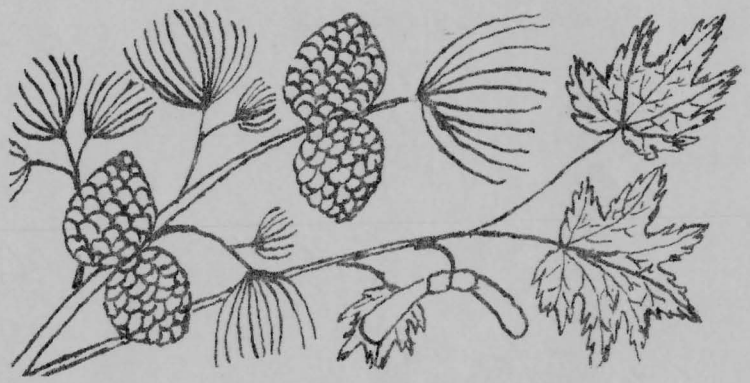
Dr Castle

JULY AND AUGUST 1960

The Violin Makers' Journal

THE OFFICIAL MONTHLY PUBLICATION OF
THE VIOLIN MAKERS ASSOCIATION OF BRITISH COLUMBIA



Devoted to the development and encouragement of the art of violin making

EDITORIAL PAGE OF *The Violin Makers Journal*

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HOW ARE YOUR EARS?

A tremendous amount of literature has been written for the Violin Maker regarding the tuning of violin plates. Various methods are suggested for ascertaining the so-called Tap Tones, tapping with the fingers, knocking with knuckes, playing on the edge with a bow. Listening with the plate held some distance away or with the plate three inches from the ear. Most confusing especially for the beginner.

All of which leads us to wonder to what extent the sense of musical pitch has been developed in the minds of these writers, and just how musical are the poor makers who experiment with these tap-tones?

It would seem that a most important part of a violin makers education should be a very serious course in ear training. Unfortunately very few of us are gifted with the sense of absolute pitch. But a keen sense of pitch can be attained by the study of music, especially by the study of scales and intervals. The study of part singing is also very valuable training.

It is quite likely that most of the old master makers would have received choir training in their boyhood as all the musically minded were attracted to the church, the centre of music in those days.

It is interesting to speculate on the type of training given the apprentices entering the old Cremona violin making schools. It must have been quite extensive for they turned out some splendid makers. It is probable, in fact almost certain, that such teachers as Stradivari would have insisted on some course of ear-training either by himself or through orchestras or the church choir.

Possibly it is too late in life for many makers to attempt a musical training but to the young man, starting out to make violins, may we suggest he consider seriously the theme of this Editorial. Let him join some small orchestra, or better still, a singing group, paying special attention to the improving of his sense of pitch. Not only will this aid in determining the correct "tap-tones" but will prove invaluable in the adjustment of his finished instrument.

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"Tis God gives skill,
But not without man's hands: -He could not make
Antonio Stradivari's violins without Antonio.....
- George Eliot

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LOCAL NEWS

by HAROLD BRIGGS

Hello Everyone:

There being no local news last month, and again this edition being written by someone else, will lead some of you to feel that something is amiss with our old friend Harold Briggs. I am happy to report that nothing more than business pressure is keeping Harold from you..

Our June meeting was well attended as usual, although Frank Hyde and Jene Breton were missing again, how about it you fellows, lets be hearing from you?

We are sorry to notice that pressure of business has caused Ron Huggins and Bill Walters to resign their membership. Ron is doing much more travelling out of town, and Bill is shouldering much more responsibility, too much paper work, after a days work I understand.

How about a drive for increased membership eh! Everyone bring a friend to the next meeting.

At our June meeting, keeping up with our worthy President's policy, to get down to discussing some aspect of violin-making, each meeting night. A very healthy discussion took place on the making of rub-joints, we all benefited by the helpful hints from Ragnor Helin, who is a first class cabinet maker, of a very high order.

We were pleased to hear that Peter Euen, is making good progess with his first effort. Keep up the good work Peter. We also had a welcome visit from Clarence Cooper of Victoria.

Our July meeting was a little extra special. Families and friends were invited to hear Helen Hagnes play to us upon the violin she was presented with at the Vancouver Festival 1960. This violin was willed by our late member Ernie Lindbergh, to the most promising student at the Festival. We all felt the adjudicators, chose well indeed.

Mr. Ragnor Helin, also played several pieces, adding support to Helen's programme, he also played a number of instruments belonging to members, to the delight of the audience.

Our friend Mr. Horace Plimley paid us a visit this evening, bringing along with him, Mr. Harry Verchamps, now retired, but previously 20 year concert master for M.G.M. and Paramount Studios. He thrilled the members by graciously playing their instruments. We sincerely appreciate the hard work he performed for our benefit. Mr. Heyworth had along his latest creations, a full size and a $\frac{3}{4}$ violin, Peder Svindsay was able to show us a bow that he made from green heart, he is very pleased with his efforts and results in this direction. (cont. on Page 13)

RANDOM THOUGHTS WHILE SANDING PLATES

by Norman Miller

I wonder what method of sanding was in use during the 1600-1700 years? Did they use sandpaper or the papers available to us? Perhaps they used pumice powder with a felt rubber; this could have some effect as a filler. Could they, or did they achieve as smooth a finish on the wood; use/wetting procedure? What effect would all this have on tone. Does the amount of fine dust produced by glass or garnet papering become rubbed into the pores of the wood and cause a dulling of tone? Could we get it out of the pores?

I wonder why plans in Jalovec's book show 4mm 5mm and even 6mm at the centre of the top plates tapering to 2mm at the edges in designs of Strad and Guarneri; this of course agrees with most old authors especially those during and close after the Strad era; Mozart; Bagatella etc. I am confused then by Jalovec advising 2.8mm as general thickness for the centre. If you work backwards from Otto who gives as a general mean from his examination of old master, at the ribs one-fourth the thickness of the centre. One quarter of one eighth is 1/32nd; far too thin for even the edge which supposes that the centre must be thicker than 1/8". Taking 1/16th as edge thickness, this brings the centre to $\frac{1}{4}$", which approximates 5mm, and so agrees with the plans in Jalovec.

Noticed also in Jalovec's plans that edge thickness outside the ribs vary, showing on Strad design 3mm near the neck; $3\frac{1}{2}$mm at the curve of the bout and 4mm at the corners: others have Guarneri top plate edge thickness 5mm, and bottom plate 4mm all round. Wonder why? Have s en reference in books that Strad lined his ribs with parchment. This is not in practice to-day; even the folk who say they are building exactly to Strad do not use it. What was its purpose? I would say it was to dampen tone. Are we supposing too strongly that Strad and his contemporaries wanted the power and tone quality that is wanted to-day 100-200 years after. As a master craftsman of his day, he built his violins to be good and usable then, to suit pitch and the requirements of his day. He had no idea that they would be strung differently to higher pitch, longer finger boards and the other changes. Arnold Dolmetch built a fiddle to the same specifications as an original Strad; short bar, short flat neck short strings, low bridge and short fingerboard; pitched to "A" 412 cps, and played it with a bow of similar shape and length as used in Strads day. He says the quality of tone was thin, fluty with a sort of ethereal quality that could not be acheived by a modern-fitted violin, and in fact in no way resembles the tonal quality that is being sought to-day. Strad built his violins to have that quality and not the power that is required today. His thicknesses, tap-tones and all the rest were designed to be good at the standard of tone required IN HIS DAY. Could you imagine a virtuoso of to-day playing even a modern-fitted violin in any of the great concertos with that funny bow that was the bow of Strads day. Would he get the same tonal result, and would his virtuosity and technique suffer?

I wish all authors would be explicit when writing of violins and such in violin magazines. How often have we seen a violin described and then the writer says "the top is too thick" or "too thin" and give no measurements. Also they will describe a violin and say the interior construction was "so different" and then keep the difference to themselves and say no more about it. Surely if details are different they could be exactly described and meausrements given.

Just a few thoughts, and others may like to send their thous
have a few more and will tell of them from time to time if you are interested. Some will be constructive, and others slightly cynical perhaps, but all will be of value to help the violin-maker.

Cont. next page.

In the articles on Justin Gilber a few months ago nothing was mentioned about several facts that to my mind are not true violin making.

I refer to the facts that he used to buy his scroll ready-made and also use machines for thicknessing the plates. The effect of a machine made scroll would not play much part in tone production and would only be accepted as not playing the game in saying that "I made a violin". However I feel that using a machine in gouging and thicknessing, apart from not being true craftsmanship in violin making, one runs the grave risk of completely and irretrievably damaging the fibres of the plate upon which so much depends for correct tone production and its transmission. To give some cause for thought and to demonstrate the fact I will refer to the same type of requirements needed in properly constructing an arrow made from wood. Most of the really good arrows are made from Spruce, and Port Orford Cedar; woods used in violin making.

