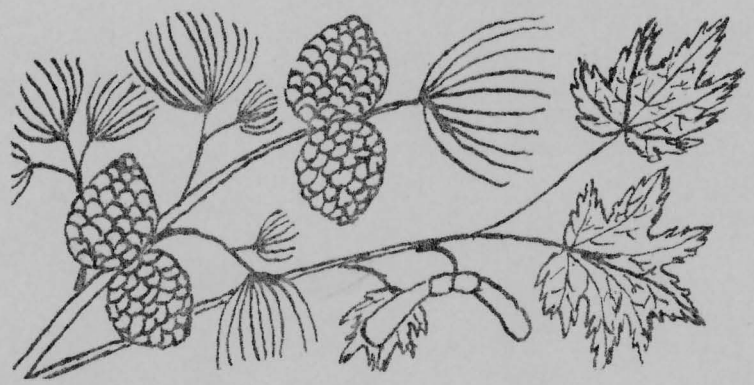
NOVEMBER 1960

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

The Violin Makers Journal

A Non-Profit Periodical . Published Monthly

By The Violin Makers Association Of B.C.

Vol. 4...No. 1.....November 1960

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EDITORIAL PAGE OF *The Violin Makers Journal*

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REVIEWING STANDARDS

On another page of this issue Mr. Clifford Hoing writes a very timely article entitled "Review your Standards".

Now it is quite possible that Mr. Hoing is not fully aquainted with the difficulties of selling instruments on the North American Market, for the quality of the violins offered by both Earle Sangster, Carmen White and many other makers are of top notch quality. The prejudice against modern violins is apparently more prevalent this side of the "Atlantic".

We do not wish to enter this argument. It was the theme of Mr. Hoing' article which attracted us, The suggestion that we must always be conscious of improvment in the Standard of the works we produce. We cannot stand still - we either go forward or retreat!

This month we celebrate the Third Anniversary of The Violin Makers Journal and Mr. Hoing's suggestion is most timely. A Review of our Standards is indicated!

Looking back over the last three years we feel justified in believing that the Journal has come a long way. It is now well established as a reputable magazine in nearly every important country of the globe. The scores of testimonials we receive convince us that we are doing good work in promoting the building of better violins.

The question is: Where do we go from here? Fi

Financial difficulties still dog our footsteps and prevent us from spreading out into a properly printed periodical. This is a subject we must soon face for we are greatly handicapped in not being able to reproduce photographs. Should we reduce the issues to every other month, affecting considerable savings? Should we raise the subscription price? Or should we just go on as we are at present for another year or so?

On these suggestions we ask for our readers opinions. But today is OUR DAY. It is an occasion for congratualating ourselves that we have in three short years established ourselves as something really worthwhile.

A VERY HAPPY BIRTHDAY IT IS!

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LOCAL NOTES

by Floyd Holly

ARE WE HUMBLE ENOUGH?

Have we sufficient humility in our make-up, to be great violin makers?

Dare we strike five straight lines across a sheet of plain paper, adorn it with a few notes, to claim ourselves to be a Beethoven, Mozart or Brahms. Does the mere juggling of the same alphabet, make one a Shakespeare, Byron, or Chaucer.

Why therefore should the world
or an Amati, because we glue a few bits of wood to-gether, which roughly conform to the shape of a violin.

It is so easy to pretend genius in found in a small bottle of varnish. Success is in following graduations, some will say, arching is the Key says another. Do we at anytime place credit where it is due.

To claim that one only requires to find the correct thickness, or arching etc., is tantamount to finding excuse for failure,

The thought arises, we talk glibly of Italian tone, German tone, French tone; is not this so dynamically true. There is such a thing. Different national school produce different types of tone. In their respect the schools individuals have their own shadings of tone. Furthermore the very character of the individual is reflected in the tone of an instrument.

No mater where an individual makes an instrument, whatever the climate, using varying grades of wood, a definite quality of tone peculiar to that individual will be found in those instruments.

Basically tone is
every maker to diligently make many instruments, to establish his own tone, and recognize it as such, following one set of standards.

From this point forward it is sweat and grind, a personal dedication, one must go to the fires many times. Each time a slight refining process takes place. Still adhering closely to the original method of construction, and only making one experiment each time. Noting each change up or down, having the courage to accept failure, and keep going forward.

Plan our your pathway, tread it firmly, diligently seeking and concentrating all your mental energy until it is possible to link up with the Universal mind which is omniscient. Drawing unto oneself inspiration as due reward for applied dedication.

At this stage of progression we shall begin to feel the immensity, the broad concept of the art of violin making. How puny and small we were in the early stages. How joyfully we can be in humility, knowing that only by linking with the great forces of the Universe, can we be allowed to transform, add bits of wood, into a thing of beauty, a joy forever.

Think and dwell upon the fact that all the emotions known to man can be excited by the outpouring of this little box, which so nearly approaches the glory of the human voice.

Yes, the scientist, the chemist can help us along the road, but the greatest help will be found in our own humility and personal dedication to the King of all instruments.

VIOLA RENAISSANCE

by Clifford A. Hoing

Controversy on the sizes of violas have arisen on several occasions during the last hundred years or so and the reason for this can usually be found in the ignorance of some people on the true purpose of the viola in music. Quite a number of musicians (?) still think that the viola is intended to play a Tenor part. This is not true. There was at one time a Tenor in the violin tween the knees and of about 17½" to 18" in body length. This was tuned an octave below the violin. The Gaspar da Salo instruments, now in use as violas, were never intended to be played at the shoulder or tuned only a fifth below the violin. These are really Tenors.

The great composers discarded the tenor violins in favour of the viola. This can be proven by the fact that the notes written for the so-called tenor parts are never below the C of the lowest string on a viola in Quartet or Orchestral parts of the original music written during last two hundred years. The viola is an Alto instrument.

There are, of course, always some in the musical world who wish to be thought of as something superior in their chosen sphere and for this reason strive to force their ideas, however excentric cognized. Such was the "big viola" idea of recent years.

Many articles were published in newspapers and in magazines. Even a book was written on the idea.

It was definitely stated that no viola under the size of 16¾" in body length could possibly have "the true viola tone". Many makers and players tried out this ungainly instrument. At the same time, scientists who tried out the "big viola" theory found that very large instruments did not give the deep and powerful tone they expected. This was of course for the simple reason that the size was too big according to the compass of tuning.

Not surprisingly from the psychological point of view, it was people of small stature who seemed mainly interested in trying to turn themselves into dominating personalities by trying to play these big "violas".

But players as well as scientists soon found out that the much boosted "big violas" were unsatisfactory. The characteristics of the tone was found to be booming and very uneven on various notes over its register.

Meanwhile, individual makers were not idle. At the International Exhbition for Violas at Ascoli Piceno, Italy, in September, 1959, 130 violas from the worlds finest makers gave ample proof that the grotesque "big viola" craze was just a flash in the pan. The main perpetrator of the idea who carried his plans so proudly to Italy, found not one instrument on his cherished model at the Exhibition.

The Italians now favour a 16½" viola on a rather narrow Strad model with the top bout slightly enlarged in proportion to the original Strad model. I was very gratified to have awarded to my own instrument the Special Silver Medal and Diploma for Outstanding Artistic Personality. My violas are usually made 16¼" to 16 3/8" in body length on a model of my own design, slightly broader in proportion than that of the Italians.

The main purpose of any design for musical instruments should of course be to obtain fine tonal results, and I am pleased to say that my violas are being used in preference to valuable old instruments of more than ten times the price. I say this because th value of an instrument is (or should be) in its tone. The actual price paid for an instrument has no relation to results that can be extracted from it.

Now the most remarkable thing about the revival of violas of medium size on a classic style is that the person mainly responsible for the recent grotesque period in violas was reported in "Violins and Violinists" and also in a German magazine to have been in favour of violas of 42cm. (16½") FOR MANY YEARS!!! He is obviously trying to glean a little reflected glory for personal reasons. A point which casts doubt on his original purpose in boosting "big violas". This should certainly give food for thought to players who were encouraged to purchase 16¾" violas.

It now seems almost like a compliment to have been contradicted and insulted by a person capable of such a "back flip" in policy.

Actually of course the body length is only one of many factors that influence the tone of an instrument. In the case of the "big violas" in question, the extra width and bad proportions combined to make such a poor design that it would have been nothing short of miraculous for the audible results to be acceptable to a musical person.

