligations to make some definitive disclosures.

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A BENCH-MODEL CALIPER

By Carl Farseth

A bench- model magnifying violin caliper can be constructed at a low cost from some ends of lumber, a steel plate and a brass rack and pinion. The accompanying drawing is largely self-explanatory. The parts can be bolted, screwed or glued together; but the horizontal arm should not be fastened permanently the adjustments are made. For the two-inch carriage bolt hole must be located exactly below the end of the rack.

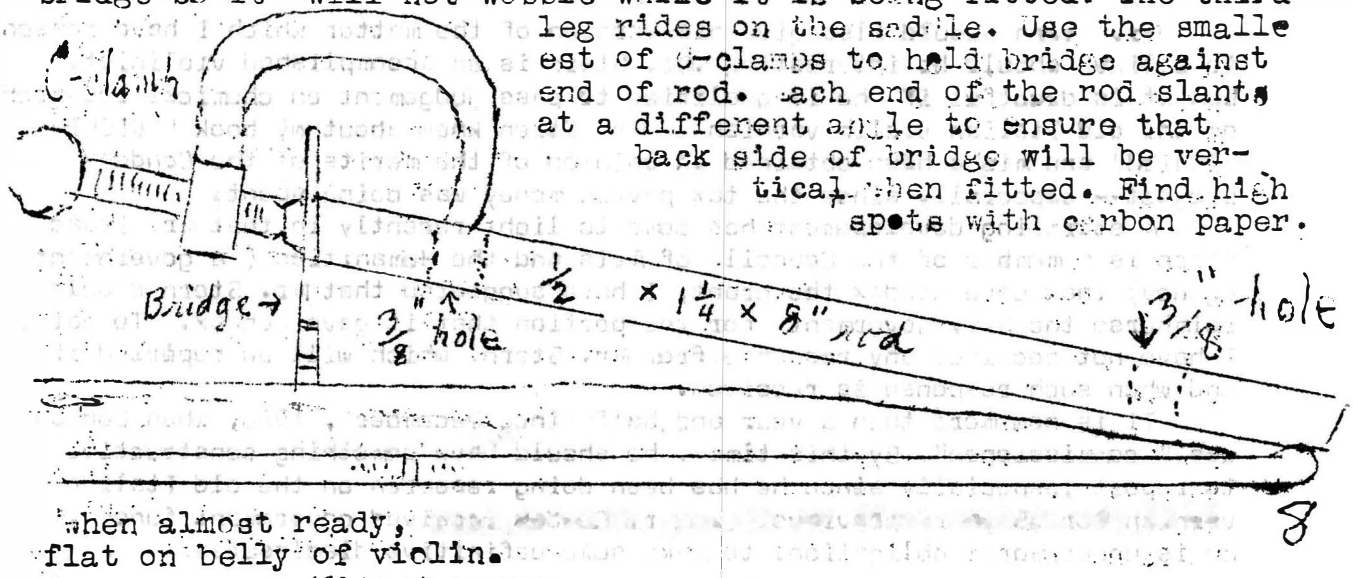
The three holes near the square corner of the quadrant are equidistant. The two farthest apart are for the screws that fasten plate to free arm, and are spaced one inch from edge. The center hole must be exactly located with pinion and rack in place. The two lugs are wrapped around two sides of the rack, the pinion confining the rack on the fourth side, as on a Waltham caliper.

The circularly curved edge of the steel quadrant naturally is centered on the bolt of the pinion. Solder the pointer on the face of the pinion and bend the pointer by the pinion so it will lie flat on plate.

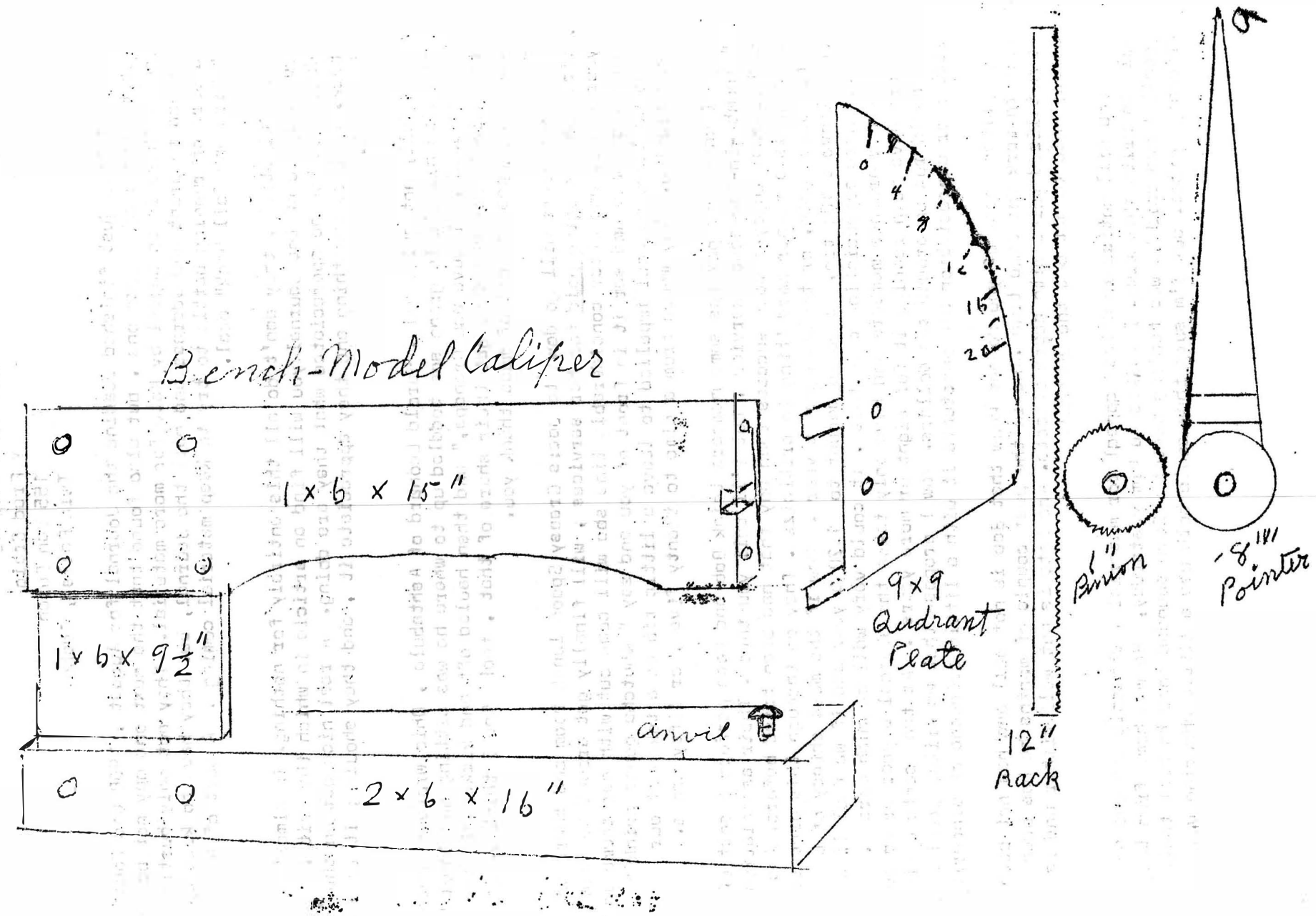
Adjust bolt anvil so zero of scale is about one inch from vertical edge of plate. With a thickness gauge mark off 4, 8, 12, 16, and 20 sixty-fourths inch readings. With a compass halve these readings. The even numbers thus are accounted for; the positions of the odd numbers can easily be measured or estimated. Make the zero, 4, 8, 12, 16, and 20 calibrations longer than the rest. With a three cornered file mark the calibrations on the edge of the plate.

The advantage of such a caliper, besides its cheapness, is that it leaves both hands free, the left to hold the plate or the opened violin, and the right with a pencil to write down the thicknesses--7, 9, 6, 10, etc.

eaver,
to ease his work. May his friends describe them to us. Here is a simple contrivance that gives temporarily a third leg to a violin bridge so it will not wobble while it is being fitted. The third leg rides on the saddle. Use the smallest of C-clamps to hold bridge against end of rod. Each end of the rod slants at a different angle to ensure that back side of bridge will be vertical when fitted. Find high spots with carbon paper.



when almost ready,
flat on belly of violin.