The correctness of flight, and performance of an arrow can be altered considerably by the misuse of construction. viz; Take a billet of Spruce or Port Orford Cedar and split it so as to get two identical pieces from the one billet. (saw it down the centre if you wish, but splitting is better). From one piece if an arrow is made to its necessary specifications by hand, shaping and all cutting being done with hand tools; chisels, planes, scrapers and sandpaper. This arrow will fly well, when shot correctly; having a true flight and going in a direct line to its mark. Turn the other piece up on speed cutting tools, or put it through a dowelling machine, or use a machine planer etc, and the resultant arrow will be rather useless. It will not fly well but will dart erratically in flight, no matter how well the archer shoots, and will be off the mark if it does reach the target. The abuse that machining gave the fibres, breaking them, and spoiling the elasticity and life of the wood made a complete flop out of a good piece of wood. I fear that the same could happen to an even great extent with violins. Add to this, cooking and baking in ovens and other "queer" procedures and you have departed from the sanity of craftsmanship with wood to a sort of witches "brew" and then claim to have solved the secret of Strad.

I have never seen anything to suggest that Strad used an oven to build a violin, and I am sure that he respected the lovely texture of the wood and carefully and wisely retained the elasticity that nature worked into the wood by its growth. Again comparing archery; you can improve the cast of a bow by baking it in a bakers oven for 30 minutes or so, but you will find that it will lose this added cast very quickly and even more will lose what cast it had originally, and will break in halves in a short space of time. So bake your violins and archery bows as much as you desire, but you will kill them.

Machine your wood if you wish, but abandon hope of ever making a masterpiece. There are some types of violin ribs available made in Germany, that have been produced by a mechanical planer to 1/16th of an inch thick, not cut by a saw; these ribs are just about useless for violin making. They do not bend well, and show the shock marks of the planer, no matter how well you sand them. Tonally they are shattered and spoiled. Machining again!

Greater respect and admiration should be given to the maker no matter how humble and rough his work appears if he honestly and truthfully endeavoured to construct it all with his own skill and hands, rather than to purchase in part or whole and call it his work.

Now I would like to give you a few ideas I have on the use of plans.

I have fair ability as a draftsman, and have drawn out my ideas to full size

plans on the drawing board and have had a good look on paper of the various methods of thicknessing and archings and any thoughts or ideas I have incorporated in the drawings which show in excellent representation how the various sections of a violin really is, and its comparison to the individual parts. Believe me this does wonders to helping in the understanding of how a fiddle works and the connection of one part with another and how the shape of one piece helps or hinders, and the best way to shape such a part. Also on the drawing board I can determine the exact slope to give the neck to match a certain rise in arching height so that the fingerboard will be the correct height above the belly and in doing so determine the height of the bridge. It follows that if you used an arching that rose half an inch, and one that rose an inch or over like some Amati's, the slope would be by necessity at a different angle in each to maintain the approximation of fingerboard distance from the belly and the subsequent height of the bridge to match. On a full size drawing of the arching you can set the neck and by measuring the angle of the top face of the neck and the shoulder where it enters the block you have the exact angle to cut the actual neck so that when fitted it gives the correctness required for slope, and height etc. I always do this and cut and finish this part of the neck to the exact size while the neckblock is still in the block. I find it is easier to do than trying to cut off a thin sliver when fitting the shoulder to the socket. The angle of my neck with a half inch rise to the arch is 84 degrees. I set a bevel-tool to this and mark it off on the block. The piece that fits to the button is an exact right angle 90° to the front of the shoulder. Cut the socket square at the back at right angles to the button tongue, and fitting the neck has few difficulties. The height of the shoulder can be also measured from the drawing to allow the $\frac{1}{4}$ inch above the top plates. This is the height of the ribs plus the thickness of the plate at the top block where the neck enters, plus the $\frac{1}{4}$". Fig 1

I have described in another article how I ascertain that the archings are correct to the templates in use, so you can see that the full size drawing in front of you can be a great help in many ways.

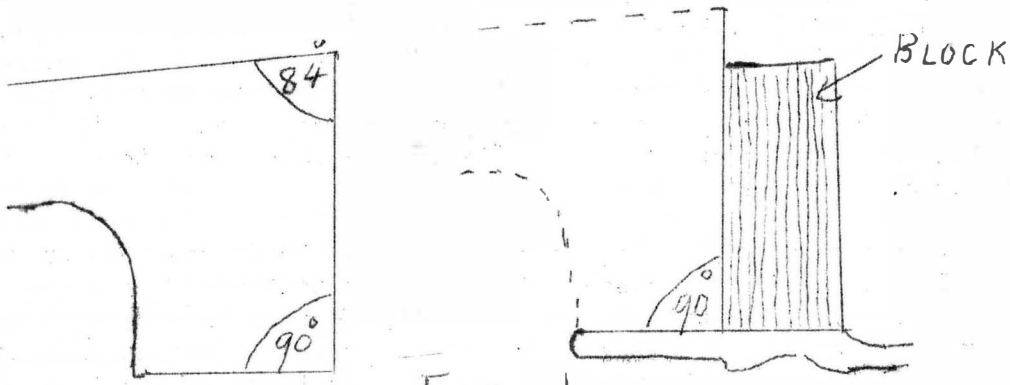

Fig 1.

Have you noticed how a sound-post, if fitted while the violin is in the white almost invariably is too short after the violin has been varnished?

Also with the bridge that has been fitted exactly to the top will be slightly out when the varnish has been applied.

This is only natural as the varnish will apply a suction that causes the top to curve slightly upwards and so destroy the arch that was present while in the white. Perhaps this is one reason why a fiddle changes its tonal quality when varnished, not so much because of the nature of the varnish but owing to the amount of pull exerted by it which causes the tone to be sometimes better and sometimes worse, depending of course whether the resultant change has enhanced or not, the tone. It also shows to some extent how vain it is to strive so hard for exactness in a particular arching and then have it changed when the varnish is applied. I have found this change sometimes to be rather considerable, as the post is short by as much as 1/32". These measurements taken with the bridge off. In the white; a neat fit. Varnished; too short! The thinner the top of course the more noticeable this effect.

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TAKE COURAGE

THERE IS ONE FACT WHICH IS SO VERY OFTEN OVERLOOKED BY THOSE WHO STAND IN AWE OF THE GREAT ITALIANS, AND THAT IS: WERE IT NOT FOR THE INGENUITY OF THE MODERN MASTER, THERE WOULD NOT BE ANY GREAT MASTERPIECES LEFT FOR THE WORLD TO ENJOY.

CHARLES D. SMITH.
VIOLIN MAKER

THE NEW AND THE OLD

by Andrew J.Priest

To compare a new violin with an old one involves several factors. The first is what you consider a new violin and what you consider an old violin; actually however, there are new, old, and in-between. It is impossible to build into a new fiddle what only steady playing will produce. Anyone who expects to turn out a new violin which plays like one that has been played for even so short a period as five years will be disappointed. Only the best work and material should go into an instrument and the finest wood only increases the cost about $15.00 more than poor wood, but increases the value of the finished product from $100.00 to $150.00.

But to the comparison of the new with the old. I have two Guarnerius copies which were made by Tennison Brothers of Fort Worth five years ago. These are 13 7/8" long, and the tops under the bridge are 5/32" graduating to 3/32" where the top is glued to the ribs. Prior to varnishi
with a paint brush and rubbed off after about thirty minutes - then six coats of varnish were applied. Rubbed down and polished.

Let's not deceive ourselves. The first few weeks the instruments were not easy to play and a little woody, but now after five years with no more than thirty minutes per day on each fiddle, they are easy to play, very responsive and have a most beautiful tone. As one of our Symphony players said "they have a lot of bottom". My J.B. Vuillaume has a top of only 7/64" depth, does not compare with these two new violins in solidity and beauty of tone, though somewhat mellower.

Another new violin is a Guarnerius model 14 1/16" long made by T.J. Coburn also of Fort Worth. This instrument also has a top with an elliptical portion under the bridge which is 5/32" in thickness and reduces to 3/32" around the outer edges. This violin is about nine or ten years old and compares very favorably in beauty of tone, responsiveness, and mellowness with my Joseph and Antonius Gagliano whose label is dated 1786.

Another new violin was a Strad model made by E.H. Sangster of Dallas. I had a customer to whom I had sold a much older violin. After one weeks time he brought it back and wanted to exchange it for the Sangster instrument, which was comparatively new. After trying it at my home for about one hour, he decided to take the Sangster violin instead of the old one, and is apparently happy with it.

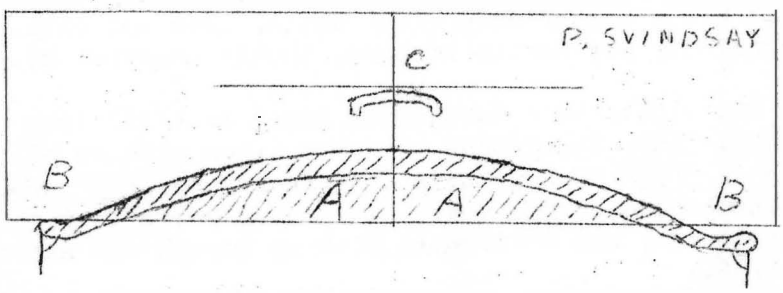
Recently I exchanged a new violin with a friend in Mexico City. Quoting from one of his letters we read: "The fiddle has a good solid tone. Each string seems to blend in well with the others - the volume is more than adequate. Without effort it sounds well for a long way off. It has, in my opinion, a much sweeter tone that the old violin."