Incidentally, I notice that one of your contributors advocates making instruments on personal designs rather than following master patterns. I do not think this is wise, especially with violins, as so many fine master designs are available. How is an amateur to know what is good or bad in a design? Although I had a long artistic training and thirty years experience in violin making, I maintain that it is a most difficult thing to design a successful musical instrument. So I do not advise the amateur to add to his difficulties any more than is necessary.

Now that a number of viola makers are working on the right idea by making instruments of medium size and good well thought out designs, we may be on the road to a renaissance in viola making and playing, with a far higher standard of tone than has before been thought possible. That is my ambition to which I have been working for twenty five years, since making my first viola. It pleases me that some think highly of the results so far acheived.

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LIFE DEPENDS ON LABOURS OF OTHERS:

> A hundred times every day I remind myself that my inner and outer life depend on the labours of other men, living and dead, and that I must exert myself in order to give in the same measure as I have received and am still receiving.
>
> .....Albert Einstein

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DON WHITE REPLIES TO LEO LARSSON
ON THE SUBJECT OF TEMPERA

I feel I must correct a few observations made by my friend Leo Larsson in the October issue of the Journal.

Speaking on the subject of Tempera as a filler, and referring to my article on Tempera in the September issue Mr. Larsson says and I quote. " the artist in using tempera as a base for his oil, or oil and temp applies it thick so as to eliminate any texture pattern coming through his painting." end quote. He then goes on to suggest that tempera because it may be used as a base for subsequent painting would not be fully transparent and - quote "does not allow the wood fibers to show perfectly clear as seen in the old Italians."

The suggestion made by Mr. Larsson that the Public Library be consulted on the subject of Tempera is an excellent one, for there are quite a few books on the subject which will prove very enlightening to the reader, providing: - he consults only books written on tempera as used during the period we are concerned with, namely the 16th and 17th centuries.

During that period tempera was used almost exclusively and some of the greatest Masterpieces were created. One could well argue that the art of painting showed a steady decline with the introduction of oil mixed with tempera and later oil alone. Now do not critisize the artists for this change of material. Every generation seeks to express itself in different terms and to do so requires a different medium. The painter, unlike the violin maker is not so concerned with creating a masterpiece as he is in searching in some manner to express the psychology of his generation. Perhaps that is why we should not think too harshly of modern abstract paintings. One must admit they have a problem in endeavouring to express the psychology of this confused age.

Let us return to our original theme; the transparency of tempera! Books on tempera will soon reveal to the reader the fact that this medium excels in this very featur

If one color is painted over another the color underneath shows through. It is, as far as I know, the only medium that will successfully accomplish this much desired effect, giving to the painting that much sought after double dimension feature.

When applied to the bare wood of a violin it is as transparent as a coat of clear varnish. The addition of yellow vegetable oil coloring will in no way impair that translucent quality. Anyone can prove this at the cost of only one small egg. Try it on a piece of Maple sanded perfectly smooth.

Regarding this sanding, or conditioning of wood to receive varnish I would like to refer to Mr. Larssons mention of using a bone for smoothing wood. He suggests burnishing with a bone after the application of tempera. I cannot agree with this.

The subject of boning was brought up by Mr. Joseph Reid who suggested that it might be the reason for the excellent tone of the violin made by Mr. Robert Holt, of Belfast, Maine. Mr. Reid does not believe that polishing with a bone would have any effect on tone. The object of boning, as I understand it, is simply an almost perfect method of "bringing out" the grain of the wood and this should be done before applying tempera, not afterwards.

I must thank Mr. Larsson for keeping the subject of tempera alive and I hope others will do likewise.

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THE PRE-VARNISHING TREATMENT OF VIOLIN PLATES

by Don White

EDITOR'S NOTE: The latter part of this article appeared in our September, 1960 issue. It is reprinted here so that the article may be complete. It was also printed in the last issue of Violins & Violinists, published by Wm. Lewis & Son, Chicago, and written at their request.

Perhaps no branch of the art of violin making has received so much attention and has caused so much controversy as that of the composition, methods of application and general proficiency of the old Cremona varnish.

Volumes have been written, scores of lectures have been made and the imagination of the maker has been taxed to the utmost in suggesting ingredients for the old Cremona formulas. Today we appear to be as far from the truth as ever. Any theories brought forward must continue to be simply conjectures. The secret must, I feel, be regarded as a lost art. Lost, not so much because it was a secret, but for the simple reason that the ingredients and technique were in such common use as not to be recognized as a secret at all and therefore never recorded.

The purpose of this article is not an attempt to appraise different methods and theories from the standpoint of their being the solution to this lost art, but to analyze, from the standpoint of its practical value to the modern maker, one phase of their technique, namely, the pre-treatment of the wood before varnishing.

It is around the subject of the pre-varnishing treatment of plates that most of the arguments center, and it is possibly the main factor in producing (or ruining) good tone. Thousands of violins have been made, which, when played in the "white", were pronounced excellent only to be classed as second-rate after treatment and varnishing. The texture of the varnish we use does not, itself, appear to change the tone to any extent. Good violins, of excellent tone, have been produced with both oil and spirit varnish, (representing the two extremes). No attempt will be made to discuss commercial fillers.

In my argument, I hope I may be forgiven for dwelling on merits of tone production rather than that of beauty. We all admit that a filler and varnish that will duplicate the transparent loveliness of the "old masters" is definitely desireable. But if in this attempt of duplication, the tone is impaired, then its practical value is nullified.

The treatment of wood previous to varnishing, or the use of "fillers" as they are now called, is practised by nearly all makers, but arguments center around just how deep this filler should penetrate. Should it act merely as a sealer, filling the pores of the material, or should it saturate the complete violin plate? One must admit that any substance applied to bare wood will penetrate to some extent and therefore should be classed as a pre-varnishing treatment. Also: Should the plates receive tratment inside as well as outside? Experts, who have examined the insides of old violins, do not agree on this point. Some find the wood so clean and well preserved as to indicate treatment of some nature.

Suggestions for the treatment of violin plates are without end, among them being Linseed oil, Glue, Shellac, Bees Wax, Sugar, Propolis, resin, and scores of other substances. I will confine myself to those in most common use and perhaps suggest one not so well known.

LINSEED OIL:

The most common treatment of violins previous to varnishing is linseed oil. This is applied to the bare wood either cold, warm or boiling hot. It is my contention that a great many violins are spoiled by the improper use of linseed oil. Linseed oil is subject to several chemical changes. The effect of these changes has not yet been ascertained. An instrument which sounds excellent today may in 50 years be worthless.

Joseph Michelman, in his valuable book "Violin Varnish" outlines the different changes through which linseed oil passes after application. The chief change being the return, after a number of years to a liquid state. Michelman also describes the tendency of linseed oil to migrate from one section of the plate to another, suggesting that this may improve the tone, but it is far more likely that after a period of years this migration may ruin the instrument.

If linseed oil is used there is only one method that appears to be quite successful. I refer to the method used and recommended by Earle Sangster. Sangster, whose violins are among the finest toned instruments in America, is a person we can confidently follow. His success with linseed oil cannot be denied. His method is to apply the oil warm to the outside of the instrument and immediately hang it in direct sunlight for several months. By this means complete oxidization is achieved. It is doubtful if proper oxidization can be obtained by any other method. Unfortunately, dependable weather conditions restrict this treatment to a warm dry climate, but it is the only method of applying linseed oil that has, at least to my satisfaction, been proved worthy of attention and can be highly recommended. A perfect finish and surface is obtained upon which the varnish can be applied, and the grain of the wood made exceedingly clear.

At this time it might be well to discuss another method that may be regarded as a linseed oil treatment, but not strictly so, for it is used in combination with other ingredients. It is the method advocated by Carmen White who has done much experimental work with the procedure and has high regard for its ability to produce good tone. It is really a combination of two methods, that of Michelman and the other the method employed by the late Justin Gilbert. It consists of semi-baking the bare instrument in extreme heat and while still hot applying, with a stiff brush, a solution consisting of linseed oil, resin and turpentine. The solution is applied almost boiling hot and penetrates clear throught the plates in a matter of seconds. The instrument is then placed in moderate heat to dry and harden. My experiments with this treatment were not encouraging and if we are attempting to duplicate the methods of the old masters I doubt very much if there is any evidence to suggest that they baked their instruments in any manner what-so-ever.