Bench-Model Caliper
1 x 6 x 15"
1 x 6 x 9 1/2"
anvil
2 x 6 x 16"
0
4
8
12
16
20
9 x 9
Quadrant
Plate
12"
Rack
1"
Pinion
8"
Pointer

FRED.. IS A NATURAL

BY Fred Craig
155
Twin Falls , Idaho.

I have just finished reading the Journal for August , 1968 and found it to be a really good one , but also found that the next one may not be so good. There is an appeal by Kate for more material. They not only hustle around to print and address and mail the Journal, but they have to keep up a sort of running battle to try to keep material coming . A sort of a " Fire and fall back" deal.

But still , they don't do all this entirely for nothing. In almost every issue of the Journal you will find an article in which the writer declaared how he appreciated what they are doing. A real nice pat on the back. That is something and they appreciate it , and they should ; it is all they get.

Well, mot quite all . Harold Leonard of Ashtabula , Ohio wrote me once and siad his little grand son toddled up to where he was sitting and looked up and said ," I wuve you Grandpa," and then hauled off and kicked him in the shins! Bob and Kate get their share of that , too! And I think it is time to propose a sort of mass thank you.

We members will go down to Joe;s Greasy Spoon lunch room and there the girl, who is being paid for her services , will finally get around to take your order, and after conciderable time she will come out with her thumb in a bowl of soup amd set it in front of you and say " Whutcha gonna drink?" When we leave we feel impelled to leave a little tip as a token of our appreciation. Any where from a dime to twenty five , or fifty cents.

I know that perhaps some members think Bob and Kate perform a sort of " Thumb -in-the-soup" service , but I'll tell you this . Their association and Journal enjoyes more success than any that has been tried before. And success is a rather hard thing to criticize . They go through this process once every month, or twelve times a year . Now if the most chincy of us only leave a 10¢ tip, it would amount to $1.20 a year and if we feel like a little more appreciation than that , it could very well be much more .

A few are new members and have only taken the JOurnal a year or so but others have been reading it for eight or more years . At ten cents a tip it could run up around ten dollars. Now I propose that we write a real letter or appreciation and punctuate it with a little evidence of sincerity!

Perhaps most of you do not know that Bob is not well and has not been able to work for some time .And in the past couple of months he has been Hospitalized And Kat barely able to get out the JOurnal.

You will notice in Kates qppeql for material , she said Bob was not able to write this time. I talked to him yestarday, He was home from the hospital and said he was feeling better . Sure sounded good to hear their friendly voices, but I'm sure they could both use a little cheering up.

ow this is not an appeal for charity. They don't want any thing like that and they would be insulted and would refuse it. But they can hardly feel any way but good if they receive some real " Thank You" notes from each of us and it will certainly sound more convincing if we enclose a little tip.

Now they may be a little reluctant to print this , but I anticipated that , and when I talked to Bob yestarday I said I was going to write an article and that he wouldn't want to print it .He said , " We have always printed what ever you wrote," and I said ,I want your promise to print this next one .He said " Send it in and we will print it." Bob's promises are to be relied upon, so I expect to read this is the JOurnal.

Bob Dargoo has a good little article in the Auguat J urnal. He makes a good fiddle , and he knows how to play it too. He mentions wettting th e violin wood. I have done this for years and in some back issues of the Journal , perhaps five or six years back, there is an article by me about it . When I first tried it I was merly using a process we had used on making furniture and the idea was to raise the grain and then sand it off ,repeating the process until the grain don't raise any more, so a stain wont raise the grain and make that corudory effect we so often see. But I found it seemed to make a better sounding violin. I imagine it is because it is only the soft wood that raises and when it is sanded off it changes the proportion of soft wood in relation to the harder grain.

When I wrote about it I used the word " wet" and so does Bob Dargoo Now we may be wrong in using that word becausesome may missinterpert it and try dunking their wood in a tub of water . The process might better be described as " Sponging " . That will raise the grain and accompolish what you are after . It needs to be repeated several times, or until the grain don't raise any more . Takes fewer times for the hard wood. But you will find that after each sponging and then drying and sanding , you will have a much smoother surface and it actually feeels harder or more like an older surfa e. I do this to the inside of the plates and then to the outside after the violin is assembled.

Good job, Bob , I'll side with you on that. Write another one.

Now the September JOurnal will be the last one before the convention and contest. Bob assures me we will have it and he said , " Sick or well, alive or dead." Now if he can show that much steam for it , I think the rest of us should shake off our apathy and get out and trade for a couple of clean shirts and polish up our favorite fiddles and head for the convention

I know that nothing pleases Bob and Kate more than for so many people to crowd into their house that you have to use a shoe horn to get them in, but I also think that this time, due to their health and Bob's recent heart attacts, we should make arrangements for food to be served right at the hall where we have our meetings and contest, both at noon and in the evening. Then we could spend our long evenings there and let Bob go to bed when he gets tired. Shucks, we are going down to see them , not to try to kill them off!

//

I couldn't make it last year as I was too busy being a moedl patient in tho veterans Hospital . (Gotta have some one to keep up the nurses morale)! I finally ran out of stories and they let me go home. But this year I am looking forwards to seeing all the old friends and meeting several new ones .

Ben Harrison writes me that he and " Good Old Clarence and his wife, and Bill Slaby and his wife", will be there. I guess Ben must be the trusted one in that bunch ; Marion isn't coming ! They had better have some pretty fine looking instruments with them . When they face up to Odd Cox and Earl Smith , they are going into the competition . And I suppose Mr. and Mrs. Hickerson will be there with a another new Cadillac stuffed with perfect violins . They should be ashamed for putting such violins in the contest; it just ain't polite to the rest of us!

I started a violin for the contest , some time ago, but then got side tracked and left it lay , up until a couple of days ago . I made up the ribs and put in the blocks and liners and sawed out the outline of the back and sawed out the outline of the back and that is as far as it got . Last Saturday I got busy and cut the edge down to the right thickness and then cut the purfling grooves and put in the purfling. Yesterday I had to go to town and then I had to mow the lawn, so I only got to work a little while on the fiddle , but I got the outside of the back pretty well shaped .Just a little more work and then some sanding and craping.

We have company now and more coming soon, and that is not exactly a th e thing that will escalate the fiddle making , but I still hope to have it done to take along. It certainly wont have the benefit of a long period of sunning , or playing either.But I hope to be competition, any way. Just in the tone department , of course . seems like my fiddles sort of take after me and none of the Craig's have ever won any beauty prizes. Poor workmanship, I guess , lacking in polish , There just wasn't much chance for us to aquire polish unless it would be the way a rolling stone gets it . We were just brought up around a wagon wheel. I remember that when I was little I would get on my hands and knees and run my head between the wagon spokes and then raise up. Couldn't get loose and Mama would have to come over and shove my head down and pull it out from between the spokes. Just couldn't seem to catch on to how to get loose by myself. No wonder I took to making fiddles , I WAS A NATURAL!

Ben Harrison mentions in his article that he just sets his violins in the window and lets them sun that way, and also says that I have a litttle motor to turn mine . He says that is a fine idea but that he don't have a motor. He can get one RPM motor from olson Electronics for seventy nine cebts! I don't know how good it may be but I'm sure it will work. However, I didn't go to any such expence as that when I got mine . Ed Moss gave me one . It is raal rugged and well made. D didn't embaress him by asking him where he got it .And . by the way, Ed has also been having a little trouble with his ticker. Just don't know whether he and Maxine will make it to the convention or not . Hope they can come . It wouldn't seem right without them.

Looking forwards to meeting Sam Waddle too. Hope his injured finger wont keep him from having a couple of good instruments to enter in the contest.

It just may be that every one will beat me but i'm just not going to think so until they do ! I think we should all go in with the attitude that we are tough competition. Of course we can have an open mind and be subject to change,but still not go in thinking we are beat before we start.

Same way when you make a violin. Make it with the thought that it is to be the best violin ever made and work like that is what you are trying to accomplish. You will be wasting your time if you keep thinking, " Oh Well, that is good enough . This one wont amount to much any way ." Better take up bird watching than that .

I read an article in yestardays local paper, entitled ,"So you want to be a writer". The assumed that he was qualified to instruct because he had manag ed to get hired by a little paper like ours! But the main advise he gave was that you should select a subject and then stick strictly with it. Don't go off at a tangent. Stay with the one theme. And so I now realize that I have just written a masterpiece! Seems to me that if sticking to one subject is good , then my sticking to several subjects would be much better . Any way, it should help prevent Kate from having to print so many blank pages .

