

Sympathetic Vibratory Physics

Tone Building

Joseph Collingwood
Violin-Maker
235 East MainStreet
Ottumwa, Iowa

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Forward

SELDOM does one find a book without a preface, introduction, or foreword of some sort. Usually the preface or foreword is in the nature of an apology for the writing of the book, or else it is an account of the circumstances which moved the author to write it.

This booklet, I think, would be incomplete without an apology from its author, and, as well, some account of the circumstances leading to its publication.

My apology (if I may term it such) for these pages is simply this: That of all the customs of the violin-maker, I like least the writing of a booklet. All violin-makers must have a booklet, of course, and that's the one circumstance which prompted me to prepare these pages.

In this era of industrialism, even the arts are not immune from the taint of commercialism. Devotees of the fine arts—musicians, painters, sculptors, etc.—must make themselves known to the public in much the same way as the maker of shoes or the builder of houses.

Could I please myself in the matter, my pen would never "speak in business intonation," and this booklet would not be. Its being a necessity will, I trust, be sufficient reason for its being.

It is really difficult to prepare a booklet of this kind—on one's own work—without seeming to be something of a charlatan—boastful and egotistical. Should I appear in this light to any of my readers let me say, in all sincerity, that I prefer being judged by my work as violin-maker rather than by what I myself may say about my work.

JOSEPH COLLINGWOOD.
OTTUMWA, IOWA, MARCH 15, 1909.

Tone Building

MANY persons of good practical ability, moderately versed in the laws of acoustics, with an eye for form, and not deficient in a certain conception of art as art, and who had the instinct to work on lines, curves and thicknesses more or less true and best for producing fine tone, have "tried their hand" at violin-making and have seen their efforts cast aside, never to assume even mediocre rank in the stern array of modern violins, much less those of ancient Italy, merely because the wood selected was of an inferior, *probably worthless*, character,

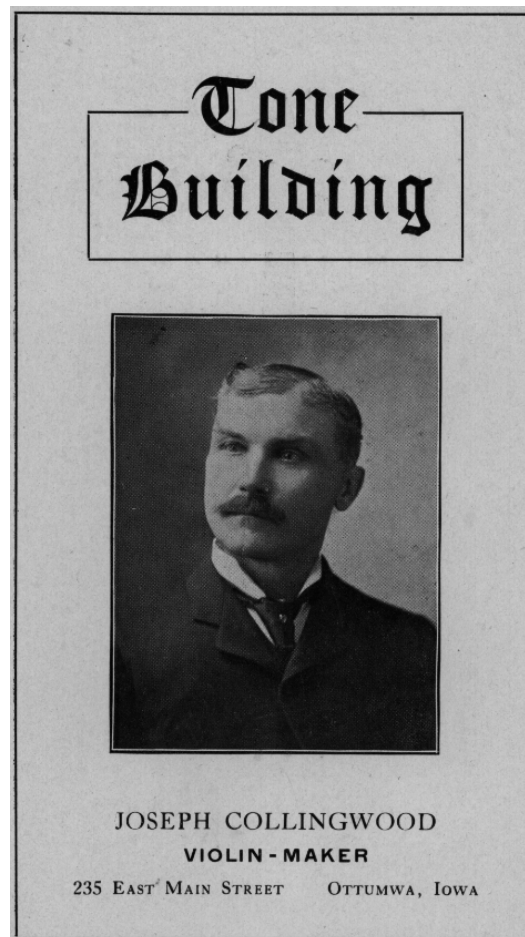
which would have been used to much better purpose had it been employed in the construction of a windmill or the shaft of a mine.

Timber that will "live" is very rare, and the ability to discriminate between timber that will "live" and that which will "soften down" is still more rare. Most violin-makers give too much thought to scientific proportions and *too little* to the qualities inherent in the *materials* they employ, hence many modern violins that are marvels in artistic and scientific workmanship "soften down" in a very few years, and are fit only for parlor purposes.

Again, timber that will produce most satisfactory tone in one model will *not* give the same satisfactory tone in another model. No matter how scientific the construction of any model, the

timber employed is the *tone-producer*, and, as such, must not only have the maker's best attention at all stages of construction, but must be selected by a violin-maker who is guided by the unerring hand of *long, practical experience*.