The violin making faternity owe much to the investigations and experiments of both Michelman and White. They have unearthed much information and have kept the subject of the pre-treatment of plates alive. Michelman's book is full of the results of his scientific research and as a reference book is invaluable.

PROPOLIS:

Propolis is a product of the bees who manufacture it from resin obtained from flowers of various kinds. Propolis from Willow tree blossoms is of a yellow color and as there were, in the days of the old masters, many willow groves in and around Cremona it is assumed (and with good reason) that this was the famous yel-

KEEP IN CONTACT WITH THE PLAYERS, THEY ARE YOUR CUSTOMERS

The American String Teachers Association is a non-profit musical and educational organization established in 1946. It serves string and orchestra teachers and students. Promotes and encourages professional and amateur string and orchestra study and performance.

The American String Teachers Association has a development and progressive program which includes:

1. Summer Workshops for string teachers and amateur chamber music players. 1960 conferences were held at Colorado Springs, Gettysburg, Pennsylvania, Put-In-Bay, Ohio and Interlochen Michigan.
2. Publications. A newsletter STRING TALK is published four times each year. The Official Journal, AMERICAN STRING TEACHER is now published four times each year.

ASTA has many other valuable publications available.
The AMERICAN STRING TEACHERS ASSOCIATION is only $5.00 per year. If you are interested in supporting the art of string playing ASTA is your organization. Your ASTA contact is Robert H. Klotman, 70 N. Broadway, Akron, Ohio, U.S.A.

low background said to be the foundation for the old varnish and found as a golden layer under that varnish. The golden color shines through the many coats of varnish and gives a beautiful effect.

An important reason that it should be suitable for a filler is that the bees manufacture propolis for one reason only-as a water-proofing material. When the weather starts to penetrate the hive they plug up the holes with propolis. Man soon took advantage of the industrious little fellow and used it to water-proof wooden utensils. It is therefore a splendid substance to prevent a damp atmosphere from entering violin plates. I have handled several violins treated with propolis and in each case the tone was remarkably good.

Yellow propolis is hard to obtain, most of it being of a reddish-brown color. I cannot say that the color would make any difference, except in obtaining the suggested yellow ground color.

Propolis is readily disolved in wood alcohol taking about three days to become completely dissolved. It can be applied with brush or rag and three coats are recommended.

I have treated the complete inside of two violins with propolis, but encountered trouble when applying it to the outside, the difficulty being to get the varnish to dry when subsequently applied. K.E. Newton, writing in the "Strad", mentions this, and advocates rubbing down the surface after the propolis is dry with fine steel wool soaked in spirits or turps. Log-wood chips soaked in alcohol and the solution applied after propolis is also said to produce a surface upon which varnish will dry. It is claimed that varnish will dry even after using bees-wax if this log-wood solution is used.

This log-wood idea has only lately been brought to my attention by my friend Frank Koscak of Milwaukee who has used log-wood solution over bees-wax with excellent results. He says bees-wax is the best filler of any of the waxes.

TEMPERA:

Most makers have at one time or another heard of eggs as a filler and have probably laughed it off as a ridiculous suggestion. A little research in any public library will reveal the fact that of all the fillers ever suggested, eggs are more likely to be the substance used by the "Old Masters".

Tempera, as the prepared substance is called, is made from eggs, and nothing more! It was used exclusively by the Old Master painters of the period under discussion, and through its mdeium some of the greatest masterpieces of that, or any age, were created. Among these are the paintings of Michelangelo and Bellini, whose works of art remain to this day as fresh as the day they were painted. In fact time seems to increase the intensity of the coloring. A tempera painting never cracks or checks and certain effects can be obtained not possible with any other medium.

If tempera, then, was the recognized medium used by the painters of that age why would anyone suggest that when the violin makers came to "paint" their instruments the entire technique should be changed? The painters used tempera and covered it with varnish the violin makers would do likewise.

In tempera they would find a perfect substance. It would meet all the requirements of a foundation and sealer. Tempera is firm yet elastic. It will

remain in one state of consistency for hundreds of years. It is transparent and can be colored to produce that beautiful golden ground color. It is easy to prepare and apply and is always available. It is waterproof. It seems the most logical from every standpoint. The instrument retains the tone it enjoyed while in the "white". After varnishing, the tone still has the strength and has in addition taken on a maturity not to be expected in a new violin.

To make tempera, beat up the white of an egg to a froth, then add the yolk. Beat for a few seconds more. Add a small teaspoonful of vinegar to prevent decay before using. Place in a covered bottle and let stand for three days or until the froth settles. Shake slightly each day. It can be used in its natural state or you can add a small amount of vegetable oil coloring such as is sold to color cake icing. Do not add the color until you are ready to apply the tempera to instrument. This is done with a brush. Apply a thin coat and let dry. Next day apply a second coat using if you wish clear tempera over the colored first coat. Let your fiddle dry for a week then apply your favourite varnish. If you treat the inside, use clear tempera, no coloring.

It would appear that the technique of violin making is an individual matter. Some makers for instance, have success with one method of graduation, others, with another. With the varnishing of the instrument the same individualistic psychology might prevail. Experiment until you find the method which suits your needs and hold to that which you find good.

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THE AMERICAN STRING TEACHERS ASSOCIATION

One of the most facinating aspects of my position as editor is the remarkable variety of contacts I make. A few weeks ago I was unaware that the String Instrument teachers of the U.S.A. had organized themselves into an association called The American String Teachers Association.

Their object is to encourage the playing of all string instruments and also to face collectively the many problems peculiar to the teaching profession. This live organization has already done fine work in assisting School Orchestras and they only started the association a few years ago.

Among our advertisements you will note one regarding the organization and the magazine they publish. This is a top notch periodical equal to any of its kind published anywhere. The Journal has arranged to exchange advertisements to, we hope, the mutual advantage of both. Remember this is an organization that should have your support. They represent the market for your violins, violas, and cello's. Without players our hobby or profession dies!

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CHRISTMAS IS COMING

Why not present a years subscription to your violin making friend? This sounds to us like a sensible Christmas Gift. The Journal is yours so why not help it out this way? If every one of our readers followed this suggestion we would, if our mathematics are correct, double our subscription list. And the cost? Only $3.00.

Send $3.00 and the name and address we will do the rest with a nice Christmas Card made out to your friend with your compliments.

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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

EARLE SANGSTER ANSWERS WILLIAM HALL

By E. H. Sangster

The September Journal to hand and greatly enjoyed. It is amazing the many ideas there are put forth to account for the beautiful tone and easy articulation of the old Italian violin. I had about decided it is little use for me to write anything in regard to my experience gained over forty years of violin making. However I feel I must write a short article to put Mr. William Hall straight on some of his statements.

He speaks of cleaning off an old double bass and finding a beautiful under coat of yellow, which he states was undoubtedly a gum concoction. That beautiful yellow was nothing more than pure raw linseed oil which the maker applied. Mr. Hall or anyone who reads this can easily prove this by taking a piece of maple and a piece of spruce 6 inches by 4 inchand and bring them down to 1/8th inch thick. Now give one side a good coat of warm raw linseed oil, put the pieces out in the sun an few days then hang them in a warm room in strong light and leave for four months. They will have a beautiful yellow color. Now polish the surface of the pieces and he will get the same effect as we see on the lower half of a Strad violin where the varnish has worn off. The highly polished yellow ground that stumped Mr. C. Reade in his article of the Italian varnish in 1872.

Now a word to Mr. Wm. Martin, his knowledge of linseed oil must be very limited because linseed oil after it has oxidized a few years is readily soluable in liquor or alcohol.

To those makers who are following Stradivari I would advise them to read if possible Hill's book the "Life and Work of Stradivari" Chapters V, VI, VII, and VIII. It has more information than any other book ever written. It gives thickness of Gasparo, Maggini and the Amatis and the thickness of eighteen Strads in fractions of an inch.

A word to those who wish to make a beautiful varnish without any coloring ingredients. Use Fioranti's formula No.11 published in 1564.

Linseed oil - 1 ounce
Pure Venetian Turpentine - 2 ounces
Pine Resin ½ ounce

Boil in a small cast iron frying pan for 15 to 18 minutes stirring all the time. Turn off the heat and add one full teaspoon of pure raw linseed oil and stir in well. Let varnish cool in pan and dilute with pure turpentine to consistency to use with a brush. You will have as beautiful a varnish as was ever used by any Italian. It is easy to apply but dries slowly except in the sun. In sunlight it dries readily.