And I do appreciate their taking the trouble to print this and I intend to amplify that with a little bouquet; a green one with at least a figure five in the corner of it .

Fred Craig.

COMMENTS

Good material now coming into the Journal and I hope it will continue. The following is to augment a point in Mr. Barnes article.

The July issue of the journal had an article by Willis Barnes in which he gave details for the construction of a machine to rotate parts or a complete instrument for sun treatment of the wood.

The following will do the same job with just a very small piece of work for instruments mounting and at a lower cost.

Buy a Christmas tree electric motorized unit for holding and rotating the tree assembly.These come in various sizes and power,prices ranges from about $12.00 to $35.00 for delux mode;s and may include a Merry Christmas tune from a music box.

A note of warning on any motor driven equipment that will be run continously in a place where the tempertature can become quite high . This could be where the unit placed in the sun which is the purpose of the operation. arrangements should be made to open up the unit so there can be a large free circulation of air for cooling the motor. Many motors are not designed for long continous operation. Jingle bells or not , try one of these units.

Leo Larsson 27 Hattie st. San Francisco, Calif .

THE BARNES PEG HOLE STRING SYSTEM

BY Willis Barnes
1089 Arney Rd.
Sherwood , MIch.

For a long time the peg box on violins and violas have bothered me and I often wondered what I could do to overcome some of the dificulties that gives a violinist trouble tuning their instruments with out getting the fiddle down on their knees and twist heck out out of them. Before I go into detail I would like to say that in my experience in violin repairing and I do a lot of it . That hinty nine pereent of the fiddles that come in my shop , the pegs and peg box are a mess , first they have strings hanging over the sides ,in other words as long as they can get them wound up some way or any old way thats good enough. Next if the peg sticks through on the small end any where from ¼ to ½ inch - Well, that's O.K. too. Next but not last.If I can get the pegs loose with out putting a pair of pliggs on them and then with some luck not having it break off . I feel real lucky.

So now here is what I came up with in the peg box ,first off I like a well fit peg, I am now talking about my own new violins. I use a number two peg , and lots of peg dope to be sure the peg is well seated.

Now this new idea of boreing a hole in the end of the peg came to me a year ago while I was about to bore the hole in the peg for to insert the strings on one of my new violins. So I got out the electric drill and used a small drill just large enough for string to entdr easy. As you can see by the drawing . First I marked where I wanted the tiney hole to be on the inside of the box, and stoped the drill at that point , then I used the same drill to drill the hole to meet the hole that I had already drilled and you must drill it on a slamt so to let the string to slide in easily. Before starting to drill either hole it is best to use a fine pointed awl, the drill will start much easier . Now you may wonder why does he go to all this bother , first let me say after the string comes out the end of the peg say a half inch or enough so you can get hold of it for easy adjustment, then start to turn the peg, and on the first time around besure the string comes right over the hole where the string entered in the first place .This locks the string in then you can finish tightening the string.

Now here is why I like this system so much. In tuning up the violin you use the ends of the strings to pull out a little or slack off until the pegs stand straight up and down as the drawing indicates , once the strings are well stretched and in tune it is so much easier to tune a violin.

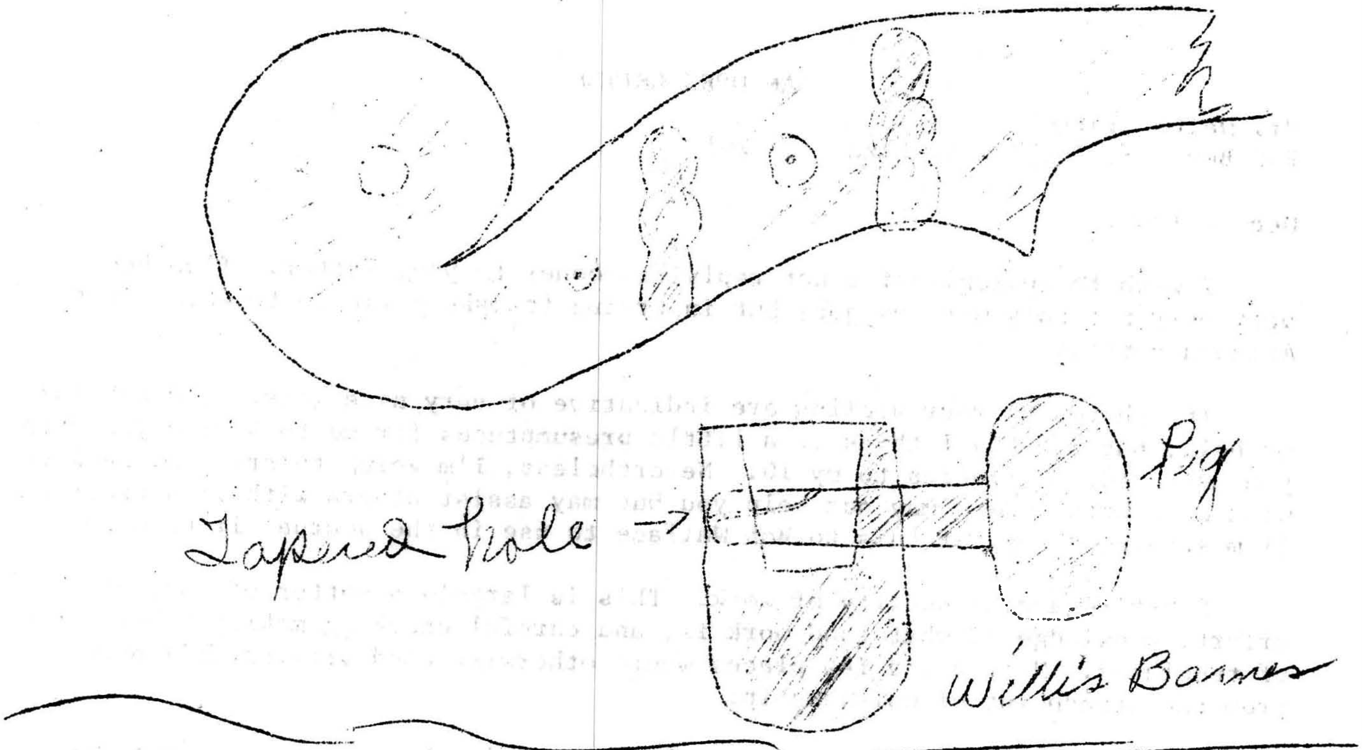
Of course now I have a special jig to bore all these pegs on the drill press

After the stretchis all out of the strings then you can clip off the ends of the up to the peg and then if you don't care to see this string show just rut a black crown in it . That is the way I do to keep people from seeing what I was up to . untill I was ready for them to see it .

Diagram on other page..

Willis Barnes.

The Barne's Peg hole string system



THE HILL COLLECTION OF MUSICAL INSTRUMENTS IN
THE ASHMOLEAN MUSEUM, OXFORD.

Before the war , the famous Hill violin firm in London decided to establish a permanent collectmon of outstanding musical instruments for public display. The war delayed the implementing of this fine project,but after the war a special room at the Ashmolean Museum in Oxford was opened to receive the instruments of the Hill Gift. Initially there were 20 instruments including the celebrated " Messie" Strad, the finest Strad in existence. Later additions include another Strad with black mastic, a collection of bows and the"Alard" violin by Nicola Amati, also another with the label of Antonio and Girolamo Amati. There is a virginal by Leversidge and harsichord by Kirckman. An Italian cittern and five English guitars were added later to make a total of 44 instruments in the Collection.

Professor David D. Boyden of the University of California has written an excellent catalogue of this outstanding collection which will be published later this year or early next year at approximately $11.50 Each instrument is illustrated with several views , and there is a detailed description of each.

William Reeves,
1a Norbury Crescent, London, S.W.16,England.

AN OPEN LETTER

Mr. Dalton Sarrels
P.O Box 248, Childress, Texas 79201

Dear Dalton,

I wish to apologize for not replying sooner to your letter. I've been very busy not only with my job, but in trying to make a violin to enter in the Arizona contest.

The photos of your violins are indicative of very nice work. You ask for my help, but frankly I think it a little presumptuous for me to advise you when you have made 30 fiddles to my 10. Nevertheless, I'm going to stick my neck out with some words which may not help you but may assist others with less experience. (I'm sending a copy of this to Bob Wallace to use in the Journal if he wishes).