I am not a violin maker and have no prejudices to influence me, but from the foregoing illustrations, which are actual happenings within my own experience, it is easy to conclude that violins are being made today which when properly constructed and varnished, will compare favorably with the older violins. But Mr. Violin Maker, do not be deceived into thinking that you can put into a new violin the tone, solidity and robustness which come from plenty of wood, good workmanship, and hard playing with a well-rosined bow.

CHIPS FROM MY CHISEL
by Peder Svindsay

From time to time I have seen some violin makers with twisted necks - that is: Not their own necks, but on their fiddles, which is far worse. If it was their own neck there would likely be a valid excuse for it. But for a violin there is absolutely no excuse. Most makers are very particular in working from the center line when making the body of the violin. Also when carving the scroll, but from then on so many forget that they have a centreline, and they have all kinds of "gimmiks" to help them when they glue the neck to the body. And so many in spite of their "inventions" get the neck and fingerboard pointing to one side or the other. This seems to have happened to some of the older makers as well. A "violinist" may excuse an "Old Master" for such a minor error, but show him a new violin with the same fault and right off it is branded worthless - so keep your necks straight.

When making my first violin I was using Heron Allens method. After a lot of wiggling back and forth I finally got it straight. But it set me thinking, and a little thinking paid off: My first advice
away in the stove. Second, always use centreline. Centre on top of neck must meet centre of top. And centre of back of neck must meet centre of back. Now mark a centreline on the back of fingerboard and extend around both ends. Before final fitting, glue fingerboard lightly on to neck, centre to centre. Use divider to find centre, then get a piece of stiff white cardboard and cut a card about 2" x 5". A piece of celluloid or translucent plastic would be even better. The bottom edge must be straight.



Then mark a vertical line (90°) in centre of card on both sides. Then cut out shaded area A so the card can rest on the edges B - mark the height of fingerboard at C. Now by sighting down the line D through center of fingerboard to center of top, you can be sure it is right. This method does not interfer with the clamping. You can have a peek-hole at C.

Oh, what was that the charge? No there is no charge. Just drop a dollor or so in the Journal's kitty, to help us keep it out of the red.

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"Now tell me," said the personnel manager, "just why you want to work for us."

"Well, sir," the applicant answered, "I got sick and went to my doctor. He gave me five pills and told me to take one after each meal. That was three days ago and I still have four pills left."

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ANNALS OF THE EARLY ITALIAN VIOLIN MAKERS

by Carl Forseth

Sebastian Vir
fiddles (Kleineu geigen) as useless instruments (onnutze instrumenta). When these scornful words came whistling through Virdung's beard, the musical world was cluttered with many truly "onnutze instrumenta" that were fretted. No maker bothered with patterns, he shaped and altered as the spirit moved him. These bastard instruments have long since disappeared.

The viol is not the immediate ancestor of the violin as is commonly believed but the lyra, particularly the arm lyra or lyra da braccio, which had a violin body and something like a guitar head. And though Virdung's criticism was directed against an instrument resembling the rebec, yet the violin may have evolved about the time he wrote his book.

Their common ancestor was the medieval guitar fiedel. The first crude viol may have been assembled as early as 1450, but the fully developed instrument did not make its appearance till 1550, at which date the violin form was
while the viol was being perfected the first lyra was born. Both the date and place of this event can be narrowed down to Venice in the closing years of the fifteenth century. In 1499 in Venice was pictured the first two cornered lyra, and six years later, 1505, we see a representation
The maker was probably Francesco Linarolli. Putting a viol head on this lyra body was an easy step that created the first violin. This may have been as early as 1515, judging by a 1535 fresco on a church at Saronno near Milan, showing an angel playing a violin or a small viola.

Venice as we have recorded was evidently the birthplace of the lyra, and may have been also of the viol, for its development stems largely from that city. History does not record whether the first violin took form in this
middle ages, but the provincial cities

The history of musical instruments is the survival of the loudest. Sometime in the 1500's, someone, somewhere - in France, Germany, Scandinavia, Poland or Italy - contrived a small but noisy
It had the arched top of the rebec, viol and lyra, also their soundpost and the bass bar of the latter two. In particular it had the arched back of the lyra and the head of the viol. It was a small instrument, containing no more wood than necessary and that judiciously distributed; and the stresses were so well balanced that it awoke from a touch of the bow.

Most of the violin maker's constructional problems had been solved long before the advent of the violin; yet it is difficult to believe the well-nigh perfect instruments of the early Amati's were not a new invention.

Gaspar da Salo of Brescia, 1542-1609, is usually credited with the invention of the violin; but a contemporary of his, Andrea Amati of Cremona, circa 1520-1580, was making good violins as early as 1560 when Gaspar da Salo was only 18 yers old. Amati was Da Salo's senior by probably 20 years; besides his violins are more finished, and more of them survive than the few claimed to have been made by the Bresian. No one, however, denies that Gaspar made the larger sizes of the violin family.

Gaspar's pupil was Giovanni Paolo Maggini, 1581-1632. With him passes the importance of Brescia. Yet Cremona seems always to have outshone its neighbor to the north. The Galileo-Micanzio correspondence reveals in 1637, several years before Stradivari's birth, that the cheapest Cremona violins cost 12 ducats while Brescians fetched less than 4.

The founder of violin making in Cremona was Andrea Amati. The date of his birth is unkown. Lutgendorff says he was married in 1554, and 1520 is the year usually placed for his birth. He died before 1580.

The next generation of Amatis, the brothers Antonio, ca 1556-1629, and Hieronymus, ca 1557-1630, according to the Hill brothers worked together all their life. Lutgendorff says their violin tops vary from 5 to 7 sixty-fourths of an inch in thickness. The claim that typical Amatis are heavy in wood is a myth. The few that are heavy are weak toned. The Amatis could no more make heavy plates vocal than can their modern counterparts. Likewise the claim that such violins have been scraped down is far-fetched. The owner of a good violin does not permit an experimenter to touch it. It is when the violin has lost its tone through old age that the owner may in desperation permit a "restorer" to alter its thickness. The loss of tone may also be due to the opening of a glued joint. Ole Bull was wont to take his hard worked violins apart every year or so and regluing them.

The third generation Nicola Amati, 1596-1684, Hieronymus' son, is considered the greates of the clan. He was also the greatestteacher in the history of the craft. There was also a fourth generation maker. Hieronymus II, 1649-1740. His work is elegant but his output small. Together with Stradivari, however, he undoubtedly was the mainstay of the Amati establishment during the declining years of Nicola.

Typical Amati violins are small, narrow, high breasted, with slab backs and fine grained tops.

Tradition makes Antonio Stradivari, 1644 or 1648-1737, a pupil of Nicola Amati. Some have doubted that Stradivari ever worked for Amati. Bagatella's claim in 1782 should however carry some weight. Some biographers claim Stradivari was born rich, others that he married a rich widow. Still others claim he got rich from violin making; but no violin maker believes that.

Stradivari's first independent attempts in the 1680's reveal the extremes to which experimenters often go. He greatly undercut the folds of the scroll, etc. Then thinking the size of the Brescian instruments may have contributed to their loudness, between 1690 and 1695 he lengthened his instruments beyond 14 inches. He also lowered the arching. Discovering low arching rather than size was the source of power, after 1700 he generally reduced the length to 14 inches.

Stradivari's arching, however, was not the circular curved of Maggini, but catemary curves both lengthwise and across the fiddle according to Lietgendorff, which is a rather far-fetched claim. Circular curves on the back tend to become catenary or parabolic (these two curves are identical when as flat as on a fiddle), but circular curves for the top tend to flatten somewhat in the center.

Stradivari sweetened the G string in his declining years by spacing the F's almost $1\frac{3}{4}$ inches apart at upper circles. Lutgeudorff adds Stradivari used the lightest of wood.

Typical Cremona backs as viewed from the side have a parabolic curve starting about an inch from the end and coming to a point near the foot of the post. The top arching, more like an ellipse, has a longer curve starting about one-half inch from the ends.

The tone of a thick top is improved with a thin edge. But an evenly thin top or one thinnest in center rings clearest with a thick ege such as Joseph adopted in his later years.

Stradivari made his best violins as an old man in his seventies. At this time Stradivari's coming rival, Joseph Guarneri II, 1698-1744, was probably working as a teenage boy in his father's workshop. Of the three brothers, the eldest Andrea never became a violin maker; he probably was apprenticed out to some other trade. The next, Peter, left his father's workshop in 1718, he worked in Venice from 1723 till his death in 1762. Joseph Guarneri, or Giuseppe Guarneri del Gesu as he is generally called, first signed his own name to a ticket in 1726.

Petherick's book on Guarneri prints several tickets showing Gisalberti was Joseph's teacher. If these tickets are authentic, not the sone but the father was Gesalberti's pupil, since some of the tickets are dated as early as 1705. If these stories of drunkeness and imprisonment of Joseph Guarneri are true they fit the father and not the son who made yearly progress in violin making till his untimely death at 46. The father's output the last 20 years of his life, 1720-40, was negligible, he died away from home, was not buried in the family tomb, and his property was sold to satisfy creditors. From 1731 to 1740 the son every year reported to the church census that he was the son of the late Giuseppe, while the census taker in his childhood parish as often reported the elder Joseph as living at the old address. A novelist could well picture Joseph as a child working in his father's shop, how he soberly and industrially, with the help of his brother Peter, was the main support of the family; for a drunkard's child is often a paragon of sobriety. He married in 1723, moved away from the parish and no one knows whence issued the great Guarneri violins.