One cannot be taught the principles involved in the selection of timber and the shaping of that timber



into a perfect violin, any more than one could be taught to paint a landscape like a Corot, or a military scene like a Meissonier, by merely being taught to handle the brush.

Making ten, twenty or even fifty violins will not impart all the knowledge necessary to produce fine tone. While originality is, to a great extent, out of the question, still violin-making is by no means an *exact* science; it is an *experimental art* at best, and the experience and judgment displayed in the selection of timber, and the experience and judgment which direct wise experimenting upon the carefully selected timber are the qualities which tell in the *tone* of the finished violin.

Cremona's Sons And Their Work

Considering the prevalent idea that a "Strad" violin is the one perfect thing in this world, and considering that Strad's best model is still accepted by many as "perfect," some may question my statement that violin-making is an *experimental art*. Some may say that Strad solved all the problems of violin toneproduction, and that further experimentation is useless as well as needless. This is true in one sense, and not true in another. In making the "Dolphin" Strad and the "Tuscan" Strad, Stradivarius undoubtedly solved all the problems and left no room for further experimentation *so far as those two instruments were concerned*.

But each violin made—no matter by whom it is made—presents the same difficulties for solution, and making the "Dolphin" perfect couldn't help Strad very much in making another violin perfect. All his violins were not perfect—all were not really first-class—and this proves that violin-making is an art—an experimental art—and not by any means a mechanical occupation or process.

The Various Strad Models

Why did Strad produce only one violin equal to the "Dolphin," only one equal to the "Tuscan"? This is a question many violin-makers have tried hard to solve, though very few have found the true solution.

Those of us who have been so fortunate as to have in our hands, from time to time, two or more of Strad's instruments, know "they're different" (to use an ultra-modern term). Stradivarius was a tireless experimenter. Instruments he made in 1707

show, under the calipers, a top-plate thickness of 2 8-10 mm. at position of bridge, tapering to 2 7-10 mm. at the edges, while a Strad of 1708 shows a uniform top-plate thickness of 1/8 throughout the entire plate. Arching also varies. The height of arch in one Strad differs from that of another. Back-plates vary also—some instruments having a comparatively high-arched back, while others—of the same period—have a modified arch in the back-plate. Even *f* holes vary—both in dimensions and locations.

It is a self-evident fact that to make the "Dolphin" Strad such a very fine instrument, Stradivarius must have predetermined exactly what manner of construction would best meet the requirements of the timber he had on his bench for the making of that "Dol-

phin." Had he adopted any other top-plate thickness than the thickness he adopted; or any other height of ribs; or any other degree of back-plate arch, or in any way failed to make the constructive details fit the wood's characteristics or peculiarities, the "Dolphin" Strad would probably now never be heard or heard of.

The fine violin isn't a result of following set rules



COLLINGWOOD
GUARNERIUS MODEL

of arching, or set rules for plate thicknesses, or set rules for size of model, or any other sort of set rules. Science—*laws* of construction—can no more dictate how a fine violin is to be produced than it can dictate how a Whistler portrait is to be painted. It's Art—the play of individual intuition, and innate knowledge and deftness—that makes the superior violin. Superior timber isn't sufficient; superior model isn't sufficient. But timber must be suited to the model and model suited to the timber. And the maker must then be "suited" to work the timber into the model and draw out superb violin-tone.

Asked why only comparatively a few modern violin-makers are famous for their violin's tone, the Writer would surely say they fail in that "sixth" sense which has to do with the eternal fitness of things. As nearly all violin-makers of any skill are well versed in the laws of violin tone-production, it is folly to say they fail as mechanics. It's as artists they fail.

Nearly all makers worthy the name can tell you in advance just what effect on a violin's tone would result from paring down the sides just a little, and thus letting the top-plate down a little closer to the back-plate. The result would be a raise in the tone-pitch. And they could tell you with certainty that if the *f* holes were enlarged a trifle the result would be a rising in the tone-pitch of your violin. They could predetermine what effect a new back-plate of harder wood would have on the violin's tone.