First regarding quality of work. This is largely a matter of patient effort, knowledge of what good work is, and careful checking making liberal use of templates. Here are a few places where otherwise good violins fall down from the standpoint of workmanship:

1. Poorly formed scrolls--weakly carved in the cheeks, poorly shaped eyes--frequently too small, and butchered where the volute runs into the eye. Peg box insufficiently wide. Thin walls.

2. Crooked and twisted necks. This must be checked visually in assembly, but when you see a fiddle with a bridge cut unusually low on the E string side you can almost bet that the neck is twisted.

3. Misshaped button--too large, too small, or not symmetrical.

4. Poorly shaped neck at chin and shoulder. For this and the previous malady templates are a necessity unless you have exceptional eyes and judgement.

5. Corners too long, too short, too narrow or too wide; but, most critically, not uniform. Any maker of quality instruments, with whom I have discussed the subject, used carefully made negative templates to check his corners in the process of shaping the outline. I find these templates most conveniently made of 1/8" maple.

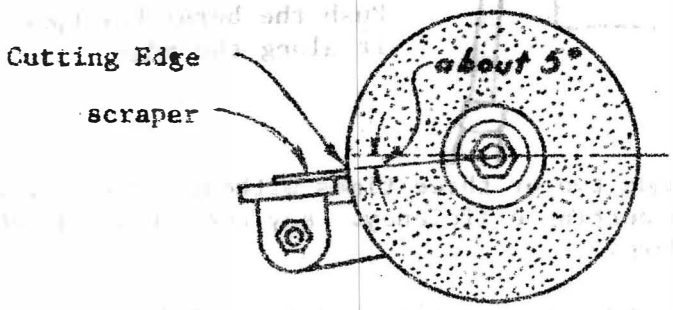
6. Misplaced f-holes. Conventional design places the top of the lower circles of the f-holes tangent to a line drawn from the centers of the lowest sweep of the purfling of the center bouts. But one sees them far below or above this line.

This may all seem like fly-specking. Probably most fine violins, tonally at least, do not portray perfection in details such as I have outlined. But it is attention to these little things that distinguish a Strad from a Del Jesu. And most of us make enough errors without deliberately ignoring the details I have mentioned.

As to short cuts in carving tops and backs, I know of none unless you have a router such as designed by Pop Wharton. I use planes, gouges, and scrapers, in addition to, a curve-bladed spoke shave designed by Joe Deulin which I described in detail many years ago in the British Columbia Journal.

I would like to talk about scrapers: Many makers will pooh-pooh this, but I have read of and talked with makers who insist that they hardly touch a violin with sandpaper. I finally had a complete demonstration from an expert maker and I am convinced that with know-how it is possible to do the job almost entirely with scrapers and, further, that it is faster and more accurate than sandpaper and gives the wood a velvety appearance that is impossible to achieve with abrasives. Also, if you like the ribbed effect on the annual rings of the top (which I think is more common in German fiddles than Italian) the scraper will enable you to get it in any degree you desire. The tricks about scrapers consist largely in knowing how to sharpen them, having the right material, and learning how to use them.

For rough scraping the simplest scraper is nothing but a piece of air-hardening power hack saw blade. This must be ground to shape an the grinding wheel with a slight bevel, not more than five degrees, and it is ready to use.



GRINDING THE HACKSAW BLADE SCRAPER

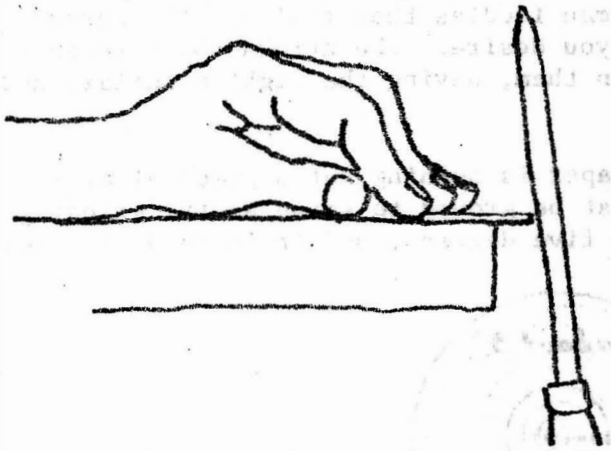
The beauty of air-hardening steel is that it will not lose its hardness from overheating while grinding. This scraper will remove stock fast but it has a tendency to tear the wood, especially if you don't work the right way of the grain which is different in each piece of wood.

Another roughing scraper is made from stock about 25/1000ths thick. On this type the bevel is ground at a 45 degree angle and the edge must be turned slightly with a burnisher. (A hard steel rod, highly polished, made for this purpose). The cutting edge must be honed to razor sharpness before turning. I prefer a hard Arkansas stone.

For finish scraping I prefer a steel of 17/1000ths thickness which is ground or filed so that the edge is square with the faces. It, too, must be honed to razor sharpness. This is done by alternately rubbing the face of the scraper and, then, the edge on the stone. My stones are all mounted in boxes so I can hold them in the vise. By resting the face of the scraper on the ledge of the box it enables me to keep the edge square with the face as I hone the edge. A light oil must be used.

I find large clock springs and old phonograph springs excellent for these

scrapers. The real trick is in turning the edge. Much has been written on this but I think there is overemphasis on the amount of pressure to apply. The turned edge or burr should be very slight--just perceptible as you run the ball of your finger over it. If a real hook is put on the edge, it won't work. To avoid too much pressure hold the scraper flat on the bench top or a convenient board fastened in the vise with the fingers of your left hand. The cutting edge of the scraper overhangs the bench top or board. Then slide the burnisher smoothly upward at about a five degree angle to the edge two or three times. Work in both directions to turn the edge from end to end. You cannot apply too much pressure because you cannot hold the scraper tightly enough to allow too much pressure. I will try to illustrate:

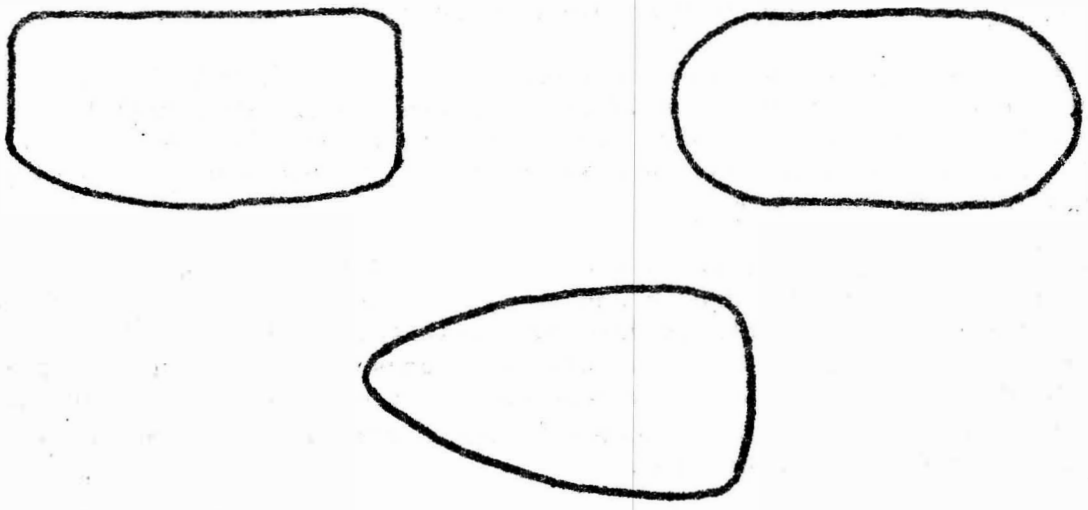


TURNING THE EDGE ON THE FINISHING SCRAPER

Push the burnisher upward as you slide it along the edge.

The burr can be remade two or three times without rehoning, but each time it loses a little of its cutting efficiency. Any good book on cabinet making will explain this procedure.

In using the finish scraper you will find that it is less critical to pay attention to the grain although you will find troublesome areas--and it does take practice! My mentor advised me that in real bad spots he did use sandpaper but finished them with a light scraping so that the surface would be uniform throughout. You can make scrapers in any shape to suit your fancy. My favorites for working tops and backs are these:



All are about full-size.

For the cheeks of the scroll I use something like this in various curvatures:

The one place the scraper won't work is on the walls of the scroll. Here sandpaper is a must.