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"One critical look from a pretty girl will send a boy running to the barber, tailor, cleaner, and bathtub, thereby accomplishing in a second what his mother's pleas have failed to accomplish in fifteen years."

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MORE ON ITALIAN VARNISH

by Carmen White

In the last issue, one of our readers advance two ideas which I beleive might be misleading, both of which were related to varnish. He stated that he had examined many old Italian violins and that (1) he had found their varnishes so soft that they could not be rubbed with pumice stone and oil, or rottenstone and oil without those abrasives working into the varnish, and (2) that the old Italian violins were French polished.

The authentic old Italain violins I have examined could have been rubbed with pumice stone and oil without working the abrasive material into the varnish. Their brilliant luster was certainly not due to any French polishing. If by French polishing, the writer means that the varnish surface is rubbed with a pad dipped into thin shellac and raw linseed oil, I cannot recommend such a procedure on any violin, old or new. While it is true a brilliant and beautiful luster is obtained in a few minutes of rubbing, it is also true, unfortunately, that the surface is only temporary. It will not stand wear, rubbing, handling, or even exposure to air without changing in a few months to a dull, lifeless and lacquer like appearance, which requires another polishing in order to regain its former beauty. Moreover, the French polishing technique is so simple, so easy, and so universally well known that if this were the answer, we would all be able instantly to present specimens of varnishing which would rival the old Italians. Surely those who have had experience with French polishing can speak with authority regarding the temporary nature of such finishes and regarding their deleterious effect on tone itself--shellac is not a tone producing material, but more like a binder. It will not wear well, in fact, climatic changes, particularly changes in humidity, affect it readily.

To illustrate how inexperienced and experienced persons may be "taken in" bey the appearance of varnishes, an actual experience might be mentioned. Two years ago, a nationally known connoissieur of old violins was handed a violin which had been revarnished with Michelman varnish. He was not given any facts about the varnish at all, but was asked by my friend, "what do you think of this varnish? It is a modern varnish, made here in Texas." The old violin expert turned it over, held it out and looked at it, then returned the violin to my friend with the remark, "Well, of course, you can't tell anything about the varnish; as you see, it has been French Polished". My friend did not tell him any different, and he probably still thinks he was looking at a French polished violin--actually, he was looking at Michelman varnish, finished with pumice stone and oil, and rubbed to a brilliant luster with the bare hand--it would be a crime to French polish such a varnish! So, you see if a nationally know violin connoissieur can so readily mistake a brilliant new varnish for "French polish", it might be easy for one to mistake the brilliant natural luster of the old Italian varnish for "French polish" also. So, do not French polish your fiddles!

As for varnishes absorbing abrasive material in rubbing, surely we must know that any varnish soft enough to absorb abrasive material in rubbing with oil and pumice stone is too soft for our purposes. Michelman's first varnishes were too soft, but even they could be rubbed with pumice stone and oil--I have so prepared and rubbed them, more than 12 years ago. None of the abrasive material entered into the varnishes at all. We have all seen heavy gum-in-oil varnishes on

Modern violins which become soft when exposed to the heat of the neck of the player on a hot day, yet such varnishes were rubbed with plenty of pumice stone and oil when first applied and dried. Some of them print readily if the violin is left in a case, and can be rubbed down again with pumice stone and oil with out absorbing any of the abrasive. I have never seen an old Italian violin which could not have been rubbed with pumice and oil. If you are using any varnish which cannot be rubbed in this way then you should try something else, but do not try French Polishing, that is fine for tables - not for violins.

oOo

Remember that a beautiful rainbow can never be

seen until a heavy shower is completely over.

oOo

FIDDLE TALK

by Frank J. Koscak

Regarding the long-wood chips you asked about. The name of the tree or wood is log-wood, and they are chips that are gathered from the cutting of the trees, I have very little left from a purchase I made in about 1925. You see I haven't used bees-wax for very long, stopped using it around 1931. I tried other waxes too. I stopped using wax because the wood under the varnish would not glow or shine, as it does when using linseed oil, or just plain clear or yellow varnish, and for tone, varnish or linseed oil is the best, with oil being better of the two. After the violins are varnished and strung up I keep them for at least 1½ years before selling them, because sometimes the top must be removed and some wood taken out, the oil or varnish filler seems to harden the wood somewhat after it is really dry so the plates, usually the top, can be thinner than when using wax or spirit fillers, but at the same time it imparts a distinctive richness to the tone.

I've used many different varnishes, and copal varnish is as good as any and a lot lower in price. If I use varnish as a filler I add about a third of thickened linseed oil and put on one coat over just once, and allow to dry a week or more in the sun, if I use oil of course then I hang the violin out on the clothes line for a month or more and sometimes I don't think that is long enough.

In regard to thickness of the plates, I use the same system you described Mr. Skou had drawn out in the May issue of the Journal, of all the articles I have read so far regarding thicknesses taking care of old instruments by loosening the tops and backs and reglueing. I think he was trying to think of the word fulcrum in describing the soundpost as the balancing point.

Sometimes I make the tops 1/8 of an inch under the bridge, up to, and below the lower corners and reducing the thickness to 3/32 at the flanks almost to the edges, on harder tops sometimes 6/64 under the bridge and slightly thinner at the flanks, but always heavier around the "F" holes. The backs are usually 11/64 under the bridge or at the soundpost and reducing to 3/32 at the flanks, but never under 1/8 inch at the "C's".

I just had a Maggini violin in for slight repairs, had no chance to remove the top, but measuring from the outside the top was 2½mm from the top of the "F" holes to the neck block and slightly thinner at the flanks, and 3 mm down to the end block and 2½ mm at the flanks, back was 4 mm in center and 3½ mm at the edge of "C's" and gradually going down to slightly less than 2½ mm at flanks, top was 3 mm under bridge. Sides 1 1/8 inch high and body length 14¼ inch full. It had a tubby tone not much carrying power, no doubt due to it's extreme age. I forgot to mention that I carry the thickness of the tops and backs up and down thru both upper and lower bouts to the end blocks of not less than 7½/64 for the back, and 7/64 for the top, unless the top is hard and is about 6/64 under the bridge, then I carry that thickness all the way thru the center, about the width of the end blocks (2").

The type of varnish I use doesn't make much difference to me anymore, just so it drys well and remains soft. I never hang the violins out in the sun to dry the varnish, as the sun will bleach out the color, but to dry out the filler is a must as far as I'm concerned, wether I use oil or varnish. I'll tell you why I use boiled linseed oil, I think boiling stabilizes it, and thru the years combines with the wood making it even perspiration proof, and raw oil remains tender or gets that way some years later, and imparts a rather gummy feeling to the wood, I might be wrong, but those were my observations. It is rather hard to tell, I think, what type of oil the Italians used by observing it under ultra-violet light, as the oil will ozidize and probably combine with elements in the wood making it

difficult to say wether it's raw or boiled. I am not a person that knows much about science, I select wood that has a high and fast responding ring to it, and tops that are hard or strong and fiberous, I try not make them too thin, because I can always take them apart after the varnish is dry and the instrument has settled down, and regraduate the top or back if necessary.

Where did one of your readers get the idea that thin strings were used in the old days (1700), I don't know because Paganini was the first to use thin strings and raise the pitch so as to give a lightning response and a more soprano overtone to the low tones by making the bass bar heavier, which increased the carrying power. Leopold Mozart in his book on violin playing describes the way to draw a tone, not ladylike but strong and manly, and to play farther from the bridge on the D and G strings so as to get a pure tone with more power, because of the thickness and heaviness of the strings. He used a Pietro Antonio Dalla Costa Violin, and purchased it brand new, copy of Antonius and Hieronymus Amati, grand model, 14 inches in body length, which was made for power, a flat model, not high arched Stainer type. Also the autobiography of Ole Bull, who was a very clever repairman, expert on bass bars, bridges, adjustments, etc., who had shown and given Vuillaume some pointers on inserting bass bars. If Stradivari Guarneri Del-Jesu, Bergonzi, and others were not looking for more power, they would never have changed the ideas on high arched thick centered, with the thin edges extending thru the "C" bouts, like Stainer and the high arched Amati's. The top flight violinists played in front of orchestras and very seldom with spinets. Bach was an organist first of all, and he was very familiar with thunderous forte's in chords, many of the modern violinists do not know how to play Bach almost all of them play too fast.