But suppose a man does know all the little niceties of tone-graduation; suppose he does know just what height of arch in the top-plate needs a certain arch in the back-plate; knows what degree of rigidity in back-plate is necessary with a top-plate of a certain degree of springiness; knows what size *f* holes, and the proper locations of them, to get the proper "condensation" and freedom of vibration at the exits; knows the proper length of neck to go with a model of this, that or the other size, and knows what weight of finger-board and strings will bring the best tone from the instrument; suppose he knows all these things (as the majority do)? Are these not merely mechanical problems, quite similar to the problems the ordinary mechanic solves each hour of his working day? Assuredly so. The "art" in violin-making lies beyond the realm of mere mechanical laws and mechanical processes. Given the mechanical knowledge, and the wood-worker's deft skill, then experience only is required, providing the maker has the genius—the art—in his makeup to perceive and to work out the inexplicable and non-scientific "laws" of artistic production.

What Violin Tone Consists Of

Ordinarily, the violinist isn't well versed in tone-knowledge. He has an acute ear and can distinguish very poor tone from fair tone, but he could no more point wherein the difference lies than he could give, offhand, the reason for blue being blue instead of red, or black.

Nevertheless, there are many reasons why tone isn't all pure tone—all fine tone. Tone has been literally "dissected" by makers of pianofortes, wind instruments, etc., to such an extent that a defect in tone-quality can be named as well as noted. Just about twelve different tone-qualities are required to insure perfect violin tone. This is a greater number than is required of any other sort of tone. Trumpet-tone requires only shrillness and penetrativeness; guitar-tone requires only rich softness; flute-tone requires only mellow sweetness with fair carrying power. But violin-tone requires about twelve different characteristics—neither one dominating the other, but each equally apparent—else it isn't fine tone. These various tone characters have been called "tone-values" and such will be treated at length.

Tone Values

TONE-VALUES are, so to speak, the ingredients from which superior violin-tone is built, or "blended." The various qualities from which superior violin-tone are blended, and which are *practically* at the command of the violin-maker at all stages of the instrument's construction, are these:

1. Pitch of tone.
2. Volume of tone.
3. Intensity of tone.
4. Evenness of tone.
5. Solidity of tone.
6. Brilliancy of tone.
7. Liquid quality of tone.
8. Nobility of tone.
9. Beautiful harmonic tones (overtones).
10. Agreeable double-stop tones.
11. Roundness of tone.
12. Responsiveness to bow-pressure.

Of the twelve individual tone-values given, I have found but two which are absolutely at command of the maker at all times. Those two are the qualities of pitch and volume. No matter what the quality of wood may be, violins equal in tone-pitch and equal in volume of tone may be reproduced indefinitely.

To reproduce the remaining ten individual tone-values at will, and at all times, is wherein lies the "art" of violin-making. Of the remaining number, I find three which are approximately at command of the maker, namely, intensity of tone, evenness of tone-power, and freedom from dissonant over-tones.

Constructive Details Responsible For The Various Tone-values

Primarily, violin-tone, no matter what its quality or value, is nothing more nor less than vibrations. The open string sounds deeper than the stopped string simply because the vibrations of the long string are slower than the vibrations of the shorter or stopped string.

But a violin is more than four strings. It is an assemblage of many parts. And each and every part has a vital function, a decided bearing on the evenness or the quality, or the power of the string's tones.

The strings themselves, the finger-board, the bridge, the sounding-board, the post, the back, the bar, the blocks, the ribs, the linings, the degree of sounding-board arching, the location and size of *f* holes, the size of the violin and its cubic air capacity—all these and many other elements score important parts in the production of superior violin-tone.

It is possible to produce violin-tone of almost any desired quality or character when one understands thoroughly the action of these various factors and develops or modifies the action of each individual factor in the proportion to produce the desired tone-quality.

Some of the factors enumerated, such as the ribs, the blocks and the linings, effect more than one quality of tone. As a matter of fact, each of these three factors effects three tone-qualities, and where one factor effects three tone-qualities, either one of the three qualities may be developed at the expense of the other two, or all three qualities may be developed approximately equal.