Count Cozio di Salalene was the earliest comentator on Cremona violin makers and he did not know who was Del Gesu's father. He says Before 1732 Joseph tickets read: "Joseph Guarnerius Andriae Nepos facit Cremona...." If 40% Del Gesu tickets are fictitious, as has been said, what is to prevent an "orthodox" Del Gesu from replacing a "Nepos" label after Paganini had dragged a Joseph into the concert halls of Europe and made it respectable? Now Cozio tried to forget what he had said earlier about Joseph and began collecting his violins. Carlo Mantigazza, violin maker of Milan, took credit for making Josephs playable by thinning them down. If friendship had not blinded his judgment, Cozio de Salabue would have wondered: If Carlo can do this to Guarneris, why are his own violins so commonplace?

Nepos (nipote) means both nephew and grandson. None of the biographers could believe the son so disliked his father that he would ignore him competely and conjoin his name with his grandfather.

Count Cozio de Salabue, of the next generation, had heard the younger Joseph was jailed for having killed in a brawl one of the Ruggeris. Remembering how quickly the impalpable dust of forgetfulness settles over the memories even of the living, it is not improbable the two Guarneris are comfounded for bearing the same name.

Legal documents of 1738 and 1739 show the younger Joseph as having lived apart and worked apart from his father from about 1722. How could the father have kept the old establishment open from 1723 to 1740 with the sons absent and his own output so limited? Connoisseurs note a dozen similarities in the construction and finish of Joseph the Elder's violins and those of Carlo Bergonzi, 1683-1747. The inference is that Bergonzi served his apprenticeship in this establishment before the sons began working. He may also have worked with the elder Joseph after the boys left. That the younger Joseph and Bergonzi carved some tops from the same log

may have some significance.

Toward the end of the 1730's, Joseph Guarnere abandoned the early Guarneri features like the round outline and the long waist. After 1740 the outline resembles Stradivari's and the edges of the plates are thicker. But also the typical Del Gesu features appear, like the long F's and the altered graduation.

The fame of Cremona set in purple glory and her violins are still the best. If aspirants to perfection would cease to "raisonner" and instead ply their gouge intelligently their violins would become more and more vocal. Stradivari kept on learning till he died, and Joseph's swans are still singing out their soul to audiences of thousands.

- 0 -

AUSTRALIAN WOODS

by Norman Miller

The discussions on names used for the same woods, and the same names for completely different woods by Mr. W. Hall and K. Skou have been interesting and both enlightening and confusing at the same time. I feel that this is even more so in Australia, as we have pine that does not resemble spruce, or pine; and Maple that has no resemblance to Maple as a tree or the wood. Most of the Pine so recognized here is either Hoop Pine or Bunya Pine. There is of course imported Oregon Pine, which I beleive is known in U.S.A. as Port Orford Cedar, which in turn is called Lawson Cypress.

How a cedar, or cypress can be a pine I do not know. Our native pines Hoop, and Bunya, have no resin streaks, or hard and soft threads. The surface is quite plain, and no matter which way the wood is cut, slab or quarter, it presents a plain surface. It is however very resonant and would make good fiddle tops, but its appearance is against it, for tradition would have it that you must have hard and soft threaded material for a fiddle top. The growth rings on most native Australian Pines are practically invisible and negligible. Bunya-Bunya is botanically called "Araucaria Bidwillii" the cones are almost circular and ten inches in diameter. The nuts inside are 2½ inches long and number 20-30 to the cone. They are egg shaped and about 3/4 to one inch at the thickest part and are edible, tasting much like roasted chestnuts. Hoop-Pine is "Aracauria Cunninghamii" small cones about 2-3 inches small nuts. Then there is Kauri Pine; again a smooth grained wood. Specific weight cubic ft. Hoop Pine 34, Bunya 29, Kauri 30. We have cedar which is called "Cedrala Australis" and is very red in colour cu.ft. 28. Our Maple, commonly called Queensland Maple is often called Red Beech; botanic name "Flindersia Chatanna" very good for furniture and interiors but nothing like "acer platanoides". Two sycamores: Satin Sycamore (Ceratopetalum Succirrubrum) cu.wt. 39. Silver Sycamore (C. [illegible] glaucesens) cu.wt. 39, Looks very much like European Maple (acer) and could possibly be used as a substitute. Modulus of elasticity of Hoop and Bunya Pines is 1880. Kauri 1130, Q'ld Maple 1480. Here are some comparisons with American woods. White spruce cu.wt. 27.0; modulus of elasticity 2,280. Sitka spruce 24.7, and 1.830. Lawson Cypress 29 and 2,380, Norway Pine (imported) 29 and 2,030. Yellow cedar 31 and 2,020.

There are European Spruce trees growing here, generally in gardens. They are rarely if ever cut for lumber. Perhaps if they were cut and properly seasoned they could have good fiddle making propensities, but I doubt it as the sub-tropical climate would cause them to have growth rings with very wide soft portions. I have never examined any of these as timber and even the opposite could be possible. They may grow similar to our native pines, very close grained. Personally I have never tried any of our native woods for violin making, being content to import wood, properly grown in its correct element and correctly seasoned for the minimum number of years.

- 0 -

LETTER FROM DR. LEONARD MARSH, VANCOUVER

Dear Mr. Editor:

I was delighted that in your June number you picked out for comment, the great news that "the engineers had done it", they could now make a live performance in a concert hall sound like a recording in a living room! Also your pointing out that everybody expects voices to be amplified by "public address" systems these days.

There are quite a few artistic battles remaing for sensible people to wage. One - to which you are outstandingly devoted is for greater recognition that only fine personal craftsmanship and devotion can produce a good violin (and keep it good, I may add!) The irreplaceable skill of the expert repairman deserves a whole campaign on its own. Another is for quality of musical tone as against mere power and volume, to say nothing of the distortions which movies, Montavani, Musac and T.V. are constantly directing at our ears. Perhaps another is for music composition which retains links with humanity, as against technological experimenting with sound-effects.

One of my own long-established battles is against the "record-fan" who falls into the understandable but nevertheless serious error of judging all musical works by his favourite performer (recorded, of course). Records are wonderful - they have became more so, not because of hi-fi, etc., but because the range of music recorded is now so enormously wider. But they still aren't any substitute for the live performance. And the other danger is that they concentrate too much of the listener's attention on the performer or the conductor! Instead of the composer; in other words, the most creative and magical part of the music itself gets obscured. As for hi-fi and stereo gadgetry - it has turned people who might learn to enjoy music by just plain listening, into electricians and knob-twiddlers.

The biggest of all battles, of course, is for home music. We need more people who will really play musical instruments themselves. And this means study, application and time. Theoretically, today we have more time than our ancestors could ever have imagined. If we don't watch out, that time will be filled up with a flood of technological gadgetry. We need fiddles, fiddle makers, and cahmber music as never before, to steer some of that time.

Here's an enthusiastic vote in your favour for the contribution your association is making to the human arts!

- 0 -

Local News cont. from Page 3:

I understand Ragnor Helin has finished his best effort as yet, namely a new violin, but we are as yet to see it. Still on the secrets list. Or is he "Kibbetzing".

I wander why George Friess, missed our big meeting. Maybe he could not tear himself away from that extra special cello he is building.

Capt. MacDonald produced a very creditable viola recently, and I myself tagged up another viola for the record, which sounds pretty good.

Floyd Holly

- 0 -

PASSING OF HENRY DRIGGS:

We regret to announce the death, last month, of one of our most ardent readers. William Henry Driggs of 4002 Rand Drive, Sherman Oaks, California, passed away in his 85th year.

Immediately on hearing the sad news I opened his "file" and reread the many letters I have received from him. Written in the firm hand of a young man they reveal his love for Violins. Of a progressive nature he constantly suggests new ideas of construction technigue. There is also an atmosphere of culture about his writing which is most enjoyable.

Not only was Henry Driggs considred one of the best makers on the Pacific Coast but at one time owned a large collection of Old Masters. Only recently he presented a number of instruments to the music department of Scripps College at which he often lectured.

"He rests from his labour but his works do follow him" and I as editor close the "file" and regretfully mark thereon - Passed Away June,1960.

AN INVESTIGATION INTO THE GRADUATIONS OF STRADIVARIUS AND GUARNERIUS VIOLINS

By Don White

Part 6:

Last month I promised that I would next present a "summing up" of the case for thin centers of violin tops. On looking over the articles I have so far written this appears to me quite unnecessary. While I admit a certain uncontrolled development in the 5 articles, I still feel that "He who runs may read!"

Sangster keeps his top plate almost equal all over. K. Skou varies the thinner portions of plate but endeavours, if wood will allow, to thin "in front of bridge". Rowe, from his experiences with Guarnerius violins has worked out what he calls "The double Heart" system. All keep their edges thick. Rooke has produced the articles from the Science Magazine, following a similar pattern to Skou.

In this instalment I would like to again present Mr. Kristian Skou. His article will follow the few words I have to say first.