Some people can't understand that most 250 year old violins do not sound like they did a hundred years ago, most of them are too smooth and weak in carrying power, of course they are pleasant under the ear, and one they are used to them any violin that is healthy, bright, and strong, sounds too raw. I have played on some pretty raw sounding old violins, the E string hurts the ears with it's pinched glassy tone, the tone collapses under bow pressure, the G string sounds like someone singing from the bottom of a barrel.

oOo

Things were quiet at the police station. One offier yawned and complained: "What a dull week! No burglaries, no fights, no murders. If this keeps up, they'll be laying us off."

"Don't worry, Murphy," said the chief. "Something's bound to happen. I've still got faith in human nature."

oOo

"What makes you look so sad and so pale," an older friend asked the romantic young man.

"Oh, it's terrible," confessed the sad swain. "She's the most wonderful girl in the world and I finally asked her to marry me and she refused."

"Cheer up," said the friend, "a wonman's 'No' may often turn out to mean 'Yes'."

"I know," said the youth mournfully, "But she said, 'Aw phooey'."

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REVIEW YOUR STANDARD

by Clifford Hoing

Mr. E.H. Sangster in the August 1959 Journal Vol.2, No.10 on page 11 says Quote "One who owns a fine old violin and plays for a living will not purchase a new violin no matter how good it is." end quote.

In the same issue on page 9, Carmen White says - Quote "Professional players may praise your work, they will not buy it! So, we must work just to satisfy ourselves----not for any financial reward at all" end quote. This is a defeatist attitude!

Now here are two people who cannot sell their fiddles to professional players, who, in my experience are always on the look-out for fine toned instruments. This can be nothing more or less than confirmation of the fact that the instruments offered do not measure up to the standard of tone required. The craze for old Italian Violins is obviously a factor to overcome, but can it be that a Review of your Standards is indicated. A new instrument must be really good. There must not be a shadow of doubt of its superiority.

.....

Regarding the "Hobby Show" competitions for violin making, I think there should be classes for amateurs and professional makers. I should think a professional would get little, if any, satisfaction in competing with amateurs and winning a prize. It would be fairer to the amateurs if a separate class was made for them. I think most people are of the opinion that professional work SHOULD obviously be of higher standard than an amateurs, and most of it is. But don't be too smug about it, some pros are not so hot!

oOo

MORE ABOUT NEW ZEALAND WOODS

by A. Johnston

At present I am engaged in research work that covers the whole of the bowed string instruments. In my own possession are eight violins, one viola, two violin cellos, one double bass. Twelve instruments used in testing, a ninth violin a large one is well on the way, using New Zealand Kauri for ribs - Queensland Maple for back, N.Z. Mangeo for neck, Pine corner blocks. End Blocks I have used a medium weight Mahogany. The top plate of course will be of pine. Yet if I had cypress of sufficient width I would have used it. It is very light creamy colour and I have used it in three violins I repaired r conditioned varnished and equiped with steel strings (Thomastik). The wood has no pattern like the maple and any staining or colour - goes on bett r if it is hot, that is if it is a stain and not coloured varnish. I am not satisfied that only pine and maple is suitable for violins. Of recent date I heard a violin all Kauri built. It had a very good tone. Another violin with a pine front had all the rest made of Beech. I have violins come from 300 miles to repair and recondition for concert playing and the one with back, ribs and neck of beech came as a surprise in tone, though I did more than the own r anticipated. I have not any experience of spruce fronts. but as a young man I used to carve the oars for the racing clubs. I believe it lighter than the pine.

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LETTER FROM MR. BEN RUST

Editor, The Violin Makers Journal,

In the June edition of The Violin Makers Journal, Mr. Leo Larsson asked us to write to you if we are interested in having a series of articles on the use of small power tools in violin making. I think that this is an excellent idea. I would for example, like to know what kind of small power tools people found were used succesfully towards the making of a scroll. Are the little moto-tools worth while? Do the myriad number of little rotary files serve to finish off intricate scroll areas? For that matter, I would like to see a few articles on the manufacture of the scroll.

I also note on page 23 that Mr. Skou says that he recommends a glue named ARALDIT. He says it is very strong. This puzzles me. We have glues of tremendous strength. The American Weldwood and other resin glues are of tremendous strength. As I understand it however, it is not recommended in violin making that any glue which is not soluble in water be used, for the simple reason that it is necessary to take apart and repair violins. Is ARALDIT soluble in water? Also, can you tell me where I can purchase and try this glue?

This brings to mind the other problem which has never been satisfactorily answered to my knowledge ie, what effect do different glues have on the tone of the violin. For example, in joining the back, if the Weldwood glues are used, the join is much stronger than if a water soluble glue is used. Why not therefore use the Weldwood or similar resinous or for that matter polyvinyl adhesives for the joining of the back?

I would like to see some articles on the different glues that can be used without impairing tone. Why not use cold glues, if they do not impair tone?

Ben Rust, Richmond California

oOo

FRENCH BOWS

It is nice to enter a store and be attended to by a salesman that definitely knows all about the article he sells. This has always been my experience when making a purchase at our local store, The Modern Music Ltd.

Mr. Jack Stobbes, the congenial manager, who is a professional viola player took time last week to show me some splendid violin bows he had just imported from France. Each bow is an exact copy of an old master bow and appears to be almost as good, for several professional players have purchased them. If you are on the market for a good bow, here is a chance to get something really worthwhile.

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Music is the first, the simplest, the most effective
of all instruments of moral instruction.

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AN INVESTIGATION INTO THE GRADUATIONS OF STRADIVARIUS AND GUARNERIUS VIOLINS

By Don White

PART 9:

I had hoped, in this instalment, to continue the discussion brought up by Dr. F.A. Saunders in the last issue. Lack of time and also the receipt of an article by Mr. G. Sanborn have changed my plans somewhat.

In spite of the most enlightening contribution by Dr. Saunders, I myself, and I believe most of our readers are still mystified over the question "What makes violin tone?" Just what part does the hollow inside of a violin take in producing this tone. Perhaps my sincere friend Dr. Saunders and myself can argue over this subject again next month.

The remainder of this space must be handed over to Mr. Sanborn and Mr. Svindsay. Mr. G. Sanborn, is the noted Swedish investigator into the scientific aspects of violin construction. For some time Mr. Sanborn has been interested in the study of the micro-tone method of plate turning, and has worked this out to an almost exact science.

It was Mr. Kristian Skou who introduced the subject of micro-tuning into this investigation a few months ago.

Mr. Sanborn now answers Mr. Skou and adds further information to this subject. Mr. Peder Svindsay as translator also contributes his intelligent observations.

COMMENTS ON KRISTIAN SKOU'S ARTICLE

by G. Sanborn
Translated from the Swedish
by Peder Svindsay

Mr. Skou has in your Journal, on certain points criticized my, as yet, uncompleted series of articles: "Cremonas Avstamningsmetod". (The Cremona method of tuning)

May I take this opportunity of replying to him?

In my opinion it would have been better and more pleasant to have these points cleared up in private or in a Nordic (Skandinavian) forum. Where we would have had no difficulties with the language.

Mr. Skou seems to take exception to the word "Air-Tone", which he refers to as a "fictive idea".

Let me admit that to a certain extent he is right, but not absolutely since the vibrating air inside the violin is setting the surrounding body (box) in motion. You can get an air tone from a box made of lead, but the lead itself (box) will have a frequency of practically 0. On the other hand it can not be denied that one can adjust the surrounding body to a higher or lower frequency.

If this is adjusted so that it comes close to the endorsed air, The vibrating air inside will to a certain extent set the surrounding box in vibration.

So far all is correct!

Obviously, when one is building a violin the ideal thing is to adjust the surrounding body to the same frequency as the enclosed air. That is why one is "building around the Air tone".

Now, if this is done to perfection before it is varnished, it will not be perfect after the varnish is on, because, the varnish will give the body a higher frequency. It is likely that Mr. Skou has not considered this difference.

He has clearly indicated that in his first try at following my instructions, he has not been able to get the frequency in the body to the necessary perfection.

So one can here with fitting radio terminology "speak" of an increased Q-value for the body.

The higher this Q-value is, the easier the body is put into vibration for this frequency, and less so for other frequencies. In other words: The body's resonance becomesmore selective.