As an illustration of just what may be accomplished by the intelligent maker with any factor which effects more than one tone-quality, we will take the exits, or *f* holes, which we will presume to be about the proper area. Now, increasing the area of these exits, or *f* holes, raises tone-pitch, increas-

es volume of tone, and diminishes intensity (carrying power) of tone. And diminishing the area of these exits lowers tone-pitch, diminishes volume of tone and increases intensity (carrying power) of tone.

Changing the positions of *f* holes, placing them nearer to, or further away from bridge will increase or diminish volume of tone; moving exits *away* from bridge diminishes volume of tone; moving exits nearer to bridge increases volume of tone.

Other similar instances of the action of certain factors on certain tone-qualities might be cited, but this one factor may be taken as an indication of what may be accomplished with any other factor as a basis.

And in the developing of any given tone-value to the "limit" care must be exercised by the maker. The production of superior tone-values indicates the entire absence of undesirable tone-qualities. For instance, volume of tone may be developed at the expense of carrying power of tone; carrying power of tone may be developed at the expense of smoothness or liquid quality of tone, or both. It is the masterly *blending* of tone-values that makes the *really great* violin, and gives to it its superb, smooth, liquid; ringing tone.

The Importance of a Knowledge of Tone-values

Any individual tone-quality that is developed to the utmost—to the "limit" of usefulness—is known as a tone-value. Some, in fact very many violinists, prefer great volume of tone to any other tone-value. In other words, they will gladly accept a coarse-toned instrument, one with little brilliancy and no trace of that soulful "liquid" value, just so they get great volume. This is to be deplored, of course.

One's taste in violin-tone is largely a matter of education. The more knowledge one has of the various qualities of violin-tone the more critical he will be in the selection of his instrument.

There are many kinds and varieties of violin-tone, but there is one standard of depth, breadth, fulness, roundness, solidity, liquid brilliancy, etc., and only an instrument that comes up to this "standard" in all tone-values can be a great violin.

It is really remarkable how many artists work hard

to make a name as violinists, yet use a very inferior instrument. More than once I have seen the defects pointed out (with a bow) in an artist's pet instrument. When shown such defects the owner invariably "jumps up" and exclaims "Why, it never sounded that way before!" I can only explain a man's blindness to the errors of his instrument on the grounds that he loves his instrument so well he never notices the defects. Certain it is that many artists play defective instruments.

Many of these, when called to task for using an inferior instrument, will say they have never found a better-toned old violin, and add that new violins are too harsh and unsympathetic. But this isn't true. Because a man says he has never observed the rainbow in the skies that doesn't prove the non-existence of the rainbow. New violins there are, quite a few of them, that are an hundredfold better than practically all old violins.

I do not think it would be anything of an exaggeration to claim that I can make a violin with any variety of tone-quality, varying from an instrument with the shrill tone of the piccolo down to the broad, sweet tone of the 'cello. And this is done—not by making the violin smaller or larger, to bring out the tone desired—but by arching the plates, regulating size and thickness of ribs, weight of bass-bar and post, size of *f* holes, etc. And no matter how thin or how broad the tone brought out it can be made true and even on all strings, in all the seven positions.

So, it should be apparent to the reader that he can have an instrument intoned to his individual liking, or intoned to that "standard" in depth, breadth, brilliancy and carrying power which stamps the great violin.

Violinists, as a class, are awakening to a renewed interest in all that pertains to violin-tone. They are studying the question from all viewpoints; weighing the value of this quality of tone as against that quality of tone; finding out what qualities and in what proportions this or that quality of tone is essential to a *great* violin. In a word, they are *analyzing* violin-tone.

Never in the whole history of the violin has there been such a demand for *great* violins as exists today, and—owing to the fact that the vast majority of old violins are lacking in tone-power sufficient for the demands of present-day auditorium and music-hall construction—the modern violin, with its greater intensity of tone, and at the same time pos-

sessing that rich, smooth, sonorous, *expressive* quality of tone which in all ages has stamped the violin king of musical instruments, is fast supplanting the "old" and inefficient instruments of earlier makers.

A New Form of Guarantee

A thorough knowledge of violin tone-values cannot be gained in an hour, nor a day, nor a year. It requires years, intense application, aptitude and opportunities for comparisons with the finest Cremona violins, together with a clear insight into the laws of cause and effect in tone-building, and a musical ear and instinct sufficiently critical and acute to distinguish between the real and the deleterious in violin-tone.