As Editor my first thought was to use Mr. Skou's contribution as a leading article but, since he discusses thicknesses and methods of obtaining a balanced tone I decided to include them in this investigation. I have long waited for someone to discuss Fuhr's system of attaining plate tuning by means of glass tubes and I thank Kristian for his enlightening article which I consider one of the most informative yet printed in the pages of the Journal.

For myself I herewith undertake the rather difficult task of describing the theories of Dr. Frederick Castle as presented in his book "Violin Tone Peculiarities" published in 1906.

I quite anticipate a storm of protests and arguments, as his ideas are to say the least unorthodox. Against these I am more or less prepared having experimented to some extent with his graduations. Also the many letters, I have received from Dr. Castles' admirers encourage me to proceed.

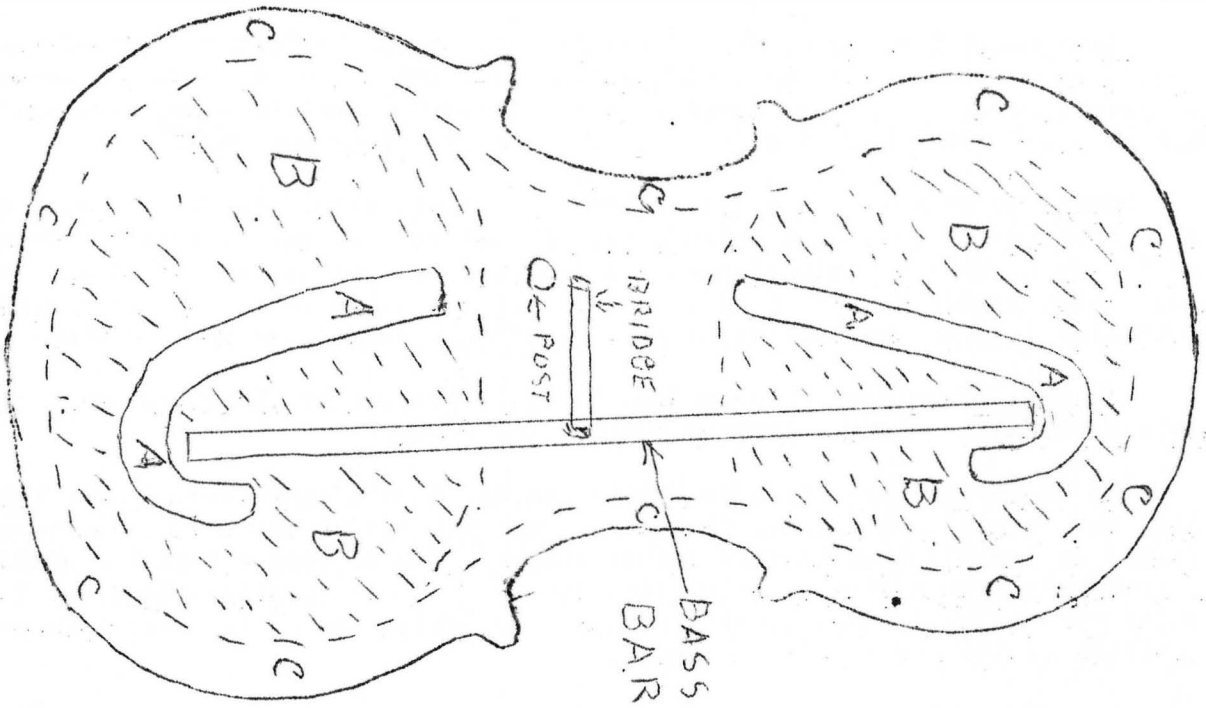
Dr. Frederick Castle, at the time he wrote his book, resided in Lowell, Ind. He carried the qualification of M.D. after his name but just what time he devoted to his medical practice is hard to imagine as his whole life was completely occupied with the study of the violin and its peculiarities.

CASTLES THEORY OF GRADUATION:

I feel that I now have the choice of presenting the theories which Castle advances in support of his graduations or first to give you the graduations and then prove its correctness by arguments. I have choosen the latter course as it might take pages of "suspense" writing to approach it from the former.

Herewith then I present a plan of the Top Plate of a violin graduated by Dr. Frederick Castle.

It will be noted that no thickness figures are given for graduation for the simple reason that different samples of wood used for the top vary as to density and would terefore require greater or lesser thicknessing.



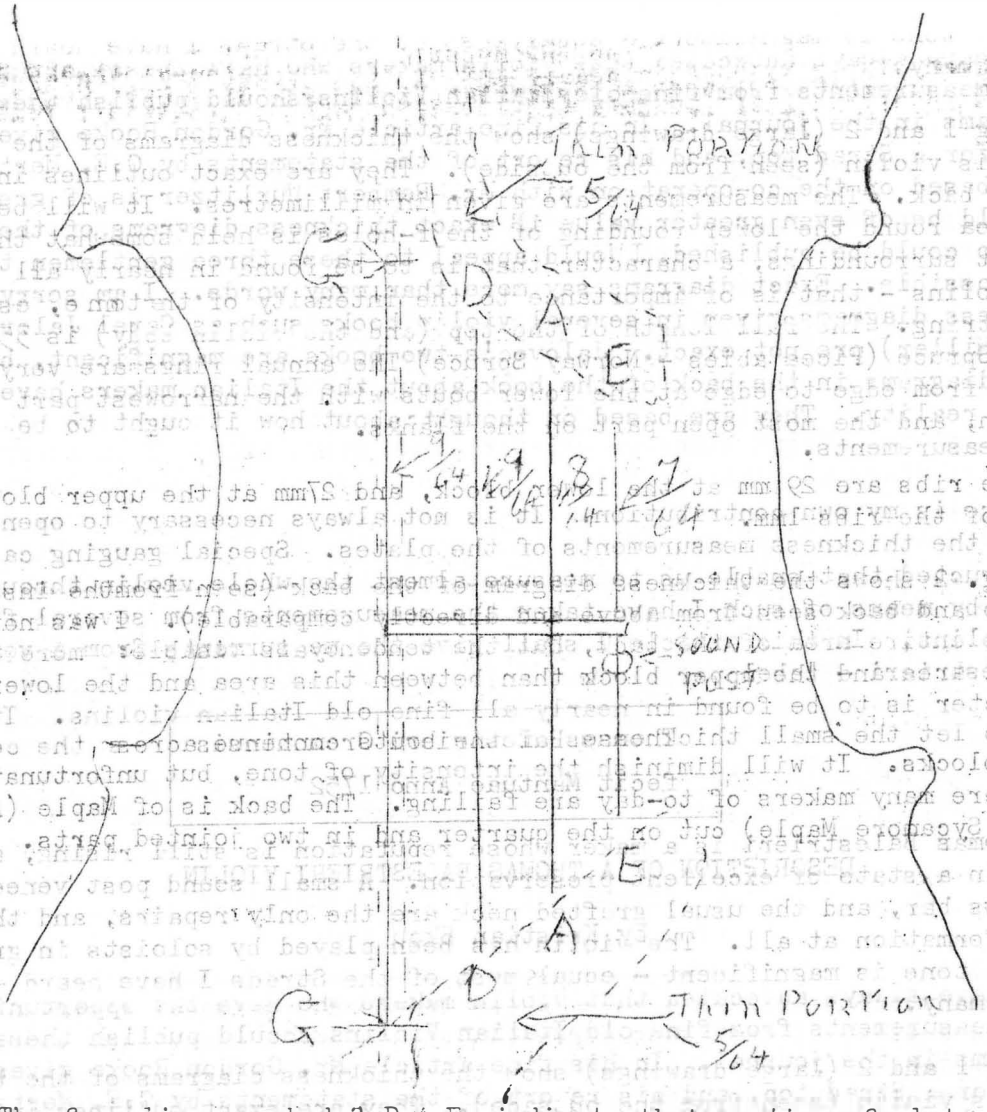
There are two main thickness graduations. Those shown as A and the remainder of the plate of nearly equal thickness. The portion shown as B is very slightly less than C.

To obtain some relative idea as to the graduations let us assume we have a normal dense piece of top wood.

The plate would first be brought to an equal thickness of, say, 10/64" all over. That portion marked A would then be reduced to what Castle calls "The limit of safety", or about 5/64".

There would only be a slight shading of the part marked B governed by some further graduating details which I will for the present outline briefly. I will in a future instalment go into the matter in detail as it is an important factor. I will also enlarge upon his theories relative to this feature at that time.

The following diagram will explain matters quicker than words.



The four lines marked G.D.A.E. indicate that portion of plate directly beneath the strings so named.

It will be noted that the G string runs almost immediately over the Bass bar. A peculiarity that you have perhaps never considered before, and to some extent proves Castles theory.

The length of the 4 lines (G.D.A.E.) indicates the distance that the wood is kept thick. At each end we will encounter the thin portion $\frac{1}{3}$" wide reduced to 5/64ths almost similar to a groove.

There is a further slight graduation from the G string side to the E side as follows:

Under G, plate thickness 9/64th inch
Under D, plate thickness 9/64th inch
Under A, plate thickness 8/64th inch
Under E, plate thickness 7/64th inch

Change of thickness is not abrupt but is shaded down gradually from string to string.