There is no difficulty in detecting these two frequencies under good conditions and with a well trained Ear. Naturally during such a test it is necessary as far as possible to mute the back, and not only the back but also the strings, the chin rest and the bridge. The last can be muted with the chin. While lightly tapping against the back, and from time to time blowing, you will soon find out if they are in time or not.

Tuning is done later with the soundpost.

Regarding Mr. Skou's claim of construction difficulties, they should possibly be blamed on himself. Neither the section around the "F" holes nor the edges are made as thin as they should be.

Regarding the edges, it is one of the few places where I have given a general measure.

What has happened is that those parts have not been muted sufficiently although in my series of articles I clearly stated the importance of muting.

Anybody can convince himself that this is correct by trying it on a loose top. By alternately muting and unmuting it beside the "F" hole. Observe the difference in detecting the micro tone. Without muting a number of side vibrations come in that tend to confuse the detection of the true micro tone.

The E string in no way gets any poorer than the rest of the strings. The tone is brilliant all the way up to the highest notes. This is not always the case when a violin is constructed in a manner different from the Harmonic tuning. (den harmoniska avstamnings principeu.) It is more difficult to explain how Mr. Skou happened to get the top too heavy in the center. Probably an error in the tuning, too much material, or the wrong starting point from the outside arching. Neither myself no anybody else, as far as I know, has had this result. Instead it can be pointed out that the top gets lower measures than those usually recommended. There is no risk of getting too dark or too booming a tone when the plates are well tuned together.

Furthermore, Mr. Skou claims that he has not been able to substantiate my principle on the old violins. Neither have I in all the parts, for the simple reason that I have not found any of them undamaged. Still, the basic principal is found to be correct.

On all the places where the varnish has been worn off, especially on the back, the micro tone is lower, while it is found to be higher on places where it has been patched or reinforced and cracks repaired, labels glued on and re-varnishing been done.

Not all the makers had flawless workmanship. Also to be considred is the oxidization of the varnish.

I will never forget an undamaged top on a Francesco Ruggieri violin; which had the highest precision in tuning that I have seen.

Tone-judges claim that the violins Mr. Skou has made until recently are not the very highest quality of tone and this tone changes from time to time. Now, when he, in his first attempt at following my method, admits that the tone is lovely, of the Amati type, in spite of some errors, he has apparently made, it must be consideredas a step forward.

I am fully convinced that the next time, with the correction of those errors, I pointed out, he will produce a tone that will give him even greater fame and will enhance the great skill of workmanship which he already has at his command.

oOo

"OBSERVATIONS BY PEDER SVINDSAY"

After working on the translation of the article by Mr. Sanborn I got so interested that I feel like adding a few lines of my own. As we all know they have been working on these problems in a co-operative way for a long time in Sweden, and I expect they are more advanced than we are, so I think we should sit up and take notice when we hear from them.

For instance, I have known for a long time about the micro tone or "lokoton" as they call it there, but I never had any idea what note they were trying to get, before now.

As for "Airtone" or, body tone, I am definitely on the side of Mr. Skou. We may say that every solid object has a natural note of its own. For instance, take a big lump of bronze - not much of a tone when you strike it - but hammer it out so it gets an elongated shape and the tone increases the more it is stretched, up to a certain point, after that it decreases. Now let's say that after it has past the point of its greatest sensitivity, that you pick up the ends and bend it. Immediately the tone increases and you may have to stretch it still farther to get the maxiumum volume. Remember we are working with the body tone now. The amount of air around it is the same before and after the bending. The same is the case when you are playing on a handsaw. You can then join the two ends together, and again you may have to make adjustments to get the best result. I doubt if anyone would credit the amount of air inside for the change of tone.

Now to finish this mental experiment we dump the whole thing in the melting pot - and proceed to make a big churchbell out of it and we have the ultimate.

An excellent tone with a great carrying power and at the same time a practical shape.

The violin has developed gradually, much the same as a bell only in a different direction. In the bell you have developed the body tone to the highest degree possible. In the violin we are doing the opposite - making the body tone as small as possible by using lighter material and making it thinner, and at the same time responsive to other vibrations. The body tone is still there but in a small way. To me so far, I have considered it as a nuisance. It tends to make the violin uneven. You get a boomy tone with more volume on that note and less volume on the notes above and below. This is nothing new. When you listen to the old cremona violins in the concert halls it is often very noticable. From those I have heard I should say it's more common amongst the Strads and Guadagnini's. Others again are almost free of it.

This is one of those things that lead me to believe that the old masters never had a special surefire method to make good violins. You may hear one Strad with a magnificent carrying power and another one that you can barely hear at the end of the hall.

To get back to the Air tone. It would be interesting to know for sure what note it is, so here is a suggestion for an experiment to someone who is in doubt.

Make a fair size hole at the end of the violin. Cover the "F" holes and cover the whole violin with rubber so that the body has no chance to vibrate. Then fill your lungs to 10 times the normal capacity and blow through the hole in the end. Or perhaps the cubic capacity of the violin could be compared to a pipe in the pipe organ. When Mr. Skou says that the air tone is a fictive idea it could possibly be mis-interpreted. The thing in itself is real enough. What he obviously means is that is has been mis-named and should be called the body-tone. Oddly enough, I had given it the same name a long time ago as some of my colleagues can testify. Also I would like to coin a new word to replace the word Micro-tone or "lokoton" as they name it in Sweden. I would like to call it the "Spot tone" which is more to the point and easier. And further more would be just as good in the Skandinavian languages as in English. Only in Sweden they would use A instead of O.

Finally I would like to ask Mr. Sandborn a question. Would his method of tuning the violin, be the same for a viola or a cello, or does it have to be changed because of the lower "body tone" in these instruments?

oOo

The best violin is yet to be made!

.....Peder Svindsay

oOo

Noble and manly Music invigorates the spirit, strengthens man and incites him to great and worthy deeds.

.....Homer

oOo

NEW ZEALAND TREES

by Arthur Johnston
Wellington, N. Z.

I would like to congratulate the B.C. Violin Makers on their enterprise.

There is a lot of good in those who create lovely things. Surrounding Wellington are hills or mountains that vary from 500 to over 1000 feet high. Thirty years ago walking around the city central I saw the slopes of the ranges mostly stripped of native forestry and many a long gray trunk in decay on the hillsides. I am looking around to see if I may get timber firms to look more carefully into those smaller trees that they may not be ruthlessly destroyed. Just as the scientist said he heard a violin made of N.Z. Red beech, I heard a violin made entirely of Australian Blackwood. I have a small quantity of red beech and by it's appearance it could make a fine violin. Indeed I made 4 plane blocks out of the same wood and I believe it is much better to work than either Swiss or Queensland maple. Violin making and carving woods creates a very sensitive touch as to the suitability of various woods that might be suitable for violin making.

I would like to know if any of your makers have used American Cedar - and there are types of Mahogany of the softer varieties that should give good results - some of the tests for resonance I have made of wood used in an american organ suggests that it could give better results than Swiss Maple. Another factor is. Why try for what Heron Allen calls Stradivari's tone - Reedy - which one may translate as woody. Some old violins I repaired had very fine tone. The pine tops had medium grain from the sides to very fine in the centre. The grain fiber was very hard and strong the soft wood in between had lost its softness in which one finds in newly made instruments but age made it very brittle and easily split. The deeper breasted and higher curved front which the same author claims gave the Stainers a fluty tone in comparison to the flatter Stradivari violin. I contend that the fluty tone is due to a large measure to the shape of the air content or if one puts it another way the internal shape of the instrument. Alter the internal shape in size and form and we get a different type of tone.