Violinists know such knowledge is hard to acquire and that it takes years to acquire it. They also know that this is an age of "graft" and that the grafter's most fertile field is the violin market.

Hence many are reluctant to pay a fair price for what seems to be a really great violin, lest time should prove they had paid a great price for what is only a fair violin.

To set at rest all doubts and misgivings, and because I believe a man who is willing to buy a fine violin, providing he can be reasonably sure he is getting a fine violin, is entitled to know just what he is buying. I have originated the "Collingwood Violin Score," reproduced here in facsimile.

The Collingwood Violin Tone-score

This "Score" is practically a new form or guarantee in which is given the specific value of the tone from all standpoints. And as the test and scoring are executed under certain meteoric conditions, the violin thus *guaranteed* or "scored" may be depended upon to repeat its "test" performance, and score the same at any time under the same meteoric conditions.

This Score is based on my knowledge of violin-tone—a knowledge gained in nearly twenty-five years' practice as a professional violin-maker and student of tone-values and their classification. I believe violinists will demand such a score as this in the future as a protection in the purchase of a fine violin.

I am confident that my violins will score at least as good as any old violin in all the *subtler* qualities that lend charm to the tone of the violin, and in the open-air test for carrying power I am sure it is quite impossible for any violin—old or modern—to score better.

This open-air test is made between the hours of 10 a. m. and 4 p. m. on a clear day, with winds at rest. Two persons are required to make this tone-distance test. One plays a melody on the G string, the other retires across the field to a distance at which the melody is faintly but distinctly audible. This distance, being measured, is placed to the credit of that string, and the D string, A string and E string similarly tested.

This test establishes:
(1) Intensity of tone (tonepower); (2) Evenness of tone-power; (3) Purity of tone (freedom from dissonant overtones).

Dr. F. Castle, of Lowell, Ind., one of the greatest authorities the world has ever produced on all phenomena relating to violin-tone, sets 1,250 feet as the "limit" for carrying power of tone in the open-air test. That is to say, he finds that a violin which will carry that distance has ample power for use in the very largest of present-day auditoriums and music halls. I test all my best violins in the open air, and guarantee them to possess intensity of tone equal on all strings, and in all positions, sufficient to carry 1,500 feet in the open air—and a violin that will do this will certainly answer all requirements under all indoor conditions.

This open-air test is the most conclusive that can be given a violin; it establishes beyond peradven-

ture of a doubt the value of the violin as regards evenness and carrying power. And not many violin-makers or dealers care to enter their instruments for this test—their instruments won't stand it.

I score all my best instruments—those valued at from \$150 up—and I know I risk nothing in claiming that violins equaling them in tone-values cannot be had elsewhere at any price.

"Scoring" a violin in the open air is possible only at certain seasons of the year when atmospheric

conditions are propitious. By a very similar method I test all my violins indoors at all seasons of the year.

In relation to this Score, it should be understood that violins which will score ten tenths in all the fifteen tone-values are very rare. I have never made one that

would, nor have I ever seen one that would—not even the finest Cremona.

On the fifteenth tone-value—human quality of tone—I have never heard an instrument I would give ten tenths to. This quality of tone is not at the command of the maker, and eight tenths is the best score I have ever known to be made on this quality of tone.

This quality is largely a result of peculiarities inherent in woods, and wood possessing the requisites for reaching the "limit" in human quality of tone is rare—very rare.

Occasionally I find wood which makes a violin whose tone-value will score the limit on nearly all

Tone-Values are given in tenths, ten tenths being the "limit," or best possible to produce, in any given Tone-Value.

COLLINGWOOD VIOLIN TONE-SCORE

This Score is guaranteed to be correct at the time Violin leaves my hands. Any change of adjustment in the Violin may change any or all Tone-Values.

NECESSARY OBSERVATIONS AT TIME OF TEST

Thermometer.....

Barometer.....

Hygrometer.....