These then are the general graduations subject to some slight modifications. You now have enough information to go ahead and do some experimenting and if you make as good a fiddle as I have made with this system you will not be disappointed.

Mr. Kristian Skou's contribution is now presented:

DESCRIPTION OF A THOMAS BALESTRIERI VIOLIN

by Kristian Skou

I have always advocated that violin makers who have the opportunity to take thickness measurements from fine old Italian Violins should publish these as thickness diagrams in the journal. In his fine article Mr. Gordon Rooke gives just such a diagram for a Strad top, and his report of the statements by C.E. Mertzanoff and I Westall based on the co-operat on with Mr. Rembert Wurlitzer is of great value, but it would be of even greater value if exact thickness diagrams of the violins referred to could be published. I would appeal to these three gentlemen to supply these if possible. Exact diagrams say more than many words. I am sorry to say that the thickness diagrams given in several violin books such as Carel Jalovec (referred by Mr. Miller) are not exact. Jalovec's two books are magnificent, but the thickness diagrams in the back of the book about the Italian makers have nothing to do with reality. They are based on thought about how it ought to be , and not on exact measurements.

Here is my own contribution. It is not always necessary to open a violin for taking the thickness measurements of the plates. Special gauging callipers have been constructed that enable us to measure almost the whole violin through the F-holes, and by means of such I have taken the measurements from several fine old Italian violins. In this article I shall give the measurments from a very fine Thomas Balestrieri - label

> Thomas Balestrieri Cremonensis
> fecit Mantuae Anno 1752

Thomas Balestrieri is a maker whose reputation is still rising, and this violin is in a state of excellent preservation. A small sound post veneering, renewed bass bar, and the usual grafted neck are the only repairs, and the plates have no deformation at all. The violin has been played by soloists in great concert halls. The tone is magnificent - equals most of the Strads I have heard - and I have heard many.

Fig 1 and 2 (large drawings) show the thickness diagrams of the top and back of this violin (seen from the outside). They are exact outlines in full size of top and back. The measurements are given in millimetres. It will be seen that a small area round the lower rounding of the f-holes is held somewhat thicker than the nearest surroundings, a character that is to be found in nearly all fine old Italian violins - that is of importance to the intensity of the tone, especially on the E-string. The full length of the top (and the violin body) is 355 mm. The top is of Spruce (Picea abies - Norway Spruce) The annual rings are very clear, 186 in numbers from edge to edge at the lower bouts with the narrowest part in the f-hole region, and the most open part on the flanks.

The ribs are 29 mm at the lower block, and 27mm at the upper block. The thickness of the ribs 1mm.

Fig. 2 shows the thickness diagram of the back (seen fromthe inside, that is both top and back seen from above and directly comparable). I was not able to measure the entire area of the back, but the tendency is visable: more wood between the central area and the upper block than between this area and the lower block. This character is to be found in nearly all fine old Italian violins. It is important not to let the small thicknesses of the bouts continue across the centre joint along the blocks. It will diminish the intensity of tone, but unfortunately it is a point where many makers of to-day are failing. The back is of Maple (Acer pseudoplatanus - Sycamore Maple) cut on the quarter and in two jointed parts. There are

74 annual rings from edge to edge at the lower bouts, and 70 regular curls. The wood is of a character which is commonly referred to as being "of native growth", a term which is not to be taken too seriously. This type of wood is and was offered for sale as well as beautiful broad-curled Maple, but beautiful wood is expensive, and the old masters had not always too much money.

These are the thickness diagrams and the character of the wood. But I should also like to give the diagrams of the micro-tones of this violin. Some words to explain: - Micro-tones (or local tones) have nothing to do with ordinary tap-tones where the whole plate vibrates. The micro-tone is the audible result from vibrations of a very small area of the plate, say a square centimeter or less. From time to time the micro-tone test - or rather: tests approaching to that idea - has been used by violin makers, and is mentioned in the literature, e.g. Karl Fuhr: "Die akustischen Ratsel der Geige" ("The Acoustic Mystery of the Violin"). Fuhr produces the tone by means of a little glass-tube, placing this on the plate, and rubbing it between two wet fingers. The tone produced in that way originates from a somewhat greater area than the real micro-tone, and the weight of the vibrating glass-tube causes a factor of uncertainty. A better - and simpler method has been worked out by Mr. G. Sanborn of Sweden, who has described his method in a series of articles in "Slojd och Ton". A very light tap - only as a touch - with the back of a nail on the plate, or a light stroke with a finger-tip produces the micro-tone. Of course a good ear and some training are necessary to determine this tone, but it can be done. Is then the micro-tone expressive of any physical reality according to the acoustic of the violin? It seems to be so. The same micro-tone at two different small areas seems to be expressive to the same resistance (and reaction) to the same physical (here oscillatory) action. I have taken a bar of Spruce: 300 x 6 x 12 mm, and I have tested the micro-tones along the bar. The pitch was rising towards the ends of the bar. Then I formed the bar in the way that the 12mm were kept in the middle of the bar, but towards the ends the heights was dimirished so that the micro-tone was the same all along the bar. The ends of the bar were now 3mm high, and the curve from end to end was a true parabola, just the form that for a central pressure gives equal pressure all over.

The pitch of the micro-tone depends on several factors: the greater elastic modulus of the wood, the higher pitch - the greater specific weight, the lower pitch- the great thickness of the plate, the higher pitch - the more wood surrounding the area for the micro-tone, the lower pitch: that is: for a plate of equal thickness all over the lowest pitch is in the middle of the plates, and the highest pitch at the edge. Moreover the arching of a plate is determining: the more acute arch, the higher pitch (just the same principle that allows us to play on a saw-blade).

Mr. G. Sanborn assumes that the old masters worked out their violins in the way that the micro-tone was the same all over the violin, on the plates as well as on the ribs (the bass bar an octave above), and further that the micro-tone was the same as the air-tone of the violin. Regarding this, I do not like the term air-tone. The true air-tone is a fictive idea - It would be the tone pitch for the air-volume if the violin body was not allowed to vibrate, e.g. incapsulated in a thick body of lead. Even the weakest blowing into the f-holes will cause the violin body to vibrate, and will not give the true air-tone. (This tone pitch is higher with the sound post placed than without, although the air volume has hardly been altered). I would rather speak about the tone pitch for the whole vibrating system, the "body-tone" or whatever else we might call it. We can easily determine this tone when touching the back of the violin with a hand, and singing against the top. The note for which the violin body gives full resonance is the "body tone"). According to Mr. Sanborn's assumption he thinks that all fine old Italian violins have the same micro-tone all over. I have tested many such violins in that respect, but I have not been able to confirm his assumption. Of course, we can construct a violin in

that way, and it has been done. The tone character is lovely (almost Amati-like), but it involves some constructive disadvantages. The top e.g. will have thick center and thin edges - and worse: the area surrounding the f holes will be very thin, resulting in lack of intensity on the E string. But his idea is not worthless, for I have noticed another thing: in the best of the old violins (and also new ones for that matter) there seems to be a certain accordance for corresponding areas on the top and the back, e.g. if the top has the micro-tone "g" in the middle, the back has also "g" in the corresponding area, and if there is "b" in an area of the bouts, there is also a "b" in the corresponding area of the back. Small divergences are to be found, but the accordance seems to be more than a coincidence. And what is more: this accordance is physically correct. The vibrations in the top plate are mainly transferred to the back (and vice versa) through the air-volume, and full resonance can only be obtained if the corresponding areas of top and back have the same resistance and the same reaction to the vibration energy. Could that be the way in which the best of the old masters determined the relative thicknesses of top and back?

Fig 3. (small drawing) shows the micro tone diagram for the top (from the outside) of the Balestrieri violin, and fig. 4 the diagram for the back (from the inside). The names of the notes are given in our system (the German system), because your system takes more space, but I shall translate.

Our System	Your System
g	g
gis	g sharp
a	a
b	b flat
h	b
c	c
cis	c sharp

The mark ↗ after the note says that it is a little high, and ↘ that it is a little low, and the long ⟶ indicates the direction in which the pitch is rising. The notes along the edge of the back are the micro-tones for the ribs taken equidistant from top and back, and the pitch is rising from these points towards top and back.

In a further article I shall give the results from my microscopic examinations of the varnish from this and other old Italian violins.

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FOOT-NOTE FROM KRISTIAN SKOU:

In my contribution to your Investigation into the Graduations of Stradivarius and Guarnerius Violins page 10 line 16 from below a line has fallen out - unfortunately including just the words that explain why a thin centre is better than a thick one. The whole passage should say:

"The oscillations of a violin plate are a combination of transversal and longitudinal waves, but the thicker a plate is, the more dominating is the longitudinal factor, forming shrill overtones." The missing words underlined. Perhaps it should be corrected for the sake of the readers.

The English word for the German "Schalmei" (page 21) is "Shawm", an oboe-like instrument, but more coarse and piercing in tone.