Perhaps as a trained concert singer who has studied the physical side of voice production with a knowledge of physiology of the throat and mouth guided me in the fact that as a singer can produce an equally good tone of many varieties by the alteration and shape of mouth and tongue and air space within the mouth down to the larynx it appears that; "These alterations of shape and material has so influenced me that on two instruments I finished the inside of the instruments to a high degree of finish." Why should not the inside of instruments be protected against humidity of atmosphere? Experience shows any damp from the atmosphere getting into wood is far harder to get out than in. Indeed it is one of those causes which causes violins to appear dead at times. Coating the inside of an instrument requires much care the very minimum of protection should be used but it must be adequate. The wood must be about 80% with the air around no matter what is used wither a water proof varnish or bleached shellac spirit varnish. At no time should any heavy coating be used. Experience shows the protection should be external and not fill into the wood. Where the harder maple was used it was burnished to a shine by lightly rubbing with the bone handly of an old knife. Where the pine was, a piece of hard close grained heart N.Z. white pine was used. In both cases the violins, which were of the chaper type, showed improved clearness of tone. All roughness was removed and the white shellac polish will keep out problems of

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There is a lot of good in those who create lovely things. Surrounding Wellington are hills or mountains that vary from 500 to over 1000 feet high. Thirty years ago walking around the city central I saw the slopes of the ranges mostly stripped of native forestry and many a long gray trunk in decay on the hillsides. I am looking around to see if I may get timber firms to look more carefully into those smaller trees that they may not be ruthlessly destroyed. Just as the scientist said he heard a violin made of N.Z. Red beech, I heard a violin made entirely of Australian Blackwood. I have a small quantity of red beech and by it's appearance it could make a fine violin. Indeed I made 4 plane blocks out of the same wood and I believe it is much better to work than either Swiss or Queensland maple. Violin making and carving woods creates a very sensitive touch as to the suitability of various woods that might be suitable for violin making.

I would like to know if any of your makers have used American Cedar - and there are types of Mahogany of the softer varieties that should give good results - some of the tests for resonance I have made of wood used in an american organ suggests that it could give better results than Swiss Maple. Another factor is. Why try for what Heron Allen calls Stradivari's tone - Reedy - which one may translate as woody. Some old violins I repaired had very fine tone. The pine tops had medium grain from the sides to very fine in the centre. The grain fiber was very hard and strong the soft wood in between had lost its softness in which one finds in newly made instruments but age made it very brittle and easily split. The deeper breasted and higher curved front which the same author claims gave the Stainers a fluty tone in comparison to the flatter Stradivari violin. I contend that the fluty tone is due to a large measure to the shape of the air content or if one puts it another way the internal shape of the instrument. Alter the internal shape in size and form and we get a different type of tone.

Perhaps as a trained concert singer who has studied the physical side of voice production with a knowledge of physiology of the throat and mouth guided me in the fact that as a singer can produce an equally good tone of many varieties by the alteration and shape of mouth and tongue and air space within the mouth down to the larynx it appears that; "These alterations of shape and material has so influenced me that on two instruments I finished the inside of the instruments to a high degree of finish." Why should not the inside of instruments be protected against humidity of atmosphere? Experience shows any damp from the atmosphere getting into wood is far harder to get out than in. Indeed it is one of those causes which causes violins to appear dead at times. Coating the inside of an instrument requires much care the very minimum of protection should be used but it must be adequate. The wood must be about 80% with the air around no matter what is used wither a water proof varnish or bleached shellac spirit varnish. At no time should any heavy coating be used. Experience shows the protection should be external and not fill into the wood. Where the harder maple was used it was burnished to a shine by lightly rubbing with the bone handly of an old knife. Where the pine was, a piece of hard close grained heart N.Z. white pine was used. In both cases the violins, which were of the chaper type, showed improved clearness of tone. All roughness was removed and the white shellac polish will keep out problems of

humidity which affect violins so much.

A violin now in the making the back just fitted has been polished. I may state that I believe violins, violas, violoncelli when varnished or french polished should have the minimum of coatings of varnish that will give adequate protection.

Though I recommend oil varnish for outside of instruments. I used shellac white spirit varnish for inside. The reason was for testing. Spirit shellac varnish could be removed, if unsatisfactory, and, it could be used so it goes on with the minimum of penetration. Oil varnish is too penetrative to be applied direct to the wood. Also I have proved considerable care in oil varnishing is needed so there is no deadening or muffling of the vibrating of the pine top through oil varnish penetration.

Of recent years I have noticed some well made violins which have been oil varnished heavily so much so that the varnish will keep those violins muffled in tone for many years to come.

Some makers may wish to make this test by taking four pieces of wood either spruce or pine and keep separately two pieces untreated in any way. Test out the resonance of all the pieces then apply a coat of varnish to two pieces. Keep one of these aside and apply another coat of varnish a couple of days later. Two other pieces of wood try out with a good french polish.

Other pieces of wood may be tested for additional testing of inside polishing to show it can be done to advantage but only if great care is taken, never to lad or saturate a violin with either spirit or oil varnish.

Regarding oil varnish the finest varnish that will standa boiling water test is better than any privately made varnish. I have made up various varnishes and I feel satisfied that commercial firms that make high grade varnishes have all the equipment and knowledge as well as sources of supply of oils and resins that neither old time makers or ourselves have.

Two other factors I have proved over 50 years. Have the instrument to be varnished in a warm room for a few hours before varnishing.

Warm the varnish as near as possible to 100 degrees, not more. Apply quickly.

I use a small tin with varnish in and place the tin inside a larger tin ½ filled with water, let the water be heated over a stove never let it boil, all you need it to be is, hot enough to warm a small quantity of varnish.

Another point in varnishing, once warmed the varnish should be used and not kept warm for long periods or you will cause a loss of volatile solvents which could spoil your varnish job and make it ropey and hard to apply.

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There is one thing to be said about ignorance -- it sure does cause a lot of interesting arguments.....

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SOME QUESTIONS ABOUT THE BALESTRIERI VIOLIN

by Leo Larsson

The articles written by Mr. Kristian Skou are of value to all of us and we should be grateful for the thorough exposition of his researches. However this does not preclude our questioning his conclusions or opinions and I beleive he would be the first to welcome any constructive questioning.

Mr. Skou's article on a Thomas Balestrieri violin published in the July-August Issue of the Violin Makers Journal brings forth the following.

"This Thomas Balestrieri violin was made Mantua in 1752 and has a top of spruce, Picea Abies - Norway Spruce." This statement raises questions and doubts.

(1) Is this particular violin labeled Balestrieri a genuine Italian instrument by this maker?

(2) How does Mr. Skou arrive at the positive identification of the wood as Norwegian Spruce?

Doubt is raised as to the authenticity of either the violin or the identification of the wood used in the construction of this instrument. Why the doubt as to the use of Norway Spruce by an Italian Maker in an inland town and about the middle of the seventeen hundreds? To clear these doubts research in fields far from violin making would have to be made. Such fields as trade, commerce, shipping and transportation in the seventeen hundreds would have to be looked into in Italy as well as the other countries of Europe to seek answers to the questioning thoughts that have arisen from reading Mr. Skou's statement.

Here are some of these thoughts:

In this period merchant sailing ships would be generally under 1000 tons burden. Wood is a bulk cargo taking up a lot of space for its weight, thus it is frequently partially carried under chain lashings on the main deck. A question is raised on the economic return such a cargo would bring on such small ships as were available for such a long voyage as from Norway to Italy. Port of arrival probably Venice, possibly Genoa for this particular piece of wood, thence far inland. From Venice it would probably travel either overland or more likely by smaller boat or barge up the river Po to some place near Mantua. If this is Norway spruce it definetely was never imported for the use of violin makers but was a piece of wood the maker came by as waste material from some other use.

Source of wood supplies for this area of Italy would more than likely be the Italian - Austrian Tyrol and the Adriatic area using river and small ship transportation.

There is no doubt that certain woods were imported into certain parts of Europe in this period, such as Logwood, Pernambuca etc. for the dye industries later used by the bow makers. Also imported was timber that was long and straight to be used in ship building for the masts and spars. Is it possible this last use was the source of Balestrieri's top wood? Was Norway supplying this type of wood to Italy at this period?

If evidence can be produced to confirm that Balestrieri used spruce from Norway for his violin tops then I think it shows the Italians were capable of using any good wood that was at hand regardless of origin and producing top tone quality instruments. Take heed makers, look around your own hillsides.

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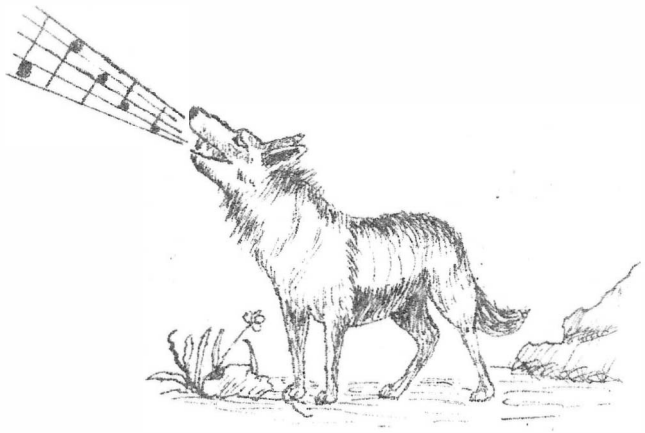
WOLF NOTES

by The Editor



THE ANNIVERSARY ISSUE:

It hardly seems possible that three years have passed by since we sent out our first very feeble effort and presented it with a name, a volume number, and date. Today, if we have not already achieved success, at least that quality is within our grasp. Such names as, Dr. F.A.Saunders, Roelof Weertman, Kristian Skou, Joseph Michelman and now G. Sanborn of Sweden are appearing on our pages. I could add many more names but somehow, although prominent makers, they seem to have become so close in our thoughts as to be, as it were, one of the family.