Regarding tone, I can add little to what has appeared in the Journal. As you know, I use an electronic rig to tune my plates and previously I used tap tones. Although each instrument has its idiosyncracies, their tone quality has been quite uniform. I don't intend to go out on a limb because I know each maker has his own ideas and I respect them. But if I did not have electronic equipment, I would use tap tones and would obtain them by holding the plate in the center of upper bout and tapping in the center of the plate. I would strive for at least E + 5/10 (about 339 c.p.s.) for the top, and 3/4 of a full tone above that for the back (about 370 c.p.s.). If the top and back could staud it without getting too thin, I would work the top as low as D (293 c.p.s.) and the back D# + 5/10 (320 c.p.s.). I would use the graduation patterns outlined in my article in the Journal--last January I believe. This doesn't guarantee success because these patterns leave some room for variation and although I think it important to know <u>where</u> to remove wood to achieve the best results, I am not experienced enough to talk on the subject--nor apparently is anyone else.

I am finally going to close by relating a recent experience regarding tap tones: I am working on a violin and have the top and back finished except for rounding the edges. At a temperature of 78°, relative humidity 53%, this is the way they checked out.

Example	Method of obtaining tone	Top	Back
1.	Electronic Vibrating	340c.p.s. (E 5/10)	370c.p.s. (F# 1/10)
2.	Tap tone-held upper bout	E 5/10 and A# 5/10	F# 1/8 and A 7/8
3.	Tap tone-ala Justin Gilbert	E 5/10 (octave lower)	A 7/8 (octave lower)
4.	Tap tone-held in sound po t area	E 5/10	A 7/8 (D 7/8 faint
	Finished weight	63.3 grams	95.5 grams

I do not have a good ear so my son did the tapping. His results were derived using a reference monochord as described in Justin Gilbert's book

as well as in the old British Columbia Journal. Now my son not only has an excellent sense of pitch but is a trained percussionist and has had several years of piano training. His credentials include membership in the University of Michigan symphony band which has an outstanding musical reputation. As a percussionist he must be proficient at tuning tympani. Thus I think he is a good judge of percussive pitch which is what we are talking about. He advised me that the tones are extremely difficult to determine accurately. Overtones are deceptive and the initial tone seems to vary from that which lingers. He was surprised that his results turned out so close to the electronic method (see example 2) and stated that he would bow to the machine.

But I think that, in addition to pitch, we should also be concerned with loudness of response and this is practically impossible to measure by ear. Here is something that may be significant: to remove some scraper marks and generally smooth the interior of the back after graduating it, I sanded it moderately with 4/0 and 6/0 garnet paper. Just before doing this I vibrated the back electronically with these results:

Pitch	Intensity
372 c.p.s.	9.8 volts

whereas after sanding:

Pitch	Intensity
370 c.p.s.	8.4 volts

You will note a drop of 1.4 volts which is a measure of the intensity or loudness of the tone. This may be regretable and I might have ended up with a better violin if I had not sanded the interior of the back. Also in the process of graduating the back I noticed an increase in loudness as I removed wood from the cheeks of first the lower, than the upper bouts. I intend to write a more detailed article regarding my experience in graduating these violin plates.

This effusion will probably be of little help but I hope it will give you something to think about.

Cordially,
Bill Slaby

BOW REHAIRING

BY Orvil O. Anderson
Box 81 Rt #. 1
St Ignatius, Mont.

TOOLS NEEDED

(1.) A device for anchoring bow to bench at left hand of the operator- (2) A block of portable nature made to support frog while fitting block and final insertion of hair, block and slide- (3) a portable block for similar purpose for the head-- that is , fitting the block and cleaning out recess but not used for putting in hair- (4) pair of scissors - (5) plunging tool for inserting block in recess (a 3/16 inch shank screw driver with bit cut off would do)- 6) A hair comb-(7) alcohol lamp- (8) a portable powdered rosin receptacle - (9) spool of # 28 annealed iron wire- (10) violin makers knife of ½ inch size- (11) small pair of pliers with rounded smooth handles and straight flat jaws-(12) a Small 1/16 inch wood chisel for prying out blocks -(13) a 1/8 inch wood chisel for cleaning out block recesses- (14) dowel wood stock for making blocks - (15) piece of poplar wood for making the wedge-(16) glue to use on wedge-(17) and of course , bow hair.

PROCEDURE

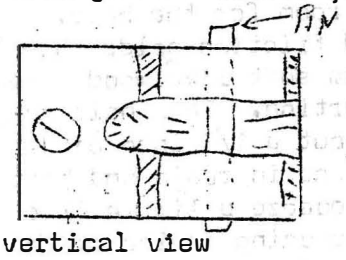
Take down bow . Ferrule may be removed by clamping with pair of small gas pliers and rocking in a twisting motion back and forth and a little off presure. Take out the wedge with knife . Set frog in receptacle block. With a little rosin on right thumb, sliding pressure with thumb on slide will remove it . Pry out block with small sharp tool adapted to the purpose.Pull out hair and clean out recess with small chisel. Remove block and hair head and clean out recess also . Clean up the bow and see that it is in good order.

REHAIRING

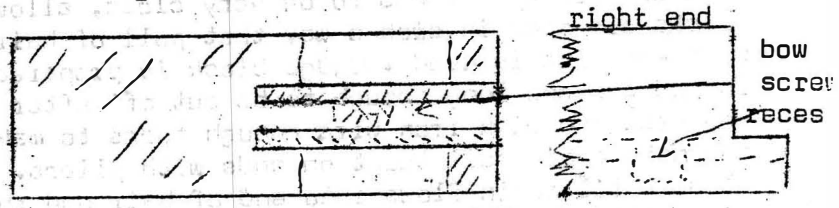
First prepare head and frog blocks from dowel stock. This is a very exacting job as fit has to be very close, allowing room for the hair. Blocks are made in such a way that pull of hair and friction holds them in place-no glue is used . Wedge block is prepared from soft like wood leaving unused end long enough to be cut off after insertion. Take hair bundle and wrap end with iron wire enough turns to make about a 1/8 inch band and make a pig tail twist on ends with pliers. Dip end in rosin and heat i n flame until rosin flows into end of hair and then squeeze a little flat with pliers while hot. Bow should be in place in anchoring device at the left. Grasp hair a little back of tie with thumb and forefinger of left hand and flattening or fanning out hair as you will wish it to be and then manipulate tied end of hair down into recess with aid of plunging tool. The little block may be impaled on end of knife and maneuvered into place and pressed home with plunging tool. Carefully trim off protrudigg excess. Remove bow and dampen hair under cold water . Remove excess water by passing hair through fingers full length. Replace bow in anchoring device. Now, facing head of bow , stretch hair with right hand and comb out starting with short strokes at end and gradually progressing until full length combs easily. Now press down hair where it emerges from head with flat of comb, hold down with right thumb and start the comb a number of

times until you have an even start when comb is inserted . Now progress along the hair with comb downwards through hair and follow by thumb and forefinger of left hand , sliding along hair and keeping it under tension in a flat ribbon as you will finally wish it to be. This grip on hair is maintained until hair is tied and cete Determone where the final tie will be by having it terminate a little short of the end of screw slot in bow(varies a little with different bows)-- bass bows often about half way down the slot. Now carefully tie off with wire as before , Heat end in flame , rivet a nd dip end in rosin and flatten when it is saturated with rosin, put some tension on hair with pliers when flattening bundle. Now put ferrule on hair and slide up out of way. Put frog on wooden holder and face it backwards to the way it goes on bow and place conveniently in front of operator . Impale block on end of knife as before . Now give the hair 180 degree rotation counter clockwise still holding under tension with left hand . Place tied end of hair in frog recess as you did with the head and block in place as before . Now place frog properly in place on bow, put in screw and tighten up fairly well. Press hair neatly in place and insert pearl slide and put ferrule in place. Remove screw again from bow . Grasp frog in right hand , put tension on hair and face toward head of bow. Take small pliers by the jaws in left hand and press rounded handle on hair such a way that you make it fan out somewhat wider thatn it will finally be. Insert comb downward through hair and draw it up close to ferrule , now upend the frog, place a little glue in back of wedge and insert it in place using considerable pressure. Carefully trim wedge off flush with frog. Replace frog in bow and screw in place,tighten hair fairly well. Bounce tip of bow a few times against left hand t o let hair settle down. Flame hair down by judiciously sliding back and forth over flame until hair assumes as even taughtness. Special attention is given hair emerging from head by gently warming it and pressing against a block of wood .Put a proper tension on hair , divide it with a pointed match passed through hair about half way up bow. Pass match back of stick and back through hair again and hang bow up to dry overnight . Next day remove match, check hair and flame lightly again if necessary . Rosin hair by by applying powdered resin ; wipe bow clean and you will have a fine professional job of carefully done.