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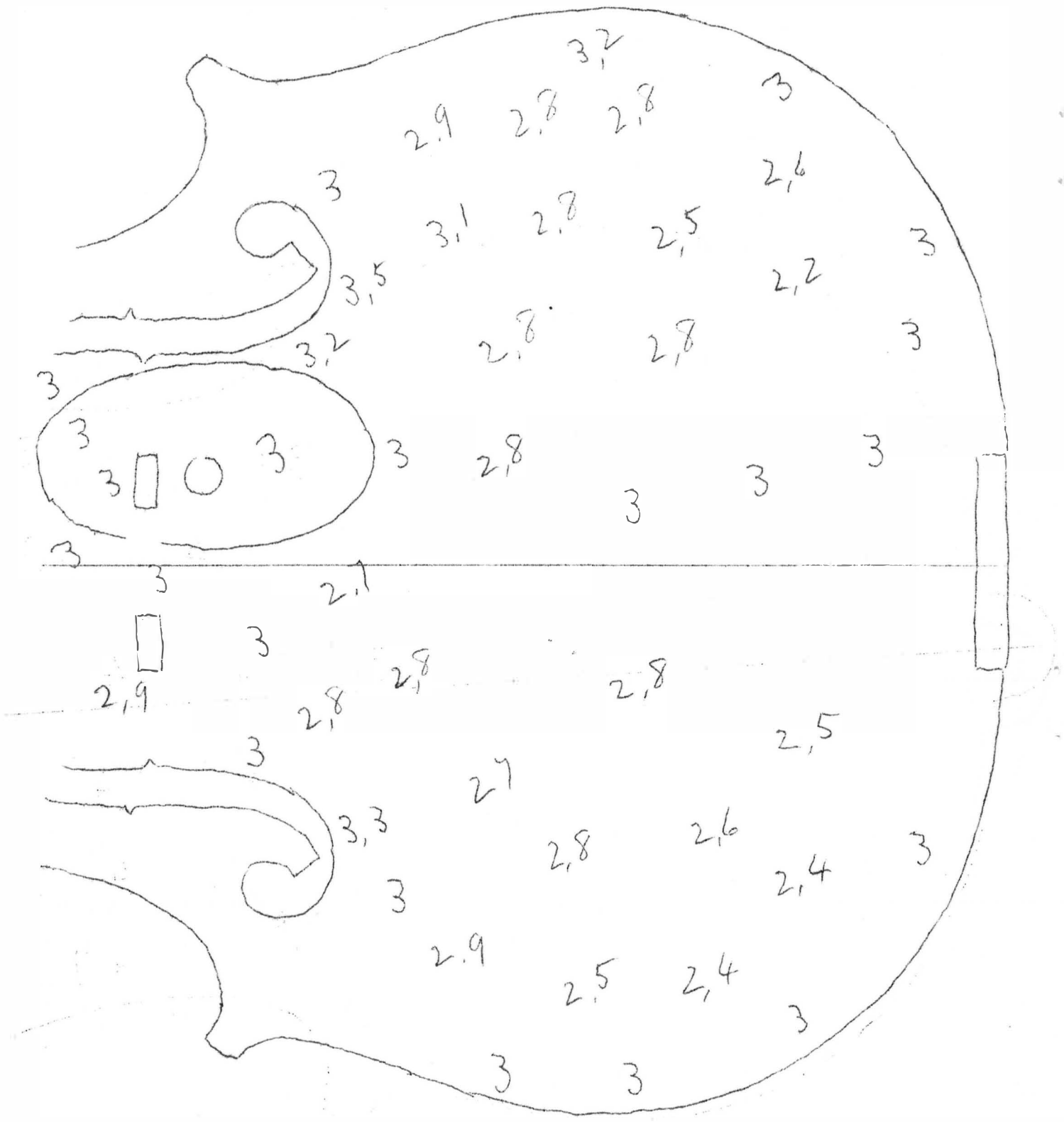


FIG 1 B. BALESTRIERI TOP.

BY - K. SKOU.

JULY 1960.

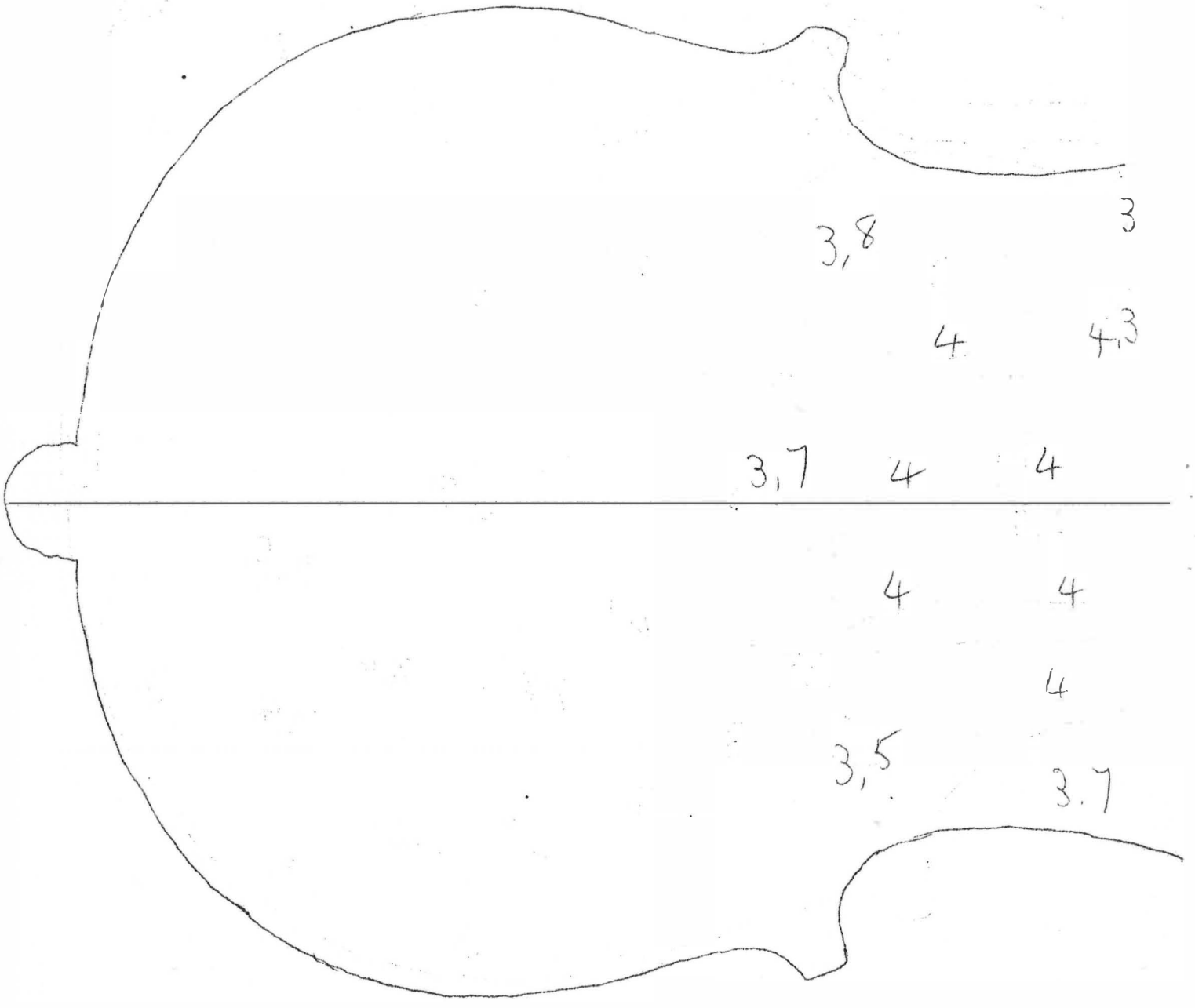


FIG 2. A. BALESTRIERI BACK

BY - K. SKOU.