TONE VALUES	G STRING	D STRING	A STRING	E STRING	OPEN STRINGS	TOTAL	REMARKS
1. Volume of Tone							
2. Solidity of Tone							
3. Evenness of Tone							
4. Intensity of Tone							
5. Brilliance of Tone							
6. Richness of Tone							
7. Liquid, Ringing Tone							
8. Pianissimo Tone							
9. Open Fifths							
10. Closed Fifths							
11. Double-Stop Tones							
12. Pizzicato Tones							
13. Harmonics							
14. Character of Tone							
15. Human Quality of Tones							

Distance at which Violin is distinguished in open air, given at time of test

G String..... feet A String..... feet Violin No.....
 D String..... feet E String..... feet Built by..... Date..... 190.....
 Open Strings..... feet Tuned by..... Date..... 190.....

points, often on all but the fifteenth. This fact explains why I value one violin higher than another, and price it accordingly; the nearer it is to perfection on all fifteen counts, the higher the price.

I have been asked why it is that I do not hold all my violins at the same price. One violinist even told me that a Mr. So-and-so (a violin-maker), told him this: "If Collingwood makes a good violin once he can do it all the time, and his instruments should be all priced alike."

My answer to this is that violin-making isn't like diamond-cutting nor shoemaking. If I cut a perfectly faced diamond today I could probably do the same tomorrow. But with violins conditions vary. Because I make an instrument today worth \$300 doesn't prove I can duplicate that instrument tomorrow. If I could make a perfect violin at each attempt I would gradually introduce machinery and turn them out by thousands, *a la* Saxony.

I don't mean to infer that violin-making is a "hit-or-miss" proposition. But I do say it is an art. An art defies duplication *ad libitum*.

My very best violins I value at from \$300 down to \$150, and I invite a comparison of these with any violins, not excepting the finest Cremona violins. And the violinist who has a violin with the "bottomless" tone of a "Collingwood"—guaranteed to carry 1,500 feet in the open air—will find, if he has the technical ability to bring out the full beauties of fine tone, that his chances of failure as a soloist will be reduced to the minimum.

Collingwood Violins

IN the selection of woods for the Collingwood Violin, I choose from a quantity of such material I have been collecting for twenty-two years. I do not choose a handsome piece of old wood for its beauty, but test for *tone-value first*, beauty of grain or "flare" being subdominant to, and of far less importance than, its tone-value, determining beforehand that each piece is quite as old as its appearance *indicates*; ascertaining by sense of smell, color, botanical knowledge and weight as compared to bulk that the process of seasoning or "ageing" has been *thoroughly* accomplished, and that every vestige of "greenness" has been *naturally* and thoroughly obliterated by age.

For thickness and outline I follow the models of Stradivarius and Guarnerius—not from choice nor because I prefer to copy the methods of others, but

because twenty-two years of experimenting, research and study have convinced me that the Stradivarius and Guarnerius models are nearest to perfection. Not only are the thicknesses of plate accurate in these models, but the arching of the plates, the thickness and depth of the ribs, the graceful proportions, and *f*holes, all operate to get the scientifically proper cubic capacity or "air-mass." I do not desire to go on record as claiming that a perfect violin cannot be made on lines other than those Stradivarius and Guarnerius laid down, but this I do claim and know from experience to be a demonstrable fact: that these models give greater volume and sonority and more even timbre in all positions and on all strings than will any other model.

For plate thicknesses I am guided by tone, and tone only, and haven't the slightest hesitation about departing from the thickness of the Stradivarius model when by so doing I can secure better tone.

In the beginning of my career I looked upon both the Strad model and the Guarnerius model as things too sacred to be tampered with. But I have concluded, as every maker must eventually conclude, that a fine violin cannot be made by following any set model.

Both Strad and Guarnerius made slight changes in the model of every instrument they wrought—no two being exactly alike.

Invariably I am guided by the materials I am working, making such changes in the model as that material seems to necessitate. Certain points in both the Strad and the Guarnerius models I alter very frequently.

I aim to get all the refinement and depth of the Guarnerius model, and yet retain the breadth and solidity of the Strad model. How well I have succeeded in this my violins will testify.

The Collingwood models I might say, is somewhat smaller than the Strad model, but its tone is quite as "big" and quite as soulful.