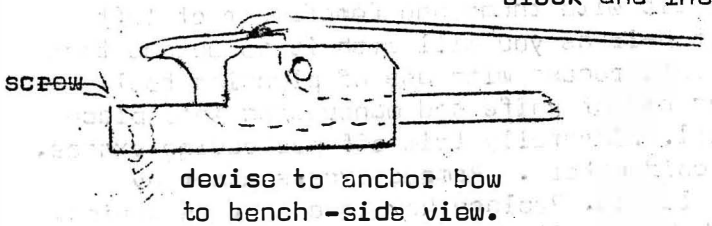
½ scale



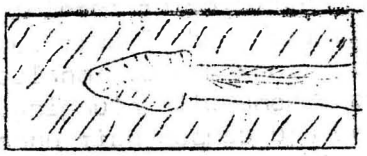
vertical view



Device for supporting frog while fitting block and inserting hair- of wood portable.



devise to anchor bow to bench -side view.



to accomodate head of bow.

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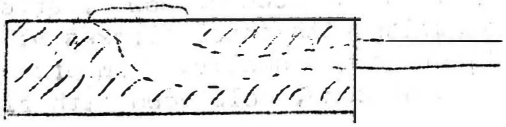


portable wooden block for supporting bow head while fitting block etc.

"ACOUSTICAL PROPERTY OF VARNISH SUPPLEMENT.

BY J. L. Stout
9148 Birch
Orland Park, Ill. 60462

Any film forming substance will dampen the vibration of the substratum to which it is applied . This effect will depend upon how resinous or resiocus or friable the coating material is .

Vibration dampening coating are used commercially to prevent metal vibration noise such as automobile doors metal sinks , and rail road passenger cars. These coatings are also used on fiber glass type plastic fabrications such as boats to prevent drumming noise.Vibration dampening compounds usually consist of a binding material which is usually resinous in nature and inert inorganic fillers. Solvent ate used in order to make them easily applied by spraying . The organic resinous binder plays the largest roll in the dampening due to its brittle nature. This can be explained theoretically that the resinous material fractures or cracks when set in motion. absorbing energy thus restricting prolomged vibration of the substrate, this of course is microscopic. This pertains to the hard theromoplastic varnish resins which are oil or solvent soluble .

Flexible film forming substance that contain very little or no resinous material are poor vibration dampening materials becaouse a compound of this nature will move freely with a vibrating substrate. Drying type vegetable oils and soft pitches or gums can be classified poor vibration dampening material. Semi drying oils which polymerize linearly non drying type plasticizers are even poorer in this respect.

The automotive industry have a standard test for determining vibration dampening efficienty of coating for cold rolled steel which is used in automobile body construction. This test consists of a electronic sound apparatus which measures the decibels per second decay rates of a quarter inch thick steel panel calibrated at a standard frequency which is coated with a test compound approzimately 1/32 (.030) inches thick or exactly 1/2 lb. per sq. ft. dry weight . This standard test panel when set in vibration, the sound will decay at a rate of 1.2 decibels per second without any treatment of sound deadening coating . The economical vibration dampening compounds will perform about 12 decibels per second decay rate and the more costly polymeric emulsion types will perform at 35 decibels per second decay rate.

A typical rubbing type oil varnish such as used for violins will dampen vibration using this test method at a rate of 6.5 decibels per second.This type of coating would be in the neighborhood of 12 decibels per second if it contained the inotganic fillers which are used in commercial sound deadening mastic coatings described above.Linseed oil by itself when polymerized will dampen vibrations at a rate of 2.4 decibels per second and in this case inert fillers will increase the efficiency only slightly.

If a highly resonous compound such as rubbing varnish is applied

over a polymerized thin film of linseed oil it will dampen sound vibrations at a rato of 4.7 decibels per second. You can see that a varnish type coating will dampen vibrations of any substrate to a fair degree of efficiency even if applied over a flexible linseed oil film. A very brittle varnish containing seven parts hard resin to 3 parts drying oil would be a excellent dampener.

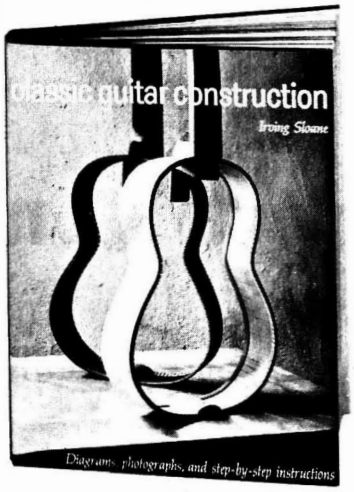
If coating mass of this typical rubbing type resin- oil violin varnish is reduced to 0.15 lbs. per square foot (0.10 inches thick) the sound decay rate will be approximately 2.5 decibels per second and if the coating mass is increased to 1 lb. per . sq. foot (.060 inches thick) the sound decay rate will be in the neighborhood of 22 decibels per second. Vibration dampening can be controlled either by composition or the amount of coating applied .The coating thickness used on violins will be in the 2 to 3 decibel area using the thick steel test panel which rings like the liberty bell so the deadening effect will be much greater on wood.

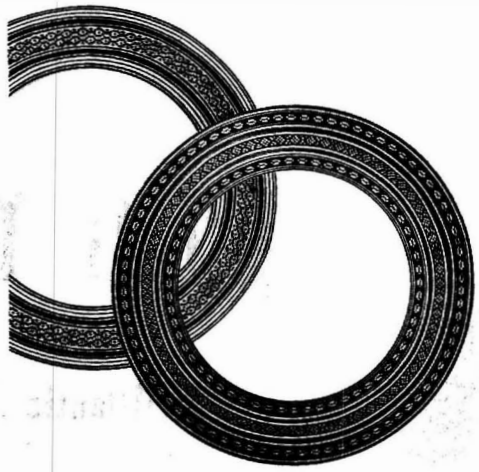
I used the thick plate method of determining sound dampening devised by Geiger which uses a thick steel plate rather than wood because this is the only precise method for this type of test work.The results obtained can be correlated to other submstrates which will vibrate such as wood, plastics and other metals even if they vibrate at different frequency than steel.

Any given coating material will vary in vibration dampening efficiency (decibels decay per second) if the ambient temperature varies .Comparatives tests reported here were all conducted at 80 degrees F although temperature variations were studied . As a general rule the decibels decay rate per second will be the greatest somewhere between 40 to 85 degrees F., it will reach its peak somewhere within this temperature range . From 40 down to zero F. and 85 up to 130 degrees F the decry rate will be considerably less. This will account fot the tone variations of violin at various tamperatures. You can see that we ate working in an area described as critical vibration dampening in respect to violin varnishes.

If the coating mass is increased dampening efficiency will be increased tremendously , this means that to much varnish will change the tone characteristics . Some of the hard thermoplastic resins which are effective in sound deadening coating are; coumarone-idene,hydrocarbon, resin and its deriviatives , mastic, copal, phenolic (non reactive) and possible gamboge extracted resin. Drying oil-hard resin type varnishes will increase in vibration dampening effect as the polymerization progresses.

The varnish system used on a violin is a integral part of the instrument in respect to tone and appearance but the prime prerequisite is proper wood selection and workmanship. Varnish will do nothing for a poorely constructed instrument and the sealer or primer you apply is far more important than the upper substratum in respect to critical dampening. The varnish which we observed on many valuable instruments in high in resin content, otherwise the varnish could not be polished , therefore we can assume that we are in an area of vibration dampening to a modernate degree which must be controlled for ultimate tonality.

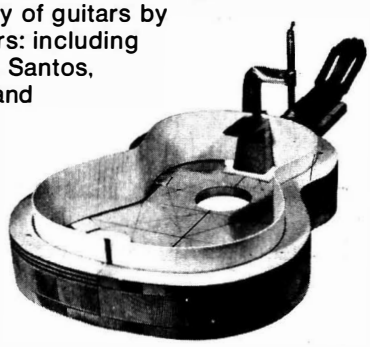




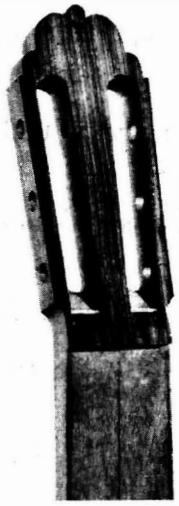
classic guitar construction

By Irving Sloane

This unique, comprehensive book gives all the information necessary for the building of a fine, classic guitar. Handsomely illustrated, it is an indispensable guide for the novice *luthier,* and conveys much of the romance of the Spanish classic guitar, gives a brief history and discussion of guitar construction theory, and provides a picture gallery of guitars by the great makers: including Torres, Hauser, Santos, Esteso, Arias, and Barbero.