We thank you all. You have made the Journal what it is today.

New subscribers send in the most flattering letters. May I be excused for printing just one, received this week.

Dear Don:

I have this day posted my subscription for the 1961 copies of "The Violin Makers Journal".

I would like to express my opinion:- It is by far the best magazine I have ever had, and I look forward each month for my copy. I read and re-read and digest the contents over and over again. I think it is a wonderful production, and I wish you and it a very prosperous Anniversary.

Best wishes,,
Sincerely yours
J.E. Hardwick
Ashtead, Surrey, England

MR. SANBORN'S CONTRIBUTION:

We were very pleased, and honored, to receive the article, appearing in this month's issue, by Mr. Sanborn.

The article of Mr. Skou's which Mr. Sanborn mentions, was a first impression of one using the system. Since then Mr. Skou has made further experiments, but let him speak for himself:-

Søborg, Denmark

Dear Don:

Only a few words. I have a little request to you. Two of my very good friends (a violin maker in Copenhagen, and the owner of the Balestrieri violin described in my last article) are very interested to obtain the August number of the journal, and I have promised to ask you if there should be any copies left of that issue - and in that case if you would be so kind as to send me two copies. The payment for them I will send you together with the subscription for the next year.

I can tell you that I have been working hard with the micro-tone system outlined in my article in the August number of the journal. I have tried the system in practice with 4 violins, one viola, and a large tenor instrument named tenorin, which I have constructed, and I can say: the system is really good. It is by far superior to any other system I have ever tried. It endows the violin with just the characteristics we find in what we are calling "Italian tone": a fully clarified tone free from distortion, and further those clear, warm flashes when the tone is augmented under the bow (besides brilliance, sweetness, power, and evenness all over, which are only a matter of course for every good violin). My results with that system are so promising and convincing that the owner of a beautiful old Italian violin, whose tone has suffered by unskilled repair, has asked me to restore the violin to its original "Italian tone", and I am sure I can.

In my article I only outlined the micro-tone system, and I am aware that further informations about the system in practice will be necessary. I intend to give such information, but I think that before writing the article I will work with the system for some time yet to gain further experience.

Yours sincerely,
Kristian Skou

NEW VARNISH COLORS:

My friend Clifford Hoing has sent me samples of color powder which he uses in his varnish. I used the red on my last violin and I must say this is the first time I have been able to procure the exact color that I wished. I used amber colored varnish and mixed in red to the desired shade. A beautiful color and completely transparent. You can start with straight yellow if you wish and vary each coat as you desire to produce the refraction mentioned in the following short article written by Mr. Hoing.

NEW VARNISH COLORS

Violin varnish that is colored by gums such as Dragons Blood and Gamboge has the disadvantage of its content being altered according to its color. Moreover Gamboge will cause it to be very slow drying.

The color by boiling process gives a very satisfactory color when contained in a jar but the depth of color in a number of coats on a fiddle is only of yellow or light orange.

I use a method of infusing color directly into the varnish in the form of a highly colored solution. This color is in the form of a highly concentrated

powder and is OIL SOLUBLE. Desolved in Toluene or other volatile liquid it requires so little to give a deep color that the actual content of the varnish is not altered to any appreciable extent.

Most modern varnishes fade almost as quickly as it takes a coat of it to dry, and as the color is not usually very deep, many modern instruments look a very insipid color indeed.

Examination of a Strad under a powerful glass shows an orange colored varnish right in the pores of the wood. It is useless to try to duplicate the fine appearance of the old fiddles by using a yellow color such as gamboge for the first coats.

If you give say eight coats of varnish to a fiddle, then your first coats are given eight times as much exposure to light as the top coat! Which partly at least explains why the under coats of any fiddle are lighter than the main varnish. This fact has never been mentioned before in any violin literature, but is so obvious when you consider it.

I am enclosing small samples of this oil soluble color for testing by the Editor, who I hope will report on this for the benefit of members.

I mix a little color, about enough to fill a salt spoon in ½ ounce of Toluene. Less is required of the red by about half. You can make it stronger if required. Infuse into sufficient varnish for one coat by means of a medicine dropper one spot at a time till color is as required. The red is so fierce that a little yellow will almost always be required, to tone it down to a more delicate color.

By mixing enough for one coat at a time, the finished color is under control during the whole operation. The coats can be varied in color as you proceed with the varnishing operation. This will give a better refraction than if uniform color is used for all coats. The colors fade only very little

I have quite a good supply of this highly concentrated color powder on hand and will be pleased to let anyone have some simply by paying for the postage powder, and packing which would be $1.25 for enough to do six fiddles. Colors are yellow, red and dark brown. I have also some nice plans of Old Masters, write to me. My address C.A. Hoing, 137 West Wycombe Road, High Wycombe, Bucks., England.

"TRY AGAIN"

Here is a letter from one who believes in the old proverb "If at first you don't succeed, try, try again."

Note the date of the letter and then the date of the post script.

Ludington, Mich.
February 12, 1960

Dear Mr. White:

I am writing to tell you how much I enjoy "The Violin Makers Journal". There is some thing of vital interest to me in each issue. The Helmholtz Notation article by Norman Miller of Queensland, Australia, was very interesting in the last copy.

After studying the violin for years I suddenly decided I wanted to make a good violin for my own use. My plan was to make several out of cheaper wood and when I thought I was good enough, if ever, I would invest in good wood and make that masterpiece. I prepared by studying Heron Allen's book on violin making and I practiced inlaying, purfling and graduating. My first violin was a copy of the Strad with plans by Heron Allen. I did my graduation by a chart from Wm. Lewis & Son. I made mistakes by getting too much arching and what I thought was maple for the sides turned out to be beech.

It was really a thrill, as anyone knows who has done it, to tune up and play that first fiddle and even more of a thrill when I found it had very good tone quality and evenness on all strings. At last I have found something I can excel at. I thought, but then came the let down.

Fiddle #2 wasn't as good and I should be able to judge tone as I have owned a Panormo violin and now own a Gabrielli. Fiddle #3 wasn't as good either. I was getting the arching better and the finishing also but not the tone. On violin #4 I returned to beech ribs but this wasn't the answer.

At last on violin #7 I bought the good wood and used all I had learned to make that good violin I had been aiming at. It is a nice looking instrument but I have doubts it will have the tone of the first one - beginner's luck? Now the house is full of fiddles and I could have made the first and quit and would have believed I was a wonderful maker. I would have missed a lot of fun working with the chisel and plane though.

Keep up the good work on the Journal as it is a boon to violin makers.

Sincerely yours,
R.A. Pirtle

September 5, 1960

P.S. - I delayed in mailing this letter and Have made three violins that excel my first attempt. The answer was a change in top graduation. Please renew my subscription to the Journal for another year.

ANOTHER LETTER OF INTEREST:

I have room for just one more letter which gives the history of a very fine violin maker:

Tucson, Arizona

Dear Mr. White:

I have been in Arizona less than a year. I am a native of Kansas City, Missouri, where I studied violin making and repairing with Joseph Rodier, a French-American, who is well known for his violins, violas, cellos and basses in the middle-west of the United States. From 1949 to 1959, I operated a violin shop in Kansas City and made no instruments during that times as there was sufficient repair work to keep busy. I am now establishing a shop in Tucson and later on I hope to make some violins and violas. The graduation information in your Journal is very interesting.

The violin I am no playing is one I made in 1948 from the Rodier pattern which is somewhat similar to the Guarnerius style. It is made of domestic curly maple and a very nice Alpine Spruce top. The back is graduated evenly from 3/16" in center to 6/64" at edges and the top 9/64" to 7/64" at edges. The varnish is William Lewis and Son red oil. It took considerable time to play this one in because of heaviness of plates, but plays rather well now.

Sincerely,
Leonard N. Smith.