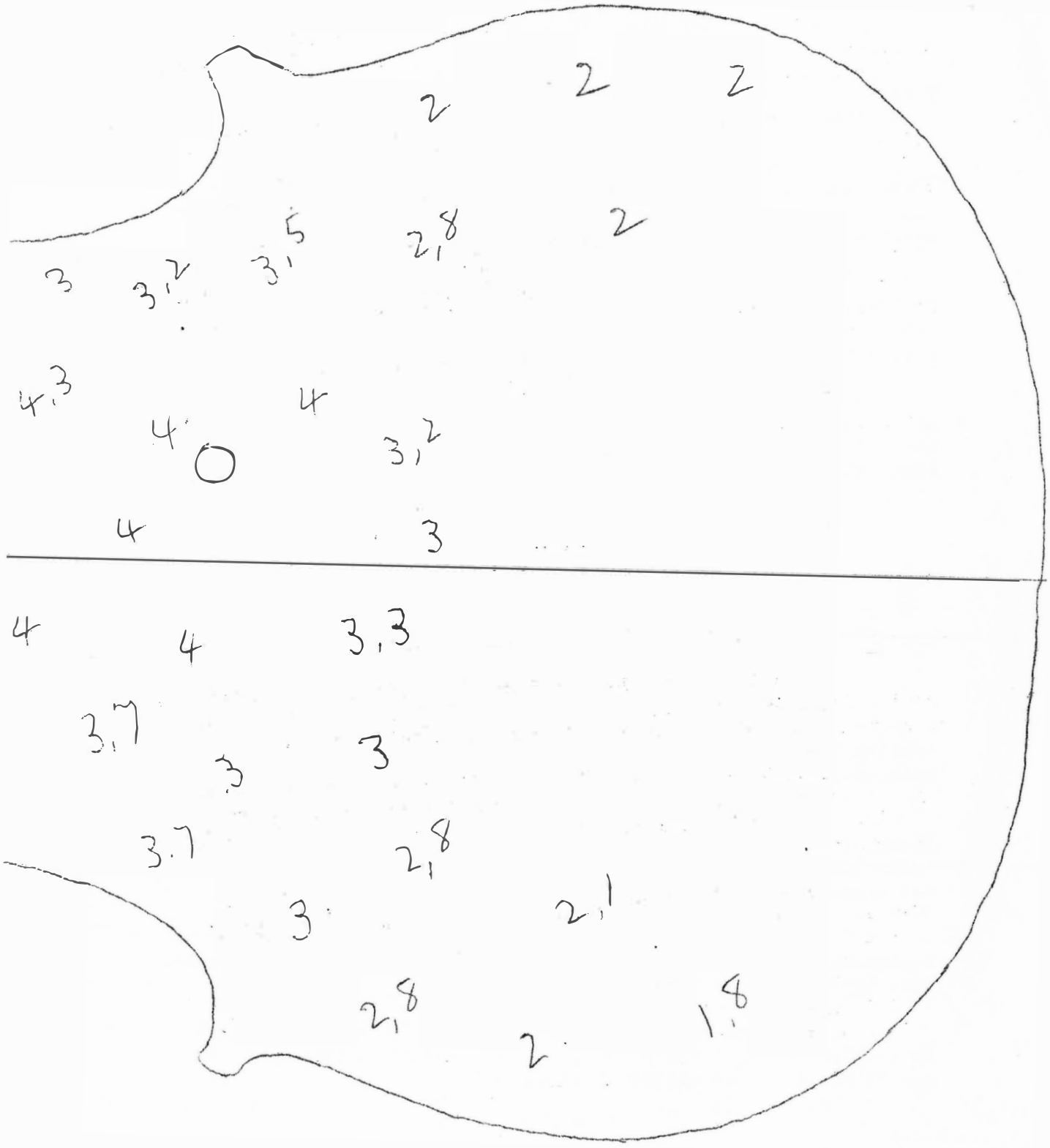


FIG 2 B. BALESTRIERI BACK.

BY K.SKOU. PAGE 25.

JULY 1960

THE HOBBY SHOW COMPETITION

The International Hobby Show held in connection with the Pacific National Exhibition will be held from August 20 to Sept. 5, at Hastings Park, Vancouver, B.C.

Almost every known hobby is included in this show and exhibits are displayed from the four corners of the earth. It is said to be the largest Exhibition of its kind in the world and well worth seeing. Prizes are given in each department.

The Violin Makers Association of British Columbia have decided to enter a Booth and it is hoped that every member in the association will exhibit at least one instrument so that our display will attract the attention it has enjoyed in previous years.

Several of our Readers from distant points have declared their intention of sending violins to this Hobby Show and we hope the officials will allow us to include these instruments with our Local display.

- C -

VANCOUVER INTERNATIONAL FESTIVAL

The third annual International Festival held in Vancouver, British Columbia from July 22nd to August 15th will be one of the outstanding musical events on this continent this summer.

Artists of the very highest caliber will converge upon Vancouver for this event. The New York Philharmonic Orchestra under its distinguished conductor, Leonard Bernsteing will provide two concerts.

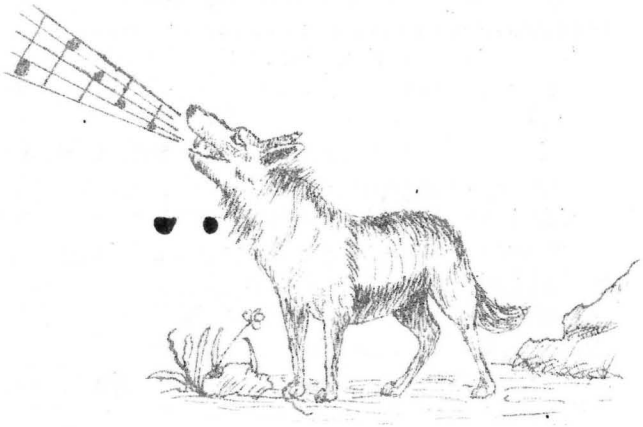
Other guest conductors will be Carlos Chavez, William Steinberg and Louis Lane. Glenn Gould the famous Canadian Pianist will appear several times.

Three operas will be presented and Drama, Ballet, Art Exhibitions and other departments of Art will be prominent. In all it should be an artistic treat.

- C -

WOLF NOTES

by The Editor



NEW SUBSCRIBERS:

This month we welcome to our group a large number of new subscribers. They heard of us mainly through an advertisement we inserted in that old, well established and valuable publication "The Strad" magazine. What particularly pleases me is the fact that a large percentage of our new friends are from the British Isles.

While extending a hearty welcome I must at the same time remind them that the Journal belongs to its readers who keep its pages filled with their contributions. We can well look for some new ideas and criticism.

LIONEL TERTIS CELLO:

Mention of "The Strad" reminds me that in the July issue of this magazine there is a news item stating that Lionel Tertis of viola fame has now designed a Cello on the same lines as the "Tertis Model" viola. A cello of the Tertis design made by Lawrence Cocker of Derby, England received a very fine reception when played at the famous Wigmore Hall, London.

The soloist was Miss Lillian Warmington (in private life Mrs. Tertis) the tone of the instrument was said to be rich and resonant and of a lovely quality. Mr. Tertis has prepared full scale working plans for his new cello. These will be available to those who wish to experiment on the new design.

LETTER FROM MR HENRY WINFIELD, SCAPPOOSE, OREGON:

I like to insert from time to time, outstanding letters I receive from our readers. Here is an extract from one written by my new friend Henry Winfield. Let it speak for itself: -

"I learned something many years ago from "Pattern Makers" for castings, that they used Pine never Spruce, because it stayed put while at the Foundry. There are many kinds of Pine, yet it seems to me, most every vidin maker wants Spruce. When you have arrived at the finishing stage with a Spruce top, and have to damp it 2 or 3 times, to get away from that corduroy effect, by repeated sandings. It must take from the wood, the very substance needed for tone. Pine on the other hand, when aged, can be dampened repeatedly and it stays flat, solid, there must be something better about Pine. I am sold completely on aged Pine. Others may prefer Spruce.

Good wood, correct archings and graduations I don't see why anyone can fail to make a good violin."

MR FRANK J. KOSCAK, MILWAUKEE, WIS:

Here is another letter, from a new reader Frank Koscak which contains good violin makers "small talk" Quote:-

"I found the articles on wood filler interesting. I can not agree with Mr. Hoing condemming all fillers mentioned. I too have tried every type of wax known, and of the waxes have found beeswax the best, if covered with a wash prepared from logwood chips desolved in grain alcohol. Using log wood chips reacts on the wax, allowing the varnish to stick and dry properly, also imparting a golden color to the ground. The best filler I believe is boiled linseed oil, not raw. This boiled oil is allowed to stand until it becomes heavy and thick, about like molasses, it is put on with a pad, rubbed in while the violin is heated periodically over an electric hot plate, hot enough to thin out the oil. Then I hang the violin out in the sun for about a month to dry , and rub down with very fine steel wool before varnishing. I find that a quality of tone is gained that stands out. It takes about 1½ years before the instrument is truly dry and settled down after stringing up. With this method the fibres and curl in the wood glows and rolls with every motion.

I also have used plain copal varnish (copal and boiled oil) for a filler and found it very good. I don't think fillers are a problem as long as the varnish and fillers used are soft. If you wish to know more about my methods, let me know and I will answereto to the best of my ability.

I use imported woods, hard resonant spruce, and maple not too hard.

I've had the tops off some pretty good Italian violins, Janaurius Gagliano, Cappa, J.B. Guadagnini, Dalla Costa, other Gagliano's and a couple Amati's along with others. I found the tops of the better instruments to be quite tough, fiberous, hard, and those are always thin in wood 6/64 - 7/64 or so under the bridge, the softer tops are thicker, and none had a deep penetration of filler, nothing on the inside except rosin dust."

BASS VIOLINS:

At least three readers have asked my why no articles appear in the Journal pertaining to Double Basses (do they still call them Double Basses, or am I dating myself?) I feel the same may be said of violas and cello's. If any of our readers love these important instruments and care to start a discussion on them I for one would be only too pleased. I have never made a Bass or a Cello. Five years ago I made a viola. Scooping out plates, at that time, seemed impossible for me (a mere wood-butcher) so I graduated a nice piece of maple, a flat piece of wood, bent it to form an arch and glued it on ribs. The top, of sitka spruce, I did scoop out and made a fair job. Strange to say this instrument will hold its own in any company for tone! "So much" for scientific arching!!!

ROELOF WEERTMANS CELLO:

News has been received that a cello made by Mr. Weertman is causing very favourable comment in musical circles in New York. I hope to give a full report of this instrument in our next issue.

REGULAR PUBLICATION RESUMED:

This months issue is numbered, Nos 9 and 10 - Volume 3. In this manner we can keep our records clear.

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