Tone-quality

The distinctive characteristics of Collingwood tone are: penetration, solidity, roundness and soulfulness. The tone is "big" without being hollow, and is characterized by unusual depth. Each note has a delightful "farewell"—a shimmering, indescribably pleasing ring which permeates the whole instrument.

Varnish

Each Collingwood Violin is covered with a varnish of my own preparation. It possesses a depth, luster and fire peculiar to itself and not present in any other varnish. It does not mute the tone; on the contrary, it exercises a most beneficial influence on the tone-quality. It will never crack off.

Prices and Terms

IN price the Collingwood Violins vary from \$150.00 to \$300.00. It is advisable that persons about to purchase write me stating purpose violin is desired for—whether for solo purposes exclusively for orchestra, parlor, or for all-around purposes. Certain tonal characteristics are best adapted to certain conditions, and to persons stating fully their requirements I can send an instrument best suited to their requirements—whatever they be.

CONCERT VIOLIN \$150.00
SPECIAL VIOLIN FOR SOLOISTS \$300.00

The \$150.00 instrument is magnificent in model and varnish, tone smooth and even throughout the entire compass, and in every way preferable to the "old" violin.

The \$300.00 instrument is made of the finest old wood, of great beauty, and has the finest tone for solo purposes. Its volume is ample, and will reach the farthest corners of the largest auditorium.

Testimonials from users of Collingwood Violins will be mailed to any address on request.

Time payments are made to suit the individual purchaser, my usual plan being to require twenty-five per cent. of the purchase price as first payment, balance to be paid in equal monthly instalments.

I will send one or more Collingwood Violins to any responsible person for ten days' trial, with the understanding that they pay all express charges, and return the instruments to me—if not found satisfactory—in as good order as when received. Accepted instruments may be paid for at once or in monthly payments.

Instruments will be shipped C. O. D., when requested, with instructions to Express Company to hold purchaser's money for ten days, refunding it in case of dissatisfaction.

Remittance must always be by draft, post-office money-order, or express money-order; private checks are not acceptable.

Violin Bows

No. 1. A good, strong, well-balanced bow for either Orchestra or Solo work.
Price \$6.00

No. 2. A fine Solo bow. Stick has fine taper and

balance; very stiff and elastic; pure silver trimmed.
Price \$10.00 to \$25.00

I make a specialty of this artist's bow at \$10.00, with solid silver mountings. In every respect this is the finest bow obtainable at the price. It is of correct weight and balance, and fully equal to many bows sold at much higher prices.

Violin Cases

I keep on hand two styles of cases. I can recommend these cases as being the best value to be had for the prices quoted.

No. 1. Leather pulp, finished in black; fleece lined, light, compact and waterproof, and as hard as horn; nickel-plated clasp-hooks and lock; holder for two bows; full lined with red-floss flannel.
Price \$5.00

No. 2. Black leather covered; velvet lined; Exposition shape; nickel lock and trimmings. A beautiful case.
Price \$7.50

Violin Tone-Adjusting

WITH an experience covering a period of over twenty-two years, during which time I have made nearly four hundred new violins and repaired hundreds of old ones. I feel justified in promising good results to any one entrusting repairing, revarnishing or tone-adjusting of any sort to me.

I have repaired some very valuable Cremona instruments, and have never yet failed to improve the tone-quality of an instrument sent to me for tone-adjusting.

There are very few old violins that will not respond nobly to the touch, here and there, of a master hand. In the very nature of things, a violin must change somewhat with use. In "developing," a violin doesn't always "develop" evenly—one string may lose in quality of tone while another string gains; or one position may lose in sweetness while other positions come out beautifully. In reality, a good violin should be adjusted once each year—at least.

The sound-post—a seeming trifle—can, by being set just a trifle from its true position, so mar the tone of a good violin that it will sound no better than the ten-dollar factory fiddle. The resetting of

the post by a practiced violin-maker will often treble the tone-value of a violin. Posts will fall, and inexperienced hands will attempt to reset them; the result is, oftener than not, the violin suffers a great loss in tone-value.

Continued exposure to excessive dampness will often cause glue to lose its "grip" and allow the linings, or the blocks, to "creep." Or that natural disintegration which comes to all unprotected wood parts may attack the sound board. From natural unevenness of growth while yet in the tree trunk, some parts of the sound board will succumb to atmospheric attacks before other parts. And this disintegration "in spots" frequently introduces the "wolf" into violin-tone.