The author's method of construction conforms to classic guitar-making principles and is superbly well-suited for the amateur craftsman. Specific diagrams and 125 clear, professional photographs illuminate each step. A simple wood 'sandwich' yields the principle elements of the basic forms necessary to build a guitar: A mold, bending form, purfling forms, and template. The author tells one how to make his own clamps, purfling cutter, and even the rosette (the sound hole mosaic inlay). He explores each aspect of guitar construction, and includes a directory of suppliers for wood, tools, and all guitar-making accessories.



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TEN ANSWERS TO BEN'S QUESTIONS

BY

Ben Harrison
23071 Sherman
Oak Park, Mich.

IN the April issue of the journal , I submittted 10 questions on the repair of violins and said that after a couple of months went by, I would send in the answers. These answers are the method we have used to make these repairs , but they are by no means the only way I don't say they are the best way. BUt , if it works and makes for a good job without a large outlay for special equipment, then it can be a useful way of fixing a violin. There is no need to write the questions out again and have Kate work overtime to write the same thing twice, so if you are interested , get out the April 1968 issue and read the question there.

1. According to where this crack occurs , you can use a rubber band, a piece of small rubber hose or a piece of liner with a motch cut in each side. The glue is worked into the crack and the notched stick is put into the f hole and turned like a key. The notches are against the sides of the f hole and if properly made , they will put a uniform pressure on the crack. The same idea works with a small rubber tube. Squeeze it to insert it into the f hole, then push it up into the wing where it expands . To use the rubber band , loop it over the F hole wing, then pull the rubber band around over the back of the fiddle secure it over the point of the plate on the other side from where the cracked wing is located.

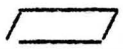
2. The last thing that should be done before the string is put on the peg is to take a small wound file and run it across the string hole in order to knock off the sharp edge that is found there . A lot of strings fray at the peg due to this edge.

3. To prevent strings from slipping on the pegs, bore two holes in the peg, side by side. Run the string end through the peg hole and then bend it over and run it back through the other hole. Use care which hole you start with so that the string wraps back over that part of the string laying on the peg surface . Remember that you must wind the string on the peg so that the winding goes toward the head of the peg, else the string pressure will push the peg out of the hole.

4. To remove a broken tail pin stub , drill a hole about 1/16 dia through the stub. Take a strong piece of string and run it through the hole just drilled and then pull this end out through the F hole. Tie a big knot in the end and pull it back into the fiddle so that the knot seats on the tail pin stub. Use a gentle pull and the stub will come right out. It has only to move a very small amount to break the taper seal between it nd the block, so don't use a jerking pull when you remove it , or you might tear out the whole tail end of the ribs.

5. First , if you are the second man to repair this , you will have to wash off all the Elmers glue the other fellow left. But , if it is a new break , glue the scroll back together as your first step.

When dry , cut out a piece of maple in the form of a trapezoid (I think that is the word, but it looks like this:



Using this as a template , mark it on the side of the peg box so that it is about half and half on each side of the crack. Cut away the wood ½ way through the wall of the peg box in the area you marked. level it up and get a good fit with the template. When this has been obtained glue the template in place and after it dries , finish it down so that it conforms with the rest of the scroll. Do this to both sides of the peg box (cheeks) but do them one at a time . The reason for this is that you can use the existing hole in the opposite cheek as a guide to drill the new hole into the inlay you just made. After the other cheek is inlayed you have a guide hole to drill it accurately. If this work has been done accurately and the surfacres fey closely, you will not need a peg hole bushing if you wish, go ahead and put in a bushing , but a good joint made in the manner I have described will be as strong as the wood before it was broken. Some makers prefer to put this fid on the inside of the peg box rather than on the outside and that is fine , if they have the patience to do it . However , you are working somewhat blind on the inside , so I prefer the outside location.

After the inlays are made and finished off , holes bored before reaming , varnish the inlay with a matching mixture of spirit varnish (or oil varnish if you prefer) . When varnished , ream the hole and fit the necessary pegs.

This is a recurring problem in violin making and I would like to hear some commentary on this from some of you fellows. How you handle this kin d of repair.

6. To remove a top plate , I have found it best to use a thin dental spatula . I always start in the right C bout area and work towards the tail block first. After the first inch in the C bout area is open,I insert flat toothpicks to keep it open. Considering that the glue is and not * old not too strong, it is not too much of a trick to remove a top plate but if the glue is strong and fairly new, heat the spatula , insert it in the opening and use gentle pressure to work it along as the plate separates from the ribs . Heat should not be so great as to scorch the wood or varnish , but hot enough to crack the glue.

Usually , the greatest difficulty is at the neck blaock as it seems to always be glued tighter there. In most cases , a gentle working up and down of the plate will loosen it, but before you try this , be sure to loosen the plate from the heel of the neck (at the sides) or you can burst the plate apart. A long spatula can be inserted so that it projects out each side of the upper bout and using a hand on each end of the spatula, gently work it between the neck block and plate . If you have a holding jig, this is simple enough to do , but if you don't have one ,you will need someone to help hold the fiddle. It can be done by holding the corpus between your knees, but this is a dangerous way to go bout it .

7. A loose tail pin is not only a nusiance , but can cause a lot of fiddle trouble by either elongating the tail pin hole, splitting the tail seam or the block. They should always fit snugly in the hole ,and the best way I have found to accomplish this using the same pin is to wrap a piece of tape arpound the shank . Chances are that it will be too big and you will have to cut out sections of the tape until it fits snug in the hole.

8. Often times the strings wrap is too long due to string stretch, manufactureing methods , or important adjustments to il gut. When this occures, the wrap hits the top of the bridge and pulls it forwards. Take a small piece of plastic and cut a tab and glue it right over the strin g groove of the bridge. Bend it over the front and rear face and glue it there . This presents a smoothe surface for the string wraps to slide on.

9 This , the bruised area should be dampened , Then , make a 50-50-mixture of Franklins hide glue and water and saturate the bruised area . Use an artist stump or a burnisher and remold the edge . You will have to keep soaking the bruised area with the glue and water solutionand burnishing it into shape . The water swells the wood and the glue seizes it and once dry, if you have worked carefully , it is not at all noticeable . However , should there be a little natural wood color showing use brown shoe polish (paste) to polish the area and it will stain the wood just right .

10. What seems like a simple operation can turn into a bad separation if care is not taken to prevent it . Before regluing a pulled plate edge , you should clean out as much of the old glue as you can . But before you start , but a spool clamp at the end of the separation so as to keep it from becoming progressively worse as you clean it out. If you don't , you may wind up taking the whole plate off.

I shall now echo Fred Craig when he said ," I don't say that is the way to do it . This is just the way I do it !" If you can think of better ways thendon't be hesitant about writing them to the JOurnal and letting us in on it . The simpler the soultion to a given problem, the better .

Now, I have a question that surely someone can help out on . It is this ;

I am fond of using boxwood pegs in my violins. Usually, there are bought with the shank greatly oversize and once they are cut down to a reasonable size, the shank is white and the head and collor are a tan, or orange tan . I have tried several of the commercial oil stains , but they just don't do it . So, how would you go about staining them.

Ben F. Harrison.

Have you noticed that it now takes 5 cents for you to say your 2-cents worth on a penny postcard.

A GUITAR IS HATCHED

BY A.E. OVERHOLTZER
618 Orient St.
Chico, Calif. 95926

In 1926 I made my first mandolin and violin. Made several more violins and other musical instruments up until 1937. I made two guitars in 1931 and several more in 1932 and 1934. Made a bass mandolin in 1933. Another violin in 1937. Another bass mandolin in 1965.

I toured the Gibson and Regal musical instruments making factories in 1933.

While in business I made Cabinets, curch furniture , foundry patterns, and machinery. Expermental work has been excitement for me. Never did I like repair.