Or, a phenomena just the reverse of disintegration may take place—the wood may "swell" in spots. Dampness, perspiration, a raindrop, in fact the causes of "swelling" are too numerous to mention. Like a fine watch, a violin is composed of numerous delicately wrought and delicately adjusted parts. And, again like the watch, the violin should be "adjusted," or "regulated" occasionally. Eternal vigilance is the price of superior violin-tone.

Upon receipt of a violin sent for adjusting I will immediately give it a thorough examination and write to the owner giving my suggestions and the cost for carrying them out. In most cases I can tell in advance just what will be the result of my work on an old instrument, and I invariably quote price and await approval of same before commencing the work.

Charges for such work naturally vary in proportion to the nature and amount of work the instrument requires. As a rule, my price for such work runs from \$10.00 to \$25.00, or if revarnishing is necessary, price may be as much as \$50.00.

The safest, as well as the cheapest, way to send a violin for repairs is in a plain, wooden box about five inches deep, eight and one-half inches wide and twenty-six inches long, made from one-half-inch lumber. Pack the violin in the box securely, using paper or excelsior for packing. Always place your own name and address on the box as well as mine, and prepay express charges. Do not ship in the violin case only—by so doing the express charges are greatly increased. When delivering the violin thus packed to the express company, be sure to give them the valuation, and they will then be responsible for its safe transit.

Repairing

Time is the important item in the cost of repairs. One who can do high class work can not work under a certain fixed price based on the value of his time.

For repairing I charge only what my time and materials are worth, and solicit the repairing of violins, confident that the little trouble involved in the shipping of the violin to me will be far outweighed by the value of the workmanship, from both the artistic and tonal viewpoints.

New bridge, cut and set.....	\$0.50 to \$1.00
New sound-post50 to 1.00
New bass-bar (including post and bridge and graduation)	\$10.00 to 15.00
New finger-board	\$1.50 to 2.00
New neck, grafted into old scroll	\$7.00
New entire neck (scroll and neck)	\$7.00 to 10.00
New set of pegs	\$1.00 and 1.50
Regluing top and back	from \$1.00 to \$5.00
Regluing cracks	from .50 upward
Revarnishing entire instrument	from \$10. to 25.00
Re-edging top or back	from \$8.00 to 15.00
Re-enforcing top or back, with patch.....	from \$3.00 to 15.00
Re-hairing bow, best hair75
Adjusting a violin, including new bridge, sound-post and strings	\$5.00
Pure silver wrapping for bow.....	\$1.00 to 1.50
Other wrapping50
Leather wrapping25
New ivory tip50
New frog	\$1.50 to 3.00
Testing and scoring a violin, including two certified score sheets, printed on heavy linen ledger paper, 8X2 x 11 inches	\$10.00

Fine Violins At Little Prices

I have had numerous requests for a violin at about \$50.00—a violin good for a lifetime.

Such a violin isn't possible at the price. My invariable answer is that I haven't such a violin and do not know where I could get one I would recommend as "a violin for life" at that price.

Many makers do handle violins at about \$50.00 which they claim are "good for a lifetime." I have examined several of these and wouldn't care to put my name behind them.

Student's Violins

For students, I make a specialty of imported violins at \$25.00, \$35.00 and \$50.00—each one reglued and fitted with new bass-bar by myself. These I can honestly recommend as equal to any instruments sold in this country at anywhere near the same prices.

Any one wishing to purchase a violin from \$25.00 to \$50.00, should send for one of these violins on trial for comparison with any other make at \$75.00 or less. They are all perfectly true and even in tone, and this alone would make them worth the price asked for them. The \$50.00 grade is finished in a very fine "imitation-old" finish, and is a fine instrument for all purposes.

I also carry this Student's Violin in half and three-quarter sizes, at \$15.00 to \$25.00 each. These smaller sizes are little gems—responsive in tone and true and even throughout the seven positions.

JOSEPH COLLINGWOOD

Violin-Maker

235 EAST MAIN STREET
OTTUMWA, IOWA



COLLINGWOOD
STRAD MODEL