In 1965 looking forward to retiring from business I wanted a hobby It was natural for me to go back to making musical instruments.First thing I did was to read all the books that I could get on violin and guitar making. My interest settled on classic guitars . Well, now I wanted to mak e the finest guitar that could be made , no matter what the cost . Time did not matter either because I am not going any place soon,that is . I have about any kind of tool that a man could wish for , hand and power , wood-working and metalworking. My wife tells me that if I wanted another machine or tool she was sure I would get it .

To make good classic guitars I needed a good set of molds bending form workboards, drills and router jigs and special clamps . I made all above last from cast aluminum. The bending form I heat with electric, thermostat controlled. It will bend ebony 1/8 thick. I made three workboards, two for the top and one for the back. One of the workboards was made with a router attachment to route out the grooved rosette and cut the hole in th e top. Two of the workboards was hollowed cut to make arched top and back. Two of the workboards, for top and back are made with tapered pins to line up the side mold with workboards, then they can be bolted together as the guitar is being made . When the guitar is glued up unbolt the aluminum forms and there another guitar is hatched. I have enjoyed making the aluminum forms sa much as I do making guitars. I worked on aluminum forms about one year . I do my own pattern and machining.

You might think from above that all the guitars are the same . Not at all. Every guitar that I have made is different .Some are deeper , different strutting, thickness,woods, inlay and finishes. I love expermental work amd go to no end to try something that mighth improve a guitar. I split out some of my spruce tops and strutting to make sure that the grain is straight with plain of top. Made some tops as thin as 3/64" around edges. Some as thick as 9/64". Carved tops and backs from thick wood (as violins) for two guitars . Have graduated tops and back on both flat and carved . Any spruce top that shows a different color from ome side starting at the glue joint is a dead give-away that the grain is not straight with plain of top . Straight grain tops do not show joint. Some of my tops I have made in four pieces . No one would know it it I did not tell them

The 4" wide spruce splits easier and has a finer grain all across top.

I would like to make a comment on Wendell Pratt's article in the July Journal. I have most of the books that you mentioned in in article, and many more. I have read them over and over again . All these books put together do not tell all that I would like to know about making guiatars I have only praise for the men that wrote them. Mr. irving Sloane's book is the most complete that I have read . (I repeat, that I have not read them all .) It would take a book the size of a Sears catalogue to tell all about guitar making.

Wendell wrote that he had difficultly in mortising the neck and gettting everything straight . Here is my suggestion. 1. Do not watch the clock. 2. Make a board as shown in Irving book, page # 29, Fig. 22. This board must be very rigid . I like a board made from lumber core plywood 3/4" Birch.(make double or a total thickness of 1½") If you do not want t to make double then use 2x3" straight lumber on under side. My own work-boards are made from aluminum castings. If the guitar you are making has a flat top the board is ready for use. If the guitar has an arched top as on page 50 then you must make rim all around board where the body of the guitar rests . When you make the neck leave the end of neck that enters mortise , straight , as you would in a violin . Now , with rubber bands fasten guitar body to board . Fasten neck to board with C clamps , Make sure that both body and neck are straight . With neck tight against body scribe for the mortising. You must make a drawing full size of nut, finger-board, bridge and strings to get th e right angle of neck heighth. Shim between board and neck to get the right angle when gluing. The dovetail that Mr Sharpe shows in book page 25 Fig 27 , is for a factory that turns out guitars fast . A factory can cut this dovetail , both body and neck, in less tha n one minute.

The factory made necks are made thick to accommodate this dovetail. It is faster for a factory to make dovetail necks. They are not as strong a neck that are mortised straight into guitar body. The best classic guitar players like narrow heels on their guitars . They like heels that are about 3/4" wide at body and 1½" to 2 " long , shaped to a sharp point. (This is one of the points that Mr. Sloane over-looked). See page #44. He is right on shape , but short on length. You can see if you make a heel the right size (slim) that would not be enough wood left to make dove-tail. You will find these slim heels on the finest hand made guitars. The heel of the neck should go down to back on all handmade guitars . (like in violin)I made my first guitars with mortise in necks . (no dovetail,That was in 1931. Now I make necks similar to Irving Sloane book. It is my belief tht a neck that is mortised into a guitar body is not the best way, because a guitar made this way will not sound as good as a guitar made with a neck extending into the body similar to Sloane. Book, page #15 and 44, The finest handmade guitar that I have seen and heard were made with necks extending through guitar body. These were made in Spain, Germany and California. Torres made his guitars this way , in 1854. And another thing about these necks in these finest late model guitars is that they are 2-3/16" wide at the nut , of which good players like.

I have made about twenty guitar necks aed fingerboards with a width of 2" at the nut and I do not think that I will put them in my own guitars, as I am going to make all future fingerboards 2-3/16" at nut. I made two guitar necks from solid rosewood.

I would like to exchange ideas through the Journal , with the hope that I might pick up a clue as to know how to make a fine tone guitar. Do not expect all to agree with me.

A. E. Overholtzer.

COMMENTS
BY R. A Prittle
204 E. Pere Marquette
Ludington, Mich. 49431

In the last Journal theee was an inquiry about an easy way to join tops and backs of violins. Here is a method I follow . I do not have a jointer so don't know how well that method works.

When the edges to be joined are close I then finish the job using emery cloth. This can be bought in rolls 2" wide and I tear this in half and use a strip longer than the back or top/. I stretch this along the edge to be joined and bend it over the ends and secure it with thumb tacks below the corners . Then I secure this half in the vise and rub the two together , holding the half near the bottom to prevent rocking. By marking the bare wood with pencil marks I can see when it sands clear across . Then I reverse the emery cloth and the half in the vise and it dosen't take long to get a good joint.

You can tell if you have a good glue job by gouging out a chip along the join and testing the chip to see if it breaks on the joint or otherwise. I hope this method helps someone to get good joints as it has for me .

I enjoy the Journal and appreciate the work you and Kate put into it for us violin makers.

R,A. Prittle .

Don't you get tired of explaining to the people in your district what you do in Congtess?" Asked of the legislator.

" No, I'm thankful they give me a chance to explain instead of jumping to conclusions of their own."

She really dosen't look 28, does she?
" Not now , but I suppose she once did."

30

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EBONY FLUTES

BY

Walter A Jacklin
850 W. Hastings St.
Vancouver , B. C.

The article concerning ebony (Or ebonite) in the last issue of the JOurnal is most intdresting. Three of the flutes in my collection are of this beautiful material and the tone excellent . I have been told it was discontinued because its cost was too high; that two men could carry out about six foot piece because of the weight of the whole log, which finally had to be mostly cut down to the heart piece, and then the heart piece seasoned for several years before it hardened. I understand most of it came from Moxambique in Afraica or southern India,

Change was made by makers tc Cocus wood of South America , and it is fine , but the lip plate contains and irritant and must be covered with silvdr to protect the players lips. Cocenidilla has also b een used , and is still used in clarinets, but the thinner body of the flute leaves it too subject to cracking .

America makers now seem only to make flutes of plated brass or silver. I have several in my collection and have played at least a dozen more . they never equal a good good instrument. Top ovtave too shrill and bottto not rich enough. The tone of the pure gold instrument is most beautiful , but it does not have the power of the wood.

My last two flutes were made by the Moenning Family in Leipzig , East Germany. This small family , with its anscestors , have been making flutes for more then a hundred years and are undoubtedly the Strads of the flute world. But the y are gone now. Russia takes everything they can turn out and they make metal.

As you probably know , Conductors have ruled out metal flutes for music for Moatzart, Beethover, etc. in London , Hamburg and Berlin. The only flutist (going to the south) using metal is in the orchestra in Florence. Maybe the conductors are starting to hear something I hear.

W. A. Jacklin.

CORRECTIONS ON ADS

These prices were received too late to print , as the ads were already finished. We have to get the material to the printers early this time of year in order to get them printed by the first of the year.

Bob.

Following is the corrections for the INTERNATIONAL VIOLIN CO. ADS

Firstly there were price changes , and I naturally want the correct prices for the 1968 year. Our Luigi Nicoseco oil Varnishes now - $5.00 per pint, 90 for two ounce bottle and $9.50 per dozen bottles . I am showing the correct on the enclosed ad. This is very important . On the White Nylon Hair we reduced the dozen units price from $5.00 to 4,50 per dozen. However the unbleached Nylon Hair , which is the best grade, and which you mention in two lines below the white Nylon Hair is now $35.00 per pound, or in dozen units lots $ 7.00 per dozen.

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